Health Predictions Come True

From time to time, I think it’s productive to review health trends (actually... disease trends would be a more accurate statement). I don’t have any set timeframe for doing this. It just occurs when I start to recognize telltale patterns showing up as I’m reviewing various studies and research data.

If you’ve been reading Alternatives for a while, you may remember that years ago I predicted each of the trends I’m going to discuss would eventually lead to diseases of epidemic proportions. Although it’s happened just like I thought it would, it’s certainly not because I’m some great prognosticator. It’s not hard to make these kinds of predictions. The writing was on the wall, as the saying goes. Until our society wakes up and understands the value of prevention, we will continue to experience these recurring waves of disease.

Granted, at times it seems like people begin to wake up and actually start taking responsibility for their health. But it’s typically short-lived with the promise of some new drug or therapy on the horizon that will miraculously counteract bad habits and extend lifespan. The fact that you’re reading this is proof that you’re too smart to risk your health simply on the hope that that might happen.

The best thing that all of us can do is step back every so often and take a critical look at the grand experiment that’s taking place around us. When you see health going in the wrong direction, it’s time to sit up and take notice. More importantly, it’s a good time to reflect and make intelligent changes to our diet and personal habits to make sure we’re not part of the sheeple, blindly following the rest of the herd off the cliff.

Liver Disease

One of the most disheartening observations in recent years is the manifestation of diseases in children that were once only seen in aging adults.

It wasn’t that long ago that fatty liver disease afflicted primarily adult alcoholics. At the time, it was called alcoholic liver disease, and there weren’t any medical studies that described the disease in children.

In fact, once it started showing up in children, it had to be renamed nonalcoholic fatty liver disease (NAFLD), a condition that refers to chronic accumulation of fat in the liver of children aged 18 or younger that’s not the result of genetic/metabolic disorders, infections, medication, malnutrition, or alcohol consumption.

The prevalence of NAFLD is now estimated to be 0.07 percent in children as young as 2–4 years old. Overall, 10 percent of all children in the US are believed to have the disease.

Although not all children with NAFLD are obese, anywhere from 29–38 percent of all obese children have the disease. It is more
common in males, and white and Asian children have a higher prevalence than African-Americans. Those of Mexican descent are most susceptible due to a particular gene (PNPLA3) that shows up more often in that ethnic group.

From the late 1980s to 2010 (the most recent figures I could find), the incidence of NAFLD in children increased almost 300 percent. It has risen more rapidly than the rate of childhood obesity.

One of the scariest characteristics of NAFLD is that it’s a silent disease. Initially there are no symptoms and a person can have it for decades and never know it. We typically only learn about the disease when other health problems crop up and a doctor does blood work to check liver function. Elevated liver enzymes in the blood are often the first indication.

The more serious problems start when the disease progresses to a type of hepatitis, which involves inflammation of the liver tissue resulting in the formation of scar tissue. Scar tissue damage can’t be reversed. If the disease continues to progress, it results in cirrhosis, where liver cells die and the organ can no longer function. A liver transplant is the only option at that point.

Poor diet and lack of exercise are two of the top contributing factors to this disease. One essential way to prevent it is to reduce screen time activities (television, computer, phone, etc.) and start exercising regularly.

In addition, sugar needs to be restricted, if not eliminated. Kids with pre-diabetes, metabolic syndrome, or diabetes are particularly susceptible. As you know, sugar triggers the pancreas to increase insulin production. Insulin converts the sugar to triglycerides, which are transported through the bloodstream to the liver for storage. High blood sugar levels lead to elevated triglycerides, which get deposited in the liver, resulting in fatty liver disease.

I strongly suspect the NAFLD we’re seeing in children has a direct link to the widespread use of sweeteners like high-fructose corn syrup. Soft drinks and other sweetened beverages are some of the worst dietary culprits.

Along with sugar, vegetable oil is another contributor to fatty liver disease. Over the years, restaurants have switched from using saturated fats to vegetable oils almost exclusively. And for the last couple of generations, the public has been brainwashed into believing that saturated fats are dangerous and need to be avoided.

Interestingly, one of the methods researchers use to promote liver disease in lab animals is to feed them vegetable oils. Although doctors are now finally starting to understand the connection between refined carbohydrates and fatty liver problems, I’ve yet to see them mention the fact that it is almost impossible for lab animals to develop fatty liver disease (even when given large amounts of alcohol) if they are fed saturated fats.

Studies have shown that natural vitamin E can help fatty liver disease, but nothing compares to exercise, eliminating refined carbohydrates, reducing vegetable oils, and losing weight. In fact, weight loss is so beneficial that bariatric surgery is now one of the recommended treatments for NAFLD.

While my focus has been on NAFLD and children, this disease has developed into a worldwide epidemic among adults as well. The same warnings and suggestions for children apply to everyone, regardless of age.

Vision Problems

I predicted another serious problem in the making years ago, and it has also come true: myopia (also called nearsightedness or shortsightedness) in children.

A person is considered myopic if their vision is blurred beyond two meters (6.6 feet). Two generations ago, 20 percent of the population of...
Southeast Asia was myopic. Now up to 90 percent of children are myopic by the time they complete school. Similar increases have been seen in China. Here in the US and in the Europe, roughly half of all young adults have myopia. This is double the percentage of when their grandparents were the same age. It is now estimated that one-third of the world's population will be affected by nearsightedness by the end of this decade.

Myopia isn’t always just a minor inconvenience that can be corrected with increasingly stronger eyeglasses/contact lenses or surgery. While they can rectify the vision impairment, they don’t fix the underlying defect—an elongated eyeball. When the eyeball is elongated, light entering the eye doesn’t focus on the retina, but in front of it, causing the image to appear blurry.

As many as one in five of those with myopia progress to what is called “high myopia,” which leads to more serious eye issues such as cataracts, retinal detachment, glaucoma, severe visual impairment, and blindness.

For the longest time, it was believed that myopia was totally a genetic issue, but genetic changes occur slowly and wouldn’t happen that dramatically in such a short, two-generation time span. For this reason, the major contributing factor, as I described years ago, is environment related.

The rise in myopia cases just happened to mirror the trend of increased time in front of computer and smartphone screens. In addition, kids in many countries are assigned more and more reading and homework. A recent study I read found that a 15-year-old student spent an average of six hours a week on homework in the US, compared to 14 hours in Shanghai. You would think the amount of time spent reading and using a computer would alter the growth of eyes, since they’re constantly trying to focus on close-up images. To an extent this is true, but there seems to be other more influential factors.

When researchers took a closer look, they found that lack of exposure to bright light was one of the key factors.

Exposure to light boosts production of dopamine, a chemical neurotransmitter that appears to prevent the elongation of the eyeball. By fitting chicks, and later monkeys, with special goggles, researchers were able to induce the development of myopia by restricting light from reaching the retina. (One of the proposed treatments for slowing myopia is the use of atropine eye drops to increase dopamine. Their long-term safety, however, is still being questioned.)

Dopamine is normally produced by the body on what is called a diurnal cycle—the day/night, 24-hour circadian cycle. The changes in light intensity during the sunlight hours signal the eye to switch from rod-based, nighttime vision to cone-based, daytime vision. Problems start to occur when the incoming light isn’t strong enough to fully trigger this change in the eye. In simple terms, indoor lighting in dimly lit classrooms, homes, and workplaces reduces dopamine production and adversely affects eye growth, leading to myopia and other vision problems.

To help prevent myopia, it is estimated that children need to spend roughly three hours per day under light levels of at least 10,000 lux. This is about the light level you experience by sitting under a shaded tree on a bright summer day. For the sake of comparison, an overcast day measures about 2,500 lux.
and a classroom or office typically measures 500 lux.

The relationship between the time children spend outdoors and the incidence of myopia was demonstrated in a study in Nepal. The prevalence of myopia in rural-dwelling 15-year-olds is less than 3 percent. But in urban children, it is 10.9 percent in 10-year-olds, 16.5 percent in 12-year-olds, and 27.3 percent in 15-year-olds. We see similar statistics in countries around the world. (Prog Retin Eye Res 2005 Jan;24(1):1–38)

China has recognized the seriousness of this problem and has started to build and test special classrooms with glass walls to dramatically increase light exposure. I hope that we will start to “see the light” in this country and make a point to get our children outside more and brighten up our classrooms, homes, and working environments.

Being outdoors in wide-open spaces also requires our eyes to focus differently than they do when we’re in front of a computer or TV screen, and these variations are important in eye development. When objects are far enough away, the entire image on the retina is completely in focus. When we look at objects that are close, only the image in the center of the retina is in focus and the objects in our peripheral vision are blurred. These variations exercise our eyes, making them more adaptive. This explains why the use of corrective lenses for myopia may actually accelerate the problem in the long term.

**Osteoporosis In Men**

Osteoporosis has always been thought of as a woman’s disease, but that is starting to change. Statistics show one out of every two women will break a bone due to osteoporosis. And now new studies find that one in four men over the age of 50 will do the same. Men are twice as likely as women to die during the year following a hip fracture.

In men, we’re also starting to see a higher incidence of osteopenia, which is abnormal bone loss that has not progressed to the point of being full-blown osteoporosis. In men younger than 50 who have a testosterone deficiency, researchers discovered 35 percent had osteopenia and 3 percent had frank osteoporosis. (J Urol 2014 Apr;191(4):1072–6)

Between 1987 and 2004, testosterone levels in the average male decreased 22 percent, while levels of the “female hormone” estrogen have increased. Alarming, 52 percent of men over the age of 40 are reported to have some degree of erectile failure. (J Clin Endocrinol Metab 2007 Jan;92(1):196–202)

Much of the problem stems from xenoestrogens, chemicals in our environment that mimic estrogen. Xenoestrogens are found in pesticides, herbicides, bisphenol-A (BPA) that leaches from plastics and food containers, chemical preservatives like parabens used in cosmetic and pharmaceutical products, perfluorooctanoic acid (PFOA) used in food wrappers, microwave popcorn bags, nonstick coatings, and water resistant fabric, and bovine growth hormones (rBGH or rBST) used in poultry, livestock, and commercial milk production.

Low testosterone is only one factor involved in the emerging osteoporosis epidemic. Others are poor nutrition, a pH imbalance in the body, inadequate levels of vitamins D and K, the widespread use of corticosteroids (prescription and over the counter), and the lack of weight-bearing exercise. I can’t stress enough the need for weight-bearing exercise. You can take all the supplements (or drugs for that matter) in the world, but unless the bones are “stressed” with exercise, the body has little reason to strengthen them.

Osteoporosis in men is becoming so widespread that as baby boomers get older, you can expect to see a push for more screenings like we’ve seen with women. The idea that osteoporosis can occur in both sexes is so new that most men don’t find out they have it until they break a bone. The most common osteoporosis-related fractures occur in the wrist, spine, and hip. Please don’t wait until that happens.

**Alzheimer’s Disease**

Death rates from Alzheimer’s disease in this country have increased 55 percent in just the last two decades. The situation has become so bad that many care facilities are overwhelmed and requiring family members to take on the role of caregiver. The percentage of Alzheimer’s patients who died at home increased from 13.9 percent in 1999 to 24.9 percent in 2014.

One of the easiest ways to prevent this awful disease is to regularly drink tea brewed from tea leaves. So instead of “an apple a
NEWS TO USE from around the world

**NSAIDs Increase Heart Attack Risk**

A lot of people avoid acetaminophen products (like Tylenol) for chronic pain since it can cause liver damage or failure. They seem to have switched to nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil, Motrin), naproxen (Aleve), diclofenac (Cambia, Cataflam, Voltaren-XR, Zipsor, Zorvolex), celecoxib (Celebrex), and indomethacin (Indocin), to name a few. There’s a perception that NSAIDs are “safe” drugs that can be taken daily for chronic pain, headaches, and fever.

However, a study just released has found that NSAIDs are associated with an increased risk of heart attack. The results of this study should certainly make one pause and think about the safety of these drugs. *(BMJ 2017;357:j1909)*

This study was a review of 82 different studies that involved 446,763 individuals. Researchers found that taking any dose of NSAIDs for one week, one month, or more than a month was associated with an increased risk of heart attack. Those who used NSAIDs at any dose for one week to one month had a 20–50 percent increased risk of suffering a heart attack during the study period. The NSAID rofecoxib doubled the risk, and ibuprofen and naproxen each increased risk by 75 percent.

Not surprisingly, higher doses raised risk of heart attack even more. Doubling the recommended dose of ibuprofen (from 200 to 400 mg three times daily) elevated risk of heart attack by more than 50 percent. Doubling the recommended dose of naproxen (from 250 to 500 mg two times daily) increased risk by 75 percent.

Heart attack risk didn’t continue to rise after a month of taking the drugs; it stayed the same. And one month after stopping these drugs, the risk dropped to around 10 percent.

Part of the problem with NSAIDs is that they increase blood clotting. Heart attacks are caused when plaques that line arteries break loose, and then a clot forms at that location, blocking blood flow to the heart muscle. Part of the heart dies from a lack of oxygen and oftentimes it will stop pumping altogether, resulting in death.

Aspirin works differently than NSAIDs, by preventing clotting. NSAIDs negate the anti-clotting effects of aspirin, which is why the FDA recommends taking NSAIDs eight or more hours before or at least 30 minutes after taking aspirin.

Researchers also found that individuals with the following health problems were the most likely to suffer a heart attack: high blood pressure, high cholesterol, high blood sugar, or high insulin levels. An estimated 20 million people have diabetes, and 89 million have high blood sugar (pre-diabetes). Another 75 million have high blood pressure and 102 million have high cholesterol.

I’m sure many of these overlap and some individuals have all three problems. But based on the recommendations of this study, there are very few people for whom NSAIDs are truly safe. And it certainly makes you wonder just how many deaths NSAIDs may have triggered thus far.

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day,” it appears that a cup of tea a day can keep dementia away.

At the Yong Loo Lin School of Medicine in Singapore, researchers studied the habits of 957 Chinese seniors aged 55 and older. They found that regular tea consumption lowered the risk of cognitive decline by 50 percent. And in those individuals who are genetically at risk for developing Alzheimer’s disease because they carry the APOE e4 gene, tea reduced their risk by as much as 86 percent. *(J Nutr Health Aging 2016;20(10):1002–9)*

The neuroprotective effect wasn’t limited to a particular type of tea, as long as it was brewed from tea leaves such as green, black, or oolong. The beneficial
Thoughts on Turmeric

**Question:** Earlier this year, *Time Magazine* put out an article saying that turmeric may not be the miracle spice everyone claims it is. Their conclusion was that turmeric isn’t going to hurt you but it is linked to acid reflux, low blood sugar, and other side effects. I know you’ve been a big proponent of turmeric. Are you still? —Jack S., Shreveport, LA

**Answer:** I happened to see that article and yes, I still think turmeric and curcumin (the active component in turmeric) are amazing substances that can provide enormous health benefits. Turmeric has been used for thousands of years by traditional healers with great success. Unfortunately, many “health investigators” who write these types of articles are more interested in trying to justify a sensational headline that draws readership than they are in the facts. The article you’re referring to is one such example.

If you read the article carefully, just about the only negative thing they could say was that it is poorly absorbed. That can easily be corrected by consuming a little black pepper at the same time. (Since I take my turmeric in the morning when I drink my protein shake, I’ve started throwing in several whole black peppercorns in the blender along with the other ingredients.)

Black pepper contains a compound called piperine that blocks the metabolism of turmeric compounds in the gut and liver, making them more bioavailable. The traditional age-old system of healing classifies piperine as a “bioavailability enhancer.” Other natural herbal bioavailability enhancers include the citrus flavonoid naringin, ginger, quercetin (found in onions), glycyrrhizin from licorice root, and genistein from soy. Piperine is now included in many curcumin products.

It’s also important to make sure turmeric is absorbed from the gut. Piperine doesn’t help with absorption... just with making it more available for absorption. To maximize absorption, be sure to take turmeric with some kind of fat or oil.

An Effective DEET Alternative

**Question:** Do you have a suggestion for a viable alternative to DEET for repelling mosquitoes? — Margaret R., Atlanta, GA

**Answer:** One that comes to mind is the essential oil in catnip called nepetalactone. Researchers have found that it is 10 times more effective than DEET at repelling mosquitoes.

You can purchase nepetalactone at most larger health food stores, some pet stores, or online. Unfortunately, though, it is somewhat expensive. You can apply a few drops directly to your skin, but it’s easier to mix a few drops in a base oil like coconut oil. You can also add other less expensive essential oils with known insect-repelling properties, such as eucalyptus and citronella, to help lower the cost. It takes about one-tenth of the amount of nepetalactone to have the same effect as DEET. The downside is that it needs to be reapplied every few hours. (And if you’re around cats, they may not leave you alone.)

While I’m not a fan of spraying DEET directly on my skin, in jungles or heavily mosquito-infested areas, I have no problem spraying it on the outside of my clothes. It can also be particularly helpful in repelling ticks when sprayed on boots, socks, and pant cuffs.
preventing Alzheimer’s and other brain-related diseases.

Every living cell in your body produces waste. For example, when cells break down proteins for growth and repair, one of the waste byproducts is urea. When cells break down carbohydrates and fats to produce energy, the resulting waste products are carbon dioxide and water. In addition, cells die and become waste. All of this material must be removed. The lymphatic system provides the initial drainage so that cellular waste products can get to the blood and ultimately be eliminated through the respiratory system, the skin, and the urinary and digestive tracts.

The central nervous system has its own separate structure for clearing waste, which was recently named the glymphatic system. The glymphatic system is like the lymphatic, but a “g” was added to the name in recognition of its dependence upon glial cells—the cells in the brain and spinal cord that carry nutrients and remove waste from nerves. The glymphatic system dumps the resulting waste into the bloodstream, which carries it to the liver for detoxification.

It’s primarily during sleep that our bodies flush out toxic waste products from our brain. When we’re sleeping, the glymphatic system goes into overdrive. Brain cells even shrink to help enlarge glymphatic pathways and make it easier to clean the spaces around them. In fact, the space between cells increases by 60 percent. (Science 2013 Oct;342(6156):373–7)

Watching the process with a special imaging technique, researchers said the difference in cerebrospinal fluid movement through the brain after falling asleep was like turning on a faucet. Amazingly, the harmful beta-amyloid protein, which makes up the plaques found in the brains of Alzheimer’s patients, cleared out twice as fast during sleep compared to when awake.

The overproduction of this beta-amyloid protein in Alzheimer’s patients is one heavily studied facet of the disease, but the inability to clear it out might be the bigger problem. Also, toxic waste that isn’t cleared from the brain leads to inflammation, and inflammation initiates neurodegeneration. Links have now been made between inflammation and the manifestation of dementia, Alzheimer’s, Parkinson’s, multiple sclerosis, and many other neurological diseases. Clearing the brain of waste may be one of the keys to keeping inflammation and beta-amyloid protein at levels that don’t cause neurological damage. (Both curcumin and ashwagandha have been shown to reduce inflammation, beta-amyloid protein production, and plaque buildup in the brain.)

Speaking of inflammation... consuming simple carbohydrates boosts inflammation, and chronically elevated blood glucose levels lead to insulin resistance and diabetes, both of which are directly linked to memory loss, dementia, and Alzheimer’s disease. If you recall, the link is so strong that many researchers think Alzheimer’s should now be called type 3 diabetes.

The one thing practically everyone complains about today is a lack of quality sleep. This seems particularly true among the elderly. There are dozens of reasons.

For one, our eyes don’t get enough exposure (indirect, of course) to full sunlight, which helps set the body’s internal 24-hour clock. We also don’t exercise enough. And we have blood sugar problems. At night, we don’t sleep in completely dark bedrooms or wear sleep masks. We stay up too late watching television or reading our computers and phones. We eat too close to bedtime (less than three hours prior). We don’t keep regular bedtime habits. Many work night shifts. As a society, our sleeping habits are horrendous. And I suspect it’s one major factor in the explosion of serious neurological diseases. If you want to avoid these diseases, improving the quality of your sleep should be a top priority.

In addition to sleep, there are other techniques that have been shown to increase the flow of cerebrospinal fluid:

- Whole body vibration
- Inversion and inversion tables
- Yoga
- Standing at work instead of sitting
- Lymphatic massage
- Chiropractic cervical and cranial adjustments
- Rebounding
- Deep breathing exercises
- Nose breathing vs. mouth breathing
- Alternate nostril breathing
- Sleeping on your side instead of your back
- Cranial sacral therapy

On another front, researchers at Rush University Medical Center in Chicago have come up with what they call the MIND diet. It’s
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Visit my website at drwilliams.com, where you’ll find information and recommendations for many of your top health conditions, including:

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- Cognition and Brain Health
- Weight Loss

Over the last few decades, we’ve seen some amazing breakthroughs in diagnosing and treating diseases. At the same time, the concept of prevention has given way to the practice of managing disease. But as I always say: It’s far easier to prevent a disease than it is to manage or treat it once you have it.

Until next month,