

Special AGING-BREAKTHROUGH Edition

I have mentioned before how the word "breakthrough" gets thrown around a lot these days. But REAL breakthroughs are few and far between. One reason is because modern research is done by subspecialists with very narrow vision. Today's "experts"-who seem to learn more and more about less and less. Unfortunately, that is what gets encouraged and rewarded in the ivory tower of modern universities and by government research grants. So these "experts" just can't see the big picture. (And it often seems the government doesn't want them to!)

But **real** breakthroughs come when we are able to piece together the many little pieces of the puzzle that typically come from different kinds of highly specialized research. Suddenly, by putting it all together, we reach a new understanding. And in fact, in this issue, I will tell you about some genuine breakthroughs that have occurred recently in the field of "anti-aging."

Now, I don't like to use the term "anti-aging." I prefer the term *healthy aging*. It seems to me if you're "anti-aging" it must mean you favor the unhappy alternative—which is to <u>not</u> get older. So, don't complain about growing older because it is a privilege denied to many (but not to readers of *Insiders' Cures*!).

But in the case of some of these new breakthroughs, there is solid scientific evidence that it's possible not just to improve your quality of life as you age—but also to extend your lifespan (or longevity). And living better for longer is the closest anyone can realistically get to socalled "anti-aging."

Of course, by definition, a

breakthrough is "a sudden, dramatic, and important discovery or development." But these discoveries aren't always positive. I will warn you about one such breakthrough development in aging on page X along lines that I have studied for many years (and will give some simple, practical advice on how you can protect yourself).

Any one of these breakthroughs would be enough to fill the pages of other newsletters. And, normally, any newsletter would spread out breakthroughs like these over many months. But I just couldn't wait and want to share them all with you now, without any delay.

So please enjoy this **Special Aging-Breakthrough Edition** of *Insiders' Cures*. And I'm confident I'll be sharing more real breakthroughs like these with you in the months to come.

Fight the ravages of time at the cellular level and add YEARS to your life... in just 6 weeks

In February, I shared part of my new Alzheimer's cure with you. It's based on a key breakthrough I discovered when studying all the newest dementia research...

Alzheimer's and other forms of dementia could also be called "aging of the brain." In fact, I believe dementia may very well be the flip side of aging in the body. And, in turn, preventing dementia is the ultimate "antiaging" effect.

Why? Well, research shows that many of the steps you already take to counteract diseases associated

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Copyright © 2016 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. with aging in your body can also help you fight age-related brain diseases. I'm talking about easyto-understand, common sense, natural solutions like taking the right supplements, eating the right healthy diet, and getting enough sleep and physical activity.

I shared some of these "brain antiaging" steps with you in February, and will unveil my full Alzheimer's prevention and reversal cure later this spring.

In the meantime, this month, I'm revealing the latest research on how you can slow down or even prevent age-related diseases in your body.

I've boiled the new studies down into three simple but effective steps. And they start with my favorite fruit.

Step 1: Eat blueberries, live longer — and better

News about the amazing health benefits of blueberries just keeps getting better.

As I discussed in the January issue of *Insiders' Cures*, there's compelling evidence that blueberries can help fight the oxidation that leads to age-related brain damage like dementia and Alzheimer's. They also help slow down aging in your body by lowering your risk of heart disease, diabetes, and obesity.

And now, a new study reveals that blueberries can improve functional mobility in older adults.¹

This discovery is a remarkable aging breakthrough. As I told you in the May 2013 *Insiders' Cures* ("Survival at the gait"), research shows that maintaining mobilityincluding the ability to walk quickly and effectively—is the *single-best* predictor of longevity.

Blueberries have already been shown to improve motor function in animal models. And this new study demonstrates they can do the same for humans.

Boost your longevity in just 6 weeks

Researchers gathered men and women age 60 or older and divided them into two groups. One group ate two cups of frozen blueberries daily for six weeks, and the other group got a placebo.

At the end of the study, the researchers found that the blueberry group had noticeable improvement in grip strength, reaction time, and balance and foot placement while walking.

And they had improved walking speed...which equals improved longevity.

That's quite striking after just six weeks of eating blueberries.

Of course, eating two cups of blueberries every day might not be very realistic. Fortunately, you have other options. Look for powdered, water-soluble blueberry food extract, which you can add to any beverage. I recommend 400 mg a day of the water-soluble powdered ingredient to help slow down aging in both your body and brain.

Step 2: Fight aging at the genetic level

Until recently, the only way to really increase your chances of living longer was to have had parents who lived into old age. But now, researchers have discovered that even if you didn't win the parental genetic lottery, you can still take steps to control aging at the cellular level.

In essence, you can actually *turn back* your biological clock.

How? Well, those who study longevity are focusing on telomeres, which are sequences of nucleic acids (thymine, adenine, and guanine, or TAG) that appear at both ends of all chromosomes in each gene. This "TAG" team helps keep chromosomes stable—similar to the way metal or plastic caps help protect the ends of shoelaces from fraying.

To understand how telomeres affect aging, you need to know that the cells in your body continually divide and replace themselves. So theoretically, you should always have "young" cells in your tissues, as long as they are properly nourished, energized, and hydrated.

But there is one catch. When new

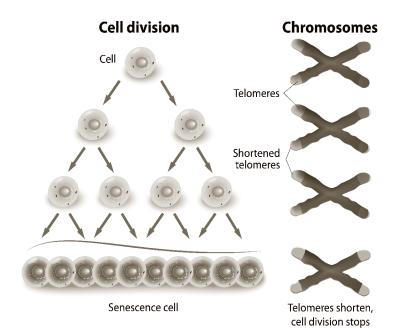
cells are formed in chromosomes, the telomeres don't duplicate. Instead, they get shorter with each new cell division. Eventually, they become so short that the stability of the chromosome is compromised, and cell division comes to a halt. No more new, young, healthy cells to replace the old.

That's why over a lifetime, cells can only undergo a finite number of divisions. Eventually, they enter a phase where they accumulate imperfections, lose their functions, and simply die. And that's a big factor in the aging process.

So it's no wonder that telomere shortening has been a focus of aging research at the genetic and cellular levels.

Gilgamesh was right—plants really can extend your lifespan

I think it's fascinating that much of this 21st century research was actually inspired by a king who ruled nearly 5,000 years ago. In the ancient Sumerian epic of Gilgamesh,



the king of Uruk searches for a plant that can restore youth. This inspired Andrew Sokar, a childprodigy-turned-doctor, to create the Gilgamesh Project to research how to prolong the human lifespan.

Dr. Sokar and other researchers have discovered that as cells age, genetic modifications accumulate and appear to affect our biological clocks.

We hear a lot about biological clocks in terms of pregnancy, but they also influence how we age. In my specialty of forensic medicine, for example, investigators might be able to determine the age of an unknown victim, or assailant, from blood or tissue samples at the scene.

Dr. Sokar and other researchers have actually discovered how to determine and detect "age accelerators," or factors that make our biological clocks go faster. They've also discovered which natural compounds help fight these age accelerators.

Interestingly, two of these compounds are found in plants, just as Gilgamesh suspected long ago. I'm talking about B vitamins and betaine—which comes from beets. I wrote about betaine's amazing health properties in the November 2015 *Insiders' Cures* ("The heart hazard throwing aging into overdrive").

My colleagues at the NIH's cellular and molecular pathology lab tell me another important way to slow your biological clock is to nourish the mitochondria, which provide the energy and water that's critical for proper cell function and replication. You can do this by taking Co-Q10 every day, as well as aspal (rooibos, or red bush), dandelion, and blueberry.

Step 3: Don't stress about living longer

We're always hearing that "stress is aging us." But how, exactly?

Well, a new study on stress reduction and lifestyle modification provides great insight into this question. The study was done on African-Americans, who have long been recognized to suffer disproportionately from high blood pressure and heart disease.²

When I was in medical training, researchers searched in vain for genetic causes for these differences in African-Americans. But after my research overseas in the late 1970s, I recognized stress was more of a factor for high blood pressure and heart disease among different population groups than genetics were. Of course, stress is now

5 supplements scientifically proven to slow down aging

Here's my daily anti-aging "prescription" based on these breakthroughs in cellular and genetic research:

- A high-quality B vitamin complex that contains at least 200 mcg of folate, 50 mg of B6, 12 mcg of B12, 50 mg of B2, and 50 mg of choline
- 2-4 grams of betaine (or a serving of beets)
- 100 mg of CoQ10 (ubiquinol)
- 400 mg each of aspal and dandelion (you can find these combined in powders you can add to any beverage)
- 400 mg of blueberry powder (or a handful of fresh blueberries)

frequently cited as a contributing factor for many chronic diseases.

The new study looked at 48 African-American men and women with high blood pressure.

The participants were divided into two groups. One group followed a stress-reduction program that involved meditation and basic health education. The other group followed an extensive health program.

After 16 weeks, researchers measured both groups' blood pressure and their genetic expression associated with aging. Both groups showed improvements in each of these measurements.

Social support can outweigh diet and lifestyle factors

Based on this study, I am tempted to conclude that participating in *any* healthy group activity has longevity benefits. In particular, there are powerful stress-reduction benefits that come from having doctors and health professionals actually paying some attention to you and interacting in a healthful environment with other people.

In fact, as I noted in my special report *The Insider's Guide to a Heart-Healthy and Statin-Free Life*, research shows that over a lifetime, family and social support can outweigh the strongest dietary and lifestyle factors. (You can order a copy of this report by visiting my website, www.drmicozzi.com, or by calling 1-800-292-5808 and asking for order code GOV2S3AS.)

The Ornish diet program is a specific example of this phenomenon. People who participate in the diet program often report reduced blood pressure, which lowers their risk of heart disease. But the Ornish diet itself isn't all that healthy—it's much too high in carbs and low in healthy fats. It seems the benefits of learning, eating, cooking, and even food shopping in a social group interaction can aid in weight loss, and improved heart health, even if you do follow a poorly designed diet.

This reminds me of my father, Ed Micozzi (1927–2007). Dad was an independent, do-it-vourself kind of guy, bless him. After serving in World War II he went to work as a civilian with the U.S. Navy installing new radar systems in Turkey to detect threats behind the Iron Curtain. After that, he worked as an electrical and avionics engineer on NASA Apollo Lunar Missions. And finally, he rounded out his career as a business executive. With a lifetime spent in high-pressure work environments, it's no wonder he developed heart disease in the 1990s

Dad wanted to avoid heart surgery (for good reason), so we encouraged him to get into Dean Ornish's heart disease-reversal program in his city. It was really the only alternative we had at that time. (Remember, 20 years ago the popular medical myth was still "carbs are good and fats are bad." I suspected this was wrong, but it was not yet as crystal clear then as it has become now with recent exposure of all the medical myth-making.)

The Ornish program had just hit the scene, and dad could not get a space in his local program. So I talked to Dean Ornish himself, and introduced him to my parents during lunch at my annual natural medicine conference—which was co-chaired that year by Dean himself and former U.S. Surgeon General C. Everett Koop. Dean kindly called his local associate, Dr. Noel, who gave dad a spot in her Ornish program.

Some time later, I called dad to see how he was doing in the Ornish program. Much to my chagrin, he said he had found Dr. Ornish's book at the local drugstore. He had read it and was following the diet at home, rather than joining the community program! Of course, that was missing the whole point.

How meditation can boost your lifespan

Had we known about the longevity benefits of mindfulness meditation before my dad developed heart disease, I would have also encouraged him to meditate daily.

Beyond lowering the risk of heart disease, studies show that meditation can also help lower stress, anxiety, and depression in people with a chronic disease like cancer—and that can potentially help prolong life or even help reverse the disease.

And, as I reported in a February

NEWS BRIEF

New reseach reveals this common drug can slow down aging—and add almost 5 years to your life

I've said before that dementia might as well be called "type 3 diabetes." After all, as I reported in the February issue, controlling diabetes markers like blood sugar and hemoglobin A1c are key parts of my upcoming Alzheimer's prevention and reversal cure. And, of course, preventing type 2 diabetes is vital for reducing your risk of serious disease and increasing your longevity.

Metformin is a proven, safe way to fight both type 2 and 3 diabetes. Even though it's a drug, it has ancient natural roots derived from the ancient herbal remedy French lilac.

And research shows there are also beneficial anti-aging "side effects" for metformin, including preventing lung and pancreatic cancer and helping you maintain a healthy weight.

But it turns out metformin can do even more. New research suggests it may even be able to *slow down* the aging process.^{3,4}

Scientists studied the effects of metformin on animals, and found that the drug can increase lifespan by nearly 6 percent. That doesn't sound that impressive until you translate it into human terms. An 80-year-old could live almost *five years longer*, thanks to metformin!

All the benefits of fasting without skipping a single meal

Researchers believe metformin mimics some of the benefits of calorie restriction—without actually having to cut calories. I find this effect particularly interesting because some of the strongest lab experiments for the past half-century show that increases in longevity come from either fasting or restricting calories. Cutting calories lowers blood sugar and substantially reduces your chance of developing metabolic syndrome and obesity—all of which are major risk factors for a variety of fatal diseases.

Apparently, this research has even impressed the government. I'm hearing that the FDA has approved human trials on metformin's effects on longevity. Although, considering how long the average person lives, we could be waiting a very lengthy time to get final results!

I'm not the only doctor who's excited by metformin's longevity potential. Dr. Jay Olshansky of the University of Illinois recently said: "This would be the most important medical intervention in the modern era—an ability to slow aging."⁵

I met Dr. Olshansky when I gave a lecture to the medical residents at the University of Illinois medical campus in Chicago over 15 years ago. The new doctors-in-training were more interested in hearing about natural approaches to healing than were their faculty members—with the exception of Dr. Olshansky.

As old-line faculty challenged me, Jay spoke up in favor of my "new" healthcare ideas. I thought then that he would make a name for himself, and history has proven me right.

2015 *Daily Dispatch* ("Mindfulness meditation boosts brain density in just eight weeks"), short periods of meditation can actually increase brain matter. Which, of course, can help fight diseases like Alzheimer's.

Mindfulness and stress reduction has also been shown to influence healthful gene expression (including the genetic expression associated with aging) in studies conducted by the "father" of relaxation therapy, Herb Benson, at Harvard University. But you don't have to become a Buddhist monk to practice mindfulness meditation and gain its stress-reducing and anti-aging benefits. My book with Don McCown, *New World Mindfulness*, tells you how to practice mindfulness anytime, anywhere, in the middle of your busy life. (You can order a copy at www.drmicozzi.com or by calling 1-800-682-7319).

So, there you have it. The secret to living longer—and better—

isn't flowing from some mythical fountain of youth (which I actually addressed last month in the *Daily Dispatch* "Find your fountain of youth this April"). It's actually flowing within you.

And science shows that a common (but powerful) fruit, a few simple supplements, and meditation appear to be keys that will help you tap into it.

Citations available online at www.DrMicozzi.com

Shocking new research reveals this common "doctor-recommended" supplement makes you older, faster—and the dangers don't stop there

It has struck me for decades that most doctors are quick to caution against taking virtually every beneficial vitamin. Either because you theoretically (but never in practice) might "overdose" with fat-soluble vitamins, or you are just supposedly "wasting" water-soluble vitamins when they're excreted in the urine. (Of course, the best studies show this doesn't really happen, as I discuss in the sidebar on page 7.)

But at the same time, most doctors and public health experts are inexplicably committed to pushing the one supplement that really <u>is</u> dangerous—iron.

I've shared with you studies that show the vast majority of men, and most women (except for a few who are of childbearing age), do not need iron supplements. In fact, excess iron is a huge health hazard. It's been linked to increased risk of cancer, organ failure, heart disease, infections, and glaucoma.

And now, a recent study shows that too much iron can actually *accelerate the aging process*.

I'll tell you more about that in a moment, but first I'd like to share with you how iron works in your body—and why too much is so detrimental to your health.

Iron—the ultimate oxidant

Your body uses iron in hemoglobin of red blood cells to bind with oxygen in the lungs, carry that oxygen through the blood, and release it into the tissues—where it helps generate the energy and water necessary for your cells to do their jobs.

So yes, iron is an essential nutrient. But your entire body only needs a total amount of 4 grams of iron, which is easy to obtain from foods like beef, liver, clams, oysters, spinach, lentils, and beans.

In fact, taking iron supplements can cause excess iron to overload the tissues. And that leads to ionization—and acts as the mother of all oxidants.

Why is this so bad for your health? Well, we know that oxidants contribute to chronic diseases like cancer and cardiovascular disease. They also are culprits in inflammation, which contributes to everything from dementia to diabetes.

So, the more iron in your body, the more of these deadly oxidants you have circulating throughout your blood and tissues.

Of course, my faculty advisor in medical school, Dr. Baruch Blumberg, knew all of this decades ago. In fact, he was a pioneer in proposing that excess iron in the body increases the risk of cancer.

But although Dr. Blumberg had won the Nobel Prize in Medicine, that was not good enough for the bureaucrats at NIH-who refused to fund his research on this topic. So I worked with Dr. Blumberg and his colleagues to obtain funding instead from the Department of Energy (DOE), which has carried out a medical research program on radiation and ionization (like that caused by excess iron) since its days as the old Atomic Energy Commission. Unlike the NIH, this agency understood that the kind of ionization created by excess iron causes cancer (just as with atomic radiation).

Dr. Blumberg, his colleagues, and I obtained the funding from the DOE and did the research. And as you know, we showed that excess iron in the body is associated with an increase in *all* cancers in men and women. And, as I mentioned earlier, other research shows an overload of iron increases the risk of heart disease, infections, organ failure, and glaucoma.

Shocking research shows iron can age you 2.5 times faster

And now, recent lab research shows iron also accelerates the aging process.¹

The study was done in roundworms, which are used in many aging experiments because researchers can observe the entire life cycle.

Scientists already know iron plays a role in degenerative brain changes associated with aging—including Alzheimer's and Parkinson's diseases. But for this study, the researchers decided to see what happens in the *body* when roundworms are given supplemental iron.

First of all, the researchers found that minerals like iron, calcium, copper, and manganese increase in the body with age, but phosphorus and potassium decrease. Meaning that the older you get, the more you need to monitor which minerals you take in supplemental form.

The researchers then discovered that the roundworms given extra iron had an increase in signs of aging...and a reduction in the average lifespan and maximum longevity.

And not just a little increase, either. The researchers fed iron supplements to four-day-old worms, and noted that after just a couple days of this diet, they looked like 15-day-old worms.

Think about that. The worms given extra iron looked *two and a half times their age*. The researchers think this damage may be due to the surplus iron causing dysfunction in proteins that are associated with the aging process.

Fortunately, it's easy to prevent the havoc excess iron can cause in your body and brain.

As I always recommend, never take a supplement that contains iron unless you're diagnosed by your doctor as having iron-deficiency anemia. And you can safely lower your iron levels, and body iron stores, by being a regular blood donor, which is good for your health and your community.

Citations available online at www.DrMicozzi.com

The "overdose myth" and 4 vitamins you need more of

I've written many times about how research shows you can't really overdose on a fat-soluble vitamin like D—because the body simply stores excess D to ensure it has a constant, ready supply of this critical nutrient.

Vitamin E is another fat-soluble nutrient that falls victim to the "overdose" myth. That's because mainstream medicine simply doesn't understand there are eight different forms of active vitamin E. So the "recommended dose" is woefully low—meaning you can take many times more E to help prevent dementia, heart disease, and other inflammatory conditions.

When it comes to water-soluble vitamins, make sure to take vitamin C in two 250 mg doses per day, since your tissues can only handle this amount at one time. But make no mistake—we all need vitamin C *every* day.

For B vitamins, some people notice that their urine turns bright yellow after they've taken a daily B complex supplement. That's because your body excretes whichever B's it didn't need that day. If you're concerned about this, don't take a B complex one day, and then start taking it again the following day. You'll notice your urine doesn't have that bright yellow coloration. Meaning that after just 24 hours, your body used up all of its B vitamins.

I base my B complex dosage recommendations on the levels shown to be optimal in many studies: 50 mg a day of B1 (thiamine), 50 mg a day of B6, 400 mcg of folate (B9), and 100 mcg of B12. But, of course, people are different in their diets, and metabolically—which can affect supplement dosages. Still, I believe it's better that some people get a little extra B every day (with the excess harmlessly eliminated in the urine), versus a lot of people never getting enough.

The secret to feeling and acting younger that's been "hiding" on your kitchen counter all along

We have heard about the benefits of olive oil for years—both from researchers and generations of people who know their foods.

But lately, some Internet gurus have been trying to cast doubts about olive oil, claiming it has too many calories and too much fat to really be healthy. (Try telling that to Vito Corleone.)

The truth is, for decades, hundreds of scientific studies from around the world have demonstrated the benefits of olive oil for heart health, preventing strokes, and even lowering the risk of some cancers. And olive oil is a key part of the Mediterranean diet, which can help you maintain a healthy weight and live longer.

In addition to its benefits for the body, new research shows olive oil has cognitive benefits as well. A new study from Italy shows that consuming extra-virgin olive oil can significantly improve memory, anxiety levels, and coordination.

And even more amazingly, the researchers found that olive oil's polyphenols (antioxidant and antiinflammatory compounds) appear to affect regulation of a gene linked to memory.

The result? The middle-aged mice used in the experiment started behaving like they were young pups.

That's exciting news on its own, but it has even more significance on a public health level. I'll explain how in a moment, but first let's look more closely at this study.

How olive oil can tackle brain aging and more

Researchers gave the mice olive oil for six months. At the end of the study, the mice performed 74% better on motor coordination tests, and also had significant improvements in spatial memory and anxiety.

You may wonder why it's important to improve your spatial memory. Well, when that type of memory is combined with better coordination, it boosts your mobility—which helps you stay independent longer. And, as I explained on page 2, functional mobility is the singlebest predictor of longevity.

The aging mice that took this common kitchen staple started behaving like teenagers again.

So it's no surprise that the aging mice that took olive oil started behaving like teenagers again.

There's another important takeaway from this study as well. The researchers observed that most of the genetic changes in the mice were in the cerebral cortex—the area of the brain involved in attention, awareness, memory, perception, and related functions.

This observation provides support for the idea I outlined on page 1—that dementia is essentially brain aging. And that like physical aging, brain aging can be avoided or delayed with the right diet (including olive oil) and supplementation.

Furthermore, these "anti-aging" genes in the brain have an impressive range of functions, including helping to regulate bone and nerve health and glucose metabolism. Which once again shows how important the brain is for healthy aging.

Another thing that makes this study important is that by demonstrating the molecular genetics involved in olive oil's beneficial effects, it provides a "mechanism of action." I've told you before how mainstream medicine needs to see these mechanisms of action before it will finally accept what centuries of folk medicine, and decades of human population studies, have shown us about the health benefits of foods and supplements including olive oil.

In fact, these study results are so convincing, lead researcher Dr. Cristina Luceri stated that longterm treatment with olive oil could become part of a strategy for the prevention of brain aging and dementia.

So make sure your diet contains extra-virgin olive oil. A splash a day will do—either tossed over salad and vegetables, or as a healthy way to sauté meat or fish.

Citations available online at www.DrMicozzi.com