

The natural "cure all" everyone should be taking

Beat lower back pain, increase longevity, and more...

I always encourage getting outside in Nature and soaking in some direct sunlight. After all, it's an easy way to naturally trigger your skin's production of vitamin D, which your body makes when it's exposed to the sun's ultraviolet (UV) rays. And this crucial vitamin protects you against just about *every* chronic disease on the planet.

So this month, as we experience the summer solstice (when the sun reaches its highest point in the sky in the northern hemisphere), I thought it would be a great time to discuss some exciting new findings about the many health benefits of both sunshine and vitamin D.

These new studies have enormous health implications.

Not only do they address some of the most common and chronic conditions Americans face, but one study even demonstrates how sunshine is a great disinfectant which is more important than ever in the age of COVID-19.

So, let's dive right in...

New research sheds light on an age-old problem

Fifteen years ago, my final federal medical research grant was to organize and lead a worldwide team of scientists in performing a massive investigation of the thousands of studies on treatment of lower back pain. This research was vital because lower back pain afflicts nearly *80 percent* of American men and women at least once during their lives¹. In fact, it's the leading cause of pain and disability in working people. And for many people, back pain becomes a chronic condition that leads to harmful drug treatments and surgery.

Our research found clear evidence that surgery and pharmaceuticals were the <u>worst</u> approaches for lower back pain. Indeed, surgery fails so often that at the time of our study, doctors who performed back surgery couldn't get medical malpractice insurance in states like Pennsylvania.

I even met with Pennsylvania Governor Ed Rendell to provide our data on the alternatives for back pain that are safe and effective, including spinal manual therapy, acupuncture, and massage.

But we didn't know at that time that a treatment as simple as vitamin D supplementation could also work for back pain, because nobody had researched that question—until now.

Can D finally end debilitating back pain?

The first new study involved 65 overweight or obese men and women who were deficient in D.²

The researchers randomly divided the participants into two groups. The

first group took an initial oral dose of 100,000 IU of vitamin D followed by 4,000 IU daily for 16 weeks (for once, a study actually used a reasonable dose). The second group took a placebo.

The researchers also measured participants' vitamin D levels and self-reported back pain scores at the beginning and end of the study.

After 16 weeks, even the men and women with the *lowest* vitamin D blood levels at the beginning of the study had a significantly greater reduction in back pain scores, compared with the placebo group.

In the second study, researchers measured vitamin D blood levels in more than 200 postmenopausal women, with an average age of 66.² The women were grouped into two broad categories:

• Those who had a "severe" vitamin

In this issue:

Listen to your gut: A balanced microbiome leads to a longer, healthier life4

Two perfect health foods you need in your daily diet—and why6

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 available in a 6th edition 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

All material in this publication is provided for information only and may not be construed as medical advice or instruction. No action should be taken based solely on the contents of this publication; readers should consult appropriate health professionals on any matter relating to their health and wellbeing. The information provided in this publication is believed to be accurate and sound, based on the best judgment available to the authors, but readers who fail to consult with appropriate health authorities assume the risk of any injuries. The opinions expressed here do not necessarily reflect the views of the publisher. The publisher is not responsible for errors or omissions.

For questions regarding your subscription, please contact reader services at www.drmicozzi.com.

Copyright © 2020 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. D deficiency—with blood levels below 10 ng/mL

• Those who had "normal status" with levels above 30 ng/mL (though, as you may recall, this is much lower than the 50 to 60 ng/mL that recent studies show as the optimal level—for more information, see the sidebar on page 3)

The researchers found that, compared with the women in the "normal" group, the women in the "severe deficiency" group had lower bone mineral-density scores, higher back pain scores, and more severe lumbar disc degeneration. And the lower their vitamin D levels, the greater the disc degeneration.

The researchers also noted that vitamin D deficiency is highly prevalent in postmenopausal women. And they think D may help with lower back pain because of the vitamin's beneficial effects on nerve and muscle pain, muscle strength and mass, and inflammation.

In the end, these two studies make the case that you can avoid—and even *reverse*—lower back pain by achieving and maintaining optimal vitamin D blood levels through proper supplementation.

D can get you up and walking again after a hip fracture

Optimal levels of vitamin D are essential for bone health, so it only makes sense that D would help your back. And a new study shows the vitamin is also important for healing from hip fractures.⁴

The study involved 290 men and women, ages 65 and older, who recently had surgery for a broken hip. Researchers measured the participants' vitamin D levels and walking ability 30 days and 60 days into the study. The goal was to walk about 10 feet without help.

The researchers discovered that the people with vitamin D levels greater than just 12 ng/mL had better walking ability throughout the study period. So just imagine the potential improvement that could be gained through achieving higher, optimal blood levels (50 to 60 ng/mL)!

In addition to its impact on bone and muscle health, D has also been shown to have direct effects on the brain and other organ systems—all of which are important for good walking ability.

So, as always, I recommend "doubling up" on your vitamin D by taking 10,000 IU of vitamin D3 per day and getting some sun exposure.

Especially since research also shows there are many benefits to sunshine *beyond* helping your body make your daily dose of D...

The benefits of sunshine beyond vitamin D

It's always been understood that natural daylight is important for general health and well-being (compared to indoor spaces with artificial lighting). But a recent study shows that sunlight can have health impacts even when you're indoors.⁵

And that's great news, since many people spend most of their time inside—especially when there are "shelter in place" and "social distancing" directives in place. But indoor dust can carry numerous microbes, including some that can make us sick.

To determine sunlight's effect on these microbes, Oregon researchers set up a group of dollhouse-size rooms and exposed them to either sunlight or no light at all. After 90 days, the researchers found that the sunlit rooms contained about *half* as many live microbes as the dark rooms. And the sunny rooms had almost <u>no</u> bacteria that cause respiratory infections.

In addition, the bacteria that survived in the sunlit rooms were the same as those found in outdoor air. Meaning that if you can't get outside, staying inside in a sunny room can still have beneficial health effects. Because, as I've often reported, you can benefit tremendously from the exposure to certain probiotic bacteria found in Nature—like naturally enhancing your mood. (Just not those bacteria generated by the annoying, dangerous and useless gas-powered blowers and mowers, as I discussed in the March issue.)

Sunlight and your microbiome

Another way sunlight can help keep you healthy is by boosting the health of your gastrointestinal (GI) microbiome. (For more about your microbiome, see page 4.)

A new pilot study from the University of British Columbia, in Canada, tested the effects of exposing skin to the UV light found in sunshine.⁶ The study involved 21 healthy women, ages 19 to 40, who had insufficient vitamin D levels.

Each woman underwent three oneminute sessions of full-body UV exposure per week. Researchers then collected blood and fecal samples in order to analyze the women's vitamin D levels and GI microbiome composition.

Results showed that after just those three minutes of UV light exposure in one week, the women's vitamin D blood levels increased an average of 10 percent!

Researchers also found changes

Thank the "anti-sun worshippers" for the low-vitamin D epidemic

Millions of Americans don't get enough vitamin D, thanks in part to dermatologists' misguided warnings to scrupulously avoid regular sun exposure. But thankfully, science is starting to show just how protective and beneficial regular sun exposure really is.

In fact, research shows the risks of skin cancer from excess sun exposure are less serious than we were led to believe, while the health benefits of sun exposure are greater than the experts admitted.

That's why I recommend spending 10 to 15 minutes a day outside—without sunscreen—and exposing as much skin as possible.

But if you're unable to do that, supplementing with vitamin D also boosts your blood levels of this essential nutrient.

Just don't listen to the supposed "experts" at the U.S. Institute of Medicine. Their recommended daily allowance (RDA) of 600-800 IU of vitamin D is woefully inadequate and outdated. In recent years, researchers have found that the optimal dose of vitamin D is more than 10 times that amount—10,000 IU per day.

Yet, many doctors still harbor an irrational fear about "toxicity" or "overdose" at this level. (I know because, years ago, I was brainwashed into

in the women's GI microbiome, including more diversity of bacteria and more "good" probiotics. Specifically, these probiotics are linked to improved health status in people with immune and inflammatory diseases, like inflammatory bowel disease and multiple sclerosis.

Sunshine lowers blood pressure

The final new study analyzed the ability of the sun's UV rays to lower blood pressure.⁷

In addition to creating vitamin D,

believing some of these baseless concerns, too.) But remember, as I explained in the May 2018 *Insiders' Cures* newsletter, the way vitamin D is measured makes the doses seem way higher than they are.

In fact, let's put the optimal daily dose of vitamin D into perspective by considering this simple comparison: 10,000 IU of vitamin D = 0.25 milligrams (mg).

So as you can see, 10,000 IU is pretty miniscule when compared to the doses of other nutrients. For example, the RDA of vitamin C (which is also too low) is almost 200 times higher than that amount—at 46 mg!

Plus, as I reported in the September 2019 issue, you can count the actual cases of clinical toxicity associated with vitamin D on your fingers. And they all occurred under circumstances so rare and unusual, the vast majority of doctors won't encounter them even once in their lifetimes.

So ask your doctor to check your vitamin D blood levels twice a year—at the end of winter and again at the beginning of fall (after a summer with some fun in the sun). Remember, you'll want to achieve blood levels of 50 to 60 ng/mL. And I always recommend supplementing with 10,000 IU daily of vitamin D3 to help reach those optimal levels.

previous studies have found that sunlight on the skin releases nitric oxide into the bloodstream. This effect has wide-ranging benefits, including reducing blood pressure.

The new study analyzed 342,000 patients from more than 2,000 kidney dialysis clinics throughout the U.S. (People undergoing dialysis typically visit these clinics three times a week, and each time they have their blood pressure measured—making them good subjects for blood pressure studies.)

Researchers took blood pressure

data from the study participants over a three-year period. Then, they analyzed weather data to estimate daily sun exposure for each of the clinic locations.

Results showed that overall, the patients who had exposure to UV sunlight had lower systolic blood pressure (the first number on a blood pressure reading).

There were also marked differences in blood pressures by season—higher in winter, lower in summer. But the variances weren't all explained by vitamin D levels, because taking vitamin D supplements did not eliminate the seasonal effect. Nor were the variances all explained by weather *temperature*—which also influences blood pressure—because only half of the seasonal variations were due to temperature.

Rather, researchers found that UV exposure alone influenced some of these findings—something that the

lead author called "really exciting."

So, the takeaway here is simple: Go out and get some sun this summer. Use discretion and avoid sunburn, of course, but don't be afraid of direct UV rays. I always recommend spending 10 to 15 minutes each day in the sun *without* sunscreen.

After all, there's a reason why the Greeks made Apollo the god of both sun and healing. Sunshine is essential for life—and one of the bright spots for human health.

Listen to your gut: A balanced microbiome leads to a longer, healthier life

Years ago, before "microbiome" became a health buzzword, I began reporting on research showing the importance of healthy probiotic bacteria in your gastrointestinal (GI) tract—otherwise known as the GI microbiome.

Since then, it's been well-established that a healthy GI microbiome is critical for a healthy immune system, which helps you fight off virtually every chronic disease. (Not to mention infections and viruses like COVID-19.)

So it makes sense that two new, cutting-edge studies have found that genetic sequencing of the microbiome can not only determine whether you have a disease, but can even predict your risk of dying within the next 15 years.

How the GI microbiome governs immunity

I've written before that the bulk of our immune cells are in our GI microbiomes. And there's evidence that a healthy microbiome helps balance the immune system. This is crucial because an unbalanced immune system can harm the body's organs and tissues.

We've actually seen this with COVID-19. Some reports suggest that an overreacting, unbalanced immune system has damaged lung tissues in people with the virus contributing to respiratory failure and even death.

So while the immune system needs to protect us from infections with dangerous microbes, it also needs to coexist peacefully with probiotic bacteria and tissue cells in the body. Which is why it's so important to have a *balanced* immune system one that's relaxed when there are no invaders, but jumps into action when there are.

Taking all of this into account, it makes sense that researchers have discovered that the mix of probiotics in our GI microbiomes can reveal the presence of many diseases better than looking at our own genes.

What your gut tells you about disease

Harvard researchers evaluated

47 studies examining the links between the GI microbiome and common diseases like asthma and hypertension. They discovered that the genetic signature of gut microbes was 20 percent more accurate than full human genome sequencing for distinguishing between healthy and unhealthy people.¹

They also found that microbiome analysis was *50 percent better* than genome sequencing at predicting whether or not someone had colorectal cancer.

These findings jibe with previous evidence that both genetics and your environment help determine your risk of disease and death (nature *and* nurture). In essence, the microbiome represents some environmental aspects of disease that you can't tell from human genetic studies alone.

It also helps explain why the billiondollar, big-science boondoggle to sequence the entire human genome known as the Human Genome Project—has been such a spectacular failure. Twenty years later, practicing doctors say they have yet to find this project useful in actually caring for patients, or for so-called "gene therapy" for diseases.

So, perhaps microbiome sequencing will turn out to be more helpful in identifying and curing chronic disease—and extending our lives. Which leads me to the next new study...

The "bad" gut bacteria that shortens your life

Researchers analyzed data from a 47-year study of more than 7,000 Finns.² They specifically looked for links between mortality and the different kinds of bacteria in the study participants' GI microbiomes.

The researchers discovered that a type of bacteria called *Enterobacteriaceae* is a good predictor of mortality. In fact, they found that people who have an abundance of *Enterobacteriaceae* in their guts are <u>15 percent more</u> <u>likely to die within 15 years</u>.

The most common *Enterobacteriaceae* are *E. coli* the nasty microbes behind disease outbreaks from contaminated lettuce and other produce. This type of bacteria is also linked to urinary tract and bloodstream infections (like sepsis).

In a healthy GI microbiome, "good" probiotic bacteria crowd out "bad" bacteria like *Enterobacteriaceae*. And there have been some studies looking at whether taking oral probiotic supplements can prevent "bad" bacteria colonization in the microbiome. Not surprisingly, these studies haven't reported much success.

That's because, as I've often reported, probiotic dietary supplements <u>simply</u> <u>don't work</u>. (Most of them can't survive the assault from stomach acids long enough to do any good in your microbiome.)

The best foods for your microbiome

So, rather than taking useless probiotic supplements, the best way to maintain a healthy microbiome is to eat a healthy, balanced diet that contains plenty of prebiotic foods that supply nourishment for beneficial probiotic bacteria.

Top prebiotic foods include:

- Apples Leeks
- Asparagus
 Onions
- Bananas
 Whole grains
- Garlic

You can also eat fermented foods, which contain natural probiotics. These foods include:

- Cheese
- Pickled vegetables
- Sauerkraut
- Yogurt

Many of these prebiotic and probiotic foods are staples in the Mediterranean diet, which, as I often report, can slash your risk of chronic disease. And a new study reveals yet another way it accomplishes this by keeping your GI microbiome healthy...

The simple diet that helps you live longer

Researchers analyzed the diets of 612 people, ages 65 to 79, in five European countries.³ About half the participants ate their usual diet, and the other half ate a Mediterranean diet rich in fruits, vegetables, fish, legumes, nuts, and olive oil.

After 12 months, the Mediterranean diet group had increased probiotic diversity—including the types of bacteria that have been linked to good health in other studies. This group also had better memory, hand-grip strength, and walking speed (which is the single most important indicator of longevity) than the other group. In addition, the Mediterranean diet group had fewer GI bacteria that are associated with chronic inflammation, increased risk of cell damage, colon cancer, fatty liver, and insulin resistance.

The researchers concluded that the Mediterranean diet increases prebiotic and probiotic-friendly nutrients like dietary fiber, vitamins B6, B9, and C, and the minerals copper, manganese, magnesium, and potassium.

A different twist on gut feelings

The final new study I'd like to share with you shows just how intertwined the GI microbiome is with both our physical and emotional health.

Researchers at Oxford University in England examined the relationship between people's personalities and the composition and diversity of their GI microbiomes.⁴

The researchers looked at fecal samples from 655 men and women with an average age of 42, from 20 different countries on four continents. They also collected information on 44 other factors relating to behavior, diet, health, lifestyle, and socioeconomic measures.

After analyzing all of this information, the researchers found that people who were more sociable had more diverse, healthy microbiomes. But those who were stressed or anxious had less diversity.

They also found that the study participants on dairy-free diets had a less healthy microbiome, which makes sense because full-fat cheese and yogurt contain natural probiotics, as abundantly found in the Mediterranean diet (for more on the health benefits of dairy, see page 7). People who traveled more and ate a variety of foods also had healthier microbiomes. The researchers broadly linked differences in healthy probiotics to people's personality traits.

They theorized that declines in microbiome diversity (primarily

driven by poor, restricted diets) may relate to declines in psychological health in modern society.

Bottom line? To stay healthy in body, mind, and soul, *listen to*

your gut. Because nourishing your microbiome with a healthy, balanced diet—like the Mediterranean diet—is a key factor for living a longer, happier life.

Two perfect health foods you need in your daily diet—and why

For years, the mainstream medical establishment has been scrambled about eggs and clouded about dairy products, to say the least.

These healthy and wholesome foods have been blamed for everything from heart disease to obesity. But the science never showed the harms the U.S. government tried to claim come from eating these foods.

In fact, one important new study found that eating at least one egg a day can actually *lower* your risk of cardiovascular disease.

And that's not the only evidence about the health effects of eggs and dairy that the mainstream continues to ignore. Let's take a closer look starting with the incredible, edible egg.

Nature's perfect health food

In recent years, some members of the mainstream have begun touting the health benefits of eggs. But this nutritious food has been demonized for so long that the message is clearly not getting through.

Case in point: I just can't believe how many misinformed people still order egg-white omelets. These people mistakenly believe that avoiding the naturally occurring cholesterol in egg yolks is healthier for their hearts. But as I've written many times before, dietary cholesterol *isn't* a risk factor for heart disease.

Of course, there's nothing wrong with egg whites. They are pure protein, which your body needs. But the real, rich nutritional content of eggs is all in the yolk—which contains essential fatty acids, calcium, selenium, phosphorus, zinc, the carotenoids lutein and zeaxanthin, and vitamins A, B, D, E, and K.

Plus, eggs are good sources of phosphatidylcholine—a nutrient that's been shown in multiple studies to help improve cognitive performance and protect against dementia.

No other food has this many nutrients in a single serving, plain and simple. That's why Dr. C. Everett Koop, my former professor and the former U.S. surgeon general under Presidents Reagan and Bush, would always start his day with *whole* eggs—not egg whites. And it's why I've always recommended you do the same!

I've written before about my breakfasts with Dr, Koop in the 1980s and 1990s. Along with two or three eggs, he ordered a glass of whole milk. He said this combination was the only thing that gave him the energy to get through his busy day. (*Not* carbs, like the bread, bagels, muffins, and cereals that the big food industry and their mainstream minions like to push.)

Egged on by misinformation

Clearly, Dr. Koop wasn't worried about the propaganda linking eggs with cardiovascular disease. He knew the *real* science. In fact, 20 years ago, there was a major study that found <u>no association between</u> egg consumption and higher risk of heart disease.¹

Now, the misinformation campaign against eggs started at least 40 years ago, meaning it took another 20 years to do an actual study which then showed the anti-egg nuts were all wrong, all along. But nevertheless, they remain persistent.

However, the new study I mentioned earlier may finally expose the cracks in their arguments...

What we've learned from nearly 2 million egg eaters

Harvard researchers looked at studies that tracked more than 215,000 men and women for 32 years. And they analyzed another 28 studies that included more than 1.7 million people.²

Like the study 20 years ago, this new study showed that eating an egg a day is *not* associated with a higher risk of heart disease.

Plus, the study demonstrated that even increasing your consumption by an extra egg per day *still* didn't boost your risk of heart disease. And this study went even further than the previous study, analyzing egg consumption by ethnicity.

The researchers found that Americans and Europeans who ate an egg a day had *no higher risk* of heart disease than non-egg eaters. And, interestingly, egg consumption was actually associated with a *lower* risk of heart disease among Asian populations.

But wait, there's more...

Egg lovers stay healthy in other ways

The Harvard researchers found that people who ate eggs also had a higher body mass index (BMI), consumed more red meat, and were less likely to take statin drugs (meaning they had higher cholesterol) than those who didn't consume eggs.

But the egg eaters *still* didn't have a higher risk of heart disease.

These findings go *against* all of the usual disease risk factors that the politically correct like to round up. For instance, I've written before about how the mainstream has been all wrong, all along about eating red meat. Plus, research shows a little extra body fat may actually be protective for your health as you age.

And of course, we all know how harmful statins are for both body and brain. (I revealed more shocking new research about the dangers of statins in last month's issue of *Insiders' Cures.*) So it seems like people who regularly eat eggs may also be doing other things to improve their health—even if the mainstream doesn't think so.

The bottom line is that while the size of this new study is huge, the findings shouldn't be. After all, there was never <u>any</u> reason to label eggs as unhealthy in the first place.

So, now that we've busted the myths about eggs, let's move on to dairy products.

Skimming the controversies about milk and dairy

Like eggs, dairy had traditionally had a positive image. Generations of Americans were raised to think of cow's milk as creamy, delicious, nutritious, and filling. And yogurt is often touted as a health food due to its probiotic content.

In fact, dairy products are considered so essential to our health that the U.S. dietary guidelines recommend three servings a day.

Of course, cheese and yogurt are key components of the Mediterranean diet (although the "experts" don't like to tell you that). And, as you know, the single most consistent finding on diet and health throughout the years is that the Mediterranean diet is the healthiest eating plan in the western world, as I discuss on page 5.

That said, in recent years, milk has been getting a bad rap for its lactose content. And cheese has been criticized for its cholesterol content, even though—as we just discussed with eggs—dietary cholesterol isn't a risk factor for cardiovascular disease.

And if that weren't bad enough, a new scientific review questions whether milk and other dairy products really "do a body good."³

Researchers question dairy's role in building strong bones

We all know dairy is high in calcium (which should *always* come from dietary sources, not supplements). And calcium is a key nutrient for healthy bones.

But the scientific review cites population studies showing that people who eat the most dairy have the highest rates of bone fractures. The researchers note that high dairy consumption during childhood results in longer bones, and long bones are easier to break.

Consequently, the researchers questioned whether dairy is really necessary to meet our daily calcium requirement.

But as I've written before, there's more to bone health than just calcium. You also need vitamins C and D, boron, magnesium, and other key minerals.

So researchers aren't seeing the whole picture when they look at dairy only through the lens of calcium. They're basing their opinions on dairy's nutritional value solely on how it contributes to bone health...rather than all of the other health conditions dairy products can prevent or improve.

Why full-fat dairy is so good for you

Of course, dairy contains many more nutrients than calcium. Full-fat milk, cheese, yogurt, and other dairy products are rich sources of protein. And they're loaded with vitamins A, B, and D, along with potassium and phosphorus.

Increasingly, many people don't get enough protein from sources like fish and meat to maintain healthy muscle mass—especially as they get older, and especially among men. But dairy can help fill the gap.

I've also written about studies showing that full-fat dairy can actually *lower* your risk of obesity, high blood pressure, and diabetes. But the key words in that sentence are "full fat." Which guarantees nothing has been added (like sugar) or taken away.

The fat in dairy products is an excellent source of essential fatty acids and the fat-soluble vitamins

A and D. Meanwhile, artificially "low-fat" or "no-fat" dairy products contain much less of these key nutrients.

That's why I always recommend full-fat whole milk, cheese, yogurt, and other dairy products.

Not all dairy and eggs are created equal

By now, hopefully you're convinced about the importance of eggs and dairy as part of a balanced, healthy diet. But there's one more point I want to make.

Whenever you can, choose organic dairy that comes from pasture-raised, grass-fed and -finished cows.

This is important for a variety of reasons. When nutritional and health arguments against dairy fail, the politically correct turn to the supposed environmental impacts and climate change effects of grazing cattle.

But when cows are raised organically, studies show they contribute to the ecology and health of pastures and grasslands.

As for eggs, look for free-range, organic eggs that come from freerange chickens. Free-range means chickens can roam freely within the yard <u>all</u> the time, with access to coops and roosts (*not* cages) to lay eggs and seek warmth. (Note that "cage-free" may *sound* the same, but this term can be used by egg sellers as long as *some* chickens are allowed to roam outside the confines of their housing facility *once in a while*—a bit like prison inmates occasionally being allowed out in the yard.)

Indeed, my daughter began keeping a flock of chickens, and people are flocking to buy her organic, free-range eggs! The eggs come out in different sizes and different colors—which is the way her customers like them.

Plus, if you keep the outer membranes intact (meaning you don't wash the eggs until you're ready to prepare them), organic, free-range eggs keep well for weeks without being refrigerated.

Overall, cattle and chickens that are given access to open pasture are generally healthier and don't have to be pumped full of antibiotics and artificial chemicals (which are forbidden under the U.S. organic label anyway). And the finished products are healthier for you, too.

Science shows that organic foods have more nutrients

For years, big food argued that organic produce, meat, eggs, and dairy didn't have any more nutrients than their conventional counterparts. But that's because there wasn't any science proving the opposite.

You see, until recently, less than 5 percent of eggs and dairy came from organically, humanely raised animals. Consequently, dietary studies didn't differentiate between conventionally and organically produced products.

This is important to know because newer studies have shown that organic dairy products from pasture-raised, grass-fed, contented cows have higher concentrations of disease-fighting omega-3 fatty acids, iron, vitamin E, selenium, and carotenoids.⁴

Other research shows that eggs from chickens that are pasture-raised, rather than confined in cages, had twice as much vitamin E and a whopping 2.5 times more omega-3s. And they had 38 percent more vitamin A.⁵

Plus, another study found that freerange chickens produced eggs with *three to four times as much vitamin* *D* as the eggs from their caged counterparts.⁶

The tasty way to fight chronic disease

In conclusion, every balanced diet should contain organic, free-range eggs and organic, pasture-raised, fullfat dairy. I recommend an egg or two a day, along with a helping of dairy in at least one meal a day. (Though personally, I like to add full-fat dairy products to nearly all of my meals.)

These two perfectly nutritious foods are a simple—and delicious—way to boost your immune system, brain function, energy, and muscle mass. And if that weren't enough, they also help protect you from heart disease, diabetes, obesity, macular degeneration, and osteoporosis.

So the next time some misguided expert tells you to avoid eggs and dairy, show them the science...not the fiction.

How to deal with lactose intolerance

Many people lose the ability to metabolize lactose (the sugar in milk) after infancy. Consequently, they become "lactose intolerant" as adults.

But the solution is not to drink "fake milks" like almond milk, which require more environmental resources to produce than cow's milk. Instead, if you're lactose intolerant, opt for other dairy products like cheese and yogurt.

These products contain probiotic bacteria that metabolize the lactose and reduce or eliminate the sugar content—and the associated digestive and metabolic problems, too.

Plus, probiotics in dairy products improve the health of your GI microbiome, and they also naturally preserve cheese and yogurt, without the need for added chemical preservatives.

> Citations for all articles available online at www.DrMicozzi.com