

The "secret" cancer culprit that's been ignored for 50 years

If there's any New Year's resolution you should make—and keep it's to break your sugar habit.

After decades of misdirection, most everyone *finally* recognizes that sugar consumption is a major contributor to obesity and diabetes—as well as all of the complications associated with diabetes in the blood vessels, brain, nerves, eyes, heart, and kidneys (none of which new diabetes drugs have been shown to prevent).

And, of course, sugar consumption is also associated with cardiometabolic heart disease, the leading cause of cardiovascular disease today—and the nation's number one killer.

Not to mention the growing epidemic of Alzheimer's disease and dementia has been called "type 3 diabetes," caused by—you guessed it—sugar.

And then there's cancer. For decades, sugar has been given a "free pass" when it comes to cancer-causing agents—<u>until now</u>.

Belgian scientists say they've made a research breakthrough regarding the connection between sugar and cancer. I'll tell you more about that in a moment.

But first, let's take a look at why the kinds of conclusions in this research are far from new... but have been ignored for decades.

The great cover-up about sugar's role in cancer

I vividly recall when I first arrived as a young research scientist in the

new intramural Diet and Cancer Research program at the National Cancer Institute. The U.S. Congress had directed the National Institutes of Health to *finally* start looking at the role of diet in nutrition in chronic disease. What's more, Congress had also directed the National Academy of Sciences' (NAS) Food and Nutrition Board to compile all of the research documenting the role of nutrition in cancer.

I was astounded that there was virtually *nothing* in the NAS report about sugar and cancer. After all, I remembered when sugar was considered "bad" for your health—before the "sugar coating" in the 1970s of all the evidence against sugar.

In fact, as I wrote in an October 2016 *Daily Dispatch* titled, "How big sugar got such a sweet deal for so long," there was a secret campaign by the sugar industry to deflect the blame for heart disease from sugar onto dietary cholesterol and fats—without *any* evidence.

So in retrospect, I guess I shouldn't have been surprised that the only mention of sugar in the NAS report was to dismiss its role in cancer. I remember asking the politicalscience bureaucrats who ran NCI about this oversight and being told we wouldn't be researching sugar and carbs' relation to cancer.

Instead, NCI wasted decades and billions of dollars running after fats, and even protein, as the macronutrients that supposedly cause cancer—while ignoring mounds of evidence on the ability of vitamins, herbs, and other plants to prevent and even *reverse* cancer (for more info, see the sidebar on page 3).

A metabolic toxin's influence on a metabolic disease

Not surprisingly, none of these government decisions made sense to me. After all, cancer is a *neoplastic* disease, meaning it results from new growth of abnormal cells. And cells need energy (namely sugar) to grow—especially if they are growing rapidly like cancer. And it's also a *metabolic* disease, resulting in disruptions to metabolism in all cells and tissues at every level.

Since sugar is a metabolic *toxin*, basic cancer biology should tell us that sugar has an important role in cancer—since cancer is also a metabolic *disease*.

There's an important metabolic difference between cancer cells and normal cells. Cancer cells

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Copyright © 2018 OmniVista Health Media, L.L.C., 100 W. Monument St., Baltimore, MD 21201. Reproduction in whole or in part is prohibited without written permission of the publisher. grow faster than normal cells, and require more blood, oxygen, and energy in order to keep growing.

Cells face a choice about how they make more energy from breaking down food. Cells can continue healthy energy production by using oxygen to combust (completely burn) glucose, yielding energy, and water for cellular hydration. Or, they can shift to the unhealthy energy production characteristic of cancer cells, which includes relying *less* on oxygen and *more* on glucose.

Cancer cells still need extra blood vessels so they can grow off the body's blood supply—but it's the glucose carried in blood, rather than the oxygen, that actually becomes more important to these cells. In essence, cancer cells become ravenous for more sugar.

Modern scanning techniques like PET (positive emission tomography) show which cells in the body are consuming more sugar. In most cases, the more sugar a cancerous tumor consumes, the worse the prognosis for the patient. In other words, the more sugar in the cells, the deadlier the cancer.

And yet, oncologists actually advise patients in the latter stages of cancer (when a metabolic condition called cachexia sets in, where patients experience rapid weight loss and muscle atrophy) to consume more sugar!

What a Nobel laureate told us about cancer... nearly a century ago

There's simply no excuse for this ignorance about sugar's role in cancer. Especially in light of Nobel Prize winner Dr. Otto Warburg's discoveries on this topic back in 1924.

Warburg, who lived from1883 to 1970, was a German physician

and physiologist, and the son of a prominent physicist. He was nominated for the Nobel Prize 47 times, and became the sole recipient of the Nobel Prize for Medicine or Physiology in 1931 (in his case, it was for medicine *and* physiology).

As director of the Kaiser Wilhelm Institute for Cell Physiology, Warburg studied the respiration, metabolism, and physiology of cancer cells.

Warburg served in the German Cavalry in World War I, and was awarded the Iron Cross. Albert Einstein, who knew Warburg's father, wrote to encourage Otto to leave the Army and return to research. Einstein's work in physics had great influence on Warburg's understanding of cell physiology (and because of this, we now know cells rely on quantum effects).

Warburg was half-Jewish, and when the Nazis came to power, he was forced to give up teaching. But Warburg's research was so critical to the Nazi War on Cancer (which competed with the British Empire Cancer Campaign), that Herman Goring, a highly-ranked Nazi official, personally issued a special permit so Warburg could continue his research and avoid persecution as a Jew under the Nazi Nuremberg Laws.

All of his work led Warburg to conclude the following about cancer:

"Cancer, above all other diseases, has countless secondary causes. But, even for cancer, there is only one prime cause. Summarized in a few words, the prime cause of cancer is the replacement of the respiration of oxygen in normal body cells by a fermentation of sugar."¹

This is now known as the Warburg Effect. But the medical establishment basically overlooked it when it was discovered.

Warburg was regularly frustrated by lack of acceptance of his theory, and often shared a quote attributed to Max Planck: "Science advances one funeral at a time."

Even 45 years later, a handful of minions at the National Academy of Sciences decided to set aside the work and warning of this pioneer, and pointedly ignored sugar in the new multibillion NCI effort to finally study diet and cancer.

What you need to know about the genetic effects on cancer

So why was the Warburg Effect essentially ignored? One reason is because scientists instead became infatuated with the discovery of DNA by American biologist James Watson and English physicist Francis Crick in 1953, the year I was born.

DNA became the new fashion in medical research, and it soon was possible to detect the genetic abnormalities of DNA in cancer cells. Genetics became the hallmark for diagnosing cancer cells, and scientists embraced the "explanation" that abnormal genes were responsible for the higher growth, invasiveness, and aggressiveness of cancer cells.

The idea of looking at cancer cell metabolism and sugar, and all of the Nobel-prize winning work of Warburg, was kicked to the wayside.

And yet, there's an undeniable link between genetics, cancer, and excess sugar metabolism. A number of genes that "cause" cancer and were known for their role in creating more cancer cells, have now been seen to also regulate the consumption of nutrients, such as sugar, by cancer cells.

These abnormal "cancer genes"

How to naturally reverse cancer at the cellular level

I recently released an extensive online learning tool, my *Authentic Anti-Cancer Protocol*, which is the culmination of 40 years' worth of research and medical training.

Along with avoiding sugar, my anti-cancer protocol discusses other natural, simple ways to actually *reverse* cancer at the cellular level. Below are a few go-to strategies:

Botanical solutions. There has been scientific evidence for decades about the ability of certain plants and herbal remedies to actually reverse cancer. Ancient Ayurvedic remedies from India and herbal remedies from China can cause cells to "re-differentiate" from cancer, and essentially go back to normal.

There are also natural constituents, such as vitamins and herbal remedies, which have been shown in studies to prevent or slow the growth of new blood vessels that feed cancer tumors—thereby starving the tumors. This process is called "antiangiogenesis."

Meanwhile, Western biomedicine is searching the plant kingdom for cancer "cures." However, researchers only look for one property in so-called "anti-cancer" plants—their ability to kill cancer cells outright. They pay little attention to the plants I mentioned

simply represent a breakdown of normal cellular control, by telling cancer cells to consume more sugar than they should. As I mentioned earlier, cancer cells become addicted to sugar and eat as much as they can—growing, and making as many copies of themselves as possible.

Today, most medical textbooks on cancer biology don't focus on cancer metabolism. As in all of modern medicine, it's all about "molecular genetics" and the false promise of "genetic therapies." But there is yet to be a single gene therapy offered up for cancer, or any other common chronic disease. above that "re-differentiate" these cancer cells back to normal cells... *without* killing them.

So, basically, Western biomedicine ignores the healing properties of plants, and instead looks only for those that contain poisons that can kill cells. In this way, scientists are making potential potent plant remedies into another version of chemotherapy or radiation. Of course, you have to hope these poisons kill more cancer cells than they kill normal, healthy cells. And, unfortunately, that's not usually the way oncology works...

Metformin. This "natural" drug, which is derived from French lilac, is widely prescribed to tens of millions of people to decrease blood sugar.

But an important "side effect" is that Metformin also reduces the risk of cancer, including breast, colon, and pancreatic cancer—and also reduces the risk of death if you do get cancer. Of course, this makes perfect sense if you take into account glucose's (sugar's) role in cancer cell growth.

For more natural, cutting edge treatments, you can enroll in my *Authentic Anti-Cancer Protocol* by clicking here or by calling 1-866-747-9421. Just ask for order code EOV3U101).

New research may revive the Warburg Effect

Finally, the Warburg Effect may be getting its due, thanks to a group of Belgian researchers that started investigating sugar's link to cancer in 2008.

In October 2017, they published a study showing, in part, how the Warburg Effect works. The researchers discovered that yeast with high levels of glucose causes overstimulation of the same proteins that are mutated inside human cancerous tumors—making cancer cells grow faster.³ Of course, an American Cancer Society representative made it all sound very complicated in a *USA Today* story, saying while the study shows one way the Warburg effect could occur, the researchers "are a long way away from saying this could actually happen."⁴

But it's not very complicated to understand that fast-growing cancer cells need more blood and energy (sugar) to keep growing.

A final note: Warburg located the metabolic dysfunction in

cancer (involving extra energy production from sugar) in the cellular mitochondria. Mitochondria are the critical parts of the cells poisoned by statin drugs.

We've seen statins increase the rate of complications throughout the body, including the metabolic disease of diabetes.

Early studies on statins (which showed only their ability to reduce blood cholesterol, but not to reduce actual heart disease) weren't conducted long enough to reveal the long-term complication of diabetes. But now, studies are showing that statins can indeed cause diabetes.

All research has shown that cancer is also a result of a very long process. Are we going to find out next that cancer is a long-term complication of statin drugs?

Bottom line: After considering the influences the government health agencies' have regarding diet, nutrition, and cancer and other chronic diseases, it's easy to pinpoint the culprit: sugar.

Ring in the new year with the right supplements

The results are in from the 2017 Consumer Survey on Dietary Supplements conducted by the nonprofit Council for Responsible Nutrition (CRN).¹ Today, I'm sharing some of the CRN's findings, as well as some information no one else will tell you.

The good news

Three-quarters of U.S. adults take supplements.

Given the generally poor state of diet and nutrition among most Americans, it's encouraging that supplement use continues to increase.

The CRN report shows that 76 percent of American adults took dietary supplements in 2017—up five percent from the prior year.

Vitamins, minerals, and herbs lead the way.

Not surprisingly, vitamins and minerals are the most commonly consumed supplements, with 75 percent of the CRN survey respondents saying they've taken supplement forms of these nutrients over the past year. And almost one-third (29 percent) of respondents take botanical/herbal supplements—many of which I recommend throughout this issue.

Our needs for improvement

People are taking powerhouse nutrients... but not enough people.

In terms of the most popular specific nutrients consumed, the news reveals a step in the right direction.

Given the need for optimal levels of vitamins and minerals, the glass is half-full when it comes to the percentage of those taking the following:

- vitamin D (28 percent)
- vitamin C (24 percent)
- vitamin B complex (18 percent)
- omega-3 fatty acids (16 percent)
- magnesium (12 percent)

That's a start, but studies on diet and disease prevention and reversal indicate that *most* Americans should be taking all of these supplements in light of deficient, insufficient, and suboptimal levels in most of the population—and the health benefits of optimal levels.

The vast majority of supplements users believe in the products they take.

Much of the dietary supplements industry has a lot of problems with its science (or lack of it), formulations, and marketing hype. Nonetheless, 87 percent of adults surveyed by CRN have confidence in the safety, quality, and effectiveness of dietary supplements overall.

Furthermore, 76 percent believe the supplement industry is trustworthy. These numbers are much higher than those who trust the medical profession—not to mention big pharma or the government, for that matter.

But sadly, this trust is misplaced. From what I've seen, and knowing what I know, I personally just can't trust or recommend a dietary supplement unless I have formulated it myself. Of course, most doctors can't do that.

The bad news

Most supplements users take multivitamins. Over half—56 percent—of supplement consumption consists of multivitamins, which are basically worthless.

As I've reported many times, there cannot possibly be the right doses, combinations, and formulations needed for your individual health housed in any little one-a-day pill.

Plus, the efficacy and potency of some multivitamin formulations consistently rank at the very bottom of industry surveys. No wonder they're not doing any good.

What's astounding is that mainstream scientists (who know next to nothing about human diet and nutrition) continue to use ineffective multivitamins in research on disease prevention and management. And they wonder why their results aren't better...

Unfortunately, these are the studies that get trumpeted to doctors and consumers. Meanwhile, the studies using the RIGHT doses of vitamins and minerals consistently show benefits... but are rarely reported.

Junk supplements remain

popular. Nearly a quarter (22 percent) of Americans inexplicably insist on taking useless "sports-nutrition" supplements.

And a surprising 15 percent use weight-loss supplements—which scientific studies consistently show are basically worthless.

Adults still think green tea is a godsend beverage—11 percent to be exact. I guess I shouldn't be shocked at this statistic. After all, the hype for this mostly useless beverage is strong.

But as I reported in the April 2014 issue of *Insiders' Cures* ("The sinister secrets swirling inside your teapot"), there are many problems with consuming green tea—including pesticides, artificial flavors, GMOs, and toxic packaging. What's more, you'd have to drink a bucket-full of green tea every day to get its weight-loss benefits. Meanwhile, rooibos or aspal (red tea) and coffee offer the same healthy constituents as green tea—plus many others. (For more info, search DrMicozzi.com using the keyword "aspal.")

Too many people are taking supplements that are dangerous.

Some misguided doctors say *all* nutrients should come from the diet. But that's simply not feasible for most people. That said, there actually are several nutrients you really should get from your diet—and not from pills.

And that's what concerns me most about the CRN data. There are worrisome levels of consumption of supplements that should come mainly from the diet, not from pills,

My supplement recommendations for optimum health in 2018—and beyond

Among the reasons consumers listed in the CRN survey for taking supplements, 46 percent cited general health and wellness, and 30 percent said to fill nutritional gaps in their diets.

Others mentioned specific concerns: bone health (23 percent), immune health (24 percent), heart health (22 percent), and healthy aging (21 percent).

Heart health is, of course, the number one health issue—especially as you get older. Along with B vitamins and omega-3s, I also recommend the following to keep your heart at peak performance:

- vitamins D3 (10,000 IU per day and K2 (150 mcg per day)
- magnesium (to find the right form for you—and which to avoid—read my Daily Dispatch titled, "Never take these three forms of magnesium")
- L-carnitine (500 mg)
- betaine (500 mg)
- coenzyme Q10 (200 mg)

To learn about all of the natural approaches for preventing and reversing heart disease, refer to my newly-released *Heart Attack Prevention and Repair Protocol*. (To learn more or to enroll today, <u>click</u> <u>here</u> or call **1-866-747-9421** and ask for order code **EOV3U102**.

Immune health should be supported daily. However, there are several

supplements that should *only* be taken when a cold or flu is coming on, to reduce the duration and severity. I recommend combining echinacea, elderberry, and goldenseal into a tea and drinking it throughout the day, with lemon or honey to taste. You can also take up to 100 mg a day of zinc acetate lozenges.

For long-term *balancing* of the immune system, I recommend:

- vitamins C (250 mg twice per day, D3 (10,000 IU per day), and E (50 mg daily)
- selenium (100 mcg a day)
- ginger and turmeric (as foods rather than supplements)

You also don't want chronic inflammation (overstimulation of the immune system), which contributes to cancer, heart disease, obesity, and metabolic disorders. A high-quality B vitamin complex, along with 1 to 2 grams of omega-3s per day, is a potent way to prevent chronic inflammation.

Bone health is increasingly important as you age, and I suspect the calcium supplements users fall into the category. But they should be taking the following:

- vitamins C (250 mg twice a day)
- vitamin D3 (10,000 IU daily),
- magnesium (400 mg daily)

Additionally, you should be getting calcium from your diet (particularly dairy and leafy greens).

including these key nutrients:

- calcium (20 percent)
- protein (17 percent)
- probiotics (12 percent)
- fiber (11 percent)

On page 7, I discuss new research showing why it's important to get calcium from your diet rather than from supplements—and what happens if you get *too much* calcium (it's not good).

Protein also needs to come from a balanced diet that includes dairy, meat, seafood, and legumes (beans). Protein powders can be downright deadly—in fact, during my time as a consulting forensic Medical Examiner, I once investigated a case of fatal protein-powder poisoning.

Probiotics (beneficial bacteria) are important for your microbiome as well, which studies are now showing influence almost *every* aspect of your health. But I believe the right approach is to support your naturally occurring probiotics with prebiotic foods like garlic, leeks, onions, asparagus, oats, apples, and flaxseed—rather than take a probiotic supplement.

Why? Because I haven't found a probiotic pill that is actually effective. However, I'm currently researching a new probiotic supplement formulation that appears to be active and beneficial, and I'll be sure to let you know what I find.

Fiber is also a prebiotic (which feeds beneficial probiotic bacteria), and of course helps keep your digestive system regular. But fiber also needs to come from a balanced diet, with plenty of fruits and vegetables, and not from supplements.

That's because people tend to overdo fiber supplements in misguided attempts to lose weight. But as I've written before, research shows that too much fiber can actually lead to cancer and type 2 diabetes. If you need to take fiber for a medical condition, your doctor will give you a prescription.

Finally, what your doctor probably won't tell you...

Of those who do *not* take dietary supplements, 45 percent said they would consider taking them if a doctor recommended it.

Of course, that sounds all well and good... but don't hold your breath.

While more doctors are recommending vitamin D, now given the epidemic proportions of this deficiency, they also still push dangerous calcium and iron pills. Not to mention a boat load of dangerous drugs—when science shows the right dietary supplements would be a *much* better choice for many patients.

Medicine is an art <u>and</u> a science. But sadly, the science of human diet and nutrition is often not adequately covered in medical training (I'll tell you more about that in next month's *Insiders' Cures*)—and practicing physicians are still barraged by misleading headlines about vitamin D and other nutrients. That's why the art of medicine consists of filling the gaps in scientific knowledge with clinical judgment and good intentions about what is best for each individual patient.

Fortunately, more and more studies are showing the importance of nutritional supplements for both prevention *and* treatment of disease. Not surprisingly for natural approaches, they are often one and the same. Unlike some doctors, I rely on this new science when it comes to nutrition and health, and so can you.

So I advise you start the new year by checking what's in both your kitchen *and* medicine cabinets. You need nutritious foods and the right supplements to help keep your health optimum in 2018... and beyond.

How peppermint can help you sniff out Alzheimer's disease

You probably have some candy canes left over from the holidays, that weren't eaten, and that's a good thing.

You've already read about the perils of sugar earlier this year. Although I do have to say that peppermint candies aren't *entirely* bad.

Peppermint oil is very good for digestion—and after a good, balanced meal, it's a bit easier for your body to digest a little sugar.

But the main reason why you should keep your leftover holiday peppermint candy around is to see if it passes the smell test.

Why? Because losing your sense of smell for peppermint (and other scents) can be an early warning sign of dementia.

Your nose knows if you may be developing dementia

Researchers recently evaluated the ability of about 2,900 men and women, ages 57 to 85, to detect five different scents: peppermint, fish, leather, orange, and rose.¹

A large majority of 78 percent recognized four out of five scents, while 14 percent detected three, five percent identified two, and two percent recognized one. Only one percent of the study participants were unable to recognize any of the scents.

Five years later, nearly *all* of the subjects who couldn't recognize any scents had been diagnosed with dementia. And among those who could only recognize one or two scents, a whopping 80 percent developed dementia.

So, what does your sense of smell have to do with dementia? Well, one of the study authors noted that your olfactory system (which determines your sense of smell) has stem cells that self-regenerate. So if you can't identify scents, that may mean your brain is having trouble rebuilding key components that decline with age... which can be an early warning sign of dementia.

Start improving your brain health *today*

Confusion, sleeplessness, and mood swings are other wellknown signs that dementia may be developing. And now, sense of smell may help predict dementia in time to do something about it.

Mainstream medicine has been trying to "sniff out" reliable tests

to determine risk of dementia well before the disease actually develops. Of course, the mainstream still has nothing to offer to treat this disease—despite big pharma's failed billion-dollar Alzheimer's drugs.

But you don't have to wait for an early-warning sign like loss of smell to start improving your brain health. Natural approaches offer plenty of ways to *prevent* and even *reverse* Alzheimer's dementia. You can learn all about them in my online learning protocol, the Complete Alzheimer's Cure. (For more information or to enroll today, <u>click here</u> or call **1-866-747-9421** and ask for order code **EOV3U100**.)

In the meantime, peppermint also has a number of other health benefits, beyond helping you detect Alzheimer's.

The many uses of peppermint

Along with its ability to sniff out dementia and improve digestion, peppermint has many common uses.

I remember a friend of mine in Idaho, Mark Noble, whose father was a major businessman investing in high tech. But Mark wanted to be a farmer instead. He and I were involved in a project to get farmers (and the USDA) to move from growing sugar beets to much more profitable and predictable (compared to the crazy sugar-commodity markets)—not to mention healthy herbs for medicinal remedies.

I would visit Mark on his large ranch on the Snake River near Twin Falls and Pocatello, Idaho. Gazing out on his acres and acres of fragrant peppermint plants (which also acts as a natural pesticide), I thought what a pity it is that manufacturers extract the oil from these versatile herbs and then only add a few drops to sugar confections to make various kinds of candies. Tons and tons of sugar consumed along with just a few drops of peppermint.

But peppermint has so many more uses than flavoring toxic sugar bombs. Peppermint tea can provide relief for colds, coughs, bronchitis, allergies, digestion, and asthma. It can also give you a natural energy boost and help to reduce hunger cravings.

And, of course, peppermint oil applied topically is a natural pain reliever for everything from headaches to overworked muscles. If you don't have some in your medicine cabinet, I suggest you "remedy" that right away.

Are you getting too *much* calcium?

While the mainstream generally believes in the myth that supplements are useless at best, they often make an exception for calcium supplements especially for older women.

When women lose estrogen after menopause, bones can weaken. To try and combat this problem, big pharma pushes osteoporosis drugs that are not only dangerous, but ineffective. These drugs actually attempt to build bone by poisoning an entire class of bone cell responsible for removing unhealthy old bone and recycling calcium—which means bone cells end up forming new bone on top of a rotten foundation. Now *there's* a recipe for disaster...

So, doctors who want to take a more "natural" approach recommend calcium supplements to fight osteoporosis. But, as I've written before, research shows calcium supplements can *increase* the risk of heart disease, dementia, kidney disease, and paradoxically—bone fractures.

So what should you do instead?

Well, first of all, there's new research from Europe showing the optimal levels of calcium you need for good bone health and the best way to get it.

Plus, my own anthropological and medical training, in addition to years of studying the latest research, shows there's one overlooked nutrient for bone health that's *just* as important as calcium.

Yet another use for vitamin D

I learned in medical school in the 1970s that vitamin D is the real way the body absorbs and balances calcium in bones and other tissues. Then, during my medical training, I went to Southeast Asia for research fieldwork and saw reallife examples of this in action.

You see, Chinese and Asian populations have virtually no dairy industry (because a majority lack the gene to digest lactose, or milk sugar).

Of course, dairy is a primary source of calcium. Yet the Chinese don't get any calcium from dairy foods in their diet. So, it would make sense for them to have had high rates of osteoporosis, right? Instead, I found that osteoporosis was almost *unknown* in China.

The conclusion? It takes about *more* than just calcium when it comes to osteoporosis.

In fact, according to a new European Menopause and Andropause Society (EMAS) clinical guideline, for women who actually have osteoporosis, clinical trials have shown the effectiveness of calcium when taken *with* vitamin D.

The Goldilocks approach to calcium levels

But the key is to consume just the right amount of calcium. The EMAS guideline concludes that 700 to 1,200 mg of calcium daily is sufficient for bone health. Anything more, researchers advise, is useless and potentially harmful.1

If fact, one of the authors of the guideline (which included information from 10 years' worth of osteoporosis studies) believes calcium doses should be even more restrictive—from 700 to 1,000 mg a day.

So how does this compare to the U.S.? Well, alarmingly, a joint (no pun intended) guideline last year from the National Osteoporosis Foundation and the American Society of Preventive Cardiology recommended taking—wait for it—2,000 to 2,500 mg of calcium per day.

This level is at the limit established by the U.S. National Academy of Sciences in 2011—and it's *more than double* what the European guidelines recommend.

Why are U.S. numbers so high? I suspect it may be a futile attempt to address bone health in a population with poor diets and woefully insufficient vitamin D levels.

Why food is the answer, not pills

The EMAS scientists said about 30 percent of postmenopausal women in Europe and North America have osteoporosis, and about 40 percent of them will experience bone fractures.

However, the EMAS scientists noted that while drugs are used to try to prevent osteoporosis in the U.S., that's *not* the case in Europe.

Instead, the European emphasis for prevention and treatment is on diet and lifestyle. Even despite their lower guidelines, the EMAS scientists report that over-supplementation with calcium is a problem. In fact, one study found that half of women were taking too much calcium.

That's why the EMAS researchers recommend getting calcium from a balanced diet. And even if you consume extra calcium from the food you eat, it doesn't have the same effect in your body as too much calcium from supplements.

In the cases of women who don't follow a balanced diet, European medical professionals then recognize the need for calcium supplementation. And when women decline calcium supplements, they simply take vitamin D supplements instead. It sounds like the Europeans have it figured out.

So if you want to protect yourself from osteoporosis, skip the drugs and calcium supplements. A great place to start is to follow a balanced diet which includes dairy, meat, seafood, and leafy greens.

And take 10,000 a day of vitamin D—especially at this time of year, when the sun doesn't get high enough in the sky to activate vitamin D in the skin in most parts of North America. I like an easy-touse liquid form—preferably with astaxanthin, a powerhouse marine carotenoid with numerous health benefits of its own (that I reported in a recent *Daily Dispatch* titled, "Little-known marine carotenoid can increase your longevity").

Be sure to get in 15 to 20 minutes a day of moderately brisk walking, or other exercise (preferably outdoors), to help keep your bones strong.

Lastly, be sure to get your vitamin D levels checked at your next annual doctor's check-up. The ideal vitamin D level for optimal health is 30 ng/ml or more.

Getting older makes it more difficult to get enough of this crucial vitamin. With natural supplementation, proper diet, and exercise, you can enjoy stronger bones and evade a laundry list of unpleasant symptoms and chronic disease.

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