For decades, I’ve lived just 150 miles from the Mexican border. Being so close, I am constantly reminded of just how different our two countries are. I used to travel extensively throughout Mexico. I had no hesitation about driving across the border and exploring any part of that country.

The beauty of many areas in Mexico rivals some of the most well-known landmarks on the planet, and the countryside and small towns overflow with friendly, hard-working, highly reverent people. I love Mexico, but I no longer travel carefree throughout that country as I once did.

The government has always been corrupt, but “gratuities,” bribes, and the like were just a part of life there...an accepted way of doing business. For the most part, the government was in control. But that’s no longer the case. And surprisingly, the people who don’t live near the border never hear just how much the situation has deteriorated and how extensive crime has become.

Considering how close I am to Mexico, the local television stations avoid reporting on the violence and volatility there. Instead, they focus on the atrocities taking place on the opposite side of the planet in countries like Syria, Afghanistan, and other parts of the Middle East and Africa. All the while, our neighboring country to the south is on the brink of revolution.

Have you heard that 2017 was the deadliest year in Mexico’s history, with 29,168 murders? And the murder of women (femicide) has doubled since 2007, with only about 20 percent of those cases being reported as murders.

The country is a narco state, or “el narcogobierno.” There is open corruption between the Mexican government and the drug cartels.

It’s a difficult situation to correct considering the Mexican government is being co-opted and at least partially funded by the drug cartels.

This year, the US issued a strict “do not travel” advisory to five Mexican states (Tamaulipas, Sinaloa, Colima, Michoacán, and Guerrero). This level 4 advisory puts these areas on the same level as Syria, Somalia, and Yemen. Other states of Mexico where the tourist destinations Los Cabos and Cancun are located have level 2 warnings.

It’s important, however, to put things in perspective. Mexico is a country of roughly 130 million. They have great universities, engineers, doctors, and, in many places, better internet than I have. It is far from a total third-world disaster, as it is often portrayed.

I still love Mexico and its people. Just like here in the United States, the government and the people are two completely different entities. And thanks to the actions (or inactions) of their government, travel in certain cities, regions, and border areas is dangerous, especially for “gringos” like me.

I mention all of this because even in our own country, we’re not always being told the whole backstory. As the saying goes,
Coca-Cola & the Overuse of Water

Years ago, one of my favorite places to travel was the town of San Cristóbal de las Casas in the Southern Mexican state of Chiapas, near the Guatemalan border. It’s a beautiful high-elevation area surrounded by pristine mountains and inhabited largely by indigenous people.

The sites, food, people, and markets are amazing. I’ve always enjoyed a fermented drink unique to this area that’s made from corn, called pozol. Pozol predates Hispanic times and was commonly consumed by the Mayans. When I was there in the mid-1990s, there were some political tensions. The Zapatistas organized in the surrounding mountains. And this past September, the area experienced a massive earthquake. Their biggest problem right now seems to be that, for the first time in history, they are now facing a drinking water shortage. It stems from a Coca-Cola FEMSA bottling plant that opened in the area. This plant produces 7 percent of the Coke products for Mexico. The deepest wells in the area that supply the locals with water are around 75 feet deep. Coca-Cola’s well, which Vicente Fox’s administration renewed the licenses on for $146 USD a year, is about 400 feet deep.

Coca-Cola is pumping 1 million liters of water per day, and it has caused the local wells to run dry. (Their permit allows them to pump 499.9 million liters of water a year.)

Some locals now have to walk two hours to get water, while others who have the financial means buy their water.

Never one to miss a marketing opportunity, Coca-Cola now just happens to have an abundance of bottled water and soft drinks available to sell to the locals. And just to sweeten things, they charge the same price for bottled water as they do for some of their soft drinks.

“We’re treated like mushrooms... kept in the dark and fed BS.” As an Alternatives reader, I’m sure you realize this is particularly true when it comes to matters involving our health.

Special interests and corrupt government agencies often control the messages we receive, much like in Mexico. And some of the health problems being experienced in that country provide a small glimpse into the problems we’ll probably be experiencing here in the very near future.

Health Catastrophe in a Bottle

One of the most frequent questions I’m asked is, “What’s the quickest and best way for me to lose weight?” My initial response is to cut out sugar from the diet, and more specifically, to eliminate sodas. I believe sodas have probably done more damage to society’s health than any other single factor. And as I’ve traveled the world over the last 40 years, you can visibly track the deterioration of health in a country based solely on the introduction and acceptance of sodas and vegetable oils into their diet. Mexico is a great example.

If you visited Mexico the 1900s or earlier, I doubt you would have noticed much difference in the number of obese individuals compared to our society. But that has changed significantly. Although we struggle with an ever-increasing obesity issue, over the last couple of decades Mexico has become one of the most overweight countries on earth, exceeding the US. In 1975, about 37 percent of the population was obese. Now, it’s about 65 percent. (During that same period, the rate globally has...
risen from just over 20 percent to almost 40 percent.

Right on the heels of obesity is type 2 diabetes. Diabetes is considered a lifestyle disease, since it most often develops in those who are overweight. It is now the leading cause of death in Mexico, killing more than 80,000 people a year—and this number is expected to continue climbing for several decades. One report I read referred to the situation as the Mexican population “eating themselves to death.”

Some of the most common drugs to treat high blood pressure are low-dose thiazide-type diuretics, or “water pills.” These are often the first choice for treatment, and it has been this way for decades. They work by removing water from the body, which reduces blood volume and lowers blood pressure. The most well-known side effect is the loss of minerals that exit with the water, particularly potassium. Potassium supplements are often prescribed at the same time to remedy this. Water pills have been considered reliable and safe without many other serious side effects.

Recently, though, Danish researchers discovered that the thiazide component in water pills causes changes in the skin, making it more susceptible to the sun’s UV rays, which can result in skin cancer. They now believe that 10 percent of all cases of squamous cell carcinoma is a direct result of taking these hypertension drugs. (J Am Acad Dermatol 2018 Apr;78(4):673–81.e9)

Only limited testing is done before a drug is put on the market, and every single drug has side effects. The safety tests are limited, and we know that many times, negative test findings are not published or even hidden from the public. And until recently, no one paid attention to vulnerable areas like the gut microflora, so it is unclear what long-term effects drugs have on beneficial microbes, brain chemistry, digestive enzymes, etc. For instance, it is known that just one round of antibiotics can disrupt the gut microflora for as long as a year, resulting in immune problems, weight gain, and a dozen other issues. But we’re still learning more about these areas.

Unlike drugs, vitamins, minerals, herbs, and foods are not foreign to the body. They are the building blocks and raw materials the body was designed to use to function properly. Personally, I want to resolve health issues without creating other problems down the road. Avoiding drugs whenever possible is not just about resolving a current problem. To me, it’s about preventing future ones.
Blue Light & Risk of Cancer

BARCELONA, SPAIN—Researchers have reported a link between exposure to blue light and a higher risk of developing cancers of the breast and prostate.

Blue light isn’t actually blue, it is the visible light spectrum emitted by most white LEDs and computer, tablet, and phone screens.

We’ve known that increased exposure to artificial light at night (from the computer, TV, etc.) disrupts the circadian rhythm, reduces melatonin production/secretion, and increases the risk of breast and prostate cancer. However, this is the first study I’ve seen that has been able to look at outdoor levels of artificial light and what effect it might have.

Medical and epidemiological data of more than 4,000 individuals between the ages of 20 and 85 living in Spain were examined. Researchers compared to their exposure to outdoor artificial light. The only way this could be accomplished was to evaluate nocturnal images of the intensity and wavelength of Madrid and Barcelona taken by astronauts aboard the International Space Station.

The results indicated that for both cities, individuals exposed to higher levels of blue light had a 1.5 and 2-fold higher risk of developing breast and prostate cancer respectively, when compared to the people with less exposure. (Environmental Health Perspectives 2018 Apr. doi:10.1289/EHP1837)

It’s a little scary to think that living in a city with LED blue light illumination can double your risk of developing prostate or breast cancer. LEDs have been great for reducing electrical usage, and LEDs with targeted wavelengths have health and healing applications. It’s the blue light wavelengths we’re being exposed to at night that confuse the body into believing it’s still daylight. (LEDs aren’t the only blue light sources, but they are rapidly becoming the primary source.) This nighttime exposure delays the sleep cycle, disrupts the body’s natural circadian rhythm, and creates havoc when it comes to the production of hormones, particularly melatonin.

Most people associate melatonin with sleep, and for good reason. If you have difficulty going to sleep or staying asleep, melatonin can be a very effective and inexpensive remedy. A dose of anywhere from 1 to 6 mg can work wonders. (Melatonin displays low toxicity with no serious side effects reported, even with doses as high as 20 mg per day.)

Start with a lower dose and gradually increase if needed. The ideal dose will allow you to sleep well and not wake up in a daze or stupor. I’ve found that 3 mg a night works well for me. I have a hard time keeping my eyes open about 15 to 30 minutes after taking it.

It is important to note that, in addition to promoting sleep, melatonin is considered a powerful anti-cancer agent. In fact, one scientific article I read labeled it a “full-service anti-cancer agent” because it mitigates cancer at the initiation, progression and metastasis phases. It also has been shown to enhance the activity of the immune system, particularly the T cells and natural killer (NK) cells. Additionally, it improves the efficacy of chemotherapy and has been shown to induce apoptosis (self-inflicted death) in most types of cancer cells.

Melatonin also works by modifying estrogen receptor sites in the body, helping to prevent many of the ill effects of excess estrogen, or estrogen dominance. (The cancer drug tamoxifen blocks the same receptor sites as melatonin.)

This is why melatonin is so closely related to cancer prevention, particularly estrogen-dependent cancers. Two of the most common cancers influenced by estrogen happen to be breast and prostate. Others include ovarian, endometrial, melanoma, testicular, and colorectal. Non-small cell lung cancer and certain liver, brain,
NEWS TO USE from around the world (continued...)

bladder, and colon cancers have an estrogen connection as well.

Melatonin is also an antioxidant and can be used adjunctively during chemotherapy with any type of cancer. Numerous studies have shown that melatonin not only lessens the toxic side effects of chemo, it increases the average survival time.

A review of several studies using melatonin found that when cancer patients were given 20 mg daily of melatonin along with their chemotherapy and/or radiation, the number of partial remissions doubled (16.5 percent vs. 32.6 percent) and the 1-year survival rate almost doubled (28.4 percent vs. 52.2 percent). Also, side effects like fatigue, neurotoxicity, and thrombocytopenia decreased dramatically. These effects were consistent across the different types of cancer and there were no adverse events reported from taking the melatonin.

The typical dose used in cancer therapy is 20 mg per day, and in most of these studies, the patients start on that oral dose from the beginning, taking it once in the evening. The only warning might be for those taking a blood thinner like warfarin. In some cases, it appears melatonin may decrease clotting factors. Other than that, the studies I’ve seen haven’t reported any serious side effects, although some individuals reported having vivid dreams.

The general thought is that vivid dreams don’t occur unless the daily dose being used is 10 mg or more. But I’ve occasionally noticed that I have vivid dreams even at the 3 mg dosage I take. During cancer treatment, I would suggest working up to 20 mg per day in stages over a week or so, just to get used to the effects.

Although melatonin has no reported adverse effects at these doses, and it has been shown to be almost universally beneficial during cancer treatment, very few doctors even mention it to their patients. It suffers from the same problem a lot of natural therapies do...it’s safe, inexpensive, readily available to everyone, and can’t be patented.

Probiotics & Alcohol

NEW YORK, NEW YORK—If you drink alcohol, you may want to consider using an oral probiotic. Researchers at the New York School of Medicine examined the impact that alcohol consumption had on the oral microbiome of 1,044 adults between the ages of 55 and 87. Of these, 270 were nondrinkers, 614 were moderate drinkers (1 drink/day for women and 2 drinks/day for men), and 160 were heavy drinkers (more than 2 drinks a day). Also, 101 were wine drinkers, 39 only drank beer, and 26 only drank liquor.

When tested, all drinkers were found to have the more potentially harmful Bacteroidales, Actinomyces, and Neisseria species of bacteria. (Neisseria can synthesize the cancer-causing compound acetaldehyde from alcohol.)

Higher alcohol consumption also was shown to increase colonization by Streptococcus mutans, the bacteria that causes dental cavities. Furthermore, the drinkers had fewer Lactobacillales, the beneficial type of bacteria that reduce gum inflammation and periodontal disease. The more someone drank, the lower the numbers of beneficial bacteria in his or her mouth. (Microbiome 2018;6:59)

Personally, I think it’s a good idea to use an oral probiotic supplement even if you don’t drink. The microbiome in the oral cavity is the first line of defense against everything that enters the digestive tract. Beneficial bacteria in the mouth also colonize in the throat and nasal and sinus passages—the body’s first line of defense from airborne pathogens.

We also know that dysbiosis of the oral microbiome can lead to gum disease that progresses to heart disease and potentially cancers of the head, neck, and digestive tract. So make it a point to take a daily probiotic geared toward increasing beneficial bacteria in the oral cavity.

■
Alternatives

kidney failure that requires hemodialysis. Emergent dialysis costs roughly $400,000 USD per year, and outpatient dialysis about $75,000 USD per year. This surge in diabes places Mexico’s public health care system in serious jeopardy.

There are several factors contributing to the growing diabetes epidemic in Mexico. It is thought that the Mexican population may have a higher genetic susceptibility to developing the disease, but being next door to the US seems to be a larger risk factor.

Mexico also has a large, growing, urban middle class that has followed our lead in consuming super-sized fast foods and vegetable oils, commuting to work by automobile, eating fewer fruits/vegetables, and exercising less. The North American Free Trade Agreement, which took effect in 1994, flooded Mexico with processed foods. Since 2000, consumption of beans has dropped by half. Fruit and vegetable consumption has decreased by 30 percent. There is also less social stigma attached to being overweight.

But one of the primary culprits is soda. Sodas account for seven out of every 10 drinks sold in Mexico. Mexicans consume the most sodas per capita of any country in the world, with Coca-Cola being the most popular.

Coca-Cola is a political powerhouse in Mexico. The company is well-entrenched in the government and enjoys a “revolving door” situation, much like the US pharmaceutical companies have here. The decisions (and income) of politicians and government employees are focused on what’s best for industry, not constituents.

As such, sugar-sweetened drinks like Coke are estimated to kill more than twice the number of Mexicans than the “other type of coke.” *(Circulation 2015 Aug;132(8):639–66)*

You may remember the heated exchanges between former Mexican president Vicente Fox and President Donald Trump about a border wall during the last election. Prior to being Mexico’s president, Vicente Fox happened to be president of Coca-Cola FEMSA, the largest franchise Coca-Cola bottler in the world. Its most profitable market is Mexico.

Coca-Cola isn’t alone in its quest to grow the Mexican soda market and fuel a worldwide diabetes pandemic. A couple of years ago, PepsiCo announced it would be spending $5 billion for expansion in Mexico. (Coca-Cola has more than 70 percent of the carbonated drink market there, and PepsiCo only 14 percent.)

**Out-of-Control Crisis**

Mexico is just one unfolding example of how quickly a health care crisis can spin out of control.

Mexico’s health system doesn’t cover dialysis. If it did, it probably would have collapsed by now. Even still, the soda/diabetes connection may be the straw that breaks the camel’s back. It is like watching a train wreck in slow motion. The next few years could be pivotal to Mexico’s economic and social stability.

The US is really not that far behind. The cost of dialysis for every US citizen is fully covered under law by Medicare, Medicaid, and other secondary payers.

The American public obviously doesn’t understand the health dangers of consuming sweetened beverages. Most haven’t grasped the magnitude of the problem or the enormous burden it will place on our health care system.

Much like the Mexican population, we’re being treated like mushrooms by our government as well as the soft drink industry. Let me say that I believe in free will. We should be able to “pick our poison” and make our own decisions when it comes to health. However, to make smart, informed decisions, we need the facts. We need to be given the available research (and the motivations of those promoting a product/lifestyle) to fully understand the consequences before making our decisions.

How many times have you heard that soft drinks can be a part of a healthy diet, and that the key is maintaining a healthy, active lifestyle? Or that sodas consumed in moderation are a good source of energy for a quick pick-me-up? The soda industry wants you to believe that you simply need to exercise more to burn the extra calories provided by sodas, and this will mitigate any potential health effects.

There’s a problem with this logic though. Research does NOT support the idea that physical activity will protect against obesity and diabetes.

People who consume excessive amounts of sugar over the long term will usually end up with diabetes, even if they remain skinny. And, no surprise here, soda is the worst source. It is essentially sugar water without any protein
or fiber to blunt its absorption. The high concentration of sugar results in an almost instant blood sugar spike. The body responds by releasing a flood of insulin, which stores this excess sugar as fat, resulting in fatty liver, obesity, and eventually diabetes. This same process happens whether you are overweight or not.

The idea that a little more activity is all that’s needed to compensate for that daily soda is a sad joke. A 20-ounce bottle of regular soda contains 250 calories from 16 tablespoons of sugar. To burn that many calories, you’d need to run for 50 minutes. If you consume a 12-ounce can of Coke, which contains 140 calories, you’d need to run 11 minutes or walk 26 minutes.

You never see these figures (or warnings) on the labels or in the advertisements for sweetened beverages. And there’s something else you don’t see: the amount of sugar listed in teaspoons.

The beverage industry knows that most consumers in this country have a poor concept how much is in a gram because we measure using teaspoons. A 12-ounce can of Coke contains 39 grams of sugar, which is meaningless to most people. However, 39 grams of sugar equals 9 ½ teaspoons, which we can all relate to. (FYI: To convert grams to teaspoons, you divide the number of grams by 4.)

The beverage industry knows this information would make people more hesitant to drink their products or give them to their children. I mean, can you even imagine putting that much sugar in your cup of coffee or iced tea?

### Amount of Sugar in Common Drinks

<table>
<thead>
<tr>
<th>Container</th>
<th>Drink</th>
<th>Sugar Grams</th>
<th>Teaspoons</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-OUNCE CONTAINER</td>
<td>Gatorade</td>
<td>34 grams</td>
<td>8.5 teaspoons</td>
</tr>
<tr>
<td></td>
<td>Vitamin Water</td>
<td>32 grams</td>
<td>8 teaspoons</td>
</tr>
<tr>
<td>16-OUNCE CONTAINER</td>
<td>Coke</td>
<td>52 grams</td>
<td>13 teaspoons</td>
</tr>
<tr>
<td></td>
<td>Snapple Kiwi Strawberry</td>
<td>45 grams</td>
<td>11.25 teaspoons</td>
</tr>
<tr>
<td></td>
<td>Nantucket Nectars Big Cranberry</td>
<td>58 grams</td>
<td>14.5 teaspoons</td>
</tr>
<tr>
<td></td>
<td>Monster</td>
<td>54 grams</td>
<td>13.5 teaspoons</td>
</tr>
<tr>
<td>16.9-OUNCE CONTAINER</td>
<td>Mountain Dew Kick Start Energy</td>
<td>65 grams</td>
<td>16.25 teaspoons</td>
</tr>
<tr>
<td></td>
<td>Rockstar</td>
<td>76 grams</td>
<td>19 teaspoons</td>
</tr>
<tr>
<td></td>
<td>Red Devil</td>
<td>75 grams</td>
<td>18.75 teaspoons</td>
</tr>
<tr>
<td>11.3-OUNCE CONTAINER</td>
<td>Sunny D</td>
<td>19 grams</td>
<td>4.75 teaspoons</td>
</tr>
<tr>
<td></td>
<td>AriZona Tea</td>
<td>34 grams</td>
<td>8.5 teaspoons</td>
</tr>
<tr>
<td></td>
<td>Capri Sun</td>
<td>33 grams</td>
<td>8.25 teaspoons</td>
</tr>
</tbody>
</table>

In the chart above, you will see other sobering examples of the amount of sugar in popular beverages.

### Artificial Sweeteners: Not Much Better

The beverage industry has tried to sidestep the sugar issue by using zero-calorie artificial sweeteners in place of sugar in many of their products. Unfortunately, when it comes to preventing obesity and diabetes, artificial sweeteners do not work.

Studies have shown that consuming diet sodas and drinks with zero-calorie sweeteners can still lead to obesity, cardiovascular disease, and diabetes. One found that individuals who drank one diet soda daily had a 36 percent increased risk of metabolic syndrome and a 67 percent higher risk of developing diabetes. *(Diabetes Care 2009 Apr;32(4):688-94)*

Another study tracked the health of 2,564 New Yorkers over the age of 40 for 10 years. Those who drank diet soda daily were more likely to have experienced a heart attack, stroke, or death from cardiovascular disease during that period. This was true independent of their sex, age, race, education weight, cholesterol levels, smoking and exercise habits, and other factors. *(J Gen Intern Med 2012 Sep;27(9):1120–6)*

The most recent study on this subject was just reported at the 2018 American Physiological Society’s annual meeting, held this past April in San Diego.

This is one of the first studies I’ve seen that illustrates that artificial sweeteners actually change the way the body processes fat.
and produces energy. Within three weeks of consuming artificial sweeteners, the researchers saw significant differences in the various concentrations of biochemicals, fats, and amino acids in the blood, compared to participants who did not consume artificial sweeteners.

One example was acesulfame potassium (also known as acesulfame K or Ace K and marketed under the names Sunett and Sweet One). Acesulfame potassium accumulated in the blood and as levels increased, researchers began to notice damage to the cells that line blood vessel walls.

With sugar-sweetened drinks, you’re drinking flavored sugar water. With artificially sweetened drinks, you’re drinking water laced with chemical additives that are foreign to the body. These chemicals are designed to “fool” your taste buds into thinking you’re consuming sugar. And it works.

The brain receives the signal that the body is getting calories for energy, but it doesn’t. This sets off a chain reaction that triggers hunger, cravings, and an increased consumption of sugar and refined carbohydrates. The result? Weight gain, obesity, damage to blood vessels, and increased risk of stroke and heart attack, and diabetes.

Still Drinking Sodas?

If you’re still drinking sodas, energy/sports drinks, or other commercially produced beverages, I hope this convinces you to stop. If you need a worthwhile health goal this summer, this should be it. There are a lot of excuses that can be made for not exercising enough, not eating vegetables, etc., but there are no legitimate excuses for continuing to drink sodas.

Recent studies indicate that the average lifetime cost of treating a single case of diabetes is close to $100,000. It is estimated that the medical costs of diabetes alone in the US is $245 billion. And since these figures only encompass cases that have been diagnosed, I’m sure they’re much higher. One-third of the individuals with diabetes are undiagnosed, yet still suffer from associated medical issues.

The emotional toll this disease takes on families is immeasurable. Diabetes is the sixth-leading cause of death in the US. The number of diabetes cases is expected to double by 2034. Based on soda consumption among our youth and the continued support of the beverage industry, I have no doubt we will get there.

You’d have to be living under a rock to not know that soda consumption has become a daily addiction in this country. One study found that nearly two-thirds of boys and girls in this country drink at least one sugar-sweetened beverage a day. Just one of these beverages contributes to 7.3 percent of the total daily caloric intake.

When it comes to destroying health, sodas are basically liquid cigarettes. There is simply no need for them, or any sweetened beverages. So make it a point to cut all of these drinks from your diet today.

Until next month,