

EXTINGUISHING THE FIRES OF HELL

ENDING *AUTO*IMMUNE DISEASE



GRANT GENEREUX, P. ENG.

Extinguishing the Fires of Hell

Edition 1.1, 2015

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DISCLAIMER

The statements herein are not intended to diagnose, treat, cure or prevent disease. The information provided is for educational purposes only and is not meant to substitute for the advice provided by your doctor or other health care professional.

I want to make a couple of points clear here.

One, please understand that I am presenting this book as a theory. It could be wrong, and completely wrong. It could be right, or only partially right. I am completely and totally open-minded about this. Autoimmune diseases are not trivial topics. This topic is complicated, and the theory I present requires a lot of evidence. However, the preponderance of the evidence is indeed pointing in one direction.

Two, this book is not intended to be some official scientific publication. It is an odd mix of theory, evidence, and my own personal account and observations in dealing with autoimmune diseases.

Thirdly, I have no medical experience or training whatsoever. I'm not a health expert, and I'm not claiming to be one — at all. Therefore, please apply your own good judgment to all of this.

There are many references in this book to external sources and documents, most with a URL link. At the time of publication, all links were valid. However, this is the Internet, and things can and do change frequently. Therefore, if you find a broken link, just search for the source document by name.

It's about getting to the Truth, nothing else.

The only goal I have in publishing this book is getting to the truth about the very root cause of autoimmune disease. I'm going to make a lot of categorical sounding statements that I think are true. Of course, they *could* be wrong. If you spot something that is wrong, please let me know that. I will acknowledge your contribution, and make the correction in a subsequent edition.

This book is not about opinion or endless debates; it is about the facts. It is not intended to entertain you; it is to inform you and hopefully to call you into action. You may freely share this e-book under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](#).

Dedication

This book is dedicated to a brave eight-year-old boy who suffers from eczema. He recently said to me, “*In the wintertime it feels like my legs are on fire!*”

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Preface

This book was born out of the fires of hell. Last year, I had my first encounter with an autoimmune disease. Since I was 54 when this happened, I was lucky and very lucky indeed. Most of the prior years of my life were spent in generally good health. My autoimmune disease was Eczema, a moderate and almost mild condition compared to what I learned others were suffering from. Moreover, I quickly became aware that many kids suffer from this painful condition and other horrible inflammatory autoimmune diseases. Although I was now experiencing this new, and weird, inflammation attack my skin, I knew I had absolutely nothing to complain about.

Eczema for me was mostly just a long-lasting rash. Of course, I did not like this rash; I did not like it one little bit. My skin was randomly burning and peeling off, and leaking. At particularly bad times, I felt like a lobster that had been boiled from the inside out. That is not very pleasant.

Something was wrong. Although I thought I was living properly by eating healthy and exercising regularly, I now had a mysterious *autoimmune* disease. This term *autoimmune* was practically new to me too. After applying the standard prescribed medical treatments for several months, it was clear my condition was just slowly getting worse. My overall health was also slowly slipping into the murky abyss of more disease. I thought to myself, man, if this is aging, it sure does sneak up on you fast!

I had this niggling little feeling that I had somehow put myself into this state. I had no idea whatsoever as to why or how, but somehow, I felt I had messed up and had caused this to happen. After an amazingly short period of research, I had a suspect. It was crazy, and I felt foolishly naïve for even considering it. My doctor made it perfectly clear that autoimmune diseases are lifelong, and there are no cures. Period.

Therefore, for me to consider making a tangible improvement in my condition was indeed just foolish. I likened it to me saying that I was going to build a replica of the space shuttle in my backyard and launch it into outer space using rubber bands. That is simply not going to happen. Not ever. Yet, in the spirit of science, I set out to conduct a pretty simple little experiment. My early experimental results were encouraging, but also very confusing and not at all conclusive. There was only a tiny smidgen of a possibility that I could be onto something.

I was trying to be completely objective. There is nothing worse in science than being sucked into our preconceived notions and talking ourselves into something. There are all kinds of pitfalls such as cherry-picking the data, finding only what you are looking for, the temptation for cooking the books, etc. I was also a bit emotionally invested in this, no matter how objective I thought I was being. It would be so easy to apply wishful thinking and talk oneself into something that was not true. Therefore, I was trying hard to be completely honest with myself. At this same time, I was making some almost absurd observations. Some of my observations were so ridiculous that I was embarrassed to even write them down. For example, just eating a single handful of green peas *appeared* to cause the skin to burn off on my fingers (and no, I'm not allergic to peas).

Then, within a few weeks, I experienced another oddity of having much more hair show up on the tops of my feet. It was nothing like the amount of hair on Frodo's feet, but still quite noticeable. So, I was documenting the genuine facts as they were being revealed. This is what you are supposed to do in an experiment. It was just me, my trusty thirty-year-old geology microscope, and my weirdly behaving skin. Science has a way of surprising us.

Then about day 21 into my experiment, something truly shocking and completely unexpected happened. Almost in a moment, it became quite clear to me that eczema was probably not really a spontaneous disease at all. Most importantly, I suspected I had just stumbled upon something very, very important. It had nothing to do with eczema. I had to find out more. I most certainly did not want to jump to conclusions. Although I was still fighting my eczema condition, it took a backseat to what was now turning into a more serious research project.

After a bit more investigation, I had good reasons to believe that the so-called auto-immune diseases were probably auto-poisonings. But, they're bizarre and strange auto-poisonings. These are poisonings that take decades to develop and then fire off some almost unstoppable chain reaction of inflammation. Nevertheless, I felt that making a full recovery from my incurable, remainder of life; autoimmune disease was, at least, a possibility—and maybe even likely. However, I had no idea how long it might take to recover.

The much harder part was going to get other people to consider the bizarre, and almost insanely ridiculous, notion that some of the biggest diseases in the world are poisonings. I also had no idea how long this would, and will, take. I knew it would be extremely difficult, and that I was going to need a lot of evidence. I floated the concept with a friend and a fellow engineer with very strong analytical skills. His reaction was concisely stated as: *“You sound like a complete wacko!”* Followed by a few moments of silence, and then: *“You might be onto something.”*

Ironically, being called a “wacko” was quite reassuring. If this was indeed so “wacko”, maybe that is why others were not considering it.

Introduction

Let's start with some very basic statements that hopefully everyone can agree with.

Someday, someone will solve this autoimmune disease puzzle.

Someday, these diseases will be completely preventable.

Someday, people will be completely cured of these diseases; and not just given endless masking or suppressive treatments.

Here's the critical point to understand; someday these diseases, all of them, will be solved. People are smart, and we will figure this out. The only question is how much longer will it take. Will that *someday* be this year, or in the year 2065, or later?

Now, let me move forward with a somewhat absurd-sounding statement. We, the people with these diseases, or the parents of children with these diseases, can solve them. There is something somewhat unique about the autoimmune diseases that make this entirely possible.

If we're waiting for the someday when a drug company solves these diseases, that someday may never come. Consider this question: when is the last time a drug company actually found an absolute cure for a *non-infectious* disease? Has it ever happened? Why would we expect that to happen? Drug companies are in business to discover, make, and sell drugs. They're not in the business of curing diseases. Completely curing a disease would be very bad for business. Therefore, the people more likely to discover the actual cause or cure for a disease are academic, and government paid researchers.

We could all sit on the sidelines and wait for that magic *someday* to arrive. Alternatively, we could decide not to treat this as a spectator sport and directly participate in it. After all, we are all deeply involved with this, like it or not.

I'm still early into this investigation. I am genuinely, and literally, asking *you to participate* in this investigation. I'm one person with a theory, what I think is an abundance of strong evidence, and a few experimental results. That's an interesting starting point. Now, I need your help. This book is not a casual read, and it is not a novel. If you, or a family member, have one of these diseases then please take this very seriously. I believe with your help, insight, and first-hand experiences we can quickly move this theory over the finish line, or into the trashcan if needed.

Every single person with an autoimmune disease can contribute to this. I'd especially like to reach out to angry mothers who have had it with helplessly sitting by watching their children suffer. Please don't think for one second this is impossible to solve. It is not impossible. It is the exact opposite. It is hugely probable. I am incredibly confident in this statement because these are environmentally caused diseases!

When I use the term "environmentally caused", that means some aspect of our land, air, food, and or water is causing them. The term "environmental factors" is generally used in the medical literature regarding potential disease etiology.

Chapter 1

When Did We Descend into This Hell?

Now, let's look at some charts of the skyrocketing growth rates of these diseases. Although the growth rates are alarming, I do not want to alarm anyone. Right now, I just want you to focus on something else about these diseases. Focus on when they started to increase at these rates.

As you look at each one of the following charts, run your finger along the timeline to where the rates first start to kick up. Please do that for every one of these diseases and just make a note of the year. When do these diseases really start to takeoff?

Also, clearly keep in mind that these years are not the genesis of the disease. No, all of these diseases did exist well before these dates. A hundred years ago, these diseases did exist. They were then just very, very rare.

Figure 1 Alzheimer's death rate age group 55-65

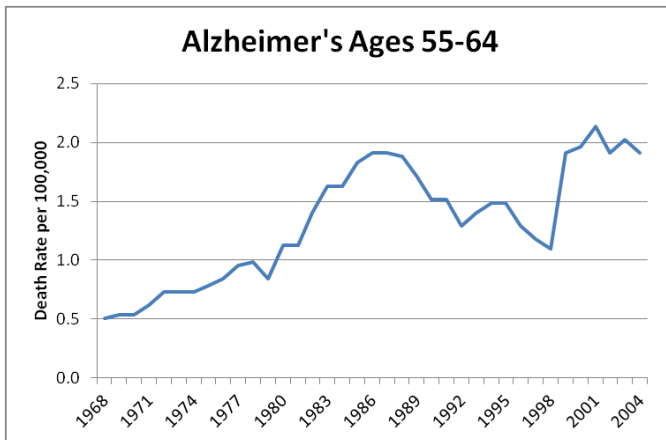


Figure 2 Alzheimer's death rate age group 65-75

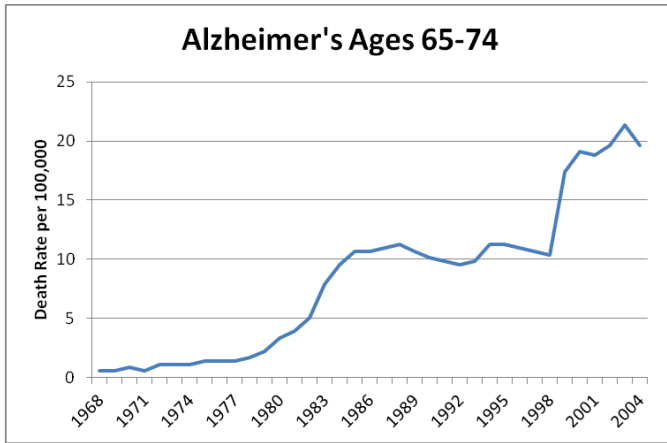
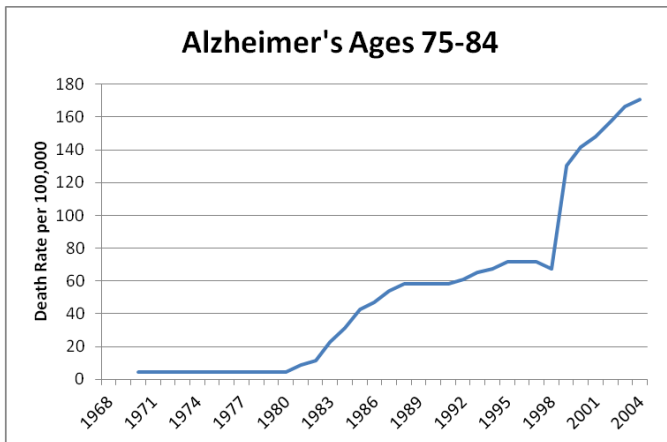
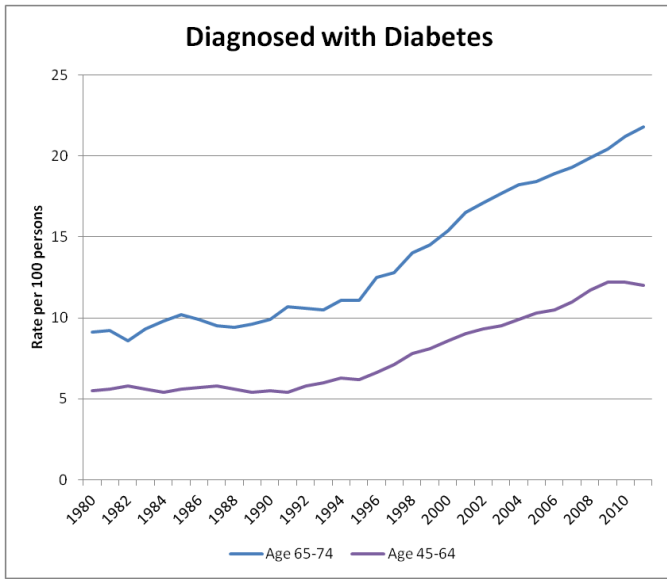


Figure 3 Alzheimer's death rate age group 75-85



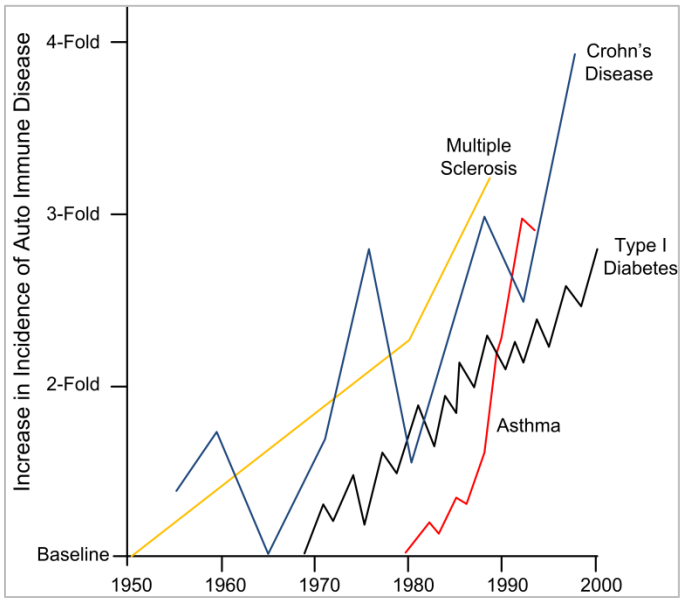
Source: Journal of Alzheimer's Disease 17 (2009) 519–529 519
DOI 10.3233/JAD-2009-1070

Figure 4 Rates of Diabetes Diagnosis



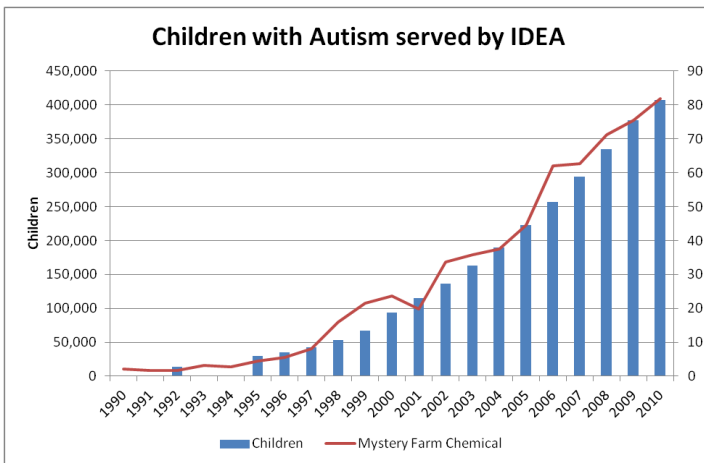
Source: <http://care.diabetesjournals.org/content/24/11/1936/T1.expansion.html>

Figure 5 Autoimmune Disease Incidence Rates



Adapted from: Bach JF. "The effect of infections on susceptibility to autoimmune and allergic diseases." N Engl J Med. Sep 2002;347(12):911-920.

Figure 6 Children with Autism served by IDEA



What is the most important thing these charts are telling us? They tell us with crystal clear clarity that these are environmentally induced diseases. These are not genetic at all. The doubling rates are now faster than the human reproductive cycle. They are not due to aging, or almost not at all. We have simply been confusing aging with exposure time. Even Alzheimer's is doubling in multiple age groups too. Kids are getting autoimmune diseases at growth rates just as high as any other age groups, if not higher. We also know, with a high degree of certainty that these are not infectious diseases, and they are not cancers. These exponential growth rates are almost unique to the industrialized world and are not repeated in many other regions of the world such as India, China, Pakistan, Russia, etc. The table on the next page highlights just some of these numbers.

When Did We Descend into This Hell?

Table 1 Example disease incidence rate disparities by country

Disease	Western Country	Rate per 100,000	Non-Western Country	Rate per 100,000	Ratio	Source
Alzheimer's	Finland	53.77	Singapore	0.19	283.0 to 1	¹
Alzheimer's	USA	45.58	Georgia	0.25	182.3 to 1	"
Crohn's	Denmark	225	Puerto Rico	6	37.5 to 1	²
Crohn's	Canada (NS)	202	China	3	67.3 to 1	"
Celiac	Finland	1900	Turkey	900	2.1 to 1	"
Ulcerative Colitis	Denmark	378	Lebanon	6	63.0 to 1	"
Thyroid - Hyper	USA	500	Iran	20	25.0 to 1	"
MS	Canada	291	Pakistan	10	27.0 to 1	
Sjögren's	UK	3500	China	330	10.6 to 1	"
Autism	USA (New Jersey)	1060	Oman	14	75.7 to 1	³

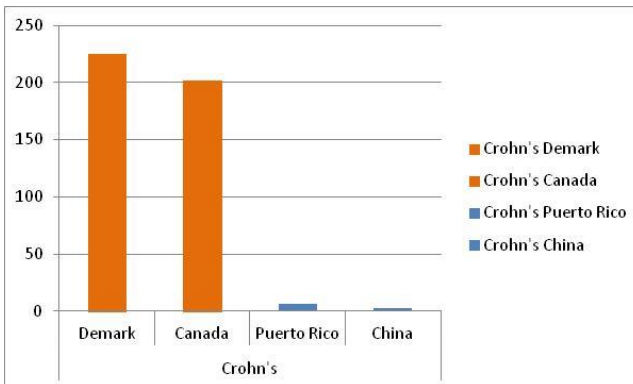
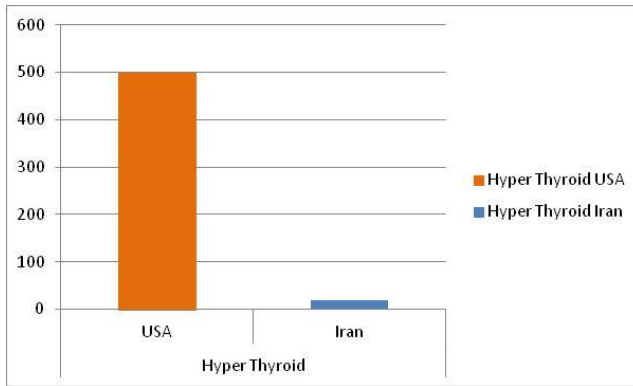
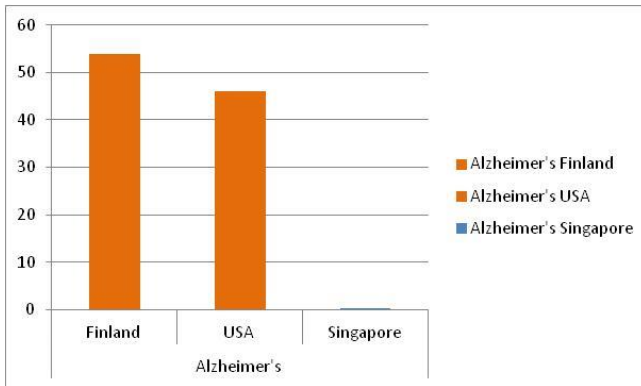
As if these numbers are not bad enough, we need to factor into them the significant immigration to North America and other Western countries over the last 20 to 30 years too. This fresh influx of healthy people will have reduced our statistical incidence rates. Therefore, the real numbers are not 60, 75, and 283 times higher. They might be more like 80, 90, and 400 times higher than what is obviously normal for the human population. Yet, when people do emigrate from these non-Western countries to North America they slowly begin to get these diseases at the same rates as us. To get a better appreciation for the significance of the situation, let's look at some of the rate differences graphically.

¹ <http://www.worldlifeexpectancy.com/cause-of-death/alzheimers-dementia/by-country/>

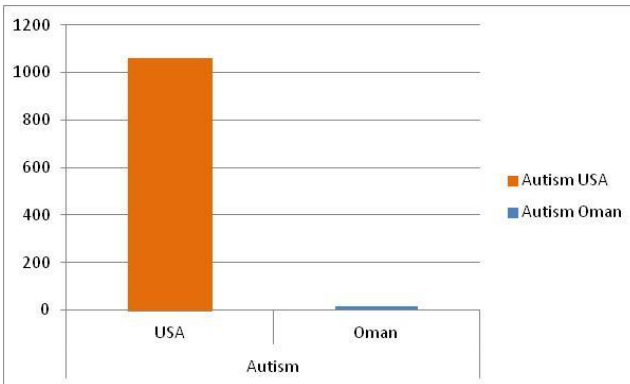
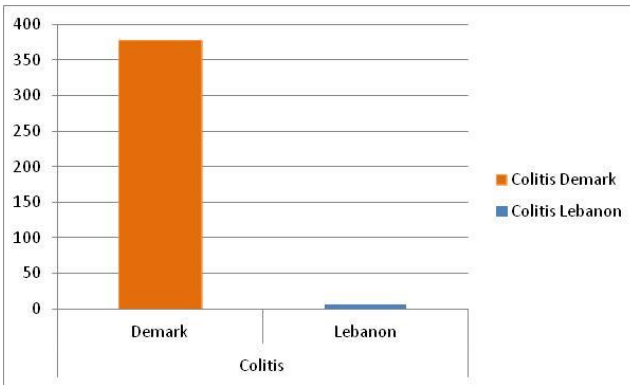
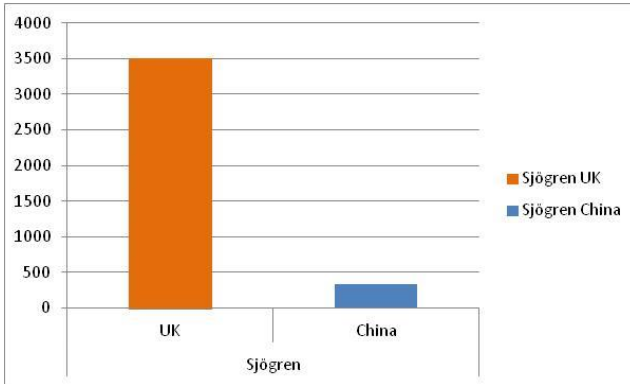
² <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2783422/>

³ <http://sfari.org/news-and-opinion/news/2011/researchers-track-down-autism-rates-across-the-globe>

Figure 7 Some chronic disease incidence rate disparities per 100,000



When Did We Descend into This Hell?



For researchers working in health care, looking at each one of these diseases in isolation, these rate disparities might appear to be rather mysterious. However, when you look at all of this data combined, there

is only one possible answer, and it is obvious. This data represents the very slow poisoning of the Western Industrialized world. This is not, “*Oh well, they could be, or they might be environmentally induced diseases.*” And, it is not “*Oh well, it could be some combination of genetics and environmental factors that cause them.*” No, let’s cut through that distracting smoke and mirrors bullshit right here, and right now and face the obvious. These are environmentally caused diseases. Period.

Of course, the naysayers will argue that these other foreign countries just don’t have doctors trained well enough, or that they are not properly reporting their numbers. Well, I investigated that possibility, and it is simply not true. These countries are reporting their real numbers. Moreover, there are other countries that don’t even bother collecting statistics on the autoimmune diseases and autism because they simply don’t have a problem with them.

So, now why isn’t this ridiculous rate of disease in North America all over the news?

Maybe, we as a society are uncomfortable with accepting this fact. After all, it means that we are indeed poisoning ourselves, and we are doing so on a national scale! How can this be possible in the most modern nations of the world? We’ve built big beautiful cities and have massive infrastructures; we have big houses, great and beautiful schools and universities, massive amounts of food, lots of money, and on and on.

More importantly, we have these incredibly advanced healthcare systems, with trillions of dollars in spending per year. We have modern hospitals with amazingly sophisticated technology and equipment such as MRIs, scanning electron microscopes, sophisticated labs, lasers, you name it we’ve got it. We also have the best-trained doctors, nurses, and surgeons in the world.

When Did We Descend into This Hell?

Most importantly, we have amazingly modern sewage systems, great garbage disposal and sanitation services, and all kinds of controls and regulations on environmental pollutions etc. Man, we've even banned peanut butter from every school in the nation. We just can't get more serious than that in looking after our national health.

Yet, ironically, and in spite of all of that apparent progress, shoeless dirt farmers in India and China may well now outlive us. They will almost certainly go through their entire lives without getting a single autoimmune disease. So too will their children. Moreover, only a tiny fraction of them will die with dementia or Alzheimer's. Autism is almost unheard of in their children, too. What is going on here? People in North America should be thriving like never before, yet almost the opposite is happening. We are now getting rates of chronic disease, and dying from them, like never before. Where and how could we have gone so wrong?

Not too long ago, the autoimmune diseases (all of them) were actually incredibly rare. Alzheimer's was a very rare disease too. Now, and nearly all of a sudden, that has changed. We are in the midst of a raging epidemic of these diseases. We could actually be at the early stages of these epidemics too. Once again, something is clearly and hugely wrong.

How could it be that so many of us are now slowly getting sick and we are doing so on an exponential scale like this? As parents, we are doing everything we can to raise our children to be healthy and successful in life. Yet, something seemingly random, and out of our control is destroying their lives with a multiple of diseases on unheard of epidemic rates! We are smart; we read and follow the nutritional advice from experts, and feed them healthy meals. Yet, something is wrong. Something is enormously wrong. In the midst of all our successes, we have this huge failing of not being able to protect our children from these diseases.

Governments, and the media tell us that we are facing a massive *health care* crisis. However, that is not exactly correct. What we are really facing is a massive *chronic disease* crisis. Maybe, we just can't admit to ourselves that things are not really going so well here in the modern industrialized world. What have we done? Who cares about the money, nice houses etc., if our kids are dying, or in endless, terrible suffering from autoimmune diseases⁴? Something significant, yet subtle, has changed in our environment starting around the early 1970s. It's something in our modern environment and well-nourished Western lifestyle that's causing these diseases at these alarming rates. This is an absolute fact.

There's another critically important observation we can make from the Alzheimer's charts shown above. That is the age of onset is moving to the left on the timeline. Alzheimer's in people younger than 50 was almost unheard of just a few generations back. Now, here in Canada, we have something like 50,000 people with early onset. Alarming as that new early onset may sound, that isn't what I'm pointing out. This shift to the left on the timeline tells us more. It is clearly telling us that not only is Alzheimer's an environmentally induced disease, but one that is related to exposure time! The more exposure, the younger this is going to happen. This means there's really nothing stopping this disease from happening to people in their 40's, or even in their 30's.

This tells us that this disease might have almost nothing to do with aging. Historically, Alzheimer's just *appeared* to be a disease of aging because it took so long for the cumulative exposure to induce the conditions of the disease. Now, whatever it is in the environment that's causing it, there's a higher concentration of it, and the required cumulative exposure time is much less. Humans have not changed, but our environment,

⁴ <http://www.theatlantic.com/health/archive/2013/12/living-sick-and-dying-young-in-rich-america/282495/>

including food, has. Even though I think this is obvious from the data, we really need to accept this as a fact. An uncomfortable fact maybe, but it is a fact.

It is something in our environment that is causing Alzheimer's, autism, and the autoimmune diseases. In the next few pages, I'm going to repeat this statement about it being an environmental cause around ten times over. This repetition is not some silly brainwashing trick I'm playing here. It is most certainly not to give people some bogus false hopes, either. It's because the facts and concepts presented here are going to be very counterintuitive for many people. You have to be open-minded. I'm not asking you to believe in the impossible, or some farfetched wacky theory, or some contrived new term such as "frankenwheat".

It's exactly the opposite. I am asking you to believe only in what the evidence says. Nothing else. Don't let preconceived notions blur the evidence. Be critical in your thinking. Don't believe other people who say that this is impossible just using some vague "*because, it just can't be*" argument.

The truth is not what people say it is. The truth is what the evidence says it is.

I'd like to ask that we make this statement our motto for this investigation. Of course, it's a good motto to live by too. Just as importantly, the truth is not what we *want* to believe it is either. Therefore, please don't buy into this out of desperation or blind hope. If you have one of these diseases, please set all emotions aside and look at the evidence.

It's on the strength of the evidence that I present here that you need to make your judgments on the validity of what I am claiming. Most importantly, we all need to understand that the "truth" is not always static. The truth can be provisional, and we need to be prepared to update

what we believe is true whenever new and compelling evidence comes along. This is applying Bayes' theorem.

Therefore, we must always remain open-minded. Moreover, I am once again asking that *you* contribute more evidence, pro or con, to this. This is about science, it's about math, it's about facts, and it needs to be about the truth.

Okay, once we accept that the root cause(s) is something in our environment then we can believe that it (the something) can be discovered. Therefore, hopefully, these diseases can be solved, or at least prevented. There's nothing stopping someone from solving one or more of these diseases, and it could even happen today! You don't have to be a scientist or a medical researcher. I'm not saying it's going to be easy, just that it's possible.

Now, you may be asking, why are there charts showing the growth rates of Alzheimer's and autism in a book on autoimmune diseases. Surely, they're not autoimmune diseases too. Well, maybe not officially, but science is full of surprises. Let's just say they're all diseases of something more fundamental. For now, let's just say they're all on the spectrum of inflammation caused tissue destruction in the human body.

Alzheimer's, autoimmune and autism are some of the biggest diseases of our time. They're killing millions of people, and destroying the lives of tens of millions of others^{5 6 7}. Statistically speaking, about every 60 seconds another person in North America is being diagnosed with Alzheimer's disease. Worldwide, the rate is about one person every 4

⁵ Diabetics worldwide, an annual death count of 4.6 million
<http://www.medicalnewstoday.com/articles/234358.php>

⁶ Autoimmune diseases: a leading cause of death among young and middle-aged women in the United States. <http://www.ncbi.nlm.nih.gov/pubmed/10983209/>

⁷ In 2015, an estimated 700,000 people in the United States age 65 and older will die *with* Alzheimer's. https://www.alz.org/facts/downloads/facts_figures_2015.pdf (page 25)

When Did We Descend into This Hell?

seconds. That is effectively a death sentence. Consider that right now in Canada 48% of men, and 67% of women by age 85 have Alzheimer's or dementia. If you're lucky enough to live to be 105, then the probability of having Alzheimer's is 95%. Approximately every 30 seconds another person in North America is now being diagnosed with an autoimmune disease. That is effectively a life sentence of future misery. In Canada, the suicide rate for men ages 50 to 59 has increased a shocking 49% since 1999. Sadly, we've seen an equivalent surge in serious mental health issues within our youth too. There's been like a 45% increase in hospital admissions for youth mental health cases in just the last seven years. This is now resulting in 50% of our Children's hospital beds being taken up for mental health patients. Then, factor into this that Canada is one of the safest, and best places in the world to live, and is quite affluent too⁸. What in the Sam Hill is going on here? There is no obvious reason in Canada for us to be seeing these dramatic increases in mental health issues. In addition to all of the above, at least 41% of Canadians will now get cancer in their lifetime. What's really going on here?

I want to emphasize that the rates of these diseases I've just cited are absolutely not at all an attempt at raising fear. That is the very last thing I would want to do. I want everyone to be calm, and thinking very clearly and rationally about this. The only message I want to deliver with these stats is that these disease rates are *not at all normal*, for us, or in the human population. Therefore, they are indeed caused by our environment. There is just no way we can have disease rates 75 times, and 283 times higher than other nations, and for this to be anything else. Therefore, I hope by now we agree there's something in, or about, our environment causing these new epidemics. And we *are* going to find it, so you should be very optimistic. This is a manmade problem, and there *will* be a manmade solution.

⁸ <http://www.cbc.ca/news/health/suicide-men-50s-causes-1.3263412>

But, the environment is an enormous and broad spectrum of factors. The environment is complex to the extreme. It's the air, the soil, the water, the food, things like farm chemicals, GMO-based farm products, hormones fed to chickens and cows, the electrical grid, laundry soaps, Teflon, cell phones, antibiotics, vaccinations, chemicals in toothpaste or deodorants, and on and on, and at least ten million other factors.

Moreover, it may not just be one of these factors; it could be some weird and unexpected combination of them. Then, combine this with the unknown interactions any of these environmental factors could have with the stunning complexities of the human body. It could be exposure levels too. It could be one random high-level exposure, or some moderately high-level exposure sustained just long enough so that it acts as a triggering event. Maybe it's walking through those airport scanning machines. There are a staggering number of possibilities; it is in the zillions! We could think that it just cannot get to be more complex than that.

But, oh yes it can. It could be something we've taken out of our environment too. Maybe it's our high levels of hygiene, or sanitized foods, doing us in. Maybe it's because no one gets measles, or some other viral infection, anymore. Who the heck knows? How on earth are we going to nail this down to just one or a few of these factors?

Although I'm painting a daunting sounding task, it is not. There are some obvious ways to narrow down the search and do it quickly. How about this as a plan of attack? We get a database of all known substances with human toxicology. Then, we make a list of the combined symptoms of all the autoimmune diseases, and we find the matches in that toxicology database. Then, we filter down the matches to only those substances that are substantially higher in the industrialized world. Who knows, we might be able to shorten the list down to only a few thousand, or a few hundred, or just a handful of compounds.

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I don't have access to such a database, but I do have a refrigerator full of foods that are suspects. Can we narrow it down from there? Well, it might shock you by just how easy it's going to be.

However, the most shocking discovery for me is that I think it's one thing, and almost one thing only, in all our foods that is the root cause of some of the big autoimmune diseases. I think it is causing most of them too. To make this even more outrageous, I think it is the root cause of autism and Alzheimer's disease, too. Could I get any more absurd than that? Sure, I can. I think this one thing is also, at least, a strong influence in the other epidemics of obesity, osteoporosis, depression, and anxiety. I can almost hear people say, "Oh, that's all, huh." Have a loud laugh, and snap this book shut forever.

Still reading? Great, you're in the open-minded group. However, please understand I don't *want* to make these absurd-sounding claims. Clearly, doing so does make me sound like a "complete wacko." It also makes me sound as if I'm stupidly naïve. I mean, really, how realistic is it to think that a few simple molecules could be causing so many different diseases at the same time and that modern medical science is missing this? It should be almost insane. And maybe it is insane. Just based upon reasonable, rational, and intuitive thinking, the probability is micro minuscule at best. Maybe, my autoimmune disease has just fried my brain a tad too much?

Yet, based on the evidence, I do think one molecule (with a few isomers and precursors) in our food is at the root cause of all of this. If true, how amazing would that be? Oh, by the way, I'd like to add non-alcoholic fatty liver and kidney disease to the list too.

Chapter 2

The Criticality of Getting to the Root Cause

My field of work is engineering, computing, and some time ago, geology also. Geologists are trained to think in long periods of time, and in extremely long periods of time. This is a valuable skill for this investigation.

Engineers and computer scientists often encounter strange problems with completely unobvious causes. As in most fields, you have to apply very good detective skills to get to the bottom of them. Depending upon the severity of the problem, time, and cost, you may decide you don't actually need to fully understand the root cause and just apply some working compromise type solution. In many scenarios, this is completely acceptable. In others, it is completely not. However, obviously, there is nothing more effective in problem solving than getting to the very root cause.

Something most people are probably aware of is the investigation of airliner crashes. In these cases, there is usually a large loss of life. Engineers and investigators will stop at almost nothing to find the very root cause of what really happened. If a structural or engine failure is even hinted at, or remotely suspected, there can be no stopping. These people don't stop digging until the exact and the very root cause is uncovered. The thinking is, obviously, that if it happened even once, it can happen again. Therefore, they must understand the very root cause. This is imperative to the thinking, and problem-solving.

Sadly, the death rate in autoimmune disease or Alzheimer's disease is like another jumbo jet crashing *every single day* in North America. Think of this happening nonstop every day of the year, and that it's gone on for

almost 20 years now. It's even worse because the rate is going up, and up and there's no end in sight.

Oddly, from the outside looking in, it appears that the focus of research into the autoimmune diseases is on various forms of dubious treatment. However, these treatments do not lead to curing the disease at all. Rather, they only mask it or attempt to control the symptoms. For more than 50 years, steroids have been used. These were even once proclaimed as a "cure" for arthritis. That turned out to be a rather premature claim. They are not a cure at all.

Rather, the steroids suppress one mechanism of the immune response, effectively hiding the disease. Frankly, from an outsider's perspective, this appears to be almost crazy. When my doctor first explained to me that the steroids actually suppress the immune system, I thought how odd is that? I am sick, and I'm now suppressing the most important self-defence and healing mechanism my body has. Yet, I'm open-minded, and if that's the best modern medicine can do for me, then okay, I guess. Still, how strange?

Doing some research into the real mechanisms of steroids, I found they suppress the generation of cytokines. Cytokines are signaling proteins sent out from cells to invoke an immune response, among other things. A bit of a silly analogy would be to have a small fire in your house, and you cut the phone lines so that no one can call the fire department. After all, who wants to deal with all the noise, water, and mess that the firefighters will make? However, in the case of steroids, they actually do work really well in at least controlling the situation. With few alternatives, and in the short term, they're probably better than letting things get too out of hand inflammation wise. Of course, the steroids are only deferring the inevitable, and may set you up for a bigger, if not a massive, flare-up if you ever stop using them.

I am personally grateful to have had this treatment option. But, it turns out that the longer-term side effects are pretty nasty. They include irreversible tissue atrophy and a higher chance of getting this other little disease called cancer. Who could not have seen this one coming? We are suppressing the immune system, after all. This is the body's primary defense against cancer.

Okay, so now the alarm bells are being sounded about cancer, and other long-term risks of using steroids as a treatment option. Remember that this has been the standard treatment option for more than *fifty years*! One of the good aspects of steroid treatments is that they're not too expensive. I believe that the average cost is documented to be somewhere around \$50 per month. However, we now have this concern being raised about the increased cancer risk. Remember that the steroids BLOCK the production of cytokines. So, what are the next generation miracle drugs being offered? They are called Biologics. These are marvels of pharmaceutical science, and, no, there is no sarcasm intended here.

But, do they work on the root cause? No, they do not. Rather they ABSORB cytokines. Moreover, they are organism-derived substances that are injected into the body. We have no history with these in the human body, and, of course, no history of long-term use. Yet, somehow, in some way, the assumption is being made that these are less of a cancer risk. But, oh, by the way, they can cause latent tuberculosis to go into the full-blown disease along with a much higher risk of other infectious diseases, too. No kidding, huh? Who would have thought it?

What you need to understand is that cytokines are key messaging proteins used by cells to alert the immune system and inter-immune system cellular communications. This may be like cutting the phone lines, cell phones, Internet, shutting down the police, fire departments, and 911 call centers, and turning off the gas and electricity. Everything

will be nice and quiet as your house crumbles. But, hey, these fancy new Biologics will sure suppress the symptoms of your autoimmune disease quickly.

Great, in both types of drugs, the mechanism is to suppress the messages *sent* to the immune system. Is that the best we can do after fifty years, and hundreds of billions spent in research? Are not the biologics just going to lead to a lot more cancer than the steroids are already causing? Are we not now just queuing up more of the autoimmune disease sufferers into the cancer pipeline? Haven't they suffered enough?

How About We Find the Root Cause?

We can never win this battle if we think we're just going to *treat* the symptoms. Does anyone think for one second that the incidences of these diseases are going to magically stop on their own? Moreover, the incidence growth rates could even accelerate. What if some farm chemical is causing these diseases and that chemical is just starting to become popular with farmers? Maybe the farmers are going to start using more and more of it. These are not infectious diseases, and we're not going to develop immunity to them because our immune system clearly does not like whatever is causing them. On the contrary, our immune system is just going to respond more quickly and forcefully.

Here's the rub with the biologics. The cost of the steroids was, say, \$50 per month. Whereas, the cost of the biologics is somewhere around \$2,000 to \$10,000 per month! How are these drugs any better? Obviously, that's a rhetorical question. The biologics suppress the immune response, too, just more aggressively, and in a more creative way. I view them almost like a master off switch for the immune system. This strategy is almost crazy; at least, it appears so to me.

What's really crazy is that these new drugs have zero chance of curing anything, zip, zilch, nada, nothing! But, they do have a huge chance of

causing even more deadly diseases. On top of that, this elevated risk won't be to just the people who take the new biologic drugs, but now to the people around them too.

Although it may sound like it, I'm not completely against these new drugs either, since they're obviously very helpful in the short term and are no doubt saving lives. At the very least, they are buying people more time. Clearly, though, we need something better. The real question is **WHY** are the tissue cells generating more messaging cytokines in the first place? Additionally, in the near term, are there any other treatment options for us?

What About This for a Treatment Concept?

How about you move out of cushy North America and move to a country with a really low, or nonexistent, rate of your autoimmune disease? Once there, adopt exactly the same diet as the people there eat, and drink the same water too. It will probably cost you far less than a few thousand dollars per month. You will not have the extraordinarily increased risk of getting cancer as we now have in North America. If you do get an infection, at least you'll have a non-suppressed immune system that can fight it.

What do you think the chances are that living in this new environment is going to help you? Who knows? Such an action just might put your autoimmune disease into remission; or even more amazingly, it might just cure it altogether. After all, it is something in ***our*** environment that is causing it!

Moving out of the Western world might appear to be a bit of an extreme. But, it is not. It would be incredibly prudent. Right now, you have about a 50/50 chance of getting Alzheimer's, and, at least, a 40% chance of getting cancer if you stay.

Just to make the point, say I can give you a fairy-tale magic coin, and you do a toss. If it turns up heads, then you get Alzheimer's; and if it's tails you don't. Now, if you did this, and say you tossed tails, then you might feel luck is on your side. But, no it isn't. As in most fairy tales, magic in this one comes with a catch to it. You tossing tails means your spouse gets the heads side of the coin and is now going to die from Alzheimer's. You will spend your retirement years, and life's savings, looking after them before they slowly die.

So, now back to the real world, between yourself and your spouse, there is almost a 100% chance of one of you developing Alzheimer's disease. And of course in the real world, you not getting a disease in no way increases your spouse's chances of getting one. Nonetheless, you and your spouse just need to live long enough and one of you will get this disease. But, living long enough is getting to be more challenging too. Cancer or an autoimmune disease might kill you off sooner. For the first time in history, the life expectancy in North America is actually dropping!⁹ ¹⁰

Maybe, we resign ourselves to this fate and live with that. Or, maybe, we naively think that modern medical research is going to magically solve all these diseases? Well, we're almost literally betting our lives on it. So, let's look at how that research is going.

Why are we Messing with the Immune System at all?

There are other autoimmune disease drugs in development. The theme is still the same: to block or restrict the immune system. It's a bit amazing to me that this same mentality has persisted for over 50 years. The

⁹ <http://www.theatlantic.com/health/archive/2016/01/middle-aged-white-americans-left-behind-and-dying-early/433863/>

¹⁰ <http://www.nytimes.com/2012/09/21/us/life-expectancy-for-less-educated-whites-in-us-is-shrinking.html>

thinking is always to interfere with or obstruct the *immune system* in some way. Here's just a recent example from 2014:

Research uncovers new insight on immune reaction and inflammation in the gut.

The symptoms of Inflammatory Bowel Disease are caused when immune cells from your blood are recruited to your intestine and start attacking and damaging your gut tissues. A recent study published by Crohns and colitis Canada-funded researcher Dr. Vallance found that a protein called RELM- β , produced by the cells lining the intestine, is involved in attracting immune cells to the site of infection. While the recruitment of immune cells helps control the spread of bacteria, they also cause inflammatory changes and damage in the gut, similar to what is seen in IBD. Thus, RELM- β may be a key factor in causing the tissue damage and inflammation seen in patients with IBD. This work may lead us closer to new treatments for IBD by blocking immune cell recruitment by RELM- β .

Source:

http://www.crohnsandcolitis.ca/site/c.dtJRL9NUJmL4H/b.9311451/k.68DE/Research_uncovers_new_insight_on_immune_reaction_and_inflammation_in_the_gut.htm

Of course, the observation of the recruitment of immune cells into the fight is not at all a new discovery. This has been known for a very long time now. Yet, the assumption being made here is that the *immune system* is now somehow defective, and we need to prevent it from causing the destruction. However, that is clearly not the case. What these researchers are seeing is the perfectly normal, and well understood response by the immune system to infection. Clearly, the immune system is reacting, and being recruited into the fight by the infected cells sending out chemical messages. The immune system is simply doing its everyday job. Why should we even begin to think about blocking that incredibly important process? Not only is that thinking just plain wrong, it is

incredibly dangerous too because those messages are really pleas for help.

The immune system is the most important system in the body to keep us healthy. Unfortunately, current and new drugs are trying to block it or shut it down. Now, why would the immune system try to destroy the body's tissue and organs when it is its job to protect them? After millions of years of evolution, does this not seem very peculiar? Isn't it like incredibly peculiar that it mostly happens to people living in North America too?

Now, here's an interesting question. What if the immune system is actually working perfectly and correctly? What if it's doing *exactly* what it's supposed to do? Isn't this, indeed, hugely more likely? I mean really, how can more than 50 million people in North America have sporadically defective immune systems, and there's nowhere near this ratio in the non-industrialized nations? It isn't even remotely close. Is not that, by itself, incredibly strong evidence that the immune system is not defective? How can so many kids in North America all of a sudden have defective immune systems? Seriously, please pause for a moment, and really think about that question.

Remember that modern medical science has been trying to find and understand what has gone wrong with the *immune system* in these diseases for more than 50 years now. Is there a clue here for us in the fact that they can't find it? Is there a clue here for us in the fact that most of the treatments interfere with the messages *sent to* the immune system? Will medical science ever find out what is wrong with the immune system? I very highly doubt it. Because what they are looking for does not exist, and that's exactly why they haven't found it. So, how can so many kids all of a sudden have defective immune systems? The obvious answer is that *they don't!*

Of course, claiming that the immune system is working perfectly correctly must sound totally and completely ridiculous. We all know, as I do personally, that the immune system appears to have turned on us and is destroying our own body tissue. At least, that's what we've all been told. How the heck is that "working perfectly correctly" we should ask?

But, remember that the truth is not what people say it is. The truth is what the evidence says it is. So, let's use a bit of predicate logic here.

1. Autoimmune diseases are caused by environmental factors.
2. The diseases result in the immune system destroying our own tissue.

Therefore, we can say:

1. Environmental factors *cause* the immune system to destroy our own tissue.
2. The immune system is simply and *correctly responding* to the environmental factors.
3. There is absolutely nothing inherently defective, or wrong with the immune system. I'm sorry, but that is just the way us humans are made.

What we are really seeing with the autoimmune diseases are *responses* to some new toxic situation in the immune system's environment. It may sound like semantics, but it is critically important. The human body is *responding normally* to something in our environment. Amazingly, I think this has been absolutely and 100% conclusively proven thousands of times over by people immigrating to North America. They are being afflicted with the same autoimmune diseases and rates once *here*. Normal and healthy people are coming *here* and are getting the diseases that they would have never gotten at home. It is being *here*, not *there*, that is causing the immune response.

Here means Not There. Here means in Our Environment

Obviously, autoimmune disease is a *normal* immune response to something in our environment. Therefore, we need to fix whatever is wrong in the environment, not the human body. There is actually nothing intrinsically wrong with the human body or the immune system to be fixed. The *only* reason that we don't currently accept that this is the normal immune response is that we have failed to understand that this is a *capability* of the immune system. It is an extreme capability in response to an extreme condition. Just think ahead to say, 20 or 30 years from now, and 80% or more of the North American population has an autoimmune disease. Then it will be the norm, and not the exception. Then we'll say: "oh, that's just the way the immune system works".

Although the immune system may be working *normally*, that normal can be pretty brutal, painful, and often even deadly. Obviously, we also need to be able to treat the people who already have these diseases. And clearly, if we can determine the real root cause, then we'll have a much better chance of developing the correct, and effective, treatment.

The most surprising insight for me when reading about the autoimmune drug research is that there appears to be incredibly little interest in looking for the root causes of these diseases. Additionally, there is almost always some distracting and irrational rationalization that genetics are somehow part of the root cause. That's exactly the opposite of what it should be. Once again, whatever is causing these epidemics; it is something in our environment. That is the key fact to solving all of this.

The same applies to Alzheimer's disease. There has been a staggering amount of money spent on looking for new drugs to combat this disease. It is in the billions of dollars. Yet, within a few minutes of examining the exponential growth rates of this disease in North America, it's stunningly crystal clear that it too is an environmentally caused disease.

It is just as crystal clear that this is not a genetic disease. Once again, the doubling rates are now faster than the human reproductive cycle. And, who the heck cares if there's a genetic predisposition or not? What are we going to do, give 100's of millions of people gene replacement therapy?

Reading about the research into Alzheimer's and Autism the focus is almost always on: genetics, genetics, and genetics. But, no, genetics are not the answer. The real answer is: environment, environment, and environment. It is something from the environment that is causing these diseases. It is some toxin getting from the environment into the human body. Therefore, putting something else into the human body to combat these diseases is probably not going to help much. We need to prevent these toxic substances from getting into the human body in the first place. Research into more drugs is almost completely useless. Nearly every research dollar spent should have been directed at finding the root cause(s). The same goes for the autoimmune diseases. More research into drugs for other novel ways of suppressing the immune system is almost completely pointless, if not incredibly dangerous. They will never cure a single instance of disease, not ever!

Let's find the responsible toxic substances. Let's be like the plane crash investigators and stop at nothing to get to the bottom of this. Let's find the *very root cause*. That's not: let's get close to the root cause or find a short list of possibilities that can be investigated over the next 10 decades. No, our goal is determining the very root cause and doing it so fast it will be shocking!

Nothing else is acceptable. This is a national emergency. Does this sound alarmist and unrealistic? Just remember, from the time you started reading this, at least 100 more kids have gotten diagnosed with an autoimmune disease. These are life-threatening diseases. These diseases

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could dreadfully disfigure many of these kids for life^{11 12}. In the longer term, these diseases are going to kill or destroy the lives of millions of our nation's kids. It is 10,000 times more urgent than any threat from terrorism or any other known risk to our nations. What are we waiting for? Currently, autoimmune diseases are a leading cause of death for young and middle-aged women in the United States¹³. Not long from now, we'll have 100 million and then 200 million people sick with an autoimmune disease in North America. Add to that the staggering rates of autism and Alzheimer's disease. Who is going to be left working to pay the taxes? We don't need big and long-drawn-out clinical studies and thousands of more peer-reviewed papers. Although that's the standard and accepted process, it's proving ineffective and too slow in this regard. It is currently not delivering the results we need. What we need is thinking, deep thinking about the real root causes; and maybe a bit of luck too.

The root causes are not impossible to find. After all, it is something in our environment! It is also completely clear that it is something we are currently adding to the environment and adding more of it as time goes on. Therefore, what *we* are going to do in this book is be like the plane crash investigators. We are going on a rather in-depth search to find the very root cause. We are not interested in band-aid type solutions and we are not going to stop until we nail it right down to the very specific molecules. Not only is that our goal, I believe that these molecules will be revealed in this investigation and that by the time you finish this book you should have so very little doubt about who the guilty party is. Now,

¹¹

<https://www.google.com/search?site=&tbm=isch&q=crohn%27s+colostomy+bag&oq=Crohn%27s>

¹²

<https://www.google.ca/search?q=hidradenitis+suppurativa+deroofting&biw=1054&bih=654&tbm=isch&tbo=u>

¹³ <http://www.ncbi.nlm.nih.gov/pubmed/10983209/>

let's get going, because after all how hard can it be to find a few toxic substances?

Here's our first clue. Do you remember this old cliché: "The best place to hide something is in plain sight"? Well, guess what? The answer starts with the labels of the foods you have sitting in your kitchen. With that, let's look at what the experts have been telling us about our foods for decades now.

Chapter 3

Beware the Nutrition Experts

In the 1970s and '80s, health experts deemed saturated fats evil. They told us that butter was very bad for us, and we would be so much better off eating margarine. Margarine was this new imitation butter containing magical and manmade trans fats that were supposedly so much better for us. It would save us from the sure death that the real butter was causing. If you're old enough, you'll probably remember all those "I can't believe it's not butter" commercials. Of course, being trusting and health-conscious consumers, we followed that advice from the experts.

Somewhere around the mid-1980s, I saw a television interview with a young man who made a solo expedition to the South Pole. He took something like 300 pounds of butter on a sled with him. This was his primary food source for the expedition. He lived on it for months.

Surprisingly, and unlike other expeditions before him, this guy succeeded. He did not run out of energy and freeze to death in the snow. Moreover, he did not die from a heart attack. It was just the opposite. He was healthy, happy, and even thin. In the face of the expert nutritional advice of the time, this guy did exactly the opposite. I thought to myself, how strange is that? Maybe that expert nutritional advice was not so expert after all?

And, of course, now the so-called science behind the trans fats and saturated fats has been completely turned upside-down. It's the trans fats that are now evil, and the fat in butter is now actually good for us again. This in itself is almost a scientific fiasco. After all, the trans fats have no doubt killed thousands of people.

Next, in the mid-1980s, the nutritional experts vilified two other staples, eggs and red meat. They told us that the cholesterol in eggs is what's killing all of us, and likely causing the epidemic of coronary heart disease. The mantra was that eggs were just simply unfit for human consumption. Likewise, red meat was deemed to be just as evil. Even more so were the animal fats of red meat. We were told that it was next to being a toxic substance, if not deadly.

Well, in the mid-1990s, magically eggs became good for us again. It turns out that the amount of cholesterol in eggs was far lower than what the human body generates naturally by itself. Moreover, some of the anti-cholesterol drugs that doctors were pumping into patients were probably killing them faster than almost anything in their diets could ¹⁴.

Similarly, now red meat is also not so evil anymore. Red meat now has a big following again. Moreover, people who do consume it appear to be doing quite well health-wise. Okay, once again, the experts were not experts at all.

Then in the late 1990s and early 2000s, the sacred utterance from the experts was to eat lots of brightly colored fruits and vegetables. They are not only good for us; we've had it drilled into our national psyche that they are mandatory, and essential to our wellbeing. We are told that this may somehow magically stave off the cancer epidemics.

The recommendation from the Canada food guide is to have something like five to 10 servings of fruit and vegetables a day. Okay, so the experts are telling us to pump ourselves, and our children, up with fruit sugar. Great, we now have an outrageous obesity epidemic and a national population with almost nonstop flatulence. Nice work guys! We also

¹⁴ [92 Deaths Linked to Cholesterol Lowering Statin Drugs](http://www.yourmedicaldetective.com/public/454.cfm)
<http://www.yourmedicaldetective.com/public/454.cfm>

have a huge abundance of tooth decay and other dental issues. Is there a connection?

Once again, there's something smelly about this so-called expert advice. What do our liver and pancreas think about all this new inbound fructose? When in human history have we consumed so much fruit? The real answer is more like: never! Can you name one successful historical population that has eaten 10 pieces of fruit per day?

Is there any clear-cut, absolutely rock-solid scientific evidence to support this advice? Maybe this expert advice will soon be turned on its head too? More than likely, this recommendation of eating five pieces of fruit per day originated with some *marketing* expert. Maybe the nutritional experts are just parroting the marketing propaganda from the fruit producers?

The historical batting average for the supposed nutritional experts is not looking too good actually. It is more like a flip-flop, another flip-flop, and full of reversals. All of this expert advice has just confused the heck out of consumers, and we are losing faith in the experts. Not a single one of these sweeping changes in the national diet has resulted in any significant improvement in the rates of the chronic diseases.

At the current time, the experts are now telling us that omega 3/6 oils are essential for our health and really important for brain health, too. Now, once again, the North American consumers are trying to be smart and wanting to look after themselves and are consuming hundreds of millions of dollars' worth of fish oils annually. It must be good for us, right? After all, we're facing an alarming epidemic of heart disease, dementia and Alzheimer's disease; we have to do something to try to protect ourselves. What about the real evidence that it's actually good for us? There's zip, none at all!

Remember our motto:

The truth is not what people say it is. The truth is what the evidence says it is.

Well, it just might turn out that this expert advice regarding supplementing with omega 3/6 oils is going to be a complete and colossal disaster for our national health. But, it's for a completely unobvious reason.

What if the American and Canadian food guides are almost like prescriptions for autoimmune disease and Alzheimer's too? Does that statement sound ridiculously absurd? Well, unless the root cause of these diseases is a toxin in either the air or the water, then that statement almost has to be true. Think about it. And, I can prove in two minutes that it is not something in the air or the water; so that leaves food. *Period!*

So what does the evidence say about our current national diets prescribed by the experts? The evidence says it's not working out very well. It's not working out very well at all. We now have 70% of the population on at least one long-term prescription drug, and 50% on two or more¹⁵. At this rate, within a few decades, or less, 100% of us will be on prescription drugs. At least 50% of the North American population is technically obese. There are at least 10 million people who suffer from depression. There millions that suffer from anxiety, and ADHD too. On top of that, at least 100 million people in North America suffer from chronic pain¹⁶.

Judged on a worldwide scale, North America is one of the most disease-prone places on the planet to live. We have to be honest with ourselves

¹⁵ <http://newsnetwork.mayoclinic.org/discussion/nearly-7-in-10-americans-take-prescription-drugs-mayo-clinic-olmsted-medical-center-find/>

¹⁶ <http://www.webmd.com/pain-management/news/20110629/100-million-americans-have-chronic-pain>

and face the evidence. We now have epidemics of all kinds of horrible diseases. And these are not minor diseases. They're painful, disfiguring, life-debilitating, and sometimes deadly diseases. The rates of these diseases are nowhere near normal for the historical human population.

Does anybody think for one minute this isn't connected to our national diet? Something is very fundamentally wrong here. But, if we can't trust the experts whom are we going to trust? How about we trust the evidence? Do we have any strong evidence of what the correct human diet should be? Of course, we do. We can look at China and India. These countries have had very successful and quite healthy populations for something like 5,000 years. They also don't currently have this outrageous epidemic of non-communicable diseases as we do in North America. In their billion person populations, they have almost not even a micro-spec of these diseases, relatively speaking.

What does their diet look like? It's simple. It is the simple starches from rice, a moderate amount of vegetables, and a moderate amount of fish, pork and chicken, and small amounts of fruit. They're not stuffing themselves full of 10 pieces of fruit each day. They're not stuffing themselves full of multivitamins. They're not stuffing themselves full of omega-3 and fish oils. They're not eating huge amounts of milk and dairy products. Are there lessons here for us? I think there are indeed.

How about we consider the evidence presented by the diet of the original North American Indians. Once again, these people had a very simple diet of mostly protein from red meat. They had very small amounts of fruit and a tiny amount of vegetables. They had zero amounts of milk and dairy products. Yet, they too had large and successful populations and for thousands of years too. How is that possible? Are there lessons for us? I think there are indeed.

Could it be that the current expert nutritional advice is actually killing millions of us in North America? I think it is quite inadvertently doing

exactly that. Some of the current self-proclaimed nutrition experts are celebrities such as Dr. Oz and Internet sensations like the “Food Babe”. In the case of Dr. Oz, this guy has like rock star celebrity status. Why are these people so popular, and why do they have such big, sustained audiences? Well, one reason could be because of their charming personalities and charismas. But, I think the much bigger reason is that at least 100 million people in North America are now sick! If we were all healthy, there would be very little interest in these new health celebrities.

Now, maybe oddly (based on my own nobody status, and nonexistent credentials), I think some of the advice from both Dr. Oz (and I’ve only watched two of his episodes) and the Food Babe is just nuts. In some cases, they are spreading dangerously bad advice. In the case of Dr. Oz, it was his recommendation to supplement daily with all five vitamins and omega-3 oils¹⁷. That may actually be a prescription for an early death from the good doctor.

In the case of the Food Babe, it’s her criticism of the “artificial” food color used in Kraft Dinner. Now, messing with KD is serious business (no sarcasm intended) because this product is such a staple in the diets of North American kids. A “natural” plant-based food color may actually be much worse. She has no idea what she’s talking about in this case. Yet, her quasi-celebrity status may influence changing this widely consumed product for the worse.

Maybe the surprising bit of news for the followers of the Food Babe and such is that plants are actually incredibly good at making very toxic chemicals. Moreover, a chemical does not know or care, whether it came from a nice organically grown plant or from a nasty-looking industrial factory. Therefore, the plant-based origin of a chemical does not

¹⁷ Dr. Oz's Recommendation on Vitamins
<https://www.youtube.com/watch?t=8&v=Jc1fhvN-NoY>

Beware the Nutrition Experts

automatically make it safe for human consumption. It's a ridiculous assumption to make.

Although I do believe these people do have the best intentions, they are just missing some critical information. History tells us that we should be very, very careful of who and what we believe. Any broad and sweeping changes to the national diet should also be made very slowly, and very carefully. They must not be made based upon the hunches from celebrities or other self-proclaimed experts.

We've had enough disasters. Ironically, all of us would have been vastly better off if we had never heard, or seen, a single word from the nutrition experts. Even though it may sound like it, I am not putting the blame on anyone here. I think what has happened is that in the face of the escalating health crisis, we are simply trying to combat it with what we think is more and more nutrition. However, that approach is simply backfiring. We are not going to eat ourselves out of this health crisis; at least that's what the evidence says.

The only way out of this crisis is getting to the very root causes of these diseases. Furthermore, if there has been this enormous focus on diet for decades now, and we are eating more, and more of everything that we think is healthy, and it is simply not working, like not at all... could it be that we need less of something? Therefore, let's investigate this possibility a little bit more by applying some good old fashion thinking.

Chapter 4

A Thought Experiment

Let's look at this logically and go through a bit of a thought experiment together. Please be critical in your thinking. Please try to spot any mistakes in logic, or erroneous, or unreasonable extrapolations.

Okay, let's start:

- Epidemic rates of these diseases in the industrialized world mean they are not genetic. Eczema has increased 40% in five years. Crohn's has doubled in just 5 years in Chile. It is impossible for this to be genetic.
- People emigrating from non-industrialized countries develop the same rates of autoimmune disease rates here, at least by their second generations.
- Just as importantly, immigrating adults are statistically healthier than most Canadians of the same age. Yet, within just 15 years, they become just as sick as their Canadian counterparts (and this is just general health, not disease).
- This means it is environmental; that should be perfectly, 100 percent clear. Therefore, it is probably one or more toxins in the food or water we all consume.
- But, it is not the air or water we all drink because not even close to everyone gets these diseases. Even within the same families emigrating from non-industrialized countries, not everyone in the family gets the disease once here.

A Thought Experiment

- Big regional differences within North America in these disease rates mean the toxin isn't uniformly consumed.
- These diseases are not at all unique to the Western industrialized world. Our incidence rates are just much higher. Therefore, the toxin(s) must be present in all countries of the world, just in lower concentrations. We should expect a graded exposure to result in a graded response.
- The dramatic increase in these disease rates started in around the 1980s. Therefore, more of the toxin(s) started to be introduced and/or consumed in the '70s and early '80s.
- These are not modern-day diseases, although the epidemic rates are. Therefore, it is not a modern-day toxin(s).
- There is clearly a time delay (usually in decades) between consumption and disease onset. Therefore, it is not a toxin at low doses. The body, therefore, must be able to deal with a certain amount of this toxin, so it probably accumulates. Therefore, additionally and oddly, the accumulated amount is not toxic.
- These diseases affect children and adults. Therefore, they are not diseases that result from aging. However, for most adults, once acquired, the diseases are chronic (usually for the remainder of life). Therefore, there is a tipping point or threshold to the level of toxin(s) the body can deal with.
- These diseases are very widespread in the industrialized world; there is no geographic region in North America that is immune from these diseases. Therefore, this toxin(s) must be very widespread and very common in the food or water we all consume. This is also supported by the fact that very few adults

spontaneously fully cure of the disease, meaning that almost no one randomly stops consuming this toxin(s).

- The incidence rates are higher in North America along the Atlantic Coast. Therefore, there must be more of this toxin consumed in this region. Other countries, such as the Scandinavian countries, with high rates of saltwater fish consumption have high rates for these diseases, too. Therefore, this toxin could likely be found in fish. The two most unanimously cited other trigger foods are milk and tomatoes. Therefore, this toxin should be found in these two foods too.
- Women get these diseases much more than men do. Therefore, they are either consuming more of this toxin, and/or have a lower threshold for reaching a tipping or triggering point.

What Is the Immune System Telling Us?

Nearly everyone in the medical community tells us, and tens of millions of people know firsthand, that these are *triggered* autoimmune diseases. Let's set aside the apparent oxymoron for now, and note that the most commonly cited *triggers* are food.

Next, we need to know what functions the immune system provides us. It protects us from viruses, bacteria, fungi, parasites, and toxins. We know with a high degree of certainty that autoimmune diseases are not caused by viruses, bacteria, fungi, or parasites. So, that leaves us with toxins or the medically accepted view that the immune system has somehow become defective. But, the flare-up nature of these diseases clearly indicates that it is not a permanently defective immune system. It is almost randomly defective. Additionally, it is most actively defective when we eat trigger foods, and/or in the winter months. So, it is highly likely that the immune system is actually responding to a toxin in our

A Thought Experiment

food, or somehow the defective immune system now knows how to tell the weather.

There are more than 10 million kids with eczema in North America. Although most cases are mild, it is indeed this same autoimmune disease. Is not this in itself very strange? Why do so many otherwise healthy kids now have an autoimmune disease? It is not just eczema these kids are getting either; they are getting other autoimmune diseases too.

But, magically, most kids “grow out of it”. So, they have a defective immune system for a while, and then it self-corrects? Or, more logically, their bodies are able to adapt to or outpace the consumption of the toxin. But, we know that they are probably not adapting because for a quite a few of these kids, their eczema returns in their 20’s or later in life.

- So, I think that the immune system is telling us that we are still looking for a toxin, and most likely one found in food, and weirdly, one that is somehow more active, or consumed more, in the winter. Even more strangely, one that only kids routinely grow out of.
- The autoimmune diseases such as Crohn’s, colitis, lupus, arthritis, and eczema all involve the skin either as a secondary or primary symptom. Therefore, this toxin must be documented to affect the skin in the exact same manner.
- Here’s just a subset of the combined documented symptoms for some of the more common autoimmune diseases:
 - Abdominal pain, cramping
 - Diarrhea
 - Nausea and vomiting
 - Diminished appetite and weight loss
 - Fever
 - Anemia
 - Chronic fatigue

- Skin lesions, peeling, nodules
- Swollen lips with fissures
- Eye inflammation, blurred vision
- Joint inflammation and pain
- Muscle stiffness
- Mouth ulcers
- Bone pain
- Osteoporosis; spontaneous bone fractures
- Mental dullness, confusion
- Light sensitivity
- Liver issues
- Kidney issues

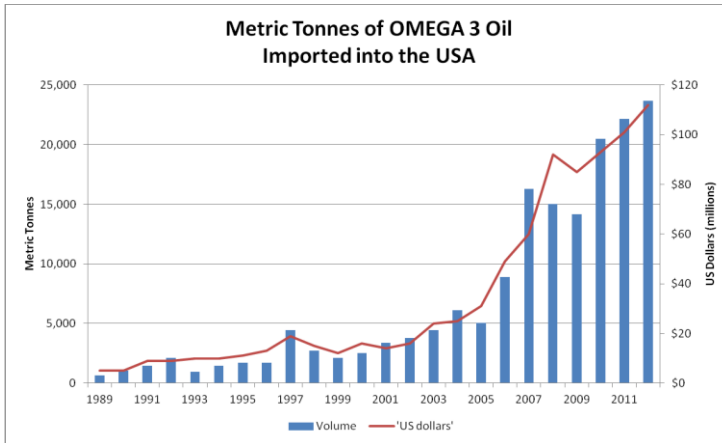
Therefore, the toxin(s) we are looking for must be documented to produce *all* of these very same symptoms *and* it must be very widely consumed. Even this subset of symptoms is one heck of a list to match.

Yet, amazingly, there is such a potential toxin, and it is in nearly all of our foods.

It is called Retinol, a.k.a. Vitamin A

It is also essential, and harmless at low doses. It also has a threshold, or tipping point, when it becomes toxic. The normal function of the human body is to store and accumulate this substance. It's also high in certain fish. It is also added to all low-fat milk, dairy, and margarine. This policy started in the 1970s. More importantly, the fish oil craze started around the mid-1990s. Consumption of fish oils is now exponential in growth in North America.

Figure 8 OMEGA 3 fish oil imported to the USA



Source: The Evolution of Fish Oils to Omega 3 Fatty Acids

Why have we done this? Have we now become like Finland in our consumption of fish oils? Is this really good for us? How much of this Omega-3 is from fish or krill oil? Has its vitamin A content been removed prior to packaging? I doubt it, but I don't know. Nevertheless, let's consider this:

Health experts commonly tell people that oily fish have more health benefits than white fish. However, their recommendations have never been compellingly proven scientifically in large population studies.

Source: <http://www.medicalnewstoday.com/articles/40253.php>

The [chart](#) I've included in Chapter 1 showing the growth rate of autism was taken from a report trying to implicate glyphosate with this disease. That is the mystery farm chemical shown with the red curve on the chart. (Source: [Swanson-et-al](#)¹⁸.) But, that implication is just based upon a correlation. It is almost meaningless to implicate glyphosate based only on that evidence. For example, we might find a similarly strong

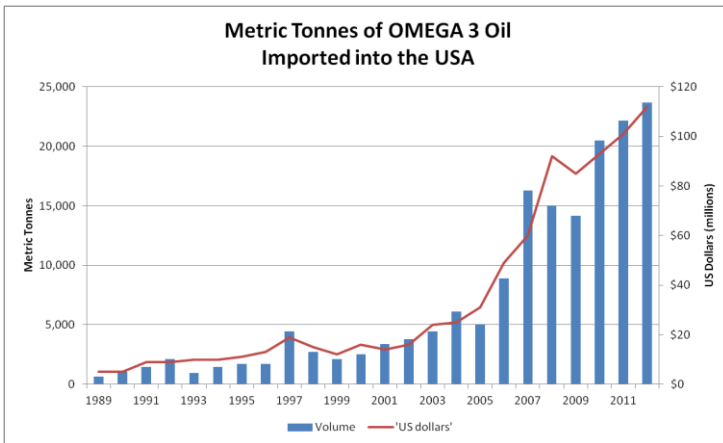
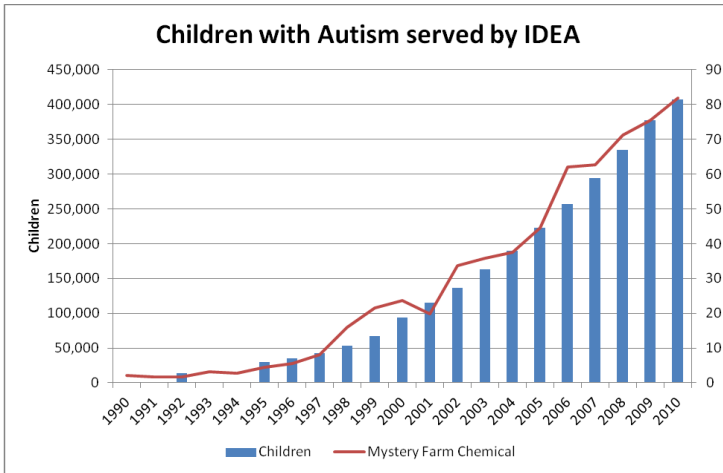
¹⁸ http://farmwars.info/wp-content/uploads/2014/11/JOS_Volume-9_Number-2_Nov_2014-Swanson-et-al.pdf

correlation between the number of LEGO sets sold and autism rates. For those correlations to have significance there needs to be another scientifically supportable connection. Regarding glyphosate; I have no opinion whatsoever about its safety. It may be harmless; it may not be. I don't know, but my bet is that Swanson is completely wrong in implying that glyphosate is at the root cause of autism.¹⁹

¹⁹ There is a bunch of mumbo jumbo in this report that is questionable science. However, the underlying base data regarding the growth rates of the diseases is valid, and is hugely important.

A Thought Experiment

Now, let's note the same strong rate correlation exists here too with fish oil consumption and autism (correlate the blue bars, not the red lines).



Next, let's consider an important known difference between glyphosate and retinol. Which one of these two chemicals is actually absolutely, clinically proven to cause: inflammation on the brain, anxiety, brain fog, and memory loss, (yes, at high doses)? It is retinol, a.k.a. vitamin A.

I think this nice "vitamin" label is throwing people off. I see it differently; I see retinol as being just another molecule. I don't care one

tiny bit about what misleading label someone else has put on it. This is where you need to apply very critical thinking. Consider that at one time both Adolf Hitler and Joseph Stalin were each considered to be nice guys. They were each separately nominated for the Nobel Peace Prize. As more information became available, it was abundantly clear that they were anything but nice guys. And so it is with vitamin A. It is a nice molecule, until it converts into a very toxic one.

Therefore, it is very important to know that it is not vitamin A (the retinol molecule) that is the biggest concern. Rather the real culprit is the molecule that retinol converts into. That converted molecule is retinoic acid, and the conversion happens normally, and automatically when retinol levels get too high. This converted retinoic acid molecule has got to be one of the most destructive chemicals we can have in the human body. As you are about to learn, that last statement is not an assumption; it is an absolute, scientifically proven, fact. Why is this substance so incredibly destructive to the body? It is because it *causes* the powerful immune system to start destroying the body!

The FDA has set some guidelines to try to limit the maximum amount of vitamin A in multivitamins to something like 1000 IU (international units). This is to lower the risk of people accumulating too much of it. Could all this Omega-3 fish oil be another highly concentrated source of vitamin A that has snuck under the FDA's vitamin A radar, so to speak?

Countries with low vitamin A consumption, or have a vitamin A deficiency, have incredibly low rates of these diseases compared to North America.

If I'm right about this, and nothing changes, then we as a society are in very big trouble. The doubling rates we now see for the autoimmune diseases are nothing yet. The doubling rates are not going to be linear. The body's absorption rate of retinol by the liver is going to follow an

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exponential decline curve. That is because it will be exponentially and inversely proportional to remaining storage capacity.

Mathematically speaking, it is, therefore, going to be exponential and not linear growth rates in these disease rates. The vitamin A consumption rates are zooming, too. We really have two near exponential curves crossing over on each other. It will be far more than doubling of rates over the next 10 to 20 years. It's more likely to be four times, and then eight times, etc. every 10 or 20 years. Once again, this is not fear mongering, and it is not just speculation. There is already very good mathematically based, and major scientific evidence to support this prediction. Just some of that evidence is that there are now 86 million Americans, age 20 and older with pre-diabetes; and that is up from 79 million in 2010²⁰. Add to that the 30 million already diagnosed with diabetes. When we include Canada in the numbers, this easily adds up to well over 100 million people in North America. Since diabetes is a common precursor disease for so many other autoimmune diseases, I think it's clear that we are headed for a tidal wave of disease.

²⁰Data from the National Diabetes Statistics Report, 2014
<http://www.diabetes.org/diabetes-basics/statistics>

Chapter 5

The Real Experiment

I would like to claim that I conducted that thought experiment to get to this point. However, I did not. I took a far more direct approach. I conducted a real experiment.

First, I need to put this in the context of my own health conditions at the time. In the fall of 2013, I started to experience some rather severe fatigue. It was getting worse and more or less turned into unrelenting chronic fatigue. In the years leading up to this time, I was in generally good health. I did have some minor health issues creeping up on me that I had just assumed were due to aging. These were mostly joint pain in the knees, and dull, blurry vision, and several other minor things.

One other weird thing started happening to me around this time. For most of my career, I had been cycling to work, both during the summers and winters. I'd go at a good speed and wasn't shy of hitting bumps and "shooting" off curbs etc. But now, even small bumps or even just dropping down off a six-inch curb *hurt my brain*. As the bike slightly impacted the road, my arms impacted the frame; and my brain ever so slightly impacted the inside of my skull. It was quite noticeable and moderately painful. I just assumed I was coming down with the flu. That flu never did develop. I didn't think at the time that I had *inflammation* of my brain.

Of course, I'd been sick before, and naturally, I always recovered. So I was just expecting the same would apply to the fatigue. It did not. It only got worse. I went to see my doctor multiple times regarding the fatigue. He had no clues or answers for me.

Just to quantify the severity of the fatigue, I needed 12 hours of sleep per day. On top of that, I was trying to get a mid-afternoon nap each day. I was just completely wiped out. I was forced to quit my job over it too. So, I was typically going to bed at 8:30 p.m. and waking up about 8:30 a.m. A lot of mornings after waking, I felt no better than I had before I went to sleep. Sleep provided no relief. That may sound strange, but it's true. More consultations with my doctor resulted in no answers.

Around February 2014, I started to develop a rash on the backs of my hands. I made several visits to my doctor and was diagnosed with adult eczema. At this point, I had only a vague understanding of what eczema even was. I thought it was just a rash. My doctor explained to me that I now had an autoimmune disease. I thought: *“Oh, that doesn't sound good”*. I had almost never even heard the term *autoimmune* disease before. He explained that my immune system was now being extra-aggressive and attacking my own skin.

He went on to explain that there was no known cause and no cure. Furthermore, he told me that for adults my age, it's just going to get worse. Being a good doctor, and wanting to put all the cards on the table, he also explained to me now that I have gotten one autoimmune disease, I'm probably going to get more. He said that it's nothing I've done wrong, implying that it is just more or less bad luck. I thought: *“Oh, great! That was not exactly the news I was hoping for as I headed into my retirement years. But the reality is what reality is”*.

My doctor prescribed steroid creams and told me that I'd be using these for the rest of my life. He told me to go easy on them because there are long-term negative side effects. I'm thinking: Hmm... I'll be using these for the rest of my life yet there are long-term side effects? How's that going to work out? Does this imply that *long-term* might not translate into a *long-time*?

I thought: *“Okay, we’re dealing with modern medical science, and if that’s the best it can do for me, then that’s fine. I’ll just have to live with that.* Oddly, I had not made the connection between the fatigue and eczema conditions. Neither did my doctor suggest that they were connected. Overall, my health had declined into a very bad state. I will go into a lot more detail of this decline in a later chapter since there are some very important clues there.

By July 2014, the bank account was draining, and I was considering trying to get back into work. I was joking with my wife that maybe I could find an employer who would let me have mid-afternoon naps. Being realistic about my chronic fatigue, it was clear to me that my life would now be nothing more than work and sleep, at best. Also, I had band-aids on most of my fingers, like permanently now. By this point in time, I had gone through thousands of band-aids.

It was going to be kind of tough getting back into work looking like this and having some creepy clear fluid leaking from my skin. I was fortunate to find another job with a start date of August 11th. From the very beginning of my eczema diagnosis, I had this feeling that I had somehow done this to myself, even though my doctor assured me it was just bad luck.

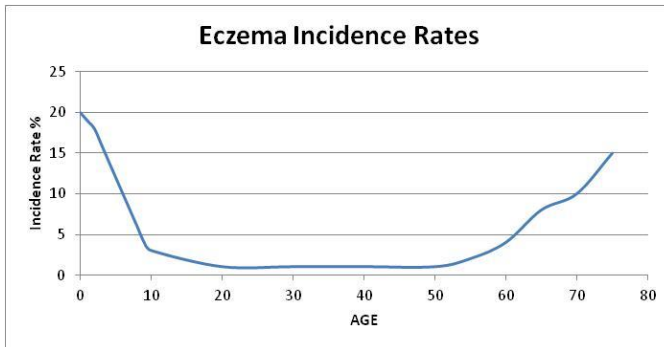
On August 8th, I decided I just had to try to do something to get this eczema condition under control. Clearly, the steroid treatments are a dead-end. Also, I’ve been told not to use them on my face. My face was somewhat red with inflammation, and I felt that it could break out with the eczema rash at any moment. There was no way I was going to be able to keep this new job if I had a flare-up on my face. That was just going to scare people I work with.

Okay, at this time, I knew next to nothing about eczema. I started to do a bit of research about this nasty condition. Let me now take you through that discovery process.

The Real Experiment

The first surprising thing to discover is that there are over 20 million people in North America with this nasty disease. In the U.K. it is around 6 million cases, in Canada it's around 3 million, and in Australia it's about 3 million too. Wow, that's totally shocking! I had no idea. At least, I'm not alone. About 20% of young kids in North America now "get" eczema. It has increased 42% in just five years in the U.K.²¹ and has increased at least 300% since the 1960s. There are similar rate increases currently happening in the United States, Canada, and Australia too. More and more adults are picking up eczema in their fifties. So, we have this U-shaped pattern in the incidence rates. It looks something like this.

Figure 9 Pattern of incidence rates of Eczema in the USA



After doing an intense amount of research, umm, for about 30 minutes, the other thing I discovered is that there's a very well documented list of **trigger foods** for this condition. They're not cited as being the root cause of the condition. They are just foods that make it worse or that can cause you to go into "flare-up". Flare-ups are periods of intense inflammation, and the skin breaking into lovely little lesions. The various lists of trigger foods mostly include milk, dairy, eggs, tomatoes, bell peppers, citrus fruits, fish, and peanut butter.

²¹ Eczema cases rise dramatically <http://news.bbc.co.uk/2/hi/health/7955312.stm>

Well, that's an interesting list. I'm a bit shocked to see my old friend milk listed. I have been drinking milk all my life—and lots of it, and maybe an unreasonable amount of it too. I've never had a problem with milk. Yet, here it is on a list of foods that can make my condition worse. How strange. Has my old friend turned on me? Has my overconsumption of it caused me to have some intolerance to it?

What the heck is in milk these days? I go to the fridge, pull out the milk jug and read the label. It proudly states vitamin D and vitamin A added. Okay, those are vitamins; those are good for us, right? Could I be getting too much of one of these?

I do some intensive research about vitamin D, umm, for like 15 minutes. Oh, isn't this surprising? Vitamin D is actually used as a rat poison. I used to shoot rats on the farm when I was a kid. I did not like these animals one bit, but I did have a ton of respect for how tough they were. If you don't know it, these are incredibly tough and resilient animals. Yet, we are able to kill them with vitamin D overnight? Why is this substance in our milk? Are we really, really sure it's safe? More importantly, are we really, really, and absolutely sure that it's safe over a long period of time? How about for 100 years of consecutive daily consumption? Well, we had better be!

Coincidentally, there has recently been a quite a bit of news about everybody being low on vitamin D, and it has apparently somehow happened all of a sudden too. This is all strange, new information for me; and I am not sure what to make of it. Okay, the next question I had was: what other foods in that list of trigger foods contain vitamin D? Almost none do; just the fortified dairy. So now, after another 30 minutes of my intense research, I cross vitamin D off the suspect list.

Next, I move on to vitamin A. The first question I have is how many of the foods on the trigger list contain vitamin A? Isn't that interesting? It's almost all of them with the exception of peanut butter. The other

interesting observation is that all of these trigger foods actually have quite high levels of vitamin A too.

Doing 40 more minutes of intensive research, surely there have been studies ruling out vitamin A as a factor in eczema? But no, I can find no research whatsoever linking these two things. At the least, I expected to find some research that has considered this and has ruled it out. But, I can find nothing.

Okay, there's tons of research about vitamin A itself. I have no knowledge about the function of this vitamin whatsoever. I quickly find myself on the NIH (National Institutes of Health in the USA) site, reading about vitamin A toxicity.

Isn't this strange? There is something like 20 documented symptoms of vitamin A toxicity, and I personally had about 19 of them! Wow, that is surprising. The one symptom I don't quite yet have is *death*.

Reading a bit more about vitamin A toxicity, it is documented that you need to consume what appears to be massive doses of it before you get into a toxic state with it. The cited classic case is of someone eating polar bear liver. Well, I sure have not been eating polar bear liver. Okay, maybe there's no connection here. Doing a bit more reading, though, I discovered that the body *stores* the vitamin A you consume. That's an interesting little detail, and that little detail changes everything. I'm an engineer; back in the day, I loved integrals. As a geologist, a human lifetime is a mere micro-blip of time. Time, integrals, and stored consumption leading to a toxic state, hmm; it's at the least a possibility.

Could it be that a lifetime of consumption has actually turned into a condition of vitamin A toxicity? Yet, there is no research I can find linking this potential condition with eczema or any other autoimmune disease. Most importantly, there is no research ruling it out. That's so odd to me.

We have tens of millions of people with autoimmune diseases, and the symptoms of the autoimmune diseases are a perfect match for vitamin A toxicity. Okay, the next question I have is how many foods have vitamin A. I do an inverse search: How many foods have zero vitamin A? Just to be clear, this is not foods that are just labeled as having 0% RDA, it is foods with zero molecules of vitamin A.

I expect to find hundreds, if not thousands, of foods. I have no idea how many foods don't have any vitamin A since I had no prior knowledge whatsoever about it. If I had to make a guess, I would have guessed that only about 5 or 10 percent of our foods contain some vitamin A. My reasoning is that it must be a small number of foods because we are supplementing our milk and dairy with what is documented to be a micronutrient. Surely, we are doing this for a very good reason, right? There must be a substantial risk of not getting enough of it, right?

Well, it turns out, there are about five foods of any substance that have *zero* amounts vitamin A. So, the inverse of this is that nearly all foods we consume can have at least some vitamin A content. Amazingly, that is like 99.9% of all foods have some vitamin A, or what is called a vitamin A precursor.

Okay, almost all foods contain some vitamin A. The more popular foods such as eggs, milk and low-fat dairy products, many fruits, tomatoes, tomato based sauces, bell peppers, fish, cheese, pizza, yams, sweet potatoes, many spices, carrots, etc. are very high in vitamin A. Now add to that just the abundant volume of food consumed per person in North America.

If vitamin A is considered to be a micronutrient, how the hell could anyone in North America be deficient in it? It's well known that the body stores and accumulates it. If you accumulate too much of it, you will get extraordinarily and painfully sick. So, in the face of all that, we are supplementing the national milk supply with it. It's not voluntary on the

The Real Experiment

part of the milk producers either; it's mandatory by legislation. We have legislated a potential toxin into the national milk supply. Why? Why the hell would we do that? Could it be that the road to hell is indeed paved with good intentions?

Moreover, in the United States, many wheat flours and breakfast cereals are supplemented with it too. I just have to be missing something here. Surely, the experts know what they are doing; right? I just have to be missing the obvious because this just does not add up at all. Legislation mandating this substance into the North American food supply since the early 1970s? Once again, why?

Okay, this is just vitamin A, let's not get too alarmed about it. But, the vitamin A added to our low-fat dairy is actually no ordinary vitamin A. It is called vitamin A palmitate. This is the retinol (the regular alcohol form of the vitamin A molecule) combined with palmitic acid. Palmitic acid is a fatty acid and a major component of palm oil. The vitamin A palmitate added to our milk synthetic manmade molecule. Of course, this combination is used to keep the retinol stable in milk, and also greatly facilitates the uptake of it by the body. Now, isn't this a dirty, sneaky little trick to play on the body's cells. Cells will be taking on what appears to be a lipid, but this lipid now has a tag-along toxic molecule. Brilliant! How, and why was this fateful decision made? Did they have any long-term history of using this combined molecule in the human body? No, of course not, because it is a synthetically made molecule. Yet, someone made the colossal assumption that this was going to be safe for everyone. After all, what could possibly go wrong with unnaturally combining one of the most fundamental hormones in biology with a fatty acid and putting it into the nation's milk supply?

I needed to delve into this subject just a little bit more. Was there some great outbreak of vitamin A deficiency that happened in the late 1960s in the USA? I was not able to find any history of that having happened. So why not provide just an optional milk choice with the supplements for

consumers that had an explicit need for the extra A & D? After all, vitamin A and D are powerful hormones. How could anyone assume we should all start adding this to our everyday diet?

To use an analogy, imagine that you've inherited a beautiful, and extremely expensive gold watch. The watch has a fantastically intricate and complicated set of gears and related mechanisms. The watch is working absolutely flawlessly. The watch is the epitome of the perfect blend of mathematical science, art, craftsmanship and style. Then, just on a hunch that you can make it better, every day you crack open the back case and drop in one grain of sand. One grain of sand might not harm it, but adding more over time will absolutely destroy it. Now, why on earth would anybody do this? The answer is that they wouldn't! When something is working perfectly, the golden rule is DON'T mess with it.

Yet, I believe that this legislation has done precisely that with the supplementation of the nation's milk and dairy products. Once we reach the tipping point, everyone's beautifully functioning bodies will be slowly destroyed, and with one molecule at a time.

Clearly then, our elevated levels of vitamin A consumption should be a prime suspect in the epidemics of the autoimmune diseases. I think that there is no way in hell that this has not been extensively researched. Yet, I can find nothing linking vitamin A toxicity with autoimmune disease. Moreover, it's very high in this list of trigger foods too. I did find some websites recommending vitamin A to combat, or treat, an autoimmune disease. However, there is very little research supporting these recommendations. What research there is, it looks to be very new. What are the chances that this potential connection has been overlooked?

The obvious scientific question here should be: in these lists of cited autoimmune disease flare-up *trigger foods* that universally include milk, dairy, eggs, tomatoes, bell peppers, citrus fruits, fish, (peanut butter being excluded because it's a well-known allergen), what are the

common chemical compounds they all share, other than H₂O? After all, the chemical culprits we are looking for is very likely shared by all of these foods. For example, what chemical compounds are common to both orange juice and fish? I'm guessing there are only a few compounds, and that one of them is vitamin A or one of its precursors. Of course, we should not guess, so we will go through this analysis in a later chapter.

Okay, the total amount of time of my intense research has been about four hours. I asked myself the simple question: what if I eliminate vitamin A from my diet for a while? From what I've read, I have at least a year's worth of storage built up. It can't do any harm, and I have nothing to lose by doing it. However, I'm realistic, so the chances of anything coming of this are about one in 6 billion. Once again, I trust the experts, and therefore, I just have to be missing something.

It's totally crazy, but I decided to conduct that exact experiment. First, I reduced my consumption to low and then near zero vitamin A. My diet was now almost exclusively rice and beef. That's three meals a day, seven days a week. The same two-course meal three times a day is rather monotonous. So, some days I spice it up to a four-course meal by adding salt and pepper.

I started this experiment August 9th. I went cold turkey off the steroid cream treatments for my eczema-affected skin. And, no, I'm not recommending that you do this ²².

Within three days, I notice a significant drop in my overall body-wide inflammation. It is a remarkably quick change and very noticeable.

²² http://www.huffingtonpost.ca/2015/05/15/steroid-cream-addiction_n_7236986.html

For the next three weeks, there is a little bit more progress, but very subtle, and I could be easily judging it wrong. There is very little, if any, improvement in my fatigue condition.

Around day 18 of this experiment, I'm thinking this is probably not working and is just foolish. Most of the progress was in the first three days, and I've seen very little since. That early improvement was probably just a natural cycle. I'm about to give up. However, I decide to give it three more days.

Remember that I'm now going to bed at 8:30 p.m. and usually waking up at 8:30 a.m. and waking up still *totally* fatigued.

- Day 20: still go to bed at 8:30 p.m. I wake up at 5:30 a.m. and strangely it actually feels as if I slept okay.
- Day 21: I wake up at 3:30 a.m. I feel pretty good, and I actually feel refreshed. I think to myself, how strange is that?
- Day 22: I wake up at 1:30 a.m. and I'm feeling really good. I'm feeling totally refreshed. I stretch out my arms, weird, no joint pain! No stiffness. I wiggle my legs, weird, no joint pain, and no stiffness. Wow, I think I'm feeling really, really good. The other thing that is super-noticeable is my thinking clarity. It's crystal clear compared to what it was just a week ago. Fatigue, totally gone. Joint pain, totally gone. I ask myself: "*what the hell was that?*" Very surprisingly, one word instantly snapped into my head. It happened in less than a millisecond. It was a German name. It wasn't a name common to my daily vocabulary either.

For the next several weeks, more out of habit than anything else I was still going to bed around 8:30ish. I was routinely waking up at 1:30 or 2:30 in the morning and being totally refreshed. This was not insomnia; it was that I just did not need the extra sleep.

The Real Experiment

Sometimes, I'd force myself to get more sleep. Others, I just waited awake until 6:00 a.m. to get ready for work. I went to work and worked all day with no fatigue whatsoever. Not even a mid-afternoon lull. I started to shift my sleep cycle back to going to bed at 10:30 or 11:00 p.m.

Now, after six or seven hours of sleep, I was totally refreshed. My thinking clarity was still completely clear. In the mornings, I was hopping out of bed with absolutely no joint pain or body stiffness whatsoever. Okay, this is really interesting. What just happened? Had my bad luck just changed? Overall, my health was starting to make a big, but slow, 180-degree U-turn back to normal.

At this point, I could have just decided that this whole bad experience was nearly over and that I should move on with my life. However, two really important things were troubling me. The biggest one I needed to understand is what happened with my thinking clarity. It was not just a stunning turnaround, but quite scary. Had I just dodged a bullet? I could not just gloss over this possibility that that strange German name had a big meaning to it.

Did I just stumble upon something really important? Has there ever been anyone else with an autoimmune disease that has gone to a *zero* vitamin A diet like this? It's pretty unlikely actually. I still had the eczema skin condition; so I wasn't out of the woods just quite yet. No, more like not at all.

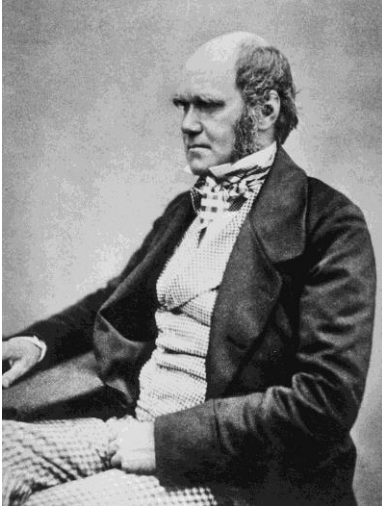
Still riding my bike to work, I decided I should extend my experiment a bit. There is a very big staircase down an escarpment in the park on my way into the downtown. It has about 160 steps on it. Rather than taking the bike path down the hill, I decided to ride my bike (no suspension) down those stairs. That's 160 drops of about seven inches each. What happened? No brain pain! The inflammation on my brain was now magically gone!

Okay, I needed to dig into this some more. My personal experiment was maybe an interesting little case study. However, what we really need is a big clinical trial. How about we do a 5 million-person study and conduct it over the next 20 years. We'll reduce the vitamin A consumption in this 5 million-person group and see if it results in a reduction in autoimmune diseases. Then we'll form a committee of experts to study the results for another 10 years. How does that sound?

It should sound completely ridiculous coming from the guy who was earlier proclaiming we need to move fast and furious on this. Fortunately, effectively and quite inadvertently, that exact study has already been conducted for us. It also shows a dramatic result that needs no committee of experts to interpret. Next, let's look a bit back into history, and see if we can learn a new lesson from Charles Darwin. He left us some more important clues.

Chapter 6

A New Lesson from Charles Darwin



After dealing with my own eczema for a few months, I wondered whether any noteworthy names in history had this disease. My curiosity was really twofold. First, I just wanted to get a feel for how long this condition has plagued humans. Is this a recent “modern” disease, or has it been around for a longer time?

Second, maybe some historical figure kept a food diary that would provide some clues as to what’s causing it.

Maybe there is something we can spot.

Well, I quickly discovered that Charles Darwin had this disease, and more, actually much more. He had chronic eczema from before 1836 and suffered from it for the remainder of his life—for over 40 years.

But, eczema was only one of his conditions. It would appear that he suffered from multiple diseases actually. It looks as if there’s been some interest from the present day scientific community in correctly diagnosing Darwin’s disease(s). Here’s a link to a 2005 paper from two researchers, Anthony K. Campbell and Stephanie B. Matthews at the Wales College of Medicine entitled [Darwin’s illness revealed](#)²³.

²³ <http://pmj.bmj.com/content/81/954/248.full>

Their conclusion is that Darwin had suffered for these 40 years from Lactose Intolerance. They state: “Darwin’s symptoms match exactly those we have described for systemic lactose intolerance.” Bingo! There you have it; puzzled solved.

Well, I am not a doctor, and I have absolutely no medical experience whatsoever; and I have never had any Lactose Intolerance. But, I think these folks are completely wrong in their diagnosis. They (and we) have missed some bigger clues that Darwin left us.

Here’s a list of Darwin’s symptoms from their paper.

- Chronic fatigue and exhaustion
- Severe gastrointestinal problems, including pain
- Nausea
- Frequent vomiting
- A swimming head
- Severe headaches
- Trembling
- Insomnia
- Joint pain
- Rashes and eczema
- Mouth ulcers
- Boils
- Tooth and gum problems
- Heart palpitations
- Poor resistance to infections
- Depression

The authors claim this is a perfect match for lactose intolerance. Wow! That’s a pretty horrible sounding condition. All of that from drinking milk? How could that be? The actual documented symptoms I found for

lactose intolerance are more like [abdominal cramps, bloating, gas, diarrhea, and nausea](#)²⁴.

The reason lactose intolerance is the wrong diagnosis is obvious. First, and fore-mostly, this is *the* Charles Darwin we're talking about. Let's give this man a wee little bit of credit. This guy was an amazingly observant and intelligent biologist and geologist. Of course, that does not make him immune to lactose intolerance, but it does tell us he wasn't completely daft, either. What about the diarrhea symptom? It isn't on Darwin's list of symptoms. Isn't that like the key symptom of lactose intolerance?

A few years ago, I had a guy putting a new roof on our house, and he told me one day about being lactose intolerant. He was about 40 years old, and he said that this condition developed in his 20s. I asked him how he knew he was lactose intolerant. He explained to me that it becomes abundantly clear that there's a big problem, and that most people will make the cause and effect connection. He stated that if he drank a glass of milk, he'd be heading to the toilet in about two hours to deal with it. I don't think he had a medical diagnosis for this condition. It sounded as if he just figured it out on his own, as most people probably do. This guy was in great health and worked all day long, up and down ladders, etc. There was absolutely nothing wrong with him. He just couldn't drink milk or eat dairy products. No problem at all, life was just fine, as it is for most people with lactose intolerance, once they know what it is.

So, if this man and thousands of others, can fairly quickly make this connection between drinking milk and soon thereafter needing the toilet, then there's no way in hell Charles Darwin would not have figured this out in more than 40 years.

²⁴ <http://www.healthline.com/symptom/lactose-intolerance>

The second and equally obvious clue is that Darwin was suffering from very bad health while on his famous *Beagle* voyage. This was a voyage in the hot tropical sun, and much of the time he spent aboard ship. Of course, there was no refrigeration in 1830, and there would have been no way to preserve milk or dairy products aboard a ship. Therefore, these symptoms were simply not from lactose. No way, nearly impossible.

But Darwin did leave us some very big clues indeed. First, specifically regarding eczema. It's interesting to know that eczema was somewhat common in the 1830s, especially among the upper classes of English society. This means that today eczema is probably not being caused by modern day toxins, such as herbicides, pesticides etc. However, these modern-day toxins may still play a bit of a role.

Darwin sought out some of the very same therapies used today to relieve his eczema symptoms such as hydrotherapy. He also had chronic inflammation on the face and grew his beard to hide this. Even more important than that, he had [eczema as a teenager and suffered outbreaks of eczema on his face and lips](#)²⁵. The only time he was really able to put it into remission is when he went on trips to Russia.

Darwin also made the connection between eating foods and worsening conditions, but he couldn't pin down an exact cause. Of course, Darwin was limited in his resources and didn't have modern science or Google to help him. He also suffered from significant periods of psychosis and severe social anxiety. In addition to the above-documented symptoms, Darwin also determined that he was quite sensitive to sunlight and avoided the sun.

He did make an amazing, and I'd like to say a brilliantly amazing observation. He determined that his only really safe food was raisins. At

²⁵ <http://www.americanscientist.org/issues/pub/darwins-enigmatic-health>

one point, he lived on nothing but raisins for something like five weeks straight! How the heck did he figure this out? Of all the real foods on the planet, there are about five of any substance that has zero vitamin A, and one of them is raisins.

However, once again, this raisin-only diet was aboard ship. I don't know if he repeated it once back in England. So, maybe the raisin-only diet was not a brilliant feat of elimination but made much simpler because he had a very limited selection of foods available. A much bigger question is if he ate the liver of fish while aboard the *Beagle*. Did he eat the organ meat (liver) of other animals such as the turtles? What we do know is that he ate Atlantic saltwater fish, which is generally high in vitamin A by itself.

So, what were Darwin's symptoms really of? I think it was chronic subclinical vitamin A toxicity. If you really must give it a named modern disease, then Celiac or Crohn's diseases are good possibilities.

Source 1: <http://www.healthline.com/health/hypervitaminosis-a#Symptoms3>

Symptoms of acute vitamin A toxicity include:

- drowsiness
- irritability
- abdominal pain
- nausea
- vomiting
- increased pressure on the brain

Symptoms of chronic vitamin A toxicity include:

- blurry vision or other visual changes
- swelling of the bones
- bone pain
- poor appetite
- dizziness
- nausea and vomiting
- sensitivity to sunlight
- oily skin and hair

- itchy or peeling skin
- cracked fingernails
- skin cracks at the corners of your mouth
- mouth ulcers
- hair loss
- respiratory infection
- confusion

Source 1: <http://livertox.nih.gov/VitaminARetinoids.htm> (NIH)

- severe headache
- nausea
- vertigo
- blurred vision
- muscle aches and lack of coordination
- followed by skin desquamation and alopecia (hair loss)
- dry skin
- cheilosis (fissures in the corners of the mouth)
- gingivitis
- muscle and joint pains
- fatigue, mental dullness
- depression

Let's match these symptoms with Darwin's.

Table 2 Darwin's Symptoms and Vitamin A toxicity

<i>Vitamin A Toxicity Symptoms</i>	<i>Darwin's Symptoms</i>
Skin desquamation	Eczema
Fatigue, mental dullness	Chronic fatigue and exhaustion
Abdominal pain	Severe gastrointestinal problems/pain
Nausea	Nausea
Vomiting	Frequent vomiting
Vertigo, mental dullness	A swimming head
Severe headache	Severe headaches
	Trembling
Commonly documented with eczema	Insomnia
Bone pain	Joint pain
Skin desquamation & alopecia	Rashes and eczema
Mouth ulcers	Mouth ulcers
Gingivitis	Tooth and gum problems
	Heart palpitations
Respiratory infection	Poor resistance to infections
Confusion, vertigo	Social anxiety
Sensitivity to sunlight	Sensitivity to sunlight
Depression	Depression

Now we have a near perfect (and realistic) match on these symptoms. Maybe if I looked a little more, I'd find trembling and heart palpitations on the match list. Actually, vitamin A toxicity is still a bit of a superset of Darwin's symptoms. The mouth ulcers were a very big, and early, warning sign of this toxicity (firsthand experience).

Let me tell you without any doubt whatsoever, and also from direct firsthand experience, and as documented above, eczema on the lips is none other than vitamin A poisoning!

In my personal experience, I slowly built up to this subclinical toxicity level of vitamin A over a period of five to 10 years. I did it on a perfectly normal diet, too. I know about most of these symptoms firsthand, but they built up very slowly over time, so slowly I really didn't think about

it too much. However, there's no question about it. When I adopted my vitamin A elimination diet, almost all of the symptoms receded very quickly. It was then hugely more obvious that I was suffering from most of the above-documented symptoms.

I also noticed a bit of hand trembling while being in this toxic state. However, I don't think I experienced heart palpitations. But I could easily see heart palpitations happening as part of an anxiety attack.

How did Darwin get into this condition? The same way I did. And the same way the 30+ million people with eczema, and the 700,000 people with Crohn's, and 5+ million people with Alzheimer's have today.

Diet! Mostly, ordinary diets, too. It just takes lots of cold saltwater fish, or milk, and brightly colored fruits and vegetables, etc. That's all you need.

Since Darwin had such severe eczema at an early age, he had to have done something really wrong. I believe it was probably due to regular liver consumption. Organ meat was popular with the well to do in England at the time. Darwin was a self-proclaimed glutton, who prided himself on eating the entire animal. There was an interesting newspaper article from this era with a bit of a prophetic warning. A doctor who had treated the king of England for his eczema wrote it. He described the king being bedridden, with his hands constantly wrapped in bandages and sometimes even bound to prevent scratching. The doctor's basic message was: don't be too envious of living like the king, and his diet rich in soft organ meats. If you live like the king you may die like the king too, and it isn't a pretty way to go.

What I personally now know, and what Darwin documented; is that once you saturate your body's store of vitamin A, it's extremely unlikely you're going to randomly get out from under it. He now had chronic diseases that plagued him through to the end of his life.

Modern medicine labels eczema, Crohn's, lupus, arthritis, etc. as autoimmune diseases. I don't think that makes any sense whatsoever, for all kinds of reasons. These are really auto-poisoning via chronic and subclinical toxicity to vitamin A. Oddly or not, I have little doubt that Alzheimer's is a member of this illustrious autoimmune disease club too.

The myth in the medical literature is that you need massive doses of vitamin A to get into this state. The bigger myth is that you'll quickly recover after you stop overdosing.

Well, no you don't, and it depends. It's mathematical. That vitamin A you've accumulated is not going away. Once you've accumulated too much, you reach a tipping point or a threshold. And then you more or less fall over a cliff into serious disease from this deadly toxin. A better metaphor might be to call it a trapdoor.

You've saturated your body's storage capacity. Once you've fallen through that trapdoor, there's almost no getting out. Even a few micrograms of vitamin A consumption are enough to keep you in a toxic, or near toxic, state. You'll continue to be in this toxic state for the rest of your life if you don't take evasive action. You need to go to zero, or near zero, consumption. But, instinctively, and based upon current nutritional advice, you're probably going to do just the opposite. You're now sick, so you're probably going to eat even more *healthy* foods. Please pass the raisins Mr. Darwin, thanks very much.

Naturally, I have a ton of respect and admiration for what Darwin accomplished. I have little doubt that if he were alive today, he would have been able to determine the true root cause of this scourge quite quickly. Sadly, it has been almost 200 years since Darwin documented his symptoms and his struggle with eczema. Modern medicine has not even begun to solve this disease. It has only just become far more prevalent in our society. Something is indeed hugely wrong.

The lessons I think we can learn today from Darwin are:

1. He was really suffering from subclinical vitamin A toxicity for most of his life.
2. He stayed in this state for 40 years and without modern-day supplements, it was just diet.
3. He had resulting eczema as a symptom of this for most of his life too.
4. Eczema is not a specific autoimmune disease at all; it's most likely just another *symptom* of subclinical vitamin A toxicity.
5. Eczema is not caused by a modern day toxin; or pollutant.

I don't want to call this Hypervitaminosis A. That isn't the case at all. Hyper implies very high doses of vitamin A being consumed. This situation is much different. It's really getting into the state of vitamin A saturation and then remaining slightly or moderately above that level. Therefore, the term Insidious-vitaminosis A seems more appropriate.

Why do so many young people experience Crohn's and other autoimmune diseases at around 20 years of age? There's something special about this number. It is not a coincidence. It's obvious once you understand what's really going on here. Yet, it's also somewhat complicated, too.

Aside: Ironically, I think there is something absolutely stunning about Crohn's disease that it would have startled Darwin. So much so, that it may have altered his view of evolution too.

Chapter 7

Crohn's Disease in Canada

Let's take stock of where we are at here in our investigation. We have a theory. We have the fact that these are environmentally caused diseases. We have a supporting thought experiment. We have a supporting single case experiment. We have some interesting historical trivia from our old friend Charles Darwin. That's all interesting, but it isn't very compelling scientifically speaking. We need real evidence. We need a ton of real evidence. Therefore, in this chapter, we are going to start adding some serious scientific evidence to the investigation. We are going to learn some very interesting aspects about Crohn's disease, and the disease rates in Canada.

Also, I just want to remind you that we're all in this together now. You now have insider information, so to speak. Therefore, you're not allowed to just be a spectator anymore. Just as important as more real evidence is, we need real results, too. In the end, all that matters are the real results.

Around the time of my initial recovery from eczema, there were radio commercials in Canada raising the awareness of Crohn's disease & IBD (inflammatory bowel disease). At that point, I knew nothing about Crohn's disease. The commercials were raising the alarm about how many young people, and kids as young as 10, are now getting this disease. The commercials stated that we all need to be aware and made a plea for help. Well, being aware and being able to help are two different things. I assumed the plea for help was really a plea for research donations. Okay, that's perfectly fine. I thought I'm now aware, and I'll donate directly to research with a bit of my time.

In the little bit of research that I did regarding eczema, it was clear that more kids are getting eczema than ever before too. It's something around

20% of kids now getting this painful, ugly rash. Also, the incidence rates have jumped 40% in just the past five years.

Okay, a lot more kids are getting eczema, and lots more kids are also now getting this other disease called Crohn's. I was thinking maybe there could be a connection between these two. After a few minutes of investigation, I was a bit shocked by what I found.

First, eczema and Crohn's are both members of this mysterious autoimmune disease club. Okay, fine, I had no idea.

Second, Canada has very high rates of both of these diseases. It turns out that Canada actually has the highest rates of Crohn's disease in the world, and that Crohn's disease has almost doubled in children younger than 10 since just 1995!

Third, the list of *all* the symptoms of Crohn's disease was as if I had written down my own list of *all* the symptoms that I had experienced with eczema. With a bit more investigation, I thought that Crohn's disease was really eczema of the body's internal skin. Could this be? I have no medical experience, nor knowledge, to base such a weird assumption upon. It was just pure speculation, yet I thought it plausible.

Reading the Crohn's and Colitis Canada's website, <http://www.crohnsandcolitis.ca>, they state that the reason you have Crohn's is not your fault or the fault of anyone else. The reassuring message is that it is nothing you've done wrong. More or less, it is just bad luck! Hmm... that sounds familiar.

A [nice little video](#)²⁶ on the site explains the Crohn's and Colitis diseases. In that video, they mention you'll have to learn what your *trigger* foods

²⁶ <https://www.youtube.com/watch?t=297&v=Keqzt83KMVA>

are and avoid them. Hmm... okay, a list of trigger foods to avoid, that also sounds familiar.

But, hold on here just one minute. Firstly, claiming this is no one's fault is simply not a legitimate statement until we know the real root cause. Secondly, if it isn't our fault, then why are they telling us about these trigger foods that we need to discover and avoid? Right away, something does not add up here, at all.

From their [FOOD FOR THOUGHT](#)²⁷ booklet they state:

Since we do not know what causes Crohn's and colitis, there is no known cure – yet. We do know that your diet did not cause inflammatory bowel disease, nor will a “miracle diet” cure it.

The first sentence is perfectly sensible. But, then, look at the obvious contradiction in the second one.

1) *We don't know what causes it; but we do know that it was not diet.* Oh really, how do they know that? Do they have proof? No, they do not, because they don't know what causes it.

2) *No “miracle diet” will cure it.* As above, they don't know this either.

Therefore, these nice-sounding statements are simply not valid. I think they're almost nonsense statements just based upon the exponential growth rates in this disease. If it isn't diet, what else could it be? Why on earth are so many kids all of a sudden getting this horrible disease? The probability that it's diet related is actually huge. Something in the diet as being the cause is far more scientifically plausible than this it's just bad luck theory. Obviously, we need to get to the root cause before we can rule out diet, or anything else.

²⁷ http://www.crohnsandcolitis.ca/atf/cf/%7B403f6026-70ba-417c-a39b-7fbf23d5d690%7D/CCF_59189_FOODFORTHOUGHTEN.PDF

If anyone is up for a wager, I'll bet that *Crohn's and colitis is caused by diet and that a "miracle diet" can cure it.*

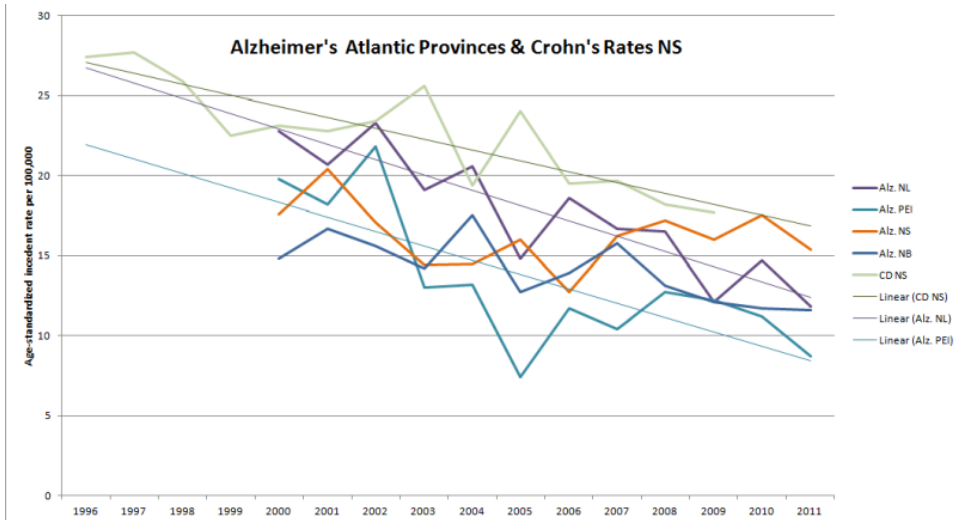
In the next few pages, I believe that I am going to prove that it is indeed diet.

Here are some charts I put together revealing what I think is an amazing connection. These charts are key pieces of evidence needed to solve this puzzle. Please do not gloss over it. Look at it very, very carefully. Not to overstate it, but these charts are incredibly important evidence.

Please understand that these charts reveal some major new clues as to the root cause of this major autoimmune disease and directly correlates that disease with Alzheimer's. Also, these charts are original; they aren't copied from anywhere. They show reliable, scientifically published data. These charts should be of immense interest to anyone serious about getting to the root cause of these diseases.

If we can understand what happened here, and fully understand what the connections are, then I think we will uncover the root cause(s) of these diseases. If we can solve one of these diseases, we may be able to solve the other. How hard can it be to crack the code on one of these?

Figure 10 Alzheimer's mortality rates in the Atlantic Provinces & Crohn's rates in Nova Scotia



This is data from Atlantic Canada from between 1996 and 2011. The top line is Crohn's disease incidence rates in Nova Scotia, and the others are Alzheimer's mortality rates in the Atlantic Provinces.

The Crohn's disease data is from a 2014 research paper titled [Decreasing incidence of inflammatory bowel disease in Eastern Canada: a population database study](http://www.biomedcentral.com/1471-230X/14/140)²⁸.

The key observations here are:

1. A remarkable ~35% drop in Crohn's disease over this time period (1996-2009)
2. A stunning ~50% drop in Alzheimer's mortality over this time period (2000-2011)
3. These two trend lines for Crohn's and Alzheimer's disease are nearly parallel

²⁸ <http://www.biomedcentral.com/1471-230X/14/140>

4. Western Canada has no such decline (Both are increasing in Alberta.)
5. No other region of the world has had such a decline in either of these two diseases.

Here's the Canadian Alzheimer's data from the East to West Coast provinces. That east to west ordering is very important. Please look at these numbers very, very carefully. What do they tell us? You can probably visualize a big arrow from the top left to the bottom right.

Table 3 Alzheimer's disease Age-standardized mortality rate per 100,000

Prov.	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NL	22.8	20.7	23.3	19.1	20.6	14.8	18.6	16.7	16.5	12.1	14.7	11.8
PEI	19.8	18.2	21.8	13	13.2	7.4	11.7	10.4	12.7	12.2	11.2	8.7
NS	17.6	20.4	17.1	14.4	14.5	16	12.7	16.2	17.2	16	17.5	15.4
NB	14.8	16.7	15.6	14.2	17.5	12.7	13.9	15.8	13.1	12.1	11.7	11.6
QC	16.4	18.4	19	17.8	17	18	16.5	17	17.2	16.4	16.3	15.8
ON	12.7	12.6	11.9	12.4	11.9	12.1	11	10.8	11.8	10.7	10.6	9.5
MB	8.7	10.8	7.4	7.8	8.9	9	8.5	7.9	7.9	7.3	6.9	7.3
SK	13	13	12.7	12.5	11.7	11.6	11.3	10.6	11.9	9.1	7.5	8.5
AB	12.4	10.6	12.5	10.3	9.7	9.2	9.9	8.6	10.8	9.3	8.5	7.8
BC	8.6	9.8	9.7	9.5	9	8.1	8.4	8.1	9.7	9.5	8.4	8.5
YK	0	0	8.2	7.4	8.7	20.4	19.7	10.2	17.8	14.8	11.9	16.5
NWT	6.8	7.4	17.3	7.9	7.5	0	7.4	5.7	18.5	0	0	4.9

Source: <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=1020552&pattern=Alzheimer%27s+disease%C2%A0&csid=#customizeTab>

Table 102-05521

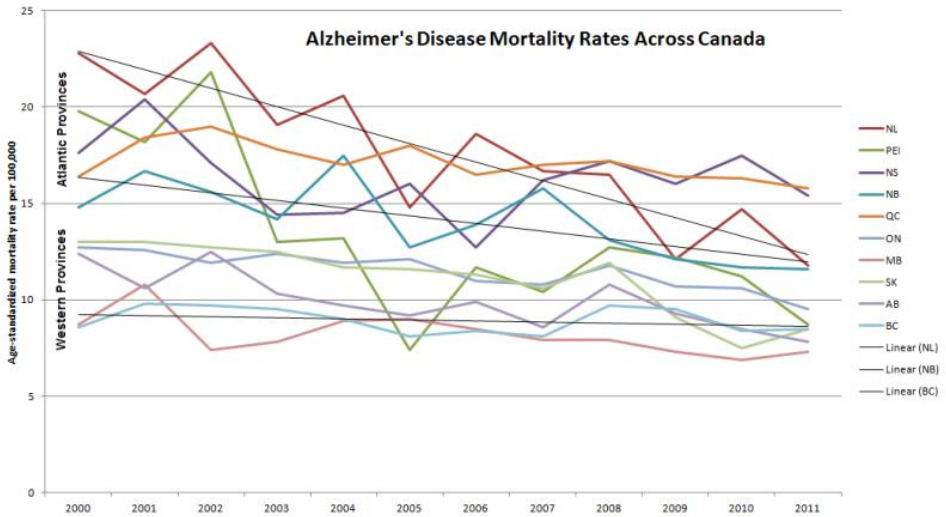
Sex = Both sexes

Cause of death (ICD-10) = Alzheimer's disease [G30]

Characteristics = Age-standardized mortality rate per 100,000 population

Here's a chart showing the Alzheimer's mortality rates in most of the other Canadian provinces.

Figure 11 Alzheimer's mortality rates across all of Canada



The key observations here are:

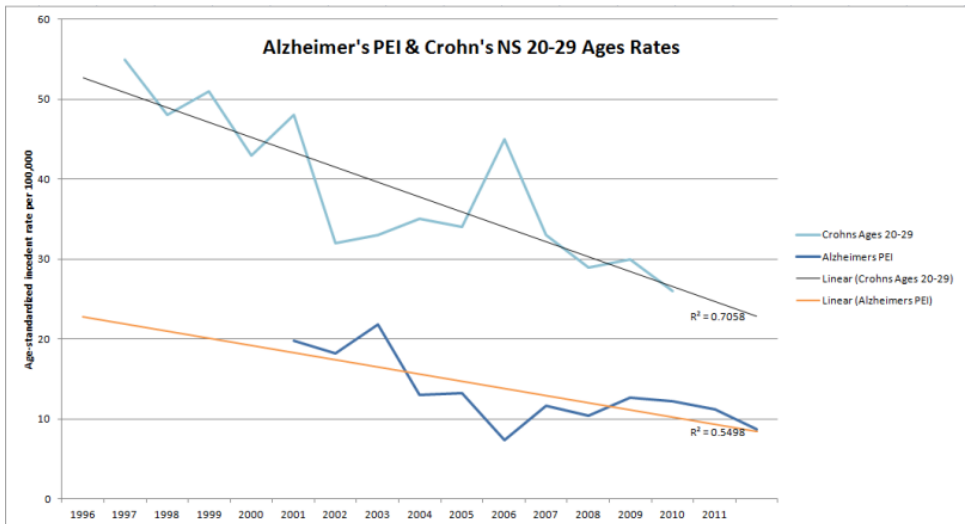
1. The decline rate in Canada's western-most provinces is nearly zero. In the year 2000, the Atlantic provinces had at least 1.5 to 2 *times* the rate of British Columbia (BC) and Alberta (AB).
2. All the Atlantic coast provinces are at the top of the chart. All have clearly significantly higher rates than the rest of Canada.
3. The significantly declining rates over this period, but particularly so in the Atlantic Provinces.
4. The slope of the regression lines on Newfoundland, and New Brunswick is much steeper than that of BC, and AB. The BC regression line is almost flat.
5. The Nova Scotia rate changes are a bit different from the other Atlantic Provinces.

6. By 2011, the rate of most of the Atlantic Provinces is cut in half and is approaching the same rates for Western Canada
7. Once again, *no other region of the world* has any such decline in the rates of these two diseases.

This tells us with crystal clear clarity that these are environmentally induced diseases. Secondly, there has been a pervasive environmental change in Atlantic Canada to cause these significant declines. I suggest there is no other logical conclusion.

The charts shown above include quite a few curves and end up looking a bit cluttered. Here's a chart showing just the Alzheimer's rates in Prince Edward Island and the Crohn's incidence rates in Nova Scotia.

Figure 12 Alzheimer's in PEI and Crohn's rates in Nova Scotia (ages 20-29)



I picked these two curves just to emphasize the significant trend here. Nonetheless, all the Atlantic province curves are similar. The decline rates in these two seemingly completely distinct diseases are tracking each other very closely. I think there's just no way that the underlying

cause of these two diseases is not indeed related. For me, on one hand, this is remarkable data. But, on the other hand, based on my battle with eczema, it's exactly what I suspected. After all, I didn't just randomly think to go and look for possible correlations between Crohn's, eczema, and Alzheimer's.

You might be asking yourself: "*What the heck is this guy talking about, a connection between Crohn's, eczema and Alzheimer's*"? Well, I believe that indeed there is, not only that but they're *directly* related because they share the same sinister parent. They share something else too, and it's called osteoporosis. We'll dive deeper into that topic in a later chapter.

So now, what happened in Canada around 1996? Canada closed the Atlantic cod fishery in 1993. So, there's something fishy about this story. Here's something else that's fishy: it's the Alzheimer's rate directly across the Finland/Russia border.

Figure 13 Alzheimer's rates across the Finland – Russia border

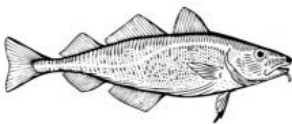


Finland's Alzheimer's rate is 25 times higher than Russia's²⁹. That isn't a typo, and this is not at all the highest rate disparity in the world either. It is just the highest rate disparity directly across a national border. Worldwide, there are much bigger disparities. For example, the age-adjusted rate of Alzheimer's in the United States is 239 times higher than Singapore's! That's a staggering 23,900 % higher.

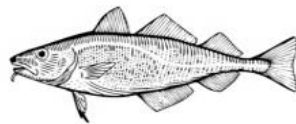
Finland also has one of the highest rates of eczema in the world. Sweden and Denmark have some of the highest rates of Crohn's disease in the world too. What does this tell us? Once again, if we can understand why these disparities are happening, we are well on our way to solving the mystery. A partial clue is the Finns eat lots of fish and fish oils; their Russian neighbors do not. But, this story is not about fish! It is about what's hidden inside the fish.

Here's a bit of trivia for you to consider. Look at these two cod fish shown below. They are almost the identical species; the same age, size, taste, and smell. The only difference is one came from the West Coast, and the other from the East Coast of Canada.

Figure 14 Canadian Pacific and Atlantic Cod Fish



Pacific Cod



Atlantic Cod

What's different about these two fish? The big difference is that the Atlantic cod has about 10 TIMES the level of vitamin A compared to the

²⁹ Source data: <http://www.worldlifeexpectancy.com/cause-of-death/alzheimers-dementia/by-country/>

Pacific cod³⁰. It's essentially the same fish; yet, it's 10 times higher in vitamin A. That difference is because the Atlantic is deeper and colder.

³⁰ Vitamin A in Cod. <https://www.google.com/search?q=vitamin+A+in+cod&ie=utf-8&oe=utf-8>

Chapter 8

The Mysterious Autoimmune Diseases

When I was first diagnosed with eczema, my doctor told me that now that I had one autoimmune disease, I was only going to get more of them. I thought, well, that really sucks. But, why am I going to get more of them? This is unexpected to me. I eat healthy, exercise, and I'm just a bit overweight, in my early 50's, yet I'm going to get sicker. Why? Was it just more bad luck? Was it just because, as they say, shit happens?

It turns out that the autoimmune diseases do come in packs. I guess when your luck runs out, it really runs out. Of course, my GP knows from firsthand experience in dealing with many patients that this progression and escalation of autoimmune disease is all too true. It's a mystery why this happens.

Naturally, each one of the autoimmune diseases is mysterious in and of themselves. No one knows the causes of any one of them, and therefore, there is no cure for any of them. The diseases are termed *idiopathic*. Definition: *denoting any disease or condition that arises spontaneously or for which the cause is unknown*. Okay, it's somewhat like getting dandelions in your grass. Once you get one, you're going to get more and more. But, unlike the harmless dandelions, these diseases are horrible, painful, and deadly afflictions. Actually, the diseases are more like a spreading infection or a cancer, but they are neither of these. What exactly is spreading is a mystery. Another mysterious factor is that the diseases go through unexplainable periods of remissions and flare-ups.

There are about 80 different documented autoimmune diseases. Some of the big ones are Crohn's/IBD, Eczema, Psoriasis, Rheumatoid Arthritis, Lupus, Juvenile Rheumatoid Arthritis, Graves', Hashimoto's, Sjögren's syndrome, Type I diabetes, Celiac's, and Multiple Sclerosis.

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Sure enough, if you read the various online support forums of these autoimmune diseases, very few people get just one of them.

If you go to one of the popular [Sjogren's forums](#)³¹, you'll see people include a comprehensive list of their conditions in their profiles. Here are just a few examples:

- *Male 48 yrs old*
PSjS (Positive SSa & SSb ANA 1:2560, Possible Fibromyalgia and CFS, IBS, brain fog, joint pain, mouth and nose ulcers, paronychia, headaches, fatigue, Very low WBC count.
- *47 year old mom of two. Sjogrens, Hashimotos, small fiber neuropathy, neurogenic atrophy(myocitis)*
- *Female-73-CVID-pSJS-IC-Periph.Neuro.-CAD-Osteoarthritis-Auto.Neuro-SFN-Anemia-Copper Def-Raynaud's Blepharitis, Meniere's/Deafness-GERD-Hiatal Hernia*
- *Male - Sjögrens, Fibromyalgia, Crohn's, Diabetes, RA, TIA's, ADHD*
- *Female - Hypothyroid, Esophagel Reflux, Gastritis, Barrett's Esophagus, Asthma*

I've read another guy's blog post regarding Hidradenitis Suppurativa; in addition to his HS, he also has Inflammatory Bowel Disease, Cataracts, Pars Planitis, and Diabetes. He is less than 40 years old.

There are millions of people in similar predicaments. This is not unusual; it's the norm with autoimmune diseases. So, these mysterious autoimmune diseases are not lone wolves. They do indeed hunt in packs.

³¹ <http://sjogrensworld.org/forums/index.php>

What the heck are these afflictions really? A better question is what the heck is really going on here with all these diseases occurring simultaneously in so many people?

No one knows. Yet, somehow, these diseases can more or less cause the head to toe *self*-destruction of the human body. How is that possible? What could cause the human body to do this to itself? Is this just a very angry and confused immune system?

Well, for me, one of the most obvious and striking things to realize about the autoimmune diseases is that they *all* share a big collection of common symptoms. That's right; no matter what specific autoimmune disease you are diagnosed with, you get about 10 to 15 symptoms common to all of them.

The absolute universal theme among *all* of the autoimmune disease is INFLAMMATION. Inflammation is now the new fires of hell for us. The second most common theme among *all* of the autoimmune diseases is fatigue or even chronic fatigue. The third most common is depression, confusion, memory loss, and what is termed "brain fog". Therefore, the autoimmune diseases are also very commonly affecting the brain too. Isn't that interesting?

Then, there are these ten or so other common symptoms we all share. But what the medical community has done is to give each autoimmune disease a very specific name based upon the primary anatomical location of the worst of the inflammation. More specifically, the primary location of the worst inflammation, combined with a particular subset of these common symptoms, is a named disease.

Correspondingly, it seems that there's a ton of effort put into giving patients a very specific diagnosis. You might even be given the diagnosis of a disease with a nearly unpronounceable name such as Hidradenitis Suppurativa, or Myasthenia Gravis. A lot of people comment that it can

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take many years, and seeing many different doctors before you are *correctly* diagnosed.

One of the reasons it's so difficult to get the correct diagnosis is that there's a lot of overlap and mimicry in the symptoms. The second reason is that most GPs haven't had adequate training to diagnose each specific disease. After all, there are 80 of these mysterious diseases.

But, when people do finally get a specific name for their disease, they seemed to be somewhat relieved. I'm guessing that maybe people feel once they do get to the correct diagnosis there may be better treatment options or specialists who can help them. But, that's just false hope. The real truth is that no one knows what causes these diseases, and there are no cures.

The medical experts document the additional symptoms of the autoimmune diseases to be the external manifestations of the primary disease. In the case of Crohn's/IBD, these are documented as the ***Extra Intestinal Manifestations***. In others, the extra symptoms are documented to be ***Complications*** of the primary disease. For example, in the case of Juvenile Rheumatoid Arthritis, skin rashes, and IBD are listed as *complications* of the Arthritis. How is that even possible? Of course, the reciprocal of this applies to Crohn's/IBD. In that disease, joint pain is documented as a manifestation ***external of the gut***. Huh?

- Arthritis joint pain IS a complication of IBD
- IBD IS a complication of Arthritis joint pain

But, to the outsider, with maybe a fresh (or distorted) perspective, it's obviously completely the opposite. Are these not just the two sides of the same coin? Maybe, these are not different diseases at all?

Now, here's the really curious question. If so many of the autoimmune diseases share so many of the common symptoms and mimic each other,

and so many people get so many of the diseases at the same time, and so many of these diseases use the same treatments, could they actually all just be the *symptoms* of something else? Could that “*something else*” be far bigger, far more sinister, and far more encompassing?

But, what has happened is that the different *named* autoimmune diseases are nothing more than selected *clusters* off of the same longer list of symptoms. What if we just looked at *ALL* the symptoms of *ALL* the autoimmune diseases together? Then, we get a different picture. Could it be that most of the autoimmune diseases are all the same thing? Are we being thrown off by the specific names? Could these so-called *diseases* all just be *symptoms* of something else that manifests as various levels of inflammation severity in different tissues? The fact that so many people get most of the symptoms of all these diseases implies that could, indeed, be the case.

Most importantly, this means the thought to be *Extra Manifestations or Complications* of the primary disease is not that at all. Therefore, let’s turn this concept completely upside-down. They’re *all* symptoms of something else. What is this something else? Well, let’s consider few of the more prevalent named clustering’s of the autoimmune symptoms and compare them with that of vitamin A toxicity.

Figure 15 Autoimmune and vitamin A toxicity symptoms

Common Vitamin A Toxicity Symptom	Type 2 diabetes	Eczema	Lupus	Juvenile Arthritis	Crohn's	Celiac	Sjögren's
abdominal pain	✓	✓	✓	✓	✓	✓	✓
anxiety	✓	✓	✓	✓	✓	✓	✓
blurry vision or visual changes	✓	✓	✓	✓	✓	✓	✓
bone pain, swelling in joints	✓	✓	✓	✓	✓	✓	✓
confusion	✓	✓	✓	✓	✓	✓	✓
cracked fingernails	✓	✓	✓	✓	✓	✓	✓
depression	✓	✓	✓	✓	✓	✓	✓
dizziness	✓	✓	✓	✓	✓	✓	✓
dry, rough, flaky skin, inflamed skin	✓	✓	✓	✓	✓	✓	✓
fatigue	✓	✓	✓	✓	✓	✓	✓
hair loss	✓	✓	✓	✓	✓	✓	✓
headache	✓	✓	✓	✓	✓	✓	✓
increased pressure on the brain	✓	✓	✓	✓	✓	✓	✓
itchy or peeling skin	✓	✓	✓	✓	✓	✓	✓
gingivitis	✓	✓	✓	✓	✓	✓	✓
mental dullness	✓	✓	✓	✓	✓	✓	✓
mouth ulcers	✓	✓	✓	✓	✓	✓	✓
muscle and joint pain	✓	✓	✓	✓	✓	✓	✓
nausea and vomiting	✓	✓	✓	✓	✓	✓	✓
poor appetite	✓	✓	✓	✓	✓	✓	✓
respiratory infection	✓	✓	✓	✓	✓	✓	✓
sensitivity to sunlight	✓	✓	✓	✓	✓	✓	✓
skin cracks at the corners of mouth	✓	✓	✓	✓	✓	✓	✓
swelling of the bones	✓	✓	✓	✓	✓	✓	✓
swelling of the eyes	✓	✓	✓	✓	✓	✓	✓
yellowed skin (jaundice)	✓	✓	✓		✓	✓	✓
increased infections	✓	✓	✓	✓	✓	✓	✓
dry mouth	✓	✓	✓	✓	✓	✓	✓
swollen lymph nodes	✓	✓	✓	✓	✓	✓	✓
fever	✓	✓	✓	✓	✓	✓	✓
osteoporosis	✓	✓	✓	✓	✓	✓	✓

Isn't that list rather telling? Of course, all of these autoimmune diseases will eventually involve the liver and kidneys too. But, there are two symptoms in particular that I want to focus on just for now. They are sensitivity to sunlight and cracked fingernails. Has anyone not bothered to investigate why all the autoimmune diseases are causing splitting and cracking of the fingernails? Has no one ever considered that this very well documented and a key symptom of vitamin A poisoning could be related? Seriously, how are both, say, Crohn's and diabetes causing this same cracked fingernail condition? Likewise, and much more importantly, why do *all* of the autoimmune diseases present itchy skin that is so sensitive to sunlight? Isn't it rather obvious that there must be a light absorbing substance accumulating within the skin? Isn't it rather obvious that whatever is poisoning the skin, and nails, is also responsible for poisoning everything else?

Of course, the medically accepted and standard explanation is that this is a defective AUTO immune response causing the destruction. Moreover, the explanation is that the immune system is just progressively and wrongly attacking more and more tissue types. Additionally, there's this notion/assumption of triggered autoimmunity.

But yet, within a few minutes of applying some predicate logic, I can prove to anyone that this is NOT a response of a defective immune system. It is in no way defective. Not a chance of it! Okay, so what is it?

It's a poisoning! It is a body-wide poisoning!

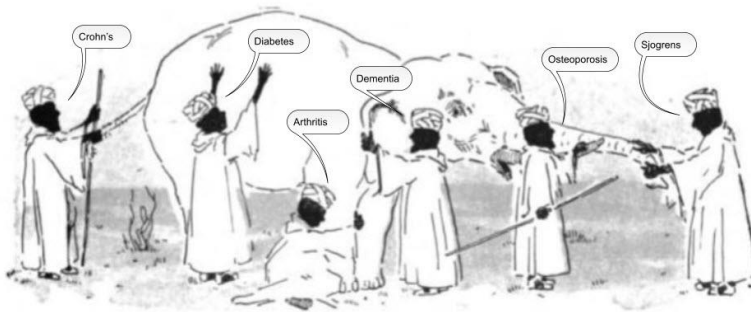
We have just failed to recognize this as a poisoning because of the extended timeframes involved. We aren't thinking like geologists. We all normally think of poisonings as something that presents symptoms in seconds, minutes, or maybe weeks after exposure. In this case, the exposure times are in decades and even as long as seven or eight decades. However, for young kids, or even infants, long exposure times are not needed. They have smaller bodies and correspondingly smaller

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liver volumes. Their smaller size simply causes them to be more susceptible to this poisoning.

Could this be a modern day version of the tale of the six blind men examining an elephant?

Figure 16 The six blind men and an elephant



Original image source: "Blind men and elephant3" by Illustrator unknown - From Charles Maurice Stebbins & Mary H. Coolidge, *Golden Treasury Readers: Primer*, American Book Co. (New York), p. 89

Maybe if the specialists in each of these diseases stop diagnosing via such very specific symptoms, and started collaborating more, and took a step back to get a bigger perspective, then they might “see” the full elephant. That elephant is the full spectrum poisoning of the entire human body. I mean, seriously, how can the human body have 80 *different* autoimmune diseases, and they all more or less do the same thing; just in somewhat different body locations? Then add to that the fact that these 80 diseases occur far more often, or “*cluster*”, at specific geographic locations on the planet³². My guess is that they had to stop naming the autoimmune diseases after 80 because they just ran out of

³² Recent Insights in the Epidemiology of Autoimmune Diseases: Improved Prevalence Estimates and Understanding of Clustering of Diseases
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2783422/>

named body locations for the primary inflammation. Isn't it peculiar that there are over 50 different documented symptoms of vitamin A poisoning? Could it be that each one of these symptoms, or various selected combinations of them, has simply been given its own autoimmune disease name?

There is another major ongoing event that we are failing to recognize here. That is that our kids are now effectively the canaries in the coal mine. Almost all of a sudden we have over 300,000 *kids* with rheumatoid arthritis in North America. And, just like so many of the other autoimmune diseases; the rates of juvenile rheumatoid arthritis are vastly higher in North America compared to the rest of the world. We also now have somewhere around *ten million more* kids with seasonal eczema than what we had just a decade ago. Doesn't that just make it so incredibly obvious that it is a poisoning? With this information on dramatic worldwide rate differences, and rate increases, how can anyone buy into this ludicrous "*bad luck*" theory of disease etiology put forth by the western medical establishment?

It simply boils down to the fact that we are all being very slowly *potentially* poisoned. If you've been living in North America for fifteen or more years, this definitely includes you.

Now all of this might sound rather dramatic. To claim that most people in North America are slowly being potentially poisoned should sound rather unrealistic, if not even impossible. But, let's once again think like the plane crash investigators. If this has happened before, it can definitely be happening again. And not so long ago, almost exactly this same scenario has indeed happened before. Rather than the slow accumulation of retinol building up in our lipids, it was the slow accumulation and buildup of lead in our lungs. I remember reading a news report back in the late 1970's where doctors were finding significant amounts of lead in the lungs of nearly every person they

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examined for it and that lived in large American cities. Where was the lead coming from? It was from the emissions from cars burning leaded gasoline. The story is almost the same one here. However, this time, the source of the potential toxin is our foods. Although it's a bit dramatic sounding, it is simply true. So, with that wee little bit of a realization, we should all be asking what can this new poisoning do to us? Very unpleasantly, it can burn our skin off just for starters.

Chapter 9

A Deeper Look at Eczema

I have literally watched the skin burn off my fingers (under a microscope), and I have done so multiple times. When exactly did my skin burn off? It was when I went into flare-up mode. When did I go into flare-up mode? It was when I ate foods containing even the tiniest little bits of vitamin A. I've repeated this little sub-experiment multiple times. There's no mistake about it. It was like clockwork. Although I'm not recommending this, anyone with severe eczema should be able to repeat this same experiment and observe the same results.

It is actually a bit fascinating (no sarcasm) to watch your own skin peel and burn off under a microscope. The process can take less than five minutes after the inflammation really sets in. First, the top layer of the skin just more or less disintegrates into a mush. Next, the deeper layers of the skin are exposed with big (microscopically speaking) burn holes in it. Deeply rooted tiny blisters finally burn through to the surface in other areas of the skin. It looks a lot like the structure of basalt. However, this is skin disintegrating in real time, and it's very nasty looking even at 30x.

Figure 17 The skin on my left hand dissolved and cratered



Then the blood and lymph fluid comes weeping out. Shown below is a photo of the fingers on my right hand with this condition.

Figure 18 The burned and weeping eczema skin



The burn is what I assumed a strong acid burn to be like. Oddly, this was not all that painful. There was just a bit of a sting to it. How can that be? Can you imagine burning and peeling your skin off with scalding water or burning oil? That should be incredibly painful (and, no, I was not using steroid creams or anything else at this time). Clearly, whatever was burning my skin off was also damaging some nerve cells at the same time. That aspect of the condition is hugely interesting by itself.

So, from my own experiment with this toxin, I know fairly well what happens to the little extra bit of vitamin A that my liver doesn't absorb and is overflowing into my skin. No, it's definitely not magically disappearing. Some of it was somehow literally burning its way out of my skin. This is eczema at its finest. Rather than using my very scientific term of "mush" to describe my skin, I've read other people describe it as their skin being turned into "Swiss cheese" or "hamburger." Either term is just as effective in communicating the condition.

I think it's important to elaborate on this process a bit more. Firstly, if any Eczema researchers were to watch this process like I have; then it would be abundantly clear to them that the destruction is originating from deep within the skin. It is not from the surface in. They would immediately dismiss any notions that this is fundamentally caused by such things as dust mites, or harsh soaps etc.

Secondly, it's very important to understand that the top layer of the skin more or less dissolves. You can actually see this happening in real time. It is somewhat like watching a sugar cube dissolve in water. Therefore, the chemical dissolving the skin is acting like a tissue (collagen) solvent. Would retinoic acid be capable of doing this to human skin? You'll soon find out.

When I stopped eating foods with vitamin A, this process slowly stopped, and healing started, and the skin started to rebuild. When I ate

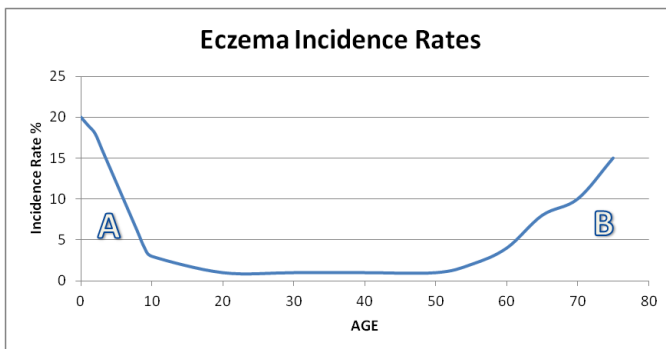
A Deeper Look at Eczema

foods with vitamin A, healing halted, and the destruction process started back up.

It was almost like turning a switch off and on (with a four- to 24-hour delay). I know that is bizarre sounding, but I believe it's absolutely true. Of course, the skin dissolving process happened very fast (sometimes in minutes, not even hours), and the healing process took weeks or months. So, here I was, more or less turning off and on what's thought to be an autoimmune response. Of course, I was trying really hard to always have it turned off and keep it off. I only turned it back on inadvertently when I ate the wrong foods. At sometimes, even foods without vitamin A triggered the process too. Therefore, it was very tricky.

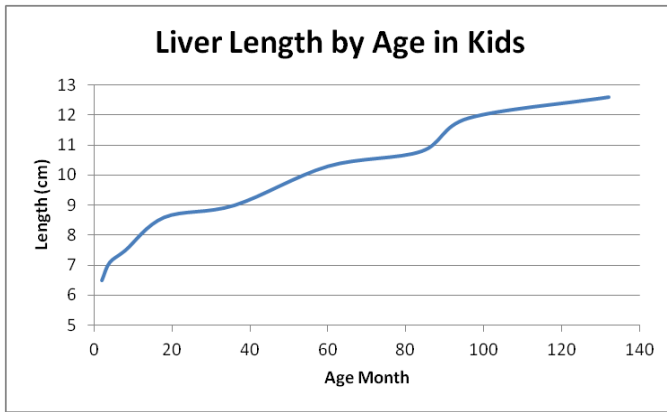
Since this incredible destruction is happening to the skin tissue, it's clearly capable of happening elsewhere in the body. With these observations, I think I had a pretty good idea what this "inflammatory autoimmune response" truly was. I did not really understand the exact mechanism, but at the very least I had a very good idea of what the root cause might be. Let's once again look at the sketch of the age related incidence pattern.

Figure 19 Approximated Eczema age incidence pattern



What is happening in this pattern? In section A it is kids literally "outgrowing" the disease by growing their liver's storage capacity larger.

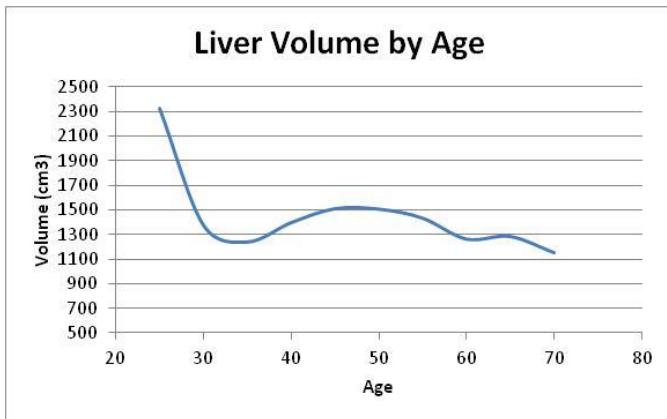
Figure 20 Liver Length by age month in Kids



Source: Normal Values of Liver and Spleen Size by Ultrasonography in Indian Children <https://ispub.com/IJRA/13/1/9978>

By age 50ish (section B in the incidence rate chart) the liver's storage capacity is now being overwhelmed, shrinking, or damaged.

Figure 21 Liver Volume by Age



Source: Assessment of Liver Volume with Spiral Computerized Tomography scanning in North Indian Adults. The Internet Journal of Radiology. 2009 Volume 13 Number 1. <http://ispub.com/IJRA/13/1/9978>

Please have a close look at the chart above of liver volume by age. There is a significant natural decline in liver volume starting about age 25 and another drop starting around age 50. Do you know what else is now happening to men around this 50ish age? They are getting infant style “cradle cap” back.

And once again, no big clinical study is needed to verify this. Just go and ask any older men’s barber as to how often they are seeing this now. Then ask them how often they saw these conditions 20 years ago! Of course, I did go ask; the ratio is around 10 to 1. I also talked with two men’s barbers who are new to Canada, having recently emigrated from Iraq. Boy, did they ever want to talk about this creepy condition! They both said they almost never saw this condition back home in men of this age. They also were concerned about it being contagious. Secondly, and surprisingly, they asked why there are so many teenagers and even younger kids with gray hair in Canada. They said that they never saw this back home either. Surely, there is no correlation between the early onset of gray hair in kids and autoimmune diseases? Not surprisingly, oh yes there is!

Clearly, *something* is causing this increase in eczema rates in older men. Once again, let’s consider that there is a well-established list of trigger foods that cause eczema flare-ups. This trigger food concept is medically accepted, and there are tens of thousands of people who can attest to it. For kids, these foods are often termed as being *allergies*. But, maybe these are not *allergies* at all. What if these trigger foods are actually putting a toxin into the body, and eczema is one of the body’s response to that toxin? In a previous chapter, I was speculating that there would only be a handful of chemical compounds shared by the more common trigger foods. So, now let’s not speculate, and investigate this.

We are going to analyze the chemical compounds in fish (cod), orange juice, milk, and eggs. There are hundreds of compounds in these foods,

but we are only interested in the ones that are *common* to all four of these well-known trigger foods. The source data used is:

United States Department of Agriculture, Agricultural Research Service

National Nutrient Database for Standard Reference Release 27, units are per 100 grams.

<http://ndb.nal.usda.gov/ndb/foods>

Table 4 Shared chemical composition of four trigger foods

Compound	Units	Cod	O.J.	Milk	Eggs
Calcium, Ca	mg	16.0	43.0	128.0	50.0
Fatty acids, total monounsaturated	g	0.094	0.039	0.280	4.077
Fatty acids, total polyunsaturated	g	0.231	0.042	0.036	1.414
Fatty acids, total saturated	g	0.131	0.025	0.604	3.267
Folate, DFE	DFE	7.0	17.0	5.0	44.0
Iron, Fe	mg	0.380	0.090	0.050	1.190
Magnesium, Mg	mg	32.0	10.0	14.0	10.0
Niacin	mg	2.063	0.400	0.090	0.064
Phosphorus, P	mg	203.0	12.0	100.0	172.0
Potassium, K	mg	413.0	169.0	162.0	126.0
Protein	g	17.810	0.700	3.480	12.580
Riboflavin	mg	0.065	0.040	0.173	0.513
Thiamin	mg	0.076	0.100	0.040	0.066
Total lipid (fat)	g	0.670	0.210	0.970	10.610
Vitamin A, RAE	RAE	12.0	11.0	59.0	149.0
Vitamin A, IU	IU	40.0	225.0	204.0	520.0
Vitamin B-6	mg	0.245	0.051	0.045	0.121
Zinc, Zn	mg	0.450	0.080	0.400	1.050

Per 100 grams.

Next, let's exclude minerals, fats, and proteins because the minerals are found in water and the fats and proteins in beef. The fats and proteins are

A Deeper Look at Eczema

also at extremely low concentrations in the orange juice. Additionally, nobody reports flare-ups being caused by drinking water or eating beef.

Table 5 Trigger food chemical short list

Compound	Units	Cod	O.J.	Milk	Eggs
Folate, DFE	DFE	7.0	17.0	5.0	44.0
Niacin	mg	2.063	0.400	0.090	0.064
Riboflavin	mg	0.065	0.040	0.173	0.513
Thiamin	mg	0.076	0.100	0.040	0.066
Vitamin A, RAE	RAE	12.0	11.0	59.0	149.0
Vitamin A, IU	IU	40.0	225.0	204.0	520.0
Vitamin B-6	mg	0.245	0.051	0.045	0.121

Next, we can reduce the list a bit more by removing most of the B-vitamins for several reasons. One is they are less than 0.1 mg per 100g in at least one of the trigger foods. Additionally, the B-vitamins are water-soluble and are quickly removed from the body, and therefore rarely produce toxicity. Folate is also a B vitamin (B9). The risk of folate developing into toxicity is also documented to be very low because it too is a water-soluble vitamin and is regularly removed from the body through urine. Therefore, our finalist is vitamin A. Note that RAE is Retinol Activity Equivalents, and is the most representative unit of measure for the body's usage of various forms of the retinoids.

Table 6 Trigger food chemical finalist

Compound	Units	Cod	O.J.	Milk	Eggs
Vitamin A, RAE	RAE	12.0	11.0	59.0	149.0
Vitamin A, IU	IU	40.0	225.0	204.0	520.0

Once again, vitamin A is clinically proven, and documented, to produce skin inflammation, as well as *all* the other symptoms of *all* the autoimmune diseases combined? Could it be this straight forward to get to the root cause? I think it just might be. Now, if there is a root cause, it sure isn't spontaneously AUTO.

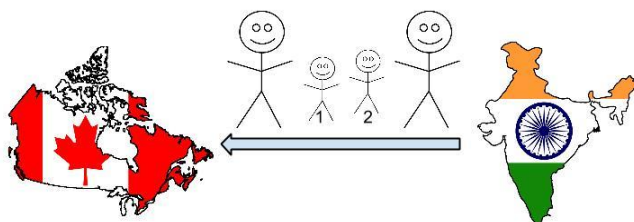
Chapter 10

No, it is absolutely not AUTO Immune!

Not only are these diseases not AUTO, there is actually absolutely nothing wrong with the functioning of immune system in these diseases either. Therefore, I so want to send this AUTO immune notion into oblivion³³. If we all buy into this silly AUTO nonsense, then these diseases will never get solved. In addition to my other arguments and thought experiments I've presented earlier, I think that if we go through this very logically, we can nail this down so that no one can have any doubt whatsoever.

Let's look at an example of a young family emigrating from India to Canada. A mom, a dad, and two kids, kid 1, and kid 2 (I am not singling out India; many other countries of origin apply too).

Figure 22 A family immigrating to Canada



The AUTO immune disease in this example is IBD/Crohn's disease. But, it doesn't matter; the same scenario applies to the others. Now, I want to be perfectly clear that this is not some hypothetical example. This exact scenario has been repeated in real life many times and it is being

³³ The term "auto immune" is just very unfortunate; it should have been "self immune".

repeated today. This is not fictional. I can give you real names, and dates. As can probably most gastroenterologists in Canada, the USA, and the U.K.

Let's go through the actual sequence of events.

1. If this family were to stay in India, the chances of any of them developing IBD/Crohn's disease is effectively *zero*!
2. But, in pursuit of a better life, they decide to immigrate to Canada.
3. Their long-term chances of getting Crohn's disease have *instantly* just gone up. What changed? Their environment changed.
4. Did we just change these people in any way? No, we did not.
5. Did we just change their immune systems in any way? No, we did not.
6. Did we introduce a genetic defect into them? No, we did not.
7. Does anyone immediately get IBD/Crohn's? No, of course not.
8. Ten years go by; they're all still healthy. Do they all still have non-defective and non auto-immuning immune systems? Yes.
9. Two more years go by; kid 1 mysteriously "gets" IBD/Crohn's disease.
10. Did kid 1 breathe the same air and drink the same water as kid 2? Yes.
11. Did kid 1 live in the exact same house and go to the exact same schools as kid 2? Yes.
12. What has really happened? Somehow, the new environment poisoned kid 1 but not kid 2.
13. Did her immune system become defective AUTO magically? No, it did not. Her environment *caused something* to happen.

No, it is absolutely not AUTO Immune!

When the environment causes someone to get sick, it's called a poisoning!

14. If kid 1 immediately moved back to India, would this reduce her symptoms? Actually, yes, it probably would. But it probably wouldn't cure her.
15. Why did kid 1 and not kid 2 get poisoned? Actually, all family members were being potentially poisoned; it's just that kid 1 was a bit unluckier.
16. Why was kid 1 a bit unluckier? Because she made *slightly* more "healthy" food choices. Her exposure level to something in her food environment was a bit higher than that of her sibling.
17. Why was there a 12-year delay before disease onset? Because the human body is near perfectly well equipped and well prepared for this potential poison in reasonable amounts.
18. Why were the mom and dad not poisoned? Well, they too are being potentially poisoned, just not enough yet to cause disease. But, most importantly they have bigger livers and bigger bodies to protect them.
19. Let's be 100% crystal clear and perfectly honest about this. What made this kid sick? Moving from one environment to another made her sick. The environment *caused* this to happen. We moved a healthy person with a healthy immune system to a new environment. Her immune system *responded* to a new environment. Although we don't like that response, yes it sucks, but it's the *normal* response!
20. Why isn't everyone in Canada sick? It is because the body has very big natural buffers (storage locations) for this substance; and it is perfectly harmless, and beneficial too until you start exhausting that storage capacity. Additionally, the body responds by growing fatter and adapts in other ways to accommodate the accumulation of it. So, not everyone is sick (yet). But, almost all of a sudden, many more of us are indeed getting sick with autoimmune diseases.

I know this family from India. What happened to kid 1? She had her colon removed at age 18. Her colon is now gone, forever!

Similarly, I know of another family from India. They have a daughter with eczema. She has the eczema only while in Canada. When they go back to India for the summers, the eczema clears. When they come back to Canada, the eczema returns. It's like clockwork. Once again, clear evidence there's something in the Canadian environment causing this autoimmune disease to reoccur. But, wait one second; if our environment is causing these diseases, they're clearly not spontaneously "auto".

The immune system is responding to the new environmental situation. Are these people "defective"? No, of course not! Do they have defective immune systems? No, of course not! We all have immune systems that are so highly perfected that it has protected humans for millions of years. This concept of autoimmunity is complete and utter rubbish. It should have never been allowed to get this far. I think there are just overwhelming amounts of evidence that should allow us to toss this autoimmune concept into the scientific trash can forever. There are literally more than 5 billion people on the planet who are demonstrating that it isn't autoimmune by not getting these diseases. It's something about the environment (foods) in the industrialized nations that *is causing* these diseases.

Here's a very nice and interesting video of a doctor in Taiwan treating psoriasis. [Experience of curing psoriasis Miss Dai](#)

Source: <https://www.youtube.com/watch?v=5dTyq2kAqY8>.

The interesting points presented are:

1. He has amazing and genuine-looking before and after photos.
2. He claims to use Chin-Dye ointment to achieve the miracle.

No, it is absolutely not AUTO Immune!

3. The video states, “*It will never work unless you come to Taiwan.*”

Now, I have no idea about the medical properties of this traditional Chinese Chin-Dye ointment used. But the statement that you need to get out of your current environment, say, North America, for this to work is indeed very interesting. My guess is that Dr. Liao’s treatment does work. However, once you return to North America, and to your regular diet, my next guess is that your psoriasis will return too.

These diseases are really AUTO poisonings. Once again, the only reason we don’t recognize it as a poisoning is because of the long timeframes involved. We’re just not accustomed to thinking of poisonings that take 10 to 80 years before they start to manifest symptoms.

I hope I’ve presented a somewhat convincing argument. But, I may have only gotten this AUTO notion into a low orbit and not into deep space where it belongs. So, I’m not done with it just yet. There’s a lot more evidence to come.

Nevertheless, there is something more important to be said with the above argument. That is that it applies just as equally to Alzheimer’s and autism too. These too, are indeed environmentally caused diseases. There’s simply no two ways about it. They’re poisonings. But we don’t need ask doctors to confirm this conclusion; rather we should ask mathematicians.

Would it not be stunningly amazing if the autoimmune diseases, Alzheimer’s, and autism were all being caused by one environmental factor; or, more specifically, by one and only one poison in our environment? What one poison could be so incredibly destructive to the human body, yet so globally widespread, and so devious in its pathology? How about a potential little toxin that’s in nearly all the foods on the planet? Paradoxically, one that’s nearly hidden because it’s so

ubiquitous. Paradoxically, one that medical science really never notices too much because it's always present in nearly every tissue and used by every cell in the body, Paradoxically, one that is promoted as being healthy and good for us. And it is indeed good for us until we reach a critical tipping point. Paradoxically, one the human body has evolved with over the last ten million years and has a profound and universal effect on all of our cells.

Maybe I'm completely insane, but I think that's indeed the case. Insane or not, that's indeed what the evidence is pointing to.

“Anecdotal Evidence”

Of course, for anyone scientifically minded, the term “anecdotal evidence” is almost an oxymoron. Anecdotes are just a tad above hearsay, and I totally concur with that sentiment. However, I do believe that anecdotes can, at the least, provide some clues. So, let's consider a recently reported case that matches with the above story. Here is a news report of a young man in Canada who developed Crohn's/IBD: [CTV National News Extended: First in the family](#)³⁴.

Listen very carefully to what Rasheed Clarke says starting at about 34 seconds into the clip. He says:

“I was training for a half marathon; I was eating all the recommended fruits and vegetables.”

Hmm... he eats really *healthy* and then gets sick with IBD. Does that sound familiar?

It is intermission time here in Canada. I am, once again, sincerely asking you to participate in this. Please try to prove me wrong. This is not out of

³⁴ <http://www.ctvnews.ca/health/younger-immigrants-at-greater-risk-of-developing-ibd-study-1.2272470>

some bravado and, most certainly, not out of some arrogance. I want to get to the truth as much as anyone. What would be very helpful is statistical data for some of the other autoimmune disease rates from Atlantic Canada from 1993 until now.

The body at war with itself

Clearly, in the autoimmune diseases, it is as if the body is at war with itself. Therefore, it is useful to learn a little bit from an old master of war.

It is said that if you know your enemies and know yourself, you will not be imperiled in a hundred battles; if you do not know your enemies but do know yourself, you will win one and lose one; if you do not know your enemies nor yourself, you will be imperiled in every single battle.

Sun Tzu: The Art of War, published 513 BC

So many times when nations go to war, it is with others who were once their friends. After most wars, nations quickly become friends again and live in peace and trade with each other again. Therefore, what is really happening is that it is the leaders of nations, and not the people, who are at war with each other. But to wage war, the so-called leaders need to trick their populations into hating and fighting each other. The real motivation for almost all wars in human history is simply theft. In reality, wars are massive armed robberies that quickly escalate into mass murder. But, very few people actually recognize this as so because they are blinded by the propaganda their governments use on them.

By now, it is clear that the basic premise of this theory is that many autoimmune diseases are caused by being in a chronic state of elevated storage levels of retinol, retinoic acid, and possibly the carotenoid vitamin A precursors. These substances were indeed once our friends. But, they are now being used to trick our bodies into being at war with itself.

No, it is absolutely not AUTO Immune!

Therefore, to resolve these diseases we need to get to know this enemy, and ourselves a whole lot more. Once we can truly understand each other, we can learn how to live in peace with each other once again.

Next, we need to learn exactly how and why the immune system is all of a sudden so motivated to wage war against the very body it is supposed to be protecting.

Chapter 11

Vitamin A—Friend and Foe

In this chapter, we are going to get to know this potential enemy on what I am calling the macro scale. The term macro scale means what does the body do with retinol before the cells make use of it. This is a very simple, yet critically important process to understand.

Consider this sketch of a very slow drip filling up a rain barrel.



Let's say the volume of the drop going in is just slightly larger than what is lost to evaporation. What's going to happen? Obviously, the barrel is going to be filled. It is a mathematical certainty. The only question is how long will it take. We can use simple math to determine that answer. It might take 50 years, but it is inevitable. Of course, once the barrel is full, what happens next is that every little drop will be overflowing. Since in this scenario, it is simply water overflowing, there's not much to worry about. However, in the case of retinol, there is a huge concern, because that overflowing retinol will eventually become extremely toxic. Naturally, that brown rain barrel and slow drip are an analogy for the process of slowly filling up the human liver.

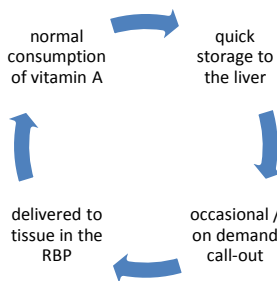
The World Health Organization and Pregnant Women in India

An early key piece of information for me was reading a report of an early program conducted in India in which they were pre-dosing pregnant/lactating women with 400,000 IU of vitamin A in one dose.

They were monitoring the blood serum in some of these women as they digested the given dose. An incidental comment in the report was that they were amazed at just how fast the body removed the vitamin A dose from the blood serum. There are other reports documenting very similar observations.

Of course, the liver quickly absorbed that dose and stored it away. The time between digestion and absorption was brief (they did not numerically quantify it). Therefore, in normally healthy people the consumption cycle looks like this.

Figure 23 The normal Retinol consumption cycle



Undoubtedly, that single 400,000 IU dose of vitamin A is a bit risky. Nevertheless, this was a critical point for me in understanding what might be going on. It means the body really does not want unbound vitamin A in the serum, and more like *not at all*. Why not? It is because it is a toxic molecule outside of what is called the retinol binding protein (the RBP).

Fine, and this quick storage process is not surprising since this is what's expected to happen in a normal healthy person. But, there's a limit on how much the body can physically store. That brings us to the all-important next question.

Exactly what happens once we have accumulated too much vitamin A?

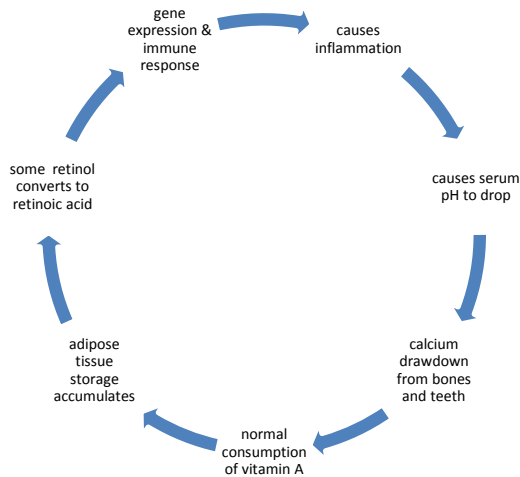
If you are a researcher or a medical professional, then the obvious question for you is what's going to happen once the body approaches or reaches this storage limit. We all need to know the exact and correct answer to this question. There can be no glossing over this. It's a critically important question since vitamin A is in nearly all foods. The food supply in North America is highly supplemented with it too. It's a critical question because most people in the Western industrialized world will eventually get into this state. It too is a mathematical certainty. What's going to happen once the body nears storage saturation for vitamin A? Exactly what happens to serum retinol in the period of time between digestion and safe storage?

Of course, the *absorption rate* to safe storage is going to be vastly diminished. Obviously, tissue cells will now be exposed to plain retinol for an extended period of time. This is not normal. What should be normally happening is that cells that need retinol make callouts for the delivery of it. The liver then responds to that callout by releasing retinol on an as-needed basis. Extremely importantly, the liver does so by first wrapping the retinol in what is called the retinol binding protein. Think of the RBP as an envelope that facilitates the safe transfer of retinol in the serum. Moreover, the cells that have made the call out for retinol have enabled their RBP receptors, thereby ensuring that the retinol is being received at only the correct destinations. Overall, it is a very elegant process. Very dangerously, that elegant process is now completely circumvented.

It's obvious that since the liver can no longer *quickly* absorb and store this intake it will remain in the blood serum longer. With the body's dedicated and normal storage function overwhelmed, it is going to result in sporadic and or chronic excessive vitamin A levels in the serum. This will allow more time for that vitamin A to be combined with circulating fats. Other systems and organs are now attempting to contain this overflow. They are going to contain this overflow by storing vitamin A locally in the fats, a secondary safe and natural vitamin A wrapper. This buys us a little more time.

However, it isn't quite this straightforward. Consider yourself getting into this state. You've just slowly gotten yourself into a vitamin A toxicity state. You are going to become sick, and extremely sick over time. The trapdoor loop looks like this:

Figure 24 The trapdoor Retinol consumption cycle



All kinds of horrible things will start to happen. There's no antidote, as far as I know. You've now fallen through an almost one-way trapdoor.

If your average daily intake is more than your body's daily usage, then it's more or less inevitable. If you indulge just a little bit too much on milk, dairy, eggs, certain fish, etc. or any of the vitamin A precursors, then this will happen much sooner. If you supplement with cod liver oil, or a vitamin A supplement, or any vitamin A derivative; it will be much sooner. It could be in your twenties or teens or even at birth! It also depends very significantly on what fats you consume that vitamin A with.

Naturally, your liver will have swelled up, maybe even grown larger, and have gotten fatty attempting to deal with what can now become a horrible toxin (in the form of retinoic acid). Other defense mechanisms of the body are now also responding, and attempting to neutralize the retinoic acid. Other, almost undetectably slow, processes are picking away at important tissues cells too.

Now, every microgram of vitamin A consumption could now become toxic. You now have an autoimmune disease. You are now in the same group as more than 50 million other people in North America. Welcome to the club. These diseases are really the result of the non-liver accumulation of this potential toxin.

The other organs, such as the skin, lungs, kidneys, GI tract, and joints are accumulating too much vitamin A. Although these organs and tissues are capable of storing or accumulating vitamin A, this is an extraordinary defensive measure taken by the body to locally store excessive amounts. Additionally, that somewhat safe storage in the local lipids is only temporarily safe. Once these tissues use that loaded lipid, they are going to expose the retinol.

Now take one guess what happens to cells that are exposed to elevated levels of retinol? You guessed it. They become inflamed. And that is only the beginning of the slow spiraling descent into this hell.

Chapter 12

Inflammation—The New Hell on Earth

In this chapter, we are going to investigate what happens with retinol at the micro and molecular levels within cells. We are also going to gain the all-critical understanding that retinol is normally, and automatically converted into retinoic acid. From there we are going to gain the amazing bit of understanding that retinoic acid causes cells to call the immune system in to destroy themselves. This is not only retinol-induced inflammation, but it is the key process by which the autoimmune diseases cause the body to self-destruct.

Of course, when we do get infections or injuries, inflammation is also normal, and beneficial. Therefore, inflammation is one of the key mechanisms the immune system uses to protect us from pathogens. Another very key clue here is that the immune system also responds to cell injury or damage, even without infections. This is a well-accepted fact. It is also very critical for us to really appreciate the significance of that. Cells do quite often go through errant, and damaging, DNA mutations. Without the immune response to this cellular damage, many of us would quickly develop cancer. The bottom line here is that the immune system responds to cellular damage, and to pathogens in very similar ways. Of course, this is completely logical too. Because, in many cases pathogens have entered the body via, and at the same time that damage has occurred to our tissues. Obviously, pathogens also damage our cells too.

But, we now are faced with a bit of a paradox; in one scenario inflammation is helping heal tissue, in the other it is wrongly destroying

tissue. Therefore, we need to understand how these two inflammation scenarios and processes are related; yet not entirely the same.

In the case of organism based intruders, the immune system is responding with inflammation as part of the process to kill them. Naturally, the immune system has multiple strategies for killing off detected pathogens. Chemical warfare and the highly elevated temperature are the basis of all of it. Of course, the inflammation (the increased heat) is a key artifact of the process and is very effective in killing off temperature sensitive viruses. But, clearly, in many cases the pathogen intruders are not just in our blood serum. No, they go deeper, and burrow their way into the intercellular fluids, and even into the interior of our tissue cells. Now, what happens? This damages the cell. The cells send out many damage alerting molecules, and possibly unique self-destruct messages via cytokines to the immune system. The immune system's ever-vigilant sentinel cells detect the alerting molecules and send out more alarm signals to call in the heavy troops. In order to quickly transport the additionally needed troops, the microvasculature must be enlarged to enable significantly more blood flow. This quickly elevates the tissue temperature.

Some of the immune cells will follow the chemical crumb trail back to the alarm emitting cells and attack them. The cells that have sent out the self-destruct messages have made this self-sacrifice for the better good of the entire body. It happens all the time, and it is not a big cause for concern because replacement cells can be grown quickly. So, the process is a bit like the alarm system you might have in your home. The alarm system detects an intruder, and then immediately sends out a distress call to the alarm company. The alarm company calls the police, and the police then take care of the intruders.

In the case of the human body dealing with an infection, once the intruders are destroyed, the inflammation settles down and the overall period of inflammation is temporary. However, in the case of the

autoimmune diseases, the inflammation is far more chronic in nature. So, with that observation, we believe the *inflammation* is somehow now the cause of the disease. But that is not really true. We are just failing to understand what's really happening. What's happening is that the immune system is using the same well-proven mechanisms and processes it has always used to fight pathogens. However, in the case of the autoimmune diseases, it is fighting phantom pathogens, and the very last thing we need is heat applied to our retinol containing lipids! The immune system has now just opened up a virtual minefield of micro-explosives.

So, is the immune system now defective in mistakenly thinking there are pathogens present? Not at all, because the presence of these damage-associated molecules is completely real and is a big red flag alerting the immune system that there must be pathogens present. The immune system simply responds accordingly, and it is never going to surrender. It generates deadly destructive proteins, acids, and does everything it can to make the tissue environment a very unpleasant place for any pathogen to live in. But, the immune system does not know that it is really attacking a molecule! It is attacking our own regular tissue cells that contain this molecule within their cytoplasm, and or any cell that is foolish enough to present these molecules on their surface membranes.

But now, unbeknownst to the immune system, generating all that heat in this particular battle is disastrous. It is of no help, and in a completely unexpected way, it is going to cause the problem to become far worse. It has just now *triggered* the notorious autoimmune disease flare-up. I'll discuss the cascading flare-up cycle in a lot more detail in a later chapter.

Next, we need to know exactly how the immune system accomplishes this feat of cellular destruction. And *no*, this is not so we can invent some other new and novel way of blocking it. It's so we can track it back even further, and get to the very origin of the problem. So now, how exactly

does the immune system destroy our own tissue cells? Of course, the immune system is no lightly armed infantryman. Rather, it is a well-equipped army of highly effective killing specialists. It has a variety of very specialized chemical weapons to kill or destroy pathogens and any cell that might be infected with them. Most of the weapons are proteins and acids. Retinoic acid and hydrogen peroxide are two of them. With that knowledge, what do you think is going to happen when tissues cells start generating retinoic acid on their very own, and they start to generate more and more of it? Not only is this destructive chemical incredibly effective in destroying proteins, it can cause a massive immune response and a lot of downstream inflammation.

As I described earlier, I've watched this inflammation process, in real time, dissolving the skin on my fingers and on the backs of my hands. For being defective, the immune system is pretty damn effective at getting the job done! If the top layer of the skin doesn't dissolve or completely crumble, it has hundreds of little craters burned into it.

Paradoxically, with the inflammation, the skin will subsequently become much thicker. The same paradox is observed with both psoriasis and the joints in arthritis. This is a well documented, and an absolute, fact. The medical term for this thickening of tissue is called sclerosis.

So, even though the immune system is inflaming, and destroying the skin and joints, some other facet of the process is at the same time trying to counteract it and build the tissue bigger and stronger. Therefore, there appears to be two processes fighting, or offsetting, each other at the same time. Just like with the joints in arthritis, the skin in eczema actually becomes much hotter. Like cooking hot. Therefore, there must be an exothermic reactions occurring. Exothermic reactions happen when molecules split apart, chemical bonds are being broken releasing heat. Some of the molecule we are mostly talking about here are our proteins.

Of course, the difference with eczema and arthritis is that with eczema we have the advantage of being able to get a very good look at the process in real time. I was genuinely fascinated to watch it.

It also made me very curious. I had to know exactly *how and why* my skin was being dissolved. Somewhat surprisingly, the exact how and why of this is already documented. The exact how and why of this paradoxical observation of the tissue becoming thicker with the inflammation is also already well documented. Eczema provides us with some very important clues. Here are some really big ones.

“Never let the Skin Air Dry: it will make your autoimmune disease get worse”

Of course, this is not just my observation. The very common recommendation from medical professionals and other people with eczema is to dry oneself off very carefully after a bath or shower. The advice is:

*Blot dry with a towel (rather than rubbing), and apply a moisturizing cream from head to toe (focusing on problem areas) within 3 minutes of getting out of the bath or shower, while the skin is still moist. If the skin is allowed to air-dry before the moisturizer is applied, **the eczema could get worse.***

Source: <http://allergies.about.com/od/skinallergies/a/atopicdermtx.htm>

Why is this? It's for two reasons. Firstly, it is because the skin in affected areas is so incredibly thin, thinner than rice paper thin, or disintegrating that if you rub it the least little bit, you'll rub it right off. The skin can be so thin that it has no structural integrity left to it. At this point, it's more like a thin layer of mush.

Of course, if you do rub it off, it's both a bit more painful, and you now expose yourself to the risk of bacterial infections. Once again, this thinning of the skin has happened from the inside out. The top layer of

the skin has dissolved away. Naturally, once this happens, the skin's barrier function is completely lost too.

I think for most people, if they were to look at eczema-affected skin during a flare-up under a 30x microscope, they'd be shocked. It is actually an amazing amount of destruction going on. There are hundreds of little pockets of skin per square centimeter that are completely burned out. The hair can be completely burned off at the skin surface level too. Unfortunately, I don't have a camera attachment for my microscope; so I don't have a 30x picture to share. However, I do have [pictures from a regular camera shared here](#)³⁵.

The second huge clue here is this: “If the skin is allowed to air-dry before the moisturizer is applied, **the eczema could get worse.**”

I can't tell you how many different places I've seen this same statement. This is a universal observation with eczema. Now, why does letting the skin air-dry cause an **autoimmune disease** to get worse? The short answer is that the last thing you want to happen is for the body's natural mechanism for moisturizing the skin to go into effect. The longer answer is just a few pages below, and you're probably not going to like it.

So what about this dissolving, crumbling skin? What chemical is capable of doing this to the skin? Retinoic acid is, of course.

Vitamin A and Vitamin A Acid Peels

You can actually get cosmetic applications to accomplish exactly this. They're [vitamin A peels](#)³⁶. Some are retinol, and others are retinoic acid and are called Vitamin A acid peels. There are hundreds of various products on the market. They dissolve the top layer of dead skin cells to

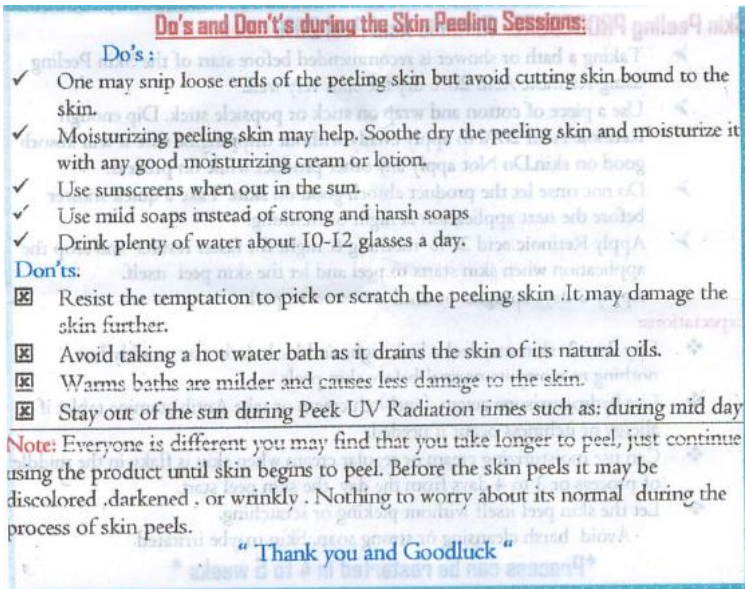
³⁵ <https://ggenereuxblog.wordpress.com/photo-gallery/>

³⁶ http://www.google.com/search?q=vitamin+a+peels&as_sitesearch=.com

expose the newer deeper layers and promote faster skin cell turnover. Similar products are available as an acne treatment. That's nice for them I guess. But, people with eczema are effectively applying a similar vitamin A acid peel from the inside out. This might sound like something out of a horror novel, but it is not. It is exactly what is happening. What's the difference between excess retinol being applied topically to your external skin, versus excess retinol being applied internally to your skin? It's almost nothing.

I ordered a small vitamin A acid peel package online. Here's the insert provided with it, giving a nice list of the do's and don'ts for using it. Of course, this is not what anyone would call strong evidence, but I do consider it a very interesting clue.

Figure 25 The do's and don'ts of applying Vitamin A acid peels



What's so interesting about this is that it's a pretty damn good match for the eczema do's and don'ts that you'll find on medical websites and other eczema support forums.

Although the reference to vitamin A acid peels might be something a lot of people are aware of, or can directly relate to, it isn't very strong evidence, scientifically speaking. Let's look at some more scientifically based evidence.

Key Evidence—Japanese Skin Rejuvenation Therapy

Here's a great collection of recent research papers on the topic of Retinoic Acid and disease.

[Retinoic Acid: Structure, Mechanisms and Roles in Disease \(Microbiology Research Advances: Cell Biology Research Progress\)](#)³⁷

Authors: Cheng, Li-Hong, Ito, Yuto; Osaka University, et al.
ISBN 978-1-62100-597-1

From chapter 6: Tretinoin-cyclodextrin Complex in Skin Rejuvenation Therapy

Tretinoin is all-trans-retinoic acid (ATRA). In a nutshell, what they are researching is the development of the topical application of ATRA (retinoic acid) to reduce the effects of chronological and or photo-aging of the skin.

The authors of the report document that ATRA induce improved skin turnover and, ultimately, the thickening of the collagen. However, when applied directly, and topically, they report that patients frequently experience *inflammation, redness, scaling, itching, burning, and desquamation*.

Okay, it appears they're directly inducing the eczema skin condition we all consider to be an autoimmune disease. But, if the patient can tolerate

³⁷ <http://www.amazon.com/Retinoic-Acid-Structure-Mechanisms-Microbiology/dp/1621005976>

these conditions for a while, then after stopping treatment there's a subsequent thickening of the collagen. This is exactly the same condition observed with eczema; after the skin becomes inflamed, it usually turns much thicker. Overall, this now sounds like the textbook description of eczema.

The authors describe the mechanism as:

The phenomena occur because Tretinoin releases heparin-binding EGF-like growth factor (HB-EGF), which enhances the proliferation of basal cells.

This little detail of the *EGF-like growth factor* being released is a *very important* one to remember.

This process is called *Retinoic Acid Apoptosis Signaling*, and it appears to be well studied and understood^{38 39}. Therefore, all of these supposed side effects should be of no surprise. However, the common complication of skin inflammation leads to the interruption of treatment by many users. Additionally, once you understand exactly what this treatment is really doing, you'll see the complete folly, and futility, in the logic of it. I'll add more on that point in a later chapter.

Nevertheless, ATRA works in thickening the epidermis, but it needs to be directly delivered deeper into the dermis skin layer, without first inflaming the epidermis, the outermost layer of skin. The researchers adopt some rather novel ways of bypassing the epidermis and getting the ATRA deeper into the skin. They use some other carrier molecules that can physically contain the retinoic acid molecule, and pass it deeper into

³⁸ <http://www.annualreviews.org/doi/abs/10.1146/annurev.nutr.28.061807.155509>

³⁹ <https://targetexplorer.ingenuity.com/pathway/ING/ING:46cko#!/api/rest/v1/client/search/PathwayNodes?pathwayId=ING:46cko&rows=0&facetLimit=5000&responseType=default>

the skin. This is also a very critical mechanism to remember when we discuss celiac disease in a later chapter.

There are many more papers providing scientific evidence that retinoic acid may be the culprit we are looking for. Retinoic Acid has been in use in dermatology since 1959. It has been used to treat many skin-related diseases such as acne, ichthyosis, psoriasis, and others. However, it is now finally falling out of favor, because any gains are usually temporary, and there is almost always accompanying inflammation.

Here's another research paper on a similar topic:

Chapter 10: [Alternatives to Reduce the Topical Retinoic Acid-Induced Skin Irritation](#)⁴⁰ by G.A. Castro and L.A.M. Ferreira of the Federal University of Minas Gerais, Brazil

The authors discuss several approaches to addressing the concerns of patients attempting to use Retinoic Acid treatments topically.

The key points in this paper are the documented side effects of skin irritation that include *erythema (redness), dryness, peeling, scaling, and the breakdown of the skin's barrier function.*

Well, are these not very interesting *side effects*? This is once again like a textbook description of eczema.

What's interesting about this paper is that they document the exact process at the cellular level as to why this happens. It is a well-understood process. The retinoic acid causes the gene expression leading to the immune inflammatory response. This is an important paper in many ways. It documents the nuclear hormone receptors that bind to the

⁴⁰

http://www.novapublishers.com/catalog/product_info.php?products_id=34523http://www.novapublishers.com/catalog/product_info.php?products_id=34523

retinoic acid and the retinoic isoforms. They also document that these same nuclear receptors accept steroids and vitamin D. This should be really interesting to us.

This paper also points out the direct cause of the skin irritation, inflammation, erythema, dryness, peeling, and scaling is, indeed, the overload of retinoic acid. It is a bit odd to me that they call these conditions “*side effects*,” when they know the exact cause is the topical application of the retinoic acid. Maybe they should have termed these the “direct skin response effects.” Fortunately, those documented *side effects* are once again pretty clear evidence that retinoic acid could be the culprit in at least causing eczema; the autoimmune skin disease.

At the very least, we now have this solid scientific evidence that retinoic acid can directly cause the same eczema-like condition. Anyone can completely and easily repeat it. Repeatability is the foundation of the scientific method. But, I’m not volunteering.

Naturally, these researchers applied the retinoic acid topically. So, is it possible that retinoic acid internally building up in the skin causes eczema? Of course, it is. This exact accumulation process happens in the adipose tissue, the sebaceous glands, and anywhere else that the body stores lipids.

But where is that retinoic acid coming from? The vitamin A in our food is mostly in either the [retinol](#)⁴¹ or the [retinal](#)⁴² forms, or as the vitamin A precursors. Where and when does this conversion take place in the body? It’s well documented in [Retinoic Acid: Structure, Mechanisms and Roles in Disease \(Microbiology Research Advances: Cell Biology Research Progress\)](#)⁴³, both at the cellular and molecular levels. It’s also

⁴¹ <https://en.wikipedia.org/wiki/Retinol#mediaviewer/File:All-trans-Retinol2.svg>

⁴² <https://en.wikipedia.org/wiki/Retinal#mediaviewer/File:All-trans-Retinal2.svg>

⁴³ <http://www.isbnsearch.org/isbn/9781621005971>

documented in this 2006 report on [the acute and chronic toxic effects of vitamin A](#)⁴⁴.

From these two sources, it's clear to see that the body will convert excess vitamin A (retinol) to retinoic acid. It's going to happen and it happens normally. It will happen in the intestine and at the cellular level in any other tissues. Here is the key fact to remember:

Retinol is metabolized to retinoic acid in normal cells.

At the cellular level, the normal pathway of delivery is for the liver to release retinol bound to, and contained within, a retinol binding protein (RBP). Once again, this is critical because the retinol binding protein facilitates the safe transport of the retinol within the blood plasma.

All cells have a surface receptor for this retinol binding protein complex and absorb it via that receptor. From there the cell unbinds it, metabolizes the retinol, and converts it to retinoic acid. That retinoic acid then passes into the cell's nucleus and is used for gene expressions and subsequent generations of proteins. The gene expression can produce cytokines. The cytokines are signaling proteins the cell releases. Some particular cytokines will invoke an immune response.

However, the cell also has surface receptors for unbound retinol. Let's call this the unlocked backdoor delivery path. Therefore, via that backdoor, unbound retinol can also pass through the cell's membrane into the cytoplasm. From there, it follows the same path of conversion into retinoic acid and the subsequent generation of cytokines. This was an unexpected uptake of retinol by the cell since it did not make a callout for it. Therefore, that excess plasma retinol has just bypassed the cell's self-regulation mechanism for importing it. Yet, the subsequent

⁴⁴ <http://ajcn.nutrition.org/content/83/2/191.long>

mechanisms of gene expression and the downstream generation of retinoic acid are going to be exactly the same.

I want to be clear that this backdoor delivery pathway is not speculation. It is well documented in other research. What's been a bit speculative on my part up until this point is that food consumed vitamin A is accumulating in the skin, converting to retinoic acid, and thereby causing eczema. Well this is no longer speculative either, because there's research from back in 1985 documenting this connection:

Vitamin A in skin and serum--studies of acne vulgaris, atopic dermatitis, ichthyosis vulgaris and lichen planus.

In skin biopsies, the mean dehydroretinol concentrations were markedly increased in lesions of atopic dermatitis (eczema) and lichen planus.

Source: <http://www.ncbi.nlm.nih.gov/pubmed/2933053>

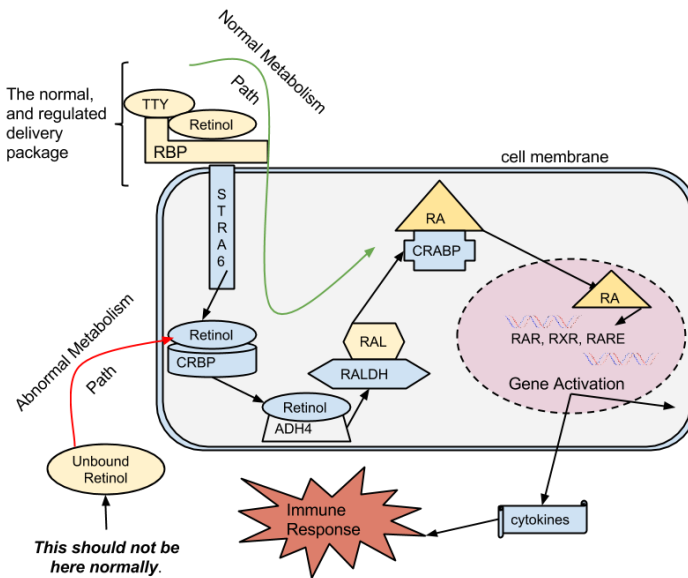
What is *dehydroretinol*? It is a derivative of retinal. Known as vitamin A₂, it is found in fish liver oils.

Therefore, the chain reaction looks like this:

- ⇒ Excess serum retinol
 - ↳ absorbed into the cell
 - ↳ cell converts to retinoic acid
 - ↳ cell generates cytokines
 - ↳ immune cells respond
 - ↳ attack the cell
 - ↳ inflammation
 - ↳ cell's destruction
 - ↳ growth hormone released.

Pictorially, it looks like this:

Figure 26 The cells metabolism of Retinol



Source: adapted from Retinoic Acid: Structure, Mechanisms and Roles in Disease

Clearly, this isn't quite autoimmune since we are, indeed, inducing it to happen. But, if we look at it at just at the same point in time as the inflammation, it sure appears to be autoimmune. We could also be training the immune system to wrongly respond in the future too, and without the presence of excess retinol.

Nevertheless, it isn't "auto" in the sense of it happening automatically, or spontaneously, or randomly, or defectively. No, it is not spontaneous, and there is indeed a reason it happens. No, people do not get these diseases just because of bad luck. Physical events always happen for a reason. That's just a fundamental law of science. So, I'd sure like to propose that we drop this silly notion of "auto" immune diseases. Next, let's start getting closer to understanding the real root cause(s), and overall mechanisms.

The conversion of retinol to retinoic acid is going to happen a lot more in people with elevated tissue storage and even slightly elevated plasma levels of unbound retinol. In normal and healthy people, regular vitamin A consumption should mostly be stored, and stored very quickly and efficiently by the liver.

The authors of the 2006 **Toxic effects of Vitamin A** report state, "*Hepatic storage of vitamin A will continue until a pathologic liver condition develops*".

However, clearly there's a physical limit to this storage. Therefore, we can safely say pathologic conditions develop once *the Hepatic storage is exceeded*. Of course, this is not some thin line or single threshold, that's crossed over. It's variable, and variable over time, and the liver is going to swell up and grow as much as possible to contain this overflow of vitamin A and probably retinoic acid too.

The next obvious question here is: where the heck is all the vitamin A coming from in what appear to be normal people on what we think are

normal diets? Just as obviously the current abundant North American diet is not even close to being normal in the context of human evolution. We are now loading ourselves up on vitamin A like never before in human history.

This same chemical, or its precursor, is literally in nearly every food on the planet in one form or another. The big environmental change since the 1970s is just that there's now a lot more of it in our foods. More specifically, we're eating a lot of the higher vitamin A concentrated foods. Additionally, we also eat brightly colored fruits and vegetables year round now. Not too long ago, these foods were very seasonal. You can probably guess what category of chemical is primarily responsible for giving these fruits and vegetables their bright colors. It is the carotenoids - the vitamin A precursors.

Chapter 13

The Vitamin A Connection and Subclinical Toxicity

In this chapter, we are going to learn more about just how toxic vitamin A can become to the human body.

The official information from the National Institute of Health states that [Vitamin A IS A DIRECT TOXIN](#)⁴⁵ at high doses.

We need to understand three very important facts:

1. Vitamin A is a potential serious toxin.
2. The body stores this potential toxin.
3. The body has a fixed capacity for storing this potential toxin, and therefore, a limited ability to protect us from it.

It's no secret that vitamin A can be a serious toxin. This is well established and abundantly documented. But if there was ever a case of too much of a good thing being a bad thing, this is it. What about this "at high doses" part? From an engineer's point of view, since the body stores and accumulates this substance:

High doses EQUAL the SUM of many small doses

But, the critical question is exactly *why* does retinol become a toxin at high doses? The answer is simply because as you reach elevated storage levels more of it converts to retinoic acid.

⁴⁵ <http://livertox.nih.gov/VitaminARetinoids.htm>

Now, let's get to know this potential villain a little bit better. From the National Institute of Health:

Source: <http://livertox.nih.gov/VitaminARetinoids.htm>

Background

“Vitamin A is a retinoid and a fat-soluble vitamin that is commonly found in eggs, milk and liver and in the form of provitamin A in carotenoids in fresh fruits and vegetables particularly those with red, orange or yellow color. ... and (cod liver oil)

Hepatotoxicity

Normal doses of vitamin A are not associated with liver injury or liver test abnormalities, but higher doses (generally more than 40,000 IU daily, ~12,000 µg) can be toxic. Acute toxicity is caused by a single or a few repeated very high doses (generally >100 times the RDA), arising within days to weeks with a typical symptom complex of severe headache, nausea, vertigo, blurred vision, muscle aches and lack of coordination, followed by skin desquamation and alopecia.

...

*Chronic hypervitaminosis A usually arises 3 months to **many years after starting** moderately high levels of vitamin A (generally 10 times the RDA) and is marked by dry skin, cheilosis, gingivitis, muscle and joint pains, fatigue, mental dullness, depression and liver test abnormalities.*

Mechanism of Injury

Vitamin A in high doses is a direct toxin. Excess vitamin A is stored in stellate cells in the liver and accumulation can lead to their activation and hypertrophy, excess collagen production, fibrosis and liver injury. The toxicity is dose-related and can be reproduced in animal models.”

How bad can this villain get?

The simple answer is it can kill you! The more complex answer is it can first painfully destroy your body for decades, and then kill you. As you've seen, high intake of the preformed types of Vitamin A are

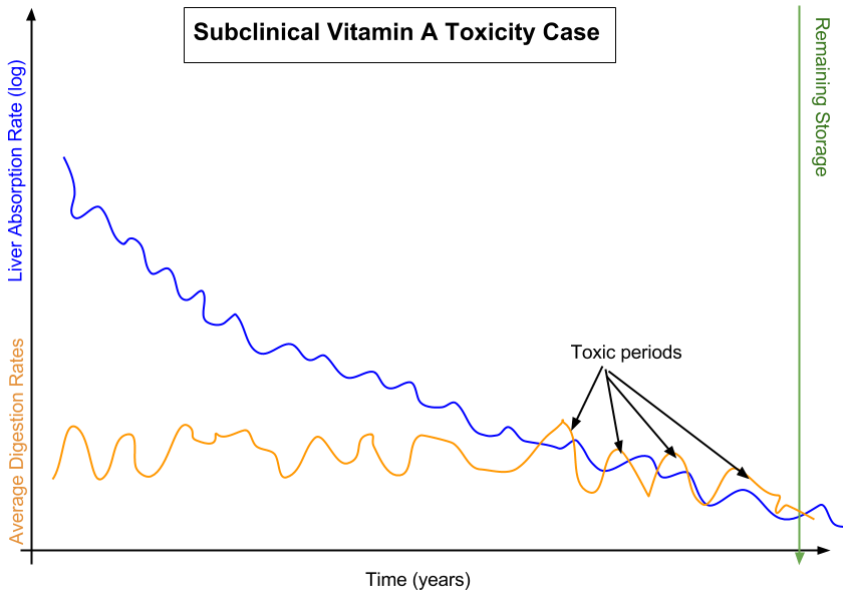
associated with toxicity, and can cause such things as nausea, dizziness, elevated pressure around the brain, headaches, and even coma etc. Of course, high vitamin A levels during pregnancy are proven to cause birth defects.

Now, just like most villains, this one has a good side. At one level, it isn't a villain at all. It's a critical substance for the human body. At the right level, it's not only harmless, but it's also essential for health. So, it's a double-edged sword. It's also a very tricky balance. It isn't just how much you consume; it also significantly depends on what other foods you consume it with.

As everyone knows, the liver is the body's primary storage organ for vitamin A. And we now also know that the liver's storage capacity can become more or less saturated, or maxed out. The skin, fat, and intestine are secondary storage locations. If we have one of these diseases, then effectively, the body can no longer protect us from what is now a toxin.

Since this substance is also in nearly all foods, once we've maxed out our liver's storage capacity, we're in serious danger. We've defeated our body's primary defense mechanism from this potential toxin. Our immune system and the skin are now attempting to deal with it. What happens now? If we consume just a little bit of vitamin A, the inflammation continues. If we consume a bit more vitamin A, we experience a flare-up, and that burns holes in our tissues/organs. This is not some instantaneous event. It is, of course, more complicated and the declining *rates* of absorption are what are really important. Here's a sketch of what is happening.

Figure 27 The exponential decline curve of absorption rates leading to toxicity



If you're thinking, okay, great to know, I'll just go low on foods that contain vitamin A. No, sadly, it might not be that easy. That vitamin A in your liver isn't going anywhere fast—or soon. The liver more or less traps it (to protect you from it and to use it when needed). The vitamin A stuck in your skin and other organs is trapped there for even longer, possibly much longer. Also, there are other artifacts from the immune response, such as cytokines and antibodies, stuck in your skin too.

Now, this is a very tricky and delicate situation. If your vitamin A intake surges even slightly beyond your body's vastly diminished ability to safely absorb and store it, you're in big trouble. Moreover, my own experiment is leading me to believe it isn't just vitamin A, but maybe also carotenoids. Many of the more common carotenoids are what are

known as vitamin A precursors and are in brightly colored fruits and vegetables. Carotenoids are also now used to make most food colors⁴⁶.

It's even trickier because it will significantly depend upon what fats you consume vitamin A with. If you consume it with certain fats, it may bypass any attempt by the liver to store it. Rather, it may go directly to other storage locations. However, if you are on a low-fat diet, that condition might significantly reduce the amount you take up from digestion.

If you have truly overwhelmed your liver's storage capacity, you're not only preventing proper storage of vitamin A, but that of the other fat-soluble vitamins too. Now you probably need to go to near zero consumption of vitamin A for a good long while. Saturation means you're filled to the brim; every extra drop is now overflowing. The catch here is that nearly all foods contain at least some vitamin A or carotenoids. Now every molecule counts. Based upon my own experimental evidence you cannot consume any coconut oils, either. I think the coconut oils may act as emulsifiers, or binding molecule, for retinol and carry it around the body. Other types of emulsifiers will act similarly.

People from the medical community will probably quickly challenge this entire theory of subclinical toxicity with this vitamin. But, not on the basis that it can't happen; rather they might take the position that there is no way ten's of millions of people are now actually getting into a toxicity state. Well, let's investigate this and see.

Beyond Subclinical Toxicity—How Toxic is it really?

There are tons of scientific and medical publications on the toxicity of vitamin A. Much of early research was back in the 1930s and 1940s.

⁴⁶ <http://www.amazon.com/Carotenoids-Colorants-Vitamin-Precursors-Technological/dp/0120828502>

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Retinoic acid is documented to be extremely toxic when it's in the wrong place or wrong concentrations. Here's another really interesting 2012 paper, [Retina, Retinol, Retinal and the Natural History of Vitamin A as a Light Sensor](#)⁴⁷, that states that “Excessive vitamin A uptake can lead to severe toxicity in humans.”

In the case of vitamin A derived acne drugs, such as Accutane et al, it's extreme. About 20% of fetuses exposed during early pregnancy had major malformations. Women taking the drug were required to be on two forms of birth control, or completely abstain from sex. Moreover, they were to enter into a contract, the “[iPLEDGE](#)”⁴⁸ program and contract and be closely monitored.

⁴⁷ <http://www.mdpi.com/2072-6643/4/12/2069/htm>

⁴⁸ <https://www.ipledgeprogram.com/>

From the iPledge program [Patient Introductory Brochure](#)⁴⁹:

There is an extremely high risk that severe birth defects will result if pregnancy occurs while taking isotretinoin in any amount, even for a short period of time.

What are the risks exactly?

Birth defects which have been documented following isotretinoin exposure include abnormalities of the face, eyes, ears, skull, central nervous system, cardiovascular system, and thymus and parathyroid glands. Cases of IQ scores less than 85 with or without other abnormalities have been reported. There is an increased risk of spontaneous abortion, and premature births have been reported.

Documented external abnormalities include: skull abnormality; ear abnormalities (including anotia, micropinna, small or absent external auditory canals); eye abnormalities (including microphthalmia); facial dysmorphia; cleft palate. Documented internal abnormalities include: CNS abnormalities (including cerebral abnormalities, cerebellar malformation, hydrocephalus, microcephaly, cranial nerve deficit); cardiovascular abnormalities; thymus gland abnormality; parathyroid hormone deficiency. In some cases, death has occurred with certain of the abnormalities previously noted.

Wow! That sounds pretty bad. So, what happens if a woman does become pregnant? Although it is not explicitly stated in the iPLEDGE brochure, other medical websites state: “*Because the answer to a pregnancy [on isotretinoin] is a termination*”. Okay, this is retinoic acid (specifically isotretinoin). It’s actually also a chemotherapy drug. It works by killing rapidly reproducing cells. Did anyone not stop to think that these normal teenagers have rapidly reproducing cells too?

⁴⁹ <https://www.ipledgeprogram.com/Documents/Patient%20Intro%20Broch.pdf>

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Now, what about plain old retinol (regular vitamin A)? There is a [well-known study](#)⁵⁰ (published in 1995) by Rothman et al. In this study, he documented that for pregnant women who were taking 10,000 IUs or more it resulted in 1 in 57 these children having birth defects. This was not retinoic acid; it was retinol, plain old vitamin A.

Table 7 Summary of birth defects rates reported by the Rothman study

Daily Retinol IU	No of Births	No. w/ CNC Defects	Rate	Prev.	Total No /w Defects	Rate	Prev.
0-5,000	11083	51	0.46	1.00	148	1.34	1.00
5,000-10,000	10585	54	0.51	1.11	168	1.59	1.19
10,000-15,000	763	9	1.18	2.56	13	1.70	1.28
15,000-20,000	188	4	2.13	4.62	6	3.19	2.39
20,000 or more	129	3	2.33	5.05	4	3.10	2.32

CNC is Cranial-Neural Crest Defects

Prev. is Prevalence defined here as the percent increase in the incidence rate over that of the baseline 0-5000 IU category.

Let's dig into this a little bit more. What we know for sure is that a daily 10,000 IUs was incredibly toxic. Now, even though 10,000 IUs sounds like a big number, it actually isn't hard to obtain. This is only around three times the recommended daily allowance (RDA). A person could quite easily achieve this with normal foods alone. Of course, normal foods are not much of a risk. It is now the un-normal supplemented foods, etc. that poses the greater risk.

⁵⁰ <http://www.nytimes.com/1995/10/07/us/study-links-excess-vitamin-a-and-birth-defects.html>

But the point is we don't know whether the 10,000 IUs was the dangerous high-level mark or not. The Rothman report strongly suggests that the dangerous level is 5,000 IUs or more. Yes, it could be 5,000 IUs, or it could be 3,000 IUs. Who really knows for sure? Actually, nobody does, because it depends on many other factors.

Based on my understanding of what's happening here is that the real risk is the liver's absorption rates and not the daily dose that matters so much. The absorption rate is going to be very dependent on a person's prior consumption history, and therefore, be a very individual rate. So, the real risk is more like:

$$risk = dose \times \frac{\sum_{i=0}^n \text{avg. daily consumption}}{2000000}$$

Where n is the total number of days the person has been alive.

When you read the various studies on what the safe amount of vitamin A is during pregnancy, they're all considering a daily dose. Everyone is assuming that there is a simple dose-response threshold. It is as if this is somehow the magic number that needs to be quantified.

But, since the body has a big buffer and stores most of the daily dose, it's almost the completely wrong number to consider. What's far more important is cumulative storage and what exactly happens with that daily dose. Additionally, exactly how fast this process happens is a big factor.

Generally, older women are probably going to have lower absorption rates into the liver (not due to aging), so their risk level will be higher. Therefore, the safe amount for pregnant women is also going to be relative, and variable just based on individual historical dietary habits, remaining storage capacity, consumption *rate*, and possibly age.

With the large amount of vitamin A in the North American diet by the time a woman reaches her childbearing years, there's zero possibility of

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women not having ample storage built up. Therefore, there should be no need for a supplement at all.

Let's imagine what might happen with a well-intentioned pregnant woman who wants to do everything she can to make sure her new baby under construction gets all the nutrition it needs. She might eat a few eggs with cheese for breakfast, two glasses of milk, and take a multivitamin. She might take an Omega-3 fish oil tablet. Then for lunch a tuna salad. Maybe she has a salad with lots of brightly colored vegetables such as tomatoes and bell peppers. Maybe she juices a few carrots with that fancy juicer she has. Boom! Now, her vitamin A intake has just surged and, maybe, way beyond her safe absorption rate. Now, what happens to it? Could some of that excess vitamin A convert to retinoic acid and endanger the fetus? You bet it could! The conversion of retinol to 13-*cis*-retinoic acid happens normally. But, it is just thought to be in small amounts. Does this assumed to be small amount change to a large amount with elevated storage conditions?

Fortunately, some doctors are now warning women about consuming too much vitamin A during pregnancy. I don't know how widely this message is being delivered. There's also the ongoing belief that elevated post-delivery vitamin A consumption is fine, if not being recommended. But, is this really true? Is there 100.00% completely water tight, irrefutable scientific evidence to support this? Or is it just being assumed too? Why on earth do we have this astounding epidemic of autism in North America?

Okay, this is in the context of birth defects; someone might claim high doses are only a risk to a developing fetus. But that's totally incorrect. As you've seen here, there is tons of research proving high doses are toxic to kids and adults too. What makes a high dose? Anything that isn't nearly immediately stored. Who does this apply to? It applies to kids because they naturally have correspondingly small liver volumes. It applies to everyone else with current elevated storage or compromised liver

function. Of course, I can't just make this claim without strong supporting evidence. Here's a great piece of evidence. The Journal of the World Public Health Nutrition Association published a May 2010 commentary titled [*The great Vitamin A fiasco*](#)⁵¹ by Michael Latham, Division of Nutritional Sciences, Cornell University.

If you currently believe that supplementing kids in the undeveloped nations with vitamin A is a good idea, then ***you must*** carefully read this paper. The basic premise of the paper is that if we really want to help these kids, we just need to feed them. Or even better yet, just enable them to simply feed themselves. We're completely fooling ourselves if we think that popping two vitamin A pills into them, and then walking away, is doing much good. No, that's a complete myth! It looks like the motivation may be money and politics. Moreover, it's clearly harming these kids. For now, I just want to focus on this one statement from that report (page 24):

The findings that high doses of vitamin A, especially in well nourished children, have adverse impacts on respiratory infections, should surely be grounds for serious concern.

I think the critically important point in this statement is the “***especially in well nourished children.***” Why is that? It's because the absorption rates by their liver are going to be slightly lower. This in itself should be hugely telling. There is, indeed, a very thin range of consumption rates that are safe. This is actually the same higher socioeconomic factor documented elsewhere showing up here but in the context of kids from villages in India, etc.

⁵¹ <http://wphna.org/wp-content/uploads/2014/12/WN-2010-01-01-12-45-Michael-Latham-Vitamin-A-fiasco.pdf>

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Does anyone think for one second that children in the North American are not *well nourished* too? Does not our supplemented food now load them up with somewhat big doses almost every day?

There's something else about this “*adverse impacts on respiratory infections*” that needs a bit of investigation. Why exactly does giving a poor kid in India a single shot of vitamin A cause higher rates of *respiratory infections*? Isn't this an amazingly revealing tidbit of information? I believe it's because a surged vitamin A intake can lead to inflammation. Inflammation leads to opportunistic infections, especially in sensitive tissues like the lungs.

Here's another interesting fact in the 1998 WHO (World Health Organization) report [Safe Vitamin A dosage during pregnancy and lactation](#)⁵² (the WHO is the same organization raising the alarm about a vitamin A deficiency [VAD] and supplementing kids and women in the underdeveloped world). It states:

Given the global magnitude of VAD, it is surprising that there are so few observations of malformed babies delivered to pregnant women who have symptoms of VAD. Countries in which VAD is endemic do not appear to have a higher prevalence of birth defects than other countries. Only a handful of published case reports of teratogenicity can be found and they describe eye malformations and central nervous system problems.

What the heck is that saying? Yet, in North America, we have abundant amounts of vitamin A in the diet, and we do supplement with it too. Remarkably, we actually do have far more than “*Only a handful of published case reports of teratogenicity*” Brilliant!

So why would anyone at the WHO think we should supplement people in the underdeveloped world to prevent birth defects when, by their very

⁵² http://whqlibdoc.who.int/hq/1998/WHO_NUT_98.4_eng.pdf

own report, there's no evidence of an elevated risk. It's actually just the opposite. What about the risk that we might actually *cause* birth defects or that we may even be harming children with infections or other diseases for life!

Let's think about this "*only a handful of published case reports*" just a bit more. The WHO was conducting these supplementation programs in India, China, and other countries in Southeast Asia. These are multi-billion person populations, and they have "*Only a handful of published case reports of teratogenicity.*" I'd bet there's another very simple and very plausible explanation for even these few cases. It's called malnutrition or even starvation!

Whereas, here in the most affluent and well-nourished nations of the world, we should have almost no birth defects. Of course, that is not the case at all. Rather we have an astounding "*About one in every 33 babies (about 3%) is born with a birth defect*". In the CDC numbers for 2006 and the annual estimated number of cases in the USA, it's 33,084.

Source: <http://www.cdc.gov/ncbddd/birthdefects/data.html>

This is a shocking and glaring difference to the "*only a handful of published case reports of teratogenicity*" in the undeveloped nations. How can this possibly be?

What in the world is going on here? In China, the current birth defect rate is 1.53%, and that is up from 0.87% reported in 1996. These recent increases in the Chinese rates are being attributed to elevated pollution⁵³. Okay, so from that we should consider that the normal rate for the human population is say 0.85% or lower. But, from the Rothman report, also done in 1996, the rate in the USA was almost twice that. The current

⁵³ <http://www.scmp.com/news/china/article/1079608/chinas-rising-birth-defects-blamed-pollution-unhealthy-living>

The Vitamin A Connection and Subclinical Toxicity

2015 rate of birth defects in the USA is now also twice that of China's current (2015) rate! So, we are tracking the Chinese rates at a 2:1 ratio. Could it be that our baseline assumption of up to 5,000 IUs being safe is wrong too? Do you know what other rates are going up in China now too? It is their rates of autoimmune diseases.

The proponents of the vitamin A supplementation programs will no doubt claim that they are necessary and cite the stats about how many lives they are saving. After all, the claim is that a vitamin A deficiency somehow causes higher rates of infectious diseases too. Well, it does no such thing really. Rather, once again it is nearly the complete opposite. Of course, the real cause of infectious diseases is bacteria, viruses, and fungi. Those infectious microbes become infections when people are over exposed to them, and or they are weakened due to poor health conditions and that allows these microbes to penetrate the body's outer defenses and then flourish.

Those infections may then lead to a vitamin A deficiency. The much bigger problem here, and it should be obvious to anyone who has even spent more than one day in India, is the lack of basic sanitation, and sewage treatment facilities. If we were really determined to help these people avoid infectious diseases, then we should be helping them build fantastic new sewage treatment plants etc. Moreover, popping a few vitamin A drops into a fraction of the population is utterly useless in the long term. For supplementation to be useful, it needs to be combined with the other essential nutrients of proteins and fats.

What should be even more obvious, is that for a fraction of the money being spent on the supplementation programs, we could provide the entire region of South East Asia, and Africa with carrot seeds, and or seeds for spinach, or pumpkin, or peppers, parsley, or chives, or a vast array of other high yield plant sources. Not only would this easily supply this region with ample and safe sources of vitamin A, via the carotenoid precursors, it would be a completely renewable, self-sustaining source,

and it would provide them with all they need forever. However, I want to be clear, that I am not at all saying the VAD does not exist. It surely does exist. However, with vitamin A available in nearly all foods, my bet is that every single case of real VAD is really a case of critical malnutrition too.

Ironically, and fortunately, not having the countries of Southeast Asia dosed up on diets high in vitamin A has saved them from the plague of the autoimmune diseases we now suffer from in North America. Naturally, there will be people with financial interests in continuing the supplementation programs who will cling to the claim there is some health value in them.

I get the distinct feeling no one really knows what the correct and safe levels for this so-called vitamin truly are. We are still guessing! So, now it is time to set the record straight. Vitamin A is actually a very powerful hormone. Maybe it should not even be called a vitamin at all. We can't afford to be guessing about this.

Yes, vitamin A is indeed a very critical chemical to the human body. Too much or too little is extremely dangerous. In the paper [Retina, Retinol, Retinal and the Natural History of Vitamin A as a Light Sensor](#)⁵⁴ the author states:

*In adults, **vitamin A deficiency** can lead to profound impairment of hippocampal long-term potentiation and long-term depression and impairment in learning and memory. Vitamin A deficiency can also lead to pathological changes in the lung, the skin, the thyroid and the male and female reproductive systems.*

At first, this appears very strange, and paradoxical since it closely matches some of the major symptoms of **vitamin A toxicity**. However, once you understand that most cases of true **vitamin A deficiency** almost

⁵⁴ <http://www.mdpi.com/2072-6643/4/12/2069/htm>

have to be cases of near starvation and chronic malnutrition, you'll understand the connection. It is very likely that people who have genuine vitamin A deficiency also have a protein deficiency, and that of zinc, too. If the liver can no longer safely deliver vitamin A in the RBP (retinol binding protein), and build RBPs for the management of retinol tissue levels, it is actually going to lead to localized vitamin A toxicity. Without adequate protein, the liver will not only be unable to properly deliver or recycle any vitamin A. Unpackaged vitamin A will then accumulate in the tissues. The body would normally move empty RBPs into such tissue to clear the excess retinol. This function is now broken. Having the required dietary protein to clear, and safely package retinol is critically important. Amazingly, there was a study done in Canada around 2005 putting a large number of patients with kidney disease on a zero protein diet. The thinking was that protein was stressing the kidneys. The results of that experiment were that many of those patients quickly died.

We also have a recent case study of someone following a high vitamin A, and low protein diet. Steve Jobs occasionally adopted such a diet by exclusively eating apples and carrots, and he stuck to it for weeks at a time⁵⁵. So much so that his skin had an orange hue to it. Of course, apples and carrots provide negligible protein. We all know the tragic end to that story. Therefore, from the man who gave us these beautiful Apple computers, we have some more critical information. Vitamin A without adequate protein is probably useless, and maybe even deadly. It sure did not prevent or cure his cancer either. And, yes, there have been people who have killed themselves by eating too many carrots!

Whatever the mechanism, vitamin A intake is indeed a double-edged sword. There are many studies from the 1940s, and '50s describing the incredible toxicity of the over-consumption of vitamin A. I've read one study from the early 1940s where the researchers considered vitamin A

⁵⁵ <http://www.nbcnews.com/health/body-odd/strange-eating-habits-steve-jobs-f119434>

to be so toxic that they recommended it to be a controlled substance. So, this potential deadly toxicity of vitamin A has been very well known for at least 85 years. There are also many studies confirming the requirement of vitamin A in normal growth and longevity. Obviously, the big question is how much do we really need?

There was a large-scale study done in the UK in 1949 to establish the vitamin A requirements for young adults. It was determined that 1,300 IU was probably the minimum dose. This was determined by monitoring serum levels, and we now know this is a very inaccurate, and nondeterministic measure of the body's storage levels.

Nevertheless, that number was doubled to create a *safety* margin, and 2,500 IU was proposed as the daily requirement for adults⁵⁶. Then the FDA doubled that number again to 5,000 IU in the USA. The current NIH recommendation is also 5,000 IU. Okay, now the daily-recommended dose is really about four times higher than needed. That would all be just fine and dandy if vitamin A did not accumulate!

Then, for some incredibly misguided reasons, in the mid-1970s, governments legislated the addition of this well-known potential toxin into nearly all low-fat milk and dairy in North America. Subsequently, starting around the 1980s, we started to see this exponential growth rates in chronic disease. Now, if the real daily requirement is, say, around 1,300 IU, and most adults are getting more than enough by being somewhat close to the recommended 5,000 IU, how much extra vitamin A would a person consume over say just a 10-year period?

Well, it's: $10 \times 365 \times 3,700 = 13,505,000$ IU. If you've been living in North America since the 1970s that's about: 60,000,000 IU. That is definitely enough to kill you.

⁵⁶ VITAMINS AND HORMONES, Volume 12, Robert S. Harris, Academic Press, Jan 1, 1954, page: 119

So, where did it all go? Much of it accumulated in our liver, other organs, and fats. Additionally, the effects of retinoic acid are documented to be systemic, and completely non-discriminatory. This means body wide, and every cell is susceptible to its exposure.

Now, is it any wonder why so many of us are getting the chronic diseases? We now have an epidemic in eczema, Crohn's & IBD (inflammatory bowel disease), obesity, depression, anxiety, diabetes, liver and kidney disease, arthritis, lupus, autism, Alzheimer's, and much more. Once again, and amazingly, all the combined symptoms of all of these diseases are a perfect match for chronic vitamin A toxicity.

Schizophrenia and Winter Time Birth Defects

Okay, it's time for some more trivia. Did you know that more schizophrenics are born in the late winter/early spring, than at other times of the year? Why is that? It could be just a coincidence. Or more likely it is for one or more real reasons. One good possibility is that this is after the fall harvest season. Therefore, women who were in early pregnancy in say September or October would have been more likely to eat pumpkin, more carrots and other high vitamin A content foods than women who became pregnant during the early spring.

A second good possibility is that the mother's skin begins drying in the late fall, and that process releases retinoic acid into the bloodstream. I'm somewhat speculating of course. But, it is a speculation based on the extremely well-documented fact that the dry winter air does indeed cause autoimmune diseases to flare-up. There are tens of thousands of people who can attest to this experience. I have also observed this condition and under an extremely well controlled near zero vitamin A diet. I believe there was enough retinoic acid released to cause big areas of my skin to self-destruct with eczema. Could this be enough retinoic acid to damage a fetus? I have *zero* doubt that it could be.

Now, let's see if we can be a bit less speculative about this. Amazingly, there is something like 55 other conditions or diseases that are significantly dependent on birth month. This is documented in this recent study from the University of Oxford:

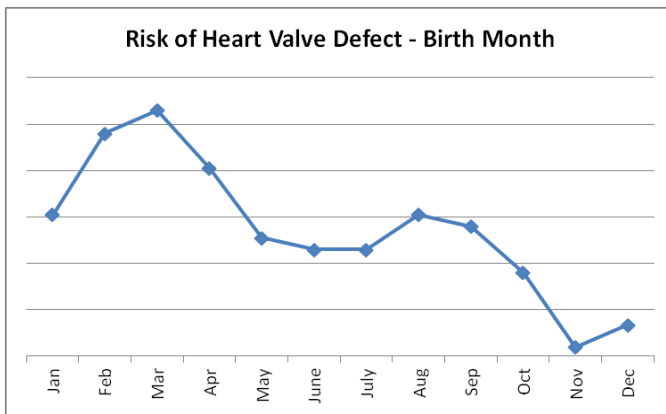
Birth month and disease rates:

<http://jamia.oxfordjournals.org/content/jaminfo/early/2015/06/01/jamia.ocv046.full.pdf>

Following in footsteps laid more than 2 millennia ago, recent studies have linked birth month with neurological, reproductive, endocrine and immune/inflammatory disorders, and overall lifespan.

That's right, what *month* you were born in is a factor in your risk of disease or birth defect. But, for now, I just want to consider one condition in particular, and that is heart valve defects. The risk to birth month relationship for this condition is shown below.

Figure 28 The risk of Heart Valve defect by birth month



You are at a higher risk of being born with heart valve defects if you were born in March (after the winter), and a lower risk in October or November (after the summer). Of course, it is not actually the month you were born in that elevates the risk; it is the months prior that you were developed in that elevates the risk.

What is important to know is that heart valve defects have definitely been related to fetal exposure to retinoic acid. Could these kids being born after the winter months have been exposed to higher levels of retinoic acid somehow? If so, where did this extra retinoic acid come from in these months of fetal development? Once again, I believe it is from the mother's drying skin during the fall and winter months. Now, this study was done based on historical records from the North East United States. I'll bet that if a similar analysis is done with say South Texas, or California we won't see many of these same correlations. These correlations are rooted in a hidden chain reaction set off by drying winter air conditions.

So, what about this possible connection with schizophrenia and drying winter air? Could there possibly be a connection between schizophrenia and autoimmune disease? Well, it appears there is. Here's a study from the Johns Hopkins University that makes this connection.

Association of schizophrenia and autoimmune diseases: linkage of Danish national registers.

Their conclusion is:

Schizophrenia is associated with a larger range of autoimmune diseases than heretofore suspected. Future research on comorbidity has the potential to advance understanding of pathogenesis of both psychiatric and autoimmune disorders.

Source: <http://www.ncbi.nlm.nih.gov/pubmed/16513876>

Earlier, I was predicting that older women would be more likely to give birth to children with symptoms and conditions caused by higher levels of retinoic acid. Here is an interesting Danish study making this connection.

Parental age and risk of schizophrenia: a case-control study.

Their conclusion is:

Increased risk of schizophrenia was associated with advanced paternal age, particularly in females, lending support to the theory that de novo mutations, possibly X-linked, associated with increased parental age might be responsible for some cases of schizophrenia.

Source: <http://www.ncbi.nlm.nih.gov/pubmed/12860771>

You might be thinking that there is no way in hell drying winter skin could cause these diseases. Well, I've been to this hell and back over the winter, and I have absolutely zero doubt about it.

What's interesting to me is that schizophrenia, like in the autoimmune diseases, autism, and Alzheimer's disease, is more or less reported to be idiopathic⁵⁷. It is thought to be some complex combination of genetic and environmental factors causing them. But, no one knows what causes it, yet damn; it just has to be genetics! Man, here we go again with genetics; I guess we just can't help ourselves but to put the blame on something out of our control.

Now could there be a link between say eczema and schizophrenia? It turns out that there is indeed a connection. It is showing up more often later in life for kids that have had childhood asthma or eczema.

⁵⁷ <http://www.healthyplace.com/thought-disorders/schizophrenia-information/phases-of-schizophrenia/>

Golam Khandaker (University of Cambridge) and colleagues studied data on 7814 children who were followed up from birth to the age of 10 years. During this time, 14.4% were physician-diagnosed with asthma, 12.7% with eczema, and 7.3% with both asthma and eczema.

Source: <http://www.news-medical.net/news/20131128/Childhood-asthma-eczema-linked-to-adolescent-psychotic-experiences.aspx>

With that bit of trivia, aren't you just itching to know more about Crohn's and eczema?

Chapter 14

Crohn's and Eczema—The Body's Skin Inside and Out

When I first encountered eczema, I had no understanding whatsoever about autoimmune diseases. But, it quickly became obvious that both Crohn's disease and eczema have inflammation and destroy skin and skin-like tissue.

There's a bunch of other similarities also. In both these diseases, people experience periods of flare-ups. In both these diseases, it's possible to have extended periods of remission. At a certain age, both diseases become chronic, with no real known cause and no cure, just treatment. Both are considered to be autoimmune diseases. Both diseases use steroids as a treatment. Both these diseases have seen a doubling in incidence rates during the past 15 years or so. Both diseases are not modern-day diseases. Eczema goes back 200 years, and Crohn's disease some 90 years ago. No doubt, it was occurring before that and just not documented.

Both diseases are considered chronic inflammatory disorders in which the symptoms can range from mild to severe. In both diseases, tissue can be turned thick and leather-like with inflammation.

Both these diseases affect young, and what should otherwise be healthy, people. In both these diseases, there's a significant jump in incidence rates starting at about age 50. With Crohn's disease, as with many other autoimmune diseases, there's a big jump in the incidence rates starting around age 20. This 20ish number is another very important clue.

I think the only really big difference between these two diseases is just the body location where the destruction takes place. Eczema is on the external skin, and most often on the face and hands. Crohn's / IBD

Crohn's and Eczema—The Body's Skin Inside and Out

(inflammatory bowel disease) is in the GI (gastrointestinal) tract, the body's internal skin.

Matching Up Theory with the Facts

Now, let's look at the symptoms of vitamin A toxicity and compare those with Crohn's disease. But, just like with eczema, it's important to look at all the ancillary symptoms of Crohn's disease and not just the primary one of inflammation and tissue destruction. We need to take a step back from focusing on the primary symptom and look at the bigger picture. Let's compare the symptoms of Crohn's disease and the symptoms of vitamin A toxicity.

Table 8 Vitamin A toxicity and symptoms of Crohn's disease

Vitamin A Toxicity (aka poisoning)	Symptoms of Crohn's Disease
skin desquamation	skin rashes and ulcers in the GI tract
cheilosis (fissures in the corners of the mouth)	mouth and anal fissures
fatigue	fatigue
abdominal pain	abdominal pain
nausea	nausea
vomiting	vomiting, in some cases
vertigo, mental dullness	brain fog, confusion
severe headache	headaches
bone pain	joint pain, symptoms of arthritis
alopecia (hair loss)	alopecia (hair loss)
mouth ulcers	mouth ulcers
gingivitis	osteoporosis, bone loss
blurred vision	blurred vision
respiratory infection	Asthma ??
confusion	brain fog
sensitivity to sunlight	sensitivity to sunlight
depression	depression

Source: <http://www.healthline.com/health/hypervitaminosis-a#Symptoms3>

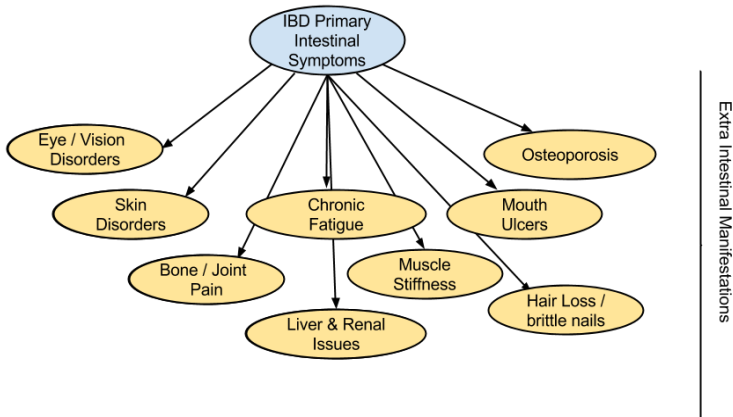
It's a near perfect match. Some really key ones (outside of the gut) for me are mouth ulcers (canker sores), fatigue, and blurred vision.

Inflamed and Thick, Scaly Skin

And of course, both eczema and Crohn's share the lovely symptoms of having holes burned in our tissues, or regions of tissue that is turned red, inflamed, thick, scaly, and loses its barrier function.

Those are, naturally, the big symptoms everyone focuses on. But, they're only a few of the symptoms of these two diseases. As I stated above, I think it's very important to look at all of the symptoms collectively, and then it becomes a much clearer match about what's really causing these two diseases. Now, let's look at this differently. IBD has its documented primary symptoms and a bunch of others categorized as Extra-Intestinal Manifestations (or symptoms outside of the gut).

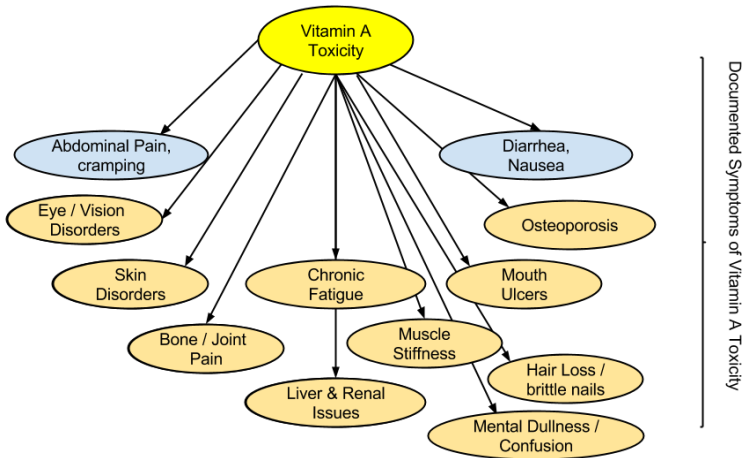
Figure 29 IBD's documented Extra-Intestinal Manifestations



What is being termed Extra-Intestinal Manifestations implies that these symptoms are somehow being caused by the IBD, or that they are somehow complications of the disease. I don't think that is the case at

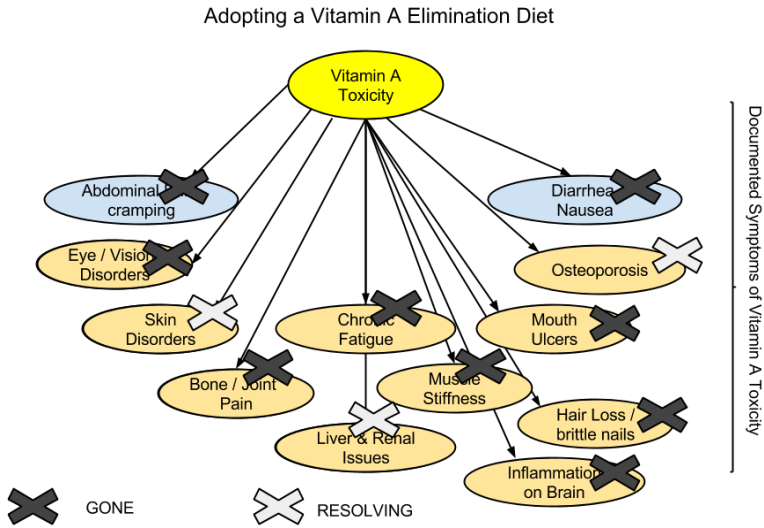
all. What if we move the primary IBD symptoms down to the same level as the other ones, and just consider them all symptoms of some other underlying root cause?

Figure 30 The documented symptoms of vitamin A toxicity



I think this is highly more likely. Now, what would happen if someone with one of these autoimmune diseases went on a vitamin A elimination diet? In my own case, my diagnosis was severe eczema, so the chart now looks like this.

Figure 31 IBD symptoms being resolved on a low vitamin A diet



Naturally, I can't just make this claim without a bit of supporting evidence. Therefore, I've included a few before and after photos on the next few pages.

Here is a photo of my left hand when it was highly inflamed. It almost looks like I cooked it in an oven. But, I did not; this is 100% from inflammation (no sauces added, just dry December air).

Figure 32 My left hand “cooked” with inflammation



I had this level of inflammation in other body locations too. Of course, that was not too pleasant. But, don't start feeling sorry for me, because I think I might be one of the luckiest guys in the world. Why? Because I was able to recover from this condition relatively quickly and did so with zero medications.

Figure 33 My left hand “un-cooked” from inflammation



However, as I went into my second fall season some of that inflammation condition returned too. I'd say at about 1/10th the severity. So, I was making good progress, but not fully recovered.

Now, let's look at more important connections between vitamin A toxicity, inflammation and Crohn's disease.

Critical Evidence: Accutane—A Huge, and Direct Connection

Accutane (isotretinoin) is a popular drug for severe acne created by Hoffmann-LaRoche Inc. The drug is linked to severe bowel disease and other side effects.

The medication is a derivative of vitamin A and works by controlling the oil in the sebaceous glands.

However, clear skin may be accompanied by [serious side effects](#) like Crohn's disease.

Roche stopped manufacturing Accutane in 2009.

Source: <http://www.drugwatch.com/accutane/>

Please read the source page for all the other horribleness this *drug* has caused, including birth defects. With this hugely important information, what have the medical community and government agencies done to warn the general public about the dangers of too much vitamin A? Pretty much nothing, as far as I know.

This is bizarre to me since the official information from the National Institute of Health states that [Vitamin A is a direct toxin](#)⁵⁸ at high doses. Here, we have drug companies marketing a product that is exactly that. What the heck did they expect to happen? Could this be worse? Well, here is an interesting bit of trivia about Accutane (*isotretinoin*). It was first developed as a chemotherapy drug and is still used as one today. It is used for this purpose due to its ability to kill rapidly dividing cells.

Accutane (*isotretinoin*) is an isomer of tretinoin. Tretinoin is all-*trans*-retinoic acid. Isotretinoin (eye-soh-tret-in-OH-in) is a direct derivative of vitamin A.

⁵⁸ <http://livertox.nih.gov/VitaminARetinoids.htm>

Now, it's well established that high doses of vitamin A, in the form of retinoic acid, can cause and has caused Crohn's disease. That's no surprise to me. But the key thing to understand is that vitamin A is not a direct toxin just at high doses; that is a myth. It can be a toxin at any dose. Once again, it just depends upon what storage state your body is in when you take that dose. Therefore, it's relative. If you're in a saturated, or near saturated, state, then any small or even tiny dose can be toxic!

So, what happened with Accutane, and what can we learn from it? Firstly, what this drug did do, was to use up the body's critical storage capacity for vitamin A compounds. Secondly, this saturated state very likely caused Crohn's disease in many cases. This has been proven in courts. Third, most of these people did not fully recover after stopping the drug (but some did).

Why did they not recover? Partly, I think it's because they remained saturated with retinol and retinoic acid. What's going to happen to it? Is it going to simply disappear? No, of course, it isn't. However, much more importantly, retinoic acid is not the same as vitamin A. It could very likely be that this high dose of retinoic acid caused permanent liver damage. I don't know; I just hope it isn't permanent.

Did Accutane Really Cause IBD/Crohn's?

I don't know how much the medical community accepts that Accutane actually caused Crohn's disease or not. I found this 2010 paper titled: "[A causal association between Accutane and IBD has yet to be established.](#)"⁵⁹

The authors question this cause/effect relationship. They conclude it isn't really conclusive (yet) and that the very slightly higher ratio in people who took Accutane and developed Crohn's as opposed to the general

⁵⁹ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2775814/>

population is not very convincing. Statistically speaking, looking at the numbers, it is a bit weak. Just based on the raw numbers *presented* in this report, I would agree. However, there are quite a few documented cases in which people started on the drug, developed Crohn's, stopped the drug and then recovered. So, I think that's pretty strong evidence that there is, indeed, an association. Also, we might get a better insight if we were to do face-to-face interviews with these people. Everything isn't reflected in the numbers. My guess is that these were mostly perfectly healthy people before they took the drug. I think after talking face-to-face with say victim number 5,000, we might not care too much about the numbers or ratios at all.

Now, let's dig into this causal association question a little bit deeper.

I think the authors of this report should have taken a different perspective on investigating this question. In doing so, they may have come to a different conclusion. The basic question they're asking is, "Did *Accutane* cause IBD/Crohn's," and that leads them down a certain path of thinking. The key starting point in the analysis is first understanding that *Accutane* is derived from vitamin A (it is the retinoic acid form). Yes, the *isotretinoin* molecule is a slightly tweaked form of retinoic acid, but it's an isomer, having the same chemical formula, and the same functional groups.

In my reading about this drug's genesis, I learned Roche wanted to develop an anti-acne drug and started with the knowledge that this drug would move into the sebaceous glands of the skin and reduce the amount of the oil feeding the acne-causing bacteria. However, *Accutane* and the vitamin A derivative retinoic acid molecules are nearly identical and effectively function the same in the human body. I don't think there can be much debate about this point. The drug worked as expected and did dry the skin and did reduce acne. It also caused birth defects just like high doses of vitamin A have proven to cause. These are proven facts.

We all know the body stores retinol (the food form of vitamin A). But the most amazing fact about the Accutane experience is that *the body also stores retinoic acid*. We need to remember this fact.

Okay, so now let's ask the "Did *Accutane* cause IBD/Crohn's" question just a little bit differently. Since Accutane is vitamin A (retinoic acid), we can ask, "Did *vitamin A* cause IBD/Crohn's?"

In order to investigate this question, we need to first research the accounts of people who have authentically chronically poisoned themselves with genuine vitamin A (nothing to do with Accutane or even retinoic acid, for now).

There are thousands of people who have done this for various reasons. (For some reason they thought it was good for them.) Here is an example case of a [six-year-old boy being admitted to hospital](#)⁶⁰. There are many other well-documented accounts, and it's still happening today. See the many cases documented on the NIH pages and elsewhere. So, let's just take a hypothetical example (or use any real case if you want) of someone taking reasonably high doses of vitamin A, daily, for, say, three years. Here's the approximate sequence of events:

- @ 6 months ⇒ no adverse symptoms at all
- @ 12 months ⇒ no adverse symptoms at all
- @ 18 months ⇒ no adverse symptoms at all
- @ 24 months ⇒ no adverse symptoms at all
- @ 30 months ⇒ no adverse symptoms at all, hair getting oily
- @ 36 months ⇒ no adverse symptoms, but maybe the skin getting drier
- @ 36 months + 10 days ⇒ huge adverse symptoms: skin peeling, lips swollen and cracked, hair falling out, etc., seeks immediate medical attention

⁶⁰ <http://www.hindawi.com/journals/crie/2011/424712/>

This similar sequence of events repeats itself in all cases of chronic vitamin A poisoning. So, what's really happening here? The body is safely absorbing and storing all the daily doses until it gets to a slightly saturated point. It is important to understand that all those stored doses have not suddenly become toxic; no, they're safely stored. It's the additional doses that cannot be absorbed, or absorbed fast enough, by the liver that are now becoming toxic. What these people are doing is filling up their storage capacity for this substance, and thereby reducing their absorption rates.

Okay, let's get back to Accutane. Remember these are mostly young people dealing with acne. So, what is the sequence of events? It is going to be something like this (depending on dosage):

- @ 1 month ⇒ acne gets worse (documented as a *side effect*)
- @ 3 months ⇒ no adverse symptoms at all, skin drier, acne clearing
- @ 4 months ⇒ no adverse symptoms at all, skin drier, acne clearing or more clear
- @ 5 months ⇒ stops doses or reduces to only when required

At this point, the majority of them have not yet induced Crohn's or any other disease.

First, let's analyze this documented common *side effect* of acne first getting worse. It's actually not a side effect at all. It's perfectly logical, and we should expect it as a normal progression of taking the drug. When they start on the drug, since it's in the retinoic acid form, the body will quickly start moving it into the sebaceous glands. In order to do that, it must first wrap that retinoic acid in a lipid. Then, in order to move this new toxic lipid into the sebaceous glands, some of the current nontoxic lipids are going to have to be expelled. This newly expelled (and nontoxic) lipid now fuels and promotes the acne-causing bacteria.

Next, and more importantly what these people have done is significantly elevated their bodies' storage. Therefore, they have reduced their future storage capacity. These are generally young people, so they may have gone from hypothetically 10% storage used to something like 30-60% storage used. What they have effectively done is to remove two or three decades of future storage capacity that would have been consumed by our normal North American diet.

Now, let's get back to this report questioning the causal association between Accutane and IBD/Crohn's. What they're failing to consider is the time dimension. They need to consider what's going to happen to these people in the future with regard to regular vitamin A consumption. At some point, they'll reach an elevated storage level when newly consumed vitamin A molecules will become toxic. They'll be toxic because the body has no place to store them. It is almost like a guy authentically poisoning himself with regular vitamin A. However, it is just a bit worse actually.

There's a big time delay here, most likely in two to five decades for most people, between taking Accutane and getting a disease. Therefore, rather than looking at a particular point in time (2010) to consider the ratio of people who took Accutane and developed Crohn's, they need to wait two to three more decades and redo that ratio calculation. They need to expand the question to "Did Accutane cause IBD/Crohn's, lupus, eczema, arthritis or any of the other fifty autoimmune diseases?"

Now let's dig into this Accutane causation question even deeper.

Firstly, it is important to know that Accutane was not the only isotretinoin based acne drug being sold. Some of the various product names are Amnesteem, Claravis, Sotret, Myorisan, Absorica, and Zenatane. Even though LaRoche stopped manufacturing Accutane in 2009, others continue to sell it. You can even buy generic versions of this drug online (and with no prescription required).

Crohn's and Eczema—The Body's Skin Inside and Out

Now as this drug gained widespread use; all kinds of side effects started to be encountered. The more common *side effects* are: (from the iPledge program page)

problems with the skin, pancreas, liver, stomach, bones, muscles, hearing, vision, lipids, allergic reactions, blood sugar, or red and white blood cells. The most common, less serious adverse events include dry skin, chapped lips, dry eyes, and dry nose that may lead to nosebleeds.

Do you recognize these *side effects*? Yes, they are the symptoms of vitamin A poisoning! But, wait, there are even more *side effects*, including fatigue, trouble sleeping, trouble concentrating. And, there are still even more serious *side effects* listed:

Depression

Psychosis (seeing or hearing things that are not real)

Suicide Some patients taking isotretinoin have had thoughts about hurting themselves or putting an end to their own lives (suicidal thoughts). Some people tried to end their own lives And some people have ended their own lives.

and

Patients on isotretinoin have been known to become depressed or to develop other serious mental health problems. Some people have had thoughts of hurting themselves or putting an end to their own lives. Some people tried to end their own lives and some have ended their own lives. There have been reports that people on isotretinoin were aggressive or violent.

That's right, suicide is documented as a *side effect* of taking this so-called medication. Are doctors really giving a chemotherapy drug to trusting teenagers for acne? Is this true? Yes, it is absolutely true!

13-cis-Retinoic Acid

Isotretinoin

Trade name: Accutane®

Other name: 13-cis-Retinoic Acid

Drug type: Isotretinoin is an anti-cancer drug. This medication is classified as a retinoid.

Source: <http://www.chemocare.com/chemotherapy/drug-info/13-cis-retinoic-acid.aspx>

Naturally, the so-called side effects are not that at all, they are direct response effects. If you put a known toxin into the body, and these are the known, and very common results, then these conditions are a direct response to that toxin. Let's please stop with the ridiculous bullshit. This drug is simply poisoning these kids.

Additionally, [The iPLEDGE Program Patient Introductory Brochure](#)⁶¹ states:

After stopping isotretinoin, you may also need follow-up mental health care if you had any of these symptoms.

What in the hell does that mean? After taking an acne drug, your kid could now be brain damaged too? Who in their right mind could call this a “medication”? Additionally, what exactly does “*follow-up mental health care*” entail? Undoubtedly, more drugs.

How many teenagers were being *treated* with this? Oh, only about 400,000 per year in the USA alone. Maybe it's just me, but doesn't it seem extreme to consider this an appropriate drug for reducing acne in healthy teenagers? Acne is completely non-life threatening, and we give

⁶¹ <https://www.ipledgeprogram.com/Documents/Patient%20Intro%20Broch.pdf>

these kids a drug that can easily lead to life-threatening diseases, brain damage, and suicide.

Naturally, once you read about all the details of the chemotherapy treatment with this same drug, the thought to be *side effects* are clearly not *side effects* at all. They are absolutely ***direct response effects!*** From the use of this exact chemical, it is well established that it more or less poisons the entire human body. Additionally, once you consider the complete list of other so-called reported side effects if isotretinoin, it is absolutely absurd for anyone to call this a “*medication*”. It is a really a poison!

There are more than 7,000 lawsuits filed over Accutane. I've read one report where it's projected that about 30 percent of the people who took Accutane will go on to develop Crohn's/IBD. If that proves to be true, that will be more than 120,000 people that isotretinoin induced Crohn's/IBD in.

At this point you might be thinking: “just hold on here one minute; vitamin A (retinol) and isotretinoin are not the same molecules”. There are a lot of people with IBD that did not take Accutane, and therefore, all of this is not on the mark. Well, it is ***exactly*** on the mark because the human body, naturally and normally, converts some of the retinol consumed to retinoic acid, and to exactly this same isomer: 13-cis-retinoic acid, a.k.a.: isotretinoin. That's right, we are all effectively taking very low doses. This exact molecule is normally produced and stored by the human body. The only difference here is dosage.

Next, let's have a critical look at the actual data, and analysis presented in the Causal Association report. There is something vastly wrong with the numbers presented.

Twelve case reports (1-6,10-15) and 1 case series (16) were identified via a systematic search strategy. Results are summarized in Table 1. In total, 15 cases were reported in 7 different countries over a 23 year time period (1986 to 2008). In addition, there were 85 cases reported in the FDA MedWatch analysis from 1997 to 2002(8)

What? How is that possible to only identify 110 cases when by 2002 there had been about 23,000 reported cases of adverse reactions? Although the most commonly reported were alopecia, depression, headache, dry skin, and induced abortion; it is extremely doubtful that only a handful of these 23,000 cases reported symptoms of inflammation in the GI tract. Then what about all the additional cases reported for the next seven years, from 2002-2009?

Likewise, by about this same time there were over 7,000 lawsuits claiming an association? Were these 7,000 cases not somehow worth considering too? How could anyone take this report seriously after seeing that? Additionally, these 7,000 cases are from people with the resources, and strength to take this to court. No doubt, there were at least twice as many people silently suffering without ever reporting it, or because they are in the very early stages of the disease. More importantly, of course, there were probably at least 7,000 more people who were slowly getting ill and had made no association with having taken an acne drug many years, or even decades, before.

Well, the report goes on to use these scant few case numbers in the risk ratios they calculate:

If more than 59 cases per year were observed in isotretinoin users, this would suggest a positive relationship between isotretinoin use and IBD. However FDA MedWatch reports include an average of only 14 cases per year(8)

So, there you have it; only an average of 14 cases reported per year, and for the normal, non isotretinoin users of this same sample size, they

expect to see at least 59 or more cases. Damn, by this analysis, it looks like isotretinoin (Accutane et al) was actually *cutting* the incidence rates of IBD by 75%! But of course, we know that using 14 cases per year in this critical study is utter and total rubbish. With 7,000 lawsuits, how can anyone use a number like 14 cases per year? It is a glaring indication that the report's numerical analysis is complete nonsense.

Next, in the Plausibility section of the report the authors, acknowledging that isotretinoin is a derivative of vitamin A, go on to emphasize the potential beneficial effects of vitamin A derivatives may have in regards to IBD.

For example, a key factor implicated in the pathogenesis of IBD is the impaired barrier function of the intestinal epithelium. Retinoic acid, a form of vitamin A, has been shown to enhance barrier function by increasing expression of numerous tight junction proteins such as occluding etc..

However, they are completely glossing over the facts. As documented in textbooks of dermatology, both vitamin A, and its derivative retinoic acid will absolutely inflame and destroy the skin if applied too long, or at too high of a concentration⁶². Of course, those swollen tight junctions are just the intermediate phase of the skin thickening before the over application disintegrates them. Now, what do you have? It's the breakdown of the barrier function. These widely reported ulcers are the hallmark condition indicating treatment with retinoic acid has been applied too long, or at too high of a concentration. This is not hypothetical; it is a well-documented **fact**.

Even more bizarrely, they completely neglect to mention the widely reported side effect of treatment of Accutane causing the body's *external*

⁶² Textbook of Cosmetic Dermatology, Fourth Edition, Robert Baran, Howard Maibach pages 106-110

skin to become thick, inflamed, and even exhibit the eczema condition, another autoimmune disease. This too is another well-documented *fact*.

Moreover, retinoic acid is the heavy hitter in this dynamic duo of retinoids. It's almost ten times more potent than retinol (due to retinol's slow conversion to retinoic acid). The authors of this report were supposed to be investigating an association with isotretinoin here, not retinol. Amazingly, the authors know, with certainty, that isotretinoin is derived from vitamin A, yet they don't appear to even consider any of the documented symptoms of vitamin A toxicity, nor that of retinoic acid overexposure. How can that be possible? Wouldn't that be the very most basic question any legitimate investigator should ask? Overall, I think this is just one of the major failings in this report. The second major failing is that they don't appear to investigate the published literature on the toxicity of retinoic acid either. What you need to know is that the study of the retinoids, vitamin A, and retinoic acid has been a rather hot topic of research since the 1930s. There have probably been thousands of papers, and many books published on the extraordinary importance and powerful effects of the retinoids, including retinoic acid, in human biology. Surely, there was prior knowledge about the potential risks. Of course, there was, here's just one example from Lehman et al., 1988. These earlier researchers state:

Due to its association with significant systemic side effects, such as hypertriglyceridemia, muco-cutaneous toxicity, corneal opacities, skeletal hyperostosis, and teratogenesis, oral use of retinoic acid is generally not recommended except for treatment of medical disorders.

Therefore, back in the 1980s, researchers knew that oral use of Retinoic Acid would indeed cause mucosal and skin toxicity, skeletal problems, and much worse. What does hypertriglyceridemia mean?

Hypertriglyceridemia: *is a condition in which triglyceride levels are elevated, often caused or exacerbated by uncontrolled diabetes mellitus,*

obesity, and sedentary habits. This condition is a risk factor for coronary artery disease.

Therefore, at least some 25 years prior to this Accutane causation report, it was perfectly clear that this so-call acne “medication” was absolutely known to cause not only the inflammation and toxicity of mucosal tissues, it was going to cause diabetes, and coronary artery disease too! How the hell was this drug ever approved as a medication for treating millions of kids for acne? With that somewhat rhetorical question, let's move on now to other bizarre aspects of this causal association report.

In the Experimental evidence section, the report states:

This criterion refers to whether evidence in humans or other species exists to corroborate the connection. No human experiments have addressed this question, and we were unable to find published evidence of colitis developing in animals exposed to isotretinoin or similar compounds. Experimental evidence also refers to whether the outcome can be prevented or ameliorated by an appropriate experimental regimen. Since the mechanisms of isotretinoin are largely unknown and no single ‘antidote’ exists, such experiments are not possible.

Now, doesn't it strike you as being very strange that a “drug” with over a billion dollars in sales revenue did not undergo extensive animal testing before being approved for use in humans? Of course, after the serious issues with it started to surface, and La Roche was aggressively defending itself against numerous personal injury lawsuits over it, probably the last thing they'd want is for any new animal testing to be conducted. But, what about the FDA and Health Canada? How could these agencies have approved such a serious, and well-known toxin, as a “drug” without first having the results of animal testing to ensure its safety in humans? Surely, they didn't just take La Roche's word for it? Likewise, how is it possible for the FDA, and Health Canada, once they started to see thousands of reports of very serious adverse reactions, to not have immediately ordered animal testing? Here we have a situation

with a “drug” that’s clearly causing brain damage, and even killing teenagers, and they do no follow-up testing? That’s far beyond being completely irresponsible; it is probably closer to criminal negligence. Clearly, there is something drastically wrong with our regulatory agencies. Even still, something was just not adding up here, and I had to dig a bit deeper into the report’s claim that the authors were unable to find existing studies in humans or other species to corroborate the connection, and they were unable to find published evidence of colitis developing in animals exposed to it. Well, wouldn’t you know it, the evidence turns up in about two minutes of trivial searching. There was indeed isotretinoin testing on animals, and in human cells, and it was conducted by none other than La Roche themselves back in 1996.

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Isotretinoin Oral 9-cis-retinoic acid versus 13-cis-retinoic acid in acne therapy.

Ott F1, Bollag W, Geiger JM.

Author information

1F. Hoffmann-La Roche Ltd, Basel, Switzerland.

Abstract

BACKGROUND:

9-cis-Retinoic acid (9-cis-RA) is as active as 13-cis-retinoic acid (13-cis-RA) in inhibiting the proliferation of cultured human sebocytes and in reducing the size of sebaceous glands of hamsters.

CONCLUSION:

For the two retinoids tested, the anti-acne effect correlates with the sebosuppressive effect in humans.

Source: <https://www.ncbi.nlm.nih.gov/pubmed/8884148>

Therefore, La Roche knew both the mechanism of the drug, and at the very least they knew it would slowly damage (and maybe permanently destroy) some of the sebaceous glands of the skin, and of course therefore the GI tract too. But, there is little doubt La Roche knew much more about its adverse side effects too, as that would have been revealed in their testing. I can make this claim because there was indeed even much earlier animal testing with retinoic acid. This testing was done in 1959, and 1960 at Harvard, with dosing rats with moderate amounts of retinoic acid (isotretinoin). In these studies, the animals quickly had many of their epithelial tissues effectively slowly disintegrate. The affected epithelial tissues included the GI tract, the trachea, mouth, tongue, lungs, pancreas, kidneys, inner ears, reproductive organs, and the eyes. The mucous generating epithelial tissues became dried out and structurally malformed. The animals developed progressive levels of

xerophthalmia, many forming blisters on the eyes, some developing into complete destruction of the eyes, and of course with that, blindness. With the blistering, and the weeping epithelial tissues the animals were very prone to bacterial infections too. Most of the animals died within a mere 8 to 10 weeks. The luckier ones had died before their eyes disintegrated.

Therefore, it appears that the report's claim that: "*the mechanisms of isotretinoin are largely unknown*" is just another lie. It is clearly documented that isotretinoin moves into the sebaceous glands as toxic lipids. This is why it is used as an acne drug after all. Then, there is this peculiar choice of words here "*no single 'antidote' exists*". Don't *antidotes* usually apply to *poisonings*, and clearly they know that no *single antidote* exists for this one.

Naturally, the glaring *fact* is that these little details did not stop the drug companies from selling it to something like 400,000 young people per year. And even by 2002, it was very clear that something had obviously gone enormously wrong with this drug⁶³. That is why the FDA now has the iPledge program and all kinds of controls and more and more restrictive guidelines on who is eligible for the drug. The other glaring fact is that by 2008 there had indeed been a large field experiment conducted with this drug; and it had been done on our nation's kids, and without an antidote being available. More importantly, why did these investigators not conduct their own animal experiments to test the causal association hypothesis? Why did the FDA, and Health Canada not ignore this clearly obfuscating and ridiculously phony report, and directly test it themselves? The so-called watchdog agencies should have done it immediately. It can still be conducted even today. How about feeding a bunch of high-dose *isotretinoin* to 100 young pigs for a year and see what happens? Well, it is obvious as to exactly what would

⁶³ **Concerns Regarding Accutane (isotretinoin)**
<http://www.fda.gov/NewsEvents/Testimony/ucm115126.htm>

happen because *it was documented and proven* from the use of this *exact* chemical in chemotherapy *in humans*. That information was available since at least the early 1970s. So, with all of that background knowledge, does that sound like a drug safe enough to be approved as an acne treatment? Why did the government agencies not bother to investigate the early history of this molecule? Why on earth are other brand name versions of this drug still on the market? Why is Accutane still sold in Canada?

Of course, another major consideration that this report failed to recognize is that Accutane did, and does work really well in treating acne. That's why it became so hugely popular. Why did it work so well? It is because shrunk the sebaceous glands and it toxified the skin lipids to such an extent that it killed the acne causing bacteria living there. Now, since IBD is in the domain of Gastroenterology, should not the report authors have been extremely concerned about what this drug might do to the body's internal skin? What would happen to this internal skin shed its cilia producing cells, and it had all of the resident commensal microbiota that normally live there wiped out, and maybe wiped it out permanently? Would that be a bad thing to have happened? Would that not lead to a far more pathogen-friendly surface?

Overall, I think the report took a completely contrarian, and ridiculously dismissive perspective on this deadly serious question. If this report is indicative of the way disease etiology is investigated, then there is no doubt as to why there has been zero progress in solving the autoimmune diseases in over the last fifty years.

Of course, this report was published back in 2010, and since then more and more people are reporting serious issues and many more cases of IBD with this so-called medication. There is now a mountain of evidence and the FDA's iPledge programs that fully acknowledges the incredible toxicity of this drug and its potential to directly cause IBD. So, now, I

think there should be zero doubt about a causal association between Accutane and IBD.

At the very least, we should now warn people who took Accutane (or other brand names) to start adopting a very low vitamin A diet. If anyone is wondering if I have a personal issue with Accutane (isotretinoin), no I don't. I did not take this drug.

Therefore, the hugely important thing to learn from the Accutane disaster is that *it is a derivative of vitamin A that caused the IBD /Crohn's disease*. Don't just think, "Accutane", the product name caused it. The body slowly converts vitamin A, retinol, into retinoic acid, and it does this conversion normally.

From all of this, we can now say: elevated levels of *vitamin A caused* thousands of incidences of *Autoimmune Disease*. That should be a really interesting statement to stop and think about for a moment. Maybe think about that statement for a very long moment.

Therefore, is it not highly likely that excess vitamin A is still causing a lot more incidences of autoimmune disease? Could it be that it's causing most of these autoimmune diseases?

It doesn't matter at all if that vitamin A was obtained from an acne pill, or from eating fish, tomatoes, or liver. In the end, it's all just vitamin A. It's a molecule, and molecules don't care where they came from. It's a potential direct toxin. But, this potential toxicity might not show up for decades. This is a simple scientific fact. The other simple scientific fact is that when this condition exposes the direct toxin, it will cause inflammation and destroy human tissue. As we seen above, isotretinoin can be a seriously deadly toxin and that this toxin accumulates in the sebaceous glands of the skin, and other adipose tissue.

The tissue in the GI tract also has sebaceous glands and other similar lipid-containing structures. Not only that, the intestinal tissues store abundant amounts of vitamin A. Why is it here? The dendritic cells use it. The dendritic cells are part of the immune system. Dendritic cells in the lining of the intestine are always busy swimming around locating, engulfing, and destroying the many pathogens that end up there. While doing this, they convert some of the vitamin A into retinoic acid. Could it be that the dendritic cells use the retinoic acid as a form of chemical warfare against pathogens?

It turns out that these dendritic cells have interesting features and capabilities. They have tentacle-like protrusions that penetrate the tight junctions between the epithelial cells, through to the other side of the tissue, and use these tentacles to pull external surface antigens back in for destruction. Just to clarify this, these are internal immune cells reaching to the outside environment to grab antigens. How cool is that?

Moreover, and very importantly, I think this might explain the intense itching people with eczema experience. It sure fits with the weird tingling, almost crawling feeling I often had on my face. I think what could be happening is the following sequence of events:

1. Skin cell absorbs excess retinol and converts to retinoic acid.
2. Excess retinol and retinoic acid cause the gene expression. But this gene expression is very similar to what would happen if the cell were actually infected by a virus or bacteria.
3. The cell starts emitting its self-destruct cytokine messages to the immune system because it is *as if* a virus has infected it.
4. The cell also emits its growth hormone to kick-start the growth of its replacement cell(s).
5. The immune cells follow a chemical crumb trail and destroy the skin cell that's emitting the cytokines. Probably with some

collateral damage to nearby cells. Neighboring cells absorb the emitted growth hormone and quickly divide.

6. But, the immune cells *do not stop* there. No, they're smarter than that. After all, if a virus infected a skin cell, then that virus must have originated from the outside environment. If there was one virus, then there are surely many more of them. Now the immune cells *go on the hunt* for other viruses. They do this both internally and by probing the external environment for them.
7. It's a thorough and intensive sweep-and-destroy mission conducted for many hours if not days. Now that's super cool!

Yes, it is super cool, but it results in the intense itchiness we eczema sufferers know all too well. The entire process is really our immune systems simply taking care of business. Of course, this sequence of events is a bit speculative. But I'm beginning to understand that our immune system is not just amazingly smart, it is brilliantly smart!

Just like with the external skin, the insides of the cheeks have sebaceous glands also. So, I now know why I was getting the canker sores too. With all of that, I have little doubt that Crohn's is indeed eczema of the body's internal skin.

Similarities with another well-known toxin

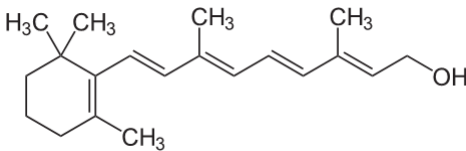
Even though vitamin A is officially recognized as a direct toxin at high doses, it might be hard to accept that it can easily be a toxin at small doses too. It really just depends on how fast your body can safely store it, or get rid of it. Now, if it can be a toxin at any dose, then there must be other similar chemicals with a similar known toxicology to humans. Let's consider one that is very widespread, and has been studied extensively. Poisonings with it are relatively common, at a rate of at least

10 million people per year in the USA⁶⁴. Encounters with this poison are notorious for creating painful and blistering rashes. It actually even has the word “poison” in its name. It is called Poison Ivy, and / or Poison Oak.

The toxic substance in Poison Ivy / Oak is a sticky oil named Urushiol. When people brush against the urushiol-bearing plant some of this toxin can rub off onto their skin. Since urushiol is a hydrophobic molecule, it absorbs into the oils of the skin and slowly passes through the epidermis layer. Once deeper in the skin all hell can start to break lose in the form of a highly inflamed skin, and often resulting in a nasty blistering rash. Strangely, the process and rash may not show up for months, or even much longer after exposure. So, there can be a big time delay between exposure and severe symptoms. Now let's start to compare this poisoning with eczema.

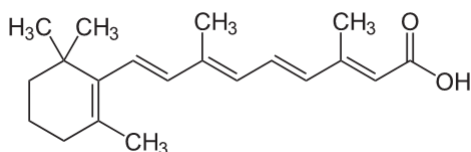
Firstly, let's have a look at the chemical structure of vitamin A and Retinoic Acid and compare them with Urushiol.

Retinol (vitamin A)

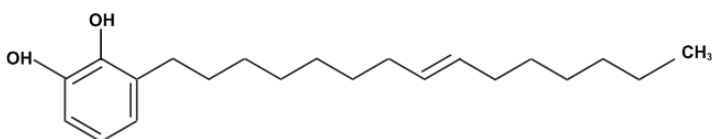


⁶⁴ http://medlibrary.org/medwiki/Urushiol-induced_contact_dermatitis

Retinoic Acid



Urushiol (poison ivy)



I think that is a rather intriguing similarity between these molecules. Although, they are not the same molecule, in biological systems molecules don't need to be identical to have similar functions, they only need to have similar functional groups. Even though vitamin A and urushiol do have similar functional groups, there are major differences between them too. The cyclic end group in retinol has attached methyl groups, and in urushiol, they are hydroxyl groups. Like with the retinoids, the urushiol molecule also has quite a few variations. Urushiol is a general name for the poison ivy toxin. Molecules of this toxin have a variable length side chain (depending on the actual plant source). The toxicity of various urushiol molecules is documented to be higher with a longer side chain, and when the side chain is less saturated. This corresponds to the retinol molecule being less toxic since its side chain is about half as long. Conversely, though, the side chain in retinol and retinoic acid is less saturated. However, urushiol is clearly a serious toxin.

Now, the actual quantity of urushiol needed to induce the toxic condition can be incredibly small, like as little as two micrograms. Therefore,

clearly urushiol can have a much higher toxicity than that of retinol or even retinoic acid. Nevertheless, they are indeed both toxins. There are other similar, and well known, food based molecules that produce significant heat and a burning sensation in tissue that they come into contact with. Two common ones are capsaicin⁶⁵ (found in chili peppers etc.), and ginger⁶⁶.

Next, somewhat strangely, urushiol is documented to be not toxic until it binds with a skin protein. As the urushiol oxidizes, it forms what are called hapten molecules, and when these bind with proteins they elicit the immune response. It is documented that these urushiol-produced haptens can even *induce autoimmune disease*. This is intriguing, and a very key point to keep in mind when we investigate the potential mechanism of Celiac disease in a later chapter.

So, the mechanism of toxicity of urushiol in poison ivy is to induce a major immune response, yet often a delayed one. This is because the molecule can remain safely hidden within the fats of the skin for a good long while. The complicated reaction starts once the molecule is exposed and bonds to a skin protein, or even to receptors on the immune cells themselves. This causes the prolific production of cytokines, with the subsequent attraction of an army of white blood cells into the fight. These immune cells then release a protein-destroying toxin that kills cells that have urushiol bound to them and many other cells in the vicinity too. This major immune process and destruction of the skin cells cause the painful rash, and it can last for months. Inadvertent and repeated poisonings are common due to the strong environmental stability of the urushiol molecule and the difficulty in completely washing it out of clothing et cetera. Once bonded to the skin it is nearly impossible to wash off.

⁶⁵ <https://en.wikipedia.org/wiki/Capsaicin>

⁶⁶ <https://en.wikipedia.org/wiki/Gingerol>

Overall, this process appears to be suspiciously similar to the stubborn eczema condition we are being told is an autoimmune disease. There are even more similarities with eczema. The actual urushiol-induced rash is remarkably similar too. In both conditions, the skin becomes red, inflamed, weeps lymphatic fluids, and has yellow colored blisters. The rash in both conditions can be intensely itchy, stinging and last for months. If you search for images of mild cases of poison ivy rashes, it looks nearly identical to the eczema rashes. However, the rash and blisters due to urushiol can be extreme by comparison. Even medium cases of the poison ivy rashes can make eczema look trivial. Yet, like with eczema, every imaginable home remedy on the planet has been attempted as a topical antidote; but nothing really works.

In both conditions, if the rash is severe enough, doctors will prescribe steroids as a treatment. Anti-inflammatory corticosteroids are commonly used too. Other similar symptoms are that some people report swollen lymph nodes and lips when poisoned with urushiol, but even in cases where the exposure was just on their legs, or lower body. This corresponds with these same symptoms being reported in some cases of eczema too. I think the big differences in these two conditions are just severity and that in poison ivy the toxin is applied topically. Whereas, in eczema the potential toxin is delivered internally to the sebaceous glands via toxin loaded lipids. Nevertheless, I think it is obvious that in both these conditions, the underlying cause is a poisoning. Clearly, it is not this magic “auto”.

It is a poisoning!

Is there other supporting evidence in the geographic, and demographic, data with regard to Crohn's disease to support this poisoning theory? Of course, there is, and like the Accutane disaster, we have another manmade disaster that adds significant evidence. As mentioned in an early chapter, that is the collapse of the Canadian East Coast Cod

fisheries in 1992. This is critically important because we know that it was not urushiol or some other toxin that was removed from the food chain with this major regional change. There will be more on this subject a bit later. Firstly, let's deal with some of the common theories regarding the etiology of the autoimmune diseases.

Chapter 15

What Is Not Causing the Autoimmune Diseases

Since the autoimmune diseases are idiopathic, that is no one knows what causes them, let's try to establish what does *not* cause them.

It's Not a Modern Environmental Toxin

It isn't herbicides or pesticides, or modern day pollutants, farm chemicals, or chlorine in the water, etc. that's causing the autoimmune diseases. This is clear because these diseases have been around for well over 100 years. Charles Darwin had eczema 200 years ago, so that was not caused by a modern day toxin. The Egyptians wrote about having boils and endless itchy skin some 3,500 years ago. Queen Hatshepsut, who ruled Egypt from 1479 to 1458 B.C., suffered from inflammatory skin diseases, diabetes, and arthritis. The Romans documented chronic inflammation more than 2,000 years ago. So, we've had these scourges for a while now.

Naturally, there could, of course, be more than one toxin that causes the same disease. However, we do know there was, at least, one toxin that's more than 200 years old that causes eczema, Crohn's, and Alzheimer's.

It's Not Genetics

Fortunately, the official position regarding the autoimmune diseases is that they're idiopathic. Unfortunately, however, there are a very large number of medical websites suggesting that these are somehow rooted in genetic disorders. For me, this is not just totally and completely nonsensical; it's hugely dangerous thinking too. Amazingly, you can rule out genetics as the root cause in less than 30 seconds. Here's how. Get

What Is Not Causing the Autoimmune Diseases

out a map of the world, and put your finger on the nation with the most genetically diverse population. You've probably put your finger on the United States or Canada. Yet, these nations have two of the highest rates of these diseases in the world. Bingo, these diseases have absolutely nothing to do with genetics.

Even more amazingly, any theory that these are genetically caused disorders has almost zero supporting evidence, yet it persists. Almost every single foundation based website for the autoimmune diseases that I've read about, claims some genetic factor being at play. That is complete, and utter rubbish! Seriously, with Canada having MS rates 100's of times higher than the non-developed countries, how can anyone claim a genetic connection?

From my own experience, I've never once had eczema in my life before now. Then, at age 54, it magically shows up. Did my genetics change? No, they did not. There are tens of millions of people in the same situation and many of these people are young kids. How can we blindly ignore this mountain of evidence?

Here are some interesting points about eczema from the Canadian Dermatology Association website.

Atopic Dermatitis (AD) is hereditary and the most common type of eczema. In Canada, the lifetime prevalence is higher than the worldwide average. It is estimated that up to 17% of Canadians suffer from AD at some point in their lives (Eczema Prevalence in Canada. Ipsos-Insight Health, 2003).

AD usually starts in infants and young children and is characterized by itchy, inflamed skin, usually behind the knees, the inside of the elbows, and on the face, neck and hands. Children with eczema often develop asthma and/or hay fever and have family members who also have these problems.

Source: Canadian Dermatology Association <http://www.dermatology.ca/skin-hair-nails/skin/eczema/#/skin-hair-nails/skin/eczema/what-is-eczema-2/>

Okay, so there you have it. It's hereditary. Why would they even bother to look for a root cause, if, after all, it's genetic? Yet, once again, there's no conclusive evidence to support this claim. Additionally, it just happens to be doubling every ten years, so does that mean human genetics are magically changing faster than every ten years too? Man, I just can't believe the stuff I'm reading these days.

Who are these guys? They are:

The Canadian Dermatology Association, founded in 1925, represents Canadian dermatologists. The association exists to advance the science...and more

These are the medical experts in skin disorders. Eczema has to be by far the most prevalent skin disorder in the nation. Yet, here, the experts are claiming that it is hereditary. I find this so incredibly disappointing.

Do they have scientific evidence backing this claim of it being hereditary? I don't see it. Maybe it is just because it shows up in families? Well, what else is hereditary, shared, and shows up in families? It is diet.

What about this observation that children with eczema often develop asthma too? Is that more bad genetics? No, it is not. It is the same toxin inflaming the lungs as well as the skin.

Amazingly, there's another way you can rule out genetics as being the root cause of these diseases with less than an hour's worth of investigation. In the context of eczema, it's blisteringly obvious. The rates of this disease have jumped up 40% in just five years! Bingo, it is simply not possible for this to be genetic. Like so many of the autoimmune diseases, there's a significantly higher prevalence in the industrialized world too. Bingo, they're not genetic. We really need to see and accept the obvious. The incidence rates of these diseases are doubling at alarming rates, as fast as every 5, 10, or 20 years, depending

What Is Not Causing the Autoimmune Diseases

upon geographic location. Human genetics are not changing this fast. No way, not a chance of it!

Moreover, 20% of kids now get eczema, and most “grow out of it”. Likewise, teenagers and young adults “get” Crohn’s, and they did not have it during early childhood. That is just not logical if these were genetic diseases. Bingo, they’re not genetic, or even some “genetic predispositions”.

Kids would not “grow out of” eczema, and magically pick up Crohn’s at 15 to 20 years old. No way. You don’t grow out of a genetic disorder. And you don’t grow into one either, at least not on a wide scale like what we are seeing with these diseases. If you really have a genetic disorder, you’re most likely going to have it at birth, and you’ll have it for life. Bingo, they’re not genetic.

What might be a genetic predisposition is just the location the body is going to manifest this toxicity first. Undoubtedly, some people have both eczema and Crohn’s. I believe that if eczema patients use steroid creams long enough, they are just going to force this inflammation to go internal.

The higher prevalence among Ashkenazi Jews is also not genetic. That is just a red herring. It’s more likely simply due to their diet. Some customary dishes include chopped liver (53,000 IU/100g) and pickled herring (1,300 IU/100g). Other geographic distributions for these diseases will closely match dietary patterns. World incidence rates will closely relate to those areas with high cumulative consumption of vitamin A. Also, it will closely correlate with countries that fortify milk and dairy and those regions with high consumption of fish taken from *cold salt-water*.

Seeing multiple incidences within families is not reflecting genetics, at all. What we know families do share as much as genetics is the dinner table.

If these diseases were really rooted in genetics, then the severe symptoms they present would be much more consistent if not constant. There would not be this sporadic/chronic nature to these diseases. We would not see these periods of alternating long remissions and “flare-ups”. The genes are not going into remission and recurrence. What’s causing the “flare-ups” is far simpler; it’s food. And no one stops eating vitamin A! It is nearly impossible since it’s everywhere. What *is* sporadic is just the amount of intake and the current relative level of saturation.

But, once again, the trump card in proving that the autoimmune diseases, and Alzheimer’s and autism, are not genetic is incredibly basic. It’s the vast diversity of the North American populations. These have to be the most genetically diverse populations on the planet; yet, we have some of the highest rates for all of these diseases. Is that not just a glaring contradiction to any proposal that genetics somehow causes these diseases? Blaming these diseases on genetics has been a complete copout.

It is mathematically impossible for these diseases to be rooted in genetics. The only real genetic connection here is being human.

Of course, I’m not alone in concluding that these are not at all genetically caused diseases. I mean it is now just so glaringly obvious from the incidence trend rate data that no one can reasonably argue that it is.

Here’s a quote from Dr. Francis S. Collins, M.D., Ph.D.

Dr. Collins is the current Director of the National Institutes of Health. In Witness appearing before the House Subcommittee on Labor-HHS-Education Appropriations in 2006 he states:

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“But genes alone do not tell the whole story. Recent increases in chronic diseases like diabetes, childhood asthma, obesity or autism cannot be due to major shifts in the human gene pool as those changes take much more time to occur. They must be due to changes in the environment, including diet and physical activity, which may produce disease in genetically predisposed persons.”

Source: <http://www.genome.gov/18016846>

Dr. Collins is responsible for the NIH’s annual thirty-billion-dollar medical research budget and is a leading doctor and geneticist on the Human Genome Project. So, clearly, he’s an extremely bright guy, and as a geneticist, he knows that human genetics can’t be changing fast enough to account for the rate increases we are seeing in these diseases.

Like with the attempts to link these diseases with genetics, many research papers that I’ve read document different rates occurring between races. There are notably higher rates among African-American, Hispanic-American, and Native-American women⁶⁷. But, these rate differences may have almost nothing to do with race. A bigger difference between ethnic groups is their customary dietary choices and preferences. Here’s another very interesting bit of trivia to consider in this regard. The per capita consumption of sweet potatoes in the USA is highest among Puerto Ricans and African Americans. It isn’t just a little bit higher either. It is like two times higher⁶⁸. At a whopping 18,868 IU of vitamin A per cup, that adds up to a huge difference in lifetime consumption.

Therefore, the changes in the environment that Dr. Collins is looking for is indeed the change in diet; and I think it is called our vitamin A consumption. And we are all *genetically predisposed persons* because

⁶⁷ <https://www.nlm.nih.gov/medlineplus/autoimmunediseases.html>

⁶⁸ <http://webarchives.cdlib.org/sw1hm53n4b/http://www.ers.usda.gov/publications/agoutlook/Nov2002/ao296e.pdf> See page numbered 15: (page 3 in the file)

the chronic disease process underlying diabetes, asthma, and autism etc. is exactly what the human body does when dealing with an overload of vitamin A. The only real big variables here are consumption and time. There is no shortage of vitamin A consumption going on in North America, and time has caught up with us.

As a matter of fact, I think there is tons of clinical evidence to prove beyond any doubt that we are *all* genetically predisposed persons to this toxin. Of all the people ever treated with isotretinoin as part of chemotherapy, has there ever been a single person not adversely affected by its well-documented *side effects*? That has to be millions of people at this point in time. Out of these millions of people, has there even been one of them that sailed through the treatment and had absolutely no adverse *side effects*?

There is another clinically proven reason to believe that we are *all* genetically predisposed persons. The shocking little realization is that autoimmunity is perfectly normal and necessary. If I understand this correctly, normal and perfectly *healthy* people would have to have a tiny little bit of autoimmunity going on all the time. Anytime there is latent retinol in the serum, or tiny amounts of infectious agents, or damaged DNA/RNA, the immune system would respond by destroying some cells. It is not abnormal at all. It is just when the process becomes highly elevated, out of control and chronic that we have a chronic disease.

By now hopefully we can agree that it isn't genetics causing these diseases. Anyone that continues to claim a genetic connection is simply trying to bamboozle us with bullshit. Next, let's see if we can come to the same agreement that it surely isn't this mysterious AUTO nonsense either.

Chapter 16

The AUTO Nonsense—Destination: Deep Space

As you can tell, I have a serious dislike for this “AUTO” notion being applied to disease. I almost feel as if it’s a ridiculous cop out on the part of medical science. For a scientific field that appears to take great pride in long complicated terms and names such as “*Myasthenia Gravis*”, “*Hidradenitis Suppurativa*”, or “*focal lymphocytic sialoadenitis*”, “*paroxysmal nocturnal hemoglobinuria*” (PNH), “*atypical haemolytic uremic syndrome*”⁶⁹ (AHUS) and many more, why use such a simplistic term as “AUTO”?

Why not something more like: “*spontaneous inexplicable inflammatory immune aggressiveness dysfunction and disorder*”? Then we can create a fancy new acronym for it such as SI3AD2.

I believe that this AUTO prefix may have lulled medical science into thinking that it’s so mysterious, or some random acts of the genetic gods, that there’s little point in looking for the root cause. What’s even sadder is that this AUTO notion has stuck around for more than fifty years. That is just far too long. Could this AUTO notion be part of the reason these diseases still plague us, and millions are still dying from them? I really think so.

Can you imagine civil engineers investigating thousands of bridge or building collapses and always concluding that it just happened AUTO magically? Very similarly in computer science, we deal with incredibly tricky and often mysterious problems almost every day. No one ever suggests that these problems happen because of some vague “AUTO”

⁶⁹ [The cost of the drugs for PNH and AHUS is a record cool \\$500,000 per year per patient](#). Umm... doesn’t the word “extortion” better describe that amount?

reason. But, of course, computer science and engineering do have their own vast array of acronyms. Problems are never caused by AUTO, and they are not ever magic. No, there's always a real and tangible reason for things going wrong.

I also feel that there's a bit of a similarity between this AUTO notion and that of psychosomatic illnesses. I have zero doubt there are genuine cases of psychosomatic illnesses. However, in my extremely limited exposure to medical science, I think diagnosticians use this term far too quickly and conveniently. I think it too is a cop out. Rather than falling back on this psychosomatic position, I believe the medical community should almost never resort to it.

This would be far more respectful of the patient, and it would actually enhance the regard patients have for the medical profession. It's simply mutual respect. If we don't understand something, that's fine. It's a complicated world, and medicine has to be the most complicated of the sciences. We understand that as patients. I've read many accounts of people who develop autoimmune diseases who their doctors initially dismiss as being psychosomatic, or their condition being due to stress, or just "in their heads," etc.

I think when a person is sick, it's most likely never just in their heads. The real reason may be very mysterious and completely unexplainable, and incredibly complicated, and it may be due to life's stresses, but it is not "just in their heads."

Now, let's see if we can knock the "AUTO" emperor off his podium and into deep space forever.

Treatments as Evidence

There are some really big clues here with the steroid creams used to treat eczema. For argument's sake, let's say the immune system is attacking the skin tissue (the assumption is that it's defective, or out of control, rogue immune cells). I'm calling these rogue cells because the inflammation is not body-wide but quite localized.

Now, we apply the steroid cream (immunosuppressant) *to the location of the inflammation*. It works like a charm (firsthand experience). The immune cells back off and the inflammation dies down quickly. Did we kill these rogue immune cells? No, we did not. What happens to them? Do they move on and immediately attack similar tissue elsewhere? No, they do not. Therefore, what we've really done is to introduce an immunosuppression agent to the site of the inflammation. These supposed rogue white blood cells and every other white blood cell in the body is now staying away from this location. What we did with the steroid is to put an immune barrier around the site of a substance the immune system regards as a toxin. Technically speaking, we blocked the production of cytokines that call the immune system into action. Therefore, logically, these rogue white blood cells aren't rogue at all. They're normal. They're just getting the wrong messages.

I think it's far more likely that the retinoic acid and or retinol is building up in the tissue, dissolving collagen, and destroying cells. The tissue cells are absorbing this excess retinol and simply calling the immune system into action. To the immune system, it appears that these tissue cells are under attack from an external pathogen. These cells are sending out some alarm signal to the immune system for help or for assisted self-destruction.

The body has just not evolved for this condition. This is the liver's job to contain this potential toxin and to protect the body from it. But, the liver is maxed out; it's now sidelined and of no help. Thus, free retinol is

relentlessly entering the bloodstream with every meal. We are now in subclinical toxicity; it only appears to be an immune disease causing the destruction.

There are even more reasons that this is not “auto” immune. Why are these very localized inflammations we see in these diseases? I’m not talking about all autoimmune diseases combined. I am talking about just in the context of one of them such as eczema, or Crohn’s, or pick almost any other one of them. Even arthritis doesn’t attack *every* joint in the body, only some of them. Eczema does not attack *all* the skin, only small areas of it. Therefore, the immune system does not have an issue with these tissue types at all. Rather, it has an issue with these tissue types at only specific locations.

A common theory published about autoimmune diseases is that the immune system has developed antibodies to our own cells, or more specifically our cell proteins. But, this is so obviously completely and totally wrong. This localized inflammation just in itself almost completely disproves that theory. If the immune system had built antibodies to say my skin cells, it would then quickly burn *all* of my skin off. If the immune system had gone this completely haywire, then for most people it would be far more widespread, if not everywhere in a specific tissue type. In the case of eczema or psoriasis, almost all of the skin should be under attack and not just these limited patches of it. That is just not a logical hypothesis.

Remission and Flare-ups

Likewise, it is just not logical that the immune system would magically stop auto-immuning and start up again in some random fashion that we see in these diseases. Why does the immune system stop flaring up and the disease go into remission? Does the immune system get tired of the fight and give up for a while? Does it need time to rebuild resources

before the next attack? Isn't it far more logical that it actually accomplished what it needed to and finished its job?

What *is* random is the amount of vitamin A we eat and the relative states of the digestion and absorption rates our body can sustain.

Winter Weather

Amazingly, there's another tricky factor at play with eczema, and that's the weather. Eczema, lupus, and arthritis sufferers living in cold, dry winter climates commonly report that these conditions get worse in the winter. Here's an interesting study referencing this point on winter conditions affecting an autoimmune disease.

This is important because skin dryness and subsequent itchiness often lead to the use of medication in atopic patients, especially during the dry winter conditions in Finland, where ambient indoor humidity can be <30% moisture for months on end."

Source: Departments of Pharmaceutical Chemistry, Clinical Nutrition, Clinical Research Centre, Computing Center, Department of Dermatology, University of Kuopio, Finland <http://www.ncbi.nlm.nih.gov/pubmed/16019622>

Similar flare-ups are commonly reported in kids with asthma as they head into fall weather. So, what the heck does the weather have to do with an autoimmune disease? That should sound absurd, but it isn't. It's perfectly logical. It's not the temperature or the air pressure at play here. It's the moisture level dropping, and, to maybe a lesser extent, the reduction in UV exposure. We'll come back to this drying winter air topic a bit later, but it is a *critically* important one to appreciate.

For what it's worth, I believe I can turn off and on my auto-immuning just like turning a switch off and on. Only, the switch is food with and without vitamin A. To test this hypothesis, after having my eczema almost completely clear, I ate a single medium raw carrot. The next

morning, I had a significant spot of inflamed skin show up on both hands. It was about the size of a mosquito bite. It was right in the cusp between the thumb and index finger, and very peculiarly it was perfectly symmetrical on both hands.

I was able to do this because I'd been on a near zero vitamin A diet for many months. Naturally, I was trying very hard to keep it turned off. It was a struggle, tricky, and I am still dealing with it every day. There's still a huge amount of retinol and or carotenoids stored in my body.

Skin Fluorescence

To investigate this point, I compared my brother (two years younger), and myself under a simple handheld fluoroscope (similar to, but not the same as, a black light). It's an old geology fluoroscope that I have. Nevertheless, it worked great. It induced a huge amount of [fluorescence](#) in my skin but not in my brother's.

It was a shocking difference. However, I want to be perfectly clear here, that most of my skin areas that exhibited the significant fluorescence were *not at all* inflamed. These high fluorescence areas included the upper chest, the neck, and the ears, around the eyes, and even the first inch or so of the hair. This first inch of hair fluoresced almost blue. The backs of my hands were by far the most fluorescent.

I clearly had a lot of carotenoids and /or retinol in my skin compared to him. Why is that? Well, consider what my brother's diet looks like; it's coffee and toast at breakfast, burgers at lunch, and steak and potatoes for dinner. He drinks beer, does not smoke, and doesn't drink milk. He's perfectly healthy and has no sign whatsoever of inflammation, skin diseases, or any other disease. How's that for ironic? I'm the one that eats "healthy", and I get diseases; he doesn't, and he's just fine. Yep, confirmed, retinol definitely collects in the adipose tissue. I'll explain in a later why it collects the most in the skin of the hands and face. My

current camera (iPhone) does not pick up the emission wavelength very well. However, I do have a few pictures of my hand and skin fluorescence in my [photo gallery](#)⁷⁰.

Therefore, this fluoroscope test is a simple, non-invasive technique to quickly evaluate the levels of carotenoids and retinol in people's skin. It's a quick 30-second check, and no biopsies, or samples are needed. Note that retinoic acid is not fluorescent. To get more specific, the wavelength used might need to be adjusted to pick out each compound (carotenoids and/or retinol). Nevertheless, it is more direct evidence. You can literally see it glow under/in the skin. If anyone doubts this, well just check for yourself, and post a comment as to your observations.

Randomness and Symmetry

In addition to the intense immune response not being body wide, an even more important observation to make is that it isn't in completely random locations, either. For most people, eczema is much more common on the hands and face, and in children it's at the back of the scalp.

What's common about the hands and face? Both are exposed to sunlight. Both retinol and carotenoids are light-sensitive molecules. Sensitivity to sunlight is a well-documented symptom of vitamin A toxicity and of course with lupus, and other autoimmune diseases. What about the back of the scalp? Well, like the hands, and face, it has a high concentration of sebaceous glands and will, therefore, process more skin oils.

However, eczema does indeed commonly show up in locations where there's no exposure to sunlight, such as the underarms, the elbows, behind the knees, and even the tops of the feet. Therefore, it isn't just sunlight that's invoking the immune response. It's a toxin. How about a

⁷⁰ <https://ggenereuxblog.wordpress.com/photo-gallery/>

toxin that's also a light-sensitive, and light-absorbing molecule? How about a well-known toxin that collects in the sebaceous glands?

Not only are they not completely random locations that eczema shows up in, they exhibit some *symmetry on the hands*. For me, this is the ring finger of both hands and the space between the thumb and the index finger. Placing both hands face down on the table, index fingers and thumbs touching, the inflammation locations are actually *symmetrical*. The two hands are not quite mirror images of each other, but close enough to be very significant.

Now, how can the immune system mount a coordinated and symmetrical attack like this? That is just not at all logical for even a healthy immune system, never mind a defective one. No way is the immune system *choosing these locations to autoimmune* and attack my skin cells. It's far more logical there's something common about the locations that make the immune system want to attack here. I know it sounds like semantics, but there is, of course, a big and critically important difference in what is initiating the immune response. Did the immune system itself, or did skin cells call the immune system into action? Since these are symmetrical locations, I think it's clear the immune system is responding to something *at* these locations; it isn't the immune system randomly auto-immuning.

I have an old family medical textbook from 1964. It has a good chapter on eczema. It documents that the most common place for eczema to first show up is on the ring finger. Exactly the same goes for me now, 50 years after that publication. So, with the immune cells circulating in the blood, why do they prefer these locations to *autoimmune*? We have this well documented common *location* for auto-immuning to take place. Isn't that kind of amazing for a defective immune system to be this consistent? I think it's obvious that it isn't a defective immune system at

all. Clearly, there's something at these *locations* that is invoking the immune response.

An analogy would be to notice that the police are commonly showing up at the houses of drug dealers and causing altercations. Then, observing and feeling alarmed by these altercations, concluding that the police are defectively auto-policing, and are wrongly attacking the same poor citizens' houses all the time. No, there is a *reason* the police are going to these same locations, just as there's a reason the immune system is attacking the skin at these preferred locations. It's their job.

White Flaky Skin

A documented secondary symptom for eczema is white flaky skin. I've closely looked at the skin at the sites of inflammation under a 30-x microscope. I have always seen the white flaky skin on the top layer. This top layer of white flaky skin is always present both with the inflammation, but more so after the inflammation dies down. It might be a bit hard to see when the skin is highly inflamed and turned red. However, if you look with a 10x to 30-x microscope, you will see it clearly. Here's a picture from Wikipedia.

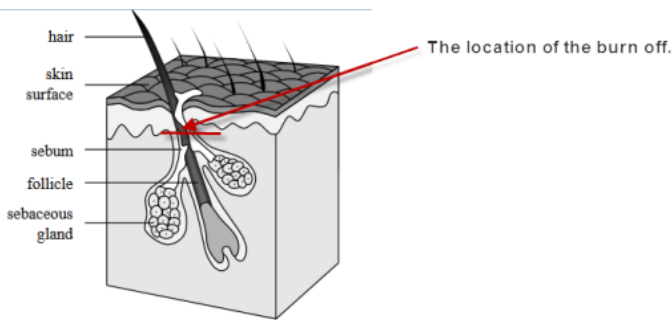
<http://en.wikipedia.org/wiki/Dermatitis#mediaviewer/File:Eczema-arms.jpg>

Please ignore the red, inflamed skin in this picture for now; just note the significant white skin flaking off. Of course, white flaky skin is not only a well-documented symptom of vitamin A toxicity, but it's also actually one of the *key* symptoms. The important question is how does the immune system cause this to happen? Does it burn off the top layer of skin? The answer is that the immune system does not cause this condition at all. So, what's really going on here? It is partly due to the overgrowth of the skin being induced by a growth hormone. This is exactly what is documented to happen in the presence of retinoic acid. The other part of the story will lead us to the virtual fingerprints of exactly who the guilty party is here.

Hair Burnt Off and Missing

There's another key observation to be made when examining the skin under a microscope (repeatable by anyone with severe eczema using a magnifying glass). The hair on the inflamed skin often burns off, or breaks off, almost as if you shaved it off with a razor. It is not just a few hairs burnt off either. It is hundreds of them, all at the same depth. The exact location (depth) of this burn-off on the hair is another important clue. It is just a little deeper than the top surface of the skin at the sebaceous gland, maybe 0.5 mm below it. However, it doesn't actually burn off into the hair follicle's root.

Figure 34 The Sebaceous Gland



Original image source:

http://en.wikipedia.org/wiki/Hair_follicle#mediaviewer/File:Hair_follicle-en.svg

Now, why would the immune response burn off the hair shaft right at this level, and not burn it off, or more deeply, below the sebaceous glands? It's much more logical that whatever is coming out of the sebaceous glands has caused the hair to burn off, or to become brittle and break off, at this level. This is an important clue that we can't gloss over. What exact chemical can cause this to happen to the hair? What's the concentration of retinoic acid within these hair follicles?

It's interesting that Accutane is reported to work by "*controlling the oil in the sebaceous glands*". Accutane is retinoic acid. It doesn't really control the *amount* of oil in the sebaceous glands; rather, the acid toxified it. The retinoic acid builds up in the lipids in the sebaceous glands. This is documented, and well known, and Accutane clearly proves this. It has been proven at least 1,000,000 times over. Now, with the retinoic acid within the lipids contained in the sebaceous glands, and at elevated levels, the sebaceous glands can no longer moisturize the skin. They do the *exact opposite*; they dry it out. It's a vicious cycle actually. As the skin gets drier, even more oil releases from the sebaceous glands. As the body consumes that oil, even more, retinoic acid is exposed, and the skin gets even drier. We now get inflammation, and if it's severe enough eczema. This is going to cycle until the sebaceous glands temporarily deplete their fat store. Of course, as the sebaceous glands become inflamed they can no longer take on more lipids. This is partly why there is the breakdown in the skin's barrier function.

We're now in a flare-up. Of course, we now have a direct toxin within the skin layer. Now, what happens? The immune cells are going to move in and destroy the skin cells that were induced by the exposure to the retinoic acid to send out their self-destruct cytokines. The flare-ups are of course more complicated, and I've dedicated a separate chapter to this process.

Overall, this also completely fits with the widely accepted view that eczema, psoriasis, and lupus all get worse in the winter. In addition, this is why you need to moisturize yourself within three minutes after the shower.

This also correlates with my other observations that more often than not there's slightly more inflammation right around the hair follicle as compared to the surrounding skin. Secondly, when the little burn craters show up, they are definitely more prevalent at, or just adjacent to

the hair follicle, usually 1 to 3 mm away. However, the little burn craters are not at all exclusive to being adjacent to the hair follicle; they are indeed widespread throughout the inflamed skin area.

Washing Dishes Causes Autoimmune

There's another interesting observation in that 1964 family medical textbook regarding eczema. It reports that eczema on the hands is much more common in women who wash dishes by hand and recommends using gloves. Okay, after reading that sentence, does anyone seriously believe this is an "auto" immune disease? How can the immune system know that someone is washing dishes, compared to some other activity such as typing, or playing the piano, or anything else? That is just so completely nonsensical. Of course, what's happening is the dishwashing is drying out the hands, and that has the same effect as the dry winter air. That causes the sebaceous glands to release, and process, stored fat/oil with its contained retinoids. As the skin absorbs and uses that oil, it exposes the retinoid molecules. In addition, clearly, eczema is much more than just dry skin. Let's not get confused about that. Eczema is inflamed, burning, peeling, cratered, and weeping skin. We end up with a vitamin A acid peel right inside the skin!

Pressure on the Skin Causes Autoimmune

Lastly, I think we can more or less prove that eczema is not autoimmune with a trivial little experiment. Anyone with severe eczema can repeat this same experiment in just one minute.

Steps:

1. Find a location that has some *very slight* swelling to it, but has no redness. (For me I've commonly had this condition on the backs of my fingers just above the metacarpal bone.)
2. Firmly (but not too hard), rub that area for 30 seconds; don't scratch at all.

What happens? Within a minute or less, that area will start to become inflamed and red with the start of the eczema condition. I've now induced the autoimmune response at exactly this location. Yes, no question, the eczema condition was going to happen in a few days anyway; I just significantly sped up the process. How long does the red inflammation at this location persist for? It is about four to six weeks (no, weeks is not a typo). It finally heals when the top layer of white flaky skin forms and flakes off.

Repeat this same experiment at another location where there's no prior swelling. For me, I've used my thigh. I can put high pressure on it for five minutes with no redness, no autoimmune response, and, of course, no eczema. High pressure rubbing the skin here doesn't cause an immune response. So, the obvious question is how does just firmly rubbing the skin for 30 seconds invoke an autoimmune response that lasts for over four weeks? It's just not logical that this action alone caused my white blood cells to attack the skin at this location and to continue doing so for the next four to six weeks.

What is far more logical is that this rubbing put pressure on the sebaceous glands, or other fatty structures, and squeezed some of the

contents to go in between the layers of the skin. I just forced some toxin to be exposed. The immune system is responding to that toxin, or more correctly, the immune system is reacting to the effect the toxin has on the skin cells themselves.

Why does it take four to six weeks or longer to heal? I have no way of knowing for sure. However, at the same time of my severe eczema condition, I cut the back of my thumb on a nail. It was a moderately deep cut with some bleeding. That cut took seven days to completely heal. Therefore, I think the healing time for my skin, and my age, is about one week. So, why does this eczema take so long to heal? It is because this condition is not the immune system healing the skin. No, it is the very opposite. Some toxin is inducing the immune system to continue to destroy the skin over an extended timeframe. It means that this toxin is hard for the immune system to deal with. Secondly, it means that this toxin has a very long half-life in the body.

Maybe it takes four weeks for the immune system to gather this up and put it back into the sebaceous glands. More likely, we're kicking off a nearly endless chain reaction until this molecule finally breaks down.

The Koebner Phenomenon

Once again, this is not just my observation that pressure on the skin can cause eczema. It's documented, and of course, has its own medical name. It's called the [Koebner phenomenon](#)⁷¹.

The Koebner phenomenon is getting a rash in a usually straight line or another identifiable pattern. The rash is the result of applying pressure on the skin but not actually harming the skin. Imagine rubbing your arm along a tree branch as you're riding your bike. There's no real abrasion

⁷¹ <http://www.dermnetnz.org/reactions/koebner.html>

to the skin; yet, within a few days, you get the eczema-like rash exactly along that pressure line.

This affects patients particularly with psoriasis and to a somewhat lesser extent with eczema. It also occurs more often in the winter than in the summer. The cause of the Koebner phenomenon is unknown. Well, I don't think it's a phenomenon at all. I think it's a little yellow toxic molecule embedded in lipids in the skin layer and in the sebaceous glands that are being exposed when the skin is being pressured. And this is why eczema is, indeed, the scratch that itches. The more you scratch, or rub, the more toxins you expose.

When I had first read about the Koebner phenomenon, it was a surprise this goes back more than 100 years, and that it has not been solved. I think if the Koebner phenomenon were to be solved, the entire enigma of autoimmune diseases would be quickly unraveled. To me, I think it's obvious now. There's a toxin *already* in the skin, and it has been sitting there for a good long while. That toxin is now being exposed or released as a result of the pressure on the fat cells within the skin.

For the medical researchers, that might sound absurd. They might logically ask why would there be a toxin stored directly within the skin. That's nuts! However, it isn't. It's completely logical. To a layman like myself, it's more like: "what else could it be?" I just can't help to be reminded of that catchy old Frank Sinatra tune "[*I've Got You Under My Skin*](#)".

It is very interesting that the Koebner Phenomenon is documented to occur in people with psoriasis, eczema, systemic juvenile rheumatoid arthritis, vitiligo, lichen planus, et al. It's also documented as an all-or-nothing phenomenon, meaning it can only be reproduced in people who have these skin disorders, and never in people who don't have them. Since the Koebner phenomenon is unique to people with these diseases, I think it's likely that if we can determine its true underlying mechanism,

then, we can quickly get to the root cause of the disease. It's not at all surprising to me that juvenile rheumatoid arthritis is on this list, either.

I've reproduced the Koebner phenomenon on myself multiple times and have caused my eczema to spread. I was able to spread out my autoimmune disease area as if it were an infection. Of course, I was not spreading an infection. I was spreading a toxin with its corresponding complicated chain reaction. When you look at how the Koebner rash can appear in a straight line, (due to the pressure pattern), it is interesting to see almost the same rashes in poison ivy where people have lightly rubbed their skin across the plant in a straight line too.

The facts we know with certainty are:

1. We know from Accutane that the body will move retinoic acid-laden lipids into the sebaceous glands in the skin.
2. We know from Japanese and Brazilian researchers, and many dermatologists, that retinoic acid applied topically to the skin does cause the eczema like rash and rapid skin cell growth.
3. We know from global observations that eczema and psoriasis etc. worsen, or flare up, in dry weather. This is clearly happening when the skin is absorbing the oils from the sebaceous glands.

The Koebner Phenomenon is really just a localized manifestation of the same effect observed in the skin during drying winter air conditions. This fact that drying skin in the winter months causes elevated symptoms of autoimmune diseases should be of incredible interest to researchers. There is almost only one plausible explanation. Therefore, I think the Koebner Phenomenon offers a huge and immediate opportunity to reveal the root cause of these diseases. It's a toxin sitting within the lipids in the sebaceous glands. We know the exact toxin we are looking for too; it's

retinol, and/or retinoic acid. I suspect the retinol mostly due to its fluorescence.

There's absolutely, one hundred percent positively, something in my skin, and it's fluorescent. It isn't slightly fluorescent, either. It's highly fluorescent. There isn't a wide range of possibilities as to what this fluorescent substance could be. You don't need biopsies or sophisticated equipment to see it, either. I'm seeing this directly in the skin with a \$300 geology fluoroscope. Once again, retinoic acid is not fluorescent; therefore, I may be seeing only a portion of the total retinoids stored in my skin lipids.

Since retinol and *retinoic acid* are very light sensitive molecules, anyone wanting to test this fluorescence hypothesis needs to take care in obtaining and testing a sample. Still, I think it could be proven in a matter of days.

Eczema is clearly not random autoimmune activity. It's due to a toxin found in the sebaceous glands and elsewhere in the skin lipids. With the inflammation, it may actually burn out and destroy the sebaceous glands too, leading to one hell of a nasty condition.

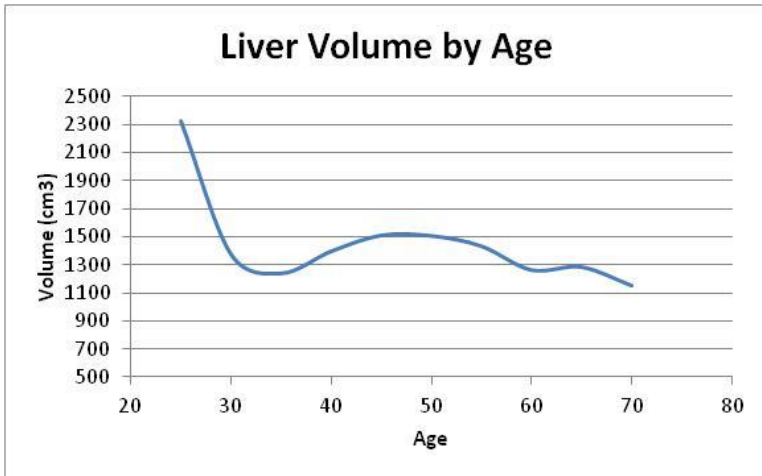
Crohn's et al Incidence Rates Kicking in at Age 20ish

The interesting question here is what's with this magic 20ish age thing. Why are so many young people getting Crohn's and many of the other autoimmune diseases around this age? Well, what happens at that age in the human body? Take just one guess, you'll probably be right.

The human liver becomes fully developed around age 20; boys are one or two years earlier. Some other sources document that it is more likely happening by age 15 or so. Now, let's have another look at the chart of the liver volume changing with age. For whatever the reason, it looks

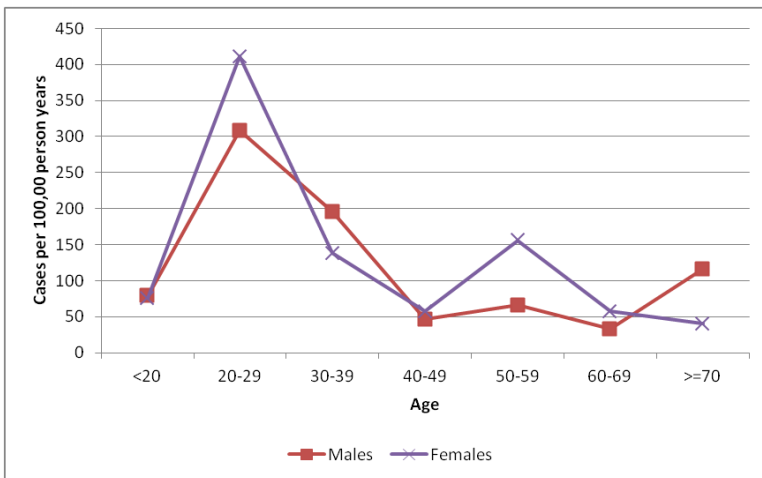
like the liver drops in size once it has stopped growing, and this happens at age 20ish. The two charts are shown on the next page.

Figure 35 Adult liver volumes by age



Source: Assessment of Liver Volume with Spiral Computerized Tomography scanning in North Indian Adults. The Internet Journal of Radiology. 2009 Volume 13 Number 1. <http://ispub.com/IJRA/13/1/9978>

Figure 36 Prevalence of Crohn's Disease by age



Source: Prevalence of Crohn's Disease in Olmsted County, Minnesota, on January 1, 1991 <http://archive.crohn.ie/research/epidem/olmsted.htm>

Therefore, that's probably why there's this spike in Crohn's at this age. Not only can the growth of the liver no longer outpace the rate of dietary consumption of vitamin A, it is actually shrinking in volume. The consumption - absorption race is lost. Of course, it isn't this binary. This can, and clearly does, happen at any age between 10 and 50 plus. That 20ish young age also corresponds to the post acne age. How many of these young people took vitamin A based acne medications? Another obvious thing to consider is that the shrinking liver size could be causing the acne flare-ups in the first place. Remember that the body moves retinoid-laden lipids into the sebaceous glands. This is proven to fuel the acne causing bacteria living there.

I have no doubt those kids younger than 10 can have a surge in their dietary intake of vitamin A, which can cause an inflammation episode in their bowels. Unlike 10-year-old kids with eczema, they just can't see it happen. They may just get an unexplainable abdominal pain that lasts for a few days or more. The damage is painful, silent, and out of sight and the body heals, and they move on.

The Higher Socioeconomic Status Factor

People from a higher socioeconomic status have a higher prevalence for getting autoimmune diseases. Why is that? Well, I can guarantee you that their immune cells cannot detect their bank account balance. However, obviously, there is a real reason. It's because they're likely to be more educated and have more money to spend on eating *healthy* with lots of brightly colored fruits and vegetables, and probably even vitamin supplements. There's the same higher socioeconomic connection with rates of MS, Lupus, Crohn's and Alzheimer's (reported in the USA).

For me, this higher socioeconomic status connection is a *super-important key point*. It's not just an interesting anecdotal finding. What does this key point really tell us? Several things. It tells us in perfect, and indisputable clarity that these are not genetic diseases. They are also not

environmental in terms of the air we all breathe, or the water we all drink, or exposure to farm toxins, etc. What *is* different is the food people choose and what they can afford to buy. It's the *food!*

What food(s) exactly? Once we can answer that, then, we need to ask an even more important and specific question. What exact chemical compound(s) in those foods is it?

Nova Scotia, Canada

About 10 years ago, there was a news report about Halifax, Nova Scotia, having the unfortunate distinction of being the Alzheimer's capital of Canada (in rates of incidence). I don't remember the exact numbers, but it was something like 1.5 times or even 2 times the national rate.

Researchers were trying to understand why. Well, I think I now know. As I stated above, I believe that Crohn's, eczema, arthritis, probably lupus, and Alzheimer's all share the same sinister parent.

When I first started looking into Crohn's, it was only a bit surprising to learn that Nova Scotia also has the highest rates of Crohn's and colitis in the world. So why is it that both the Crohn's and Alzheimer's rates are really high in this province? Well, it should by now be obvious to us. It's that this coastal province has been historically very high in fish consumption. Canadians called the Grand Banks the fish "*wheat fields*" of Newfoundland. It was actually a fish-based economy, and fish was always a staple in the diet since the mid-1550s. But the key point here is that it's not just any fish; no, this is fish from the deep cold *Atlantic waters*.

With the knowledge about Halifax, and thinking that there was a connection between eczema and Alzheimer's, I suspected there would have now been a significant drop in incidence rates in the province. It was because, in 1992, the fish stock collapsed under the burden of

overfishing by the industry. The government imposed a fishing moratorium, and all commercial cod fishing was abruptly stopped. Although this temporarily had a big negative impact on the economy, it also had a very interesting and positive side effect on regional health. In this recent 2014 study, titled: [Decreasing incidence of inflammatory bowel disease in Eastern Canada](#)⁷².

The researchers observed a significant decline in the incidence rates of Crohn's, ulcerative colitis, and inflammatory bowel disease in the province starting around 1996 and continuing through the end of the study in 2009. The drop in all the three age categories studied was significant. The diet in Nova Scotia before the fishing collapse included lots of cod. That changed almost abruptly, starting in 1993. A very important observation to make about this report is that the age group with the biggest decline in rates is the 20 to 29-year-old age group. Since the Atlantic cod fishery had been closed for nearly their entire lives; this makes sense.

Even though the meat of the Atlantic fish is 10 times higher in vitamin A than similar Pacific fish, overall, it's not particularly high in itself. Once again, we need to factor in the TIME dimension here. One codfish meal isn't going to do any harm. However, 3,000 or more of them will. In addition, the cod oil is much higher in vitamin A.

There's no doubt that the decline in incidence rates of Crohn's in the province is due to the abrupt reduction of Atlantic codfish in the diet. Therefore, in one man-made disaster (Accutane), we added vitamin A to people and caused more Crohn's. In the other, we removed a significant source of vitamin A from the diet and, subsequently, hugely reduced the rates of Crohn's. These are not coincidences. These are facts we simply can't ignore.

⁷² <http://www.biomedcentral.com/1471-230X/14/140>

We have just (inadvertently) conducted a ~20-year, ~5-million-person field trial with the closure of the Atlantic cod fisheries. This led to a very significant result, specifically with regard to Crohn's disease. However, on the other hand, there may be something wrong in my determination that cod (the meat) is the culprit here. Cod meat is actually not that high in vitamin A ~ 100 IU/fillet. However, a kid growing up in Halifax eating cod three times a week compared with a kid in Alberta or Saskatchewan eating beef three times a week will consume about 500,000 to 1,000,000 UI more of vitamin A over a 20-year period. These may look like big numbers, but they're not really in the context of vitamin A consumption. This could be a very clear indication that the truly safe range of consumption of vitamin A is not very wide.

Now we all know the cod liver oil is much higher in vitamin A, so we need to know what happened to this oil. Did it go into the food chain somehow? Was it used for cooking or supplements, etc.? Basically, the question we need to answer is, was it also consumed by people in the Atlantic region of Canada and the USA?

I'm guessing probably yes. But I don't know the pathway. Please comment if you can. Also, please comment if you can on the rates of other diseases in the region over this same period. I know that Atlantic Canada has historically been somewhat higher in rates than compared to the rest of Canada. What about disease rates in Sydney, Nova Scotia, over this period? Sydney had some of the highest disease rates in Canada in the 1980s and 1990s. In a news report from the *Halifax Herald* in 1998, it stated, "[Deaths caused by hypertension, Alzheimer's disease or multiple sclerosis occurred at twice the national average in Sydney.](#)"⁷³ The report cites the Sydney tar ponds as the suspected toxic source. However, I wonder if these high rates of disease in Sydney have now changed too?

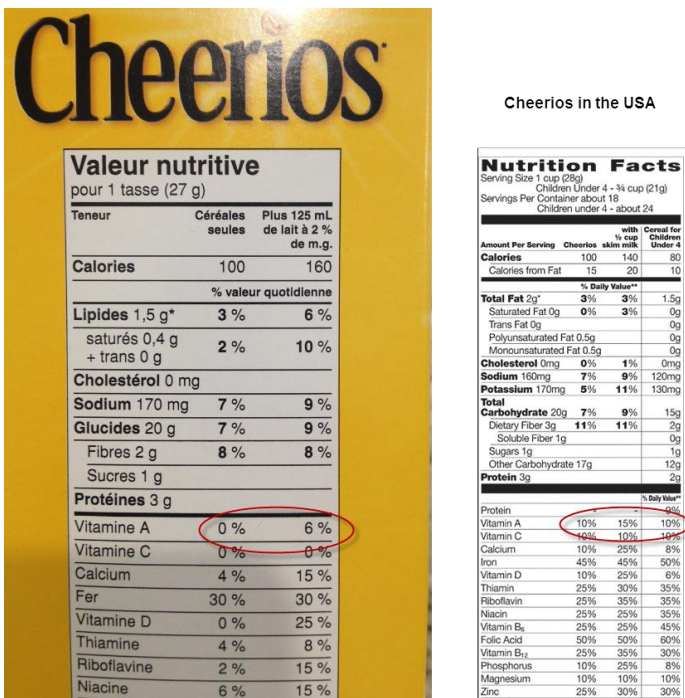
⁷³ http://www.safecleanup.com/old_site/health925.html

The Crohn's & Colitis Foundation of America reports in its [2014 Fact Book](#)⁷⁴ that the countries with the highest rates of Crohn's and ulcerative colitis are Canada, Denmark, Iceland, and the United States. However, more precisely this list should be Atlantic Canada, Denmark, Iceland, and the United States. What is common at least between Atlantic Canada, Denmark, and Iceland? It's *North Atlantic* fish consumption.

⁷⁴ <http://www.ccfa.org/assets/pdfs/ibdfactbook.pdf>

The United States supplements more foods with vitamin A than Canada does. I’ve noticed that some simple foods, such as those with flour, list vitamin A on the nutrition label, while the same foods in Canada do not. For example, the nutrition label for plain Cheerios in the United States lists 10% RDA without milk and 15% with milk. Whereas, apparently the same box of Cheerios in Canada it lists 0% RDA without milk, and 6% with milk.

Figure 37 Vitamin A content in Cheerios in Canada and the USA



This additional fortification of flour and cereals might help to partially explain the high rates of Crohn’s and ulcerative colitis in the United States.

There’s more evidence that can be gleaned from the closure of the Atlantic Cod fisheries. It was not only Canada’s fishing fleets off the East Coast; other nations had fishing fleets there, too. When the codfish

stock collapsed, then these other nations stopped fishing here. Therefore, we might see a decline, or maybe just a leveling off, in the incidence rates of Crohn's in their home nations. See the Wikipedia entry, [Collapse of the Atlantic northwest cod fishery](#)⁷⁵.

However, just as with *Accutane*, the drug name, we can't implicate *fish*, the animal name in these diseases. It is a chemical that's in both the Accutane and the fish that is the culprit.

Eczema and the East Coast

I don't know of data for eczema rates on the east coast of Canada. But, here is an excellent study, with all kinds of geographic data regarding the rates of eczema in the United States: "[Eczema prevalence in the United States: data from the 2003 National Survey of Children's Health.](#)"⁷⁶

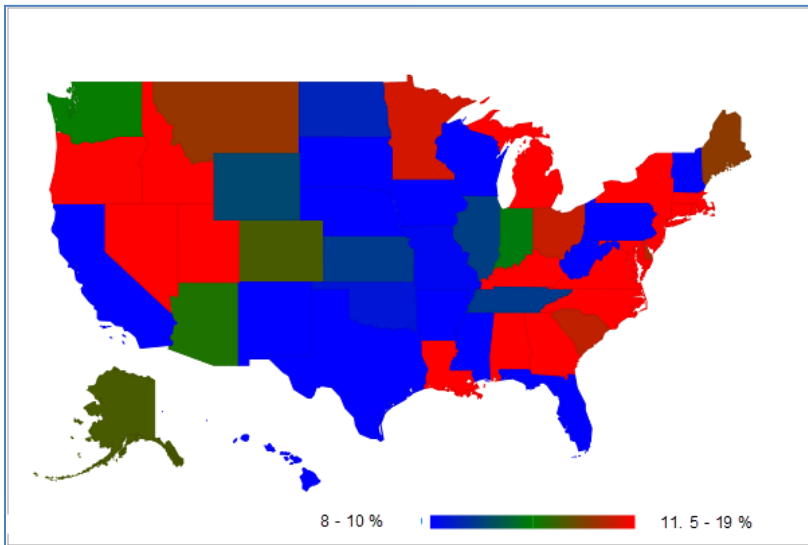
Novel findings include the demonstration of higher eczema prevalence along the East Coast. The study correlates well with previous reports and may help point to environmental factors that contribute to the development of eczema.

Why? Once again, I think it is due to the higher East Coast fish consumption. Northern East Coast codfish is particularly high in vitamin A. The following chart presents the prevalence rates from this report.

⁷⁵ http://en.wikipedia.org/wiki/Collapse_of_the_Atlantic_northwest_cod_fishery

⁷⁶ <http://www.ncbi.nlm.nih.gov/pubmed/20739951>

Figure 38 Eczema prevalence by state



Other countries with high rates of fish consumption, but specifically from cold waters, also have high rates of eczema and Alzheimer's, and I have no doubt Crohn's/IBD, too. Sweden, Denmark, Iceland and Finland definitely do. Here's a world map showing vitamin A deficiency: http://en.wikipedia.org/wiki/Vitamin_A_deficiency

Since it is a vitamin A *deficiency* map, you just have to note that the dark green countries are getting, at least, enough vitamin A. There are no surprises there for North America, the UK, Sweden, and Australia. But look at Chile. Chile now has the highest per capita consumption of fish in South America. It also has the highest rates of Alzheimer's in South America. What are the rates of Crohn's in Chile? What fish species do they eat? What about their tomato, yam and sweet potato consumption?

Global Patterns in Crohn's Disease

Here's another excellent study showing a global map of Crohn's disease, "[New global map of Crohn's disease: Genetic, environmental, and socioeconomic correlations.](#)⁷⁷"

The comments regarding Chile are: *Cases of Crohn's from 1996-2002 more than doubled compared to 1990-1995.* Wow! More than doubled in just 5 years! What in their diet has changed? By chance, did they buy the no longer needed Canadian fishing ships?

In the comments section of this report the authors ask:

What unites Canterbury in New Zealand, Nova Scotia and Manitoba in Canada, Amiens in France, Maastricht in the Netherlands, Stockholm in Sweden, and Minnesota in the US (apart from the existence of scientists alert enough to reveal the evolving epidemiologic trends)? Unlocking this strange union would subsequently unlock the mystery of Crohn's etiology, still speculated upon 75 years after its baptism.

I think it's now obvious. It's mostly fish consumption but particularly fish that's high in vitamin A.

What's with *Manitoba and Minnesota*? I don't know. Maybe they have a higher rate of dairy or beef liver consumption? They do have a large Native First Nations population in Manitoba. But, conversely, the incidence rates in First Nations people should be statistically lower. This is because most First Nations people are lactose intolerant. That would remove a big dietary source of vitamin A for this group. I don't know if these are factors in the Manitoba data or not. Has anyone warned all the Manitoba moose hunters about the highly toxic nature of moose liver? Apparently, it is second to the polar bear liver in toxicity.

⁷⁷ <http://www.ncbi.nlm.nih.gov/pubmed/18095316>

Other Geographic Regions

Amiens, France? Maybe it's a combination of pâté and coastal fish consumption. Of course, it isn't just the fish. It's any source of vitamin A and, I think, carotenoids too. The uptick in incidence rates we're seeing in India and China is simple to explain. They're adopting a new Western food crop, big time. It's tomatoes, and in China, it is pumpkin too.⁷⁸ Check the stats; it's amazing, and alarming to see that these countries with huge populations are showing increases in these diseases.

Naturally, it is not just India and China that are consuming more tomatoes. It's us here in Canada and the USA, too. Business is booming for tomato growers worldwide. Consumption in North America has more than doubled in the past 15 years. What else has doubled in the past 15 years? Crohn's and eczema are to name a few. The other food business that's booming is the carotenoid-based food colors. There's more like exponential growth in production since its use is now being mandated and legislated worldwide. Then, of course, we've had supplemented milk and dairy since the 1970s. This all adds up to an exponential increase in consumption of vitamin A, and the vitamin A precursors.

This report also points out that the Canadian province of Alberta is quite high in Crohn's rates. Why? Well, Alberta is a highly affluent province. It also has quite a high average level of education. So, there's not much of a shortage of money here for the family grocery budget. People both listen to nutritional advice and have shopping carts full of the brightly colored fruits and vegetables and lots of meat, eggs, dairy, etc., and undoubtedly multivitamins.

I was at a Costco store here not long ago, and there was a two-pallet (1m x 2m x 1.5m) pile of guess what for sale? Cod liver oil. There you have it right in the main aisle of the local Costco. We don't need an East Coast

⁷⁸ <http://www.ers.usda.gov/topics/crops/vegetables-pulses/tomatoes.aspx>

Cod fishery to catch the cod. We're still supplementing with the very worst part of it!

North/South Gradient in the Geographic Data

Various research reports document an observation that there's a world north/south gradient in the geographic distribution of the incidence rates of Crohn's. The same observation is hugely obvious in the MS rates data too⁷⁹.

There are some really important points to consider about the north/south gradient observation. First, it isn't just the rates of Crohn's disease that present this pattern. The incidence rates of multiple sclerosis and diabetes show up in the same pattern. Second, it's not just a North American phenomenon, either. It's also in Europe, Africa, and Australia. This has nothing to do with genetics. It has to do with the latitude you live on. Is this for real? The more north or south you live on the earth increases your chances of getting an autoimmune disease. How can this be? Could it possibly be less exposure to the sunshine and, therefore, vitamin D production? Many researchers do think this is the case. However, that hypothesis quickly breaks down. The Russians live at the same latitude, or even higher, as most Canadians do and they have significantly low rates of these diseases by comparison. Additionally, the Western countries have now been supplementing their dairy products with vitamin 1,25 D for decades now, and these autoimmune disease rates have only gotten far worse.

This north/south gradient in the rates of disease corresponds to the north/south temperature gradient in the Atlantic Ocean and the North Sea. In the case of Chile, this is the cold Antarctic Ocean. Then consider that Australia is presenting a substantial north/south disease rate gradient

⁷⁹ http://www.who.int/mental_health/neurology/Atlas_MS_WEB.pdf see page 15

just within its own continent, and, of course, it does so within the global context too. An interesting bit of historical trivia is that Charles Darwin's condition significantly worsened as he sailed down the coast of Chile some 200 years ago. We were warned. The colder waters require fish to have higher oil content, and probably a higher level of vitamin A.

Therefore, in addition to the north/south gradient, I think there will be a correlation between incidence rates and the proximity to *cold* coastal waters. There sure is in Canada. In Canada, we have a dramatic West to East gradient. Our West Coast disease rates are moderately low, and our East Coast rates are some of the highest in the world! Most Canadians live at approximately the same latitude (80% within 100 miles of the US border), yet we have a very big difference in the incidence rates going from the West to East coasts. Most importantly, the biggest jump in rates occurs in the Atlantic Provinces.

I was in Denmark a number of years ago. The eel was popular in lunchtime sandwiches there. At 3,787 IU/100g, eel is also very high in vitamin A. This animal lives in very cold waters. What are the rates for these diseases in Denmark and the other Scandinavian countries that take fish from the cold North Sea? They are some of the highest in the world.

Alzheimer's Disease Rates Between Finland and Russia

As I've documented before, the biggest rate disparity directly across a national border in incidence rates of Alzheimer's disease is between Finland and just into western Russia. This border would have been completely closed during the cold war era. The diet in Finland was, and probably still is, very high in fish. Their Russian neighbors had next to none along, with their rates of Alzheimer's disease. Today, the Alzheimer's/dementia death rate (age-standardized) Finland/Russia ratio is 53.77 to 2.17 per 100,000. Here, we have a population with a higher vitamin A consumption, and they're **25 TIMES higher** in their rates of Alzheimer's/dementia compared with their immediate neighbors. Finland

also has the highest rate of diabetes, and one of the highest rates of MS, and eczema, in the world too. A really interesting number to find out would be the actual ratio of vitamin A consumption between these two populations. I'm betting it's more than 5 to 1.

Haven't we seen this before in medicine?

I see a big parallel here between autoimmune and infectious diseases. Before the discovery of bacteria and viruses, people were getting “diseases” at all kinds of random anatomical locations. Many doctors at the time assumed that these were different diseases simply because of the different body locations. Once bacteria and viruses were discovered and understood to cause infections, it quickly became clear that many of the previously thought to be distinct diseases were indeed the same infections. Regardless of the anatomical locations, they were all being caused by basically the same root cause. The different anatomical locations turned out to be a red herring, and almost completely irrelevant.

But, still today the medical specialists for each of the autoimmune diseases are in almost separate silos. The isolated silos are simply because the specifically named diseases occur at somewhat separate anatomical locations. Each one of these diseases has its own separate national association or foundation, fundraising and research teams.

Even though there is an incredible amount of overlap and mimicry in the symptoms of the diseases, the medical specialists cling to the very specific names such as Celiac, Crohn's, Lupus and 50 others. I think this is almost ancient thinking and, metaphorically speaking, the splitting of hairs. They are failing to see the bigger picture. I don't care about the different names and the somewhat random anatomical locations these diseases present at. They are meaningless, because, in an interconnected way, Celiac's is Crohn's, eczema is Dermatitis herpetiformis, lupus is diabetes, diabetes is kidney disease, and autism is liver disease, liver disease is Alzheimer's, Graves' is Hashimoto's, and on and on. Just like

with bacterial infections, all of these diseases are poisonings that are manifested at different body locations in slightly different ways! Moreover, once the liver function even begins to become compromised there is a cascading effect to every other organ, and tissue in the body. Almost all of the autoimmune diseases are manifestations of that poisoning.

Many current researchers are looking at the geographical clustering of these diseases, and clearly they understand there must be a connection. Yet, we've already been taught this lesson. A famous discovery in medicine was made in 1854 by mapping the clustering of a disease in London. John Snow mapped the incidence pattern of the Cholera cases in the Soho district of London. Here's his map.

Figure 39 Map by John Snow showing the clusters of cholera



Original map by John Snow showing the [clusters](#) of cholera cases in the London epidemic of 1854. The pump is located at the intersection of Broad Street and Cambridge Street (now Lexington Street).

The prevailing theory at the time was that pollution or a noxious form of “bad air” caused diseases such as cholera. Snow was skeptical and plotted this map. Based upon this revealing information, he had a theory. What he did not do was conduct a 10-year, thousand-person clinical trial. No, he did something far more direct. He had the handle of the pump on the suspected contaminated well removed. The outbreak quickly resolved. Of course, there’s more to that story, and more important lessons we’ve failed to learn.

Nevertheless, we are seeing almost the same thing repeat itself with the autoimmune diseases. Rather than the clustering's of disease around a pump, the clusters are showing up in and around individual nations and along the Atlantic coast of North America and Northern Europe. There are striking regional clusters of eczema, Crohn's, Alzheimer's, diabetes, MS, and autism too. Clearly then, these diseases are not random, and they are being caused by something. But, unlike in cholera that *something* is not a microbe, it is a molecule. The common language in the various research papers that mention this clustering of incidence rates is to use the very general phrase that “this indicates an environmental factor”. Well, I think if the medical researchers just called the obvious, and changed this language to “regional poisonings”, the focus would immediately shift to finding exactly what that poison is. Furthermore, once they just entertain even the remote possibility that it is vitamin A, all the pieces will quickly come together.

Tying it all together with the skin and dry winter air

This dry winter air factor is such a critically important aspect of the autoimmune diseases to fully appreciate and understand. We really need to think deeply about this point in the context of investigating the root cause. After all, how on earth is drying air conditions causing the immune system to become defective and inducing flare ups? If we can understand this riddle, we can solve these diseases.

As I've discussed earlier, this correlation with drying winter air is very widely reported for eczema. Naturally, a lot of mothers know this all too well based on their first-hand experiences dealing with their kid's mild eczema getting worse in the winters. But, autoimmune is not dry skin, it is an aggressive immune response. Not surprisingly, the same observation is widely reported for asthma, psoriasis, and lupus. Once again, this has been reported by millions of people, this is not some small incidental anomaly. Therefore, it is not just a “theory” either, it is a fact. It is also a widely medically accepted fact.

Now, you might be tempted to think that the drying air affects the body's external skin, and, therefore, there is some unknown reaction occurring here with eczema, psoriasis, and the asthma-related immune response that starts flaring up. However, it is not just the external autoimmune diseases that manifest this phenomenon. It is the *internal* autoimmune diseases too. It's reported with the intestinal diseases of Crohn's and celiac disease too. Arthritis and diabetes are also widely reported to worsen with drying air. Additionally, not only is this phenomenon a common factor in the worsening of the diabetes condition, it is actually measured and shows up in the elevation of blood sugar levels. That's right, drying air causes blood sugar changes in diabetics! Moreover, did you know that more diabetics are first diagnosed with the disease in the winter months too?

How the heck is this possible? What's really going on here? Once again, how can drying air cause autoimmune disease conditions to worsen? It is the skin, the body's biggest organ, releasing a very powerful toxin into the bloodstream. It is the drying skin releasing some of its accumulated retinol and subsequently generated retinoic acid. Obviously, it is probably, therefore, contributing to some of the seasonal illnesses too. On the mild end of the scale, it probably contributes to higher rates of colds and flu. On the more severe end, it is the higher rates of pneumonia and birth defects.

Okay, so now we have drying winter air tying together the autoimmune diseases of eczema, psoriasis, asthma, lupus, Crohn's, celiac disease, arthritis and diabetes too. What one chemical within the skin lipids is scientifically proven to be capable of causing this response? There is only one answer.

Here's the stunning kicker in all of this: Alzheimer's disease and dementia are also commonly reported to *worsen* in drying winter air too.

Additionally, eczema, psoriasis, asthma, lupus, arthritis and diabetes, Alzheimer’s disease and dementia all present with dry itchy skin too. So, how does this toxin get into our skin lipids? There is almost only one answer here too. It’s from our food.

No, it absolutely is not AUTO. It’s a toxin found in our Food!

Autoimmune diseases are now one of the leading causes of death in North America. These are horrible and unnatural deaths. If you don’t die from one of these diseases, you’re probably going to have a family member or friend who will. Die, or not, Crohn’s, or chronic eczema, or any other autoimmune disease will destroy any young person’s quality of life.

Is this too simple and too bizarre to believe? Hopefully, it is not. Once you fully grasp these three simple facts:

1. The human body stores vitamin A.
2. The body has an upper, and declining, limit for safely storing vitamin A.
3. Vitamin A, as scientifically documented, easily becomes a direct toxin and to invoke the immune response that destroys tissue.

The rest is not too hard to believe. Everything I’ve presented above conclusively tells us these are food-induced diseases.

Can we please now remove this very misleading “AUTO” prefix from the medical disease vocabulary forever?

Chapter 17

Osteoporosis

I believe that osteoporosis is another critical piece of evidence that really ties this whole theory together. It is a major direct connection between vitamin A consumption, Crohn's disease, Alzheimer's, and autism, and just about every one of the other autoimmune diseases.

Why is that? Well, firstly, blocked vitamin D usage and, therefore, calcium absorption now proves to be a factor in people with elevated levels of vitamin A. But, I think that's only part of the story. What about all the retinoic acid? This substance will bring down the serum pH level, and the body's pH regulation mechanisms need to kick in to counter this condition. I think it's logical for the body to draw calcium from the bone stores to bring the pH level back to normal.

Here's a reference to a book that provides us with some interesting evidence, *Biopsy Interpretation of the Gastrointestinal Tract Mucosa*, 2nd edition, Volume 1: non-neoplastic by Elizabeth Montgomery and Lysandra Voltaggio.

(See:

<https://books.google.ca/books?id=p19i7R6PdsEC&printsec=frontcover#v=onepage&q&f=false>)

From Mucosal Calcinosis on page 60,

metastatic" calcium deposits that are typical in such patients...also been associated with hypervitaminosis A...

The authors go on to state:

Regardless, mucosal calcinosis itself seems to be of no immediate clinical significance except as an incidental finding in patients with renal failure.

On the contrary, I think this is of huge *clinical significance*. The first obvious question to ask is: did that calcium contribute to the renal failure. The second question is where did all this calcium come from. Did it come from the bones or from the diet? There's actually little doubt that it came from the bones.

How long has this been known for? It has been known since the 1940s. Here is a study from 1947 [“The action of vitamin K in hypervitaminosis A.”](#)⁸⁰ The authors report high rates of spontaneous bone fractures in rats that are given elevated levels of vitamin A. It's so toxic they inadvertently broke bones just trying to handle the rats. These rats were fed high doses of vitamin A (via fish oils) for only 10 days! The bones were incredibly quickly depleted of calcium.

Here's a more recent study by Binkley and Krueger [“Hypervitaminosis A and bone.”](#)⁸¹ They noted the consistent occurrence of spontaneous bone fractures associated with hypervitaminosis A and that *“no compound other than vitamin A is known to be associated with such fractures in animals.”*

⁸⁰ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1258540/>

⁸¹ <http://www.ncbi.nlm.nih.gov/pubmed/10860393?dopt=Abstract>

Then next, let's consider this report on autism, "[Studies Link Autism to Low Bone Density and Increased Fractures](#)."⁸²

The highlights are:

- *The increased risk was greatest among girls and women affected by autism spectrum disorder:*
- *Girls with autism had **eight times** the hip-fracture rate of other girls.*
- *Women with the disorder had **ten times** the rate of spinal fracture of other women.*
- *Boys with autism had **double** the hip-fracture rate of other boys.*
- *Men and women with autism (ages 23 to 50) had nearly **12 times** the hip fracture rate of other adults.*
- *Women with autism also had **double** the rate of arm, wrist and hand fractures.*

Therefore, I think this “***no compound other than vitamin A is known to be associated with such fractures in animals***” finding is of enormous significance. The numbers reported above should be stunning! These are 800%, 1,000%, and 1,200% differences. How much more glaringly obvious does this need to be before someone takes this damn seriously? Another bit of trivia is that in healthy people, ounce for ounce, human bone is stronger than steel. Yet, here we have kids and young adults *spontaneously* breaking their bones. This means under completely normal loads, and with no impact. For me, as a structural engineer, this is astounding information, as it would be to any civil or mechanical engineer. Now, knowing that there is only one substance that can weaken

⁸² <http://www.autismspeaks.org/science/science-news/studies-link-autism-low-bone-density-and-increased-fractures>

human bones like this and that we've jacked up the entire North American population on this substance over the last five decades, I am sorry, but it just can't get any more straightforward than that!

Vitamin D to the rescue! Well, maybe not?

Now just like with vitamin A being added to our staple foods, governments have decided to supplement some of these same foods with vitamin D too. Specifically, it is being added to milk, margarine, and other dairy products. In the USA, it is also added to breakfast cereals. Why? Because someone has decided that it is good for all of us. The assumption is that every man, woman and child should have more of this hormone.

Here's a very good 2004 report documenting this supplementation, and some of the reasoning behind it.

Vitamin D fortification in the United States and Canada: current status and data needs.

American Society for Clinical Nutrition

Source: <http://ajcn.nutrition.org/content/80/6/1710S.full>

Some noteworthy comments in this report are:

Reports of a high prevalence of hypovitaminosis D and its association with increased risks of chronic diseases have raised concerns regarding the adequacy of current intake levels and the safest and most effective way to increase vitamin D intake in the general population and in vulnerable groups.

and more specifically,

Moreover, we are becoming increasingly aware of the link between these low concentrations of 25-hydroxyvitamin D and increased risks of chronic diseases, including diabetes mellitus, cancer, autoimmune disorders, and osteoporosis.

Okay, with that observation, the assumption being made is that elevating the levels of vitamin D might help. It appears that the critically important question not being asked is: **why** are low vitamin D levels associated with these diseases?

Two very critical *assumptions* are being made here. The first one is that we are all low on vitamin D due to low consumption and or reduced sun exposure. The second major assumption is that these diseases are somehow *consequences* of this low vitamin D condition. But, are these assumptions really true?

No, they are not, and it might be completely the reverse. The condition causing the chronic diseases may also be just causing the rapid depletion of vitamin D. The body may be using up that vitamin D faster in combating the effects of elevated vitamin A. Now with regards to reducing the incidence of diabetes, autoimmune, and cancers, the sad truth is that the experts simply don't know if this is a factor or not, because no one knows what causes these diseases. Without knowing the actual root cause, they are simply guessing and using vitamin D is just another shot-in-the-dark or possible band-aid type treatment.

We know much less about the efficacy of vitamin D fortification of foods in reducing the risks of osteoporosis and other chronic diseases.

It is a huge assumption that adding vitamin D is actually beneficial. It may be in the short term. However, here's the shocking truth; there now is very strong evidence that, over the long term, drinking milk with added vitamin A and D added is actually causing osteoporosis. It is

causing our bodies to suck the calcium out of our bones and teeth. There are studies making hugely significant correlations with elevated milk consumption and the higher rates of not only the autoimmune diseases, but with heart disease, and breast cancers too.

Just as with vitamin A, vitamin D is a powerful hormone. Vitamin D is a hormone that the human body produces naturally, and, therefore, self-regulates. Yet, the assumed to be experts have decided to supplement the entire North American populations with a second powerful hormone. I think this is a rather astonishing bit of scientific arrogance. To think that we are going to outsmart millions of years of evolutionary development with a pill, or supplement in our milk is a tad presumptuous at best. The only way these experts should be able to make these claims is for them to know precisely, and exactly every minute detail and the mechanism by which the vitamin D hormone can affect the human body. In other words, they had better be 100.00% sure about this. And they had better be 100% sure about it 350 million times over that daily consecutive consumption for a lifetime is completely safe too.

Now, the most basic, and obvious, question to ask about boosting everyone up on vitamin D supplementation to combat chronic diseases, osteoporosis, and cancer is: how's it working out? Other than in preventing rickets, the stunning answer is that it is not working out at all! Rather, it appears to be just the opposite. An equally obvious question to ask is why did the rates of the chronic diseases, and cancer, start their dramatic rise in the late 1970s, only five years or so after more vitamin A & D were added to the national food supply. Was that just a coincidence?

Could this be an unforeseen consequence of this added vitamin A & D to the national food supply? Are we overdoing it? Could it possibly be causing higher rates of these diseases? Well, I think it might be significantly elevating the risk of cancer. This is not just speculation; it is now showing up in the data. The big connection here is that the nuclear hormone receptors that bind to retinoic acid also bind to vitamin D. Now,

take one guess as to what happens when we block up that receptor? Well, once again it is not speculation since it has now been proven with another chemical, and that is the steroid treatments used in autoimmune diseases. It is causing higher rates of cancer. I'll add a bit more on this cancer connection in a later chapter.

Of course, we are not interested in band-aid type treatments. We need to get to the very root cause and find out exactly what the heck is sucking the calcium out of our bones and causing osteoporosis in the first place.

Autism, Alzheimer's disease and Osteoporosis

I'm not the only one who thinks there are many similarities between autism and Alzheimer's. I'm going to add another crazy statement into the mix here. Remember that U-shaped incidence rate curve I presented before, lots of kids younger than, say, 10, and lots of adults 50 plus getting eczema? We now have lots of kids getting autism and a lot of adults getting Alzheimer's. When combined, these two curves present a similar incidence pattern. There is something else these two diseases share, and that is significantly elevated levels of osteoporosis. It is a common thread that connects these two diseases between the young and old alike.

The current rates of Autism spectrum in North America, published by the CDC, are now an outrageous 1 of 68 kids. Some people claim this is partly due to better diagnosis and a broader definition of the autism spectrum. I think that's complete nonsense. It isn't just a definition that has changed. What's with these spontaneous bone fractures? There's not much gray area here for a missed interpretation of the definition of a spontaneously broken bone. Additionally, I think we've seen almost this same 1/68 ratio before. It's pretty darn close to the 1/57 number of birth defects found and reported in the Rothman study of the women taking even moderately high doses of vitamin A.

Since osteoporosis is a universal symptom reported with autoimmune diseases, I think it's important to dig into this topic some more. We really need to understand the mechanism here, or at least, come up with a very plausible explanation. To do so, let's revisit the case I cited earlier of a [six-year-old boy admitted to hospital for hypervitaminosis A](#)⁸³. When I selected this as an example case, it was just by pure coincidence that this boy was autistic too. There are some important points about this case we need to consider. First, someone is spreading very bad advice about giving vitamin A to combat autism. That is just, purely and simply, absolutely the wrong advice, and it could have a devastating, if not fatal, outcome.

Second, what's really interesting is that the emergency treatment for this boy was to try to get his serum calcium levels into a normal range. His calcium levels were critically high. This is well documented in the case report. So, why were his serum calcium levels so high? We might say, oh well, that's just what happens with hypervitaminosis A. However, it is critically important to know why it happens. I believe it's because the excess vitamin A is quickly converting to retinoic acid. This retinoic acid caused the huge amount of inflammation this kid experienced with the swollen lips, and undoubtedly on his brain too. Just as importantly, this abundant amount of retinoic acid then causes the serum pH levels to drop significantly.

Here's another incidental study that documents the fact that inflammation does indeed lower pH:

Evaluation of pH changes in inflammation of the subcutaneous air pouch lining in the rat, induced by carrageenan, dextran and staphylococcus aureus.

Source: <http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0714.1987.tb00674.x/abstract>

⁸³ <http://www.hindawi.com/journals/crie/2011/424712/>

The lowering of tissue pH in inflammation is generally accepted as the important mechanism for the failure of local anesthesia in inflamed tissues.

The body must combat this lowering of the pH and combat it fast to bring it back to a normal range. It does this with calcium. Now, of course, the **critically** important question is where did all this kid's serum calcium come from. It didn't just magically appear, and minerals are not created from other elements. He didn't eat a kilogram of calcium just before being rushed to the emergency ward. Therefore, it came from his bones. There's no other possible source.

Even though this is a single case study, it completely matches with many other studies in this regard. What about some really convincing evidence from a broad geographical perspective to support this claim?

We have a [recent report from Sweden](#) (Prof. Håkan Melhus from [Uppsala Clinical Research Centre](#)⁸⁴, Department of Medical Sciences, Uppsala University, Uppsala, Sweden) with just such data. Here we have near indisputable clinical evidence that elevated levels of vitamin A is indeed causing osteoporosis.

But daily consumption is only half the story. The real risk is the long-term, elevated storage levels. Currently, no one understands at all well the spectrum of safe consumption. In this report, there were 66,000 women on a normal Swedish diet, and they are slowly developing osteoporosis.

Please watch this video *The [Harmful Effects of Vitamin A Overdosing](#)*⁸⁵, it's an absolute must-see. In this video Prof. Håkan Melhus from Uppsala Clinical Research Centre talks about his findings.

⁸⁴ <http://www.ncbi.nlm.nih.gov/pubmed/9841582>

⁸⁵ <https://www.youtube.com/watch?v=eXcMmclEO8c>

But, there is one statement in the video by the narrator that is worth pointing out. He states that *people in Sweden live long and healthy lives*. That's a nice sounding statement, but someone needs to check the facts since this isn't exactly true. Sweden has high rates of autoimmune disease and one of the highest rates of Alzheimer's disease in the world.

Now, with most autoimmune diseases exhibiting this same osteoporosis symptom, it's not too much of a stretch to make the connection. You don't have to be in a state of hypervitaminosis A. You just have to have some chronic inflammation. Maybe even just a little extra bit each day. It's going to have a cumulative effect on your calcium stores. Taking more calcium is not the answer, and it could actually be harmful. It is getting the inflammation under control that counts. Once again, we need to get to the very basic root cause of the problem.

An important note on pH

In the report cited above, Evaluation of pH changes, regarding the inflammation lowering pH levels the author state:

Results showed only a small lowering of pH in inflammation, of the order of about 0,5 pH unit. It may be possible that even such a small pH reduction would affect the buffer capacity of the tissues

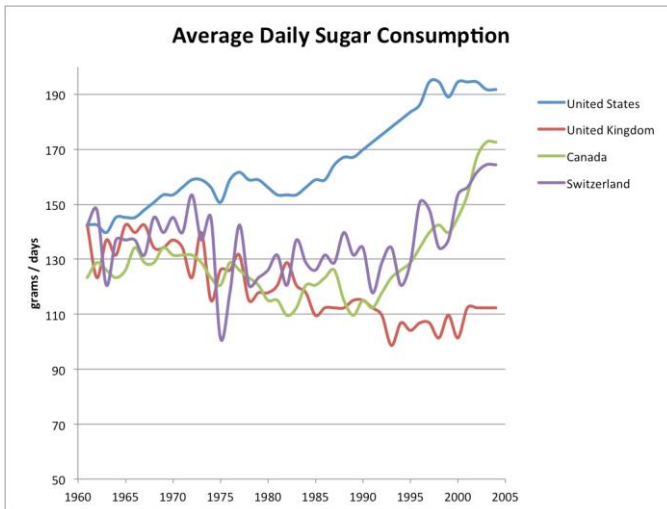
However, a 0.5 change in pH is not actually a small amount at all. The pH scale is logarithmic. Therefore, a measured 0.5 change is actually the difference between 1×10^7 and $1 \times 10^{6.5}$, that's going from 10,000,000 to 3,162,278, or more than 100% difference coming from the lower value. That, clearly, is a huge difference.

Chapter 18

Weight Gain and Obesity

We have yet another outrageous epidemic going on in our society, and it is called obesity. When discussing obesity, it is very common, and I suppose it's somewhat natural, to blame this epidemic on our out of control sugar consumption. I have little doubt that that sugar consumption is indeed a big factor. However, we can't jump to conclusions about it, because when you look at the numbers from some of the European countries, it just doesn't add up. Sugar is not the only factor at play here, and it does not independently account for the peculiar differences in national trends. To examine this, let's consider the obesity trends going on in the USA, Canada, the UK, and chocolate-loving Switzerland. This is quite revealing.

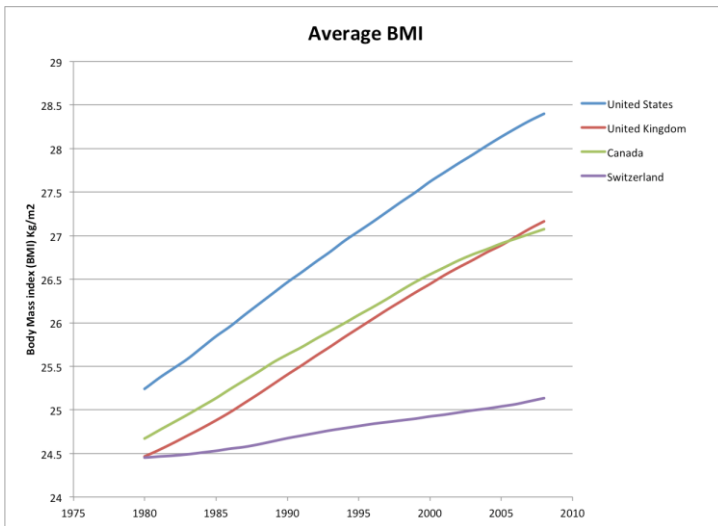
Figure 40 Average Daily Sugar Consumption for Selected Countries



Weight Gain and Obesity

There are a few very important observations to make here. The first is to note that Switzerland's average daily sugar consumption is actually higher than that of Canada's, and has been consistently so for about the last five decades. The second observation is the significant and steady decline in consumption of sugar in the UK. Next, let's look at the trend lines for obesity in these countries.

Figure 41 Average BMI for Selected Countries



Even though Switzerland has higher average daily sugar consumption than that of Canada, they have significantly less obesity. More striking is the slope of the trend lines. Canada's trend is dramatically higher. Next, consider the contradiction in the sugar consumption between the UK, and Canada. Even though the consumption in the UK has steadily dropped significantly over this time, and Canada's has steadily increased over this same time, the trend lines for these two countries are nearly identical. Therefore, this completely contradicts the theory that sugar consumption is causing obesity. There is some other very powerful force at play here. Now, if sugar is *not* causing obesity, how can we explain the significant difference in obesity rates between Canada, and the USA? Both of our countries have very similar diets, cultures, foods supply chains,

education systems, levels of sports participation, and levels of health care. So, what's different? Well, here's a possible clue. The USA supplements their dairy products, breakfast cereals, and many flours with vitamin A. Whereas in Canada, it's mostly only our dairy products that are supplemented. Therefore, just making a ballpark guesstimate here, the people in the USA might be consuming about 40% more vitamin A than their Western Canadian neighbors do. The USA has about 40% higher rates of obesity too (that's not a guesstimate).

This does not mean that sugar is off the hook on this either. Maybe sugar is amplifying some other factor. Whatever it is, the bottom line here is that it is not sugar *alone* that is causing the obesity epidemic. What we are really seeing with obesity is the body's extreme response to an extreme condition.

Next, some folks will claim that it's a lack of exercise that causes obesity. Of course, doing the simple math on the potential calorie burn rate quickly rules out that argument too. Additionally, many people do exercise long and hard and they still really struggle to lose weight, and especially struggle to keep it off. Low-fat diets are just as useless in losing and maintaining weight loss. It's almost as if our bodies have a mind of their own, and are forcing the fat storage no matter what we do. What the heck is really going on here?

Well, apparently, no one knows. Every conceivable diet plan imaginable has been hatched, vigorously promoted and tried by millions. Going all vegan does not work, going low carb does not work, going high carb does not work, going low protein does not work, going high protein does not work, going low fat does not work, even going low food does not work for most people. Therefore, obviously, we are not on the right track here. How about we just do something amazingly simple, and revert back to the diet we had thousands of years ago? Well, this is the new ever-popular Paleo diet; and I think in concept it is brilliant. Many people do

lose weight on this diet and do regain their health. Some people have even recovered from their autoimmune disease on this diet. However, the rub here is that not everyone does. Therefore, I think this diet is very close to the right one, it is just missing one critical bit of information.

Next, some people try to dismiss our national weight gain as just part of living the *good life* in a developed country, and we should consider ourselves lucky, and just call the condition the new normal. However, for a lot of people with an autoimmune disease, it's way beyond this new un-normal normal. Once again, we want to focus on the real root causes, or at least, we need to come up with a very plausible explanation. So, specifically, in addition to the baseline increase in obesity in North America, why do people with autoimmune conditions gain even more weight? I'm almost ashamed to admit that it took me several weeks of thinking about possible causal mechanisms, before seeing the most obvious one. The following paragraphs enumerate my thinking through these possible explanations and mechanisms.

One explanation would be to just say that most people with autoimmune disease are just too fatigued to exercise at all. However, in my own case, that isn't true. I did not experience fatigue for much of the time leading up to my eczema, and I did exercise. Yet, the weight gain was just creeping up on me. By age 54, I was about 20 lbs. overweight. It was going up a few pounds per year, almost regardless of how much exercise I got. It was not too horrible, but still something out of my control was taking over and causing this to happen.

Here's what I think one mechanism could be. It's a gut bacterium called Bacteroidetes. It's one of the most abundant organisms in the human large intestine. When the bacteroidetes populations decline, people become obese. Oddly, and conversely, when people go on a diet (eating less), the bacteroidetes populations return to a normal proportion. The reason this happens is unknown.

Could it be that there's a common toxin in most of our food that kills off some of these bacteroidetes? Of course, you know where I'm headed with this. If high doses of vitamin A are toxic to a human, could very small doses in our regular diet be toxic to these tiny bacteria? Of course, this is a bit speculative, but I'm curious. After all, many of the bacteria-killing acne drugs are indeed vitamin A or a derivative.

The next explanation I considered was that the body just may be forced to, or prefer to, store retinoid-laden lipids. Remember that plain retinol is actually toxic to cells, and if the body can't very quickly stash serum retinol away in the liver, it may be forced to stash it away in other fat cells. Incidentally, many schizophrenics have reported that they had a surge in weight gain just prior to their first encounter with the condition. I found that so intriguing.

Now, this little sub-theory I am presenting here about the body being forced to store more lipids when they contain retinoids might sound speculative. However, it is not. It has been proven with Accutane (isotretinoin) and proven hundreds of thousands of times over. Remember that a common side-effect of taking Accutane is that the acne condition often first gets worse before it gets better. This is because the body is forcing more lipids into the sebaceous glands, and therefore, obviously to the adipose layer of the skin too. From that, we have clear evidence that the body is moving more lipids to the skin with elevated retinoid consumption. Additionally, we have the research from Lehman et al., in 1988, documenting that oral treatments with retinoic acid directly causes hypertriglyceridemia, leading to obesity. These earlier researchers clearly knew that there was a cause and effect relationship here. Why was this ignored?

Finally, I was trying to understand why fat cells, being the primary accumulators of retinol, appeared to be somehow immune from its harmful effects when other epithelial cells are induced to divide more

rapidly. The answer is that the fats cells are not immune from the effects of retinol. They do almost the same thing when exposed to non-emulsified retinol! The fat cells are indeed dividing more rapidly too. These cells subsequently make more energy and resource demands upon the body to mature themselves. Therefore, the body gets fatter and demands more glucose. The big difference is that unlike the epithelial cells, the fat cells do not become inflamed, and induce an immune response.

Since adopting my low vitamin A diet, I have lost about 20 lbs. My BMI is now the old “normal” again. I wasn’t fasting at all. I was eating lots and getting tons of calories too. The extra weight just magically went away. Go figure? This significant weight loss has been reported by another person I know who has adopted the low vitamin A diet. Of course, the experience of two people does not make for a clinical study. But, there have indeed been clinical studies, done in the early 1970s, of people adopting very low vitamin A diets, and as a side-effect they effortlessly dropped amazing amounts of weight too. In my case, I wondered if this weight loss was simply due to more or less removing sugar from my diet. Not being afraid of experimenting on myself, I jacked up my sugar consumption to about 100 to 200 grams per day for at least two months. That was in addition to a baseline of very high starch consumption. Other than giving myself a creepy sugar buzz, and having a somewhat poorer sleep, I did not notice big changes in my skin condition, and my weight remained about the same. Sugar alone, did not cause my weight gain.

Now you might be thinking: *“great, I’ll get off the high source vitamin A foods, and start losing weight at the same time, that’s a bonus”*. Well, I have zero doubt that you will start losing weight. So, that might be great, but losing weight isn’t the goal at all here. This is much more about ending disease and survival. I suspect there’s a bit of a catch to this losing weight phenomenon for us. As you lose that extra weight, you

will, of course, reduce your body's fat store. Take one guess what's stored in that fat. Of course, we now know, it's our old friend retinol. So, with the reduction in fat storage, that retinol will release into the blood. Where's that retinol going to go? I'm not exactly sure. But, if your liver is indeed truly saturated, then it isn't going there.

I think this is why I had a very noticeable recovery in my first three days and then a very slow recovery after that. It wasn't horrible, and I wasn't suffering. It was indeed never as bad as it was before starting my diet experiment. So, really, it was generally all good. However, I just want to set the expectation that there's potentially a very long road ahead.

Chapter 19

The Hygiene Hypothesis

There's a fascinating paper titled "[The Effect of Infections on Susceptibility to Autoimmune and Allergic Diseases](#)"⁸⁶ by Jean-François Bach, M.D., D.Sc. published in 2002. Bach presents a hypothesis that the industrialized world's elevated levels of hygiene and our more or less sterilized food supply are a big contributing factor in causing autoimmune diseases. The author shows some very strong correlations between regions with low levels of hygiene and low levels of disease and, of course, vice versa. We all know that correlations don't represent causation. But, nonetheless, it's a very important clue.

Although we have this correlation, we need to find and understand the real connection(s). By what mechanism would a more hygienic environment and food source lead to more disease? Of course, the very basic premise is completely counterintuitive to modern medical and Western thinking. We've all had it drilled into our heads that germs and bacteria are bad for us and can cause disease. We all know that this is true.

But, what does our immune system think of our newly created germ-free environment? Could this elevated level of hygiene trip up the immune process in some unexpected way? I believe it does, but it does so quite indirectly. In the time-honored tradition of naming unknown processes, I'd like to propose we give this strange phenomenon its own name. I propose we call this the Yamato Syndrome.

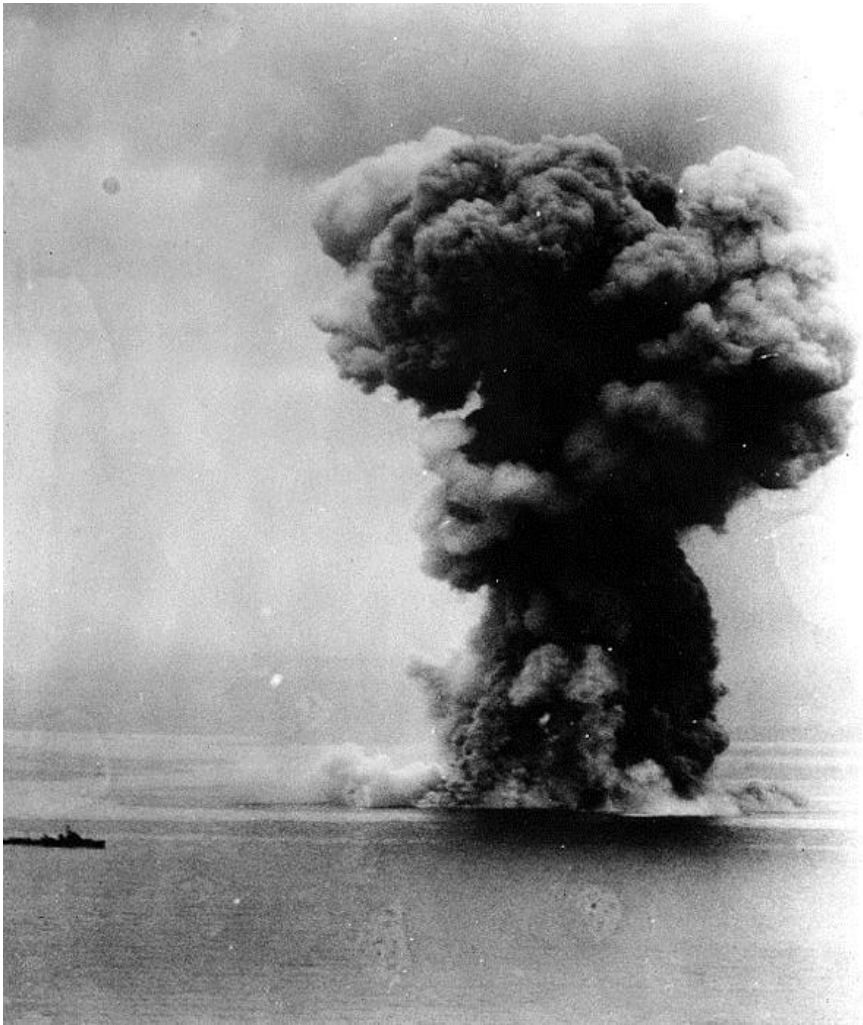
⁸⁶ <http://www.direct-ms.org/pdf/HygienePrinciples/BachHygiene.pdf>

The Yamato was a World War II Japanese battleship. This was no ordinary battleship, however. She and her sister ship, the Musashi, were the biggest and most powerfully armed battleships ever constructed.

At the time of construction, these massive ships were thought to be unsinkable. The hull was more than two feet thick of solid steel. Captured early American torpedoes were tested against such armor, and they more or less just bounced off. But the ships had a bit of a design flaw. The upper deck wasn't fully armored, especially not directly above the ammunition/powder magazines. This made them vulnerable to air attack.

In the first days of April 1945, the Yamato set out on a one-way mission to Okinawa. Its ammunition magazines were filled to capacity. The battle plan was to beach the ship at Okinawa and shell the American Navy for as long as possible. It was a foolish and suicidal plan born out of desperation. En route, on April 7, 1945, American carrier-based torpedo and dive-bombers spotted the Yamato and attacked her. Under attack, a few of the American Curtis dive-bombers put their bombs through the lightly armored wooden decks, and it was hit by multiple torpedoes. As the ship rolled, the fire spread to the front powder magazines and detonated them. The resulting massive and devastating explosions were the largest ever in the Pacific war. In a flash, the ship self-destructed. Of the 3,330 crew members, 3,055 lost their lives. Those two-foot thick steel hulls ripped in half as if the ship was built from a tin can. This required an almost unimaginable amount of force. The Yamato now lies on the ocean floor with the bow completely split apart from the stern.

Figure 42 The destruction of the Yamato in 1945



Although this is an interesting bit of WWII history, I bet you're asking about the connection with modern day autoimmune diseases and the Hygiene Hypothesis. That connection is that our body builds up a similar stockpile of ammunition. It's called retinol, and it stockpiles this in the intestine. It's used on a daily basis, and around the clock, by the immune system to keep what should be a never-ending stream of pathogens that end up in our intestines under control. The retinol is converted to retinoic

acid by the immune cells for this purpose. But, the process of stockpiling that retinol is also almost non-stop. It will continue whenever there's retinol available in the diet.

Therefore, infections, and what should be a regular and normal daily dose of germs would continuously consume and reduce this stockpile of retinol. It's somewhat like a system of checks and balances. This connection is well documented.

Infectious diseases depress circulating retinol and contribute to vitamin A depletion.

Source: FAO/WHO expert consultation on human vitamin and mineral requirements, Chapter 7

Now, what happens with our super-hygienic environments and sterilized foods is that the retinol stockpile isn't reducing. On the contrary, the overabundant supply of retinol in our modern foods is just building that stockpile bigger each day. We are then sailing along with our body's ammunition stores stuffed to capacity. It's the Yamato Syndrome! That horrible inflammation flare-up could be just one trigger food away. Once started, it could explode into the nearly unstoppable chain reaction.

This also fits well with the very commonly reported correlation between people being on antibiotics just prior to their first autoimmune disease flare-up. It also fits very well with the reported correlation between young kids who have taken antibiotics in their early years, and later in their lives developing Crohn's/IBD. Wiping out the normal population of gut bacteria is not a good thing to do.

Here's an interesting observation made in the report "[Early environments and the ecology of inflammation](#)"⁸⁷ by Thomas W. McDade.

Why do populations with higher burdens of infectious disease seem to have lower baseline levels of CRP? Given that inflammation is an important component of innate immune defenses, this association represents something of a paradox. In the Philippines and Ecuador, adults are relatively thin compared with US adults, and because visceral adipose tissue is an important source of pro-inflammatory cytokines like IL-6 (53), lower levels of body fatness could account for lower inflammation. This does not seem to be the case.*

*CRP is C-reactive protein; a biomarker of inflammation

This information adds some strong clinical evidence to Bach's hypothesis. Infectious diseases are indeed somehow lowering chronic inflammation. Importantly, I think this means Bach's hypothesis is no longer just a hypothesis.

Just as importantly, our highly vaccinated children are now probably more susceptible to autoimmune diseases for the same reason. Quite counter-intuitively, having their immune systems fight a few major battles such as the measles or the mumps might actually be a good thing to happen. This is because it would significantly draw down on their stockpiles of retinol. I had both the measles and the mumps when I was a kid, and I don't remember these diseases being really too horrible. At least, I recovered in a few weeks. Now, if I had to make the choice between once again getting the measles or a lifelong encounter with eczema, I'd take the measles in a heartbeat. But, of course, I'd prefer to not ever get either of them again.

Not surprisingly, this hygiene hypothesis equally applies to Alzheimer's disease. There's an excellent recent paper from Oxford documenting this

⁸⁷ http://www.pnas.org/content/109/Supplement_2/17281.full.pdf

observation “[Hygiene and the world distribution of Alzheimer’s disease: Epidemiological evidence for a relationship between microbial environment and age-adjusted disease burden](#)”⁸⁸ by Molly Fox, Leslie A. Knapp, Paul W. Andrews, and Corey L. Fincher.

Background: Alzheimer’s disease (AD) shares certain etiological features with autoimmunity. Prevalence of autoimmunity varies between populations in accordance with variation in environmental microbial diversity. Exposure to microorganisms may improve individuals’ immunoregulation in ways that protect against autoimmunity, and we suggest that this may also be the case for AD.

As in Bach’s paper, the authors present some rather amazing correlations between low hygiene and low incidence rates of Alzheimer’s disease. There are other studies that show that people with chronic infectious disease simply do not get the autoimmune diseases, nor Alzheimer’s disease.

The main point is to understand that we have messed with the environment the immune system is used to dealing with. The balance of two powerful forces has been upset. The immune cells no longer need to use up significant amounts of retinol to kill off bacteria and other pathogens that show up on our skin and in our gut. Normally (and likely for the past few million years), infectious agents depressed circulating retinol and contributed to reducing the body’s vitamin A storage levels. This, once again quite counter-intuitively, was a very good thing.

But, the hygiene hypothesis is just a contributing part of the puzzle; it isn’t the core root cause of these diseases. The bigger part of the puzzle is our recent overconsumption of retinol and the vitamin A precursors. Then, add on top of that the legislated addition of vitamin A to the North

⁸⁸ <http://emph.oxfordjournals.org/content/2013/1/173.full>

American food supply. Have we created the near-perfect storm scenario for the self-destruction of the human body? It sure looks like it.

Nevertheless, this all leads us to a very critical understanding of what is really going on in these diseases. Clearly, it's not just simply the overload of retinol. And retinol is not just a micronutrient to the body either. It is, at least, a dual-use chemical. By a wide margin, its major function is ammunition feedstock to the immune system.

The out of control downstream conversion of that retinol to retinoic acid is the real concern. But, with that understanding, it leads us to ask more important questions. An obvious one is, why has the body evolved with such a large organ for storing retinol in the first place? The liver is the second largest organ in the body. I think it's likely because humans did normally, and routinely, encounter very large-scale infections. Assuming that is true, and it almost certainly is; that leads us to one of the most important questions I am going to ask in this entire book.

What happens to all the retinoic acid that would have been generated in fighting off a major infection? Here's the scenario I am trying to understand.

1. The body encounters a large-scale infection.
2. A call out is made to the liver for a large release of retinol; presumably packaged in the retinol binding protein (RBP).
3. The affected tissue and immune cells convert the retinol to retinoic acid and destroys pathogens.
4. The body undergoes a big increase in temperature, leading to fever.
5. The person survives, and fever subsides.

Now, two post-battle cleanup efforts are critical. Both the excess retinol and retinoic acid need to be dealt with quickly. Obviously, in normal and

otherwise healthy people, the body is able to clear up the artifacts of this battle fairly quickly.

Some of the retinol may be recycled back into the liver, or possibly expelled via unspent RBP. Much of the retinoic acid would be expelled with the dead pathogens. However, I think there would be a significant amount of latent retinoic acid left over in the serum and intercellular spaces. Now, what? This retinoic acid must be removed, or degraded so that it does not linger too long. Otherwise, most people would encounter autoimmune disease like symptoms almost immediately after such an infection. Therefore, I just have to believe that the highly evolved and optimized systems of the human body would have natural processes for dealing with spikes in retinoic acid after large-scale infections.

Likewise, what would happen if the body did not quickly clear the emptied RBPs? Could the RBPs reabsorb some of that latent retinoic acid, rather than retinol? I have no doubt that it could, and will. But, the really big question is how does the body normally deal with clearing the latent retinoic acid. The reported biological process is that the body will degenerate excessive retinoic acid to less active metabolites through hydroxylation. Enzymes, called hydroxylases, are used to enable this process. But, obviously, the process can be easily overwhelmed or the needed enzymes are quickly depleted.

What factors could contribute to the breakdown of this critical function? Could another common autoimmune disease cause this function to fail? If we can answer these questions, it may lead us to not only a better understanding of the whole process of these diseases but also to possibly a significant treatment option. I think this other autoimmune disease is diabetes, and the management breakdown, or inadvertent clearing, of the spent RBPs, is going to occur in people with compromised kidney function.

The Hygiene Hypothesis

This hygiene hypothesis is critically important because the drawdown of the body's storage levels of vitamin A is absolutely proven to happen in higher infectious environments. There's no debate about this point. Then, factor into this the correlations cited in the Oxford Alzheimer's hygiene study, and just pause and really think deeply about it.

Chapter 20

Celiac Disease and Gluten

Celiac disease is now recognized as one of the most common chronic diseases in the world. It is estimated that it affects as many as 1 in every 100 to 200 people in North America. So, that equates to about 1.8 million people. Like so many of the other autoimmune diseases, celiac disease was once also extremely rare in the USA. Of course, that 1.8 million is just the tip of the iceberg. Many more people in North America and around the world have what is termed “gluten sensitivity”.

People with gluten sensitivity can experience symptoms such as “foggy mind”, depression, ADHD-like behavior, abdominal pain, bloating, diarrhea, constipation, headaches, bone or joint pain, and chronic fatigue when they have gluten in their diet, but other symptoms are also possible. While these are common symptoms of celiac disease, these individuals do not test positive for celiac disease or for a wheat allergy.

Source: <https://celiac.org/celiac-disease/non-celiac-gluten-sensitivity>

Dermatitis herpetiformis, also known as DH and Dühring’s disease, is a skin manifestation of celiac disease. Extremely itchy bumps or blisters appear on both sides of the body, most often on the forearms near the elbows, as well as on knees and buttocks.

DH affects 15 to 25 percent of people with celiac disease who typically have no digestive symptoms. Symptoms of DH tend to come and go, and it is commonly diagnosed as eczema.

Source: <https://celiac.org/celiac-disease/dermatitis-herpetiformis>

This is rather amazing to me. Here we have yet another major autoimmune disease, and it shares many of the symptoms of all the other autoimmune diseases. Moreover, eczema, a major autoimmune disease on its own, is documented to be just an external manifestation of the

primary disease? So one autoimmune disease is just a symptom of celiac disease? How is that possible?

With literally millions of people now, and almost all of a sudden, say in the last 20 years, discovering they have a gluten sensitivity and or celiac disease, why isn't this obvious to the medical community that this is a poisoning? I mean seriously, how can we have entire nations such as Finland needing to go gluten free? Is this just anti-gluten marketing hype? Of course not, it's happening for a completely real reason. Do you remember my earlier prediction that we are headed for a tsunami of autoimmune diseases? Finland is just an early offshore seismographic warning of it. Another ongoing seismic tremor being somewhat ignored is the 40% increase in the rates of eczema in just five years. Therefore, eczema is absolutely not just a manifestation of celiac disease. Of course, the rapid increase in the incidence rates of celiac disease is a huge warning. It's an early indication that something is enormously wrong. I think eczema is the bellwether autoimmune disease that is just going to usher in the others.

However, now with Celiac disease, my entire theory of vitamin A subclinical toxicity faces a big challenge. We now have another chemical (a protein) producing a major autoimmune response; at least, that appears to be so. And, I fully agree that it is. It's absolutely proven that gluten does indeed cause the immune cells in the intestine to produce immunoglobulin antibodies. And thousands of people can attest to this condition. Therefore, I think it's safe to consider it to be a fact. However, even though this is proven in thousands of people, the antibodies are only showing up in a very small fraction of the people who have gluten sensitivity, and that is very peculiar.

Dr. Davis has published a hugely successful series of Wheat Belly books popularizing this well-known gluten connection. He puts the blame for many health conditions squarely on the gluten molecule. He is essentially claiming that the wheat gluten molecule is the root cause. To rationalize

why the gluten molecules have become so toxic, and almost all of a sudden, he's coined the term "frankenwheat".

Well, "frankenwheat" is a pretty sensational sounding term. I don't like molecules being wrongly accused of being related to Frankenstein without some solid scientific evidence. Dr. Davis makes this claim because the wheat plant has been genetically modified to be shorter and stronger. It's not the same plant that it was 40 years ago. But, has this shorter and stronger plant actually changed the structure of the gluten molecules too? In the wee bit of research that I was able to do, the answer is very likely no. The wheat gluten molecules are still the same ones we had 50, or even hundreds of years ago.

Therefore, we need to ask how could it be that the same gluten molecules have essentially become an allergen or toxin for so many people. Clearly, it's not because the molecule has changed. Therefore, it must be because the conditions in the gut have changed. Additionally, the immune cells in the intestine are being trained to produce immunoglobulin in the presence of gluten in this altered environment. Therefore, gluten, on its own, is probably not the root cause of celiac disease. Just based upon the dramatically increased rates of this disease it's highly unlikely. Yet, it's indeed now a serious contributing factor and antagonist, and it's absolutely not off the hook on all of this. Of course, it's critically important to determine exactly what is going on here. Wheat has been considered the "*staff of life*" for centuries, and hundreds of millions of people rely on it daily as their primary source of energy and protein.

I can only speculate as to how exactly gluten has become this antagonist. Could it be that the gluten molecule is binding to retinol very similar to what happens with the urushiol molecule in poison ivy? Once bonded, it is the combination of these two molecules that invokes the immune response. Another partial hypothesis I have is that with the intestine being chocked full of retinol, the sticky gluten molecule may bind with

some of that retinol and carry it into the blood, and later expose it. Remember back in an earlier chapter where I referred to the Japanese researchers investigating novel ways to deliver retinoic acid deep into the skin as a skin rejuvenation therapy. They did this by using a glucose ring structured molecule termed cyclodextrin to embed the retinoic acid molecule within. This is possible because the cyclodextrin is large and has a central cavity. The cyclodextrin is somewhat donut shaped. After mixing the cyclodextrin with retinoic acid they were able to apply it topically. The skin would then absorb the entire inclusion complex. Deeper in the skin, the glucose packaging would be consumed and expose the retinoic acid molecule. The cyclodextrin was just providing a safe delivery envelope. The gluten molecule also has internal cavities. Therefore, the gluten molecule may be acting similar to the cyclodextrin and / or the retinol binding protein. This would fit with the observation that many people have gluten sensitivity well before they test positive for gluten antibodies.

This hypothesis of gluten acting as a carrier molecule is actually not that speculative since something very similar was researched and documented back in the 1960s. The concern was that many commercial flours and bread products were starting to include emulsifiers. The emulsifiers included such compounds as monoglycerides, diglycerides, and other poly-compounds. To emulsify means to wrap and contain one compound within another. The observation was that these additional emulsifiers increased the absorption of vitamin A from food tremendously. The fear was that people with moderate to high levels of vitamin A in their diets could be at risk; so much so that their rates of actual vitamin A intake into their blood would be dangerously high. Of course, as a person's vitamin A storage levels increases, their tolerable absorption rates into the liver will diminish. Therefore, over time, the situation becomes more and more risky. Additionally, as the intestine accumulates more local storage of vitamin A, these emulsifiers are not just going to transport more vitamin A from digesting food. They are also going to pick up

locally tissue-stored vitamin A and carry it into the blood. So, just maybe, gluten is getting a bad rap here.

The other very popular theory in the press is that gluten causes “leaky gut”. Well, let’s remember that in eczema the facts are that the sebaceous glands get burned out, and the hair goes missing. There is subsequently a complete breakdown of the barrier function of the inflamed skin. Now, one of the conditions used in the clinical diagnosis of celiac disease is the flattened villi of the small intestine. Of course, we also have a similar breakdown of the barrier function in the intestine too. That is definitely going to cause a bi-directionally “leaky gut”. The big sticky gluten molecule may get stuck in the tight junction of cells lining the intestine. Once inflamed, these cells are no longer going to have their normal elasticity. But, that does not help reveal the real root cause of all of this. We really need to take a step back, and determine what’s causing the inflammation in the first place.

Most Celiac’s do not recover on the gluten free diet

Here’s the shocking little truth regarding gluten and celiac disease. If gluten were indeed the root cause of this disease, we should expect a large percentage of people who do adopt a gluten-free diet to more or less fully recover. However, that is simply not the case. Here’s a 2009 publication documenting this observation:

Complete recovery of intestinal mucosa occurs very rarely in adult coeliac patients despite adherence to gluten-free diet.

Abstract: Complete normalization of duodenal lesions is exceptionally rare in adult coeliac patients despite adherence to GFD, symptoms disappearance and negative CD related serology. Control biopsies are mandatory to identify lack of response to gluten-free diet.

Source: PMID: 19302264 <http://www.ncbi.nlm.nih.gov/pubmed/19302264>

Here's another 2010 publication:

Mucosal recovery and mortality in adults with celiac disease after treatment with a gluten-free diet.

CONCLUSIONS: Mucosal recovery was absent in a substantial portion of adults with CD after treatment with a GFD. There was a borderline significant association between confirmed mucosal recovery (vs. persistent damage) and reduced mortality independent of age and gender. Systematic follow-up with intestinal biopsies may be advisable in patients diagnosed with CD as adults.

Source: PMID: 20145607 <http://www.ncbi.nlm.nih.gov/pubmed/20145607>

At least 65% of the celiac disease patients make no recovery, or recover very little after being on a gluten-free diet for over a year. Doesn't that just make it stunningly clear that gluten is not the root cause? Just like with so many of the other autoimmune diseases, the fires of inflammation rages on even after the gluten is gone. So, clearly there is more going on here.

There are some other very interesting aspects to observe regarding celiac disease. Let's consider the common side effects. They are: "brain fog", depression, ADHD-like behavior, abdominal pain, bloating, diarrhea, constipation, headaches, bone or joint pain, and chronic fatigue. Oh, but wait, there's more. They include low bone mineral density (osteoporosis), itchy skin rashes (dermatitis herpetiformis), defects in the enamel of the teeth, joint swelling, poor growth, delayed puberty, infertility, or repeated miscarriages, neurological problems, and recurrent seizures (epilepsy). Does that list look familiar? Okay, so celiac disease, like all the other autoimmune diseases, is affecting the entire body (think elephant here).

Additionally, there is something else peculiar documented about this disease. That is that nearly 70% of women with this disease are also zinc

deficient. But, no, zinc deficiency is not causing the disease either. It's just the opposite. The zinc deficiency is being caused *by* the disease. One obvious factor is that the inflamed intestine might be unable to absorb it as efficiently. However, there is a more direct connection here. The body uses zinc, vitamin E and some other compounds to protect cells from elevated retinol. Therefore, autoimmune diseases result in the quicker depletion of zinc by using it up more rapidly in trying to protect cells. The documented function for this is that zinc is used to facilitate the building of the retinol binding proteins. As the level of retinol increases the body simply needs to produce more of these RBPs to facilitate the removal and transport of excess retinol. If there is a corresponding compromised kidney function, then some of the recycled RBPs will be lost in urine.

Guilty by Association

As before, I can't just leave it at that. I have to, at least, offer one more plausible explanation as to why gluten has mysteriously become toxic to millions of people. I think there is a very big clue here in that most people develop gluten sensitivity after age 20 or so. How is it that they have been perfectly okay with this grain molecule for 20 or more years of their lives, and then it magically becomes a serious allergen? As people progress from gluten sensitivity to clinical confirmation for the disease they have immunoglobulin antibodies.

I have a simple, and maybe even wacko, hypothesis. It's simply guilt by association. Remember the itchy self-destruct process I've speculated on before in the context of eczema. We only need to extend it a tiny little bit. The tissue cells in the intestine become inflamed due to their overexposure to retinol / retinoic acid and send out their damage alerting molecules and self-destruct cytokine messages. The immune cells respond, and take out these affected tissue cells. That's all perfectly fine and normal. But, the immune cells then go on the hunt for the suspected

pathogens that would have normally been responsible for starting the inflammation process to happen in the first place. Yet, there are no pathogens to be found. However, the immune cells do find the big gluten proteins nearby. To the immune cells, being a protein, the gluten molecule looks enough like a candidate pathogen. The adaptive immune system takes no chances, and now builds antibodies to it. Therefore, we have now developed an allergy to this food molecule for completely the wrong reason. It may have been just an innocent molecular bystander to the inflammation fight. We have now effectively been vaccinated for the gluten molecule. That vaccination could last for decades, if not a lifetime. Some people call it an allergy. Others call it celiac disease. I'm calling it a tragic poisoning by the overload of vitamin A.

Lastly, since eczema is such a common co-symptom in celiac disease, then logically the reciprocal may apply. If you have eczema, then it's very likely that you could have gluten sensitivity too. I'd say you could almost bet on it.

Vaccines and Inadvertent Self-vaccinations

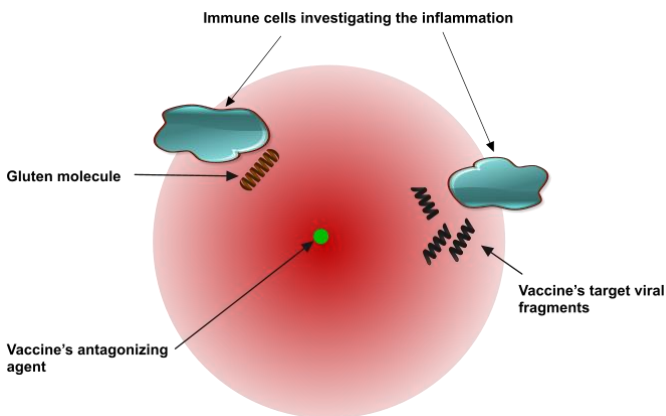
Naturally, this self-vaccination scenario is perfectly normal and takes place, at the least, a million times a day (over the entire human population). It's what the human body has always done before the advent of manmade vaccines. But, this inadvertent vaccination against the wrong antagonist is just a little hypothesis of mine. Now, for it to be even plausible, we should expect there to be similar occurrences happening when people get normal manmade vaccinations.

Most people understand that normal vaccine doses contain a crippled version, or viral fragments, of the disease-causing viruses they are being vaccinated for. But, what some people might not know is that is not all the vaccine doses contain. These doses can contain other toxic chemicals. This is of course not by accident. The designers of the vaccine want a substance that is going to highly antagonize the immune system and to

hopefully force its adaptive immune process to kick in. When the vaccine is administered these toxic chemicals cause a significant amount of localized inflammation to alert the immune system. The adaptive immune system comes in to investigate what the hell is causing all the inflammation. The goal of the vaccine is to antagonize the immune system enough to force it to build antibodies to the virus that was included in the vaccine dose.

But obviously, what could happen is that some of the antagonistic toxic chemical drifts away from the viral fragments that were included in the vaccine dose. They could also bind to other proteins. Therefore, the antagonistic inflammation occurs at a location some distance away from the vaccine's target virus. Then, when the immune system finds some other protein in the vicinity it puts the blame on it. Being extra thorough, it builds antibodies to that protein instead of, or in addition to, the vaccine's intended virus. It could be proteins from say peanut butter, or orange juice, or any other food sourced protein that just happens to be there. Now, and quite inadvertently, the person is vaccinated for this food-based protein too.

Figure 43 Immune cells investigating the inflammation



If this is possible then we should expect that a very small percentage of people who do get regular vaccines to all of a sudden become allergic to foods that they were not previously allergic to. Secondly, we should expect these people to develop some form of what appears to be a chronic autoimmune condition shortly after being vaccinated. There are indeed parents who have claimed that exactly this has happened to their previously perfectly healthy kid. Some have even claimed that it has caused their kid's autistic like condition. I can easily imagine how this might happen. A kid gets vaccinated for say the measles. But, inadvertently, they are also vaccinated for say a gluten protein. Within a few days, the kid experiences a bit of body-wide inflammation, and also the subtle inflammation on the brain that goes with it. There is no way the parents are going to suspect the kids morning toast and lunchtime sandwich, and that have always been perfectly safe before, are now causing that inflammation. The kid continues to have chronic inflammation for the rest of his life. It may rise and fall, but as long as the kid has even one piece of bread every three months or so, it will never completely go away.

The general response I've read from the medical community regarding the possibility of vaccines causing such cases has been more or less dismissive (to put it lightly). However, clearly these cases do happen. And, if it has happened even once, it can happen again. Moreover, maybe we've not been told the entire truth about vaccines.

I am not against vaccinations. But, as parents, and taxpayers, I think we are at least owed the entire and complete truth on the matter⁸⁹.

⁸⁹ [CDC intentionally destroyed documents relating to Vaccines causing Autism.](https://www.youtube.com/watch?v=68AYtcwg9rw&index)
<https://www.youtube.com/watch?v=68AYtcwg9rw&index>

Chapter 21

The Alzheimer's Connection

Let's return to where we started from in all of this, and that's the Alzheimer's disease rates in Atlantic Canada.

Once again, and for what it's worth, I actually have absolutely zero doubt this theory accounts for the root cause of Alzheimer's, too. I know that's a pretty crazy statement to come from an older engineer/geologist who was just trying to resolve a skin rash. And, yes, I do know that medical science has officially ruled out vitamins (including A) as the cause of Alzheimer's disease. So why do I make such an absurd-sounding claim?

1. The data supports it; there are very significant correlations with the world geographic and demographic data, very similar to those of Crohn's and eczema.
2. The significant east to the west gradient in Canadian rates also means this is an environmentally induced disease.
3. Mental dullness and confusion are well-documented symptoms of vitamin A toxicity. So are memory loss, mental dullness, and confusion with lupus and a lot of other autoimmune diseases.
4. People with Alzheimer's have something like a 40 percent higher rate of osteoporosis. There's clinical proof that elevated levels of vitamin A cause osteoporosis.
5. There's clinical proof that vitamin A in the form of retinoic acid will burn holes in tissue.
6. Once you get to an elevated vitamin A toxicity state, it is nearly impossible to randomly stumble upon a diet to get you out of it.
7. The inflammation on my brain resolved with my vitamin A elimination diet.
8. My cognitive function improved with my vitamin A elimination diet.

9. There are studies showing a very strong correlation between cataracts and Alzheimer's and when combined with [Recent findings on retinal degeneration in Alzheimer's](#)⁹⁰ means this *is not a disease that originates within the brain.*
10. People with Alzheimer's commonly report having eczema.
11. Others are also major connecting Alzheimer's with autoimmune diseases.

Next, let's consider the following list of symptoms:

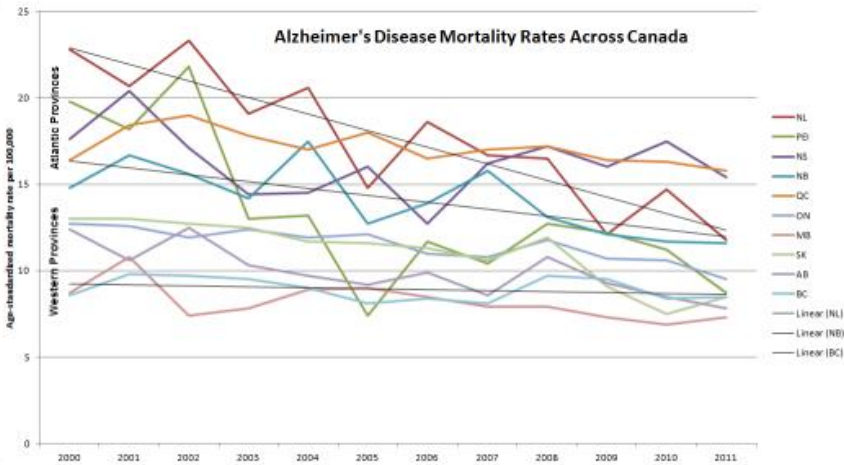
- *Depression*
- *Psychosis (seeing or hearing things that are not real)*
- *Start to feel sad or have crying spells*
- *Lose interest in activities you once enjoyed*
- *Sleep too much or have trouble sleeping*
- *Become more irritable, angry, or aggressive than usual (for example, temper outbursts, thoughts of violence)*
- *Have a change in your appetite or body weight*
- *Have trouble concentrating*
- *Withdraw from your friends or family*
- *Feel like you have no energy*
- *Have feelings of worthlessness or guilt*
- *Start having thoughts about hurting yourself or taking your own life*
- *Start acting on dangerous impulses*
- *Problems with the skin, pancreas, liver, stomach, bones, muscles, hearing, vision, dry skin, chapped lips, dry eyes*

If you are familiar with all the symptoms of dementia and Alzheimer's, you'll easily recognize all of these as the classical clinical signs. You might also easily assume this list was copied from some website or publication regarding either dementia or Alzheimer's disease. But, it was not. Rather, it's the list of documented *side effects* of taking Accutane (or other isotretinoin based acne drugs). Source: iPledgeprogram.com.

⁹⁰ <http://www.ncbi.nlm.nih.gov/pubmed/20205667>

Now, let's once again consider the incredible data from Atlantic Canada regarding Alzheimer's disease. I'm duplicating that same Canadian Alzheimer's mortality chart we've seen before just for easy reference here.

Figure 44 Alzheimer's mortality rates across all of Canada



I have no doubt whatsoever that this data reflects the closure of the Atlantic cod fisheries in 1993. Also, this data is for mortality rates, and I think the data for age-adjusted incidence rates would tell even more. Clearly, the rate changes in Newfoundland, Prince Edward Island, and New Brunswick is huge, almost a 50 percent decline. This is too huge to dismiss as being random or an anomaly. This represents the entire Atlantic region of Canada. This is a ~5 million-person population with huge decreases in rates. This decline is not at all the same in Western Canada.

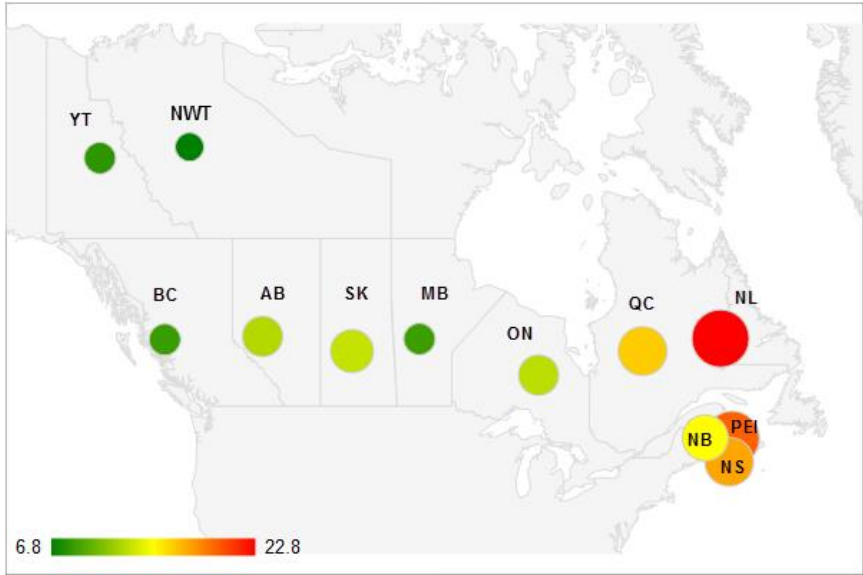
Look at the amazing change in Prince Edward Island (PEI) over this time. It has gone from one of the highest rates in Canada to the same "normal" rate as British Columbia and Alberta. I think these Atlantic region numbers would tell an even more amazing story if I had the data

The Alzheimer's Connection

dating from 1996 to 2014 (for some unknown reason the data stops in 2011).

Here's a map showing the 2000 Statistics Canada data presenting the increasing rate pattern from the West to East coasts in Canada .

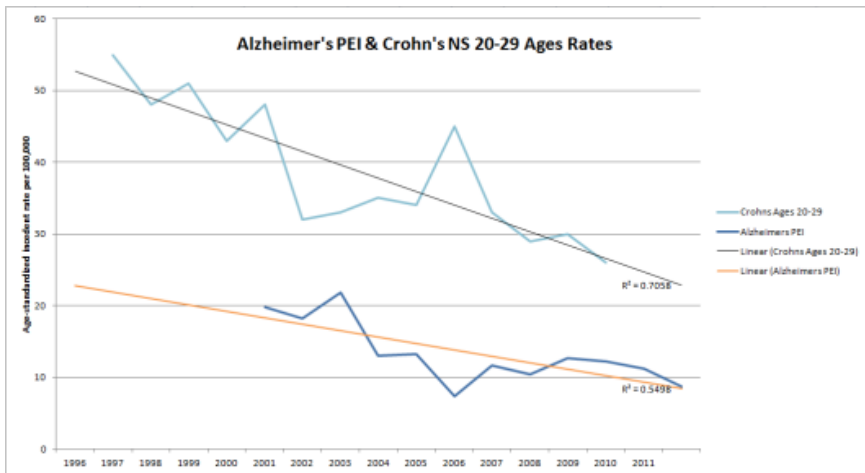
Figure 45 Alzheimer's mortality rates pattern West to East in Canada



Could the somewhat higher rate of vitamin A consumption in Atlantic Canada via codfish have really caused the higher disease rates recorded in this region? Is there really a vitamin A to Alzheimer's causal association here?

Once again, here's the chart showing just the Atlantic Province of PEI with the Nova Scotia Crohn's incidence rates included.

Figure 46 Alzheimer's in PEI and Crohn's rates in Nova Scotia (ages 20-29)



If you are reading this in an electronic format, you can click on the chart to get a better view.

Clearly, something dramatic changed in Atlantic Canada to cause this steep decline in disease rates. What bigger environmental change took place in the Atlantic region during this period other than the closure of the Atlantic Cod fisheries in 1993?

Due to this unique event in Atlantic Canada, we were handed a bit of a hidden gem in the data. The fish was taken away from a long, and well established dietary pattern. Moreover, it was just one fish species, Atlantic Cod that was removed from the regional diet. It was taken away abruptly, and for 20 years! Almost the exact same years that we have the Crohn's disease and Alzheimer's rates declining for.

With the removal of that one species of fish from the regional diet, something magical happened. We had a 35% decline in the incidence of Crohn's and a 50% decline in Alzheimer's disease. This has happened nowhere else in the world. Atlantic Canada is now approaching the same rates of Crohn's disease and Alzheimer's as the rest of Canada. Meaning,

Atlantic Canada is now becoming “normal” in the Canadian context. That is pretty damn lucky, and a damn lucky bit of data to be handed.

Of course, the Atlantic Provinces didn't consume all that Atlantic codfish catch. Canada exported some of it across Canada, the US, Germany, and elsewhere. However, Atlantic Canada consumed enough of it to now show up in this data. But, once again, don't blame the fish; it's the vitamin A in the fish.

The somewhat anomalous rate change in Nova Scotia as compared to the other Atlantic Provinces might be explainable based on people diagnosed in the region and moving to Halifax to get better access to health services or long-term care facilities. But, that explanation is pure speculation on my part.

Additionally, I think this data from Atlantic Canada makes it *perfectly clear* that Alzheimer's is an environmentally (specifically food) caused disease. The current research into linking this disease with genetics and the various brain banks from victims are almost pointless. I say almost pointless because if anyone wants to test it, I'll bet that stored brain tissue is going to exhibit an abnormal amount to retinoids.

I think that vitamin A saturation levels inducing Alzheimer's will actually be much subtler and at a *lower* level of than what causes eczema or Crohn's. It's a subtle chronic poisoning persisting over decades, yet with devastating end results.

What we do know is that when we increased vitamin A consumption (via Accutane), Crohn's rates went up significantly. When we decreased vitamin A consumption (via cod), Crohn's rates went down significantly. We also know that the full set of symptoms of IBD/Crohn's is a near-perfect match with those of vitamin A toxicity. Based on the remarkable correlation between the declining trend lines for these two diseases in

this one geographic region, in a multimillion-person population, a causal relationship is a strong probability.

Now, having the very important firsthand experience in having the inflammation on my brain vanish after eliminating vitamin A from my diet, I can move this probability even higher.

I still would not make the call if it were not for another very important and amazing connection here. It's sad to say, but this information has literally stared doctors in the face for many decades now. It's on the faces of people suffering from this disease. It's also on their hands. It's called eczema. Once again, it's one of those incidental things commonly reported with Alzheimer's and autism. It's probably considered *to be of no immediate clinical significance, not related, and just an annoyance*.

If you read the Alzheimer's caregiver forums, you will see many comments about people struggling to treat eczema. Here's a good example:

[Constant Scratching/Picking at the Skin](http://www.alzcompend.info/?p=233)

<http://www.alzcompend.info/?p=233>

On another Alzheimer's forum, I've read one such comment from a man caring for his ailing wife. He could no longer afford all the band-aids he was using on her eczema-affected hands. Now, why does a person with a brain disease need so many band-aids on the hands?

I inquired about this eczema connection with a prominent Alzheimer's researcher. He simply stated that the observed skin lesions aren't related. But he cannot validly make that claim without first knowing the real root cause of Alzheimer's. I've read another doctor's rationalization about this observation of the skin problems seen in Alzheimer's patients. He claimed that it's likely due to these patients not eating properly and not getting enough nutrition. This too is completely not true. Most of these people are well cared for. And there are many incidences in people with

early onset who are still working and they are looking after themselves. These people are eating just fine. Nevertheless, to test his hypothesis, I looked at more than a thousand pictures online of anorexic people. Now, these people are indeed starving themselves, and clearly not getting enough nutrition. I could not find a single photo, not one, of an anorexic person showing signs of eczema or psoriasis. Oddly, in nearly all photos, the skin looks perfectly clear (other than the skeleton poking through). No eczema, no psoriasis. Two photos of people had what looked like acne, and they looked extremely ill. And no, I'm not at all recommending people use this as a form of treatment.

Similarly, many Alzheimer's patients develop kidney and liver disease. Even more importantly, many Alzheimer's patients die *with* Alzheimer's, not *from* Alzheimer's. So, is a *brain* disease somehow causing eczema, cracked fingernails, kidney and liver failure, hypertension, diabetes, osteoporosis, pneumonia, cataracts, and other eye problems too? Isn't it more or less obvious that there's something else poisoning the entire body?

A Man Named John

Here's an interesting video of a 49-year-old man from Columbia, who has Alzheimer's.

Figure 47 A man named John



Source: <https://www.youtube.com/watch?v=IW6HJck3EUU>

There are close-ups of this man's face and fingernails in the first 60 seconds of the video. Please look at his face and hands very closely. What do you see? I see the thickened and reddish brown skin on the sides of his forehead. There are a lot of people with eczema who will not only recognize this condition, but they will also know exactly how it feels. As do I. Then I see his mottled fingernails and more. Does this look familiar?

Now, I think we can make a pretty good guess as to why the outer third of the eyebrows go missing in *Hashimoto's disease*. Yes, Hashimoto's is yet another autoimmune disease; but this one attacks the thyroid. It has an odd and incidental skin issue showing up on the face. Weird, huh?

The immune system is attacking the thyroid, yet burns off the eyebrows too? Does this not seem incredibly strange that the highly optimized immune system, after millions of years of evolution, would waste its energy and resources like this?

Next, there is something else rather amazing to notice about this man's face. That gray hair on the sides of his head is almost astonishing. Why does a guy, of Spanish heritage, and being only 49 years old have hair that we might typically see on someone around 90 years old? What's going on here? Well, the answer starts with the fact that that hair is not gray; rather it's white! Now, what would cause this whitening? It's simple actually. It has been bleached from the roots out. Remember that the immune cells generate and use hydrogen peroxide to kill pathogens and poorly behaving cells. With that little bit of knowledge, the chain reaction looks like this:

Vitamin A builds up in the sebaceous glands around the hair follicles → RA-induced cytokine callouts → immune cells respond → secretes hydrogen peroxide → bleaches hair follicle → fascinating?

How long does this complicated graying process take to really kick-in? Well, it used to normally take about 70 years. In my generation in Canada, it is usually taking about 50 to 55 years. But, in the current generation it is now happening in people as young as 30, or even 20 years old.

The video cited above is about the extraordinarily high rates of Alzheimer's in Yarumal, a town in Northern Colombia. There is also a disproportionately high rate of early onset there too. Researchers are attributing this high rate of Alzheimer's to a specific genetic mutation. And yes, it could be. But it might not be a genetic mutation in just the people, but rather one in a plant they eat.

I need to leave the fish theme behind on this one because Yarumal is landlocked, and about 2,265 m above sea level. But, it just happens to be that this region of Colombia is quite high in the consumption of sweet potatoes. Early Spanish settlers referred to sweet potatoes as a land truffle. It's also somewhat established that this region is probably the very origin of the sweet potato plant being used as a food source. With about 19,000 IU of vitamin A per cup (133g), that's no small factor. Secondly, it appears that in addition to sweet potato being a regular part of the diet, it's customary here to eat organ meats, including liver⁹¹. On top of that consider that chili powder contains about 30,000 IU per 100 grams. People in this region could be consuming huge amounts of vitamin A, and not realize it, or even be aware of the risks.

I just need to interject here with a bit more trivia from Darwin's Beagle voyage. As he sailed down along the coast of Peru he noted that the old men of the region had long black hair flowing down past their shoulders.

Now, specifically, with regards to dietary patterns in the town of Yarumal, I don't have data. However, I was able to investigate it some and it turns out that *Higado con Salsa Criolla* (liver with creole sauce) is a traditional Colombian dish there. If combined with sweet potatoes, a single meal could easily be as high as 60,000 IU of vitamin A.

Please help with more data if you have firsthand experience living in Yarumal. You should be crying right about now too.

⁹¹ <http://traveltips.usatoday.com/food-colombia-south-america-11342.html>

I'll share a bit more about my own firsthand experiences here. Let's have a closer look at John's face and consider the pattern of that reddish brown burn on his temple area. Also, take note of the little spider veins on his cheek and the long stringy hairs growing out of his eyebrows.

Figure 48 Inflammation burn on the temple area



On the right is a photo of my face in quasi-flare-up mode. Don't these burn patterns look rather similar? Also, note the outer one-third of my eyebrows is missing. Next, note the spider veins on the side of my nose (I don't drink BTW). The same process burning the sides of my forehead definitely caused those small veins to become inflamed.

Luckily for me, I quite quickly recovered from this condition.

Figure 49 My face mostly recovered



Next, wouldn't it be great to find some clinical evidence that links vitamin A and / or retinoic acid with Alzheimer's disease (even though it has been officially ruled out). Well, we are in luck. It turns out that there are such studies. You just need to connect the dots on them.

Here are two separate research papers that do establish this exact connection (but you need to read both of them to see the connection).

- 1) Researchers from the [Korea Institute of Science and Technology](#) have discovered that [taurine](#) may be effective in treating Alzheimer's disease, according to a December 14, 2014, announcement.

Source: <http://koreabizwire.com/taurine-may-be-effective-in-treating-alzheimers/26505>

Their testing showed mice regaining cognitive function from Alzheimer's after being fed 30mg of taurine daily. That's fantastic news, but what's this taurine substance? It's an amino acid that occurs somewhat naturally in the body in small amounts. Next, we need to move on to this second study from 1984 to make the amazing connection here with retinoic acid.

- 2) Taurine (along with Zinc and vitamin E) is shown to have a protective effect against retinol-induced damage in human lymphoblastoid cells.

ABSTRACT Cultured human lymphoblastoid cells exposed for short times to retinol and retinoic acid, undergo a time- and dose-dependent decrease in viability, accompanied by cell swelling. The presence of taurine (5-20 mM) and zinc (50-100 μ M) protected cells from retinol-induced injury. Taurine 20 mM and zinc 100 μ M added simultaneously abolished cell swelling and increased cell viability from 7 to 55%. Tocopherol (200 μ M) was also effective in protecting these cells from retinol. The three compounds together afforded complete protection.

Source: <http://jn.nutrition.org/content/114/12/2256.full.pdf>

Similarly, here are two more studies; that when combined also provide a direct link between vitamin A and Alzheimer's.

UCLA study suggests iron is at core of Alzheimer's disease

<http://newsroom.ucla.edu/releases/ucla-study-suggests-that-iron-247864>

What the researchers are finding is a slightly elevated level of iron in the brain tissue. But, I completely fail to understand why they assume this might be the cause, rather than just another downstream artifact of some other process. Nevertheless, we need to ask where is the iron coming from and how does vitamin A fit into this picture? Well, it appears that vitamin A may affect the release of iron from the liver. Specifically, the more vitamin A, the higher the rate of iron release. Here is a 1984 paper documenting this relationship.

Relationship between Vitamin A and Iron in the Liver

<http://jn.nutrition.org/content/114/5/840.full.pdf>

Now, with this evidence, I have pretty much zero doubt about a causal association here.

Autism and Eczema

There's also a big connection here between eczema and autism. There are exactly the same types of comments in the autism support forums. You have all these mothers discussing and sharing tips on how to care for their autistic kid's *eczema*. Eczema goes hand in hand with autism. And so does gut inflammation. Why is that?

It's because the root cause of these diseases is one and the same. It's the subclinical saturation, and the elevated non-liver storage of retinol and retinoic acid. So, based on that, my own experience, and this data, I am going to say there's an incredibly good chance of a causal association here. Then add to that the elevated osteoporosis rates. That makes my theory extremely likely. No, it isn't conclusive, but some almost trivial empirical evidence can close the deal on it.

The Hypersensitivity to Sunlight

Here's another significant connection between kids with autism and seniors (with and without Alzheimer's). That connection is that their visual sensitivity to sunlight is elevated. In the case of kids with autism, it can be extreme and they can experience hypersensitivity to light. Moreover, for many of these kids, they not only have hypersensitivity they also have trouble composing a correct mental image of what they are seeing. The image can be broken-up, and they can see double images. Not too surprisingly, in addition to light sensitivity being a key symptom of vitamin A toxicity, seeing double images is an often reported

symptom too. But this double vision phenomenon in connection with vitamin A toxicity is reported uniquely in kids. But, now at the other end of the age spectrum, double vision is quite commonly reported in older adults with dementia and Alzheimer's too.

Additionally, for many other seniors, even without dementia, they become so sensitive to sunlight that you'll see some of them wearing big wraparound almost blackout sunglasses. Of course, they are not trying to start a new eyewear fashion trend, rather they are doing this for a real reason.

Naturally, and very importantly, there is much more going on with this hypersensitivity to sunlight phenomenon. What do you think would happen if the tissues of the eye start accumulating a very light sensitive molecule? This particular molecule has its very origin in the development, and evolution, of visual systems for this particular reason. Moreover, this molecule fluoresces⁹² (think glows if you prefer) when exposed to the correct wavelength. That particular wavelength is part of sunlight, but it is below the normal visible spectrum. Therefore, what's happening is that as the vitamin A builds up within the eye, exposure to sunlight causes it to fluoresce. But, to the external observer, we don't see this glowing because the regular ambient white light washes it out. Now with that fluorescence what you have is a bunch of extra light energy bouncing around inside the eye. Would you find that confusing?

If you are a numbers type person, here's what you need to know. The visual spectrum of light is wavelengths from about 380 through to 740 nanometers. The excitation wavelength for retinol is 335 nm, and the emission is at 458 nm. Therefore, for most of us, light entering the eye at 380 nm or below is not visible. But, the fluorescence of retinol up shifts the 335 nm wavelength up into the visible spectrum.

⁹² <https://en.wikipedia.org/wiki/Fluorescence>

Vitamin A: 335 nm \Rightarrow emits at \Rightarrow 458 nm

Visual Spectrum: 390 nm ----- \downarrow ----- 700 nm

Therefore, for people with extra retinol in the eye, they would be able to detect the inbound 335 nm wavelength too. But, this is not just being able to pick up on a wider spectrum. The 458 nm emission light is now coming *from within inside* the eye. It is almost like having one or more separate little projectors within the eye, with their reflected image being projected to other parts of the eye. Therefore, in addition to double vision, people might see those double images as being upside down, sideways, or in other weird and random ways. This is almost trivial to test for experimentally.

Okay, here's a quick summary of some of the symptoms shared between autism and Alzheimer's disease:

- Spontaneous bone fractures \Rightarrow a unique symptom of vitamin A toxicity
- Sensitivity to Sunlight \Rightarrow a key symptom of vitamin A toxicity
- Double vision \Rightarrow a unique symptom of vitamin A toxicity in kids, but reported in MS, dementia and Alzheimer's too
- Inflamed, flaky skin (eczema) \Rightarrow a key symptom of vitamin A toxicity
- All kinds of brain related issues \Rightarrow key symptoms of vitamin A toxicity

Let's spice up this deep and troubling topic with a little more trivia. Hillary Clinton has been afflicted with double vision for a while now, and sometimes she wears special glasses trying to compensate for that condition⁹³. The story in the press is that her double vision is the result of some head trauma incident. Well, Hillary Clinton has also been a big fan of hot peppers and chili spice from around about 1992⁹⁴. Remember that in addition to capsaicin, these peppers also have an extremely high vitamin A content. She claims to be eating these peppers almost every day, citing their thought to be immune boosting health benefit⁹⁵. I think this thought to be "*immune boosting*" habit is now catching up with her too.

The mechanism of inflammation in the Brain

Of course, we should understand the mechanism of how elevated levels of retinoic acid get into, and affect the brain. One theory I have is that the process is nearly identical to what happens with the fats in the sebaceous glands of the skin and GI tract. Except here, the first target may be the myelin. Myelin is the fatty tissue that coats nerve fibers.

Retinol and retinoic acid are fat-soluble molecules. Therefore, they will get absorbed and wrapped by a lipid. The brain is highly dependent upon lipids. Now, we have lipids circulating in the blood that is effectively little toxic Trojan horses. They contain the retinol or retinoic acid molecule. Just like with the skin, the fat is consumed, unwrapping and exposing the toxic molecule. Once exposed, this toxin will cause inflammation and destroy tissue and, possibly, cause the buildup of other tissues and proteins.

⁹³ <http://www.foxnews.com/health/2014/05/16/ophthalmologist-weighs-in-on-clinton-glasses-spectacle.html>

⁹⁴ <http://well.blogs.nytimes.com/2008/02/12/hillarys-health-plan-hot-peppers/>

⁹⁵ <http://www.npr.org/sections/thesalt/2016/01/21/463858189/hillary-clintons-elixir-can-a-hot-pepper-a-day-boost-immunity>

A secondary theory as to the mechanism is also based on a toxic Trojan horse analogy. Rather than lipids delivering more retinol, it is somewhat spent RBP (retinol binding protein) complexes that have had their retinol extracted, and are released back into the serum. Then, with elevated retinoic acid molecules, the RBP recycles and binds with this rather toxic retinoic acid molecule. This RBP is now delivered to the receiving cells, and when unwrapped it exposes a nasty little surprise (and yes, the RBP does have an affinity to retinoic acid).

I think one of these scenarios almost has to be the case since so many autoimmune diseases also have brain inflammation as a co-symptom. Also, this same inflammatory process will happen anywhere in the body that consumes these toxic lipids. I think this now puts MS on the list too.

Whether this is even close to the correct mechanism or not, it doesn't really matter in the short term. There are many times in science we can make use of information we don't fully understand. For example, I'm sure there are many effective drugs in use, and their exact mechanism is not fully understood. What's critical at this point is that we actually do something with this information.

A bit of personal "Anecdotal Evidence"

Around 2006, I had almost completely stopped dreaming at night. I maybe had dreams two or three times in a year. So, that is about nine years of almost never dreaming. I assumed this was due to drinking too much coffee or just something that happens with aging.

Four weeks after being on my vitamin A elimination diet, I started to dream every night. That is every single night for months now. My coffee intake has remained the same. Of course, it was not just my dreaming that changed. I was thinking far more clearly with my vitamin A elimination diet. Okay, so that's subtle inflammation/pressure on my brain resolved, thinking clarity back to normal, and resumed dreaming at

nights. Do you think this toxin was having an adverse effect on my brain? I don't want to think too much about it. I'm just glad I can't see my brain under my microscope.

More "Anecdotal Evidence"

I've read on some of the Alzheimer's forums that people caring for their loved ones in their very final days make some peculiar comments such as, "*When mom was finally too weak to eat and had not been eating for several days,...she had a few moments of clarity; she even recognized me again...*

Isn't that a very interesting anecdotal comment: *when mom stopped eating,...she regained some clarity*. Other people make similar comments.

When Ronald Reagan was dying from Alzheimer's he also had severe cataracts. His eyes were completely clouded over. I've read a report that in his final days after he had stopped eating, his eyes cleared and were blue once again.

Is there a clue here for us? Could this be likened to the perfectly clear skin seen in the anorexics that eat so little? Next, let's look at some interesting global maps for Alzheimer's disease and autism.

Figure 50 WHO Vitamin A deficiency prevalence 1998

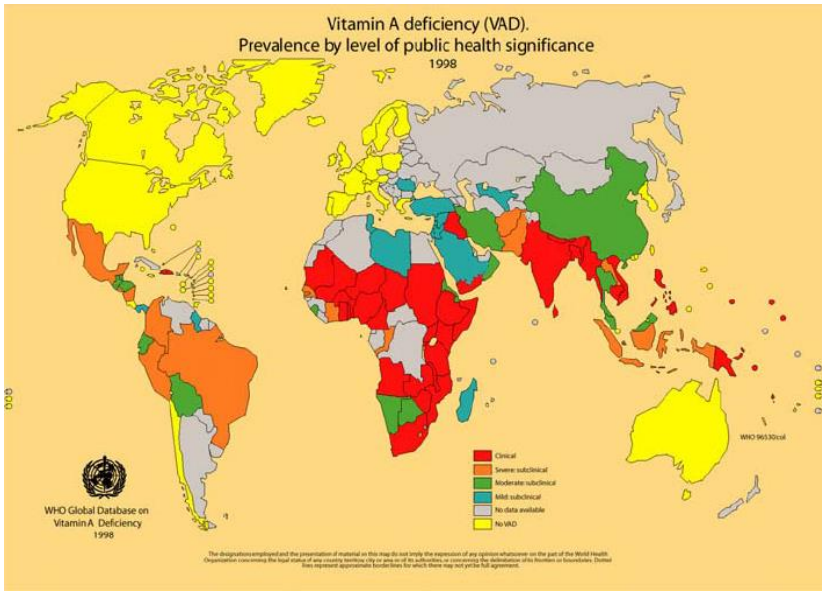
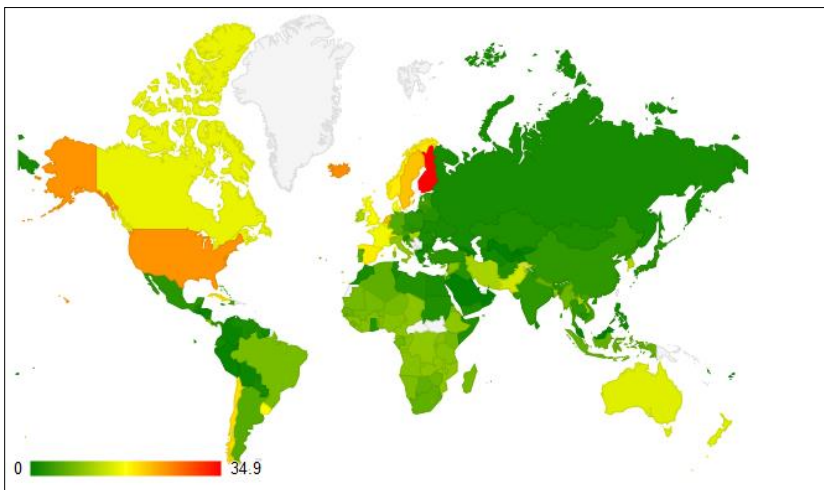


Figure 51 Alzheimer's / Dementia Death Rate per 100,000 Age-Standardized



Source data: <http://www.worldlifeexpectancy.com/cause-of-death/alzheimers-dementia/by-country/>

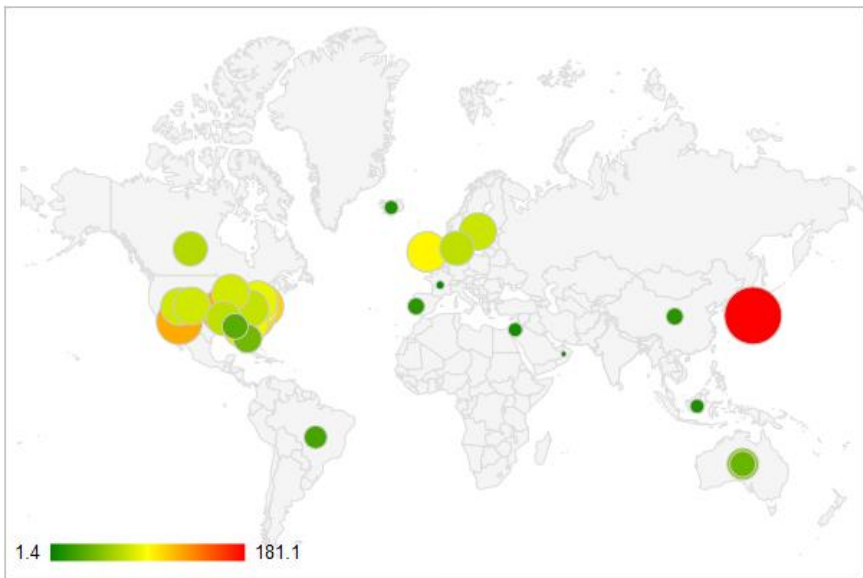
The Alzheimer's Connection

Yellow regions in the top WHO-VAD map are getting lots of vitamin A, and yellow and red regions in the second map are getting lots of Alzheimer's/dementia.

Although the world map shown above is of the Alzheimer's / Dementia Death Rate (it is amazingly close to that of worldwide rates of schizophrenia too), it could just as well be a map showing the nations that are supplementing their food supply with Vitamin A.

Likewise, here is what appears to be another world map highlighting the countries that supplement their foods with vitamin A. However, it's not actually a map of vitamin A supplementing countries. It's a map of incidence patterns of autism.

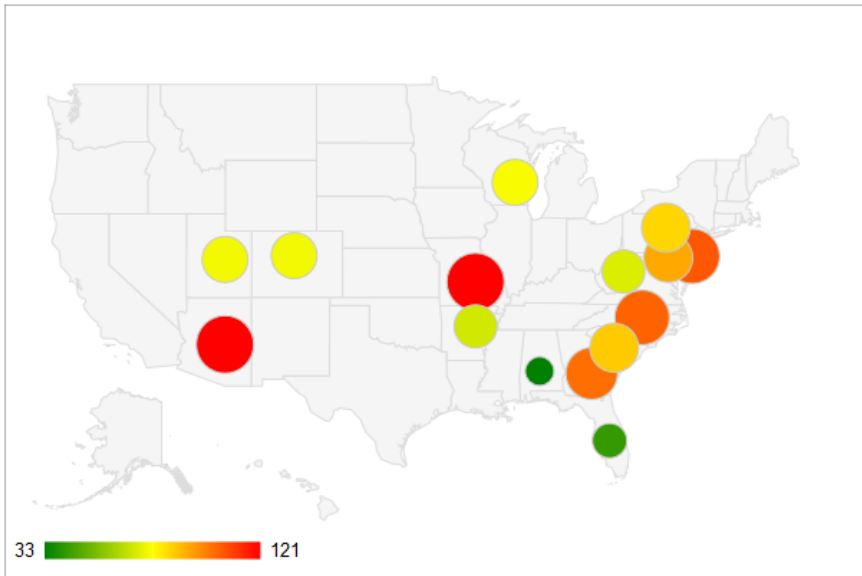
Figure 52 Incidence patterns in autism



Source data: <http://sfari.org/news-and-opinion/news/2011/researchers-track-down-autism-rates-across-the-globe>

Below is a map showing the incidence pattern of autism in the USA.

Figure 53 Autism prevalence in the USA No. per 10,000



Source data: <http://sfari.org/news-and-opinion/news/2011/researchers-track-down-autism-rates-across-the-globe>

The other observation to be made from the above maps is that the higher incidence patterns are mostly coastal regions, and especially so of course for Japan and the Scandinavian Countries. But, even more striking is the incidence pattern along the Atlantic coast in the USA. This very closely matches with the findings of the reports I've cited earlier regarding both the Crohn's and eczema incidence patterns in the USA. There is no way that is just a coincidence. These diseases are indeed somehow related. Why does the USA have such a high rate of kids with autism? Well, I believe it is because these kids have had both their milk and breakfast cereals *fortified* with vitamin A.

What about Japan? Why do they now have such a high rate of autism in kids and yet a low rate of Alzheimer's in adults? It could be that their fishing fleets are now going into the very cold Antarctic waters. The

disease rate increase is showing up first in their kids due to their higher susceptibility. It may just take a few more decades before the big jump happens with the Alzheimer's rates in their adult population. I think this is another major seismographic event predicting the oncoming disease tidal wave.

Autism and anecdotal evidence

Now a common comment or perception about kids with autism is that many have some hidden genius trapped within them. Maybe this is even accepted scientifically and not really anecdotal at all. I don't know. But, please allow me to indulge in a bit more "wacko" thinking here.

Remember that with eczema, and psoriasis there is the universal, yet strange, observation that with the skin becoming inflamed, and destroyed by the immune system it gets much thicker in the process. The exact same thing is observed with Juvenile Rheumatoid Arthritis. As the immune attack destroys the joints, they can actually become bigger and sometimes subsequently deformed. This is documented to be a paradox of the disease. Once again, it should be a paradox at all. When the cells send out the self-destruct cytokines to the immune system, they also send out growth hormones to kick-start the rebuilding of their replacement cells. So, we have secondary processes trying to counteract the first one. Do you see where I am going with this wackiness in connection with autism? Yes, I think there may be a similar process happening in the brain. As some brain cells are being destroyed by inflammation significantly more are being grown due to the release of growth hormones. Now, how many kids with autism have some subtle chronic inflammation on the brain? My bet is that every single one of them does.

Autism, ADHD, Depression, Anxiety, Schizophrenia, MS and Alzheimer's

Doesn't it just strike you as it being rather peculiar that there are so much mimicry and overlap in the symptoms of all of these conditions, and so-called diseases of the brain? Isn't it just *incredibly* peculiar that every one of these diseases of the brain comes with eczema⁹⁶? Seriously, how the heck does a brain disorder cause an autoimmune disease of the skin? The obvious answer is that it doesn't!

Isn't it just as peculiar, and like with the autoimmune diseases, one other major common symptom they all share is: *no one knows what causes them, and there are no cures*. Additionally, like with the autoimmune diseases, after more than *fifty* years of intense research, and hundreds of billions of dollars spent, none of these so-called brain diseases has been solved. That's right, not a single autoimmune disease has been solved, and not a single one of these brain diseases has been solved. Just like with the autoimmune diseases, they are all only becoming vastly more prevalent.

Yet, just like with the autoimmune diseases, if you do get diagnosed with one of these brain conditions you'll likely be prescribed some drug that will attempt to mask or suppress the symptoms. Doesn't it just strike you as very peculiar that none of the drugs work very well at all? Most are clinically proven to be no better than placebos. Doesn't all of this just simply tell you that researchers must be completely on the wrong track?

If you are really unlucky and are diagnosed with Schizophrenia, you might even be given some horrible electric shock therapy. We have no idea as to the real root causes, yet somehow "*modern medicine*" can resort to such a barbaric "*treatment*". Clearly, we are simply in the

⁹⁶ <http://www.webmd.com/skin-problems-and-treatments/eczema/news/20030325/adhd-skin-disease-may-be-linked>

virtual Stone Age of medicine when dealing with the brain diseases. Doesn't that just simply tell you that modern medicine has absolutely no idea what it is doing in attempting to treat this disease?

Now, what if autism, ADHD, depression, anxiety, schizophrenia, MS, and Alzheimer's are all just one big spectrum? After all, they all do share many common symptoms. Like with the autoimmune diseases, each one has been given a unique sounding name; but that naming is based on our somewhat vague and arbitrarily selected clustering of these symptoms. What if ADHD is just very mild autism, and depression is just one of the symptoms of very mild Schizophrenia, and Anxiety is just a small variation of ADHD combined with depression, and schizophrenia is early Alzheimer's, and therefore, Alzheimer's is the long tail condition of dealing with autism or mild schizophrenia for decades? Well, you get the idea; are not all these diseases just one big blur? Could it be that all of these diseases are just varying degrees of the same underlying root condition? Could it be that there are varying degrees that present slightly differently in different people, and present differently in different people at different ages? That's what it sure looks like to me; and especially so when you factor in the little fact that having eczema, or asthma earlier in life makes you more susceptible to developing schizophrenia. Isn't it incredibly suspicious that Autism, MS, Alzheimer's, and Schizophrenia all have this major connection with eczema? I mean, doesn't that make it obvious that whatever has poisoned the skin, is implicated in these brain diseases too?

Of course, medical experts will cling to the claim that's not the case, and state that they are indeed distinct diseases. However, unless someone can tell us the exact and very root cause, then the only thing that really makes them distinct is our naming and classification of them.

It should now be so overwhelmingly obvious that ADHD, autism, schizophrenia, MS, and Alzheimer's are really poisonings. Modern medicine has been completely over thinking it. It is not some deep and

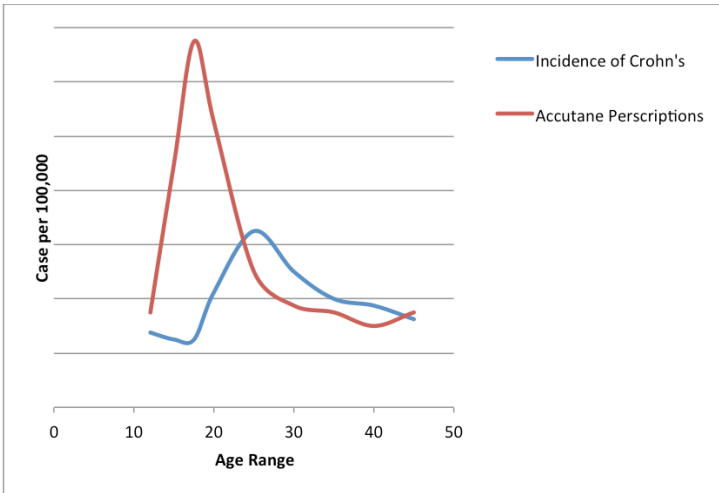
mysterious malfunction originating in the brain that's causing these diseases. I mean, in the face of the shocking rates, and rate increases we are seeing in the North American populations, no reasonably open minded person can argue that it isn't a poisoning. I challenge anyone to put forward a reasonable alternative explanation. Moreover, in a later chapter, I'll explain that in addition to inducing inflammation, the particular poisoning we are investigating here has a unique capability of depleting and destroying our stem cells at the same time. What effect do you suppose that would have on the proper functioning of the brain and nervous systems?

Please remember that every one of the symptoms, of every one of these diseases, is on the list of symptoms of chronic vitamin A poisoning, or that of being given the retinoic acid *treatment*. I think I've established at least a reasonably strong causal association here with autism, and Alzheimer's disease. ADHD, depression, and anxiety are completely obviously implicated here too. These are reported as the very common, yet mild symptoms of being given the retinoic acid *treatment*. Of course, every man, woman, and child in North America is now being given this retinoic acid treatment (agreed, at very low doses; age and diet depending).

I've mentioned Schizophrenia a few times before in earlier chapters, now I want to try to connect the dots on it just a little bit more. From the 2010 Accutane causal association report⁹⁷ investigating the relationship between Accutane (retinoic acid) and IBD, the authors included a chart showing the prescription rates of Accutane, and that of Crohn's disease. Here's a facsimile of that chart (very oddly, the authors of the report decided not to include a scale on the vertical axis).

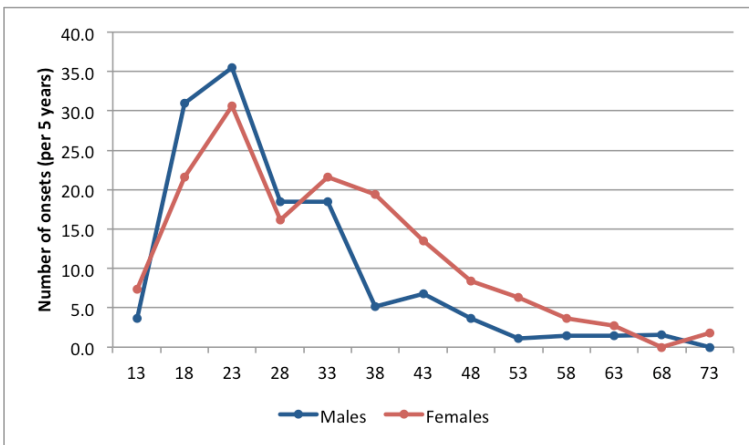
⁹⁷ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2775814/>.

Figure 54 Accutane prescriptions by age



Next, let's look at a chart showing the incidence rate pattern for schizophrenia.

Figure 55 Schizophrenia based on age group at onset



Source data: [A typological model of schizophrenia based on age at onset, sex and familial morbidity. Acta Psych8atr. Scand. 89, 135-141 \(1994\)](#)

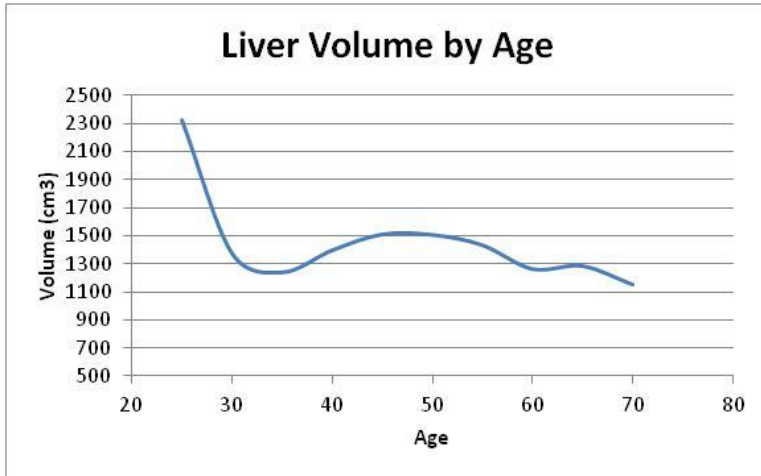
There are some important details to take note of here. Firstly, the peak in the incidence rate in boys is happening a few years earlier than that in

girls. Then look at what happens after about age 35. The pattern flips and young women are getting this disease at a significantly higher rate than young men. This is the same as for the autoimmune diseases. This very same peculiar age pattern is showing up in the Canadian schizophrenia rate data too⁹⁸. The Canadian MS incidence rates follow a similar age pattern also. If you have a particular interest in MS, then now would be a good time to look very closely at the map shown on page 15 of this [Atlas of MS report](#)⁹⁹.

Now, you might be tempted to conclude that the treatment with Accutane, et al caused some of these cases of Schizophrenia. I don't doubt that many cases are indeed exactly that. After all, the documented side effects of Accutane include all the documented symptoms of Schizophrenia. However, there is something more important to glean from these charts. Firstly, dermatologists were prescribing Accutane et al. for the very real reason of significant acne. Secondly, remember that the liver reaches its maximum size by age 15 or so, and boys are one to two years ahead of girls. Then it normally starts shrinking. I am repeating that chart here for easy reference.

⁹⁸ http://www.phac-aspc.gc.ca/publicat/miic-mmacc/images/fig_3-1_e.gif

⁹⁹ http://www.who.int/mental_health/neurology/Atlas_MS_WEB.pdf



Therefore, what I see happening is the following sequence of events.

1. Liver volume and storage capacity is quickly maxing out by the late teens.
2. Forces the body to move more retinoid-laden lipids to the sebaceous glands, and other adipose tissue.
3. Elevated skin lipids feed the skin's acne causing bacteria and enables it to flourish.
4. Some kids are treated with Accutane et al
 - a. Some of them encounter the documented "side-effects" a.k.a. Schizophrenia
5. Many other kids are not treated with Accutane et al, and experience only very mild mental health issues.
6. Some other kids, who are also not treated, still encounter more severe mental health issues due to a higher rate of conversion to retinoic acid.

It just depends on the body's state of storage when that liver volume starts dropping.

Chapter 22

A Sanity Check Point

Does all this make sense, or is it just too unbelievable? Hopefully, it's only the scope and magnitude of the situation that's unbelievable.

When civil engineers research some new beam design or even a new concrete mix, they will put samples into a hydraulic press and stress them until they break. This is a very standard and routine practice. Engineers need to know where the limits are. Software engineers apply similar techniques for testing computer systems. Applications are built and then subjected to special stress tests to find their limits and to reveal any unknown weaknesses. Similarly, what we've been doing over the last few decades with our elevated levels of vitamin A consumption is the stress testing of the human body for its limits. And we have found it. The human body has reached its limits for this substance, and it is now breaking.

Therefore, let's look at the data in the most obvious way. These diseases are doubling at alarming rates. What *potentially toxic* substance in our food is also doubling at similar alarming rates? It's easy; just ask the tomato farmers and the fish oil suppliers. Then consider that this very bad nutritional advice about eating lots of milk, dairy, and brightly colored fruits and vegetables every day, has taken hold. The cited eczema "*trigger foods*" are also some of the most recommended foods on the Canadian and US food guides.

Next, let's consider what some notorious poisons do to human skin. The mustard gasses used in World War I caused the skin to form horrible yellow blisters, and to peel off. Poison ivy causes the skin to form horrible yellow blisters, and to peel off. Both vitamin A, and retinoic acid, just topically applied, causes the skin to form yellow blisters, and to

peel off. They are all clearly poisons! The big difference, of course, is in response time and severity. But, the colossal difference is that we are all now *drinking and eating* lots of vitamin A, and we are doing so every single day. I mean, really, what the heck did we expect to happen?

No, it's not sugar, or gluten (in itself), to blame here. Sugar might help make you fat, but it will not directly dissolve and burn holes in your skin and organs. Gluten can definitely be a serious antagonist, but it's not the root cause. I think there's only one common substance in all our foods that's scientifically proven of being capable of doing this. It's vitamin A (retinol and retinoic acid). We have a perfect match on the symptoms of vitamin A toxicity, and those of most of the big autoimmune diseases combined.

But, you might argue this is a really simple theory, and there's no way the wider scientific and medical experts are missing this. Well, then, please explain why alarms weren't sent out regarding Accutane? That should have sent shock waves throughout the drug, food, medical communities, and government agencies. But, no, nothing but silence as far as I know.

So don't think that some people at drug companies can't possibly miss the obvious. Not only did they miss the obvious, they also completely, and conveniently, ignored more than fifty years of scientific knowledge that vitamin A is a toxin at high doses! It's a toxin at high doses because it's more likely to convert to retinoic acid. Retinoic acid is absolutely a direct toxin. Yet, some companies are still in denial and continue to sell retinoic acid based acne drugs today! Let's call that practice for what it really is; it's poisoning for profits!

Additionally, we should all be asking just how expert are our experts really? I believe the experts have simply been over thinking it.

After more than fifty years of research, and trillions of dollars spent, the experts are not even remotely close to solving the autoimmune diseases. It's far worse actually because the rates for these diseases are now completely off the charts in North America. How could this get so out of control with the experts looking after us? Likewise, the same applies for our cancer incidence rates. The rates are now so ridiculously out of control too, that any reasonable person, with the financial means, should be seriously considering fleeing our nations because of it.

Moreover, even after just a few hours of investigation, it is startlingly crystal clear that these diseases are being caused by our foods. There is simply no two-ways about it. There is actually no other plausible explanation for why there are more than 100,000,000 people in North America who are now sick. That fact is pretty clear evidence that many (but not all) of the experts have indeed overlooked the obvious.

From there, when you ask the most basic question: what chemical in our foods has even the capability of causing all of this? There is only one answer too. It is just that unbelievably straightforward. I'm just a kid from the farm, but I will bet a large amount of money on it. Any takers?

Does it not make some intuitive sense that whatever is causing these diseases; it just has to be something pervasive, yet subtle, in our environment? Something that is so obvious that it's being ignored and overlooked. Something so little and almost trivial, that it's never too much of a suspect. Something that is right under our noses. Something we've been told, and we assume, is good for us. Yet, it's something that can have a profound, and devastating effect on the human body. Additionally, once you understand that the root cause of the autoimmune diseases, and many of the mental health disorders, is a poisoning, you'll understand why all the various drugs are utterly useless.

Or maybe this vitamin A subclinical toxicity is not obvious? After all, this is a very subtle and tricky situation that develops slowly over a long

period. It's more or less documented to be hugely unlikely to happen on as wide a scale as it is. But it is happening, just with unexpected and with mostly small or subclinical amounts of this potential toxin accumulating in the wrong places in the human body. Just to be clear here, this is not at all classic hypervitaminosis A. No, it's far worse because the saturation levels are higher. I think it's insidious Vitaminosis A. This is a very slow build up to near saturation and thereafter remaining in a state of chronic subtle overflow of what now becomes a toxin.

This process is so well documented and clinically proven, that I think we can consider it to be an absolute fact. Earlier on I asked what could possibly cause the head to toe self-destruction of the human body that we see with the autoimmune diseases. Now we know; it's actually a well-proven, and well-documented *fact* too. It's retinoic acid.

Here is only a *partial* list of documented *side direct effects* due to short and medium-term exposure to retinoic acid (as a medical treatment):

- ✓ Headache, fever, dry skin, dry mucous membranes (mouth, nose)
- ✓ Bone pain
- ✓ Nausea and vomiting
- ✓ Rash
- ✓ Fatigue
- ✓ Mouth sores
- ✓ Itching
- ✓ Sweating
- ✓ Eyesight changes
- ✓ Back pain
- ✓ Pain in muscles and joints
- ✓ Allergic reaction
- ✓ Abdominal pain
- ✓ Poor appetite
- ✓ Dizziness
- ✓ Drowsiness
- ✓ Insomnia
- ✓ Anxiety
- ✓ Numbness and tingling of hands and feet

- ✓ Weakness
- ✓ Loss of concentration, and sleep problems
- ✓ Hair loss (thinning)
- ✓ Dry eyes, sensitivity to light
- ✓ Decreased night vision, which may persist after treatment is stopped
- ✓ Swelling of the feet or ankles
- ✓ Low blood counts
- ✓ Anemia and/or bleeding
- ✓ Abnormal blood tests: increased triglyceride, cholesterol and/or blood sugar levels.
- ✓ Increases in blood tests measuring liver function. These return to normal once treatment is discontinued (see liver problems)
- ✓ Blood clots
- ✓ Pulmonary embolus or stroke
- ✓ Pancreatitis (inflammation of the pancreas)
- ✓ Skin desquamation (peeling and shedding)
- ✓ Problems with kidneys
- ✓ Inflammation of the liver
- ✓ Inflammation of the stomach
- ✓ IBD
- ✓ Muscle problems
- ✓ Hearing loss, and ringing in the ears
- ✓ Problems with lipids
- ✓ Problems with blood sugars
- ✓ Inflamed, and peeling of the lips
- ✓ Dry nose and mouth, nosebleeds
- ✓ Depression
- ✓ Thoughts of hurting oneself, or others
- ✓ Psychosis (seeing or hearing things that are not real)
- ✓ Suicide
- ✓ Bone density loss
- ✓ And even more ...

Source: <http://chemocare.com/chemotherapy/drug-info/13-cis-retinoic-acid.aspx>

See also: http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0044974/-DDIC601821.side_effects_section

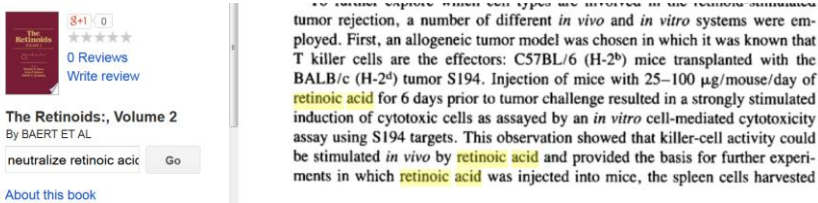
Now that is definitely, and amazingly, the head to toe destruction of the human body. More importantly, we should all now recognize this list for what it really is. It is head to toe autoimmune diseases. This so-called

“*medication*” has been proven to cause all this destruction at least a million times over.

But, is this really the *self*-destruction of the human body? I believe it is, because the retinoic acid molecule does not accomplish all of this destruction entirely on its own. Rather, it coerces the ever-powerful immune system to do the worst of it. Even more importantly, this chemical has a profound and devastating influence on our stem cells too. Therefore, this is not just head to toe autoimmune disease, it’s vastly *accelerated* head to toe autoimmune disease, and aging too.

I am absolutely certain about this. This is not a theory. Not only has it been proven in dermatology and chemotherapy millions of times over; it has also been clinically proven with direct *in vivo* application of retinoic acid.

Figure 56 Killer-cell activity stimulated into action with retinoic acid



Source: The Retinoids: Volume 2 By BAERT ET AL , page 383

The above reference is only one example, there are many other research papers reporting exactly the same effect. Unbound retinol and retinoic acid absolutely do cause cells to initiate apoptosis. Therefore, they are toxins!

Now, with that very long list of destruction caused by this chemical, does anyone have any doubt that it could be the very root cause of many of the fifty thought to be autoimmune diseases? It’s hard to imagine that there is even one other chemical that could so completely destroy the human body, and also be so easily obtained from our food. With vitamin A

easily, and normally, being converted into retinoic acid, and seeing this very long list of destruction it can cause, it's a bit hard for me to even call it a "vitamin" anymore. Retinoic acid is an incredibly serious and deadly toxin. These are facts. We now have a lot of facts. Most of what I've presented so far is based on fact and very little on speculation. I think it should be pretty clear, logical, and compelling evidence.

Evolution and chemical warfare

This theory also fits very well from an evolutionary perspective. Around 450 million years ago, plants ruled the planet. Plants used retinol as a light absorbing and energy conversion molecule. The plants had a least a 50-million-year reign before the rise of insects and animals. Naturally, the insects and animals were feeding off of the plants. Now, plants would not have liked being eaten alive, so they adapted and fought back. Retinol and retinoic acid are two great toxins to feed to your potential adversaries, especially tiny ones. Think of these as nature's insecticides.

Of course, the insects did not like being poisoned either, so they adapted and developed defense mechanisms against this toxin. Not only that, larger animals evolved even more highly sophisticated systems. Not only did they evolve to defend against this toxin, over the next several million years they evolved to store it, and use it for exactly the same toxic purposes that plants used it for. Now, both plants and animals use the same toxic chemical to fight off microbes that try to feed off of them. Fish probably evolved to use this same chemical as a blood thinner, and an anti-freeze. Higher-level animals evolved to dual use this chemical for vision development, and for limited night vision capabilities. Moreover, humans and some other animals have evolved with massive storage capabilities for this chemical. Retinol is awesome ammunition that needs to be made available to our highly refined immune systems when our bodies do get invaded by microbes.

Therefore, this evolutionary chemical warfare arms race between plants and animals has gone on for a very long time, and it continues today. Unfortunately, us humans have tried to outsmart nature. But, no matter what, we are all still a part of nature, and nature will not be fooled. No, we have been.

When I first came up with this strange theory and started researching the possible connections, I was a bit surprised at just how much information supported it. And no, I was not at all cherry-picking the data. There is just a mountain of evidence available supporting it. Additionally, I did not dig long and hard to find all of this information. It was very easy to find and connect. So, that is pretty interesting when most of the puzzle pieces fit like they have so far. Yet, there was one aspect of many of these diseases that I did not find a simple and direct explanation for. That is, why do women get these diseases at a rate of about two to four times that of men? The inverse ratio appears to apply to kids with autism.

The best explanation I can offer at this point in time is related to this plant versus animal chemical arms race. Women, due to social pressure and norms, are far more likely to eat lots of salads and more fruits and vegetables than what men do. Women are also more likely to listen to nutritional advice and want to set a good dietary example for children. Girls are not going to adopt these diet patterns until their late teens. Secondly, women are also more likely to have supplemented with vitamins during pregnancy. I also suspect the progesterone hormone being a strong factor too, since it is proven to increase the levels of the RBP, and thus increase the transport of retinoic acid¹⁰⁰. Therefore, I expect that women who have had children to have somewhat different incidence rates of the autoimmune diseases later in their lives than compared to those who did not. Lastly, I strongly suspect that there may

¹⁰⁰ <http://www.ncbi.nlm.nih.gov/pubmed/7194913>

be a connection with the interaction of the hormones in birth control pills and the cascading effects they have on progesterone levels too.

It's time to think like a geologist

When a geologist looks at a mountain, they see a mountain just like everyone else does. But, a well-trained geologist sees something else too. They see TIME. They see hundreds of millions of years of sedimentary rock layers that were deposited almost one grain of sand, or a bit of calcium, at a time. They see something like the next 100 million years of time where these rock layers were slowly buried deep within the earth. Then they see the next 200 or 300 million years where these horizontal formations are slowly curved, rotated, and lifted into the majestic mountains that we can all climb. When a geologist climbs halfway up a mountain and finds an ancient fish fossil, it's not a mystery at all as to how it got there. Whereas, other people might be a bit surprised to see it there.

Therefore, it's no problem at all for a geologist to consider the slow bioaccumulation of a toxic molecule over mere few decades culminating into chronic disease. It's especially so considering that this process is actually documented to be exactly what happens with this particular toxic molecule in the human body.

Cancer, Ancient Greece and Grape Juice

Some thirty years ago I had read a translated ancient Greek text on the topic of treating disease. In it, they documented the cure for cancer. That's right, the "cure" for cancer was documented more than 2,000 years ago. Their cure was a diet of exclusively grape juice, and not a speck of anything else. They observed that when someone went on this diet their cancer would go into full remission. They also observed that when someone started to go back to normal foods, their cancer would

return too. Isn't that fascinating? How much vitamin A is in grape juice? Zero.

Now of course, what the ancient Greeks thought was cancer, and what we know cancer is today could very likely be two different things. It could easily be that what the Greeks thought some cancers to be are really the autoimmune diseases. Even today some people refer to the autoimmune diseases as being a "non-lethal cancer". So, could the ancient Greeks have made the same discovery as what Darwin did with raisins some 2,000 years later? Or, had Darwin read the same Greek text as I had read thirty years ago? Darwin was most certainly an avid reader of the books from antiquity.

Either way, the fact is that both the autoimmune diseases and cancer have plagued humans for a very long time. And, just like with the autoimmune diseases, soft tissue cancer rates have skyrocketed over the last fifty years too, but particularly so in North America. Another thing to remember that there is now an association between the long-term steroid use in the treatment of autoimmune disease and significantly elevated cancer risks. This should be very interesting to any cancer researcher. We now have a chemical with a well-understood function actually causing cancer. Why is that? I believe it's because steroids block up the cell's receptors needed to produce cytokines. Now let's consider the perfectly normal scenario where a cell gets into trouble, due to a virus or other toxin, or even some random DNA damage and it then attempts its self-destruct sequence. The cell begins emitting its growth hormone and needs to make a call out to the immune system for assisted self-destruction. The first stage of the sequence is not impaired, yet the second stage is blocked. Now, this cell simply can't alert the immune system. Yet, the growth hormone continues to be emitted and causes neighboring cells to rapidly divide. The body's self-defence mechanism for cancer detection and prevention is now blocked. Even if this happened to a single cell, that would be enough to cause cancer. As that

single growth hormone-emitting cell gets wrapped up in more and more tightly packed neighbors, it will become a tumor. The only limiting factors are going to be blood supply, and time.

What other substances might block up this same receptor? The stress hormone and vitamin D are at least two primary ones that I know of. Moreover, vitamin D is also not just a hormone either; it is a *steroidal* hormone. Could this steroid be acting similar to the steroids used in autoimmune disease treatments? Therefore, too much vitamin D over a very long period of time might not be entirely safe. I think this is starting to show up in some of the studies.

But some research suggests there could be a link between dairy intake and the risk of developing prostate and ovarian cancers. For breast cancer the evidence is conflicting. A link between breast cancer and dairy products has been suggested, possibly because of the type of fats they contain, or contaminants that could be present in these foods. But there is no clear evidence to support this.

Source: Cancer Research UK

<http://www.cancerresearchuk.org/about-cancer/cancers-in-general/cancer-questions/does-milk-cause-cancer>

Therefore, it's probably not the fats in the dairy causing the higher cancer rates. Rather, it just might be the incredibly powerful vitamin A and D hormones we've added to it.

Now, if there is any merit to this sub-theory of elevated cancer risk due to a slightly higher vitamin A intake, then we should see two things in the data. Firstly, we should expect to see a somewhat higher cancer prevalence rate along the North East Atlantic coast of North America, similar to that observed with both eczema, and Crohn's disease. Secondly, we should have seen a slight drop in rates since 1993 in Atlantic Canada by now too.

A Sanity Check Point

Fortunately, saying that cancer can be caused by a poisoning is entirely accepted. Some of the well-acknowledged ones are smoking, alcohol, asbestos, certain other industrial chemicals, and particular viruses. Now, if we see geographic clusters of cancer rates we should suspect elevated levels of some known, or unknown, cancer-causing agent. This is somewhat like the contaminated water well that caused the cholera outbreak in London. But, the “*well*” here is really the north Atlantic Ocean, and the “*contaminant*” is in the fish.

I am duplicating the eczema map I’ve shown before, but I’ve changed the color-coding to correspond with a published cancer incidence rate map. This color-coding just makes the visual correlation a bit easier; it’s not a change to the data.

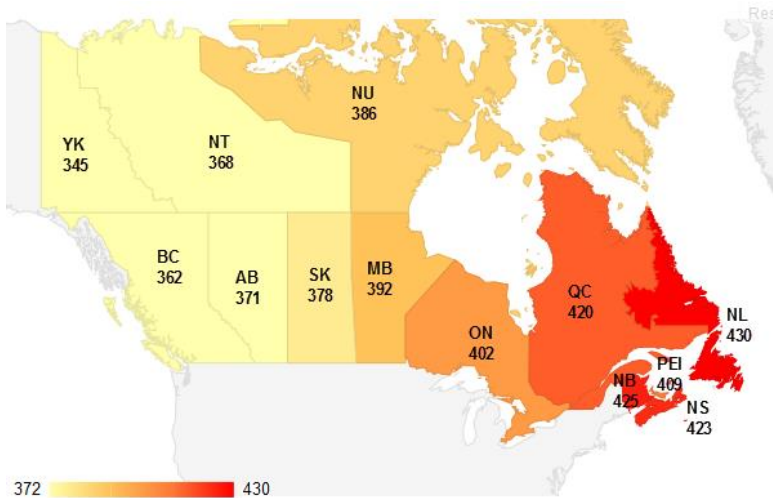
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Montana, Nevada, and Utah? They are on the eastern edge of the Rockies, and will have faster-drying winter air conditions.

If that regional difference in consumption is manifesting in these increased disease rates, then it's highly likely that our national rate difference (the yellow colored regions) compared to other nations is attributable to our elevated baseline consumption rates across the country. Weird as it may sound, almost everyone in North America younger than say 10, and older than say 50, is actually taking very small doses of a known, and a devastatingly destructive, chemotherapy drug, and doing so every day. It's simply adding up. Maybe it's not preventing cancer; rather it combined with vitamin D is somehow inducing it?

Now, since the body's primary organ for accumulating vitamin A is the liver, I think this organ would be one of the most significantly affected by an overload of it too. The Canadian data for liver cancer rates show about a 3-fold increase (that's ~300%) since the 1980s. Some of this increase is being attributed to the hepatitis viruses, and to diabetes. So, here we have an autoimmune disease being cited as a precursor to liver cancer. Therefore, for the USA and Canada combined, the recent increase in the rates of eczema, and with around 80 million people with pre-diabetes, and tens of millions with fatty livers, I think we should all be very concerned.

Figure 59 Estimated new cancer cases and age-standardized incidence rates by province or territory, both sexes, Canada, 2013

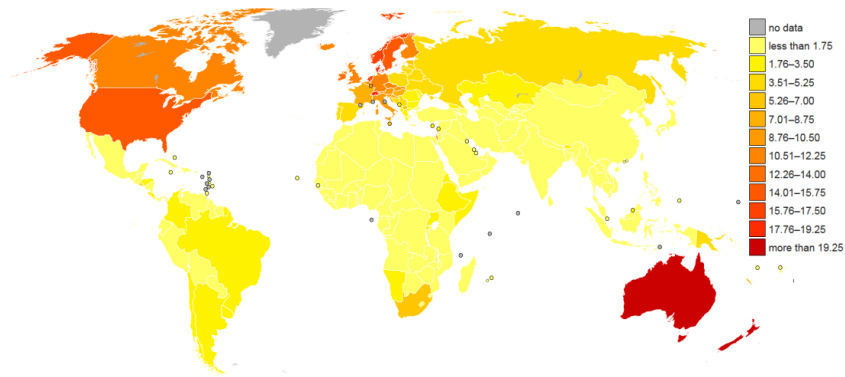


Data source: Canadian Cancer Registry database at Statistics Canada 2013

Like in the USA, Canada also has a significantly higher prevalence of cancer in the Atlantic coast region. I think what is interesting to note is that British Columbia (the west most province on the Pacific coast) has also been traditionally quite high in fish consumption too, but the fish of choice there is Pacific Salmon. It's also interesting to note that our Atlantic provinces also have some of the highest rates of Alzheimer's, MS, and Crohn's disease in the world. Unlike the east coast of the USA, the east coast of Canada is not heavily industrialized.

The second biggest organ in the body for accumulating vitamin A is the skin. Now wouldn't it be interesting to see a map of the worldwide incidence rates for melanomas?

Figure 60 Worldwide Melanoma of Skin Cancer Incidence - 2008



Original Image source:

https://en.wikipedia.org/wiki/File:Worldwide_Melanoma_of_Skin_Cancer_Incidence_-_2008_Globocan.svg

Firstly, isn't that a familiar looking map? Secondly, it is not only a map highlighting that the Western countries have ten to twenty times the rates of skin cancer, it is also the map showing the same Western countries with vitamin A being added to their staple foods. Now, if that doesn't just knock your socks off, maybe this will. In Canada, the two provinces with the highest rates of skin cancer are, you guessed it, Nova Scotia and Prince Edward Island. Here's a recent news article documenting this situation.

Skin cancer rates high in Nova Scotia and P.E.I.

Women in Nova Scotia and men in P.E.I. have the highest rates of melanoma in Canada.

The Canadian Cancer Society says skin cancer is on the rise in Canada, with Nova Scotia and Prince Edward Island reporting some of the highest rates of melanoma in the country.

According to the society's annual statistics, women in Nova Scotia and men in P.E.I. have the highest rates of melanoma in Canada.

Men in Nova Scotia are second only to men in P.E.I. for melanoma rates.

Source: <http://www.cbc.ca/news/canada/nova-scotia/skin-cancer-rates-high-in-nova-scotia-and-p-e-i-1.2657090>

The doctors are attributing these higher rates of skin cancer in the Atlantic Provinces to people taking too many vacations to sunny destinations during the winters, and to just getting too much sun exposure in general. However, this alone does not make sense. People in Alberta take a lot of winter vacations too, and we have the most amount of annual sunshine in the country, and yet about one-half the rates of melanomas. Furthermore, when you compare the rates of skin cancer in the equatorial countries to ours in Canada, the sun exposure hypothesis makes no sense whatsoever. Hmm.... or does it? Actually, yes it does, and it does so big-time too. But, another ingredient is needed. You'll see the rather amazing deeper connection here when we discuss the flare-up process in a later chapter.

Now, has no one else ever attempted to correlate the incidence rates of these diseases with the lifetime consumption of vitamin A and D? There is simply no way the human body is going to magically "autoimmune" more, and get more cancer along the Atlantic coast. This is especially so when you consider that the same correlation is being reflected on a worldwide scale too! Once again, the only logical explanation is that

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these substantially increased rates represent the slow poisoning of the human body.

Next, with regard to liver cancer, the Canadian Cancer Society's report¹⁰¹ provides this partial explanation for the increased rates.

The predominant risk factor for liver cancer in Canada is chronic viral hepatitis infection with hepatitis B virus (HBV) or hepatitis C virus (HCV). Alcohol abuse, obesity, diabetes and smoking are also associated with a higher risk and may play an increasingly important role in the growing incidence of liver cancer in Canada.

That's a good explanation. However, I think there may be another explanatory factor here. I believe it is because people are now *more easily* infected by the hepatitis virus than they were before. Later on in the report, there is this statement.

Trends in liver cancer in Canada strongly reflect the historical and ongoing trends in hepatitis B virus (HBV) and hepatitis C virus (HCV) infections, which are the major risk factors for the disease in this country.

The increase in hepatitis infections might not be entirely due to some higher exposure, but rather to the body's weakened barrier to it. I think an inflamed intestine associated with IBD, with its diminished barrier function would make it much easier for foodborne viruses to penetrate the intestinal wall and enter directly into the blood stream.

Next, based on the data available from Statistics Canada for the years 2000 to 2011, I looked for a decreasing trend in cancer rates unique to Atlantic Canada. However, I did not see it for this time period (but, it was not at all a thorough check either). Conversely, the most significant

¹⁰¹ <http://www.cancer.ca/en/cancer-information/cancer-101/canadian-cancer-statistics-publication>

trend difference is that Nova Scotia's rate of liver cancer has increased faster than the other Canadian provinces.

Herbal treatments for cancer

After doing a tiny amount of research into the biology of immunity, one of the surprising things to learn was that the immune cells have receptors for THC. THC is the principal active ingredient in marijuana. Marijuana has been growing on the planet for as long, or longer than humans have walked on it. Now, it's extremely unlikely that the human immune cells have evolved with this specialized receptor and that there is not some very beneficial reason for it. Of course, it's not just speculation. This plant has been successfully used as a medicine in India and China for thousands of years.

Yet Western governments vilified this plant, completely ignored these thousands of years of history, and criminalized its possession. In 1970 the US federal government classified it as a Schedule I drug; defined as a dangerous drug with no valid medical use. This criminalization of the plant has blocked research and general consumer access to it for medical uses for something like 50 years. In doing so, governments have stifled almost all research into its potential beneficial use too. Yet, also in the early 1970's, these same governments legislated the increase of the natural precursor of what has got to be one of the most potentially toxic substances directly *into* our food supply. Brilliant!

Once again, could it be that the extra growth hormone produced in the high retinoic acid environment is actually causing some incidences of cancer? Remember that retinoic acid does cause rapid cell turnover, a profound effect on the cell's DNA, and significantly increased growth rates. Also, note that cancer tumors generate a lot of heat, and so does the inflamed tissues of autoimmune diseases. After all, *something is* causing the vastly increased rates of this disease in North America. Yet, when people do get cancer many of them are being treated with high dose

retinoic acid. This treatment is given this somewhat sophisticated sounding term “chemotherapy”.

But, now that I’ve gained a better understanding of what this chemical does in the body, and having my firsthand encounter with this toxic condition, I feel such treatment is simply barbaric. I view it as nothing more than the devastating head to toe poisoning of the body. The poisoning drives the immune system into a killing rampage. Of course, the hope is that the “treatment” kills the cancer cells a little bit faster than killing the entire person. To me, this seems to be incredibly dubious, crude, and highly unscientific.

After hundreds of billions of dollars in taxpayer-funded research, is this really the best we can do? Someone gets sick with cancer, and we poison the entire body as a “*treatment*”? Maybe it’s just me, but thinking that we are going to poison people back into health strikes me as a bizarre concept. The ridiculously low success rates with many of the chemotherapy treatments are also pretty clear evidence that this strategy does not work very well. My bet is that the “*treatment*” with isotretinoin is one of the most ineffective of the chemotherapy drugs. After all, this drug does not actually just kill rapidly reproducing cells. No, there’s much more to it. Firstly, it *causes cells to rapidly reproduce*, and then the *immune system* quickly kills them. Secondly, it also depletes the body’s vital stem cells. Therefore, these treatments may only be stalling the cancer, a.k.a. putting it into “remission”, until the stem cell population can be rebuilt. Of course, they could even be causing other cancers to develop later on too.

Also, knowing that the immune system uses hydrogen peroxide (derived from vitamin C) to kill pathogens and rogue cells, what about injecting hydrogen peroxide directly into tumors? That would only cost pennies per treatment.

Additionally, I have to wonder what a combination of a diet with zero vitamin A, zero vitamin D, combined with THC would do for people with cancer? And no, I am not advocating *smoking* it. Smoking it might be completely useless. Rather, we should learn from the Chinese and East Indians how to use it properly. Even though the US federal government has attempted to stifle research into the medical use of cannabis, research is still slowly progressing. Here is just one such study from 2010.

Cannabidiol attenuates cardiac dysfunction, oxidative stress, fibrosis, inflammatory and cell death signaling pathways in diabetic cardiomyopathy

Their results (in part) states:

Remarkably, CBD attenuated myocardial dysfunction, cardiac fibrosis, oxidative/nitrosative stress, inflammation, cell death, and interrelated signaling pathways. Furthermore, CBD also attenuated the high glucose-induced increased reactive oxygen species generation, NF- κ B activation and cell death in primary human cardiomyocytes.

Their conclusions state:

Collectively, these results coupled with the excellent safety and tolerability profile of cannabidiol in humans, strongly suggest that it may have great therapeutic potential in the treatment of diabetic complications, and perhaps other cardiovascular disorders, by attenuating oxidative/nitrosative stress, inflammation, cell death and fibrosis.

Source: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3026637/>

Not surprisingly, now that government is figuring out how to tax, and make money off of the marijuana plant, it's not so evil anymore. But, naturally only government run or licensed "grow-ops" are capable of

producing the “good stuff”. And, of course, it’s still being strictly regulated, and for only medical use.

And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat. Genesis 1:29

Umm... apparently God has now been overruled. The not so surprising little fact is that there is something like 20,000 people in the USA who have been given a license to use marijuana, and many of them are using it to treat their *autoimmune* diseases; such as Crohn’s and MS. Have we just come full circle, back to the facts well known by the Chinese for thousands of years now? Does anyone else not see the outrageous hypocrisy in government still locking up our young people in cages for possessing a plant that has grown on the planet for more than 5,000 years, and that government itself is now profiting from selling the same plant?

Cholesterol, Heart disease and Hypertension

Earlier on I cited this 1998 news report from the Halifax Herald, “[Deaths caused by hypertension, Alzheimer’s disease or multiple sclerosis occurred at twice the national average in Sydney.](#)”¹⁰²

Seeing hypertension and Alzheimer’s in the same sentence did not escape my attention. Nor does the fact that there is another epidemic going on in our society, and that is the elevated levels of cholesterol, heart disease and stroke. Did you notice that cholesterol was on the list of documented direct response effects of being treated with retinoic acid? Once again, this is not happening for some mysterious “auto” magic reason. It’s happening for a real reason. I think it may be due to the same root-condition that is causing osteoporosis. It’s the lowering of the serum

¹⁰² http://www.safecleanup.com/old_site/health925.html

pH levels. This lining of the blood vessels with waxy cholesterol is probably a defensive measure taken by the body attempting to protect this tissue from the elevated acidity. What organ in the body produces all this cholesterol? It's the liver. There's something else very interesting found in the waxy fats of the cholesterol lining our arteries. That's that it's full of dead immune cells. Also, did you know that elevated levels of cholesterol are one of the *key* biomarkers predicting not only heart disease, but the autoimmune diseases, and of course cancer too? Naturally, this information resulted in millions of people being treated with anti-cholesterol drugs. The results have been mostly futile.

The anti-cholesterol drugs are just negating the body's own defensive measure. Just like with immunosuppression drugs, these drugs may be causing far more harm than good. And just like with autoimmunity, it's absolutely critical that we get to the very root cause of the problem rather than just treating or masking the symptoms. The major assumption made was that dietary consumption was causing the elevated cholesterol levels. That seemed like a pretty reasonable assumption to make. However, decades of real-world results with low cholesterol diets have now proven that to be completely wrong. Therefore, clearly, there is another powerful driving force. Well, we no longer have to speculate as to what it is. It is proven right there with the treatment with retinoic acid! This is simply a fact. The body is trying to protect itself from this toxic chemical.

I'm now often seeing commercials for Omega 3 from fish and krill oils promoting heart health. Ironically, it may actually be one of the very worst things you could do for your heart health. Coincidentally, most of the researchers in the 1930s, 40s, and 50s simply used fish oil to induce vitamin A toxicity in lab animals. Many of these animals quickly exhibited hemorrhages (ruptured blood vessels).

Diabetes and Alzheimer's disease

There are numerous studies now documenting an association between autoimmunity and Alzheimer's disease. The Oxford paper I referenced earlier: "[Hygiene and the world distribution of Alzheimer's disease](#)"¹⁰³ is just one of them. However, there is one autoimmune disease in particular that stands out from the crowd in this regard, and that's diabetes. Here's a good summary type report titled: [Diabetes and cognitive decline](#) from the American Alzheimer's association.

Here is one of the observations:

A study related to cognitive function in women was published in the February 2007 edition of the Journal of the American Geriatrics Society. The researchers examined older women (average age, 72 years) with different levels of cognitive function and found the strongest factor associated with good cognitive function was a lack of diabetes. Women without diabetes were almost twice as likely to have good cognitive function than women with diabetes

Source: https://www.alz.org/national/documents/topicsheet_diabetes.pdf

During my investigation, seeing diabetes and Alzheimer's often used in the same sentence did not escape my attention either. Nor does the fact that diabetes is another outrageous epidemic going on in our society. Almost 30% of North Americans ages 65 and older have this disease and nearly 50% of them have pre-diabetes.

Another fact that did not escape my attention is that Pancreatitis (inflammation of the pancreas) is another documented so-called *side effect* of treatment with isotretinoin.

¹⁰³ <http://emph.oxfordjournals.org/content/2013/1/173.full>

Obviously, having an inflamed pancreas probably does not do much to help with its function. Of course, in some of the research papers associating diabetes with Alzheimer's the thinking is that this is linked to blood sugar and insulin resistance. However, there is a more stunning connection here. It's that the pancreas is the body's organ for producing taurine. Taurine is synthesized within the pancreas through a pathway in which cysteine is oxidized to create cysteine sulphuric acid.

Remember that taurine is the miracle chemical apparently successful in treating Alzheimer's in mice in the 2014 [Korean study](#) I referenced earlier. Taurine binds with retinoic acid and helps the body clear it. Here's more supporting information from a 2009 publication titled: [Taurine supplementation and pancreatic remodeling](#).¹⁰⁴

Another interesting aspect of Taurine is that the supplement industry reports that it increases mental focus. The medical documentation is similar in reporting: "*It is also used to improve mental performance and as an antioxidant*"¹⁰⁵. It's also considered to be safe and is often added to infant formulas.

Taurine is a semi-essential sulphur containing amino acid derived from methionine and cysteine metabolism. Taurine has several biological processes such as hypoglycemic action, antioxidation, and detoxification.

...

We hypothesize that supplementation of taurine, which is important for the development of the endocrine pancreas may reduce cytokine-induced apoptosis in pancreatic beta cells.

Source: <http://www.ncbi.nlm.nih.gov/pubmed/19239166>

¹⁰⁴ <http://www.ncbi.nlm.nih.gov/pubmed/19239166>

¹⁰⁵ [http://www.webmd.com/vitamins-supplements/ingredientmono-1024-taurine.aspx?activeingredientid=1024&activeingredientname=taurine](http://www.webmd.com/vitamins-supplements/ingredientmono-1024-<u>taurine.aspx?activeingredientid=1024&activeingredientname=taurine</u)

Therefore, a compromised pancreas could lead to a significant reduction in taurine levels. Taurine appears to be (at least partially) the body's natural defense against the accumulation of retinoic acid. Also recall that the body's normal process for clearing elevated retinoic acid is through hydroxylation (adding hydroxyl groups to the molecule) to make it less active. Here's a 1987 study making this connection with Taurine supplementation and increasing the alpha-hydroxylase activity.

Effect of dietary taurine on cholesterol 7 alpha-hydroxylase activity in the liver of mice fed a lithogenic diet.

The enzyme activity of the mice fed the lithogenic diet was about 20% that of mice fed the standard diet. Dietary taurine increased the activity by 1.9-fold. Therefore, it was concluded that the inhibitory effect of dietary taurine on cholesterol gallstone formation was related to increased bile acid synthesis as reflected by stimulation of cholesterol 7 alpha-hydroxylase activity.

Source: <http://www.ncbi.nlm.nih.gov/pubmed/3668703>

Not only do I believe that the slightly elevated retinoic acid levels are indeed the root cause of Alzheimer's disease, and the autoimmune diseases, I might be even so bold to call this taurine enzyme activity the clincher connection between them. Fortunately, taurine is widely available as a supplement and is also very inexpensive.

Taurine, and Cats with Cataracts

There is another very interesting connection here with taurine. Taurine is now a standard supplement added to cat foods to prevent premature blindness. Apparently, somewhere around the early 1970s cat food producers started reducing the real meat content in cat food and have been using fillers, and cheaper organ meats that very commonly include

liver¹⁰⁶. It's also documented that many of the cat foods now have correspondingly high levels of vitamin A. For example, here are the current ingredients from Friskies® Beef & Chicken Wet Cat Food¹⁰⁷.

Figure 61 Ingredients of Friskies® Beef & Chicken Wet Cat Food

Ingredients
Water sufficient for processing, liver, wheat gluten, beef, chicken, turkey, fish, corn starch-modified, artificial and natural flavors, soy flour, soy protein concentrate, calcium phosphate, added color, potassium chloride, taurine, salt, choline chloride, thiamine mononitrate, zinc sulfate, Vitamin E supplement, ferrous sulfate, niacin, copper sulfate, calcium pantothenate, manganese sulfate, Vitamin A supplement, menadione sodium bisulfite complex (source of Vitamin K activity), pyridoxine hydrochloride, riboflavin supplement, Vitamin B-12 supplement, biotin, folic acid, Vitamin D-3 supplement, potassium iodide. B-6163

Many other flavors have similar ingredients, with liver being common, and one of the first ingredients listed. Other brands are similar.

Then, starting in the 1980s cats began to develop a lot more cataracts, early blindness, and premature death. Of course, the cats were not only getting cataracts. They were also developing diabetes, skeletal problems, arthritis, and becoming senile. Naturally, veterinarians investigated this spike in disease and suspected the liver meat replacing real muscle based meats as the cause. They tested cats with high doses of vitamin A, and found that cats can quickly absorb large amounts with little ill effect. However, they just did not wait long enough. It's not the quick and safe storage that is the risk; rather it's the slow and gradual accumulation in the adipose tissue that is the real risk. Nevertheless, after quickly ruling out elevated levels of vitamin A intake, the veterinarians moved on to suspect something that was taken out of the cat foods with the elimination of real meats. This let them to taurine. They concluded that

¹⁰⁶ <http://www.onlynaturalpet.com/holistic-healthcare-library/vitamins-nutritional-supplements/113/the-importance-of-taurine-for-dogs-and-cats.aspx>

¹⁰⁷ <https://www.friskies.com/cat-food/wet-cat-food/gravy-sensations-with-beef-chicken-in-gravy>

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the lack of taurine was likely responsible for the accelerated and elevated disease rates they were seeing.

So, there has been a disease epidemic occurring in North American cats (and dogs) at the same time as the one we have in humans, and amazingly with many of the same notorious diseases. Adding taurine to the cat food has made a significant improvement in the longer-term health of cats. But, of course it did not eliminate the diseases, rather it only delayed them. Even so, has no one considered adding taurine to human food? Well, the makers of the Red Bull energy drink sure did¹⁰⁸.

Now, I think this is where things get even a bit more amazing. Did you know that more than half of the world's blindness is caused by cataracts?

According to the latest assessment, cataract is responsible for 51% of world blindness, which represents about 20 million people (2010).

Cataract remains the leading cause of blindness.

Source: <http://www.who.int/blindness/causes/priority/en/index1.html>

Of course, almost everyone simply assumes that cataracts are just a normal part of aging. Well, they are not. That build up of tissue on the lens of the eye is happening for a reason. I believe it's for the same reason that the skin gets thicker with eczema. It's partly due to the release of a growth hormone. What causes the release of this growth hormone? Retinoic acid is for sure one of them. Of course, there's more to it, and I'll add a bit more about the very root cause mechanism of cataracts in the later chapter on the flare-up process.

Now, would this not be amazingly ironic? The World Health Organization and Western governments are supplementing major populations with vitamin A to help prevent blindness. Could it be that

¹⁰⁸ <http://energydrink-us.redbull.com/taurine-red-bull>

this supposed disease of aging is nothing more than a poisoning that takes ages to develop into cataracts? Could a combination of an ample supply of vitamin A, and a low level of taurine cause this? Please consider that diabetes is the world's other major cause of blindness. Then, consider that the body primarily derives taurine from dietary meats and that taurine is processed by the pancreas. In the developing countries, quality meat proteins would be in very low supply.

Next, we need to ask just how many people with autoimmune disease have cataracts? Many of them do, and many of these people are young, even in their early 40's. Moreover, the biggest predictor in developing cataracts, other than aging, is diabetes. Cataracts are therefore not a disease caused directly by aging, not at all.

Unfortunately for me, I had nearly completely recovered from my autoimmune disease by the time I became aware of Taurine. Therefore, I was not able to experiment with this on myself. However, my own personal vision experience was nothing short of amazing. Years of dull blurry vision quickly resolved with my vitamin A elimination diet. My vision is now crystal clear.

Okay, just one last bit of trivia from Darwin's Beagle voyage. The ship had taken on a couple young men from around Peru as new crew members. Darwin wrote about how these men had remarkable vision compared to their English counterparts. These young men would routinely spot other ships at sea miles before they became visible to the English crew members (and of course to Darwin himself too).

It's time to stop the insanity

Why exactly are milk and so many other foods fortified with a substance that can easily become a direct toxin? Did some government bureaucrat decide on this policy decades ago? That may have been fine fifty years ago, but it no longer is. We have this huge over-abundance of vitamin A

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in other foods. We now eat plenty of fruits and vegetables year round. It's time to seriously rethink this. I think we're now seeing the unintended consequences of this policy, and it's the autoimmune disease epidemic.

Why are we selling cod liver oil by the truckload to unsuspecting consumers? High doses of vitamin A have been *proven*, over and over, to cause birth defects, if nothing else. What in the hell is going on?

Is it a coincidence that low-fat milk and all dairy products have had added vitamins A and D since the early 1970s, and the incidence rates for these diseases began skyrocketing in the 1980s? Is it a coincidence that milk and all dairy products are very commonly cited as being foods that “trigger” autoimmune disease flare-ups? Is it a coincidence that elevated levels of vitamin A are known to block vitamin D, and that osteoporosis is common in all the autoimmune diseases? Milk promoting strong bone health is now being proven to be a complete myth too.

Here's a recent article and a referenced study: “Study Suggests Milk May Actually Increase the Risk of Bone Fracture.”

Despite what most people have heard their entire lives, milk may not be so good for bones or for longevity, according to a new [study](#) in the journal BMJ (formerly the British Medical Journal). The research found that consuming more milk was linked to greater risk of bone fractures and to earlier mortality. Meanwhile, cheese, yogurt, and other fermented products “appeared” to be “safe.” It's not quite clear why, but the research suggests that milk alone may increase inflammation and oxidative stress in the body.

Source: <http://www.forbes.com/sites/alicegwalton/2014/11/03/study-suggests-milk-may-actually-increase-the-risk-of-bone-fracture/>

We are talking about milk and cheese here. Could it be that we've actually inadvertently, yet effectively, poisoned the entire North American milk supply? Sadly, the answer is very likely that we have. Additionally, we need to ask why do cheese, and other fermented products appear to be safe, and milk does not? For now, let's just

assume that they have about the same amounts of vitamin A. What is different is the milk is pasteurized, and some of the cheese products are not; they are fermented and contain living microbes. So, with this difference, we are seeing the Bach hygiene hypothesis in action. Is that not amazing? A small, tiny detail, combined with the extra retinol could reduce your longevity and suck the calcium *out* of your bones.

Infant Autoimmune Disease, Cancer and SIDS

We have yet another recent study by the American Academy of Pediatrics providing a bit of a hidden, yet majorly, prophetic warning about this potentially deadly toxin.

The American Academy of Pediatrics reaffirms its recommendation of exclusive breastfeeding for about 6 months, followed by continued breastfeeding as complementary foods are introduced, with continuation of breastfeeding for 1 year or longer as mutually desired by mother and infant.

Source: <http://pediatrics.aappublications.org/content/early/2012/02/22/peds.2011-3552>

This study shows that by *not* consuming cow's milk for the first three months of life significantly reduces the risk (by ~40%) of kids developing type 1 diabetes, and many of the other autoimmune diseases too. That's right, feeding cow's milk to your infant could cause diabetes to show up later in their childhood. The perfectly reasonable assumption made in the report is that the mother's breast milk is somehow *protecting* infants from the subsequent development of diabetes etc. However, once you fully appreciate that these diseases are poisonings, it should be clear that it is not so much that the mother's breast milk is offering some form of protection. Rather, it is that the cow's milk is the source of the toxic substance that's *causing* the diseases. Furthermore, when you understand that the elevated levels of vitamin A (and likely the horrible vitamin A palmitate form of it too) will deplete these kids of their vital pancreatic stem cells, then you'll understand the direct connection here with

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diabetes. Once you know what to look for, this report is remarkable evidence that elevated vitamin A levels are indeed the very root cause of the autoimmune diseases, and not surprisingly, some cancers too. What's even more shocking about this report is that they are publishing numbers as % decreased risk. Therefore, when you do the math from the other direction, this means the increased risk is actually much higher. For example, a 40% decreased risk, is equivalent to a 60% increased risk and 75% decreased risk is equivalent to a 300% increased risk.

As you'll learn about in the next chapter, elevated levels of vitamin A will deplete many epithelial tissues of its vital stem cells. Once the stem cells are depleted, and the corresponding sclerosis develops, then that condition will lead to diseases.

Shown below is a summary of Table 2 from the report, titled: *Dose-Response Benefits of Breastfeeding*. However, since we now understand what's really going on here, we can change that title to: *Dose-Response Risks of Vitamin A supplemented milk and formulas*.

Table 9 Dose-Response Risks of Vitamin A supplemented milk and formulas.

Condition	% Lower Risk w/o cow's milk or formula	Approx. % Increased Risk with cow's milk or formula
Otitis media	23	75
Otitis media	50	100
Recurrent otitis media	77	338
Upper respiratory tract infection	63	169
Lower respiratory tract infection	72	263
Lower respiratory tract infection	77	338
Asthma	40	65
Asthma	26	34
RSV bronchiolitis	74	285
NEC	77	338
Atopic dermatitis	27	37
Atopic dermatitis	42	73
Gastroenteritis	64	175
Inflammatory bowel disease	31	46
Obesity	24	31
Celiac disease	52	110
Type 1 diabetes	30	43
Type 2 diabetes	40	65
Leukemia (ALL)	20	25
Leukemia (AML)	15	15
SIDS	36	55

Although the numbers are alarming, the exceptionally shocking number here is that for SIDS—sudden infant death syndrome.

Meta-analyses with a clear definition of degree of breastfeeding and adjusted for confounders and other known risks for sudden infant death syndrome (SIDS) note that breastfeeding is associated with a 36% reduced risk of SIDS.

But, does anyone seriously think that by not breastfeeding your baby, and feeding them other healthy foods, it is going to cause sudden death? That is just so completely illogical. Humans are just not that incredibly feeble. How is it that an otherwise healthy, well cared for human baby suddenly dies? This just violates the the laws of biology, and of nature. Humans are in no way at all that feeble, otherwise we would not even be here as a species. Additionally, when you consider that SIDS is very rare

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in China, and in places like Hong Kong, where *not* breastfeeding is the norm, the whole premise that breastfeeding is offering *protection* from SIDS completely falls apart.

What's *far* more logical is that we are boosting them up on two known chemicals that are absolutely proven to cause death when taken, at high doses. So, what's defined as a high dose for infants? Well obviously it is not very much, and we don't have to speculate about it either. It is more or less proven right here in that report. I believe the supplemented cow's milk and formulas with their significantly higher levels of vitamin D amplifies the toxicity of the vitamin A. Regardless of what I think, let's call a spade a spade here. This report is incredible evidence that elevated levels of vitamin A & D is very likely *killing* these infants and therefore, SIDS is really a fatal poisoning.

How exactly does elevated levels of vitamin A in infants lead to SIDS? Very easily. The chain reaction looks like this:

⇒ Excess serum retinol

- ↳ high rate of conversion to retinoic acid
- ↳ body attempts to buffer retinoic acid with calcium
- ↳ high serum levels of Ca^{2+} develop
- ↳ causes reduced blood flow to the brain
- ↳ critical reduction in cerebral oxygen and glucose
- ↳ hypoxia, cerebral ischemic damage develop
- ↳ death

The additional tragic ingredient here is iron. Of course, baby formulas provide more than ample amounts of iron too. The reaction of calcium and iron in an acidic environment is hugely exothermic. Therefore, not only is iron oxidized, resulting in the blood no longer being able to carry adequate amounts of oxygen, there is more than ample amounts of heat produced to destroy the proteins of the brain and other tissues. The only step missing here is the trigger, or spark, needed to start the chain

reaction. That triggering event could be something that would otherwise be harmless, such as a mild infection, or a vaccination.

Of course, it isn't just the milk and other dairy sources of this potential toxin that we need to be concerned about. When in human history have we consumed so much of it as a regular part of our diet? Is it a coincidence that reducing a significant source of vitamin A from a million-person population resulted in a 35 percent drop in the incidence rates of Crohn's and inflammatory bowel disease? Is it a coincidence that eczema is a very commonly reported co-disease with Alzheimer's and autism too?

Of course, spontaneous bone fractures have been documented in vitamin A toxicity since the 1940s. Once again, there's this amazing little bit of trivia: *no compound other than vitamin A is known to be associated with such fractures in animals*. Why would we think humans are going to be any different in this regard?

Referring again to the: "[The action of vitamin K in hypervitaminosis A](#)"¹⁰⁹ study from 1947, there are some rather important observations to be made. Firstly, what the researchers were investigating was trying to confirm earlier studies from 1943, and 45 suggesting that vitamin K might be a possible antidote to chronic vitamin A toxicity. Therefore, these researchers from the 1940s clearly understood that some people would get into this elevated state of vitamin A storage and that an antidote would be needed (it turns out that vitamin K is not one). Secondly, by feeding rats high doses of vitamin A for incredibly short periods of time, they were able to deplete the bones of calcium, and cause spontaneous bone fractures. I like this statement from their abstract: "rats were fed on *massive* doses of vitamin A for periods varying from 10 to 18 days". Then in the Experimental details section of

¹⁰⁹ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1258540/>

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the report, they define exactly what “*massive*” means: “*one drop of halibut-liver oil per rat per week*”. Therefore, for these rats, that’s just three or four drops of fish oil needed in their lifetime to induce serious disease and bone fractures, and even death!

Yet, we now have the North American human population popping fish oil tablets as if they were candies, and many people are doing so every day of the week. A lot of people have been doing it for many years now too.

Is it a coincidence that the incidence rates of Alzheimer’s have recently dropped just a bit in the USA and Germany, and both these countries stopped fishing cod off the east coast of Canada?

Is it a coincidence that the age-adjusted incidence rates of Alzheimer’s have jumped 40 fold (ages 75-85) since 1970? That is not a 40% increase; it’s a whopping 4,000% increase.

Is it a coincidence that the United States, Canada, Europe, and other industrialized nations get their vitamin A from multivitamins, fish liver oil, and the fortification of foods such as milk, butter, margarine, breakfast cereals, and some flours. Whereas, in the developing nations, people get 70 to 90% of their vitamin A from plant-based foods. We have an epidemic of autoimmune and other horrible diseases, and they don’t. Does anyone else think there’s a connection here? Almost, no matter how you look at it, all roads are indeed leading to retinol!

Chapter 23

Understanding the Horrible Flare-ups

Not only is the universal symptom of the autoimmune diseases an overall elevated level of background inflammation, there is also cyclic periods of intense inflammation and associated tissue destruction. These periods of extra intense inflammation are known as a flare-up. Flare-ups are the most damaging and dangerous times of the diseases. They are the most difficult times for people struggling to deal with the disease too, for all kinds of obvious reasons.

We are now going to investigate and try to understand exactly what is happening during flare-ups. We are going to understand what makes them happen, why they cause the tissue destruction, and why they eventually calm down. To start this investigation, we need to first review *when* do flare-ups happen most often. Of course, they can and do happen at what appears to be random times. But, there are some general times and pre-events that are widely reported as being precursors to the flare-up. Here are a few important ones:

- Heading into fall weather
- Being exposed to bright sunlight
- Dry winter air
- After getting an infection or taking antibiotics
- After taking hot showers, or using hot baths
- In the case of the Koebner phenomenon, when pressure is applied to the skin
- In eczema, after scratching etc.

Please note that this list is not from a few incidental or anecdotal reports. These precursors have been reported millions of times over. Although this might look like a bit of an eclectic list, we are about to see why this

Understanding the Horrible Flare-ups

fits perfectly. To understand why we first need to understand the structure of the skin. We need to also particularly understand the function of the basal membrane of the epidermis layer of the skin. From there, we need to understand the other major aspects of the flare-up condition. This includes:

- Intense amounts of heat generation
- The mechanism of tissue destruction
- Rapid tissue growth and thickening
- “It” moves around the body
- And, most importantly, the runaway cascading escalation process

Here's a diagram of the layers of the skin that shows some of the structures we will be discussing.

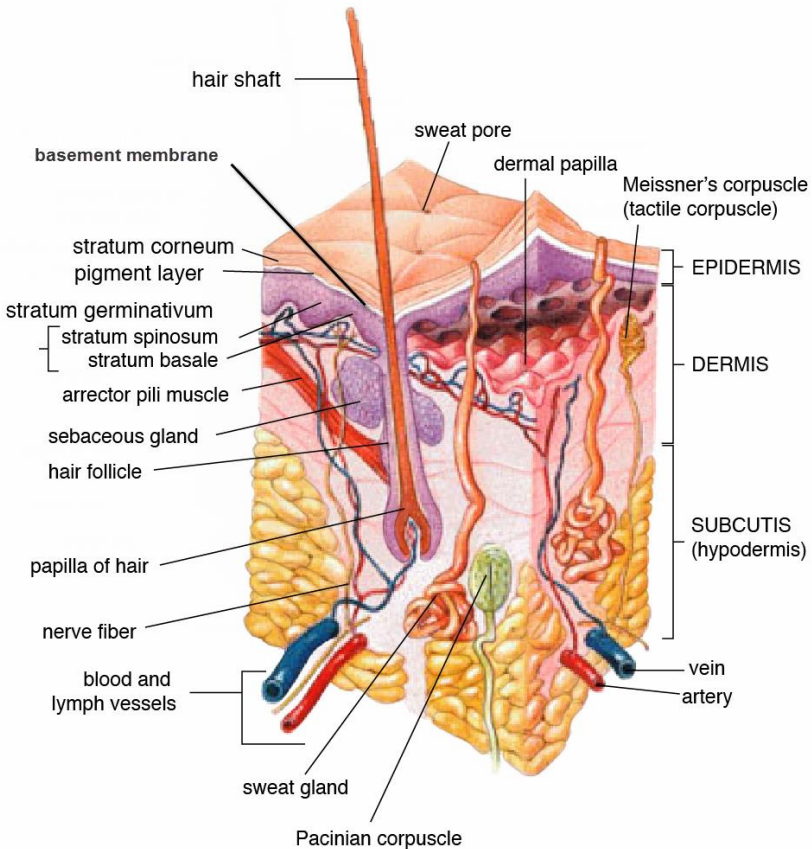


Image source: https://en.wikipedia.org/wiki/Subcutaneous_tissue_-_/media/File:Skin.png

To get started, just take note of all those nice golden looking fat cells. But, these are not quite normal, because there are now retinol-laden lipids within them. The same is true of the sebum within the sebaceous glands. It is absolutely normal to have some retinol stored in these lipids. There is no “theory” about this point. It is a fact. But, by normal, I mean at reasonably low concentrations.

Next, what we need to remember is that both retinol and retinoic acid just applied topically, and at low concentrations, to the skin will cause it to become inflamed. If applied long enough, for say 3-5 days, they will cause the skin to start to self-destruct and the subsequent breakdown of its barrier function. Although the exposure tolerance to retinol is much higher than that for retinoic acid, both substances are well documented to cause this reaction. This too has been proven millions of times over. Therefore, there is no “theory” about this point either. It too is a fact.

Next, we need to understand that the lipids of the skin accumulate and store both retinol, and retinoic acid. They are both fat-soluble molecules. Not needing to distinguish too much between them, I will now mostly just refer to these two molecules as retinoids.

The nearly unstoppable chain reaction

In normally healthy people, or even in people with autoimmune diseases outside of flare-up periods, this local retinoid storage in the fats of skin is pretty much harmless. But, as the concentration goes up, so does the risk. Now, let’s consider what’s going to happen when we head into fall weather and spend more time in dry winter air. The skin begins to dry, and for the most part this is a body-wide drying of the skin. Naturally, the face and hands are more prone to dryness due to more washing, and not being covered. The body’s mechanism for re-moisturizing the skin is going to shift into slightly higher gear. Some of the lipids (the sebum) within the sebaceous glands will be secreted to the exterior of the skin via the hair shafts, and into and just under the epidermis layer too. This is completely normal and occurs in everyone, no illness what so ever is involved in this process. But if there are slightly, or significantly, elevated retinoid storage levels within that sebum, it will change the parameters going into the equation. At a high enough concentration, the retinoids will no longer be completely emulsified.

Now, what happens? Well, nothing happens, - just yet. But, as the skin cells absorb these newly delivered lipids, the inflammatory retinoids are exposed. If there is just a little bit of them, the skin might even get a bit dryer. If there is a lot of retinoids, we have the start of inflammation. As the sebaceous glands become depleted of their local stores, more retinoid containing lipids will be moved up from the subcutaneous layer. If we sustain dry winter air conditions, more and more retinoids are being applied to the cells of the epidermis layer. The inflammation process gets going a little more. This is why it is so important for people with eczema to moisturize the skin immediately after getting out of the shower.

Next, let's consider how hot showers or baths factor into this. Other than having a somewhat drying effect on the skin due to elevated evaporation rates, there is another force at play. That force is temperature. The hot shower or bath is going to raise the temperature of the skin and that of the lipids contained within it. This has the effect of partially liquefying the lipids. These slightly liquefied lipids are now more mobile and will migrate into the intercellular spaces. This too exposes their toxic retinoid loads. So, now we are moving into a minor flare-up state. The skin now becomes a bit warmer, sensitive, and maybe a bit itchy too. We rub it and put pressure on it, and will probably start to scratch a bit. The scratching puts more pressure on the lipid-containing cells and being at an elevated temperature they release more retinoids.

As the cells within the epidermis are exposed to the freely circulating retinoids they pull these molecules through their membrane and move them into the cytoplasm, and eventually into the nucleus. This errantly delivered retinol is not properly packaged in the protective retinol binding protein, thereby bypassing the cells self-regulation mechanisms for controlled take-up of them. The inflammatory process is about to get really fired up now. The retinoids now within the nucleus will cause what is called a gene expression. A gene expression is when the cell's DNA machinery is induced to build proteins. However, this process is in

itself now going terribly wrong and it alerts the cells internal protective mechanisms to the fact that something has gone awry. The cell raises the alarm and initiates its plea for help by emitting damage notification proteins. The immune system's sentinel cells, the mast cells, detect the damage notification proteins and immediately fire off a long cascading chain reaction. After all, the damage notification proteins are an almost unmistakable telltale sign that there is a pathogen in the tissue. This is the innate immune system starting to go into high gear. In parallel to the cell emitting its damage notification proteins, and possibly self-destruct cytokines, it will start emitting needed growth hormones to encourage a neighboring cell to divide. This is a noble action on the part of the cell, and it is much better than it becoming a cancerous one. Overall, the inflammation conditions are still not too bad, because maybe only a few hundred or a few thousand cells are affected by this time. Since the skin is rapidly replacing cells anyways, this is not that big of a deal, — yet.

Now, the ever vigilant, duty bound and non-defective immune system comes in and destroys the retinoid affected skin cells. The immune cells do this by releasing a powerful acid, and other destructive proteins. This process causes a rapid localized increase in temperature. The acid destroys proteins that connect the skin cells together and some of the connective structure of the epidermis layer. The real goal of the immune response is to destroy the cell membrane of the suspected pathogen. Of course, it is now fighting a phantom pathogen.

Since there is no pathogen, the damage alerting molecules are still being detected, and the immune system is calling in more and more recruits into the fight. In order to facilitate this, it must increase the blood flow into the apparently infected tissue. The increased blood flow increases the local temperature even more. On top of that, a higher-level alarm is being sounded by the immune system. This causes the body to increase the overall core body temperature. The goal of that is to make the entire body less hospitable to the apparently invading pathogens. The immune

system is not going to give up, not ever. As long as there are singling proteins being detected, it is going to make the region of the detection as nasty as possible for any pathogen to live in. Now what's happening is the inflammation temperature is getting even hotter. It is much hotter than what could be accomplished with just elevated blood flow too. How is that possible? It is because the acid, and retinoic acid, is not just destroying proteins. It is also reacting with calcium, and iron. When iron reacts with calcium in an acid environment, it is exothermic. This generates huge amounts of heat.

Obviously, the big problem is that there is no pathogen. Rather, the phantom pathogen is really a very stable and temperature indifferent molecule. Moreover, the retinoid molecules contained within the cells that are killed by the immune response may be re-exposed with the death of the cell. Meaning, it could recycle back into the serum. Furthermore, the immune cells themselves are just as susceptible to the toxic effects of the retinoids and the toxic acid environment they themselves are creating. The epidermis now becomes a raging microbiology battlefield. The immune system is now firing off further cascading processes, and recruiting all kinds of other helper proteins that would enable it to track down and target this incredibly elusive pathogen. Fragments of destroyed cells, with their damage association molecules, circulate and attach to other cells in the vicinity. These innocent cells are now tagged for immune destruction – a.k.a. the mysterious auto immune response!

With the vastly increased tissue temperatures, even more retinoid lipids are liquefied, and thus more retinoids are exposed. More cells absorb the retinoids. The skin becomes even more highly inflamed, and dryer. (In my personal experience, it became so dry that it cracked open. It was so hot that I was able to very quickly melt ice cubes on the backs of my hands.) With the death and destruction of each tissue cell, more and more damage alerting molecules are released into the intercellular fluid.

Of course, we are not done yet. Now, the sebaceous glands really kick into high gear and attempt to release their remaining sebum into the epidermis. But, it is futile, because those nice golden looking lipids are now effectively a near perpetual fuel source for the inflammation process. The immune cells recruit a massive number of reinforcements into the fight. This includes killer T-cells and an even more substantial amount of protein and skin destroying acid is then released. This is now a major flare up, producing a massive amount of inflammation and tissue damage. The process now spirals out of control. This process can and will completely break down the skin's barrier function. Even if the immune system can kill and remove the retinoid affected cells, the process is not going to stop. The only way to stop this process is to interfere with the production of self-destruct cytokines or deplete the skin of its retinoid loaded lipids, and subsequently its overload of retinoids.

Could this get any worse? Well, yes it can. That protein-destroying process the immune system is using to break down the cell membranes of the non-existing pathogens will also destroy the beautifully complex connective proteins that hold the cells together. This connective protein forms the tight junctions between cells. This connective matrix is the core part of the skin's barrier layer. The tight junctions keep the good things in, and the bad things out. But, with the protective barrier function now crumbling, the body is far more susceptible to real pathogens.

How will this horrible runaway condition ever stop? Unfortunately, given the current state of near liver saturation, more and more retinoid-laden lipids are being delivered to the skin every day. The only saving grace is that the inflammation destruction may finally become so bad, that the subcutaneous fat cells and the sebaceous glands themselves just stop functioning properly. They stop accepting new deliveries. The retinoid-laden lipids circulating in the serum will have to be accommodated and accumulated somewhere else in the interim. This

means that the next big flare-up is probably going to happen somewhere else too. This is why “it” moves around the body.

Could this get any worse still? Yes, it can, and sometimes it is worse. So far what I’ve described here is contained within the epidermis and maybe into dermis layers of the skin. Now, imagine what would happen if this inflammation process started in, or moves into the fat cells of the subcutaneous layer? Think Yamato syndrome here. The nice medical name for this condition is [Hidradenitis Suppurativa](#).

If that was the end of it, we could possibly tolerate this flare-up once in a while. But, the process I’ve just described did not start here, and it’s not going to end here. There was definitely more of a systemic low-level inflammation condition preceding this process, and it has been going on for years. The body has been silently and appropriately responding to an artifact of that process. The small releases of the protein-destroying acid, and conversion of retinol to retinoic acid, causes a drop in the serum pH levels. Now, with the major flare-up, the serum pH levels have really dropped. Just so that you know it, even a 0.1 drop in pH is huge. Many plants will quickly die if their soil pH levels change by this amount. Therefore, the body’s pH regulation mechanism now needs to go into high gear to attempt to bring the pH levels back into a normal range. It does this by buffering the acid with calcium. It draws that calcium out of the bones and teeth. If this happens often enough, and for long enough, it will also destroy the enamel of the teeth. Of course, the cascading mess is still not resolved. The serum calcium levels are shooting up and are problematic too. Next, the body attempts to discard the calcium through the mucosal lining of the intestine. This is moving calcium out of the body at a much higher rate than normal. The side effect of this is the calcification of the mucosal lining and other tissues. Now, with the calcium depositing and building up in the mucosal lining, the body’s ability to properly absorb nutrients is significantly impaired too.

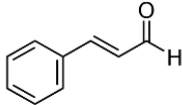
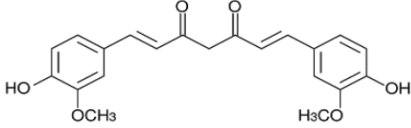
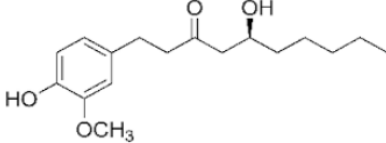
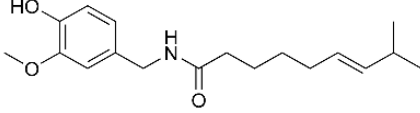
Bye-Bye Hair

There are other major side effects of the inflammation process kicking in too; including fatigue, brain-fog, more body-wide inflammation, swelling of the eyes, etc. Surely, that's enough? Nope, sorry, there's more. We are going to lose a bunch of hair too. The hair is going to become affected by the same protein-destroying acid. Moreover, since the sebaceous glands can no longer lubricate the hair shaft, it is going to become brittle and break off. But, this loss of hair is going to happen mostly in the region of the inflamed tissue. It's nice that it is somewhat localized, but there's another wider major effect this overload of retinoids has on the hair. It too has most likely been silently going on for years before this lovely flare-up. It is called graying. We'll dig into the details of this graying process a bit later on. If you haven't noticed it by now, what I am saying here is that the autoimmune disease process, and flare-ups, are causing us to age prematurely!

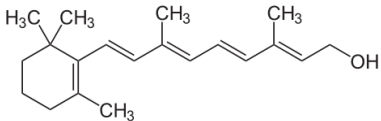
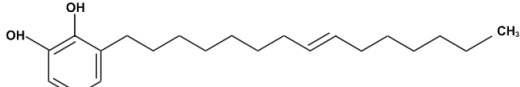
Let's move on to the sunlight factor. How is sunlight working to cause flare-ups? Well, a key point to remember is that retinol is fantastically good at absorbing light energy. Therefore, the process with sunlight is very similar to what I've just described. Sunlight is penetrating the skin and being rapidly absorbed by the retinoids in the containing lipids. This absorption of light energy is going to be converted into heat. It is almost like the microwaving of our skin's fat cells. That is just not a good thing to be doing. That heat is going to cause some liquefaction of the lipids. Once slightly liquefied the entire process starts up again. Being exposed to sunlight is a bit of a double-edged sword. Although sunlight can break down retinoids, that breakdown process is just not fast enough, and the increased heat now kick starts the flare-up process. And of course, we've all been told by the experts to avoid too much sun exposure. Unfortunately, by following all that good advice we've also allowed our retinoid skin levels to climb even higher. I also just have to wonder if the

immune cells can somehow detect the fluorescent energy of the contained retinol molecules.

With the Koebner phenomenon, the process is not so bad. That's because the pressure applied to the skin has just forced some of the retinoids to be exposed by squeezing lipids out of the sebaceous gland and or bursting some of the fat cells. But it has happened in such a confined line, or space, and most importantly without an external heat source. So, the inflammation is localized and may not flare-up into a wider area. However, now with eczema, if we scratch enough we will definitely enlarge and spread "it".

Cinnamon	
Turmeric	
Ginger	
Capsaicin	

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Retinol	 <p>The chemical structure of Retinol (Vitamin A) is shown. It consists of a cyclohexene ring with two methyl groups (CH₃) at the 1-position and one methyl group (CH₃) at the 3-position. Attached to the ring is a long side chain containing four conjugated double bonds and a terminal hydroxyl group (-OH).</p>
Poison Ivy	 <p>The chemical structure of Poison Ivy (Urushiol) is shown. It features a benzene ring with two hydroxyl groups (-OH) at the 1 and 2 positions. Attached to the ring is a long side chain containing a double bond and a terminal methyl group (-CH₃).</p>

So now, what about the body's internal skin, the GI tract? Hot showers and sunlight are not heating up that tissue. No, of course not, but, many foods will, and so will minor and major infections. Just as with the process described above, the normal immune response to an infection can fire off the same cascading chain reaction. Next, let's consider some foods that can cause significant heating of tissue. Of course, there is an app for that. Just kidding, it is called the Wilbur Scoville scale. The Scoville scale is a measure of the amount of heating various foods induce in tissue. Let's look at a few foods in a progressive level of hotness. Not too surprisingly, we are going to see some food molecules that look somewhat like our old friend retinol.

Of course, poison ivy should not be on this hot food list. No one is going to eat a poison ivy salad, but we are all eating a bunch of retinol. Therefore, and as proven many times over in dermatology, retinol does indeed have a heating action when applied to the tissue. Following that, I don't think anybody would really want to accumulate too much of this in the tissues of the GI tract. Many people learn this lesson the hard way when over consuming hot peppers. Many of the hot peppers have extraordinarily high levels of vitamin A too (for example, paprika is 50,000 IU/100g).

Saying farewell to our vital Stem Cells

Next, we need to understand where the thickening of the skin is coming from during a flare-up. In addition to the thickening of the skin, there can

also be a large amount of skin shedding, or sloughing off. For eczema-affected hands, the skin flaking off can happen on both the backs of hands, as well as the palms. The palms have no sebaceous glands.

What I am going to discuss next is a very key and critically important process to understand. After all, with my apparent indictment of the vitamin A molecule, you should have been asking: *what the hell is this vitamin good for?* Well, I'll tell you what it is good *at*. It is extremely good at influencing the stem cell differentiation process. Stem cells are very special cells in that when they divide they have a few choices as to what type of cell they want to grow up as. But, it is not a completely arbitrary choice either. That choice is tightly regulated and controlled, and the cell uses vitamin A to do so. At the risk of being overly repetitive, the key point to remember is that: vitamin A directly, and powerfully, influences stem cell differentiation.

Retinoids are ubiquitous signaling molecules that influence nearly every cell type, exert profound effects on development, and complement cancer chemotherapeutic regimens. All-trans retinoic acid (RA) and other active retinoids are generated from vitamin A (retinol), but key aspects of the signaling pathways required to produce active retinoids remain unclear. Retinoids generated by one cell type can affect nearby cells, so retinoids also function in intercellular communication. RA induces differentiation primarily by binding to RARs, transcription factors that associate with RXRs and bind RAREs in the nucleus.

Source:

Gudas LJ, Wagner JA. [RETINOIDS REGULATE STEM CELL DIFFERENTIATION](#). Journal of Cellular Physiology. 2011;226(2):322-330. doi:10.1002/jcp.22417.

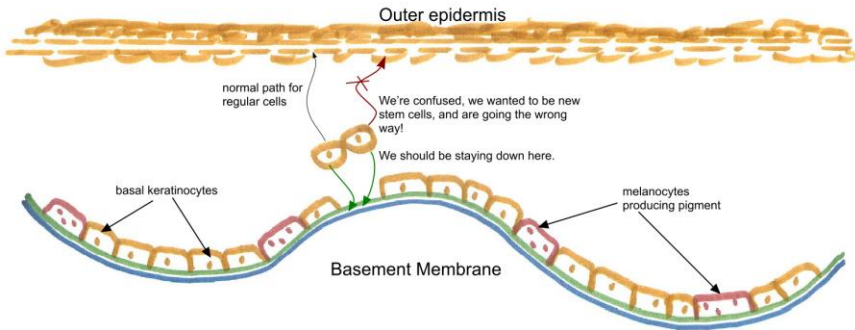
Just to be clear here, this retinoid influence on stem cell differentiation is not a new discovery, it has been known for decades now. The retinoid influence on stem cell differentiation is actually the biggest factor in why vitamin A is defined as a “vitamin” in the first place.

With that knowledge, let's get back to discussing eczema and how this ties in. In some cases of eczema, the proliferation and shedding of the skin cells can be extreme. This is not too surprising, because as I've mentioned before, as part of the cell's self-destruct sequence it releases a growth hormone. But there's much more to it. We need to ask another very critical question, that is: *where are all those new skin cells coming from?* A partial clue is that after the overall skin thickening, and the subsequent recovery from the flare-up, the skin does not revert completely back to normal. Rather, it is left thinner, more transparent, and therefore generally atrophied. Specifically, we need to understand how the skin, that is normal and healthy skin, is naturally constantly regenerating itself. This leads us to needing to understand the very important basement membrane of the epidermis. The basement membrane is like the skin's factory for producing new cells. On top of the basement membrane is a one or two-cell thick layer (the stratum basale) of very specialized cells named the basal keratinocytes. These are stem cells, or germ cells if you prefer. What makes them so unique is that when they divide, they *differentiate*. This means that, unlike other cells, they can decide to become either of a few different types of specialized cells for needed tissue maintenance. Under normal conditions, on an as needed basis, they divide at a ratio that will maintain both the stem cell population as well as the outer epidermis. When more epidermis cells are needed, a stem cell division produces two new epidermis cells. The newly designated epidermis cells lift off of the basal membrane and make their way to the top layer of the skin. As these cells migrate to the top of the epidermis they continue the differentiation process and become more and more filled with keratin. Now, on the other hand, when the basal membrane needs more stem cells, then the progeny of the stem cell division are two new stem cells themselves, and they stay attached to the basal membrane.

The process is rather amazing, because not only is the epidermis constantly renewing, the basal layer is renewed and maintained at almost

exactly the same rate. Of course, this process must be very closely regulated so that neither the outer skin, nor the basal membrane, become too thick, or too thin. In a state of homeostasis, the entire skin is normal and healthy.

Figure 62 The basal keratinocytes driven onto the wrong path



So, now what happens with the excessive latent retinol being in the serum and added to the intercellular spaces? The process is not only vastly sped up by the introduction of excessive growth hormone, but it gets completely thrown off balance by the excessive retinol. The retinol is forcing the stem cells to lift off of the basal layer to differentiate into mostly one type. They are dividing to produce two epidermis cells for every stem cell division. Therefore, the rapid cell division is producing and migrating an abnormal ratio of cells to the skin's surface, and depleting the basal layer of its stem cells at the same time. With chronic latent retinol we are slowly destroying the basal layer of the skin, and of course, exactly the same applies to other epithelial tissues. This includes the GI tract, urine, genital, the respiratory tract, eyes, blood vessels, liver and the myelin sheath insulating our nerves too. So, if you want to know the real root cause of MS, this is likely it. Of course, stem cells are found in the brain too. Obviously, depleting our stem cells is not a good thing to have happen, no matter what organ or tissue we are talking about.

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Now, if you've ever wondered why some seniors have such thin looking skin, I think this is exactly the reason. Even without ever having eczema, too much retinol will slowly deplete the basal layer of its stem cells. Once we've depleted it, the normal quick turnover of cells from the outer epidermis can't be replenished fast enough. Very importantly, remember that all of our epithelial tissues has a similar basal layer. There is one other very important organ containing a basal membrane within its ducts, and these vital epithelial stem cells. It is the pancreas. Now, what do you suppose will happen when we deplete it of its stem cells? Clearly, it will stop producing, and processing insulin. I think this is effectively the "smoking gun" in our investigation.

With this understanding, let's move on and think about those cataracts again. It's the same process. The lens of the eye is also an epithelial tissue¹¹⁰. Unlike in the epidermis of the skin, the turnover rate of cells in the lens should be normally happening very, very slowly. However, the even slightly elevated levels of retinol in the lens are speeding up that process. It is also causing the stem cells to differentially divide out of proportion. Therefore, the stem cell to outer lens cell ratio is thrown out of balance here too. Moreover, rather than being filled with a nice clear crystalline protein structure, these cells are being filled with cloudy, light blocking, keratin. This causes the lens to not only become opaque, but also stiffer. It's therefore more difficult to focus the lens. Of course, this depletion of the basal layer, and opposing thickening of the outer epithelium is not restricted to just the skin and eyes. This sclerosis is going to slowly happen to every epithelial tissue in the body, including the kidneys, liver etc. And this is why MS is called *Multiple Sclerosis*. Welcome to premature aging.

¹¹⁰ [Epithelial stem cells: the eye provides a vision, Cambridge Ophthalmological Symposium](#)

I consider this significantly out of balance stem cell differentiation process to effectively be the fingerprints in my indictment of vitamin A. This action is clearly revealing the truly duplicitous nature of this molecule. Not only *can* the stem cells use vitamin A to influence differentiation; the inadvertent presence of it is *causing* the process to go wildly out of control.

Like so much of the other evidence I've presented here, this too has been repeated millions of times over, and in both young and older North Americans alike. After all, what other food sourced molecule is capable of doing this to epithelial stem cells? Seriously, please try to name one other food sourced molecule that has had the means, motive, and opportunity for perpetrating this tissue crime in tens of millions of people? I don't think there is one, because if there were a common substitute molecule for this function, then no one would ever encounter the condition of a vitamin A deficiency. Moreover, vitamin A, would not even be considered to be a vitamin. Therefore, if that assertion is true, then the rather unique capability of vitamin A to drive stem cell differentiation is a dead-giveaway as to who the guilty party is here.

Okay, the situation just can't get any worse, can it? Surely, this molecule just can't be causing more disease, right?

Melanocytes and Melanomas

I have zero doubt that it is indeed. I think we've setup the near perfect environment for creating melanomas too. After all, we've filled up the skin lipids with an extremely efficient light-absorbing molecule. It just happens to be the very same molecule that will cause cells to rapidly divide, and at the same time to release growth hormones. Additionally, it will cause the melanocytes to differentially divide in a very unnatural way, forcing them to migrate off the basement membrane and move into the upper epidermis layers where they do not belong. Moreover, with the UV breakdown of the retinoids, free radicals are being released within

the cell's nucleus. This is going to happen even with the retinoid bonded to the cell's DNA. To top it off, when the retinoid molecule bonds with the cell's DNA it could be rather cooking hot too (relatively speaking). Of course, just the rapid rate of cell division is also going to statistically increase the possibility of DNA damage in replication errors.

Doesn't that sound like *the* perfect cancer causing recipe to you? Well, it is not quite perfect just yet. When the skin starts to react to this condition, and becomes a bit inflamed, and maybe a bit scaly too, what do we do? We go to the doctor and get prescribed the treatment of topical steroid creams. These steroids now actually force the cancer protective functions of the immune system to back-off and stand down for maybe months. Now, that is indeed the perfect cancer causing recipe! Let's extend this scenario just a little bit more. What would happen if we dose up the melanocytes stem cells on retinoic acid, expose them to high energy UV radiation, forcing them to unnaturally migrate off the basement membrane and then they move into the blood serum rather than staying within that upper epidermis? Would having damaged, and potentially cancerous, stem cells circulating in your blood be a bad thing to have happen?

However, you might be thinking that we are smart and never let our kids go out in the sun without sunscreen on, and nor do we. Therefore, we're protected, and without supporting evidence, this little sub-theory is just that. Well, hold onto your sunhat. Guess what could be lurking in that sunscreen lotion? You guessed it, it is vitamin A palmitate and there is indeed strong evidence now being (slowly) released implicating these very sunscreens, and vitamin A palmitate specifically, in the development of skin cancers¹¹¹. Don't get thrown off by the various synonyms in use on product labels: all-trans-retinyl, palmitate; retinol

¹¹¹ <http://www.ewg.org/2015sunscreens/report/the-problem-with-vitamin-a/>

palmitate; retinol hexadecanoate; retinyl palmitate; vitamin A palmitate are all referring to the the same molecule.

There are now clinical studies clearly proving that genetic mutations and increased rates of cancer are caused in cells treated with vitamin A palmitate when exposed to UV radiation (sunlight)^{112 113}. That should sound pretty bad. But it's even worse because there are other studies showing that the increased rates of cancer, and early death (in mice), is occurring even when the skin is *not* exposed to the UV radiation (sunlight). The conclusions from the NIH report investigating the cancer causing effects are:

Retinyl Palmitate

Compared to the control cream, RP further enhanced the effects of SSL in SKH-1 mice based upon earlier onsets and increased multiplicities of in-life skin lesions.

Compared to the control cream, RP further enhanced the photocarcinogenic activity of SSL(simulated sunlight) in SKH-1 mice based upon increased incidences and multiplicities of squamous cell neoplasms of the skin.

Next, please remember that exactly this same manmade vitamin A palmitate molecule is what has been used to supplement the low-fat milk and other dairy products in North America for the last four decades. It has now also accumulated in our skin's lipids. It has also done so for just about every other person living in a Western country that has similar supplementation programs. You might want to pause for a good long moment here and really think about the far reaching implications of that. Is it any wonder why there are about 100,000 new cases of skin cancers

¹¹² <http://www.ncbi.nlm.nih.gov/pubmed/16107546>

¹¹³

<https://ntp.niehs.nih.gov/results/pubs/longterm/reports/longterm/tr500580/listedreports/tr568/index.html>

every year in North America? Is it any wonder why the rates have doubled since the early 1980s?

Just as troubling is that in this 350-page report from the NIH, with more than 30 contributors, many with a Ph. D., the word “milk”, or “dairy” is not mentioned, even once. I have no doubt as to why. This report reeks of blatant scientific fraud, and with that, it should raise profound and deeply troubling questions as to who’s interests they are really protecting.

Welcome to premature aging

Okay, hopefully, we won’t be included in the group who will develop skin cancer this year. So let’s get back to discussing the far less serious issue of hair loss and graying. Of course, no one is going to like being follicley challenged. But going gray at the same time is just not fair, and especially so if you are younger. The parallel action is going on here with the germ in the bulb of the hair follicle. In healthy people, these stem cells will normally divide at the correctly needed ratio. But, with an overload of latent retinol that process is going to be driven at a higher rate. Therefore, initially, we’ll probably experience faster hair growth. That’s cool, until we realize that at the same time we are depleting the hair germ of its stem cells. Once depleted, our hair is going to fall out, or just stop growing altogether. Welcome to more premature aging.

So after a bit of a surge in oily hair growth, we might also experience some rapid hair loss, but we have lots of hair, so it’s not that big of a deal. And fine, us guys my age are definitely not alone on this one, so we can handle going a bit bald; but surely that that’s the end of it? Surely that’s enough trouble for us, right?

Hell no! It is not going to stop there. What hair is left is going to start going gray. This is because the cells that produce and accumulate melanin, the pigment of the hair, are also nestled right down on the basal

membrane of the bulb of the hair follicle. These melanocytes are also going to become slightly inflamed, depleted, and therefore eventually stop functioning properly. You might be thinking, okay, everybody slowly goes gray. It's no big deal either. But, it is a very big deal, because the people now going gray at the youngest ages are the people who live in North America.

Now, as more time goes by, the immune process has also been silently, and slowly secreting hydrogen peroxide into the hair follicle too. It is doing this because it has never given up on trying to kill those phantom pathogens. Therefore, the little bit of hair that we do have left is going to go from middle-aged gray to a nice bleached white. Of course, no one has classified our hair turning gray as being an autoimmune disease, even though it can definitely go hand in hand with autoimmune disease. Therefore, let's just think a little more deeply about this loss of the pigment generating melanocytes. The melanocytes are also stem cells, and share the same basal membrane in the skin, right alongside the basal keratinocytes. However, their function is the manufacturing of the pigmentation. They are not immune from the influence of vitamin A (no cell is) and are being overly forced to differentiate in the wrong way too. This will also force some of these pigmented cells to unnaturally migrate off the basal membrane and move up into the upper epidermis layers. We now start getting age spots. Welcome to even more premature aging.

If you were told by your grandma that these were *liver spots*, then she was almost right. More precisely, these are really "*your liver is now full of vitamin A*" spots. What happens if we really drive this differentiation process too far? Well, obviously like with the depletion of the melanocytes within the hair germ, we'll deplete the basal membrane of

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them, and we'll get blotches of skin that have lost its pigmentation. This is call vitiligo¹¹⁴, yet another mysterious autoimmune disease.

With all of that, it should be clear that the long-term inflammation process is really the long term slow cooking of our cells and it accelerates us into old age. Sadly, a so-called vitamin can cause all this destruction. And the touted primary function of vitamin A being required for stem cell differentiation is also one of its most destructive forces. Hopefully, this uniquely double dealing molecule has now incriminated itself too.

In the next two chapters, I am going to document by personal experience slowly descending into this hell, and my subsequent escape attempt from it.

¹¹⁴ <http://www.mayoclinic.org/diseases-conditions/vitiligo/multimedia/vitiligo/img-20007404>

Chapter 24

My Descent into Hell

Firstly, this chapter is not about me. It's about what happened to me. I am actually quite a private person. I am not a public kind of guy at all. There is also definitely some risk in me detailing my personal medical history here. There is of course absolutely no resume value in this for me. I am only doing this so that others can gauge the authenticity of my symptoms. It's also to highlight some very important details and clues.



Now, a key requirement in science is that experiments must be repeatable. So far, I've documented the theory behind WHY we have autoimmune diseases. I hope that I have also documented at least one method of how we can recover from them. This recovery experiment now needs to be repeated thousands of times over before it can be considered to be scientifically valid. Yes, it's time to step up and participate in this.

Next, I am going to document how I got myself into this mess and gave myself autoimmune disease. Consider this to be the counterpart experiment. In this experiment, we are going to induce autoimmune disease. Now, I believe that this same experiment has indeed already been repeated millions of times. It has been repeated by almost everyone else with an autoimmune disease. People just don't recognize this as such. How could they, because they were not aware of the risks and the root causes? Like myself, people most certainly did not know that they were experimenting on themselves. No, this little experiment was

My Descent into Hell

somewhat induced by legislation dating back to the 1970s. It's also induced by the advice from the so-called nutrition *experts*. That too was indeed an experiment. I think we are now seeing the results of these little experiments.

Nevertheless, I bet that most adults can think back to the years leading up to their encounter with autoimmune disease and see the connections. The connections are going to be their cumulative dietary history of somewhat elevated food, and supplemented, sources of vitamin A. I think they're going to see the connection, once they understand what to look for.

Okay, this is my experience:

1994-2002

- Made a lunchtime dietary change to eating tuna sandwiches with lots of tomatoes. Avoiding red meats and eggs.

2002-2004

- My wife bought flavored fish oil supplements, thinking it was good for us. The package's label says it's Omega-3 from fish sources. It didn't list any vitamin A content whatsoever.
- Supplement with this daily, ~5 days per week for several years.

2005-2006

- A huge (dramatic) loss of memory event. Too shameful to put into print.
- Biggish age spots show up on each side of my face. (I was only 46 years old.)
- Mostly stopped dreaming at nights.

2006-2008

- Okay to good health.

2008-2009

- Started to develop lots of joint pain in knees and legs. I saw three different doctors; no one had a clue why.
- Started using a heating pad wrapped around my knees to sleep (most nights, a very effective solution).
- Hair loss on the backs of my legs, a bit weird maybe, maybe normal, too. I have no idea why.
- Still not dreaming at night; maybe dream ~ 2 times a year, but still getting an okay sleep.
- Developing blurred vision.
- See doctors; get mild prescription driving glasses (nothing unusual).

2009-2011

- Slightly worsening vision, everything else okay.
- See my GP again for vision concerns; he says I have cataracts. See a specialist who says: “nope family Doc. is not quite right, these are not cataracts yet; it’s some other scarring developing in the eye”. The specialist does not know what this is and wisely decides not to attempt any treatment.
- Blue and green neon signs at night are very blurred.
- Cycle to work year-round, no problems.
- Occasionally noticing little bumps in the skin on my fingers and elbows. It comes and goes. I have no idea what this is.

2011-2012

- Starting to feel fatigue; needing more sleep. Sometimes totally wiped out, sporadic and comes and goes. Cycle to work year round, almost no problems.
- Noticed that when I hit bumps on my ride my brain hurt. That small jarring impact caused a slight pain like the pain when you have a bad flu and sneeze and snap your head forward (if that’s common).

My Descent into Hell

- Expect to develop the flu. It never does show up. (I don't think, "Oh, I have inflammation on the brain.")
- Hair on my head is fast becoming thinner (no big deal, welcome to the club kind of thinking)
- Needing to pee like 20 times a day, and 5 times at night.

2013 May-June

- More fatigue, more often; still doing okay.
- Drinking more coffee first thing in the a.m. and during the morning to compensate.
- Eating sugary snack mid-afternoons to keep going.
- Starting to notice it's becoming more difficult to learn new things.
- Job performance is still okay.
- For some completely unexplainable reason, it's taking me longer, and longer to get ready in the mornings. Often late for work by 30 to 45 minutes. Very strangely, I'm fully aware this is happening of course but can't seem to correct it.
- I'm very careful not to hit bumps while on my bike commute to avoid the brain pain.
- Noticing little lumps on my fingers and elbows more often. They come and go, as before; I have no idea what they are.
- Fairly often getting little blisters forming on the inside of my mouth, on the insides of the cheeks I have no idea what these are. They come and go.

2013 July-August

- Now sleeping more, trying to get 9-10 hours per night.
- Not feeling great, much more fatigued, stopped riding my bike, started driving to work (~ same commute time)
- Need to read things repeatedly to learn.
- What I do learn evaporates in a few days.

- Spelling skills are very noticeably bad.
- Find myself mumbling a bit in conversations, a bit embarrassing. Often repeating myself for no good reason.
- Vision is getting much worse.
- Elbows are becoming somewhat inflamed with what looks like psoriasis.
- Job performance is mediocre (this is not like me).

2013 September

- Take on a new job, lots of new learning required.
- Learning is now very slow and extremely difficult (not like me, but I have gotten older).
- Job performance is pathetic; three-hour tasks are taking three days.
- I wrongly attribute it to the complexities of new technologies I'm using.
- Talk to my boss, and we both agree that it's pretty bad performance, but he asks me to try to keep going for another month.
- I need to read things 10 or 20 times to get them to "sink in".
- When something does "sink in", it usually disappears from memory in two days or less.
- Tradespeople working on my house tell me a few times about decisions I've made and conversations I've had with them that I don't remember at all. To me, these are nonexistent events.

2013 October

- Job performance is horrible. My mind is constantly distracted. I can't focus at all.
- My spoken language skills are slipping big time. I often can't find the right word in conversations, so I resort to simpler words. The words I wanted to use are not completely gone; they're just

not available for immediate recall. Effectively, my vocabulary is shrinking.

- I almost immediately forget anything I think I've learned. I forget product names, etc.
- One notable event was very carefully reading a 20-word sentence, by the time I got to the end of the sentence I had forgotten what was at the beginning.
- I also begin to notice how fast younger people speak and how articulate they are (clearly a relative observation).
- I talk to my boss; I tell him there's something wrong with me. I'm not myself. I have no idea what's happening to me. It's just weird. He asks me to try to keep going for another month.
- When I pee in the mornings, whatever is going into the toilet it isn't exactly just urine anymore. It's cloudy, and extremely foamy too.
- My vision is sliding a bit more. At night blue and green neon signs are very blurry.
- Experiencing significant stiffness, especially after sitting for an hour or so, I now have old-man stiffness.
- The world is literally looking duller (it's as if I'm looking at the world through dull and dirty windows). Everything looks grayer. It's like a color movie slowly fading into a black and white one.
- Waking lots of mornings and my tongue is completely dry with no moisture at all. My tongue is more like a lump of dry clay.
- Hands are very numb during the nights; I need to rapidly clench a fist many times over to clear the numbness.

2013 November

- Abysmal job performance. It has taken me 20 days to do three days' worth of work. My mind is constantly distracted; I can't focus at all. I try hard to focus; it's almost impossible.
- I feel as if I'm an embarrassment to myself. This is not me anymore.

- I resign and decline to invoice for the month I just worked (not an easy decision, a month's effort is a complete loss).
- I notice a lot of "self-talk" in my mind. It's more or less constant.
- I think (almost sure) that this is the end of my career. Like a lot of people, I'm actually in the brain rental business. My brain is no longer for rent.
- I need to take a break, de-stress and try to recover before I can work again.

2013 December

- I'm more and more fatigued. I now usually try to get 12 hours of sleep. It isn't quality sleep at all. I actually wake up just as fatigued as I was before I went to bed.
- I try to get a mid-afternoon nap each day.

I formulate a recovery plan as follows:

1. Get more sleep.
2. Exercise each day.
3. Eat super healthy, like an athlete in training. I'm not at all concerned about gaining weight.
4. I don't have a big appetite at this time; I just plan to eat 10-15 percent more. Give my body all the nutrition it needs kind of thinking.
5. I won't even think about getting back to work. I have a bunch of smallish home improvement jobs that have backlogged. So, I'll do these and take the summer off with the kids.
6. I've been on a pretty good diet (at least, I think have) up until this time. I'm just going to get more serious about it. More brightly colored fruits and vegetables, more strawberries, blueberries, etc. Eat fish and spinach, and so on. Drink more milk, eat more eggs, and lean meat, and cheese.

My Descent into Hell

This should help, right? What could go wrong? Clearly, if we are sick, we need *more* of something, right? What I don't realize is that I just formulated the perfect master plan to start surging my vitamin A intake.

I see my doctor again about my chronic fatigue. Once again, he has no idea what could be causing this. I think he either doesn't appreciate or believe just how severe this really is.

The chronology of what happens next is a big blur to me. I don't remember the relative times very well. Therefore, the dates might not be exactly correct.

2014 January

- Eating the athlete's diet, and exercising yet no improvement with the fatigue; it might be worse.
- Developing some redness on my face and around my nose and mouth. I have no idea what this is. I think my neighbors might assume I've started drinking because of the inflamed face.
- Starting to develop a rash elsewhere. Vision is still getting worse.
- I start a few of my home improvement jobs. Everything is taking a ridiculously long time.
- Woodworking has been my hobby for 20 years, now I can't even do this very well or fast.
- Lots of sweating at nights, mostly around the neck. Pillows are soaked in the mornings.

2014 January-February

- I have a strong sense that my "thinking" ability has come to a complete stop. So has learning. I'm also fumbling around in conversations. I'm mumbling quite often and have big pauses in my speech because I'm too often struggling to find the right word.

- I go see my doctor, booking a “private appointment” for these special concerns. He didn't notice the “private” part of my appointment booking soon enough and came into the meeting room with a stranger. I was not going to talk to a stranger about these special concerns. I immediately shift the conversation to other concerns about my fatigue and rash. I plan to book another “real private appointment” sometime in the next few weeks to try again.
- A few days later, my body more or less explodes into a full body rash. My face is becoming more inflamed. Insane things happen to my lips. They're huge, swollen with deep cracks and fissures. My entire face then turns into thick burning red leather. It's incredibly painful. People who see me think I was caught in a fire (for real). It crosses my mind this may be the end. (What I don't know at this time is that I'm now a perfect textbook example of acute vitamin A poisoning. It's as if I've consumed 2,000,000+ UIs of vitamin A. But I haven't. It was a plate of tomatoes that pushed me over!)
- I have absolutely no appetite at this time. I more or less stop eating for three days and confine myself to bed. Booked another appointment with my doctor.
- Three or four days later, I get in to see my doctor. Most of the severity has subsided. I still have the rash on my face, feet, hands, and underarms. I try to describe to him the severity of the burn on my face and what happened to my lips. He has no idea or clue what could have caused this (and wisely, he's not speculating).
- I tell my doctor I think I've poisoned myself by eating a plate of stewed tomatoes my wife cooked the night before the big flare-up. I noticed that the tomatoes are preserved with sulfates, and I speculate that I've had an allergic reaction to the sulfates. He's not buying that theory, at all.
- I'm not too concerned at this time about my mental dullness. Having your skin burn off can quickly change your priorities.
- I'm also now developing a fairly frequent and urgent need to go to the toilet, and what I now realize are symptoms of IBD. I tell my doctor about these.

My Descent into Hell

2014 February

- I talked to a friend about what has happened to me. I suspect the tomatoes caused the big flare-up. He warns me that tomatoes and peppers are nightshades. I decide to stop eating these, just in case.

2014 March

- Some improvement with the body rash. It cycles on and off a bit. Got an appointment with a dermatologist. She has no clue what this is (but it's a low point in my symptoms), and gives me a prescription for topical antibiotics and antifungal shampoo. My face has this weird, and near constant, itchy tingling feeling. It's as if there are hundreds of tiny insects slowly crawling on it.
- Significant thinking is still slow, if not more or less blocked.
- Weirdly, I become somewhat complacent and apathetic. This is not like me. I have never been apathetic in my life. Just to clarify it, I don't really think the word "apathetic" accurately describes this feeling. To me, apathy implies consciously making the decision not to care anymore. My condition is not a conscious decision. It's as if I've just become indifferent. I'm not interested or curious about much, if anything. It's very hard to describe it. But, I have no real reason to be apathetic or indifferent.
- I'm constantly annoyed with the inflammation on my face and skin. We book a vacation, maybe a few weeks in bright sun and relaxation will help.
- Other conditions develop. My lymph nodes under both arms become swollen. So much so, that I can only sleep flat on my back. Sleeping on my side is too painful. The lymph nodes on the back of my neck also swell up.
- The eczema rash has spread to the sides of my head, mostly in the temple area, and up into the hairline. This has burned out the outer third of my eyebrows. The eczema rash is quite severe in my underarms, but more so on the left-hand side of the body.
- My thyroid has become swollen, not a lot, but noticeable.

2014 April

- I continue with the home improvement projects, not out of interest, but just because they have to get done.
- For almost some unexplainable reason, everything is taking me a long time. These should be simple jobs for me. I notice I'm misplacing tools all too often, so I'm very careful to set them down in exactly the same spot every time. But still, things are taking a huge amount of time.
- I tell my wife that it's now taking me eight hours to do jobs that would normally take me two hours or less. This is totally obvious to me.
- Yet, I can't put my finger on exactly why it's taking me so long. It's abundantly clear something is very wrong. One theory I had was that the near incessant self-talk going on in my head was very distracting, and it prevented me from focusing. It's also very difficult to keep a stepwise process clear in my mind. My mind is constantly racing, but on like on ten different topics all at the same time. I'm not sure what the real reason is. Basically, I now have ADHD at age 54. The only saving grace is that the constant chatter going on in my head is at least still in my own voice.
- I now cancel bigger home improvement projects; I have little interest, and it will take me forever to finish them.

2014 May-July

- My skin is more or less constantly inflamed. Finally, properly diagnosed with adult eczema.
- Prognosis: Treat it with steroid creams. My doctor tells me, "You'll probably have it now for the rest of your life. It will come and go, and it will probably get worse over time. It's an autoimmune disease. No one knows what causes it. There's no cure."

My Descent into Hell

2014 July

- The skin on my upper abdomen has turned yellow; I think “Oh, that’s not a good sign”
- Go on vacation with the family. Still very fatigued. Staying away from the nightshade plants. The world is getting a little less dull to me. But it isn’t a significant improvement.

2014 August

- August 8, start researching eczema.
- August 9, start my experiment.
- August 12-15, early results.

2014 August-2015 May

- The long road to recovery. It has not been exactly a linear and direct recovery. There have been some road bumps and setbacks. But, overall, everything has slowly moved back to normal.

Where my health is now:

- Thinking is perfectly clear (at least I *think* so).
- I’m totally refreshed and thinking clearly in the mornings.
- Fatigue is totally gone (not a trace of it).
- Stiffness is totally gone; I mean completely! No stiffness in the morning or after sitting.
- Joint pain is totally gone.
- Skin nodules—completely gone.
- Psoriasis on the elbows—completely gone, not a speck of it.
- Skin is almost perfect. Weirdly, other than on my hands, it now very smooth, like that of a kid’s.
- Itchiness is totally, completely gone.
- Age spots have all but disappeared.

- Spoken language is much more fluent; I now immediately notice misspelled words.
- I can now hit bumps all I want on my bike; the inflammation in my brain is gone.
- The world is brighter (this is not a metaphor or a figure of speech; it's literally brighter). I bet my *cataracts* are gone.
- My vision is vastly improved and still improving, it's now crystal clear in the near view, distant view improving too. Some days my vision is remarkable as it was in my 20s. A home self-test is 20/15 (two grades better than 20/20). Yet, it varies from week to week.
- I dream every single night now.
- I have a much better quality of sleep every night now.
- Night sweats are totally and completely gone—not a trace of them.
- Overall, I have much more hair on my lower body, especially the legs. The hair on my head is thicker, too.
- All other symptoms are slowly resolving.
- I still have smaller, random inflammation occurrences and corresponding negative vision changes.
- My overall wellbeing has vastly improved from a year prior.
- Another oddity is I think my sense of smell has improved.
- My ability for tasting sweetness is about 3 times better.
- Blue and green neon signs at night are now very clear.
- The thick build up of skin I had on the heels of my feet for over a decade is now gone, my heels are now normal and quite smooth too.

I believe I was in the subclinical toxicity state with vitamin A for at least the past five to ten years, but most severely in the past two years. So it took me more than ten years to poison myself thoroughly. Therefore, I think I should expect it to take a while to recover fully. I have no doubt

whatsoever that this poisoning caused my mental dullness, the inflammation on the brain, all the other symptoms, and my eczema. However, that eczema encounter was an interesting little twist of fate.

If I had not surged my vitamin A intake, I may have never developed my severe eczema. If I hadn't been incredibly lucky, and persistent, in determining the root cause of my eczema, I would have never uncovered the relationship and the root cause of my "mental dullness". I would have never gone searching Statistics Canada data for the disease rates data in Atlantic Canada and correlating that with a fishing industry event.

I also believe I'm still slowly moving out of this toxic state. It isn't easy. My skin is very slowly recovering and is now nearly perfect. But it's still borderline in a way too; it's still thinner where I had the most severe conditions, and treated it with the steroid creams.

The big takeaway here is that I gave myself autoimmune disease. It wasn't just bad luck. The only bad luck part was my food choices. Nevertheless, in reality, it was a self-induced poisoning. That insanely swollen and fissuring of the lips I had is a big clue. Here's a snippet of a case report from 1952 of a young man poisoning himself with vitamin A:

CASE REPORT

Present Illness: A 25 year old Mexican drug store clerk was first seen by us on March 3, 1952. He complained of marked asthenia, a 10 pound weight loss, anorexia, polydipsia, polyuria, a skin rash, excessive loss of the hair of the entire body, **soreness and fissuring of the lips**, and pain in the area of the shoulder joints, ribs, tibia and ankles. All of his symptoms were of about two weeks' duration. He and his family believed that he was very seriously ill.

Questioning revealed that for about two months the patient had been taking three to four vitamin A capsules daily (50,000 U.S.P. or international units per capsule), and two to three multivitamin capsules daily, each of which contained 25,000 units of vitamin A. He had also taken three ampuls of vitamin C and four or five 1 mm. in-

Source: "[Hypervitaminosis A: Report of a Case in an Adult Male](http://annals.org/article.aspx?articleid=675339)"

<http://annals.org/article.aspx?articleid=675339>

I like this comment, too: “*He and his family believed that he was very seriously ill*” No kidding huh? If you have not experienced this condition, then you have no idea how painful and near-death feeling it is.

Of course, the swollen fissured lips are a key symptom documented for vitamin A poisoning. So for me, was this a coincidental transition from vitamin A poisoning to autoimmune disease? No, it was not! I’ve talked with others who are currently struggling with autoimmune diseases that have done the same thing. It’s not a coincidence. All of this disease is on the very wide spectrum of vitamin A toxicity. In a bit of scientific arrogance, we have just tried to foist the blame on a defective autoimmune system.

So now, what *named* autoimmune diseases did I really have? Well, it, of course, would depend upon what specialists I went to see. But, I don’t need to see all the specialists. The diseases are:

- | | |
|-------------------|----------------------|
| ✓ Hashimoto’s | ✓ Graves’ |
| ✓ Sjögrens | ✓ Diabetes |
| ✓ Eczema | ✓ Crohn’s/IBD |
| ✓ Osteoporosis | ✓ Psoriasis |
| ✓ Arthritis | ✓ Cataracts |
| ✓ Chronic Fatigue | ✓ Other organ issues |

Yep! At least, ALL of the above, and that’s enough for me. To the astute reader, there’s clearly a big omission in the above list of diseases, and no, it’s not MS or lupus. I’m just not willing to put it down on paper.

Thanks so very much to all those nutritional experts and government geniuses that help nudge me and more than 40 million other adults, and at least 20 million kids into this horrible hell!

Next, I will document the diet I used to get myself out of this mess and how I started recovering from this ~~autoimmune disease~~ poisoning.

Chapter 25

My Escape from Hell



Throughout this book, I've referred to my vitamin A elimination diet. This diet was just a ridiculously long-shot experiment. The only goal was to maybe ease my eczema. Have you ever heard of a person adopting a vitamin A elimination diet? Or of a person with an autoimmune disease adopting such a diet? Well, the bottom line on it is that it worked!

Once again, I want to be careful, and I don't want to give people false hope. I'm just *one* person with *one* result¹¹⁵. Even though the result is very positive and very compelling, I'm not 100 percent cured, either. I'm not even going to think about calling myself 100 percent cured until I'm completely symptom-free for at least a year or, maybe two years, and my skin no longer glows under my fluoroscope. Nonetheless, my eczema skin did fully recover in five weeks on this diet. My eczema recovery was not completely sustained. The condition came back, but much less severely, through the following dry December and January. I'm now eczema free again.

This process is complicated. It will take *much* longer than five weeks to completely detox the skin and other organs of this toxin. I have no idea how long it will take or whether it's even truly possible at all to get back to completely normal health. The only scientific documentation I can

¹¹⁵ Not exactly one, some others are adopting this diet and their early reports are very similar to my experience.

find regarding the recovery time from this condition of elevated storage levels in the adipose tissue simply, and vaguely, states: “*It is going to take a long time.*” However, some documented cases of chronic vitamin A toxicity took seven to eight months to fully recover. Since this condition is similar to long-term, low-dose chemotherapy treatment with Accutane, a better indication of expected recovery time might be the documented recovery time from that treatment. That is reported to be about nine months. Therefore, I’d say count on a year or more. Kids might recover considerably faster.

I want to emphasize that I am not using the term *diet* here in the traditional sense of the word. This diet is not at all about weight loss or even nutrition. I do not want to give any connotation that this is a good *diet*. This diet is simply a *collection of foods* with ample nutrition, and that doesn’t contain a chemical that is now a direct toxin to myself.

My vitamin A elimination diet

- Lots of water
- White or brown rice (not yellow or golden!)
- Beef (steak, roast, no sauces, or spices other than salt and trace amounts of white pepper if wanted)
- Kidney beans
- Olive oil (max of 1 teaspoon per day)
- Black coffee if wanted (no milk, no cream, no whiteners)
- Zinc, Vitamin C, and B supplements if wanted

However, this diet is most certainly not skimpy on nutrition or calories either. Based on the proportions shown below, here's the approximate nutrition label¹¹⁶ for this daily diet.

Name	Amount(g)
Rice (white)	240
Roast Beef	175
Kidney Bean	100
Olive oil	10
Honey	20
Pineapple	50

I occasionally included some applesauce, pineapple, raisins, milled flaxseed, and a few almonds. These can help with fiber, provide vitamin C, E and make an otherwise dry rice and beef meal quite delicious too. However, it is critically important not to overdo it on the olive oil or almonds. Both are quite high in vitamin E, and this too can become toxic at too high a level. Vitamin E is also documented to cause an increase in serum vitamin A levels too. This elevated

risk is because the body is now reaching its capacity for storing any of

Nutrition Facts	
Serving Size (800 g)	
Calories	2371.05 cal
Fat 46.48 g	66 %
Saturated 9.56 g	40 %
Trans 0 g	0 %
Cholesterol 176.99 mg	59 %
Sodium 130.7 mg	6 %
Potassium 2960.86 mg	85 %
Carbohydrate 363.84 g	117 %
Fibre 41.21 g	108 %
Sugars 32.08 g	36 %
Protein 120.73 g	241 %
Vitamin A 38.12 iu	1 %
Vitamin C 37.5 mg	50 %
Calcium 372.9 mg	37 %
Iron 20.27 mg	135 %
Vitamin D 0 iu	0 %
Vitamin E 9.98 mg	44 %
Vitamin K 36.16 mcg	45 %
Thiamin 1.15 mg	82 %
Riboflavin 1.15 mg	72 %
Niacin 20.81 mg	116 %
Vitamin B6 2 mg	100 %
Folate 580.03 mg	145 %
Vitamin B12 3.66 mcg	61 %
Pantothenate 5.65 mg	94 %
Phosphorus 1411.37 mg	141 %
Magnesium 380.81 mg	109 %
Zinc 18.74 mg	125 %
Selenium 122.67 mcg	350 %
Copper 2.44 mcg	122 %
Manganese 6.04 mcg	121 %

¹¹⁶ Nutrition label produced with nutrient.bio.

the fat soluble vitamins in general. Additionally, depending on if you routinely include some pineapple and or apple sauce or not, you'll probably want to supplement with vitamin C. Vitamin C is critically important ammunition needed by the immune system to fight off cancer development, and pathogens. If you get bored of the red meat, you can substitute turkey breast, and you might even splurge on lobster every now and then. Therefore, this is most certainly not a starvation diet either.

Just make sure not to cook anything with butter or coconut oils. No sauces, nor ketchup, etc. is allowed. Neither is store-bought hamburger, since it can contain pork fat or it might even have some liver ground into it. Go light on the salt, too. If you do include pineapple, just don't have it in the same meal with the olive oil.

That's it! Absolutely nothing else! No fish, fish oil, no fruits or vegetables. No cod liver oil, no omega 3/6 from fish sources. No multivitamins. Nothing, absolutely nothing else! Not a single bite, not a speck, not a crumb of anything else. No coconut oil, palm oil, or sesame oil either. Coconut and palm oils have high levels of palmitic acid.

Positively no gluten either. Although most flour in Canada does not have vitamin A added, it can definitely be a serious antagonist, and you may have been inadvertently vaccinated for the gluten within it. No gravies (packaged or otherwise) are allowed, as they may contain gluten. You need to be incredibly careful.

No cashews, they could be contaminated with urushiol, and similarly for even handling mangos. Just keep in mind that the amount of urushiol needed to cause the poison ivy rash is just 2 micrograms. To clarify this amount, that is 2 - 1-millionths of a gram. That amount is so small that it would not be visible under a lot of microscopes.

This diet applies to all three meals a day, seven days per week. Eat as much as you need to, but more is not better. In the very late stages of my recovery, I added bone broth soup, as a source of calcium. However, I was not too concerned about getting enough calcium because our local water has lots of it naturally.

*"If a sick person is fed, one feeds the disease."
Hippocrates*

Now, if you are thinking of just going low on vitamin A, just to be on the safe side kind of thinking, then you've missed the entire message of this book, and you might as well not even try this diet. Make no mistake about it, Vitamin A is a toxin once you've accumulated too much of it. Yes, there's no question this diet is extreme. Admittedly, maybe it is too extreme. However, until we get to the bottom of it, take no chances. If someone knows of a more sensible and safe means of detoxing; I'm all ears. Just to be extra clear here, once again, the maximum extent of my medical knowledge is putting on band-aids. I'm not telling anyone what to do, I am just telling you what I did. So, please apply your own good judgment.

Unlike some popular health books and diets, I won't put together a bunch of fancy recipes. This is very simple; go to near **zero** vitamin A consumption for say three months, and then very low after that. I'm not a recipe person, and I don't care too much about fancy meals. Additionally, there's only so much you can do with just five foods. But, of course, it isn't exactly just five foods either. Do your own research. However, once again, you also need to be incredibly careful. The labels on food listing 0% RDA vitamin A are almost meaningless. That just means less than 1%, and it's also based on portion size and the ridiculous 5,000 IU RDA number for adult men.

One other thing to watch out for is carrageenan. I found this to be highly and suddenly inflammatory. It's also interesting to note that researchers,

back in the 1980s, actually used carrageenan to *induce* inflammation. So why is this allowed in our foods?

There are a few other practical considerations here. At first, I struggled a bit with not getting fiber. Therefore, I ended up alternating between white and brown rice every other day or so. Cooking rice three meals a day is too much of a time-consuming chore. Therefore, I purchased a good quality Japanese rice cooker, and this made a big difference. With this appliance, cooking rice for an entire day is very easy. It also does a great job of cooking the rice perfectly every time. The same goes for cooking beef. Once a week, I just cooked a roast in a slow cooker overnight. Then, once cooked, I refrigerated it and sliced off as much as I wanted with each meal for the remainder of the week. Overall, this was super-convenient and easy. My meal prep time is now just a few minutes. I consider the rice cooker and slow cooker to be my essential “life support” equipment.

Potential Calcification of the Mucosal Lining

Having read about Mucosal Calcinosis being:

metastatic” calcium deposits that are typical in such patients...also been associated with hypervitaminosis A...

and not really swallowing this “*of no immediate clinical significance*” observation, I took a small measure to address it. I occasionally drank glasses of water with small amounts of vinegar. I used about ½ teaspoon per 16 ounces (~ ½ liter).

Chapter 26

Additional Escape Strategies

Although my vitamin A elimination diet did work for me, it was rather slow, and overall it did take a long time to more or less fully recover. Nonetheless, making a full recovery from an incurable, remainder-of-life, autoimmune disease is not a trivial accomplishment either. But, there must be a faster, more direct way. What is really needed is a way to safely purge excess stored retinol and retinoic acid.

In several reports I've read, it is documented that there is no antidote for vitamin A toxicity. In the 2010 Accutane causal association report¹¹⁷ the authors use this rather peculiar phrase "*and no single 'antidote' exists*". Yet, in the 1984 report on Taurine¹¹⁸ it's documented that Taurine combined with zinc and vitamin E does provide cellular protection from excess retinol. Could it be that you need three compounds, and, therefore, it's not a *single* antidote? But, of course, taurine is ***not*** documented as an antidote either. Rather, it is documented to help protect cells from the toxicity of retinoic acid by providing the enzyme needed to add hydroxyl (OH) groups to it. It also functions as a Ca²⁺ modulator. But, this is almost slightly too late. The cells are producing the retinoic acid in response to the overload of retinol.

Therefore, taurine might be just very helpful in preventing more cellular damage while you bring down your vitamin A storage levels by other means. Nevertheless, given that the pancreas naturally produces taurine and it is documented to have such a beneficial effect in protecting cells from retinol, it's clearly a critical chemical needed by the body. There are many other sources adding supporting evidence to the very beneficial

¹¹⁷ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2775814/>.

¹¹⁸ <http://jn.nutrition.org/content/114/12/2256.full.pdf>

effects that taurine supplementation provides. Therefore, it would be very high on my list of considerations. However, a real antidote is more likely some enzyme that can crack the ring structure of the vitamin A, and retinoic acid molecules. Such enzymes exist, but it may take decades of research before they can be proven to be safe for human consumption. In the interim, additional zinc and adequate protein are going to be critical in enabling the body to produce the needed RBPs.

Treating a poisoning as a poisoning

Throughout this book, I've stated that the autoimmune diseases, Alzheimer's and autism are really long term poisonings. Now, if that is the case, should we not consider the *antidotes* that are applied to other poisonings as possible treatments for these diseases?

After a bit of investigation, I learned that one of the very standard, and widely applied treatments and first countermeasures for poisonings is Activated Charcoal. It's actually carried in many ambulances, and used in emergency rooms, for exactly this reason. Veterinarians also use it to effectively treat dogs that have mistakenly eaten rat poison. You can buy Activated Charcoal at most pharmacies.

Activated Charcoal is considered to be safe, it's basically inert, and it's also very inexpensive. It has been used for hundreds of years for this purpose and also applied topically to draw out toxins. It works by having a very high absorption capacity (so you don't want to overdo it either). Activated charcoal is just wood ash, and is usually made from hardwoods. I was curious about activated charcoal for another odd bit of trivia I had read about so many years ago.

It's well documented that the residents of Okinawa were the most long-lived people on the planet. The Chinese regarded Okinawa as the "land

of the immortals”¹¹⁹. Many people on Okinawa lived well into their 90’s and some over a hundred. But most amazingly it was not just that they were living so long, but that they were in fantastic shape at this age too. They were not affected by what we all generally *think* the diseases, and declines, of aging are. People in their 90’s appeared to be fit and agile and to be equivalently decades younger. The people of Okinawa also had very low rates of heart disease, osteoporosis, cancer, stroke, and, of course, Alzheimer’s. Now, isn’t that an amazing little list? Researchers have attributed this longevity to their healthy diet and maybe to something about the soil too. Well, it might not be the soil, and this is where the trivia fits in.

Did you know that it was very common, and traditional, for Okinawans to add wood ash (activated charcoal) to their rice and soups¹²⁰? Here’s an example: **Okinawa Soba... Behold!**

<http://sharon-thegoodlife.blogspot.ca/2010/03/okinawa-soba-behold.html>

Could it be that a regular dose of activated charcoal and a diet low in vitamin A has provided them with their remarkable longevity? Well, I most certainly do think that is the case. Of course, and unfortunately, this is now all changing on Okinawa with the adoption of an American-style diet.

¹¹⁹ <http://news.softpedia.com/news/Why-Do-People-of-Okinawa-Are-the-Most-Long-Lived-on-Earth-53411.shtml>

¹²⁰ <http://sharon-thegoodlife.blogspot.ca/2010/03/okinawa-soba-behold.html>

During the 20th century, 100,000 Okinawans migrated to Brazil, where they adopted the Brazilian diet, rich in meat. The result was that their average lifespan lowered with 17 years. When the Okinawan youth started to go to American Fast-Foods and Pizza Bars, which surround the American bases, the obesity levels, cardiovascular diseases and premature deaths of the young reached records in Japan.

Source: <http://news.softpedia.com/news/Why-Do-People-of-Okinawa-Are-the-Most-Long-Lived-on-Earth-53411.shtml>

Phototherapy as a treatment

One of the common treatment options for psoriasis and eczema is phototherapy¹²¹. It's well established as a moderately effective treatment and is offered by many dermatologists.

I've read several different explanations as to why and how phototherapy works. But, there is another possible connection here too. I've mentioned before that vitamin A, and retinoic acid are light-sensitive molecules. This means several things. One aspect is that light of the correct wavelength can cause retinol to fluoresce. To fluoresce means that the molecule absorbs one (non-visible) light wavelength, causes an energy conversion into another wavelength and emits it. The second aspect is that ultraviolet light can cause the breakdown of these two molecules.

Therefore, people using phototherapy treatments are also actually reducing the skin levels of retinol and or retinoic acid. This, of course, would only penetrate the very outer layer of the skin.

Here is a 1999 study that documents this relationship:

Ultraviolet irradiation of human skin causes functional vitamin A deficiency, preventable by all-trans retinoic acid pre-treatment.

¹²¹ <https://nationaleczema.org/eczema/treatment/phototherapy/>

Source: <http://www.ncbi.nlm.nih.gov/pubmed/10202931>

Now, it's well known that people get a bit more depressed in the winter months and that a good dose of sunshine somehow cheers people up. Could there be another connection here with this seasonal depression? I think there indeed could be. Retinoic acid is documented to cause depression. Birth defects are also more common in babies born after the winter months. Could the reductions in sunlight exposure lead to ever so slightly elevated levels of retinoic acid too?

Therefore, phototherapy might be a beneficial treatment option. However, once again, we need to get to the very root cause to really deal with these diseases effectively, since overdoing it with phototherapy could very well send you into a flare-up, or even cause cancer too.

Applying the Hygiene Hypothesis

Now, with our knowledge of the hygiene hypothesis, the obvious question is: why not introduce living organisms into the body, and let the immune system do what it does best? The immune system should be able to kill these organisms, and, therefore, draw down some of the idle stockpiles of vitamin A we have built-up. If the hygiene – vitamin A hypothesis is correct, then we should expect to see some improvement in the inflammatory disease conditions. Would you believe that this strategy was known some 2500 years ago?

*"Give me the power to create a fever, and I
shall cure any disease"*

Hippocrates

It turns out there is ongoing Canadian research at McMaster University and elsewhere, in doing exactly this. It's called fecal transfer therapy. Basically speaking, what they are doing is taking some fecal matter from a healthy person and placing it into the colon of people with ulcerative

Additional Escape Strategies

colitis. It might sound a bit gross, but I think it's perfectly logical. And guess what? It works! They even say: "*it could be a possible cure*".

"Repopulating the gut with healthy bacteria in this way can dramatically reduce symptoms and put some UC patients into remission, according to small case studies and anecdotal reports. These preliminary findings are raising hopes in the IBD community that this novel treatment could be a possible cure."

...

"We're seeing success rates of 80 to 90 percent. This kind of clinical trial is absolutely essential for a new treatment to become a standard of care"

Source: <http://www.crohnsandcolitis.ca/site/c.dtJRL9NUJmL4H/b.9013357/>

Of course, this research and the findings are fantastic news. It looks like the rationalization as to the mechanism is that somehow the newly transplanted good or *healthy* bacteria is attacking the resident *unhealthy* bacteria, and with the *unhealthy* bacteria being reduced or eliminated, the immune response is able to back off.

But, that is not at all the case because we all know that the immune system is attacking our cells. Moreover, there is no way this procedure can transfer only the "*good*" bacteria. Therefore, I believe that this research is once again proving Bach's hygiene hypothesis. It's the overall lack of gut bacteria in general (both good and bad) that is the big concern. Without adequate levels of gut bacteria, we simply don't have enough retinol being used up, and it's building up into a toxic (autoimmune) condition. This fecal transfer research is relatively recent, around 2012. Although it is very promising, the report states it still needs more study to refine it.

But, surprisingly there is another bit of Canadian history in applying a somewhat similar therapy; and it has been used since 1935. That's right, for almost 80 years, Canadians (and many Americans) have been doing

almost the same thing for another ailment of the GI tract. That ailment is called hemorrhoids, and the treatment is called Preparation H. Hemorrhoids are caused in good part by inflamed blood vessels. Preparation H has been such a successful product that it has probably been used 100s of millions of times over in the last 80 years to reduce the inflammation and swelling of hemorrhoids. How's that for a very big and successful clinical trial? So, that is a pretty amazing, and well-proven track record. Not that I am in the know; but I've never heard a news report of someone dying from, or overdosing on, Preparation H.

But more amazingly, the active ingredient in the original formula of Preparation H (and the version currently sold in the Canadian market) is a yeast extract called Bio-Dyne. But, "Bio-Dyne" is a nice marketing name for the less appealing term of "live yeast cell derivative". Yes, for almost 80 years, millions of people have been successfully treating inflammation of this sensitive tissue with a yeast extract. Unfortunately, for some reason, the Bio-Dyne ingredient has been taken out of the product sold in the US market.

Now, this live yeast cell derivative raises some more interesting questions. Firstly, does it become living yeast once placed inside the body? Secondly, how exactly does it work in reducing inflammation? Could this be similar to the fecal transfer therapy, in that our immune system responds to it and kills it by using up retinol?

The next obvious question I had was: if Preparation H has proven to be so effective, for so long, in treating inflamed hemorrhoids, how would eczema affected skin respond to this substance. Surely, no reasonable person would apply potentially living yeast directly to inflamed and broken eczema affected skin. Well, of course, I did exactly that. And it worked very well. It most certainly was not a cure, but it was very effective in reducing the inflammation and helping the skin heal.

I'd say it was easily just as effective as the prescription steroid creams. More importantly, it was much better beyond just controlling the inflammation because it did not dry out the skin and cause it to become atrophied either. It also did not suppress my immune system. Therefore, in my estimation, a \$10 tube of Preparation H beats the pants off the \$40 steroid creams and does so hands down.

If you are up for more reading on this topic, here is another interesting paper on a related application of Biodyne (LYCD).

Topical application of yeast extract accelerates the wound healing of diabetic mice.

Here's a highlight from the abstract: (note this is being applied to DB - diabetic mice)

By 24 days post injury, DB mice receiving LYCD had achieved 100% wound closure, whereas DB mice receiving vehicle had achieved only 31.4% wound closure.

Source: <http://www.ncbi.nlm.nih.gov/pubmed/10188114>

Obviously, we can't go eating Preparation H, but we can eat yogurt with yeast added to it. There are some ready-made yogurts that already have yeast added to it. Additionally, this yogurt – yeast combination is a very common food in India too, so that's pretty good evidence that it's safe.

Chapter 27

Summary

When I was a kid, the only people who got cataracts, arthritis, and Alzheimer's were 80 or 90-year-old grandpas and grandmas. We naturally assumed that these diseases were due to aging. Likewise, when I was a kid, I never even once heard of another *kid* with arthritis.

Now today, and almost all of a sudden, we have a huge surge in the rates of these diseases. Cataracts, arthritis, and Alzheimer's are now occurring in people as early as their 50's, and even 40's. Therefore, these diseases are not at all due to aging. No, they are poisonings that just takes ages to accumulate. Likewise, the autism and arthritis occurring in kids at these ridiculous rates are also poisonings! We correspondingly have a huge number of kids with other autoimmune diseases such as eczema, and a big increase in kids being born with birth defects too.

Luckily, my kids were born healthy. They were normal. They played with the phone too. Each of them randomly dialed a 911 call, unbeknownst to me. Yes, they each got a turn at around age two of doing this. What happened? In both incidents, ten minutes later the police were at the door. Upon arrival, I was a somewhat embarrassed parent trying to explain to two officers why my kids were playing with the phone. The police were courteous and explained that this child dialed 911 calls happen all the time. However, at the time, their policy was that they had to send out a unit to investigate any 911 call where they were unable to talk with the caller. This was their job, and they did it every time.

The same policy goes for the immune system. The overload of retinol and the subsequent generation of retinoic acid are causing the cells to

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make erroneous 911 calls out, via cytokines, to the immune system. The immune system *must* respond, and it does so every time, and without error. Technically, this is termed cytokine-induced apoptosis. But, being non-defective, the immune system does an extra thorough job of taking care of business. After all, it appears that the tissue has been infected and that is why the cells have sent out their self-destruct cytokine messages.

Fortunately, most kids grow out from these autoimmune diseases. Sadly, with regards to birth defects, the situation is rather more tragic. No one grows out of them. When Rothman published his paper in 1995 on the risks of elevated retinol consumption, it was quickly refuted and challenged. Some of the experts were claiming that it was not valid since he had wrongly categorized a few cases. Another claimed it was not valid because some of the retinol intake numbers were estimated. Well, these are almost trivial technicalities. And of course, all of the intake numbers are estimated, since no one is going to know exactly how much retinol they have eaten and supplemented with. The experts appeared to be more interested in finding excuses and completely ignored the giant elephant standing in the room. That elephant is the nearly indisputable fact that even if you factor in these technicalities, there is indeed a substantially higher risk of birth defects with elevated consumption. It's like a fivefold increase at the high end.

There was a brief follow-up “NIH News Release”: [Study Finds Moderate Doses of Vitamin A Before and During Pregnancy Do Not Pose Risk of Birth Defects](#)¹²² published in 1997. It appears that it tried to dismiss the original Rothman concerns as being off the mark, or inconclusive

¹²² <http://www.nih.gov/news/pr/jul97/nichd-22.htm>

Let's examine a few comments in the follow-up News Release.

"There is no reason for women to take more than the Recommended Daily Allowance of vitamin A," said the study's principal investigator, James Mills, Chief of NICHD's Pediatric Epidemiology Section. "But this study suggests that the larger doses that some women take during pregnancy is not likely to cause any problems."

The first sentence is somewhat okay. The problems start showing up in the second one. What does this mean; that their study *suggests*? Is this any more conclusive than the original Rothman study that more or less proves exactly the opposite finding with hard facts?

Secondly, the data of their follow-up study is based on telephone interviews. This approach in itself is a bit odd. In a world of evidence-based medicine (large clinical studies) how does an important study based on telephone interviews cut it? That introduces a bit of uncertainty as to how well they were actually defining consumption. Did they ask these women about *all* possible sources of vitamin A in their diets? I have no idea, but remember that the Rothman study was criticized for estimating a few cases of daily consumption. On the other hand, I think a study based on telephone interviews can be perfectly valid. More importantly, I think this is a great approach since it can be done very quickly. Therefore, there may be nothing inherently wrong with conducting a study like this using the telephone interview approach. Now, let's move on here; they state:

The Recommended Daily Allowance (RDA) for vitamin A is 2,670 International Units. Dr. Mills explained that some women may consume between 8,000 and 10,000 IU of vitamin A (roughly triple the RDA), by taking vitamin pills and perhaps eating vitamin A fortified cereal as well.

Okay, this is perfectly fine; they are acknowledging that it would be pretty easy for a woman to hit the 10,000 IU mark in one day. Of course

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in addition to the fortified cereals, there are many other big-ticket food items of much higher vitamin A content.

But, now the real interesting statement is this one:

Isotretinoin (13-cis-retinoic acid), a drug used to treat acne, chemically is very similar to vitamin A and small quantities of this compound are produced by the body after consumption of vitamin A. Because Isotretinoin has been found to cause birth defects, many researchers feared that vitamin A might also cause birth defects.

Of course, the real risk, as they state, is the retinoic acid. They are also correctly stating that Vitamin A (Retinol) is a different molecule than Isotretinoin (13-cis-retinoic acid). They are somewhat implying that the assumed risk of small amounts of retinol converting to retinoic acid was an unfounded fear raised by other researchers. It's kind of like: *nothing to see here; move along; go back to work now*. But, wait one minute; we need to know exactly when, and under what circumstances does the body convert retinol to retinoic acid?

Is there a situation, or condition, when it's no longer just a small quantity of retinol being converted to retinoic acid? Are we sure this can *never* happen in larger quantities? We had better be like 100.00% sure that this situation does not *ever* happen. Remember that every cell in the body is capable of converting retinol to retinoic acid. So, when does this happen? I think it happens when there is even slightly elevated serum levels or elevated storage in the adipose tissue. Could the elevated levels of progesterone during pregnancy increase this conversion rate, and / or facilitate the transfer of retinoic acid to the uterine? The answer to that question is, yes it does indeed facilitate the transfer of it. Now, this little detail changes the equation quite a bit. That vitamin A RDA number of 2,670 IU for an adult woman is no longer what we are talking about. The real number of concern is how much of that is being transported and delivered to the developing fetus. Additionally, do you recognize this 13-

cis-retinoic acid isomer? It is Accutane (et al). Do you remember that the body stores Accutane, and accumulates this in the adipose tissues? Do you remember what happens to the skin with the drying winter air in autoimmune?

Let's review and compare the evidence. In this follow-up study, they state that the body normally converts some retinol to retinoic acid, and are implying that small amounts are safe.

Isotretinoin (13-cis-retinoic acid), a drug used to treat acne, chemically is very similar to vitamin A and small quantities of this compound are produced by the body after consumption of vitamin A.

Then from the iPledge program page (USA FDA), we have this contradiction, stating that it's an extremely high risk in **any** amount.

There is an extremely high risk that severe birth defects will result if pregnancy occurs while taking isotretinoin in any amount, even for a short period of time.

Therefore, the real risk is not at all just this magic recommended RDA number. No, rather it's the combination of current storage levels, consumption and even rates of consumption. The %RDA number is almost meaningless when taken out of the context of the person who is actually consuming it. For example, an 18-year-old is probably going to be much different from a 35-year-old in liver absorption rates. Therefore, just to be on the safe side, they should have gone in the other direction in this News Release document. What would the risks have been in that? Well, let's once again consider that 1998 WHO report on regions with *known* vitamin A deficiency: they clearly state that it's effectively **zero**!

Additionally, we do know that almost every woman in North America has actually been supplementing with vitamin A, whether they wanted to be or not. Therefore, for most pregnant women today, this means their entire lives. Was this ever considered?

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Next, I would like to ask why do this follow-up study mentioned in the News Release at all? What was inherently so wrong with the Rothman study? Was it seriously flawed in any way? Were their interpretations of the actual hard numbers somehow wrong? Why not refute this original study on its own merits? Why take this distracting, and almost diversionary approach on this? As a bit of a silly analogy, it would be a bit like taking your car to a mechanic, and to prove there is nothing wrong with *your* car, he starts up *his* own car, and proclaims: “*Ya see; it runs fine... nothing wrong here!*”.

But fine, in science people must challenge and question the findings from others. But, considering the incredible significance of what is really at stake here, the goal has to be getting to the real truth. Maybe that Rothman study handed us some very important clues as to why we now have 1 out of 33 kids born in North America having a birth defect? The rates of birth defects in Canada are about the same as in the USA. But, the shocking news is that many defect categories in Canada have seen drastic increases in rates since the 1980s, they are 150% and 200% increases. We should be like the plane crash investigators and stop at nothing until we get to the very root cause. Seriously, how can we have 1 out of every 33 kids having a birth defect? How is this not a national emergency, if not almost a national disgrace? To me, this playing a shell game with dueling studies does not appear to be very helpful.

The takeaway here is that the experts are missing the very critical background aspect in all of this. It's not daily consumption that is at question; it's the combination of elevated storage levels, **consumption rates** and resulting diminished **absorption rates** by the liver. The current safe **uptake rate** from food is going to be a very personal number based upon age, and their lifetime's history of particular dietary habits, etc. It is, therefore, proportional and completely unknown.

There is another big unknown here. Is there a spectrum or range of disorders that could be caused by elevated levels of prenatal retinoic

acid? Could there be other health risks, other than identifiable birth defects? Well, the ones that I suspect the most are eczema, ADHD, and Autism.

In North America, we have babies being born with body wide eczema, and of course, it occurs in young infants too. Why is this happening? There are lots of online forums that report this condition. So, it's not exactly unusual, nor rare. Here is just one.

Source: <http://www.netmums.com/coffeehouse/baby-794/babies-birth-12-months-58/848567-eczema-all-over-my-babies-body-all.html>

Now, has anyone considered correlating infant eczema with elevated levels of maternal vitamin A consumption? Additionally, we should look at the correlations occurring between kids who have been fed our vitamin A *fortified* cow's milk rather than breast milk with the incidence rates of body-wide eczema, and other autoimmune diseases.

Once again, I don't think we need big clinical trials at all to determine this. Someone just simply needs to contact a few hospitals in India, and China and ask them how often they see this condition. I'll bet that the answer is going to be almost never. I think it's going to be just like with their rates of birth defects, very low. Seriously, and simply, what are the rates of body-wide infant eczema in North America compared to those in China or India? A day of telephone interviews would be all we need to find out. Clearly, telephone interviews are just fine for conducting such a study.

So now, why does a newborn baby have body wide eczema in the first place? Is it a defective immune system, the nasty autoimmune disease? No, of course not. It's because they have tiny developing livers and are unable to protect themselves from elevated levels of retinol and retinoic acid. Once again, recall that 13-cis-retinoic acid is used as a chemotherapy drug, and is proven to be very teratogenic. Add to that all the documented side effects of Accutane et al (isotretinoin). The human

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body does not like this chemical at the wrong time or place. Not at all, rather it can be a deadly serious toxin. Therefore, on the higher end of the severity spectrum it is going to include some cancers, and worse. Very ironically, it is not the BPA plastics in the baby bottle that's the big cancer risk. Rather, the huge cancer risk here is the vitamin A palmitate molecule, and the high levels of vitamin D, that's been added to the *milk* being put into the baby bottle.

Next, let's move a little lower on the severity spectrum. We have yet another health epidemic occurring in our children, and youth. It is called ADHD, with its correspondingly low academic performance. I hate to break the news to the physicians, and psychologists; but it is not a Ritalin deficiency that's causing it. Therefore, let's please cross that drug off the price list. Without knowing the root cause of ADHD, drugs such as that are probably useless, if not harmful. Once again, why do so many kids with ADHD have eczema too? Why exactly is eczema the autoimmune disease that spans across all of the others we've talked about in this book? Please pause reading here, and genuinely contemplate that question.

With that, let's consider some more hard evidence presented here by what's happening with our nation's kids.

"In mathematics, 29 nations and other jurisdictions outperformed the United States by a statistically significant margin, up from 23, three years ago. In science, 22 education systems scored above the U.S. average, up from 18 in 2009."

Source: <http://www.edweek.org/ew/articles/2013/12/03/14pisa.h33.html>

Canada, fares somewhat better in the standings. However, for our two nations, we are spending the most amount of education dollars per student, and by a wide margin, in the world, yet we have some of the poorest results. Even being ranked 3rd or 4th should be unacceptable. But, being ranked in 29th place is appalling and deeply troubling. How can this be possible? Clearly, something has gone drastically wrong. Let's

not fabricate excuses, and blame the teachers or our kids. There just has to be something far more fundamental causing this. Is it a coincidence that the best academic performance is turned in by the kids from South East Asia, the same countries with correspondingly very low rates of the autoimmune diseases? Is it a coincidence that the other countries [right adjacent to the USA in the academic rankings](#) are also those with high rates of the autoimmune diseases too, such as Norway, Denmark, and the United Kingdom? Maybe that so called *side-effect* of “brain fog” induced by the treatment of retinoic acid shouldn’t have been so quickly glossed over by the medical experts?

Okay, that’s enough about kids with birth defects, and body-wide eczema. Let’s get back to the surging rates of autoimmune diseases across all age-groups. I think I’ve presented ample amounts of evidence to make the connection. However, if the evidence I’ve presented here, and what is in the referenced studies is not enough to convince people this long-term vitamin A overload, and its subsequent uncontrolled conversion to retinoic acid, is, at least, possible, then no problem. It’s almost trivial to prove or disprove, all of this. We just need a few people with eczema or Crohn’s, etc., to adopt a **zero** vitamin A diet for four weeks as a starting point. I’d like to see some dementia/Alzheimer’s sufferers try the same diet. I’m sure the early results will be stunningly clear. More immediately, people with these diseases just need to re-evaluate themselves in the context of the wider list of symptoms documented for vitamin A toxicity. I believe they will see the connection.

Of course, I’ve gone past this just being a theory. I believe I’ve proven it on myself, with my vitamin A elimination food experiment. But, it’s still early. There’s no way to prove a negative, so I cannot guarantee I won’t regress again. Just for the record, I was on a near zero vitamin A diet for about eighteen months. I’m still alive and doing quite well. I’ve not used one speck of steroid cream, or any other drug, since starting this diet. Of

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course, I'm now once again consuming plant-based foods with *tiny* amounts of vitamin A. You can't be on a diet of zero vitamin A consumption forever.

Please do your own research. Dig through the reports I've cited and all the other material you can find. See the pictures in my personal account of my food experiment and recovery from eczema. Read about the light sensitivity and fluorescence of retinol and carotenoids. Read about the carotenoids used in food coloring and understand that beta-carotene is just a double-ended retinol molecule. Research the surging growth of tomato production in India and China, and the diet changes in Chile, etc. Let the evidence speak for itself. My only advice is to get the heck off all even slightly high sources of vitamin A, at least until we get to the bottom of this.

But here's the kicker in all of this. Let's just say for argument's sake that I'm completely and totally wrong about this theory of subclinical toxicity of retinol buildup. Let's say it's something else I removed from my diet like gluten, or folic acid. Let's say that vitamin A has nothing whatsoever to do with this. I might flippantly say who the heck cares what it is. What I do know with one hundred percent certainty is that by adopting this diet, I eliminated chronic fatigue and inflammation on my brain. I eliminated brain fog. Does anyone think that sustained inflammation on the brain is a good thing? We're not talking about resolving a case of foot fungus here.

I eliminated the inflammation on my brain in three weeks with a diet change. It's a completely harmless and simple diet change that anyone should feel comfortable trying for at least four to eight weeks. Please remember, there are about a billion people living in China and India on similar diets. So, you're in good company, and it isn't going to kill you.

I hope that once we tip over one of these "*autoimmune*" diseases, the others will fall over like dominoes. Please help push the first one over.

People suffering from these diseases can do this almost completely, at least for the critical first stage of just proving or refuting it. It's a diet change only, with no drugs or medications.

Doing nothing is not an option!

Doing nothing is simply not an option here, rather it would be an abdication of our responsibilities as parents. Of course, someone might suggest that we should conduct a big clinical trial to test this theory. On one hand, I think it would be fantastic if someone wanted to do that. But, none of us should be holding our breath, and waiting for that to happen. For so many of us, a big clinical trial is the very last thing we need. Clinical trials will only delay meaningful action, cost our nation's billions of dollars in more needless drugs and other health care treatment, and ultimately lead to many more preventable deaths. If anyone still proposes a clinical trial, here's a suggested title: *"Testing if Eliminating Chronic Poisoning Leads to Significant Reduction in Chronic Disease"*.

A bit surprisingly, effectively, multiple big clinical trials have already been completed. The results are in; we just need to be open-minded enough to see them. A huge multimillion person trial has already been conducted in Atlantic Canada. The results are stunningly clear. Another huge multimillion person clinical trial has been conducted with Accutane; once again the results are absolutely stunningly clear. Another huge, 100+ million, animal based study has been conducted on the nation's cats and dogs by boosting them up on vitamin A with liver-based foods. Results: once again stunningly clear!

Even more amazingly, effectively a worldwide clinical trial has already been conducted by the Western governments supplementing our very basic food supplies, and the non-industrialized nations did not. The results of that, and our other dietary changes, are that we now have disease rates that are hundreds of times higher. Even a 10% increase in disease rates should be alarming, but we now have increases in rates that

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are 4,000% higher. Once again, the results are stunningly clear! It just can't get any more obvious than that.

Finally, let's review the very basic facts that we now know, and we know them with one hundred percent certainty. They are:

1. The rates of chronic disease in the Western countries are off the charts in the context of our history and in the context of what is normal for the human population.
2. Our food is causing these chronic diseases.
3. There is only one common chemical in all of our foods that is both capable and scientifically proven to cause *all* of them.
4. This chemical accumulates in the body, and especially so in the adipose tissues.
5. This chemical is light sensitive and light energy absorbing.
6. This chemical will directly induce the *autoimmune* response.
7. Every cell in the human body is affected by this chemical.
8. This chemical will cause rapid cell turnover and strongly influence stem cell differentiation.
9. We've vastly increased the average daily consumption of this chemical in the last 20 years or so.

Even though we've been taught for almost all of our lives that most of the chronic diseases occur spontaneously, and are more or less just bad luck, that notion is completely wrong. The human body is not some weak and feeble machine that is prone to disease. It is exactly the opposite; the human body is remarkably good at disease prevention and self-repair. We just need to stop poisoning it via our vitamin A dosed up foods.

Yet, there appears to be a culture in medicine to resist change, and to even ridicule any foreign notions that food causes, and can, therefore, be

used to treat disease. The dogma propagated is that only drugs can treat or cure a disease. All I can do is ask that people resist the urge to stick with that bizarre thinking, and look forward to nations where most people are once again very healthy, strong, smart, productive, and happy.

A Call to Action

“We all agree that your theory is crazy, but is it crazy enough?”

Niels Bohr

Now that you’ve read everything, what do you think? Is it crazy? Is it just crazy enough? I’ve presented a mountain of evidence, and some experimental results that indicate we are on the right track. I could hardly wish for better, or more compelling evidence.

However, even with all this evidence, I’m not asking you to simply believe that this theory is correct. I’m only asking you to believe that it is quite possible for it to be correct. Whether it is correct or not is still an open question. The responsible answer to that question is that we really don’t know just yet. The great part of this investigation is that **you** now have an opportunity to help prove it one way or the other. We need more evidence, and a lot more results to prove it correct or not.

The quickest way to get that evidence is for more people to apply this simple little diet experiment and report their results. I wish I could say the results will be fast and easy, but they will not be. This process will take time. I expect somewhere around three to twelve months, or longer for most adults. Therefore, we need to be both patient and diligent.

Additionally, we need to be very careful not to jump to conclusions. This is serious business, deadly serious business. Please don’t report false results. Don’t report wishful thinking. I’d view doing so to be completely amoral and regarded as fraudulent. Also, please report all results. Both failures and successes need to be reported. For eczema, psoriasis, lupus, and most other autoimmune diseases, please post both before and after pictures.

I'm making a reporting website available (see the link below). But, of course, please report your results in many different places too. There's no exclusive reporting. No one gets to cook the books, so to speak.

I have no idea what people in the medical community will think about this theory. I'm guessing they will more or less completely ignore it, and at best, read it and dismiss it as nonsense. After all, I'm claiming there's some big unknown aspect of human physiology going on here. I'm also claiming that autoimmune disease is completely misunderstood.

I think this quote from John Hughlings Jackson might just prove to be all too true. *"It takes 50 years to get a wrong idea out of medicine, and 100 years a right one into medicine"*.

I've gotten only a bit of feedback from medical professionals to date, and it has been mixed. Mostly, I am completely ignored. It appears to be fashionable to ignore wacko outsiders.

Wacko or not, even if there's a micro crumb of a possibility that this theory is correct, the implications for the medical world could be staggering. After all, the autoimmune diseases represent about 70 percent of healthcare spending in North America. Add into that the costs of dealing with Alzheimer's, autism, and some of the assumed mental illnesses and we're talking about some seriously big numbers. Not even accounting for the human suffering, surely someone should be interested in that potential cost savings, and therefore, this is worth serious consideration.

I think that there are some very easy ways for modern medical science to start to challenge this theory.

1. Fluorescence. Get 100 people in a room, 50 who clearly have a skin-related autoimmune disease and 50 who clearly don't. Turn out the lights and scan with a simple handheld fluoroscope.

What's the result? With the correct light filters, we can pin this down to being retinol or not. We could do this in a matter of days.

2. Fluorescence. Get 100 people in a room, 50 who clearly suffer from depression, severe anxiety, or schizophrenia. and 50 who clearly don't. Turn out the lights and scan with a simple handheld fluoroscope. Especially examine their hair for fluorescence. What's the result?
3. The Koebner phenomenon should be of at least some academic interest. After all, it has been a medical mystery for more than 100 years. I think it's incredibly easy to prove there are elevated levels of retinol or retinoic acid in the skin lipids or not. Researchers could do this in a matter of days.
4. What is the ratio of C-reactive protein levels to adipose fat retinol levels in people with autoimmune diseases compared to the healthy population?
5. How closely does the inflammation of autoimmune diseases mimic the inflammation of a viral infection? How about someone personally applying a little vitamin A acid peel to induce the eczema rash? There are 10 million kids with it, so you have lots of people to compare it with. How similar is it really? The cytokines generated in reaction to the vitamin A acid peel can be compared with those present during an autoimmune disease flare-up. Are they the same or very similar?
6. How many kids with ADHD or learning disabilities have sweaty heads while sleeping? How many of them no longer dream at night? How many of them have double vision?
7. What are the serum pH levels in people in the middle of an autoimmune disease flare-up? What are their serum calcium levels at this same time? What are their serum retinol levels at

this time? What are the serum retinoic acid levels? This information should be almost trivial to gather.

8. Has anyone looked at someone's itchy eczema, lupus, or diabetic skin in real time under a high power light microscope? This isn't looking at a biopsy on a slide. This is looking at the living skin, live, not sampled, at the time of the intense tingling itchy sensation. I think they might see something very interesting.

If we all act fast, maybe we can prevent a few more kids from getting their colons removed. Is that not motivation enough to act fast? Maybe we could stop the vitamin A injection pumps at the milk producers. Can we please do it tomorrow morning? There would be absolutely no harm in doing this. It's the fastest and most prudent thing to do at this time.

Of course, people should dig through all the reports and papers I've referenced. In doing so, you'll probably discover a bunch of conflicting and confusing points of view on the safety of vitamin A consumption. But, even in that, there's a message. The message is that there's no consensus, and we surely don't know at this time what is safe. The thought to be experts are simply guessing!

I like this remark by physicist Richard Feynman, "*Science is the belief in the ignorance of experts*". This is the point; a lot of people might think that the scientific medical communities are experts on this topic of retinol. However, they are not. In almost every research paper I've read the focus is on daily consumption IU/day, or percent of RDA amounts. Everyone appears to assume there's some magic dose/response threshold. But, in the short term, that is completely wrong. Why do these daily dosage numbers really matter when the body almost immediately stores whatever we digest? Those daily consumption numbers completely miss the most important aspect of all of this, and that is TIME! What truly matters are the elevated storage levels creeping up over decades.

Just imagine putting three liters of gasoline into your car every single day. You do this daily, no matter what, regardless of what the fuel gauge reads. This strategy might be fine for a while. Depending on your driving needs, it might be just fine for a good long while. But, then one day, you try to force the three liters in, and it just all overflows onto the ground. You completely ignore the overflow, and you keep doing this daily. Now, what do you have? A potential disaster is just one spark away. Of course, this sounds like a ludicrous thing to do. No sane person would do such a thing, right? Well, no, no sane person should. But we're all sane, and we're all doing *exactly* that with our retinol consumption. Rather than burning our cars to the ground, it will be our bodies.

For the scientists researching Alzheimer's, finding out what the heck truly happened in Atlantic Canada during the past 20 years should be incredibly interesting. There's just no way that's an anomaly. I believe we were handed a fantastic gem in that Atlantic Canada data if we can just be open-minded enough to see it.

But, I'm not expecting, or even hoping, medical research will move fast at all. There has already been a long drawn out debate about the safe levels of vitamin A consumption, and it has been ongoing since about 1926! Additionally, only a few researchers appear to consider even the possibility, never mind the consequences, of elevated accumulated storage. Even though the Accutane experience handed us some amazing, and nearly conclusive evidence as to the *very root cause* of autoimmune diseases, it was conveniently glossed over and more or less dismissed. That particular incident almost completely discredits what should be a wonderful process of having *peer-reviewed* papers!

Similarly, the same happened with the reports on birth defects related to high levels of vitamin A consumption. Why is there almost this dismissive attitude and why are these people rushing to defend a known potentially toxic molecule? In both these cases, the follow-up papers should have been far more aggressive in getting to the real truth,

considering the consequences of getting it wrong. Therefore, I think we need to fast-track this and let people prove, or disprove, this theory in real life and to start doing so immediately, and directly one by one.

I don't give a hoot in hell about some distracting, nonsensical whitewashing paper saying it isn't valid or needs more data or more lengthy investigations before people try a simple diet change. For me, the first aspect of my health to recover was my chronic fatigue and thinking clarity. Maybe it's an extreme extrapolation, but I fully expect early stage Alzheimer's patients to start making some recovery after elimination of vitamin A (and gluten) from their diets. The addition of taurine, zinc, and *moderate* amounts of vitamin E might also be very helpful in accelerating the recovery, according to that Korean report.

There's absolutely nothing to lose in trying it. I think it would be wrong for anyone to talk someone out of trying this. After all, it's just a diet change. If you're not going to help, then please just don't get in the way. Let people decide for themselves. The proof is in the pudding on this. The "pudding" in this case being our own bodies and lives. Let's let the results speak for itself.

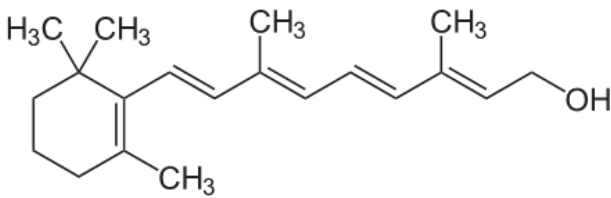
You can post your progress and failure reports, feedback, and comments on www.extinguishinghell.com.

I'll post other information as it becomes available. Thank you for your time spent in reading this book.

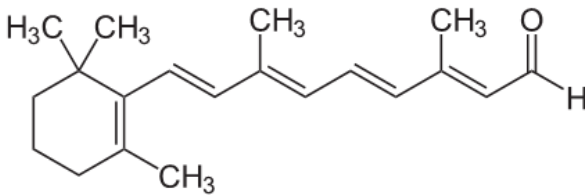


Appendix

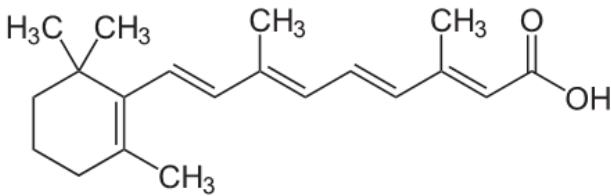
Retinol



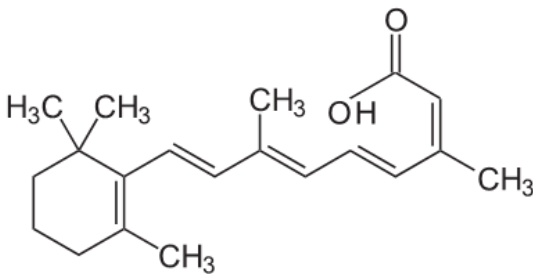
Retinal



Retinoic Acid



Isotretinoin also known as 13-cis retinoic acid



The cleaving of beta-carotene into two vitamin A molecules.

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