DR. MICOZZI'S
INSIDERS' CURES
AUGUST 2015 • VOLUME IV • ISSUE 8

News Alert

Why I'm doubling down on my recommended daily vitamin D dose

Mainstream medicine just can't seem to take seriously the constant torrent of studies showing the health benefits of vitamin D.

Or the growing list of disorders and diseases associated with a lack of this crucial nutrient.

Not to mention the huge dimensions of the worldwide epidemic of vitamin D deficiency.

But you know I take all of this science seriously. In fact, the other day, I was looking back over the hundreds of articles I've written since I started this newsletter four years ago. I counted up over 40 different times I've revealed cutting-edge vitamin D research in *Insiders' Cures* or a *Daily Dispatch.*

So it's no surprise that I have a new, compelling study to tell you about today. But before I get into that, I have an announcement to make. After careful study of all of the new vitamin D research, I'm recommending that everyone increase their dose of this remarkable nutrient…to 10,000 IU of D3 a day.

Why you need to double your D

Studies are showing over and over again that 10,000 IU of D3 every day is key for general disease prevention and health promotion. It will also help lower your risk of a variety of health issues, including cancer, dementia, depression, high blood pressure and heart disease, infections, multiple sclerosis, skin conditions, and osteoporosis and other bone issues.

Some so-called public health "experts" might scoff at my new recommendation, thinking that even my original recommendation of 5,000 IU of vitamin D3 a day was too high. But they don't read the studies like I do (or maybe they don't understand them).

Based on reams of new research, I've concluded that while 5,000 IU of D3 still provides benefit, the total evidence now fully supports supplementing with a higher daily dose of 10,000 IU.

Perhaps the most compelling evidence is two new studies showing that the Institute of Medicine's pitifully puny RDA of 600 IU of vitamin D a day for men and women under age 70 is off by 10-fold.

You read that right—the current vitamin D RDA is *10 times too low.*

The researchers—one team at American universities and another at a Canadian university—found that men and women need 10 times more vitamin D than what the IOM recommends to reduce their risk of diseases related to vitamin D deficiency. (Check out my April 3, 2015 *Daily Dispatch* "Oops–government's vitamin D calculations off by factor of 10!" for more details).

That means the IOM's RDA for vitamin D should increase to 6,000 IU per day. But remember—the RDA is the amount you need just to avoid a deficiency. *Not* to actually prevent disease or achieve optimal health.

In fact, I wrote in a June 12 *Daily Dispatch* about a study in which people were given as much as 100,000 IU of vitamin D in a single dose. *With no ill effects.* That turns the tired old mainstream argument

Continued on page 2...

In this issue:

Marc S. Micozzi, M.D., Ph.D., is a worldwide leader in nutritional and complementary/alternative medicine. He has had a distinguished career as a researcher and physician executive at the National Institutes of Health and Walter Reed National Military Medical Center in Washington, DC, and the College of Physicians in Philadelphia PA. He has published over 30 medical and trade books, and founded and edited the first scientific journal, and the first textbook, on complementary/alternative and nutritional medicine, now going into a 5th edition (2014) and continuously in print since 1995.

Dr. Micozzi's *Insiders'* Cures is published monthly by OmniVista Health Media, L.L.C., 100 W. Monument St. Baltimore, MD 21201 for $74 per year ($6.16 an issue).

POSTMASTER: Send address changes to Insiders' Cures, 100 W. Monument St. Baltimore, MD 21201.

Author: Marc S. Micozzi, M.D., Ph.D.
Publisher: Katherine Wheeler
Executive Editor: Amanda Angelini

about vitamin D toxicity right on its head.

You see, these mainstream "experts" believe that because D is a fat-soluble vitamin, it can build up in your tissues and potentially achieve dangerous levels in your body.

But that's not how our bodies work. They're actually designed to hoard this crucial nutrient so we won't run out. Like in the winter, when there's not enough sunlight for most people to make vitamin D naturally. So we rely on the D our body has stored away.

Bottom line: It's highly unlikely you're going to overdose on D. But it's highly *likely* you're underdosing. And that's why I'm doubling my recommendations to 10,000 IU of this key vitamin every day.

In fact, that amount is what researchers say is the minimum our own bodies make from just 15 minutes in the sun this time of year. That's right—the scientists who administered the new vitamin D study I mentioned earlier say the human body can make 10,000 to 20,000 IU of D a day from sun exposure (and that's only in the summer months for many people living in the U.S.).[1]

Let's look more closely at this exciting new research.

Vitamin D can shrink or even reverse prostate tumors—without surgery, radiation, or chemo

The study was presented in March at the 249th annual meeting of the American Chemical Society—a group that fortunately knows how to recognize good science when they see it.

Researchers gathered 37 men who were undergoing elective prostatectomies. The men had Gleason Grading System tumor scores below 7—meaning their prostate tumor is not aggressive and may not even cause any symptoms or health problems during their lifetime.

As I've reported before, and as eloquently stated by my friend and colleague, Dr. George Lundberg (who edited the *Journal of the American Medical Association* for 20 years), if a tumor does not grow, does not invade, does not metastasize, and can never cause death, it should not really be classified as "cancer." Nevertheless, the cancer industry encourages men with these types of tumors to have their prostate glands surgically removed anyway.

When a man does decide to have his prostate tumor removed, he must wait 60 days for the damage and inflammation caused by the prostate biopsy surgery to subside. So, dealing with today's reality of cancer treatment, researchers used this waiting period to study the effects of vitamin D supplementation.

They gave half of the study participants 4,000 IU of vitamin D a day, while the other half got a placebo. After just two months, the majority of the men given vitamin D had an actual *reversal* in the growth of their prostate tumors.

The researchers also found dramatic changes in the levels of fats and proteins involved in inflammation—which is associated with cancer—in the vitamin D group's prostate glands. And a protein called growth differentiation factor 15 was strongly induced by vitamin D supplementation. This protein reduces inflammation and has been shown in previous studies to influence tumor cells to reverse course and differentiate back to normal cells.

Longer-term vitamin D supplementation had equally impressive results. A prior study conducted by the same researchers

showed that over 55 percent of men with low-grade prostate cancer who took vitamin D supplements for one year had a decrease in their Gleason grades. And some tumors even *disappeared completely.*[2]

In both studies, the researchers noted that they were treating prostate cancer patients with just normal body levels of vitamin D produced from the sun—without even moving on to the "high" doses used in other studies on D's health benefits.

Since you often can't count on getting enough sun exposure to make optimal levels of D in your body, I recommend you take supplements. And because 10,000 IU of D can be a lot of pills, I suggest getting your daily dose in an easy-to-use liquid form. Just a dropper-full added to a small amount of fruit juice or milk will give you your daily 10,000 IU of this crucial nutrient. JC

Citations available online at www.DrMicozzi.com

A test you *should* be getting instead of a colonoscopy

In the special "Ask the Insider" edition of *Insiders' Cures* in May, I answered many good questions from readers, including one regarding how to ask your doctor about alternatives to colonoscopy. Now, important new data from Europe sheds more light on one of these alternatives: a groundbreaking procedure that truly offers safe, early detection of colon cancer—not to mention other serious health issues.

I'm talking about CT colonography (CTC). This simple test, also known as a virtual colonoscopy, can detect cancer and potentially cancerous polyps in the large intestine. Just like a colonoscopy can. But without the danger, invasiveness, expense, and flat-out discomfort of a colonoscopy.

In fact, a growing number of researchers are concluding that CTC is just as good as a colonoscopy at detecting colon cancer—but without all the risks.

Study after study shows the impressive accuracy of this new procedure. The European researchers analyzed six different studies on people with either average or high risk of colon cancer. And they found that CTC detected cancer in these people *96 percent* of the time.[1]

Plus, this simple procedure can even help identify other life-threatening issues beyond colon cancer—*before* they become serious problems. Something a colonoscopy simply can't do.

Cancer screening without the fuss

So how does CTC work? Well, you start with the same bowel-cleansing regimen you'd do before a colonoscopy. Your radiologist may also give you a laxative.

When you arrive for the procedure, the radiologist pumps some air into your colon so that it's fully extended and can't hide any polyps in folds or wrinkles. And then you get a 15-minute CT scan.

The CT scan uses x-rays to create a 3-D model of your colon, allowing the radiologist to see everything inside—including anything that looks remotely like cancer.

That's it—no anesthetic, no invasive probes, no potentially contaminated endoscopes like you'd get with a colonoscopy. And some research shows that a CTC is also less expensive than a colonoscopy.

And, unlike a colonoscopy, a CTC can also find abnormalities outside the colon itself, in the abdominal cavity. Studies show that 10 to 15 percent of CTCs detect something outside of the colon that's considered to be of moderate or high importance to the patient's health.

These findings can include lymphoma and lung and kidney cancers—before they metastasize to other parts of the body. Not to mention abdominal aortic aneurysms (which may suddenly rupture and cause death) and masses on the adrenal glands.

These "incidental" findings save lives, reduce the healthcare burden, and prevent the development of more advanced diseases.

Not bad for a simple, noninvasive, 15-minute procedure.

But is it safe?

Research shows that CTC has a very low risk of major complications. You're *20 times* more likely to have symptomatic perforation of the colon during a colonoscopy than you are during a CTC.[2] And, out of the few perforations that have occurred with CTCs, all but three were the result of an air-pumping technique that is no longer used.

There is, however, one potential risk that is higher in CTC than in a colonoscopy. As with all CT scans, CTC exposes you to radiation. Which could, ironically, lead to cancer.

But studies show that there's really no need to worry about this radiation. In fact, one group of researchers estimated that people who get a CTC every five years from age 50 to 80 have only a 0.015 percent chance of getting cancer from the radiation.[3]

Plus, it's important to note that the typical colon cancer screening intervals have increased to up to 10 years—making this theoretical risk even lower.

Scientists estimate at least an average of 30 colon cancers would be prevented for every radiation-induced cancer theoretically caused by the procedure.

Is there a better alternative?

Amazingly, the European researchers couldn't directly compare CTCs to colonoscopies—because colonoscopies are so rare in Europe. But they did compare the accuracy, patient acceptance, and safety of CTC scans to two other colon cancer screening tests: stool examinations (fecal occult blood tests) and flexible sigmoidoscopy (a noninvasive way to examine the lower colon).

Simple stool tests and flexible sigmoidoscopy have already substantially reduced colon cancer death rates in our compatriots across the pond. And they are much safer screening alternatives compared to colonoscopies.

But although stool tests are completely safe and simple to perform, they primarily detect cancer after it has already become invasive. Consequently, the researchers found that these tests typically reduce colon cancer death rates by only about 16 percent. (Cologuard, a new stool test I told you about in a September 23, 2014 *Daily Dispatch*, appears to detect cancer earlier, but is too new to have been included in this study.)

And while sigmoidoscopy reaches the most common sites of cancer in the lower colon, it is not able to see the entire colon. As a result, it typically reduces colon cancer deaths by 22 to 31 percent.

Because CTC is relatively new, there is little data yet on how much it affects death rates. But remember what I told you earlier: It can detect 96 percent of colon cancers. Not to mention the other life-threatening conditions it can find outside of your colon.

Of course, no screening test will work at all if people can't be convinced to get it. That's why many realistic public health professionals say the best screening test is the one that people will actually go out and get. Considering the advantages CTC has over colonoscopy, it certainly appears to be an appealing option for patients. Whether or not doctors actually start recommending it is another matter entirely.

Chances are, you will have to specifically ask for this effective, noninvasive alternative. But it's well worth making a special request. /C

Citations available online at www.DrMicozzi.com

The surprising reasons why your testosterone may be low—and how to raise it *without* drugs

We hear relentlessly about drugs to "treat" male menopause, particularly during the evening news. In fact, I recently read that big pharma controls much of the advertising during the prime-time TV newscasts.[1]

How does that make you feel about what you are hearing (and not hearing) about the dangers of prescription "male menopause" drugs from the lamestream media?

Of course, all you really do hear about when it comes to male menopause is "Low-T," or low testosterone—because big pharma has profitable mass-market (and dangerous) drugs to treat this so-called health condition.

But there are also other hormones involved in male menopause and healthy aging that deserve as much attention as testosterone.

We don't hear as much about these hormones because (thankfully) big pharma has not (yet) developed mass-market consumer drugs to "treat" them. But I'll tell you all about them. And what you can do to help ensure they're at healthy levels as you get older.

First, though, I want to share with you an exciting new study that reveals a key nutrient for healthy testosterone levels.

It's also vital for dozens of other important functions in our brain and body.

I'm talking about vitamin D, of course.

Low D means low T

As I've told you before,

it's entirely normal for men's testosterone levels to decline with healthy aging. Testosterone drops about 1 percent every year after age 30.

And it naturally drops after a man gets married (or these days, begins to live with a "partner"), and after having children. (I think this finding is another illustration of the mind-body connection by which mental states influence the pituitary gland, which influences hormones—but let's save that discussion for another day).

Higher testosterone contributes to the increased risk of heart and prostate disease as men get older, so flagging levels of this hormone may actually be nature's way of protecting us against these common, deadly diseases. And, as I reported in the August 2014 *Insiders' Cures* ("The latest news: 'Low-T' therapy equals high risk for heart attack and stroke"), drugs for Low-T have also been shown to raise the risk of these diseases.

But sometimes testosterone levels can actually drop too low for healthy aging (see sidebar). Fortunately, there are several simple, natural ways you can boost your T to appropriate levels.

Vitamin D. In light of the role vitamin D plays in metabolism throughout the body, the latest research regarding its effects on testosterone comes as no surprise. In fact, my colleague, Dr. Michael Holick at Boston University, has maintained that vitamin D should be thought of as a hormone, not just another vitamin. Perhaps even another "aging hormone."

The new study I mentioned earlier is part of ongoing research on first responders at the World Trade Center on 9/11. Researchers analyzed blood samples from 824 of those men for vitamin D and testosterone levels.[2]

More than two-thirds of the men had insufficient vitamin D levels (below 30 ng/mL). But only 11 percent of those men were taking D supplements (and clearly not taking enough).

Testosterone levels were significantly higher (342 ng/dL) in the men with sufficient vitamin D compared to the deficient men

Continued on page 6...

Low-T—how low can it go?

Readers often ask me how low testosterone can normally dip without the need for "treatment." It's no wonder people are curious about this, since mainstream medicine and big pharma have made Low-T into some kind of epidemic.

But the real surprise is that Low-T is actually not a pandemic, even by industry standards. While T does decline with age, studies show that 80 percent of men in their 60s do not have Low-T. And half of all men in their 80s don't even have it.[5]

So what are you worried about? (Unless you are like the late Sen. Strom Thurmond of South Carolina, who married a former Miss South Carolina and fathered four children after his 68th birthday. I got to meet Strom about 20 years ago at one of his birthday parties in the beautiful Indian Treaty Room of the historic Executive Office Building in D.C., and he still had a vigorous handshake.)

Bottom line: The idea that healthy men should have their testosterone levels checked and treated is probably nonsense. It is actually very unlikely you have the kind of Low-T that can cause depression, mood changes, lack of energy, loss of muscle strength and bulk, low libido, or erectile dysfunction.

There are so many other causes for these conditions that can be hiding in plain sight—such as diabetes, obesity, poor sleep, poor diet, lack of sun exposure (including low vitamin D), physical inactivity, psychological factors, and stress. All of these real health issues may also incidentally lower testosterone—but what is cause and what is effect here?

That said, if you do have a persistent pattern of these symptoms, you may want to ask your doctor to test your T levels. A morning blood test is the standard way to measure testosterone. That's because there is a very wide range of "normal," and T levels vary during the course of the day and night.

The normal testosterone range is anywhere between 300 to 800 ng/dL. So if your levels are above 300, there's no need to worry about Low-T.

Citations available online at www.DrMicozzi.com

(319 ng/dL). The researchers also discovered that the men with low D levels had borderline Low-T.

And an earlier German study of overweight, but otherwise healthy men with low vitamin D and borderline Low-T, found that the men who took just 3,000 IU of D a day had a significant increase in testosterone levels after 12 months.[3]

That dose is well below the 10,000 IU a day of vitamin D that I now recommend (see page 1). So if you get an adequate dose of D, your testosterone should naturally rise to healthy levels.

Sleep. One study reported that men who got only five hours of sleep per night for a week saw their testosterone levels drop by 10 to 15 percent.[4] And other research shows that men with sleep apnea also have lower testosterone levels.

Why? Researchers think lack of sleep can boost the stress hormone cortisol, which can in turn lower testosterone. (I'll tell you more about this a little later).

Diet. Eating refined sugar and carbs causes spikes in insulin, which have negative impacts on both T and growth hormone—another important hormone for healthy aging that I will tell you about shortly.

On the other hand, not getting enough cholesterol and healthy fats—like olive oil, nuts, avocados, and salmon—can also lower testosterone.

How? Well, all hormones in the body are made from cholesterol. So if you don't have enough healthy fats and cholesterol, or are "blocking" their normal metabolism with toxic statin drugs, you are bound to be disrupting normal hormone levels like testosterone. (But why worry—if your testosterone is low because you are taking a statin drug, big pharma has another drug you can take to "fix" it.)

We all need cholesterol. Yet another reason the faulty government recommendations to cut cholesterol and fats from the diet were all wrong, all along. Which the government *finally* admitted.

We all need cholesterol. Yet another reason the faulty government recommendations to cut cholesterol and fats from the diet were all wrong, all along. Which the government finally admitted.

The other two hormones you need to pay attention to

So what about the two "forgotten" hormones involved in male menopause? Let's take a look. And also examine what you can do to boost these hormones and help ensure healthy aging.

Cortisol is usually considered the "stress hormone." But in a research paper that Dr. Ken Seaton and I presented some years ago, I proposed that cortisol may also be considered the aging hormone. After all, isn't stress basically the cause of all aging, ultimately, as well as age-related diseases?

High cortisol levels can result from excessive work and worry. Or a poor diet and lifestyle. And along with premature aging, high cortisol also results in weight gain—in all the wrong places.

In Cushing's Syndrome, in which people produce too much corticosteroid hormones, fat accumulates on the torso, with round belly fat and a "buffalo hump" on the upper back. This problem also results when people are given corticosteroid drugs for long periods to suppress the immune system (usually another bad idea). But even if you don't develop Cushing's disease, extra belly fat has been linked to certain cancers, diabetes, and heart disease.

As I mentioned earlier, sleep is key to keeping cortisol in proper balance. You not only need at least six hours of shuteye a night, but also adequate REM sleep. If you can remember dreaming, that's a good sign you are getting some REM time.

During REM sleep, your body also secretes more **growth hormone (GH)**—the third "male menopause" hormone. The higher your growth hormone levels, the lower your cortisol, and vice versa.

Growth hormone is responsible for physical growth during childhood and adolescence. And like testosterone, GH begins to drop as we age.

That's why we hear so much about people taking GH to look younger. It can also promote weight loss and help your body recover from workouts faster.

Since GH supports testosterone levels, men who get treatment for low GH frequently find that T increases too. But beware if you go this route. Excess GH can increase blood pressure and blood sugar—which, of course, are primary causes of diabetes and heart disease. IC

Citations available online at www.DrMicozzi.com

NEWS BRIEF

What doctors don't tell you

The surprisingly simple way to lower your blood pressure

By now, you may be yearning for a few cloudy days and cooler temperatures. But there are many good reasons why you should spend some time in the sun during these dog days of summer.

Including a recent study that shows that sunlight can actually lower your blood pressure.

And that's not all that the golden orb can do for your health. Of course, you already know that sunlight helps your skin activate vitamin D. Which helps with major conditions like depression, dementia, diabetes, and heart disease.

Ironically, the sun's rays can even lower your risk of cancer, including skin cancer. In a June 25 *Daily Dispatch*, I reported on a study showing that sunlight actually helps protect even you from the 9 percent of skin cancers that are malignant.

And now there's the new study about blood pressure. Let's shed some light on that.

The mental and physical ways sunlight helps lower blood pressure

We know that spending time outdoors has positive mind-body effects—especially for easing stress, which itself helps lower blood pressure. And now, British researchers have found how sun exposure physiologically reduces blood pressure as well.

Scientists have already observed that human blood pressure is commonly higher in winter months, when there is less sun and people don't go outside as much. So the British researchers channeled the quintessentially English sleuth Sherlock Holmes to discover how these two factors link together.

They found that when sunlight hits our skin, it leads to the release of nitric oxide. They also discovered that human skin contains more nitric oxide than other parts of our bodies.[1]

This finding is important because nitric oxide helps dilate our blood vessels—which lowers blood pressure. It also reduces adrenaline from nerves that control blood vessels—also lowering BP.

(That's one reason why nitroglycerin has long been used as a fast, effective treatment for angina. It releases nitric oxide, which causes blood vessels to dilate and pump more blood and oxygen to starving heart muscle tissue.)

Why you need time in the sun without sunscreen

It's interesting that life could not emerge from the sea onto the land (about 300 million years ago) until there was enough oxygen and ozone in the atmosphere to block the solar radiation that would disrupt DNA—and kill those emerging life forms.

But since then, human skin has adapted to use certain wavelengths of this solar radiation—specifically UV rays—to activate molecules that are essential to life and health, like nitric oxide and vitamin D.

This natural prescription for health was known to 19th century physicians, but forgotten during the 20th century. And basically eradicated in the 21st century by the sunscreen industry.

As I wrote in the June 26 *Daily Dispatch*, a growing number of sunscreens are designed to block UV rays from penetrating your skin. Which, of course, also blocks vitamin D and nitric oxide.

That's why I recommend 15 minutes a day in the sun *without sunscreen*. It's not long enough to burn your skin, but it is long enough to substantially improve your health.

So the next time you feel like relaxing in the sun, just remember your body is relaxing too—and lowering your blood pressure.

Citations available online at www.DrMicozzi.com

New research shows how vitamin E works to reverse dementia

I and other researchers have known for quite a while that vitamin E is important for brain function. In fact, last year I wrote about a startling study that reported that a high dose of vitamin E is much *more* effective than one of big pharma's "go-to" Alzheimer's drugs for restoring cognitive function in people suffering from dementia ("Miracle vitamin outperforms drug for Alzheimer's disease," Jan. 23, 2014 *Daily Dispatch*).

Now, new research proves what I have suggested all along—when it comes to protecting our brains, big pharma has it all wrong. Which could explain not only why so-called Alzheimer's drugs fail, but also why they can actually *interfere* with natural approaches that do work. Like vitamin E.

Why vitamin E is essential for our brains

In this new study, researchers looked at the effects of vitamin E in zebra fish. They found that the fish that didn't get enough of the vitamin had about a one-third reduction in DHA, an omega-3 essential fatty acid. And these poor fish also had 60 percent less of a biochemical that's needed to get DHA into the brain.[1]

Why is this so important? Well, the brain simply can't function properly without DHA. Brain cells can actually *die* if they don't have enough DHA. And to complicate matters, our brains aren't able to make their own DHA—they get it from the liver. Which gets it from food—mainly fish—or supplements.

The researchers also discovered another very interesting way that vitamin E works in our brains. It appears the vitamin helps prevent a type of fat oxidation that is suspected to be one of the causes of dementia and other brain diseases.

These findings are so compelling that one of the researchers compared a lack of vitamin E in the brain to building a house without the proper materials.

These findings are so compelling that one of the researchers compared a lack of vitamin E in the brain to building a house without the proper materials. In essence, she said, if you don't get enough vitamin E, you're cutting out *more than half* of the materials necessary to build and maintain the brain.

So now, thanks to this new research on little zebra fish, we now know how vitamin E helps keep our brains healthy.

Which reminds me of an old saying in internal medicine about paying attention to what is obvious. "When you hear hoofbeats, don't go looking for zebras," meaning you are more likely to find a horse.

Too bad big pharma and today's medical super-specialists don't seem to pay attention to this saying. Instead, they look for exotic theories and treatments, when the obvious, simple—and natural—solutions are staring them right in the face.

So, when it comes to vitamin E for dementia, "don't look a gift horse in the mouth." We already know which end of the horse is represented by the mainstream Alzheimer's industry.

How much E do you *really* need?

In the study I mentioned in the first paragraph of this article, Alzheimer's patients were given 2,000 IU of vitamin E a day. Mainstream medical mouthpieces were quick to point out their concerns with such a "high dose." But of course, that dose is only high in comparison to the measly RDAs.

Study after study shows that for B vitamins, vitamin C, and vitamin D, you need much higher levels for optimal health, and to prevent and reverse chronic diseases, than the puny RDAs. In fact, as I tell you on page 1, the RDA for vitamin D was recently exposed by two independent teams of researchers to be *10 times* too low. I am now recommending 10,000 IU of D per day based on all of the latest research.

So with that in mind, does 2,000 IU per day of vitamin E still sound high? And it's also a good idea to eat two or more servings a week of DHA-rich fish like salmon, tuna, sardines, mackerel, or trout.

Citations available online at www.DrMicozzi.com