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Subject: Greg Brown's Weekend Reading and Other Things.. 01/29/2017
Date: Sun, 29 Jan 2017 10:20:16 +0000

DEAR FRIEND.....

Should You Drink Cow Milk?

[image: Inline image 1]

When my daughter Allie was nine years old she decided that she was lactose intolerance. I pointed out that I had traveled all across the African Continent and had never seen an African child who wouldn't drink milk when available or offered. And although when growing up in the 1950s like almost all of my friends, if not all of my friends, I grew up drinking cow milk and every so often, chocolate milk when my mother would allow or when I went to summer camp or was a hospital patient. But as an adult, I rarely if ever drink cow milk, unless it is in coffee or English tea. Even in breakfast cereal, I have substituted cow milk with almond or soy milk.

So when I ran across Luisa Dillner's article in the *UK Guardian* *– Should humans drink cow's milk? –* I had to wonder why humans are the only animals to drink another species milk regularly, although dogs and cows will happily drink cow milk if given to them. Well it appears that when an orphaned baby animal is fortunate enough to find an adoptive and lactating " *mother*," it will nurse as much as possible. For instance there are pictures showing a hippo with her "*baby*" pigs! Granted, each species' milk is optimal for its young, but I am told that doesn't mean categorically that other species' milk is bad,

[image: Inline image 2]

There is no official source for the person who officially discovered cow milk as cow milking has been an ancient practice associated with the very beginnings of agriculture development more than 8,000 years ago. However, the practice was very common in Europe and the East, in particular, and cow breeding was found to become popular when farmers began to discover that certain cows produced milk better than others. As a result, people have been drinking animal milk, and making it into butter, cheese, etc, since prehistoric times. It is not possible to say who first did it, because nobody knows. It would probably have been discovered by different people in different places at different times. People would have observed animals

suckling, and realized that animals produced milk just like human women do. And it would not take much working out to realize that a large animal like a cow or goat might produce milk that could be drunk by humans as well.

In many cultures of the world, especially the West, humans continue to consume milk beyond infancy, using the milk of other animals (especially cattle, goats and sheep) as a food product. Initially, the ability to digest milk was limited to children as adults did not produce lactase, an enzyme necessary for digesting the lactose in milk. Milk was therefore converted to curd, cheese and other products to reduce the levels of lactose. Thousands of years ago, a chance mutation spread in human populations in Europe that enabled the production of lactase in adulthood. This allowed milk to be used as a new source of nutrition which could sustain populations when other food sources failed. Milk is processed into a variety of dairy products such as cream, butter, yogurt, kefir, ice cream, and cheese. Modern industrial processes use milk to produce casein, whey protein, lactose, condensed milk, powdered milk, and many other food-additives and industrial products.

Whole milk, butter and cream have high levels of saturated fat. The sugar lactose is found only in milk, forsythia flowers, and a few tropical shrubs. The enzyme needed to digest lactose, lactase, reaches its highest levels in the small intestine after birth and then begins a slow decline unless milk is consumed regularly. Those groups who do continue to tolerate milk, however, often have exercised great creativity in using the milk of domesticated ungulates, not only of cattle, but also sheep, goats, yaks, water buffalo, horses, reindeer and camels. The largest producer and consumer of cattle and buffalo milk in the world is India.

Americans have been sold milk as the best source of calcium by a remarkable marketing and lobbying work done by the dairy industry. It's long been known that bones consist largely of calcium. Literature from around 975 A.D. noted that plaster of paris, which is made of calcium sulphate, was a useful material in the setting of broken bones. In fact, 99 percent of the calcium in our bodies exists in our bones and teeth. It's easy to assert that calcium = strong bones. Now, what about the assertion that dairy milk = the best source of calcium?

During World War I, there was a dairy surplus, and the USDA Dairy Division began to market cow's milk. They did this by creating educational milk campaigns, and were successful in their goal to increase demand. As far back as the 1940s, ads for dairy linked milk to bone health. Dairy marketing has been in schools for a long time and still is today. When you start a habit young, it's more likely to be a habit for life. Curriculum for 7th and 8th graders from the National Dairy Council promotes milk and other dairy products as the single best sources of calcium, stressing to children that vegetables just don't cut it. But is this true? Do we even need as much calcium as they want us to believe?

Harvard notes that even with a high intake of calcium, your risk of osteoporosis may not even be lower. More isn't always better, which is why the nutrition community calculates both lower and upper limits for recommended nutrient intakes. Furthermore, a heck of a lot of people in this country are lactose intolerant (L.I.). In the U.S., about 25 percent of all people lose their ability to break down lactose after weaning. Worldwide, this stat is 75 percent!

And even when a food is high in certain nutrients, this does not mean that the nutrients will be easily absorbed by our bodies – it hinges somewhat the makeup of the food as a whole. For instance, spinach and chard are not optimal sources of calcium because they contain oxalic acid, a compound that prevents the absorption of calcium. Not to worry, vegans and L.I. folks alike, for Dr. Ginny Messina tells us that calcium is easily absorbed from the following plant foods "kale, collards, mustard greens, turnip greens, bok choy, broccoli, fortified plant milks, fortified juices, and firm tofu made with calcium-sulfate."

But getting back to dairy, the protein in milk (and in all animal products) appears to acidify the blood. One of the body's main priorities is to keep the blood at a neutral pH. To buffer the acid in our blood, our bones release calcium. Drinking milk to get calcium seems a little bit counterproductive, wouldn't you say? This phenomenon may explain why countries with high milk consumption have high rates of osteoporosis and countries with low milk intakes don't seem to have problems with bone fractures.

All this goes to show, money is power. The milk lobby is huge, think tobacco lobby. The dairy industry spends a significant amount of money on lobbying. By infiltrating schools with their products and "*educational materials*," using medical professionals to advocate for them, running manipulative advertising campaigns that play on our fears (and are paid for by consumers), and influencing the government's dietary guidelines, the dairy industry is shaping our food environment and the messages we receive about cow's milk, which certainly influences our food choices. Nice try, dairy lobby. You can get all the calcium you need from plants, without the moral consequences, the potentially health-threatening animal protein, the cholesterol, or the saturated fat.

[image: Inline image 3]

The consumption of cow's milk is in decline as lactose intolerance does for dairy what gluten intolerance has done to bread. But if you are northern European, you are genetically modified to consume milk. It is said that the average person consumes 144 pints of cow's milk a year in the UK, but 40% of that is poured on to cereal. The definition of what an average person is seems to include 60% who are children. But what was once touted as the one-stop supplier of most nutrients is going out of fashion – Americans drink 37% less milk than they did in the 1970s, and in the UK dairy consumption overall has fallen by a third in the past 20 years. Milk

is increasingly getting a bad press. What gluten intolerance did for bread, lactose intolerance is doing to milk. A recent blog suggested: "Maybe people are drinking less milk because it is poisonous to many of us."

The solution

Lactose is the sugar found in milk and dairy products and it needs the enzyme lactase to break it down. Without enough lactase, the lactose is broken down by bacteria in the small bowel, causing bloating, flatulence, stomach cramps, diarrhea and nausea. Globally, around 70% of us don't continue producing lactase after we have finished breast or formula feeding. Genetically, babies need milk – adults not so much. But northern Europeans, who thousands of years ago got into cattle farming, have adapted to cow's milk and have a genetic mutation so that only between 2 and 15% have a degree of lactase deficiency. This rises to 23% in central Europeans and 95% in Asian populations.

So is lactase deficiency the normal state? Not really – it made sense to drink milk at one time, so we adapted to do so. And cow's milk is nutritious – it contains calcium, vitamins A and D and riboflavin, as well as protein and isn't heavy on calories. Dr. Miranda Lomer, senior consultant dietitian in gastroenterology at Guy's and St Thomas' NHS Foundation Trust, says our bodies may find the calcium in cow's milk easier to extract than from the supplements in almond and coconut milks (which are generally less nutritious). Lomer also points out that lactase deficiency does not equal intolerance and even people with lactase intolerance can still usually drink milk in tea (around 50ml) or on cereal – between 250 to 375ml a day.

You can see your GP for a lactose breath test, but Lomer suggests drinking a large glass of milk. If you get bloating, gurgling and diarrhea within the next 24 hours, you should consider yourself intolerant. But you may still be able to have milk in cereal and tea. People may have ethical issues about exploiting cows for their milk, but it isn't true to say we aren't meant to drink it – because in northern Europe, we are genetically modified to do so.

The Case for Milk and Dairy

The USDA's recommendations are based on the fact that milk is a prime source for three important nutrients: calcium, potassium, and vitamin D (which is added to fortified milk.) "Milk contains a big package of nutrients that are especially important to bone health," says Connie M. Weaver, PhD, who directs the nutrition department at Purdue University. "People who don't drink milk tend to be deficient in them. So it makes good sense to encourage people to consume dairy products."

Milk is also a good source of potassium -- another compelling reason the USDA committee increased the recommended servings from two to three in 2005, according to Penny Kris-Etherton, PhD, RD, professor of nutrition at Pennsylvania State University, who served on the committee.

Too much sodium and too little potassium together are risk factors for high blood pressure. Unfortunately, most Americans get too much salt and don't get enough potassium. Milk isn't the only source, to be sure. Many vegetables and fruits are also rich in potassium. But according to Kris-Etherton, experts hesitated to increase the recommended servings of vegetables, which were already more than most Americans were eating. "Short of encouraging people to eat more vegetables, we thought the best way to ensure adequate potassium was to recommend low-fat milk," she told WebMD.

Pros

Milk proteins are some of the best sources of amino acids out there. The two proteins in milk, whey and casein, have the ability to preserve lean muscle mass and improve metabolic health during weight loss, according to research published in the journal Nutrition & Metabolism. And if you go for Grass-fed, you'll be getting higher levels of omega-3 fatty acids (good) and 2 to 5 times more CLA (conjugated linoleic acid) than their corn and grain fed counterparts. CLA contains a group of chemicals which provides a wide variety of health benefits, including immune and inflammatory system support, improved bone mass, improved blood sugar regulation, reduced body fat, reduced risk of heart attack, and maintenance of lean body mass.

Cons

Like humans, when cows have weakened immune systems (because they're fed corn and soy that they weren't meant to eat), they get sick; when they get sick, they take antibiotics, and those antibiotics are then passed on to their milk. The milk we drink. On top of that, dairy is a source of inflammation-inducing saturated fats. Although studies have linked full-fat dairy drinkers with lower weights and lower risks of obesity, studies have also connected these saturated fats to disrupting our gut microbiome, actually decreasing levels of our good gut bacteria. So if you're going to drink milk, it's probably best to drink some with fat, but not too much fat. And lastly, dairy is a common allergen, with about 2 in 3 adults having a difficulty in digesting milk, whether it's lactose intolerance or a sensitivity to its casein proteins, which can also cause acne.

Eat This! Tip:

Organically raised cows are not subject to the same hormones and antibiotics that conventional cows are; no antibiotics for them means no antibiotics for you. And if you may be a little lactose intolerant, but

want to continue drinking animal milk, give goat milk a try. "Though cow's milk and goat's milk have similar nutritional profiles, the latter contains less lactose than the cow variety, so it's easier for those with lactose intolerance to stomach," explains Isabel Smith, registered dietitian and founder of Isabel Smith Nutrition. "For some people, this may help reduce the most common side effects of cow's milk, including gas, bloating, and congestion," she explains. "Plus, the protein that comes from goat's milk is easier for our bodies to use than plant protein, so it may aid muscle repair and regrowth post-exercise better than dairy-free milk alternatives."

Grass-fed is the best option, but if you can't find it at your local grocery store don't fret. Any plain ol' organic brand will do. Organic Valley's herds are 100% grass-fed and thus have higher levels of omega-3s and CLA in their milk. And always remember to choose milk with at least 1% fat. While skim milk may be lowest in calories, many vitamins are fat-soluble, which means you won't get all the benefits of the alphabetical nutrients listed on your cereal box unless you opt for at least 1%.

For additional information please find attached article – *THE BEST AND WORST MILKS & MILK ALTERNATIVES* by Eat This, Not That. As for cow milk, it won't hurt you and may help your health.

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So True

[image: Inline image 1]

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The first thing that President Trump signed was an Executive Order to dismantle Obamacare – WHY?

[image: Inline image 1]

President Donald J. Trump signing his first executive order in the Oval Office rolling back the Affordable Care Att.

Donald J. Trump ran on a campaign promise to dismantle the Affordable Care Act. So it should not come as a surprise that he has signed an executive order urging his Administration to fight it as much as possible.

US Healthcare Summary

The average American has $500,000 in medical costs over their lifetime. How? Well, it costs $6,000 a year per person for health insurance x 85

years. If you self insure, it would be around the same, accounting for major disease treatment such as heart or cancer, and/or other usual surgeries, accidents etc. But many people forget that for millions of Americans affordable healthcare was not available. If you had a preexisting condition, like I do, it was almost impossible unless you sneaked under the wire through a company health plan. People forget that even before Obamacare, health costs were rising twice as fast as everything else. People forget that before Obamacare, operators in other countries reading from a manual routinely denied life saving procedures, with little to no recourse. People ignore that Obamacare has enabled more than 20 million more Americans access to affordable healthcare. Obviously, Obamacare can be improved but repealing it will cause tremendous hardship for millions of Americans as well as the deaths of thousands.

As long as there are profits in healthcare, the healthcare that is available will be looking for ways to cut costs and/or services. And yes the mandatory provision may seen like a imposition to the young and the healthy, but as someone who suffered two strokes after a lifetime of perfect health, you don't get insurance for the times you don't need it, you get it for the time that you do, which could be anytime. As someone recently pointed out to me, it costs $75,000 to have a baby at Cedars Sinai Hospital in Beverly Hills, CA were coincidently I do all of my medical. But that is the hospital not Obamacare, as everything is more expensive in Beverly Hills than in Utah. I agree that it would be nice if Obamacare would allow a person to go to any doctor or hospital in any state and not just within a defined program.

I believe that giving people vouchers instead of actual healthcare is just another way to deny healthcare for the serious ill., as $6000 in vouchers won't cover three nights stay in most urban hospitals. One of President Trump's promises has been to provide healthcare to all.... But in the current political climate today in Washington this is probably impossible. But in his zeal to dismantle and repeal Obamacare that President Trump doesn't make things worse for those in need whose needs seem to not be a concern in this Trump Administration or with the Republican controlled Congress.....

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Unintended Consequences

Trump just proposed a $60 billion tax hike

[image: Inline image 1]

In an attempt to change the narrative that the wall President Trump has promised to build on the U.S. Mexican border would cost American taxpayers $8 to $20 plus billion, especially after both Mexico’s current President as

well as several past Presidents have forcefully denied that their country will pay for its construction, the White House on Thursday said President Donald Trump is considering a 20% tax on imports from Mexico to pay for a southern border wall.

While president-elect and now president, Donald Trump has threatened new "border taxes" on products from Mexico and China if other reforms don't take place. Now he seems to be proposing a specific tax on imports from Mexico, to pay for the wall he wants to build along the Mexican border, which could cost between $10 billion and $30 billion. Trump says he wants Mexico to pay for the wall, but such a border tax would fall largely on American consumers and US companies. And it could hurt the overall US economy rather than helping.

White House spokesman Sean Spicer told reporters on Thursday that a plan "taking shape" would put a 20% tariff on Mexican goods imported to the United States. There are no such taxes now, since both countries are part of the North American Free Trade Agreement, which eliminates tariffs. A new 20% tax would raise the cost of a $100 product to $120. The importer could bear some or all of the added cost, by keeping the price at $100 and paying the tax in full. But sellers always try to pass new costs onto consumers, and some or much of the cost increase would probably come from consumers' wallets.

As such, it would be the American taxpayers paying for the proposed wall and not the Mexican government as Trump promised. And as a result, Trump's threat of tariffs are the part of his economic plan business leaders and economists hate the most. Trump's goal is to make imports more expensive in order to spur more production in the United States, where costs are almost always higher than in other countries because workers get paid more. But many economists say tariffs are a misguided way to encourage more US manufacturing, and will most likely end up doing more harm than good. The Smoot-Hawley tariffs in the early 1930s are a notorious example of a horrible economic policy that triggered damaging trade wars and made the Great Depression worse, not better.

More importantly, Trump can't impose new tariffs on Mexico right away. He will first have to officially inform Canada and Mexico of America's intent to withdraw from NAFTA. If nothing changes, the United States can then exit the treaty six months later. At that point, Trump could begin imposing tariffs—largely without any new legislation from Congress. Spicer indicated new tariffs might be part of a big tax-reform bill expected from Congress this year, but trade experts say Trump wouldn't need a new law. He could largely impose tariffs on his own.

As Rick Newman wrote this week for Yahoo: Whether that would be smart is another question. There is bound to be aggressive push back to the whole idea from many industries, plus Republican members of Congress and even

some of Trump's incoming Cabinet members, who favor free trade and oppose tariffs. Trump's negotiating style, as many are learning, is to threaten draconian consequences then settle for some compromise that's less disruptive. On the other hand, the mere threat of tariffs might put business plans on hold at dozens of big companies, spook financial markets and wreak havoc with the value of the dollar and commodities dependent on future expectations of inflation.

The United States imported roughly $300 billion worth of products from Mexico in 2016. Twenty percent of that would amount to a $60 billion tax on some combination of Mexican exporters and US consumers. Spicer suggested a lower number, saying the 20% tariff would only apply to the amount of the trade deficit and total $10 billion or so. But you can't tax a trade deficit, you can only tax actual imports. Further clarifications by Spicer seem to indicate the whole idea needs to be developed more carefully.

Keep in mind, many of the Mexican exporters are American companies such as General Motors (GM) and Ford (F). So higher taxes on them would lower profitability and perhaps dent their hiring plans in the United States.

Here are the biggest categories of imports from Mexico, according to government data for 2015:

Trucks and buses ~ $29 billion per year

Passenger cars ~ $23 billion

Computers ~ $15 billion

Telecommunications equipment ~ $14 billion

TVs and video equipment ~ $13 billion

Crude oil ~ $12 billion

Engines and engine parts ~ $9 billion

Appliances ~ $7 billion

Industrial machines ~ $7 billion

Vegetables ~ $6 billion

To ballpark a few things that might change if a 20% tax went into effect: The cost of a $600 dishwasher made in Mexico would rise to $720, a $1,000 computer would rise to $1,200 and a $20,000 automobile would rise to $24,000.

Trump's theory is that higher prices would quickly spur new investment in US factories, and the new jobs created here would somehow offset higher prices paid by consumers. But many economists don't see it that way. Manufacturers might seek other low-cost countries instead of moving production to the United States, and if Trump taxed those imports too, some producers might just stop making goods they can't earn a guaranteed profit on at America's high labor costs. Or, they could relocate production to the United States but seek aggressive new ways to automate, so they're less dependent on costly labor.

Meanwhile, countries hit with new tariffs on imports to the United States are likely to impose their own tariffs on American imports, which would hurt Americans, too. Americans buy more Mexican products than vice versa, with an annual trade deficit of more than $60 billion during the last 12 months. But American producers still export about $230 billion worth of goods to Mexico, and at least some jobs involving those products would be imperiled.

Many Trump watchers say that Trump is bluffing and he'll settle for something far less onerous. And perhaps his promises to cut taxes and slash regulation would offset damage done by trade protection, if they get through Congress. Thing is, when things change, there are new winners and losers, and the losers often don't see it coming. The losers under new tariffs won't all be south of the border….. Hence, unintended consequences that will actually hurt the American economy and consumers.

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Hypocrisy on Steroids

Conservatives criticized President Obama's use of executive actions, but they have no problem with Trump's

[image: Inline image 1]

*Web Link: https://www.facebook.com/parkerelise/posts/10202656167480750 <https://www.facebook.com/parkerelise/posts/10202656167480750> *

Whether you are a Republican or a Democrat, Black or White, woman or man, the one thing that should anger you is hypocrisy. Throughout his two terms Conservatives criticized President Obama's use of executive actions, but they have no problem with the many executive actions that President Trump signed this week. For years when President Obama issued Executive Orders Republican Conservatives freaked out many labeling his actions as an Imperial Presidency. One Conservative critic asking "what ever happened to Article 1 of the Constitution?" And Sean Hannity, "he is going to pick and

choose and basically rule by Executive Fiat," which many other Conservatives picked up and echoed. Conservatives in massed that President Obama's use of Executive Actions were "wrong, unlawful and profoundly unconstitutional," accusing him acting more like a king and emperor than a U.S. President.

Yet this week, the first week of the new Trump Administration these same Conservative Republicans applauded the dismantling of the Obama legacy one Executive Order at a time. With Fox News' Laura Ingraham, "Executive Orders are going to start flying and these people are gonna be like bing, bing, bing, They're not going to know how to react to all of this, it's like paintball." Hannity, "I don't think that I have seen so much happen in such a short period of time." "You have a nonstop blizzard of Executive Orders coming down," applauded another Fox commentator.

Number of Executive Orders by Presidents

[image: Inline image 2]

Wikipedia: There is no constitutional provision nor statute that explicitly permits executive orders. The term executive power in Article II, Section 1, Clause 1 of the Constitution refers to the office of President as the executive. They are instructed therein by the declaration "take Care that the Laws be faithfully executed" made in Article II, Section 3, Clause 5 or face impeachment. Most executive orders use these Constitutional reasonings as the authorization allowing for their issuance to be justified as part of the President's sworn duties, the intent being to help direct officers of the U.S. Executive carry out their delegated duties as well as the normal operations of the federal government: the consequence of failing to comply possibly being removal from office

United States presidents issue executive orders to help officers and agencies of the executive branch manage the operations within the federal government itself. Executive orders have the full force of law when they take authority from a legislative power which grants its power directly to the Executive by the Constitution, or are made pursuant to Acts of Congress that explicitly delegate to the President some degree of discretionary power (delegated legislation). Like both legislative statutes and regulations promulgated by government agencies, executive orders are subject to judicial review, and may be struck down if deemed by the courts to be unsupported by statute or the Constitution. Major policy initiatives require approval by the legislative branch, but executive orders have significant influence over the internal affairs of government, deciding how and to what degree legislation will be enforced, dealing with emergencies, waging wars, and in general fine-tuning policy choices in the implementation of broad statutes.

Executive Orders have been around for as long as we've had presidents, in fact — all the way back to George Washington.

[image: Inline image 3]

In layman's language, an executive order is a directive handed down from a president or state governor without involvement from the legislative or judicial branches. Executive orders can only be given to federal or state agencies like the Department of Homeland Security or the State Department. Even though executive orders are not mentioned in the constitution, they have been used by every President since George Washington — and more often in times of war or during national disasters when government policy needs to work more quickly than the traditional legislative process. Sometimes the Supreme Court has stepped in to rein back Presidential powers, like when Harry Truman tried to use executive orders to have the government seize America's steel plants in the 50s.

Presidents have increasingly used executive orders to make policy that circumvents Congressional control. In recent years, George W. Bush used executive orders to approve more aggressive surveillance after 9/11, and President Obama has used them for several things, including immigration reform. While executive orders can be an essential tool for Presidents, some fear that their increased use threatens the long-standing checks and balances set up in the Constitution. In that system, Congress makes the laws, the Courts interpret the law, and the President and the executive branch enforces the law.

As Boston columnist Tim Snyder wrote last December, "…..executive orders are high theater for hypocrisy in American politics. Those who use them claim there was no other way, while the opposition argue they were circumvented in a travesty of democracy. When the tables turn, the roles reverse. Those who can now use executive orders forget their moral objections or cite a "they started it" precedent, while the other side cries foul conveniently forgetting their own culpability."

So the next time you hear a president is issuing an executive order it really means one person who lost the popular vote by almost 3 million, is making a decision for 322 million Americans, without input from Congress, state legislatures or Courts, and it can be just as easily changed by the next president with the stroke of a pen and no input from anyone else. And although I disagree with all of the Executive Orders that President Trump signed in his first week in office, this is not my issue today….. It is the rank hypocrisy Conservative Republicans displayed this week after eight years of denouncing President Obama's use of Executive Orders now applauding President Trump's rampant use of doing the same thing….. *And this is my rant of the week….*

WEEK's READINGS

7th Largest Cause of Death in America

[image: Inline image 1] 

Diabetes is the 7th biggest cause of death in the United States. Almost 30 million children and adults in the United States have diabetes, 86 million Americans having prediabetes, more than 8 million Americans have undiagnosed diabetes (27.8%) and 1.4 million Americans being diagnosed with new cases of diabetes every year. When compared to non-Hispanic whites, the risk of diagnosed diabetes is 1.2 times higher among Asian Americans, 1.7 times higher among Hispanics, and 1.7 times higher among non-Hispanic blacks, 12.8% of Hispanic/Latino adults in the United States have diagnosed diabetes and 13.2% of non-Hispanic black adults in the United States have diagnosed diabetes.

[image: Inline image 2] 

Among Hispanic adults, the age-adjusted rate of diagnosed diabetes was 8.5% for Central and South Americans, 9.3% for Cubans, 13.9% for Mexican Americans, and 14.8% for Puerto Ricans. Among Asian American adults, the age adjusted rate of diagnosed diabetes was 4.4% for Chinese, 11.3% for Filipinos, 13% for Asian Indians, and 8.8% for other Asians. 39.7% of diabetes in Asian Americans is undiagnosed, 36.8% in Hispanics, 32.8% in non-Hispanic blacks, and 24.6% in non-Hispanic whites Among American Indian and Alaska Native adults, the age-adjusted rate of diagnosed diabetes varied by region from 6% among Alaska Natives to 24.1% among American Indians in southern Arizona.

Diabetes is a metabolic diseases in which there are high blood sugar levels over a prolonged period. Symptoms of high blood sugar include frequent urination, increased thirst, and increased hunger. If left untreated, diabetes can cause many complications. Acute complications can include diabetic ketoacidosis, non-ketotic hyperosmolar coma, or death. Serious long-term complications include heart disease, stroke, chronic kidney failure, foot ulcers, and damage to the eyes. Diabetes is due to either the pancreas not producing enough insulin or the cells of the body not responding properly to the insulin produced. There are three main types of diabetes mellitus:

- Type 1 DM results from the pancreas's failure to produce enough

insulin. This form was previously referred to as "insulin-dependent diabetes mellitus" (IDDM) or "juvenile diabetes". The cause is unknown.
- Type 2 DM begins with insulin resistance, a condition in which cells fail to respond to insulin properly. As the disease progresses a lack of insulin may also develop. This form was previously referred to as "*non-insulin-dependent
diabetes mellitus*" (NIDDM) or "*adult-onset diabetes*". The primary cause is excessive body weight and not enough exercise.
- Gestational diabetes is the third main form and occurs when pregnant women without a previous history of diabetes develop high blood-sugar levels.

Prevention and treatment involve maintaining a healthy diet, regular physical exercise, a normal body weight, and avoiding use of tobacco. Control of blood pressure and maintaining proper foot care are important for people with the disease. Type 1 DM must be managed with insulin injections. Type 2 DM may be treated with medications with or without insulin. Insulin and some oral medications can cause low blood sugar. Weight loss surgery in those with obesity is sometimes an effective measure in those with type 2 DM. Gestational diabetes usually resolves after the birth of the baby.

As of 2015, an estimated 415 million people had diabetes worldwide, with type 2 DM making up about 90% of the cases. This represents 8.3% of the adult population, with equal rates in both women and men. As of 2014, trends suggested the rate would continue to rise. Diabetes at least doubles a person's risk of early death. From 2012 to 2015, approximately 1.5 to 5.0 million deaths each year resulted from diabetes. The global economic cost of diabetes in 2014 was estimated to be US$612 billion. In the United States, diabetes cost $245 billion in 2012.

Although the rate of new cases of diagnosed diabetes in the United States has begun to fall, the numbers are still very high. More than 29 million Americans are living with diabetes, and 86 million are living with prediabetes, a serious health condition that increases a person’s risk of type 2 diabetes and other chronic diseases. The Centers for Disease Control and Prevention (CDC) is working to reverse the US diabetes epidemic by tracking disease trends, focusing on prevention, identifying effective treatments, and improving medical care.

Public Health Problem

People with diabetes either don’t make enough insulin (type 1 diabetes) or can’t use insulin properly (type 2 diabetes). Insulin allows blood sugar (glucose) to enter cells, where it can be used for energy. When the body doesn’t have enough insulin or can’t use it effectively, blood sugar builds up in the blood. High blood sugar levels can lead to heart disease, stroke, blindness, kidney failure, and amputation of toes, feet, or legs.

Type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes, and type 1 diabetes accounts for about 5%. The health and economic costs for both are enormous:

- Diabetes was the seventh leading cause of death in the United States in 2013 (and may be underreported).
- Diabetes is the leading cause of kidney failure, lower-limb amputations, and adult-onset blindness.
- More than 20% of health care spending is for people with diagnosed diabetes. People who have one or more of the following risk factors should talk to their doctor about getting their blood sugar tested:
- Being overweight.
- Being 45 years or older.

Fast Facts

- More than 29 million US adults have diabetes, and 25% of them don't know it.
- About 86 million US adults—more than a third—have prediabetes, and 90% of them don't know it.
- People with prediabetes who take part in a structured lifestyle change program can cut their risk of developing type 2 diabetes by as much as 58%.
- CDC focuses its prevention and support efforts on populations that are most affected by diabetes to make sure they get the best education and treatment.

*See Fast Facts Chart via this web link:
http://professional.diabetes.org/sites/professional.diabetes.org/files/media/fast_facts_12-2015a.pdf
<http://professional.diabetes.org/sites/professional.diabetes.org/files/media/fast_facts_12-2015a.pdf>*

Working to Reverse the US Epidemic Division of Diabetes Translation
National Center for Chronic Disease Prevention and Health Promotion

- Having a family history of type 2 diabetes.
- Being physically active less than 3 times a week.
- Ever having gestational diabetes or giving birth to a baby who weighed more than 9 pounds.

Race and ethnicity are also factors: African Americans, Hispanics and Latinos, American Indians, Pacific Islanders, and some Asian Americans are at higher risk than whites.

"The good news is we know what works: The National Diabetes Prevention Program can help prevent or delay type 2 diabetes in those at high risk."

*Ann Albright, PhD, RDN Director of CDC's *

Division of Diabetes Translation

[image: Inline image 3]

Diabetes Complications

Again diabetes was the seventh leading cause of death in the United States in 2010 based on the 69,071 death certificates in which diabetes was listed as the underlying cause of death. In 2010, diabetes was mentioned as a cause of death in a total of 234,051 certificates. Diabetes may be underreported as a cause of death. Studies have found that only about 35% to 40% of people with diabetes who died had diabetes listed anywhere on the death certificate and about 10% to 15% had it listed as the underlying cause of death.

Complications/Co-Morbid Conditions

- *Hypoglycemia: * In 2011, about 282,000 emergency room visits for adults aged 18 years or older had hypoglycemia as the first-listed diagnosis and diabetes as another diagnosis.
- *Hypertension:* In 2009–2012, of adults aged 18 years or older with diagnosed diabetes, 71% had blood pressure greater than or equal to 140/90 millimeters of mercury or used prescription medications to lower high blood pressure.
- *Dyslipidemia: * In 2009–2012, of adults aged 18 years or older with diagnosed diabetes, 65% had blood LDL cholesterol greater than or equal to 100 mg/dl or used cholesterol-lowering medications.
- *CVD Death Rates: * In 2003–2006, after adjusting for population age differences, cardiovascular disease death rates were about 1.7 times higher among adults aged 18 years or older with diagnosed diabetes than among adults without diagnosed diabetes.
- *Heart Attack Rates:* In 2010, after adjusting for population age differences, hospitalization rates for heart attack were 1.8 times higher among adults aged 20 years or older with diagnosed diabetes than among adults without diagnosed diabetes.
- *Stroke: * In 2010, after adjusting for population age differences, hospitalization rates for stroke were 1.5 times higher among adults with diagnosed diabetes aged 20 years or older compared to those without diagnosed diabetes.
- *Blindness and Eye Problems: * In 2005–2008, of adults with diabetes aged 40 years or older, 4.2 million (28.5%) people had diabetic retinopathy, damage to the small blood vessels in the retina that may result in loss of vision.
- *Kidney Disease: * Diabetes was listed as the primary cause of kidney failure in 44% of all new cases in 2011.
- In 2011, 49,677 people of all ages began treatment for kidney failure due to diabetes.
- In 2011, a total of 228,924 people of all ages with kidney failure due to diabetes were living on chronic dialysis or with a kidney transplant.
- *Amputations: * In 2010, about 73,000 non-traumatic lower-limb amputations were performed in adults aged 20 years or older with diagnosed

diabetes.
- About 60% of non-traumatic lower-limb amputations among people aged 20 years or older occur in people with diagnosed diabetes.

Cost of Diabetes

- $245 billion: Total costs of diagnosed diabetes in the United States in 2012
- $176 billion for direct medical costs
- $69 billion in reduced productivity

After adjusting for population age and sex differences, average medical expenditures among people with diagnosed diabetes were 2.3 times higher than what expenditures would be in the absence of diabetes.

Gestational diabetes is diagnosed during pregnancy and can cause serious complications for mothers or their babies. These complications Source: National Diabetes Surveillance System, 2016. Trends in Incidence and Prevalence of Diagnosed Diabetes Among Adults Aged 20-79, United States, 1980-2014.

[image: Inline image 4]

To help reverse the trend, people with prediabetes can: Take part in a CDC-recognized lifestyle change program. Eating healthy food, increasing physical activity, and losing weight can help lower their risk for type 2 diabetes as well as preeclampsia (pregnancy-induced high blood pressure), birth related trauma, and birth defects, because women with gestational diabetes also have a higher risk of developing type 2 diabetes later in life. Again more than 25% of US adults who have diabetes don't know that they have it or that they could be developing serious complications. Without major changes, as many as 1 in 3 US adults could have diabetes by 2050.

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What You Should Know About the Mexico – American Border

[image: Inline image 5]

The Mexico–United States border is the international border separating Mexico and the United States, from California in the west to Texas in the east. The border traverses a variety of terrains, ranging from major urban areas to uninhabitable deserts, and is the most frequently crossed in the world, with approximately 350 million legal crossings annually (2010). The total length of the continental border is 3,201 kilometers (1,989 mi). From the Gulf of Mexico, it follows the course of the Rio Grande (Río Bravo del

Norte) to the border crossing at Ciudad Juárez, Chihuahua and El Paso, Texas; westward from El Paso-Juarez, it crosses vast tracts of the Chihuahuan and Sonoran Deserts to the Colorado River Delta, westward to San Diego-Tijuana, before reaching the Pacific Ocean.

Following the Boundary Treaty of 1970 between the United States and Mexico that settled all the pending boundary disputes and uncertainties related to the Rio Grande (Río Bravo del Norte) border, the national continental border extends 3,145 kilometers (1,954 mi), excluding the maritime boundaries of 29 km (18 mi) in the Pacific Ocean and 19 km (12 mi) in the Gulf of Mexico.

According to the International Boundary and Water Commission, this continental border follows the middle of the Rio Grande—according to the 1848 Treaty of Guadalupe Hidalgo between the two nations, "along the deepest channel" (also known as the thalweg)—from its mouth on the Gulf of Mexico a distance of 2,019 km (1,255 mi) to a point just upstream of El Paso and Ciudad Juárez. It then follows an alignment westward overland and it is marked by monuments for a distance of 859 km (534 mi) to the Colorado River, when it reaches its highest elevation at the intersection with the Continental Divide. Thence it follows the middle of that river northward a distance of 38 km (24 mi), and then it again follows an alignment westward overland and marked by monuments a distance of 227 km (141 mi) to the Pacific Ocean (excluding the maritime boundaries of 18 miles (30 km) in the Pacific Ocean and 12 miles (20 km) in the Gulf of Mexico).

The official 'border region' extends 60 km (37 mi) north and south of the aforementioned boundaries and 60 km (37 mi) east into the Gulf of Mexico and 60 km (37 mi) west into the Pacific Ocean. The region is characterized by deserts, rugged hills, abundant sunshine, and two major rivers — the Colorado and the Rio Grande (Río Bravo del Norte) — which provide life-giving waters to the largely arid but fertile lands along the rivers in both countries.

The U.S. states along the border, from west to east, are California, Arizona, New Mexico, and Texas. The Mexican states are Baja California, Sonora, Chihuahua, Coahuila, Nuevo León, and Tamaulipas. In the United States, Texas has the longest stretch of the border of any State, while California has the shortest. In Mexico, Chihuahua has the longest border, while Nuevo León has the shortest. Texas borders four Mexican states—Tamaulipas, Nuevo León, Coahuila, and Chihuahua — the most of any U.S. state. New Mexico and Arizona each border two Mexican states (Chihuahua and Sonora; Sonora and Baja California, respectively). California borders only Baja California. Texas is more adjacent to Mexico than California. Three Mexican states border two U.S. states each: Baja California borders California and Arizona; Sonora borders Arizona and New Mexico; and Chihuahua borders New Mexico and Texas. Tamaulipas, Nuevo León, and Coahuila each border only one U.S. state: Texas.

Today the border is guarded by more than twenty thousand Border Patrol agents, more than at any time in its history. However, they only have "effective control" of less than 700 miles (1,100 km) of the 1,954 miles (3,145 km) of total border, with an ability to actually prevent or stop illegal entries along 129 miles (208 km) of that border. The border is paralleled by United States Border Patrol Interior Checkpoints on major roads generally between 25 and 75 miles (121 km) from the U.S. side of the border, and garitas generally within 50 km of the border on the Mexican side. There are an estimated half a million illegal entries into the United States each year. Border Patrol activity is concentrated around big border cities such as San Diego and El Paso which do have extensive border fencing. This means that the flow of illegal aliens is diverted into rural mountainous and desert areas, leading to several hundred migrant deaths along the Mexico–U.S. border of those attempting to cross into the United States from Mexico illegally and vice versa.

The Secure Fence Act of 2006 was passed providing for the construction of 700 miles (1,100 km) of high-security fencing. Attempts to complete the construction of the United States–Mexico barrier have been challenged by the Mexican government and various U.S.–based organizations. In January 2013, the Government Accountability Office released a report stating that the United States Border Patrol only intercepted sixty-one percent of individuals illegally crossing the border in 2011, which translated to 208,813 individuals not apprehended. 85,827 of the 208,813 would go on to illegally enter the United States, while the rest returned to Mexico and other Central American countries. The report also showed that the number of illegal border crossings has dropped. And today there are more Mexicans leaving the United States than are arriving. This begs us to wonder why President Trump is so hell-bent on building a border wall between Mexico and the U.S. that is estimated to cost between $8 to as much as $30 billion and who border experts admit will not stop the illegal flow of undocumented aliens.

[image: Inline image 4]

Web Link: https://www.facebook.com/ajplusenglish/videos/887619274712914/ <https://www.facebook.com/ajplusenglish/videos/887619274712914/>

Please take a look at the video via the above web link and you will find that there is already a wall that is fenced along with concrete barriers and helicopters, gunboats, drones, blimps, towers, ground sensors and dogs to police the border. And although much of the illegal drugs entering the U.S. comes across the border, much of it arrives via light weight planes, through tunnels, via trucks and even shot over the border t-shirt cannons and drones. Because as the commentator says in the video, “when the U.S. is the largest market in the world for illegal drugs, there’s always a way in.” What is almost totally ignored is the flow of approximately 253,000 guns bought in the U.S. that find their way into Mexico each year. The insane amount of gun dealers on the U.S. border side make that really easy

– as there are 3 per mile and for those of you who can't add, 6000.

Last year the U.S. government spent $13, 5 billion policing the border with Mexico, up 75% over the past decade. Together with what the U.S.

spends on ICE, that number is more than the combined budgets of the FBI, DEA and the Secret Service. Between 2004 and 2015 the number of border agents more than doubled. But is this really keeping America safer? Because, in spite of what President Trump and other Constatives claim, ISIS is not coming across the Southern border, as there has yet to be a single apprehension of someone with links to the Islamic State. The current wall covers just 653 miles of the border and has already costs $7 billion – or $5 million a mile in some areas. Experts estimate to build the remainder of the wall would cost $25 billion, not including labor. And imposing tariffs to pay for the wall would really only tax Americans as seller would just add the increase onto the consumers, as even President Trump has abandoned the talk that the Mexican Government will pay for the wall.

There are many logistical problems as well. Because of treaties that the U.S. has signed with Mexico it is prohibited to build on the floodplains. And much of the border in Texas, New Mexico and Arizona are privately owned and as the commentator in the video says, "not everyone wants a giant wall in their backyard"and this does not include the backlash of hundreds if not landowners fighting the government's use of eminent domain – compulsory purchase or expropriation of private lands. So even to supporter of President Trump who want increase border security 40% of illegal immigrants arrive legally via commercial airliners planes. But even if we were to build a wall, as President Trump has promised to protect America's sovereignty, we'd be missing most of the problem — because the majority of new illegal aliens are actually visa over-stayers. And for every 11 ft. wall, I am sure that someone in Mexico is willing to sell you a 12 ft. ladder….

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MARKETING

[image: Inline image 1]

One buzz word in today's business world is *MARKETING.* However, people often ask for a simple explanation of *"Marketing."* Well, here it is:

* You're a woman and you see a handsome guy at a party. You go up to him And say, "I'm fantastic in bed."

That's Direct Marketing.

---

* You're at a party with a bunch of friends and see a handsome guy.

One of your friends goes up to him and, pointing at you, says,
"She's fantastic in bed."

That's Advertising.

---

* You see a handsome guy at a party. You go up to him and get his telephone number.
The next day you call and say, "Hi, I'm fantastic in bed."

That's Telemarketing.

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* You see a guy at a party; you straighten your dress. You walk up to him and pour him a drink.
You say, "May I?" and reach up to straighten his tie, brushing your breast lightly against his arm,
And then say, "By the way, I'm fantastic in bed."

That's Public Relations.

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* You're at a party and see a handsome guy. He walks up to you and says,
"I hear you're fantastic in bed."

That's Brand Recognition.

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* You're at a party and see a handsome guy. He fancies you, but you talk him into
Going home with your friend.

That's a Sales Rep.

_____ _____ _____

* Your friend can't satisfy him so he calls you.

That's Tech Support.

_____ _____ _____

* You're on your way to a party when you realize that there could be handsome
Men in all these houses you're passing, so you climb onto the roof of one situated
Towards the center and shout at the top of your lungs, "I'm fantastic in bed!"

That's Facebook.

_____ _____ _____

* You are at a party; this attractive older man walks up to you and grabs your ass.

That's Donald Trump.

_____ _____ _____

* You didn't mind it, but twenty years later your attorney decides
You were offended and you are awarded a settlement.

That's Any Day in America !

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Top Vitamin and Mineral Deficiencies — Are You at Risk?

[image: Inline image 2]

Eating a balanced whole-food diet, such as described in my nutrition plan, is a foundational requirement for optimal nutrition. It can be quite difficult to get sufficient amounts of vitamins and minerals from your diet if you do not eat real food. Unfortunately, even if you do eat well, how and where your food was grown can also influence your nutritional intake. Soil quality, for example, can significantly influence the levels of certain nutrients in your food, even if you eat organic.

Your age and certain health conditions (digestive issues and others) can also impact your body's ability to absorb and metabolize nutrients, potentially raising your risk for deficiencies, as can diets that restrict certain foods, such as strict vegan diets. Below, I will review some of the most common vitamin and mineral deficiencies, and how to address them. Eating real food is usually your best bet, but sometimes supplementation may be advisable, especially if you're already experiencing signs of deficiency.

6 Most Common Vitamin and Mineral Deficiencies

Studies from both the U.S, and the U.K. suggest a majority of people fail to get certain key vitamins and minerals from food alone. Topping this list are vitamins* D*, *E*, *A*,* C*, magnesium and calcium. However, in my experience, the following nutrient deficiencies tend to have the most important impact on your health. For even more in-depth information about the benefits of each of these vitamins and minerals, and how to optimize your levels, please see the corresponding hyperlinks provided.

[image: Inline image 3]

Looking at this chart, it's easy to see where the majority of problems stem from: a lack of oily fish, nuts, seeds, fermented foods and fresh vegetables in the diet. The above chart also hints at important interactions between different nutrients. Vitamins, A, D, K2, magnesium and calcium, for example, work in tandem with each other. If one is lacking, it will affect one or more of the others.

The Importance of Marine-Based Omega-3 Fats

Low concentrations of the animal-based omega-3 fats EPA and DHA8 are associated with an increased risk of death from all causes, and omega-3 deficiency has been revealed as the sixth biggest killer of Americans. When your diet is lacking in these anti-inflammatory omega-3s, you set the stage for health problems such as cardiovascular disease, cancer, depression, Alzheimer's, rheumatoid arthritis and diabetes, just to name a few.

Along with probiotics, B vitamins, magnesium, vitamin D and zinc, omega-3 fats are also among the most common vitamin and mineral deficiencies associated with attention deficit disorder (ADD) and attention deficit/hyperactivity disorder (ADHD). Telltale signs of omega-3 deficiency include dry, flaky skin, "chicken skin" on the back of your arms, dandruff or dry hair, soft brittle nails, fatigue, menstrual cramps and poor attention span.

Sardines and anchovies are one of the most concentrated sources of omega-3 fats, with one serving containing more than 50 percent of your recommended daily value. They also contain other nutrients that many are deficient in, such as vitamin B12, calcium and choline. It's best to purchase them in water, not in olive oil, as nutritionally inferior versions of olive oil are used in canned fish. If you decide to take omega-3s in supplement form, I believe krill oil is superior to fish oil. The omega-3 in krill is attached to phospholipids that increase its absorption, which means you need less of it.

Nutrient Deficiencies Are Common Even Among Those Taking Supplements

Even WITH supplementation, intakes for certain nutrients fall short of the estimated requirements, and excessive intake of any given nutrient is extremely rare. As noted by the authors of one 2014 study:

"Only 0 percent, 8 percent, and 33 percent of the population had total usual intakes of potassium, choline and vitamin K above the adequate intake when food and MVMM [multivitamin/mineral supplements] use was considered.

The percentage of the population with total intakes greater than the tolerable upper intake level (UL) was very low for all nutrients; excess intakes of zinc were the highest (3.5 percent) across the population of all of the nutrients assessed …"

Also, as noted by Medtech Boston:

"On January 6, 2016, the U.S. Departments of Health and Human Services and of Agriculture released the 2015 [to] 2020 Dietary Guidelines for Americans …

Consistent with the above findings, the Guidelines identified potassium, dietary fiber, choline, magnesium, calcium and vitamins A, D, E and C as nutrients 'consumed by many individuals in amounts below the Estimated Average Requirement or Adequate Intake levels.'

And while the Guidelines state as a goal that people should 'meet nutritional needs primarily through foods,' they also recognize that dietary supplements are 'useful in providing one or more nutrients that otherwise may be consumed in less than recommended amounts …'"

Optimizing Your Vitamin D Can Go a Long Way Toward Improving Health

*Vitamin D *was one of the nutrients most people failed to get sufficient amounts of, even when taking vitamin supplements. One reason for this is probably because vitamin D is best obtained from sensible sun exposure, not pills or fortified foods. This is how your body was designed to produce it, and oral supplementation appears to have certain drawbacks. That said, vitamin D-rich foods and D3 supplements may be necessary if you cannot get adequate sun exposure year-round. Avoiding processed foods is another important consideration, as they tend to be loaded with the herbicide glyphosate (used on most conventional and genetically engineered food crops), and glyphosate has been shown to interfere with enzymes responsible for activating vitamin D in your liver and kidneys.

A growing body of evidence shows that vitamin D plays a crucial role in maintaining optimal health. There are about 30,000 genes in your body and vitamin D affects nearly 3,000 of them, as well as vitamin D receptors located throughout your body. Signs indicating you may have a vitamin D deficiency include being over the age of 50, having darker skin, obesity, achy bones, feeling blue, head sweating and poor immune function. Your best bet is to get your vitamin D level tested twice a year. Based on the evaluation of healthy populations that get plenty of natural sun exposure, the optimal range for general health appears to be somewhere between 50 and 70 nanograms per milliliter (ng/ml).

The Importance of Magnesium

Magnesium is the fourth most abundant mineral in your body, and researchers have detected more than 3,750 magnesium-binding sites on human proteins reflecting how important this mineral is for optimal biological functioning. The fact that magnesium is the third most common deficiency hints at the potential that magnesium deficiency might be involved in any health problem you may be experiencing. Without sufficient amounts of magnesium your body simply cannot function at its best. Insufficient cellular magnesium levels set the stage for deterioration of proper metabolic function that can lead to more significant health problems. For example, magnesium plays an important role in:

- Your body's detoxification processes
- Preventing headaches
- Managing cardiovascular health
- Reducing insulin resistance and metabolic syndrome if you're at high risk. The mechanism by which magnesium controls glucose and insulin homeostasis appears to involve two genes responsible for magnesium homeostasis. Magnesium is also required to activate tyrosine kinase, an enzyme that functions as an "*on*" or "*off*" switch in many cellular functions and is required for the proper function of your insulin receptors

Are You Getting Enough Magnesium?

Experts estimate up to 80 percent of us are deficient in magnesium. Since there's no easily available commercial lab test that will give you an accurate reading of your magnesium status, the best way to evaluate your status is by tracking your signs and symptoms. In her book, "*The Magnesium Miracle*," Dr. Carolyn Dean lists 100 factors that will help you decide whether or not you might be deficient.

You can also find a check list to go through every few weeks in her blog post, "Gauging Magnesium Deficiency Symptoms." This will help you gauge how much magnesium you need in order to resolve your deficiency symptoms, including headaches, muscle spasms and fatigue.

Besides eating magnesium-rich foods and/or taking a magnesium supplement (my favorite is magnesium threonate), you can also improve your magnesium status by taking regular Epsom salt baths or foot baths, which allow the magnesium to be absorbed into your body through your skin. Magnesium oil (from magnesium chloride) can also be used for topical application and absorption.

Mind Your Sodium to Potassium Balance

Sodium and *potassium* are two other key nutrients that need to be in balance for optimal health. It's particularly important for heart health. In addition to getting too little potassium in their diet, most people also get too much sodium. If you eat mostly processed foods, you're virtually guaranteed to end up with this imbalance. According to the American Heart Association (AHA), an excess of sodium in your body may cause you to retain water, putting an extra burden on your heart, blood vessels and kidneys. Past recommendations have assumed that in some people this may lead to high blood pressure. But, sodium is just one-half of the ratio needed to keep your body healthy. The second half of the equation is potassium.

The protective effects of potassium are associated with the actions of nitric oxide release, which increases the relaxation of your arterial system and maintains blood pressure. The separate roles of sodium and potassium, and their relationship to heart health, have been studied over the years. Researchers have also evaluated the relationship between a combination of sodium and potassium and heart health. One recent study

showed the sodium-to-potassium ratio was more strongly associated with blood pressure maintenance than were either sodium or potassium individually.

Other studies have also suggested that the ratio of sodium to potassium is one of the most important risk factors for managing normal cardiovascular function. Women who eat a higher amount of potassium-rich foods are able to better manage their normal cardiovascular function. Data from over 12,000 individuals participating in the 3rd National Health and Nutrition Examination also showed that higher sodium was associated with increased health risks, while a higher potassium level was also associated with increased risks.

Potassium-Rich Foods Low in Sodium

The best way to balance your sodium and potassium ratio is to increase your intake of foods rich in potassium, while maintaining a moderate amount of sodium intake. Whole foods naturally high in potassium and low in sodium include:

[image: Inline image 1]

Vitamin E for Brain Health

Vitamin E is particularly important for brain health, so the fact that an estimated 81 percent of 2- to 8-year-olds, 98 percent of teenagers and 95 percent of adults are at risk for deficiency is disconcerting to say the least. Recent animal research warns that vitamin E deficiency may actually affect the brain, and studies have also found it may help delay the loss of cognitive function. Vitamin E also helps protect against free radical damage and the effects of aging. The term "*vitamin E*" refers to a family of at least eight fat-soluble antioxidant compounds, divided into two main categories: tocopherols (which are considered the "*true*" vitamin E) and tocotrienols, each of which has subfamilies of four different forms.

Your best source of intake is vitamin E-rich foods. When opting for a supplement, chose a full-spectrum vitamin E (meaning the broader family of mixed natural tocopherols and tocotrienols). Avoid the synthetic form. You can tell what you're buying by carefully reading the label. Natural vitamin E is always listed as the "d-" form (d-alpha-tocopherol, d-beta-tocopherol, etc.), while synthetic vitamin E is listed as "dl-" forms.

Vitamins A and D Work in Tandem

An estimated 57 percent of teens and 51 percent of American adults are at

risk for insufficiency or deficiency of vitamin A, an essential fat-soluble vitamin important for maintaining healthy skin, teeth, bones, cell membranes, vision and healthy immune function. Vitamins A and D work in tandem, and there's evidence suggesting that without *vitamin D*, *vitamin A* can be ineffective or even toxic. On the other hand, if you're deficient in vitamin A, vitamin D cannot function properly either, so a balance of these two vitamins is essential.

Unfortunately, we do not yet know the optimal ratios between these two vitamins. Moreover, both vitamin A and vitamin D production is tightly controlled in your body, and taking either of them in supplemental form ends up bypassing important controls that keep you from experiencing potential toxic effects. For these two reasons, it's best to get vitamins A and D from food and sun exposure, rather than relying on supplements.

The best source of vitamin A that your body can actually use are animal products such as grass-fed meat and poultry, liver, fish and raw organic dairy products like butter. These foods contain retinol, preformed vitamin A that your body can easily use.33 It can be very difficult to get sufficient amounts of vitamin A from beta-carotene (pre-vitamin A, found in plant foods like fruits and vegetables) alone.

Calcium Must Be Balanced With Vitamin D, Magnesium and K2

Calcium is one of several nutrients required for strong, healthy bones. However, it's important to not overdo it on calcium supplements, as it needs to be balanced with *vitamins D,* *K2* and magnesium. Excessive amounts of calcium can end up causing more harm than good. Too much calcium and not enough magnesium typically causes muscle spasms, and in extreme cases can lead to a heart attack and sudden death.

Too much calcium and not enough vitamin K2 will promote hardening of the arteries and softening of your bones. The reason for these effects is because the biological role of vitamin K2 is to remove calcium from areas where it shouldn't be (such as in your arteries and soft tissues), and shuttle it into the appropriate areas (such as your bones and teeth). Too much vitamin D and not enough vitamin K2 is what produces the symptoms of vitamin D toxicity, which includes inappropriate calcification of your arteries.

Ideal Sources of Vitamin K2, Silica and Calcium

One of the best ways to achieve a healthy balance between vitamin D, magnesium, K2 and calcium is to get plenty of sensible sun exposure and eat a diet rich in fresh whole foods. Good sources of calcium are raw milk from pasture-raised cows, leafy green vegetables and the pith of citrus fruits, carob and wheatgrass.

You also need sources of silica, which some researchers say is actually enzymatically "*transmuted*" by your body into the kind of calcium your bones can use. Good sources of silica are cucumbers, bell peppers, tomatoes and a number of herbs, including horsetail, nettles, oat straw, alfalfa and raw cacao, which is also extremely rich in highly bioavailable magnesium.

Vitamin K2 is only present in fermented foods, such as natto (a fermented soy product), fermented vegetables like sauerkraut, certain cheeses, raw butter and kefir made from raw milk. If you decide to use a supplement, menaquinone-7 (MK-7) is the kind of vitamin K2 you want to look for, as this form is extracted from real food.

Tips to Supercharge Your Diet With Nutrients

As much as possible, it is recommended getting the nutrients your body needs from whole foods. As shown above, many of the most common nutrient deficiencies can be traced back to a rather limited range of foods, specifically:

- Fatty fish
- Nuts and seeds
- Fruits and vegetables

Trading processed foods for real, whole foods, with a focus on these three categories, can go a long way toward correcting an array of nutritional imbalances and/or insufficiencies. Following are a few additional tips that can help boost your intake of the wide variety of nutrients your body needs:

Homemade Bone Broth: Bone broth contains high amounts of calcium, magnesium and other nutrients.

Sprouts: Sprouts can contain up to 100 times more enzymes than raw fruits and vegetables, allowing your body to extract more vitamins, minerals, amino acids and essential fats from the foods you eat.

Juicing: Juicing not only helps you to consume more nutrient-rich veggies; it also helps you absorb the nutrients they contain. Juicing will help to "pre-digest" the veggies for you, so you will receive most of the nutrition, rather than having it go down the toilet.

*Fermented Foods: * Fermented foods support the beneficial bacteria in your gut, which helps with mineral absorption and plays a role in producing nutrients such as B vitamins and vitamin K2, the latter of which is important for the proper functioning of other nutrients, such as calcium

and vitamin D.

Dr. Mercola – November 16, 2016

THIS WEEK's QUOTE

[image: Inline image 1]

THIS IS BRILLIANT

Magic of Nature

Rat Mom Saves Baby Rat From Snake

[image: Inline image 1]

Web Link: https://youtu.be/L47FWfhYM5Y <https://youtu.be/L47FWfhYM5Y>

Truly Amazing….

THINK ABOUT THIS

Dan Rather Response to Kellyanne Conway's '*Alternative Facts*'

[image: Inline image 1]

A 63-year-long career in journalism, with decades of those spent at the top of his field at CBS Evening News, lends the man quite a bit of credibility and his fan base provides a wide platform from which to give his take on the 2016 presidential elections and the resulting mess with which America has been left. After White House counselor Kellyanne Conway stunned the media on Sunday morning with her assertion that Sean Spicer's Saturday press conference was not filled with blatant lies about the number of attendees at Trump's inauguration, just "*alternative facts*," even Meet the Press host and interviewer Chuck Todd had to laugh at her absurdity. Dan Rather, however, was not amused, and he took to Facebook to give his take on the segment.