



16 great ways to live longer, naturally

I have mixed feelings about AARP, the powerful lobbying group that has millions of members, aged 50 and older.

AARP has seemingly yet to come across a big government program it *hasn't* liked. But its position, reasonably enough, is that you have been forced to pay into entitlement programs like Social Security and Medicare your whole life. So at this point, you need to make the most of those benefits—until things change, if ever.

And I do like how AARP offers science-based recommendations to its members.

That's why I was intrigued when the March issue of the *AARP Bulletin* listed the organization's top ways to improve longevity. I agree with most of these natural, common-sense approaches. But I also have some additions and clarifications, based on the latest science.

So I've come up with a Longevity List of my own. Along with eating a balanced, Mediterranean-style diet and getting regular, moderate exercise, here are my "Sweet 16" highly effective, scientifically demonstrated steps you can take to naturally increase your lifespan... starting *today*.

The supplement you can't afford not to take...and the drug you should avoid at all costs

1. Stay vital with vitamin D. It is no surprise that No. 1 on my list is getting more vitamin D. This wonder vitamin can help protect you against a whole host of chronic, age-related

illnesses, including Alzheimer's, heart disease, diabetes, cancer, and osteoporosis.

Of course, you can generate your own D from sun exposure, but that's usually only adequate in the spring and summer for most Americans. Especially if you're older, you should consider supplementation (**read more about this on page 5**). Based on the latest science, I recommend 10,000 IU of vitamin D every day.

2. Ditch the pain pills. Politicians across the country are *finally* raising the alarm about what I have been warning against for years—the epidemic regarding abuse of prescription and illegal opiate painkillers. These drugs are a leading cause of the unprecedented increase in death rates, specifically among (for the first time in history for *any* population group) middle-aged, middle-class white Americans.

But ironically, many of these same politicians are in favor of legalizing marijuana, which many experts in law enforcement insist is a gateway drug to more serious drug abuse—like opiate painkillers!

And if that weren't bad enough, the FDA reported last year that common over-the-counter painkillers like ibuprofen (Motrin, Advil) and naproxen (Aleve) can increase your risk of heart attack and strokes—even after just a *few weeks* of use.¹ And the risk increases the longer you take these NSAIDs.

So now that we've established the very real, very fatal dangers of pain pills—both prescription and over the

counter—what are you supposed to do if you're one of the millions of people who suffer from occasional or chronic pain?

The good news is there are effective ways to safely and naturally alleviate pain. I discuss them in my **Arthritis Relief and Reversal Protocol** (for more information or to enroll [click here](#), or call 1-866-747-9421 and ask for order code EOV3T901).

Simple diet modifications make a big difference

3. Stay away from the sweet stuff. It shouldn't be any news to my readers that sugar kills. More than any other food or beverage ingredient you ingest.

This metabolic poison is a major culprit behind inflammatory diseases like diabetes, heart disease, obesity, and Alzheimer's.

That's why I recommend you avoid *anything* that contains cane or table sugar (sucrose). But don't be afraid of fructose—the natural sugar in fruits. Which leads me to...

In this issue:

Why natural, whole-body approaches are so effective for heart disease 4

Is it possible you're taking more vitamin D than you need? 5

Wandering your way to relaxation 6

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 6th edition (2018) 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.drnicozzi.com.

Copyright © 2017 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.

4. Go bananas for fruit. Everyone from your mother to your doctor tells you to eat your veggies. But there's been a "false flag" when it comes to fruit—supposedly due to the presence of fructose, even though this natural fruit sugar in the food matrix doesn't have the metabolic hazards that table sugar does.

For a century now, studies have shown *both* fruits *and* vegetables are associated with significantly reduced risks of chronic diseases. But it's best for the fruit you eat to be fully ripe.

Letting fruits ripen at room temperature allows them to develop higher levels of disease-fighting nutrients and other constituents. And it helps keep the fruit out where you can see it, as a reminder to eat it anytime, and without having to bite into the cold. But...

5. Don't be afraid to freeze. When your favorite healthy fruits and vegetables are out of season, frozen foods can be a sound option.

In fact, frozen foods may actually keep their nutritional value better than fresh produce. But there is a "catch": the produce must be frozen within a very specific window.

British researchers found that fresh produce can begin to lose nutrients within three days of being picked.² But if fruits and vegetables are flash frozen *immediately* after they're picked, they can retain their full nutrient composition. In fact, several studies have even found that frozen fruits and vegetables have higher vitamin C than fresh ones. I suspect that freezing causes loss of some moisture content, and the frozen produce has more concentrated vitamins by weight of water content.

Interestingly enough, the concept of flash freezing was actually pioneered nearly a century ago in my hometown near Gloucester, MA, by Clarence Birdseye. His technique was

originally used for loads of fresh-caught fish brought into the harbor every day. His innate curiosity led him to use this technique on fruits and vegetables. Thanks to him, we can eat healthily year-round! (You can read more about the benefits of flash freezing in my August 22, 2017 edition of the *Daily Dispatch*.)

6. Put your fork down. Eating less is some of the best dietary advice I can give you.

And I'm not just talking about managing your weight. Studies from around the world show that stopping eating when you feel about 80% full helps you live longer—even past age 100. How? Researchers believe that cutting calories reduces blood pressure and insulin resistance—which, of course, can substantially reduce your risk of cardiovascular disease and diabetes.

But how can you tell when you're 80% full? Eat slowly, and choose foods with bulk, like whole fruits and vegetables, and fish, that make you feel fuller sooner.

Toast to your health with these three beverage tips

7. Drink up—at the cellular level. Of course, there's nothing more fundamental to good health than staying adequately hydrated. But hydration "experts" don't have the full story on how to stay hydrated, as I have been reporting for five years now.

That's why I recommend you drink beverages that contain powdered extracts of rooibos, which I call *aspal*, or South African red bush. This herb helps hydrate you at the cellular level—which is key for the proper function of every cell in your body.

8. Have an extra cup of joe. As I have reported before, the benefits of coffee consumption are so strong that researchers are now resorting to dissecting the effect of coffee on

different parts of different organs. But the message is the same no matter how you parse it: Drinking three or four cups of coffee a day helps reduce your risk of cancer, dementia, heart disease, and other chronic conditions.

In fact, a new, 16-year study of more than half a million people in 10 European countries found that men who drank three or more cups of coffee a day had 12% less risk of dying *from any cause*, compared to non-coffee drinkers. And women had 7% less risk.³

And in an earlier study of 200,000 American men and women, my colleague, Walter Willett, found that those who drank three to five cups of java per day had a 15% lower risk of dying compared to their non-coffee-drinking counterparts.⁴

Worried the caffeine in coffee will give you the jitters? Researchers report that coffee's health effects are due to the plant's bean itself rather than the caffeine. In other words, you'll get benefits even if you drink naturally processed decaf.

And remember, one cup of coffee is 8 ounces. Keep in mind that when you order a "grande," you are getting 16 ounces, or two cups. Or you can just brew your coffee at home and save the time, travel, cost, and barista attitude (and possibly bacterial contamination as well).

9. Opt for full-fat dairy. I've written often about how fat gets a bad rap. Which is ridiculous, of course. We need fat to generate energy—including at a cellular level. And it's vital for proper function of our brains and nerves, and to help us absorb fat-soluble vitamins A, D, E, and K.

So it makes sense that a variety of studies show that drinking whole, full-fat dairy (as opposed to low-fat dairy, or skim milk) can help prevent diseases that significantly impact

your lifespan.

A study (conducted by my prolific colleague Dr. Willett) involved 3,333 men and women, and found that those who ate full-fat dairy, including milk, had a 50% lower risk of developing type 2 diabetes.⁶

In another study from Sweden, researchers tracked the dairy consumption of about 3,500 men, ages 40 to 60, for 12 years. The researchers found that the men who consumed full-fat milk, butter, and cream were significantly less likely to become obese than men who rarely or never ate full-fat dairy.⁷

The longevity booster so simple, you can do it in your sleep—literally

10. Get more than 6 hours of shut-eye a night. When it comes to sleep, six seems to be the magic minimum number.

A review of 15 studies, involving nearly 475,000 men and women, found that people who slept less than six hours a night were 12% more likely to die from all causes than people who got more shuteye.⁸

This might not seem like a big deal until you consider this: A 2014 survey by the Centers for Disease Control and Prevention found that more than a third (35 percent) of American adults get six or fewer hours of sleep a night.⁹

For tips on how to get a good night's rest, check out my January 17 *Daily Dispatch*, titled, "5 sure-fire tips to improve sleep," at www.DrMicozzi.com (click on the "Daily Dispatch" tab in the top menu).

Socialize your way to a longer life

11. Take a walk (down the aisle). A number of studies show that getting—and staying—married can improve longevity. Especially in men.

In fact, the prestigious, long-term Framingham Heart Study found a 46% lower risk of death in married men compared to never-married men—even after taking major cardiovascular disease risk factors like age, body fat, smoking, blood pressure, and diabetes into account.¹⁰

Why? Well, among other things, marriage can help prevent loneliness, which leads me to...

12. Make new friends—and keep the old. In a November 2016 *Daily Dispatch* (titled, "The surprising health risk factor deadlier than obesity"), I reported about a research review of more than 180,000 men and women that found that loneliness and social isolation increased the risk of heart disease by 29% and stroke by 32%.

Other research shows that lack of social interactions can weaken the immune system and raise blood pressure, which can increase the risk of heart disease and stroke.

And one review of 148 studies, involving almost 310,000 men and women, found that having ties to friends and family—including watching children and grandchildren—can cut your risk of dying *in half*.¹¹

Even some "face time" on Facebook can help you live a surprising 14% longer, as long as it doesn't supplant real interactions in person (as I reported in the February 3 *Daily Dispatch*: "Surprising connection found between online 'friends' and longevity").

And don't forget furry friends. A variety of studies show that caring for a pet—particularly a dog—can lower your stress levels and reduce your risk of heart disease and dementia.

13. Keep the faith. Embracing your faith is another community activity, so it's not surprising that research shows that attending

religious services can help you live substantially longer, not to mention the spiritual benefits.

A recent study examined data from the Nurses' Health Study, pioneered by Walt Willett at Harvard (again), found that women who attended religious services more than once a week were 33% less likely to die from any cause compared to their less-religious peers.¹²

And other research shows that attending weekly religious services can increase longevity in men and women by anywhere from four to 14 years.

Safety first

14. Light the way. Falls are a major source of deaths.

And even if you survive a fall, but break a hip, research shows that mortality is markedly elevated over the next six months to one year—especially for men.¹³

So it makes sense that getting around safely in your home (where you typically spend the most time) is key to living longer.

That means having light bulbs that safely illuminate rooms, hallways, stairways, and closets. But sadly, the failed “long life” light bulbs mandated by the federal government in recent years don't light areas until after they have “warmed up.” By which point you've probably already left the dimly lit, unsafe hallway, or stairway.

Of course, you can leave these bulbs on longer, or all of the time, but that causes you to use *more* electricity, not save it.

I once had to listen to some health bureaucrat from an international agency patiently explain that you simply need to plan ahead, every trip inside your home, and turn on the lights *before* you need them. But how does that work to save energy and “save the planet”?

Bottom line: They may mean “long life” for these dim bulbs (and long careers for the dim bulbs in the government bureaucracy), but they may not mean long life for *you*, the consumer.

Especially, because some of these “energy-saving” bulbs contain toxic mercury that the government forbids you to dispose. So once those “long life” bulbs actually burn out, you can never get rid of them.

You don't really want your light bulbs to outlast you. Hopefully some sanity will be restored to these kinds of ridiculous regulations soon.

15. Watch what's right under your feet. Throw rugs are one of the top risks for slips and falls, sending about 38,000 older Americans to the hospital every year.¹⁴

If you must have rugs, put rubber mats underneath them. This will prolong the life of the rug, in addition to yours.

NEWS BRIEF

Why natural, whole-body approaches are so effective for heart disease

I always advise you not to think of disease or illness as an isolated problem in a particular organ or tissue of the body.

But modern medicine and many cardiologists often view the heart in isolation. They basically see the heart as a mechanical pump, and discount all of the energetic, emotional, and neurochemical connections this vital organ has with the rest of the body.

Scientific research has taken the same approach. For decades, researchers have studied more and more about less and less, when it comes to heart attacks.

That is, they have taken a single-cause approach, drilling down on the cellular and molecular processes involving the damaged heart muscle tissue, but have ignored those effects on rest of the body.

And they haven't investigated the healthy, *undamaged* heart muscle surrounding the damaged tissue during and after a heart attack — let alone what happens in the organs aside from the heart.

But a new study dares to be different. This study in lab

animals, which was confirmed in autopsied humans, found that heart attacks involve the *whole* body — particularly the liver and spleen. In fact, the researchers discovered that within 24 hours after a heart attack, there are changes to nearly 9,000 genes in the heart, 900 in the liver, and about 350 in the spleen.¹

The researchers also found that heart attacks influence a protein responsible for activating processes in many other organs throughout the body.

Basically, this study showed, in molecular terms that modern medicine can understand, that a heart attack is a whole-body phenomenon. And that's why it's so critical to avoid them — and to keep your heart operating at peak performance.

The good news is, it's entirely possible to prevent heart attacks and even *reverse* heart disease naturally — without deadly drugs like statins or dangerous medical interventions.

I'll tell you all about these effective, scientifically proven natural approaches in my upcoming online *Heart Attack Prevention & Repair Protocol*. I just put the finishing touches on it, and will let you know the moment it's available. So stay tuned!

Better yet, banish rugs in favor of natural wood, tile, or stone floors. Wall-to-wall carpeting may help prevent falls, but it's a key source of dirt, allergens, pollutants, and toxic chemicals that disperse throughout your home.

16. Stay out of hospitals. Even conservative estimates, such as a 2016 study from Johns Hopkins, find that a quarter *million* deaths occur annually in hospitals from medical mistakes, wrong diagnoses, poor practice standards, and drug errors.¹⁵ This makes the modern U.S. hospital one of the most dangerous places on the planet.

In fact, some years back, while working at Walter Reed Army Medical Center, I performed an analysis for the Assistant Secretary of Defense for Health Affairs, which

then appeared as an article in the *Encyclopedia Britannica*, about U.S. military medicine during the Gulf War. I found that over the course of a year, the average American had a greater chance of dying from medical causes in a hospital than soldiers had of dying in combat zones in a war!


If you must go to the hospital, at least you are now out of the extreme danger zone in July and August. During these months, new, inexperienced physicians join the hospital staff, all at the same time. Meanwhile, senior doctors and other hospital staff schedule long summer vacations.

The harmful effects of these staffing disruptions on the well-being of patients even has a name—the “July effect,” as I reported in the

June issue of *Insider's Cures*. And I should know—it happened to my mother just last July 2016.

The sad fact is there is no real reason for doing things this way, except for the convenience of outdated academic schedules and traditions of medical training dating back to the 19th century.

Finally, one of the best ways to improve your health and well-being is to keep up to date on the latest scientific research and health information.

That's what you are doing right now—and can continue doing every month with *Insiders' Cures*...and every day with my *Daily Dispatch*. (If you're not already receiving my *Daily Dispatch* emails, you can sign up on the home page of my website, www.DrMicozzi.com.) 

Is it possible you're taking more vitamin D than you need?

You know there's more than ample evidence of the worldwide epidemic regarding vitamin D deficiency. That's why I did a double-take when I saw recent headlines screaming that many Americans actually take too much vitamin D. Really?

So I investigated further, and discovered this is a classic case of “bait and switch.” While I want to be careful about casting the first “stone” (or in the case of vitamin D, “bone”), these headlines were actually built on a house of cards.

The foundation of that house? A study published in June in the *Journal of the American Medical Association*.¹

This study was really only a survey, which simply asked 40,000 people how much vitamin D they take each

day. And the only factual finding of the survey is that more Americans were taking more vitamin D in 2013-14, compared to 2007-08, and 1999-2000.

In 2013-14, 3.2% of American adults reported they took 4,000 IU or more of vitamin D a day. In 2007-08, only 0.2% took that amount.

And in 1999-2000, the survey didn't even track dosages that high. The researchers reported that 0.3% of American adults took a measly 1,000 IU of vitamin D. In 2013-14, that number rose to 18 percent.

The more the merrier...and healthier

Given everything we know about the epidemic of vitamin D deficiency in the U.S., all of the health problems

associated with low intake of vitamin D, and all of the health benefits of higher vitamin D, this study should be taken as good news. Not as an alarming headline.

And the study reported that people over age 70 were the most likely to take over 4,000 IU of D daily—which is actually *more* good news!

In fact, more and more doctors are getting the message about the crucial need to make sure their patients get enough vitamin D.

I know that my doctors, as well as doctors I hear about from family and friends, are all recommending more vitamin D. Regardless of their medical specialty, more doctors now realize that D is key to keeping *everyone* healthy. No wonder more people are getting more vitamin D!

Vitamin D dosage debacle

The researchers who conducted the survey claimed people who take 4,000 IU of D a day may be exceeding the upper limits of what is safe. Hence the headlines that Americans are taking “too much” vitamin D.

Give them a break (but it *won't* be their bones)! The researchers apparently based their conclusions on the inappropriate, inadequate U.S. recommended daily allowance (RDA) for vitamin D.

The RDA of 600 IU a day for adults under age 70 and 800 IU for every other adult is a *minimum* level, based only on bone health.

But what the RDA doesn't take into account is the literally thousands of recent findings about *optimal* levels of D to prevent and reverse many other chronic diseases, including Alzheimer's, cancer, heart disease, diabetes, and on and on. Furthermore, as I reported in an April 2015 *Daily Dispatch*, experts at two different medical universities discovered that the government miscalculated its

RDAs for vitamin D. They should in fact be *10 times higher!*

That's why two years ago, based on the latest science, I increased my recommended daily dose of vitamin D from 5,000 IU a day to 10,000 IU.

Why you probably need to supplement with D

I think it's important to note that the *JAMA* study only cited vitamin D *dosages*, rather than actual *levels* of the vitamin in blood and tissues—which are the real numbers that count when it comes to health outcomes.

And the study author admitted there is actually little data on long-term health concerns from getting “too much” vitamin D. In fact, the only specific she provided is that higher *calcium* levels in the blood can be dangerous—which is definitely true.

But, of course, studies are clear that excess calcium results from taking calcium supplements—which I always tell you to avoid—and not “too much” vitamin D.


D actually makes sure the calcium in your blood gets into your bones,

muscles, and other tissues and cells where it's needed...and not into your arteries, where it's definitely *not* needed.

So why do I think you should supplement with vitamin D?

First of all, exposing bare skin to sunshine allows your body to produce vitamin D, but sunscreens and dermatological photophobia limit how much of the sun's rays most people really absorb. And for those who live north of Atlanta or Los Angeles, the sun is only at the correct angle, high enough in the sky, to produce D from April to October.

Of course, you can also get vitamin D from full-fat dairy products and wild-caught fish. But how many people actually eat sufficient amounts of these foods? Definitely not enough.

That's why I recommend you supplement with 10,000 IU of vitamin D3 daily, when not getting healthy sun exposure. And while you're at it, look past the scare-tactic headlines, and *really* examine what the actual data tells us when it comes to nutrition “news.” 

Wandering your way to relaxation

Easy, effective stress-busting steps you can begin today

September is here and summer is almost over. School is back in session, and you may be contemplating the return of bad weather and the stress of the upcoming holidays.

But there are steps you can take to reduce and manage your stress today, and year-round, by using your body's anatomical equipment—specifically, a remarkable nerve called the vagus.

The vagus connects the brain to the heart, lungs, GI system, and other important organs. It's a key part of

the autonomic (or reflex) nervous system, which influences breathing, heart, and digestive functions—and ultimately mood and mental health.

Basically, the vagus is the “rest and digest” nerve responsible for the body's relaxation response. And that's why keeping this nerve properly toned is essential for ensuring your health...and happiness.

You can accomplish this state by following a few simple steps. I'll discuss them in a moment, but first let's take a closer look at the mind-body connection—and how the

vagus nerve is a vital component.

Anatomical proof that everything is connected

Over the past few years, I've reported about remarkable new discoveries involving the anatomical connections wiring the brain and the body together, including the circulatory and immune systems.

When we talk about the mind-body connection, it's not just a figure of speech—it's a physical, anatomic reality. These connections are why a disease in one organ is invariably

a systemic illness that involves the whole body (**read about how this applies to heart attacks on page 4**). That's also what our super-specialized practice of mainstream medicine today is so wanting.

But long before these new discoveries about how the mind and body are connected, there was clear anatomic evidence hiding in plain sight.

The wanderer nerve

There are 12 nerves that travel directly from the brain to other parts of the body. The mnemonic device in medical school for remembering the first letters of these nerves in order went like this: "On Old Olympus Towering Top A Finn and German Viewed Some Hops." (There was also a vulgar version about the vagus that I have actually never seen committed to writing, so I won't do it now.)

The vagus is the 10th and longest of these 12 nerves. Vagus comes from the Latin word for "wanderer" (which also gives us the modern English term "vagrant"). This wanderer nerve spans throughout the entire body and is connected to just about everything inside you.

The "wanderer" nerve is the key to keeping you relaxed and stress-free. But in order to accomplish this relaxed state, you have to keep your vagus toned.

Watch your tone

Vagal tone is an internal biological balancing process that relaxes the nervous system. Increasing your vagal tone means you can relax faster after a stressful event. In fact, the more you improve your vagal tone, the more your mental and physical health expands.

In Chinese medicine, this vagal tone balancing process is reflected in the concept of the yin and the yang—originally from the sunny and the shady sides of a mountain. The yang

is sunny, active, forceful; the yin is shaded, relaxed, retiring.

As in all things in life, it's important to have the right tone, including vagal tone. And it begins early in life. Studies show vagal tone is passed on from mother to child.¹ Mothers who are anxious, angry, or depressed during pregnancy have lower vagal tone. Newborns of these mothers also have low vagal tone, along with low levels of the key "feel-good" neurotransmitters, dopamine and serotonin.

This reminds me of Thomas Hobbes, author of the monumental early English work on social organization, "Leviathan," in which he likens individual members of society to parts of a huge social organism (like cells in the body). Hobbes was born prematurely in 1588, when his mother heard about the invasion of England by the Spanish Armada, at the height of the Spanish naval power and military might. He later wrote: "*My mother gave birth to twins: myself and fear.*"

One can see the lifelong effect of that kind of emotional upset passed on from mother to child. But Hobbes took his fear and worry and turned it into a major contribution to social philosophy (a little well-placed worrying can work wonders, as I reported in last month's newsletter).

Hobbes' experiences illustrate that like all things in life, both nature and nurture have an influence on vagal tone. You can't help what your mother was feeling while she was pregnant with you, but you *can* influence how your vagus performs throughout your life.

Here are my top ways to keep your vagus in top shape:

Measure your HRV. Vagal tone can be measured by a technique called heart rate variability (HRV), or the interval between heartbeats.

Healthy, non-stressed people's heart rate (and blood pressure) change constantly during the course of the day, often from moment to moment. But studies show when you're stressed, emotionally or physically, you have a more regular spacing between your heartbeats. A non-variable HRV is also a predictor of disease—particularly heart disease and post-traumatic stress disorder.

Basically, the better your heart rate variability, the better your vagal tone.

You can measure your own HRV at home by downloading a free mobile app, "Stress Check"—available on both Android and iOS phones. It doesn't require any pricey equipment and delivers the percentage of stress levels you experience throughout the day.

Mobile technology like this provides a *non-invasive* way to check on your body to monitor your health BEFORE it becomes an issue.

Keep it cool. Researchers have found that exposure to cold can increase vagal tone.

That means swimming in cool water or going out in cool air with minimal clothing for a few minutes. You can also get the same effect by quickly immersing your face in ice water or gulping down a cold glass of it.

In fact, in animals and infants, submerging the head or face under water results in the "diving reflex," which is *so* relaxing, it can even lead to blanking out. Next time you're in the shower, try turning the water to cool for 30 seconds to stimulate your vagus nerve, before (quickly) stepping out.

Take a breath. Deep and slow breathing is a classic way to increase vagal tone. Instead of taking the typical 10 to 14 breaths per minute, try slowing down to six inhalation/exhalation cycles per minute—one every 10 seconds.

This type of breathing, which goes all the way down to the diaphragm, is key in the popular practices of yoga, tai chi, mindfulness, meditation, and other stress-reduction approaches. In fact, studies show that practicing yoga increases a key neurotransmitter that helps with anxiety and depression. Tai chi has been shown to have similar benefits.

Sing a happy song. Chanting, humming, and singing help improve the connection of the vagus nerve to the lungs, vocal cords, and throat muscles. And research shows that singing increases HRV.²

If someone ever complains about you singing out of tune, tell them you're doing it for your health!

Have fun. Laughing can reduce stress and stress-related hormones, and enhance vagal tone.

And conversely, stimulating the vagus nerve often leads to laughter as a side effect. Laughter also improves HRV and mood.

I have written about the many benefits and the healing effects of humor and laughter with my friend, Dr. Hunter "Patch" Adams, in my medical text, *Fundamentals of Complementary, Alternative & Integrative Medicine* (you can find a copy at www.DrMicozzi.com/books).

Make friends. Research shows that socializing, or even reflecting on happy social connections, increases positive emotions, and improves vagal tone.

One study found that people who practiced "loving kindness" meditation, which focuses on compassionate thoughts about themselves and others, had better HRV than people who did other types of meditation...or didn't meditate at all.³

Acupuncture. A professional acupuncturist can use needles and pressure points to stimulate vagal

tone, or you can mimic the benefits of acupuncture yourself by applying pressure to specific parts of your body. Gently press and rub your temple, the side of your eye, the base of your neck, the crook of your hand between thumb and forefinger, the front of your armpit between the shoulder and upper arm, or the soles of your feet.

Massage. Whole body massages, and foot massages in particular (especially reflexology), can also tone the vagus, reaching all of the places you can't. Not to mention that they're very relaxing.

Feed your gut. Recent discoveries show the "good" bacteria in your gastrointestinal tract—also known as probiotics—improve vagal tone by influencing production of neurotransmitters and stress hormones.

And conversely, the vagus nerve influences the ability of probiotics to make neurochemicals that improve mood and reduce stress and anxiety.

As you know, I'm not at all impressed by probiotic supplements based on the science (or mostly, the lack of it). Rather, you should eat probiotic foods such as yogurt, sauerkraut, miso, apple cider vinegar, brine-cured olives, and pickles. And don't forget prebiotic foods, which help feed probiotics. My favorites include garlic, onion, asparagus, bananas, apples, and flaxseeds.

Try a different kind of stress eating. The omega-3s in fish oil increase vagal activity and tone. I typically recommend 1,000-2,000 mg of high-quality fish oil supplements per day. You can also get a good dose from wild salmon, mackerel, sardines, and anchovies.

Bonus: Eating the little bones in sardines and anchovies also gives you a great dose of bioavailable calcium, which is key for brain and nerve function.

Zinc is also important for brain

function and vagal toning. Several studies show zinc increases vagal nerve stimulation in lab animals. In humans, six studies have shown zinc deficiency impairs brain function in children and adults.


You may have low zinc levels and not know it, because the clinical signs are often nonexistent. That's why I recommend supplementing with 50-60 mg of zinc a day. Good food sources include grass-fed beef, cashews, mushrooms, oysters, and spinach.

Find your favorite mind-body technique. Along with meditation, there are several other mind-body techniques that have been found to be effective for improving vagal tone.

Biofeedback gives you instantaneous information about your heart rate and other bodily functions. This allows you to directly observe the effects of modulating vagal tone, and learn how it affects your mind and body.

Of course, mind-body techniques work differently depending upon your personality or emotional type. To find which ones are best for you, read my book, *Your Emotional Type*, and take my Emotional Type Quiz at: www.DrMicozzi.com/books/your_emotional_type/find-your-boundary-type.

Bottom line: Just relax. Like the wanderer nerve, I have wandered quite a bit in writing this article. But consider it an object lesson about not always being driven to stay relentlessly on a narrow path. Rather, get off the beaten path sometimes, and stop to smell the roses.

Because when it comes to your vagus nerve—and your overall health—relaxation, balance, and moderation are always key. 

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