DR. MICOZZI'S
INSIDERS' CURES
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Ancient cure for COPD and asthma symptoms could make inhalers and drugs obsolete!

This ancient solution to lung disease is still the best one

Most people don't realize it. But there's another killer among us besides heart disease, diabetes, and cancer that's keeping Big Pharma in big business…

Chronic obstructive pulmonary disease (COPD).

COPD is the 4th most common cause of death in the United States. And just like America's other top killers, all mainstream medicine has to offer are drugs that barely keep symptoms in check and that are laden with side-effects that would (and often do) make your head spin.

All the while, a safe, proven, natural solution has been left in the wake of Big Pharma…and lost in the quagmire of what western scientists call "research."

The solution I'm talking about is *acupuncture.*

An acute solution, lost in research confusion

While acupuncture is finally being well-accepted for the treatment of pain, it still lags way behind as a treatment for anything else. Which is tragic.

Given its history and the science, acupuncture could safely and effectively help millions more suffering from all sorts of ailments. But you're not likely to hear it from the "modern medical establishment" anytime soon.

Of course, the Yellow Emperor of China had all the proof he needed 2,000 years ago. He based an entire healthcare system on acupuncture. For the world's largest population with the most advanced civilization, no less!

Unfortunately, western researchers have yet to embrace the obvious—acupuncture works. Instead, they're obsessed with trying to figure out the question of, *"Why? Why and how does acupuncture work for different medical conditions."*

In fact, every time a study proves acupuncture is effective, instead of focusing on the conclusion of "it works," western scientists are quick to think they have finally come up with an explanation as to *why* it works. And they tend to focus on *that* point, instead.

But then proof of its effectiveness for yet another "unrelated" condition sends them back to the drawing board. Because the reason why it works for one condition appears to be different from the reason why it works for another—at least as interpreted by the modern mainstream biomedical model.

It's a never-ending cycle that leaves practitioners with the same useless conclusion—*more research is needed.*

And it's all because western scientists are missing a very important tenet of Chinese medicine: *Everything is related.*

In Chinese medicine, there is no condition that exists independent of the whole body. So when you treat the whole body with a holistic therapy like acupuncture, you're going to get results for all sorts of unrelated conditions.

But our un-holistic western biomedical paradigm just can't make sense of the results—even though we

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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.

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

can all observe them with our own eyes.

A breath of fresh air

Maybe that's why it's taking so long for the use of acupuncture in lung problems to catch on. While it's easy enough for mainstream doctors to accept that acupuncture is effective for pain, they're *speechless*, so to speak, about its breathing benefits.

But the fact is acupuncture provides serious relief for asthma, COPD, and other lung problems. Let's take a closer look at those conditions.

Emphysema. Emphysema is an example of COPD. It is marked by an obstruction to airflow in and out of the lungs.

Emphysema makes lung cells lose their elasticity. Normally when air comes into the lungs, they expand like a balloon. But in emphysema, the balloon is more like a paper bag. It has lost its "rubbery" ability to deflate. So the person struggles to expel old air to make way for new air.

Emphysema happens when immune system cells and their enzymes enter the lungs to attack intruders. (Smoke and airborne pollutants, for example.) This destroys lung tissues. It's no surprise that smokers are susceptible.

House painters were also notoriously prone to emphysema. The reason? Paint fumes—plus a higher likelihood to drink and smoke too much. When I was a medical examiner, I autopsied many house painters who fell victim to this toxic combination.

But genetics can be an even bigger risk factor than smoke toxins. In fact, people with certain genetic variations can't neutralize the enzymes that break down tissue proteins in the lungs.

One of those enzymes is trypsin. Normally, lung cells protect themselves from trypsin with an enzyme called alpha-one anti-trypsin. Not so in people with a genetic abnormality of this enzyme.

That's another reason that smoking isn't the whole story when it comes to emphysema and lung disease. Back in the 1970's I did a summer student research project on identifying genetic variants of this enzyme, and then wrote an undergraduate dissertation on this topic for my major in chemistry. But since, we have never heard much about this important cause of emphysema—it seems to get lost in all the smoke about cigarettes.

Asthma. In asthma, the airways of the lungs constrict, becoming narrow and sometimes even closing off completely. So it has an "obstructive" component too. That means it's hard to breathe in…and even harder to breathe out again. Thus, causing the "wheezing" sound of breathlessness.

The western medical approach to asthma is to use drugs to open the airways. These drugs, called "bronchodilators" act like adrenaline.

Under normal circumstances, the body releases adrenalin when it senses danger and has to respond with "fight or flight." That's because adrenalin increases heart and muscle performance and reactions. It also expands airways, allowing more air to enter the lungs more quickly. That gets more oxygen to the blood, muscles, and other tissues.

But too much adrenalin causes problems too. And so do these drugs. They can cause heart arrhythmia and fatal acute cardiac arrest. In the 1970s, there was an epidemic of young people dying from using inhalers. The FDA finally took note in the 1990s and made some changes, which I'll tell you about in just a minute. But first, let's talk about some natural alternatives…

Nature's breathing helpers

As usual, better ways to deal with breathing problems can be found in nature.

Caffeine and theophylline in coffee and tea are both effective bronchodilators. In fact, for general congestion from allergies, I recommend a strong cup of coffee or tea in the morning. It will help get you going—without resorting to antihistamines and all their side effects. Or using decongestants that make you feel like the top of your head is coming off.

But for the serious breathing issues discussed above, we can look back to Chinese medicine. The Chinese had solutions for obstructive lung disease—not only with acupuncture, but also with a powerful herb.

This herb, *Ma huang* comes from the bark of a tree containing ephedra (the source of the drug ephedrine).

Ma huang was one of the first Chinese remedies western medicine picked up on. In the mid-20th century, Karl Schmidt and K.C. Chang studied it at my alma mater, the University of Pennsylvania.

Ephedra, too, acts like adrenaline. And that, unfortunately, led people to use it in unhealthy ways. Dietary supplement manufacturers put it into appetite suppressants and performance enhancers. And no surprise, people misused them. So ephedra was even implicated in some deaths (that also involved other factors). And the FDA banned it.

So in our culture of "more is better" we've managed to take one of Chinese medicine's effective remedies off the table.

Luckily acupuncture hasn't been outlawed—it doesn't pose the risks of drugs or even some dietary supplements. But it almost wasn't an option!

Acupuncture's "approval" almost didn't happen…

In 1997, the National Institutes of Health (NIH) looked at the science behind acupuncture. Their conclusion: It helps dental pain, certain chronic pain, and nausea and vomiting associated with chemotherapy and pregnancy.

Still, many mainstream medical practitioners and the FDA aren't sold. After all, we already have many "good" drugs for pain, nausea, and vomiting, so why bother with something exotic like acupuncture? *(Could it maybe have something to do with the fact that acupuncture takes 15 minutes to administer, while writing a prescription and popping a pill only takes seconds and results in more revenue?)*

But other results of acupuncture on lung disease (missed, of course, by the NIH) did catch the attention of FDA. These guys were located a mere three miles down the pike from the NIH, but they didn't manage to share their knowledge. Same old government bureaucracy…

FDA knew that the drugs available for asthma were dangerous. In principle, the FDA should be concerned not only with finding more effective treatments, but also with finding *safer* treatments. So, if acupuncture (perfectly safe) were effective for asthma and lung diseases, it should be very interesting to the FDA.

Meanwhile diligent attorneys such as Jim Turner had been petitioning the FDA to stop classifying acupuncture as an experimental device. Experimental devices are only allowed to be used in research experiments approved by the FDA.

And at the same time, I had started the first medical research journal on complementary and alternative medicine in the United States. In the very first issue, we published a massive collection of research (mostly published in the U.K. and Europe) on acupuncture for the treatment of (you guessed it) lung disease. The new journal and this article got a lot of attention… including by the FDA.

In typical government fashion, the FDA bumped the reclassification of acupuncture. Which means it would be left sitting on the shelf somewhere.

But fortunately for you and me, some dedicated and courageous FDA scientists petitioned their boss to be allowed to work on it on their own time. They gave up their evenings and weekends to complete the approval process, without interfering with the regular 9-to-5 priorities of the "overworked" agency.

To save time and trouble, these scientists asked me to send them the computer disc with the hundreds of scientific citations and references I had compiled for the journal.

Sure enough, the FDA approved the acupuncture needle as a therapeutic device in the late 1990s. And we can all be thankful that a lot of pain and suffering is now being legally alleviated. Especially given all the government interference with effective pain-killing drugs (see the 11/9/12 *Daily Dispatch* "DEA or DOA?" for more on that topic).

But there is always room for more news about proven treatments that are thousands of years old.

New developments in old medicine

Shortness of breath is a major problem with COPD (not surprising). This is called dyspnea. It's particularly bad during physical exertion. Dyspnea on exertion (DOE) is a major symptom of COPD. It's

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notoriously difficult to control—even with the drugs currently available.

A new study performed by Japanese researchers—in which acupuncture was actually performed properly, instead of blundered as it often is in western studies—proved acupuncture beats placebo in improving DOE in patients with COPD receiving standard medication.[1]

Apparently the "standard" medications were not helping. They were still considered standard—but of course, for ethical reasons, the patients still had to be given the drugs that weren't working anyway, because the experimental acupuncture treatment might not have been effective!

The researchers concluded that acupuncture is a "useful add-on" therapy. So if you suffer from COPD, keep taking those drugs (that apparently don't help for shortness of breath). But for real relief, also try something safe that really does work.

Safe, effective, and available

As the researchers continue trying to *prove* this age-old medicine, I believe the evidence is more than strong enough to trust that acupuncture does work. Not just for the standard uses (pain and nausea), but even for more complicated problems like COPD and asthma. And all without side effects.

Now that should give you cause to breathe easier. JC

Citations available online at www.DrMicozzi.com

NEWS BRIEF

The low-stress pain cure

Research reveals the hidden link between stress and pain

When you're dealing with chronic pain, the last thing you want to hear is that it's all in your head. But research shows your head—or a specific area of your brain, to be exact—has a lot to do with pain.

That part of the brain, the hippocampus, was first described by Venetian anatomist Julius Caesar Aranzi (1587). He gave it the Latinized (from the Greek) name for sea horse, since the shape reminded him of this marine creature. But the funny shape of this brain component belies its important functions…and some are still being discovered today.

We already know that the hippocampus has an important role in converting short-term memory to long-term memory. In fact, it's one of the first areas of the brain to be affected in Alzheimer's dementia. But now neuroscientists are finding that the hippocampus has an important pain connection, too.

Recent research shows that people with a smaller hippocampus tend to have higher levels of the hormone cortisol. And high cortisol levels are linked to stronger responses to pain.

Cortisol is recognized for its association with chronic stress. So again we see the pain/stress link.

One of the most mysterious of all chronic pain/stress conditions is the spectrum of chronic fatigue and fibromyalgia. In fact, there's such a strong link between these painful conditions and stress that they can be initiated by sudden traumatic injury or viral illness.

So it's no surprise that chronic pain sufferers can help manage their condition by avoiding the effects of stress. The good news is stress-management techniques abound…and there's one for every type of person. It's just a matter of figuring out which one will work for you.

In my book with Michael Jawer *Your Emotional Type*, we explain that a person's emotional type helps determine whether they're likely to develop chronic fatigue or fibromyalgia in response to chronic stress.

While being interviewed on radio recently about our book, I was asked what was the most significant result that I found personally. Having worked on all the topics for decades, it was in writing this book that I had the insight to understand for the first time how the psychometric spectrum of your personality boundary spectrum ("emotional type") determined whether you fell on one end or the other of the chronic fatigue-fibromyalgia spectrum as a result of chronic stress.

You can determine your own emotional type so you can choose a mind-body stress management technique that is sure to work for you. Check out the book for the full evaluation, or take a short online quiz at www.drmicozzi.com.

There's no need to continue suffering from chronic stress—or with chronic pain—when the solution can be so simple. You just need to know how to find it.

When medicine becomes poison

How one popular heart drug went so wrong

Once upon a time it seemed medical technology was evolving in a better direction. Moving toward honoring the doctors' Hippocratic Oath to "first, do no harm." Indeed, it seemed that we were beginning to choose less harmful treatment options over more harmful ones.

For example, if you could take a drug to manage heart disease, wouldn't that be better than being subjected to open-heart surgery?

But of course it wasn't that simple. As all doctors learn when studying pharmacology, any drug can have any effect. For something to act as a drug, it first has to be absorbed, be carried in the blood, enter the cells, and be able to bind to the cells to have an effect. In this process, other side effects of drugs are to be expected.

The flip side of pharmacology

Unfortunately, medical schools don't dig deeper into drugs in pharmacology courses. If they did, more doctors would get some important insights.

Drugs used to be based primarily on plant chemicals from nature. And biological organisms (like humans) are already adapted to obtaining nutrients and medicines from botanical sources. But pharmacology continues to get farther and farther away from natural approaches, as I'll illustrate in a moment.

Toxicology is the field of studying poisons. In some ways poisons are similar to drugs—they have to be absorbed, enter the circulation, and be able to get into cells in order to have an effect.

The difference is, poisons act by disrupting the normal processes that cells carry out. They disrupt your metabolism.

But most doctors don't know as much about poisons. In fact, unless they had a special interest or pursued training in forensic medicine (like I did), they did not learn anything about toxicology in medical school.

That's unfortunate, since some newer drugs are turning out to test our toxicology knowledge as much as our pharmacology knowledge.

Which brings us back to heart disease…

I mentioned that the medical establishment promised heart health through drugs instead of surgery. These drugs are called statins.

The theoretical appeal of the statin drugs is that they lower cholesterol. But we're now learning that statins were the wrong approach…to the wrong problem. Plus, these drugs are turning out to be metabolic poisons.

Debunking the cholesterol myth

If you're still counting cholesterol in your food, you're wasting your time. You wouldn't know it from the medical establishment, but there's absolutely no relationship between food cholesterol and blood cholesterol.

But it's still worth getting your cholesterol levels checked, right? *Maybe not.* In animal studies, including primate studies, only very weak connections have been found between cholesterol and heart disease.

I knew this as far back as medical school. In fact, I vividly recall taking a course at the veterinary school when I was a medical student at the University of Pennsylvania. I used to take courses at the vet school because, frankly, veterinary medicine kept a stronger connection to real biology and ecology in terms of health and disease.

In fact, animals continue to receive better care from veterinarians in terms of nutrition and so-called complementary/alternative therapies than people are getting from physicians.

But back to cholesterol…

I can still see pathologist Dr. Herbert Ratcliffe shaking his head about the "new" interest in cholesterol as a key to heart health in humans. Because he knew all the studies that had already been done in animals disproved any real cause and effect. In the meantime, Dr. Mark Hegstead from Harvard came to give a special lecture showing that cholesterol in foods had nothing to do with cholesterol in blood. *And this was all known in the 1970s!*

So why the confusion?

The body makes its own cholesterol, which is a wholly natural substance. It is a building block of cells and hormones for the body. Cholesterol has many important functions in the body, including helping repair injuries. After an injury, one of the body's first reactions is to naturally increase cholesterol levels.

But that's not true in people who are on statin drugs. Statins lower cholesterol by poisoning a normal and necessary enzyme in the body called HMG-CoA reductase. The

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poisoned cells can't produce as much cholesterol.

When Merck came out with the first cholesterol drug, Mevacor, it was heralded as a great achievement. Careers were secured, fortunes made, corporate profits assured, and buildings built to honor the discoverers.

At about the same time, some doctors (like myself) were telling the world that we believed in the power of complementary medicine. That we believed the wise use of nutrition and natural medicine could "complement" the drug-dominated practice of human medicine.

And one prime use for complementary medicine, we knew, would be to help counteract the "known and accepted" side effects of drugs.

These natural substances *support* normal metabolism, especially when the body is bombarded with drugs that interfere with normal metabolism.

If the high quality and scientific standards of the pharmaceutical industry could be applied to the "wild west" of the U.S. natural products industry, we knew it would benefit consumers.

For example, I recommend Metfolin®, Merck's pharmaceutical grade folic acid, as a reliable, high-quality source. Another example is coenzyme Q10 (CoQ10), which helps reduce the toxic effects of statins.

We knew Merck was one of the great science-based pharmaceutical companies. In fact, we were pleasantly surprised to discover Merck had already taken out a patent on a CoQ10 and Mevacor combo.

However, the combination treatment was not made available to the public. We thought Merck might be in an "era of good feeling" because of their successful new cholesterol drug, so we wrote to ask why they weren't making the combo available. They replied that they "never comment on products they are not marketing."

Bungled by bureaucracy

Industry experts point out a possible reason for the decision not to market this helpful combination. Merck had already done clinical trials on Mevacor to prove it lowers cholesterol levels. (Whether that ended up doing any good, or even more harm than good, was not part of the trial.) CoQ10 as a dietary supplement was already on the market and widely available. However, the FDA would have required a new multimillion-dollar clinical trial on the combination in order for it to be approved!

As two separate pills, the FDA saw no problem. Multiple individual drugs are given together to millions of people every day. But combine the two into one pill, and the FDA sees it as a new drug. Even though the only "side effect" of CoQ10 is to reduce the toxicity of the statin. Apparently the FDA has to protect the public against being protected from drug side effects!

Barking up the wrong tree

But back to whether statins make any sense to begin with. Sure they lower cholesterol levels—thus the FDA approves them for that purpose. But as I explained already, that doesn't improve health.

And recent research is showing how these drugs actually *harm* the body.

A study in the journal *Muscle and Nerve* finds that statins may actually make it harder for the body to recover from muscle injury.[1] Of course, the heart is the most important muscle in the body. And the most important healing is the ability of the body to heal itself.

If a statin interferes with the ability for muscles to heal, is that good for your health? Or for your heart? Of course not!

It makes sense that one of the common side effects of statins is crippling muscle cramps. The pain can be so severe that it makes it impossible for many people to tolerate these drugs—even when they're incessantly pushed to do so by medical drug treatment protocols.

Listen to the numbers

Statistical studies back up my concerns about the modern obsession with cholesterol. The World Health Organization (WHO) looks beyond the borders of the United States for health trends. In every country where WHO has collected data, the lower the average cholesterol level, the higher the overall death rate in the population.

My late colleague at the National Cancer Institute, Dr. Arthur Schatzkin, was very good at ferreting out statistical associations. In large databases he found lower cholesterol levels were linked to higher death rates from cancer—and that was back in the 1980s.

But somehow I don't recall that line of investigation being pursued.

The bottom line is that poisoning your metabolism does not make for a healthy heart.

We need to look at the real causes of heart disease—and stop ingesting medicines that are actually poisons—if we want to improve heart health.

For more on natural approaches we already know work, see *The Insider's Secret to Conquering High Blood Pressure and Protecting Your Heart* which you received as a new subscriber. If you don't have your original printed copy, you can download it online at www.drmicozzi.com under the Subscribers tab.

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Survival at the gait

One of our most basic abilities—one that kept cavemen alive—may predict our longevity even today

From an evolutionary standpoint, there's no doubt that mobility dictates survival. Just think about it. If a mountain lion decides to pursue you and your tribe, which one will end up as a tasty meal? *The slowest one.*

But even now, though we don't live in a world in which we need to outrun predators (at least not literally) in order to survive, mobility still matters a great deal. Researchers are now finding that gait speed is a great predictor of survival in older adults. But before I explain the recent findings, let's take a look at why humans walk the way we do.

Setting ourselves apart

The ability to walk upright on two legs is a distinctly human trait. It's in large part what has set us apart from other animals—freeing our hands so that we could express our creativity and productivity to build the "man-made" world that we all live in today, for better or worse.

Another important factor in setting us apart is our larger brain. But that's sometimes at odds with our ability to walk upright. Here's why. In order to walk and run efficiently on two legs, those legs need to be close together. So a more narrow pelvis, especially at the hips, is better for walking and running. On the other hand, our larger brains mean women need to have wider hips to allow the infant to pass safely through the birth canal. That explains why humans are the only animals who have such potentially difficult childbirth—and why we call it "labor."

At the same time, women's hips couldn't be too wide, or they wouldn't be able to walk and run efficiently. So over time, human infants were born at earlier and earlier stages of development, while the brain is still immature. It means our young are immature and dependent on their parents for longer than other animals. (One look at the most recent generation will confirm that beyond a shadow of a doubt!)

***From an evolutionary standpoint, there's no doubt that mobility dictates survival. Just think about it. If a mountain lion decides to pursue you and your tribe, which one will end up as a tasty meal?* The slowest one.**

So there has been a grand evolutionary biological compromise between upright posture, freeing the hands, and having bigger brains. Being able to walk efficiently for long distances, and being able to run fast, has been a key to human survival.

The many factors at play

Now when it comes to the opposite end of the age spectrum, scientists are finding that gait speed in older adults may help account for differences in longevity.

It takes several important capacities to be able to walk efficiently and quickly. First you need balance, which comes from your brain's ability to process input from your eyes (visual), inner ear (vestibular), and limbs (proprioceptive). Your eyes orient you to your position in space. Your inner ear is like a little gyroscope, sensing the position of your head against gravity. Your limbs send signals to the brain about pressure, heat, vibration, and other signals about the ground under your feet. Maintaining balance requires your brain to rapidly process and integrate all this information to keep you upright and on your feet. Even more so when you're moving.

Gait predicts longevity

Back to that research I mentioned. It turns out that—probably because of all these different faculties needed to walk efficiently—gait speed can tell doctors a lot about your health. In fact, it's as accurate a predictor of longevity as any other factor—including age, gender, use of medical devices, chronic conditions, smoking history, blood pressure, BMI, and history of hospitalizations!

A 2011 study published in *JAMA* followed more than 17,500 people ages 65 or older for 6 to 21 years.[1] Their gait speed (how fast you can walk) was associated with better survival in every group of older adults studied. There was a direct correlation between how fast you can walk and your longevity across a full range of speeds.

So, for a real measure of "anti-aging" ask your doctor to measure your gait speed. And the next time someone advises you to "slow down" as you get older, think again.

I'll tell you more about the importance of gait and your skeletal structure in next month's issue. IC

Citations available online at www.DrMicozzi.com

NEWS BRIEF

The single most important thing you can do to prevent premature death

As the U.S. government science bureaucrats continue dithering over recommendations about vitamin D intake, some real scientists in Germany (and yes, even some right here at home) are making it perfectly clear: Vitamin D prevents premature death. Plus, it reduces death rates from all causes.

So why is the U.S. hemming and hawing—and confusing patients and doctors alike?

Blind leading the blind

Over the past three decades, many scientists who study chronic diseases have stumbled into studying diet and nutrition. They often lack any understanding of nutrition as a fundamental part of human biology and behavior. And despite their ignorance on matters of nutrition, they publish their findings. And the government science bureaucrats jump on the research—and the politically correct bandwagon.

But one source has always been an exception to the rule. *The American Journal of Clinical Nutrition* (AJCN) doesn't report spurious statistical findings like those that can be found in other journals.

And across the Atlantic, German scientists tend to put out reliable information on nutrition. That's because they know how to conduct scientific investigations on human biology. They have consistently been way ahead of the United States in investigating natural and nutritional approaches to health and medicine.

Research you can trust

The trustworthy team at AJCN published a report in the April 2013 issue that takes a close look at vitamin D.[1] In it, a team of scientists measured vitamin D levels in nearly 10,000 people ages 50 to 74 years. Another 5,500 participants were measured at 5 year-follow-up. All deaths were recorded during an average follow-up period of 9.5 years. During the follow-up period about 10 percent of study participants died: 43.3 percent from cancer, 35.0 percent from heart disease, and 5.5 percent of respiratory diseases.

People with the lowest vitamin D levels were more likely to have died of any cause, and of cancer, heart disease, and respiratory disease specifically.

They also found a dose-response relationship between low vitamin D levels and death—that is, the lower the vitamin D, the higher the mortality rate.

This is the best kind of epidemiological study, with the strongest kind of results that can be performed on human populations. It makes it perfectly clear: Higher vitamin D levels protect against premature death—as well as all the leading causes of death.

It's never too late to up your D

Plenty of studies prove the dangerous effects of lack of vitamin D in childhood, but these highlight the fact that even in adults—and older adults at that—low levels of D have bad health effects.

On the flip side, that means that even later in life, you can improve your health and longevity by increasing your vitamin D intake.

And here's some more good news: Vitamin D can be free. All you need to do is expose your skin to the sun (it's the perfect time of year to get started!) and your body will activate its own vitamin D.

For the rest of the year you can build up healthy vitamin D levels with appropriate high-quality supplements. If you have any reason to believe you are not getting enough vitamin D, ask your doctor to measure your levels the next time you have a routine blood sample taken for testing. If you're below 75 nmol/L—and especially below 30 nmol/L—it's time to add a high-quality supplement.

Citations available online at www.DrMicozzi.com