



Dr. Sears'

CONFIDENTIAL CURES

Your Guide to Truth and Lies in
Medicine from Around the World

April 2021

Vol. X Issue 4

Dear Friend,

Natural solutions get buried.

They're just not profitable...

Even when they have the potential to save you from chronic disease and add decades to your health span.

The National Institutes of Health (NIH) is a good example.

They're testing an existing anti-cancer drug called rapamycin as a "longevity pill" to slow down human aging.

Trouble is their rush to find a profitable marketing angle for anti-aging through their existing drug machine is not only unnecessary, but dangerous.

Especially when there are natural ways to approach this life-enhancing goal.

In this **Confidential Cures** issue I'll tell you about...

- **Autophagy — The Secret of Longevity?**
Your body's little-known form of cellular "self-cannibalism" that rids your body of dangerous, disease-causing debris. I'll explain how autophagy works and what it does. But most importantly, I'll also show you how you can activate autophagy to increase your health span safely and naturally — without dangerous Big Pharma drugs, like rapamycin.

- **Protect the "Good Guys" in Your Gut** — If you fail to keep your gut flora in a healthy, vigorous state... you may leave yourself vulnerable to chronic disease. I'm talking about cancer, diabetes, liver disease, metabolic syndrome, depression, Alzheimer's, and heart disease — the list goes on. They've all been linked to microorganism activity in the gut. I'll show you how to restore a healthy bacterial balance to your digestive system.
- **Is Lung Power the Secret to Avoiding COVID-19?** The coronavirus put your lungs in the spotlight, but not for the right reason. *Your lungs are not helpless targets of infection.* Truth is, your lungs have their own immune system. They have the power to resist and fight bacterial and viral infections, forming your first line of defense against unwanted invaders.

To Your Good Health,

Al Sears, MD, CNS

Also in This Issue...

Take Out Your "Cellular Trash" for a Longer HealthSpan	2
When Your Gut Cries 'SOS'... Feed it XOS	7
Is Lung Power the Secret to Avoiding COVID-19?	11

Take Out Your “Cellular Trash” for a Longer HealthSpan

The National Institute of Health is testing an anti-cancer drug called *rapamycin* as a “longevity pill.”

But it’s not only unnecessary, *it’s dangerous.*

You don’t need Big Pharma’s drugs to naturally increase your “health span,” and today, I’ll show you how to do it simply and effectively.

So why are they pushing rapamycin?

In a large dog study called the Dog Aging Project, researchers predict rapamycin will provide a 10% to 15% increase in an animal’s life and health span.

If the drug worked in humans like they think it will in dogs, scientists predict it could add an average of 11 extra years.

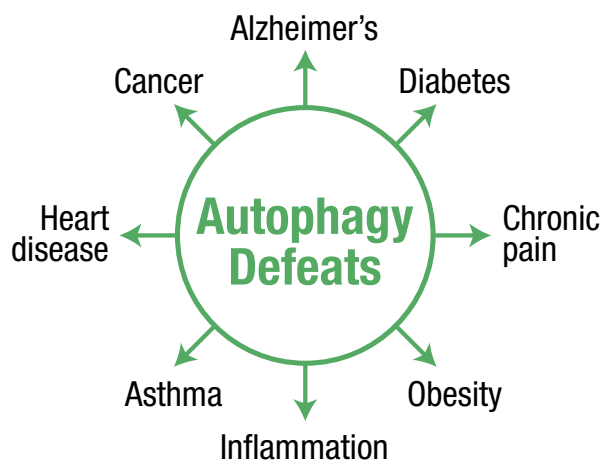
You see, rapamycin triggers a complex biological process called **autophagy**.

This little-known form of cellular “self-cannibalism” is how your body rids itself of dangerous waste and debris. If trash builds up, it eventually causes the chronic diseases we associate with aging.

In this **Confidential Cures** article, I’ll explain how autophagy works and what it does. But most importantly, I’ll also show you how you can activate autophagy to increase your health span safely and naturally — without Big Pharma’s dangerous drugs.

How to Clear Away Cellular Clutter

As you age, your body begins to accumulate the “dead weight” of damaged, dysfunctional, and other unnecessary cells. And if you don’t do something about it, it piles up in your body, like trash bags on garbage day.



Autophagy — or cellular self-cannibalism — is how your body clears away the toxic debris that causes chronic disease.

Clearing away this cellular trash involves a complex biological process called **autophagy**, which means “self-eating.”

This little-known form of cellular “self-cannibalism” is your body’s innate, natural way of ridding itself of this dangerous cellular debris.

Staying disease-free is dependent on your body’s autophagy leaping into action when needed. But between aging and decades of consuming the standard American diet, we’ve gradually lost this ability.¹

If you don’t do something about it, you look, feel, and act old because your body is carrying around so much cellular baggage.

In the brain, this dead weight can lead to Alzheimer’s. When it builds up in your pancreas, it interferes with the insulin-secreting beta cells and leads to diabetes.

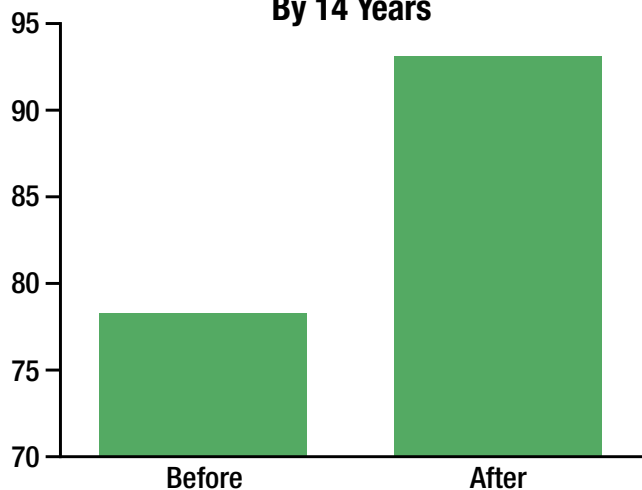
It can affect your heart, lungs, joints, and virtually any organ — and can lead to conditions like heart disease, hypertension, cancer, and arthritis.

In the last few years, several studies looked at the effects of autophagy on aging.

In one study, when researchers turned on genes that activate autophagy, the median **life span of mice increased 17.2%**.² That translates to an incredible 14 additional human years — increasing a person’s life span from 78.5 to 92.

But these animals didn’t just live longer. *They were also healthier.* They maintained lower body weight than normal mice well into older age. They had increased insulin sensitivity, indicating improved metabolic health. And they had better physical functioning.

Activating the Genes that Regulate Autophagy Increases Lifespan By 14 Years



When researchers activated autophagy in mice, their median lifespan increased more than 17%. That translates to an additional 14 human years.

When the researchers turned off the autophagy process, all these benefits disappeared.

Studies have shown that turning on autophagy with fasting is a powerful treatment for:

- **Heart disease:** Autophagy therapy cuts heart disease risk 77%.³
- **High blood pressure:** Another study tested autophagy therapy on 174 people with hypertension. After three weeks, 90% of participants had readings below the “high” threshold of 140/90mm Hg.⁴

- **Diabetes:** Researchers completely reversed diabetes in mice within six weeks.⁵
- **Cancer:** The National Cancer Institute found increased levels of plasma protein carbonyl in patients with certain cancers. Autophagy therapy reduced carbonyl by 73.3%.⁶
- **Arthritis:** Numerous studies show activating autophagy is a powerful weapon against the inflammation that causes arthritis.⁷

Fortunately, there are easy, natural ways you can speed up autophagy, improve your health span — and slow down aging. In a moment I’ll share the best ways to do this.

But I strongly advise that you DON’T use the following two methods...

You Don’t Need Big Pharma’s Dangerous Drugs To Turn On Autophagy

Researchers investigating ways to increase autophagy focus on two primary methods.

The first is using rapamycin, which has not been proven safe in studies.

Rapamycin was a natural antifungal discovered in soil bacteria in 1972. It works by suppressing a mechanism that controls cell growth. You see, rapamycin suppresses your immune system. It’s FDA approved for people who undergo organ transplants to keep their bodies from rejecting the donated organ.

The FDA even slapped a “black box” warning on the drug. That’s the agency’s most extreme warning for drugs that come with “serious or life-threatening risks” — like infections, pneumonia, and cancer.

The second method researchers are studying to improve autophagy is to turn on an enzyme in the body’s cells called AMPK. But again, their focus is on another pharmaceutical — in this case the diabetes drug metformin.

In fact, the Institute for Aging Research at Albert Einstein College of Medicine announced they’re starting a six-year study to test the life-extending properties of metformin on 3,000 older adults.

As someone who is interested in health and longevity, I’m sure you’ve heard that some anti-

aging specialists hail this diabetes drug as an “anti-aging miracle.”

Not only do I disagree, I warn my patients not to take it.

Metformin comes with a long list of side effects. These include nausea and vomiting, diarrhea, dizziness, fatigue, sinus infection, heart failure, muscle pain and flu-like symptoms.

And over time, metformin blocks your body’s ability to absorb vitamin B12 which is critical to your health.⁸

But many people — including doctors and scientists — believe metformin is an anti-aging powerhouse because it can boost levels of an enzyme called *AMP-activated protein kinase (AMPK)*.

INCREASE This Anti-Aging Enzyme

AMPK truly is an anti-aging wonder. Found in every cell in your body, it functions as an energy sensor... and turns on when your cellular energy levels are low. It’s often referred to as your “master metabolic switch.”

Your body produces energy in its mitochondria. This energy is called *adenosine triphosphate*, or *ATP*. It fuels everything your body does.

As the energy-creating process gets going, ATP is converted into AMP (adenosine monophosphate), which tells the cell it needs more fuel. That’s when AMPK gets moving, jumpstarting the transport of glucose and fats to your mitochondria so it can make more ATP.

The problem is that as you age, AMPK activation slows down. That means less ATP and more malfunctioning cells, which leads to inflammation and disease.

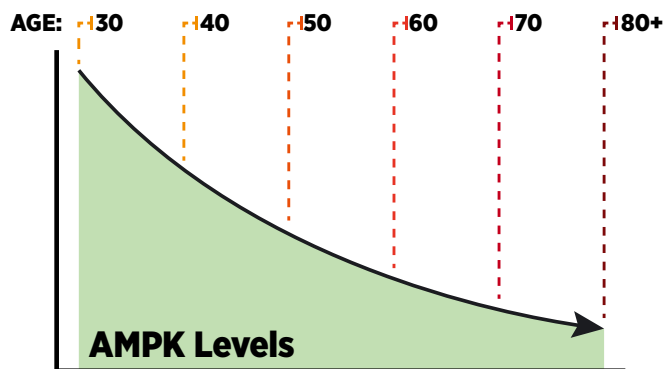
Low ATP production is the reason you slow down as you age. But when AMPK is activated, your cells jump into survival mode.

DECREASE This Aging Enzyme

There is a second regulatory protein that affects autophagy in the body called mTOR. It works in the *opposite* way that AMPK does.

When mTOR is activated, it suppresses autophagy.

AMPK Levels Decline As You Age



AMPK activation slows down with age, but once it is activated, your cells become healthier and live longer.

The number-one way mTOR gets switched on is by consuming too many calories. Eating three grain-based meals a day, plus snacking, stops autophagy from happening. It also explains why more and more younger people are developing diseases that once only affected older populations — the so-called diseases of aging like diabetes, heart disease, obesity, and other metabolic disorders.

Too much body fat is partially caused by excess mTOR that turns down autophagy’s natural elimination of cellular fat, damaged proteins, and other metabolic garbage.⁹ Normal aging results in autophagy decline unless interventions are initiated such as intermittent fasting and/or aggressive exercise. Fortunately, there are natural ways to improve autophagy even in those who don’t follow optimal dietary programs.

In simple terms, mTOR exists in almost every cell, where it controls a host of metabolic functions. It monitors numerous environmental cues, including carbohydrate and amino acid concentrations and several growth factor hormones. It constantly balances all these against current needs, surpluses, and deficits.

Depending on system needs (or stress), mTOR may promote cell growth and proliferation, or simply maintain homeostasis. Its role in maintenance and repair includes the vital cellular “house-cleaning” function of *autophagy*. In this process, dead cells and cellular debris are consumed and recycled by the body.

When mTOR is activated, it suppresses this important autophagy function, since cells stay in

growth mode. Therefore, this also leads to an accumulation of cellular “trash” that further erodes health.

Thus, the more we eat, and the more often we eat, the more we risk “unwanted” or excessive mTOR activation. This includes all macronutrients — even fat, which at least in the laboratory has also been shown to activate mTOR.

“Activating autophagy can reduce excess inflammation by 86%.”

STOMP OUT the Root of All Chronic Disease

As a regular reader, you know that inflammation is the root cause of almost every chronic disease of our times.

Inflammation is your body’s attempt to heal itself. But too much causes disease. In fact, most of the chronic ailments associated with aging are inflammatory diseases. That includes cancer, heart disease, arthritis, arteriosclerosis, Alzheimer’s, and diabetes.

But activating autophagy can reduce excess inflammation by 86%. Let’s look at one example of how it works.

Researchers at Stanford University rounded up people suffering from one of the worst chronic inflammation diseases — asthma. This condition is the result of inflamed airways in the lungs.

In this study, researchers activated autophagy in volunteers. One month later the researchers were stunned, calling the results “*striking*.” The decrease in inflammation and oxidative stress was incredible.

They recorded:

- 71% decrease of inflammatory marker TNF α
- 60% decrease of inflammatory marker BDNF
- 57% decrease of inflammatory marker ceramides
- 73% decrease of oxidative stress protein carbonyl

How to Activate Autophagy Easily and Naturally

Luckily, you don’t need Big Pharma’s rapamycin or metformin to clear away metabolic waste from your aging cells.

To activate autophagy naturally, this is what I recommend:

1. Take A Powerful Antioxidant Called Luteolin. This plant flavonoid has been found to activate

AMPK while inhibiting mTOR activity.¹⁰ This works to turn on cellular metabolism and autophagy. In studies, it was found to decrease inflammation and protect against brain injury and brain fog,^{11,12} heart disease,¹³ and cancer.¹⁴

The best way to get luteolin is through your diet. My top picks for foods and herbs rich in luteolin include celery, thyme, artichokes, oregano, olive oil, parsley, broccoli, spinach, beets, and rosemary.

Another unique source of luteolin is **propolis**. That’s the resin bees use to make their honeycombs. You can find it in most health food stores.

It can be hard to get enough luteolin through food alone. If that’s the case, you can supplement. Luteolin is available as a powder, pill, or chewable tablet. I recommend taking 8 mg to 10 mg daily.

2. Activate AMPK With The “Vine Of Immortality.” I recommend you supplement with a member of the cucumber family known as *Gynostemma pentaphyllum*.

In China, researchers discovered that a tea made from *G. pentaphyllum* is key to the surprising number of centenarians in one region.¹⁵ Today, we know it works by promoting AMPK activity.

I recommend taking 150 mg a day in capsule form. Or, you can use the vine of immortality the traditional way... with a cup of immortality tea.

3. Practice Calorie Restriction: One of the most effective ways to trigger autophagy is by using a technique called intermittent fasting — which mimics the ancient primal lifestyle of “feast and famine.”

For hundreds of thousands of years, humans had no reliable food sources. Our ancestors feasted when hunting was good. Then they had to survive periods of famine.

Over hundreds of thousands of years, these cycles of feast and famine became ingrained in the genetic code that’s coiled inside every one of your cells.

You might think starvation would drain their energy. But in fact, your power is increased. Short bouts of fasting ramps up the energy production in your cells.

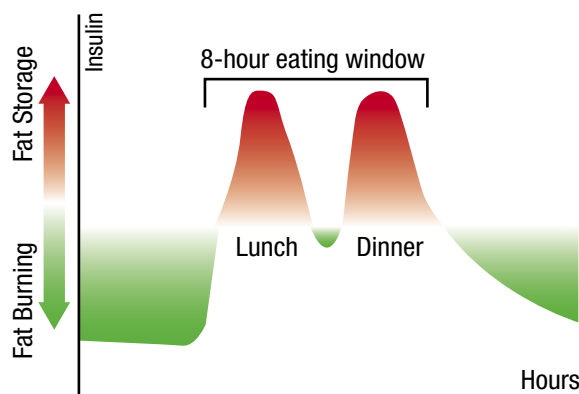
That's because as you evolved, fasting became part of your body's hidden power to survive and thrive.

And fasting kicks autophagy into high gear — and starts to work in as little as 24 hours.¹⁶

Then you fast for the remaining 16 hours. Here's an example. You eat breakfast at 10 a.m. and lunch around 1 p.m. Dinner is over by 6 p.m. with no additional food until the next day.

2. Then move to the 20:4 fast. You can do the 16:8 fast every day. But once a week or so, I recommend doing a longer 20:4 fast. It has a four-hour eating window followed by 20 hours of not eating. I suggest eating between 1 p.m. and 5 p.m. Aim for one or two small meals during this time.

INTERMITTENT FASTING GIVES YOU A FULL 8-HOUR EATING BLOCK EVERY DAY



Red peaks reflect 10 a.m., 2 p.m. and 6 p.m. with green fields reflecting fasting times.

Once your body is accustomed to fasting for 16 hours, you can then fast for a full day once a month.

Try These Simple Fasts To Get You Started

Today we're used to eating three meals a day, plus snacks. That can make fasting seem insurmountable. I recommend starting out with intermittent fasting. There are two kinds I suggest:

1. Start with a simple 16:8 fast. This plan involves fasting for 16 hours. In other words, you have an 8-hour time period in which you can eat.

References:

- Hansen M, et al. "Autophagy as a promoter of longevity: insights from model organisms." *Nat Rev Mol Cell Biol.* 2018 Sep;19(9):579-93.
- Pyo JO, et al. "Overexpression of Atg5 in mice activates autophagy and extends lifespan." *Nat Commun.* 2013;4:2300.
- Horne B., et al. "Usefulness of routine periodic fasting to lower risk of coronary artery disease among patients undergoing coronary angiography." *Am J Cardiol.* 2008 October 1.
- Goldhamer A., et al. "Medically supervised water-only fasting in the treatment of hypertension." *J Manipulative Physiol Ther.* 2001 Jun.
- Lesica N. "Intermittent fasting could help tackle diabetes — here's the science." *The Conversation.* August 21, 2017.
- Rossner P., et al. "Plasma protein carbonyl levels and breast cancer risk." *J Cell Mol Med.* 2007..
- Kjeldsen-Kragh J, Haugen M, et al. "Controlled trial of fasting and one-year vegetarian diet in rheumatoid arthritis." *Lancet.* 1991 Oct 12;338(8772):899-902.
- Aroda V, et al. "Long-term metformin use and vitamin B12 deficiency in the diabetes prevention program outcomes study." *J Clin Endocrinol Metab.* 2016 Apr; 101(4): 1754–1761.
- Mao Z, Zhang W. "Role of mTOR in glucose and lipid metabolism." *Int J Mol Sci.* 2018 Jul 13;19(7).
- Ou HC, Pandey S, Hung MY, et al. "Luteolin: a natural flavonoid enhances the survival of huvecs against oxidative stress by modulating ampk/pkc pathway." *Am J Chin Med.* 2019;47(3): 541-57.
- Tan X, et al. "Luteolin Exerts Neuroprotection via Modulation of the p62/Keap1/Nrf2 Pathway in Intracerebral Hemorrhage." *Front Pharmacol.* 2019; 10: 1551.
- Theoharides T, et al. "Brain 'fog,' inflammation and obesity: key aspects of neuropsychiatric disorders improved by luteolin." *Front Neurosci.* 2015; 9: 225.
- Hu J, et al. "Luteolin alleviates post-infarction cardiac dysfunction by up-regulating autophagy through Mst1 inhibition." *J Cell Mol Med.* 2016 Jan;20(1):147-56.
- Ashrafizadeh M, et al. "Autophagy regulation using luteolin: new insight into its anti-tumor activity." *Cancer Cell Int.* 2020. 20, 537.
- Blumert M and Liu J. *China's Immortality Herb.* Badger, California: Torchlight Publishing, Inc. 1999.
- Alirezai M, et al. "Short-term fasting induces profound neuronal autophagy." *Autophagy:* v.6(6); 2010 Aug 16PMC3106288 . 2010 Aug 16; 6(6):702–710.

When Your Gut Cries ‘SOS’... Feed it XOS

Today you hear a lot about your gut. Even as recently as twenty years ago, it wasn't something the mainstream was talking about at all.

But I've been telling my readers for years if you do everything else right... but fail to keep your gut flora in a healthy, vigorous state... you may leave yourself vulnerable to chronic disease.

I'm talking about cancer, diabetes, liver disease, metabolic syndrome, depression, Alzheimer's, and heart disease — the list goes on. They've all been linked to microorganism activity in the gut.

Patients who come to my clinic have often been frustrated by their experience with the conventional approach to medicine: **Diagnose you, then drug you.**

It never addresses the core problem. In this case, the health of your gut.

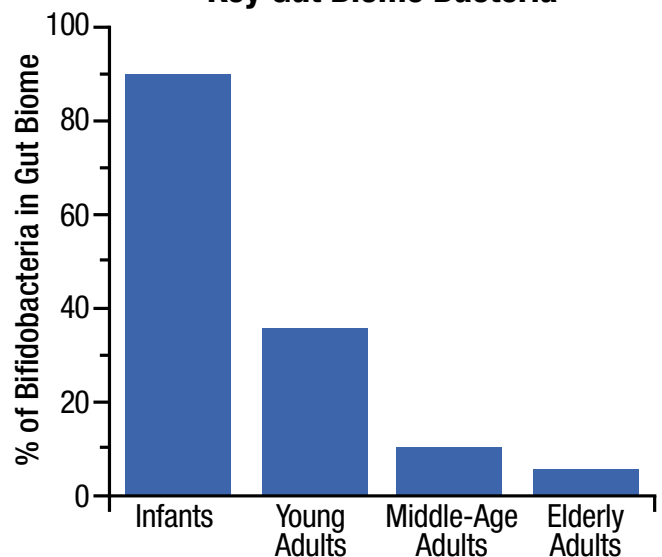
The great innovator Thomas Alva Edison put it this way: “The doctor of the future,” he said in 1903, “will give no medicine, but will have interest in the care of the human frame, in diet, and in the cause and prevention of disease.”¹

As much as I favor that sentiment, protecting your health seems to grow harder with each passing year. Environmental toxins, antibiotics, and Big Agra's processed carbs and chemical additives constantly disrupt your gut flora, throwing them dangerously out of balance.

It's hard to overstate the importance of a healthy gut biome. Think about it:

- 95% of your mood-and-anxiety neurotransmitter *serotonin* are generated there.
- About 80% of your plasma cells reside in the GI tract and surrounding tissues.
- And it accounts for about 70% of your entire body's immune cells.²

Age-Related Decline In Key Gut Biome Bacteria



Having the right bacteria in your gut keeps you young... until they get old. “Bad” gut bacteria take over unless you reverse the trend.

But it's fascinating that many of the diseases ravaging post-industrial societies are *virtually unheard of* among remote hunter-gatherers.

I've seen it first hand when I've visited some of the last remote tribes on the planet. These hunter/gatherers ate a diet very close to what our primal ancestors ate thousands of years ago... and you can't help but see the difference.

They have radiant skin, full hair, bright eyes, and boundless energy. And their elders are robust instead of infirm.

You've heard me talk about Dr. Weston A. Price, the globe-trotting Cleveland dentist and medical pioneer sometimes called the “Isaac Newton of nutrition.” He documented this same trend over 50 years ago.³

More recently, when researchers analyzed the microbiome of the Hazda, a remote group of hunter-gatherers in Tanzania who live today much as our

primal ancestors did millennia ago, they found their gut flora to be strikingly different from that of modern people.

Primal gut microbiomes are far more diverse, and therefore far more stable.⁴ Gut flora diversity leaves them better able to adapt to the stress of a changing environment.⁵

In this *Confidential Cures* article, I'll share how you can fight back against the factors constantly threatening to turn your gut into a vast, microbial wasteland. You'll see how even small amounts of a little-known prebiotic with a big name — **xylooligosaccharides, also known as XOS** — can restore a healthy bacterial balance to your digestive system... and it does it in as little as 14 days!

You are What (Your Gut Bacteria) Eats

Ask a mainstream doctor how you can nurture healthy gut flora and they're likely to tell you to add a probiotic yogurt to your diet.

Sounds healthy enough. Unfortunately, it's the sort of simplistic advice that can wreck your health.

You see, most of the "all-natural" yogurt brands in your grocery store contain **more sugar than a Twinkie**.⁶ That's incredible. The very food they are recommending as healthy can actually increase the bad bacteria in your gut. Many are also loaded with sweeteners and high-fructose corn syrup that are linked to heart and liver disease.⁷

As disease-causing bacteria snack on sugary carbs, friendly gut bacteria like *Bifidobacterium lactis*, *Lactobacillus plantarum*, and *Lactobacillus casei* face a daily battle for survival.

Left unchecked, these threats can rob you of the short chain fatty acids, conjugated linoleic acid, and B vitamins that your body simply must have to stay healthy. Eventually, nutrient depletion and pathogenic bacteria take a toll on your health.

Bifidobacteria keep that from happening. They're the most prevalent beneficial bacteria you have.

Bifidobacteria, actually a genus spanning 32 different types, can help lower your triglycerides

“By the time most people hit their 80s, Bifidobacteria in the digestive tract are pretty much an endangered species.”

to protect your heart, reduce inflammation, boost immunity, and keep cancer from taking hold in your colon.

Most importantly, they keep pathogenic bacteria in check, preventing them from taking over your gut.

They're the undisputed champions of a healthy gut biome. But there's one formidable enemy they can't overcome without help... time.

Gut Instinct: Nurture Your Microbiome

The problem is Bifidobacteria levels drop sharply as you enter adulthood.

In infants they comprise approximately 90% of the total gut microbiome.⁸ By adulthood, it's already plummeted to about 35%. And in middle age it drops to about 10%.

The slide doesn't stop there, either. By the time most people hit their 80s, Bifidobacteria in the digestive tract are pretty much an endangered species, **making up less than 5% of the gut flora in elderly adults**.^{9,10}

That's a massive imbalance, and it's an engraved invitation for opportunistic pathogens like *Clostridium difficile* or *H. Pylori* to move in and multiply unchecked.

This drastic drop in Bifidobacteria leaves pathogenic bacteria free to ignite systemic inflammation. Over time, that can burden you with chronic disease. A dysfunctional microbiome, for example, is now widely viewed as a precursor to Type 2 diabetes.¹¹

Now for the good news: There's a natural remedy for the age-driven decline of Bifidobacteria. It doesn't require drugs or side effects, and it only takes a couple of weeks for the turnaround to begin.

It's a new twist on a unique dietary fiber you may already have heard of. I'm not talking about *probiotics*. I'm talking about *prebiotics*.

Let me explain....

Disease-Proofing Your Gut

Prebiotics and probiotics are two different answers to the same question: How do you nurture a healthy microbiome?

I like to use the analogy of a garden. One approach to make it grow is to plant a lot of seeds (probiotics). That will work as long as conditions are right for them to grow.

Another approach is to provide fertilizer. This enriches the soil to stimulate growth. That's the function of prebiotics.

When my patients ask me which one of those strategies they should pursue, I recommend: Do both. Getting the gut-bacteria balance correct is just too important.

Prebiotics are natural, indigestible plant fibers that linger in the gut and undergo fermentation. This stimulates the growth of healthy bacteria that unlock nutrients your body needs to thrive.

Prebiotics are a special form of fiber that can survive the acidic journey through your digestive tract. Long after other fibers have been broken up and absorbed, prebiotic fibers are still working overtime to provide a good growth medium for your healthy bacteria.

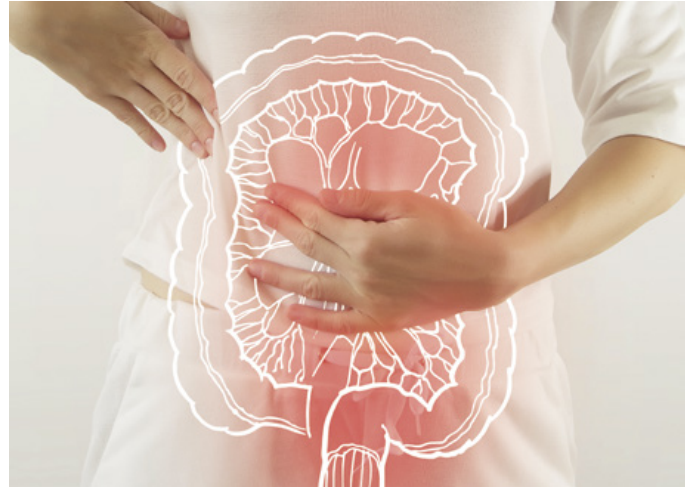
There are several different kinds of prebiotics, including inulin and chicory fiber... and some are better than others.

Lately, the spotlight has turned to a prebiotic with a name almost as long as its list of benefits. It's a special plant fiber called xylooligosaccharide (pronounced zai-low-ol-i-goh-sak-uh-rahyd), more commonly called XOS.

When Your Gut Cries 'SOS'... Feed it XOS

XOS occurs naturally in bamboo shoots, corn husks, rice husks, eucalyptus wood, and in smaller amounts in some vegetables, milk, and honey. And it has several remarkable characteristics.

Your all-important Bifidobacteria *love* to dine on XOS. Research shows just a gram or two each day of XOS is sufficient to restore your vital gut microbiome. Soon, your gut microbiome appears healthier, better balanced, and brimming with active Bifidobacteria.



Feeding your gut a unique prebiotic called XOS eliminates the growth of harmful bacteria, balances your gut microbiome, and improves overall health.

Among the revelations from recent XOS research:

- **A UCLA study** on 32 healthy adult subjects compared the effect of a lower daily dose of 1.4 grams of XOS to a higher dose of 2.8 grams of XOS. In just a few weeks, both groups saw Bifidobacterium levels climb. The 1.4 gram group saw a 7% jump in Bifidobacterium, while levels in the 2.8 gram group increased by over 15%. They also enjoyed “significant” drops in triglycerides and glucose levels.¹²
- **A second UCLA study** reported XOS supplementation led to “dramatic shifts” in gut microbiota in both healthy and pre-diabetic subjects. Researchers reported XOS “diminished or reversed” declining populations of beneficial bacteria.¹³
- **Ten people** in another study took 1.2 grams of XOS a day for six weeks and showed a “significant increase” in Bifidobacterium *plus* “significantly lower” levels of Clostridium *perfringens*, a dangerous disease-causing bacteria that causes colitis.¹⁴
- **Researchers in Seoul, South Korea** reported “significantly increased” Bifidobacterial counts after just 14 days of XOS supplementation.¹⁵

There's another, very practical reason why XOS is gaining notice. Unlike regular prebiotics that require between 10 and 20 grams a day to be effective, XOS only takes about 3 grams a day. That saves you a lot of bloating, stomach discomfort, and digestive issues. Side effects appear to be virtually nonexistent.

So the evidence is in. Just a few grams a day of XOS can make a big difference in your lifelong health.

Boost your XOS, ASAP!

Here are four ways you can halt and even reverse the age-related decline of your beneficial Bifidobacteria:

1. Put your gut to the test – There are several at-home tests you can find online that give you a snapshot analysis of your gut microbiome. Some even perform genetic sequences of the microorganisms in your gut. By periodically testing your microbiome, you'll have a good baseline to indicate how it's changing. Be sure the testing service analyzes the relative strength of your beneficial bacteria to help guide your efforts.

2. Stop killing your good bacteria! – Avoid harming your beneficial microbiota. Cut back on heavily processed carbs and meat soaked in additives and preservatives. Antibacterial residues in food can really wallop the good bacteria in your gut, which is why I recommend grass-fed beef. Also, studies show artificial sweeteners, especially saccharin and sucralose, alter your gut microbiota and decrease healthy bacteria. I tell my patients to use honey instead, a natural source of XOS.

3. Add XOS to your diet – Natural food sources are always best. You can get modest amounts of XOS in fruits and vegetables, as well as milk and honey.¹⁶ But because food sources contain only a modest amount of XOS, you'll need a supplement to fully stimulate healthy Bifidobacteria colonies.

4. Shop for a good XOS supplement – When it comes to XOS, be sure to check the label. Fructooligosaccharides (FOS) and galactooligosaccharides (GOS) are good sources of indigestible fiber. But they lack XOS's powerful effect on Bifidobacteria. (They also require a much larger serving, possibly causing digestive issues.)

Make sure the label specifies xylooligosaccharides, and keep an eye on portion size, too. My advice is only buy supplements that offer *at least* a 2.8 gram portion of XOS. That's the level at which XOS really becomes effective. Any product offering XOS should stipulate on the label how much you're getting.

References:

1. Buckenmaier, C., MD, COL, MC, & USA. (2018, October 5). "The doctor of the future will give no medication but will interest his patients in the care of the human frame, diet and in the cause and prevention of disease"—Thomas A. Edison (1847-1931)". Retrieved from U.S. Medicine website: <https://www.usmedicine.com/editor-in-chief/the-doctor-of-the-future-will-give/>
2. Vighi, G., Marcucci, F., Sensi, L., Di Cara, G., & Frati, F. (2008). Allergy and the gastrointestinal system. *Clinical & Experimental Immunology*, 153, 3–6. <https://doi.org/10.1111/j.1365-2249.2008.03713.x>
3. "Dr. Weston A. Price Movietone." Retrieved April 14, 2021, from The Weston A. Price Foundation website: <https://www.westonaprice.org/about-us/dr-weston-a-price-movietone/>
4. Schnorr, S. L., Candela, M., Rampelli, S., Centanni, M., Consolandi, C., Basaglia, G., ... Crittenden, A. N. (2014). Gut microbiome of the Hadza hunter-gatherers. *Nature Communications*, 5(1). <https://doi.org/10.1038/ncomms4654>
5. Blaser, M. J., & Falkow, S. (2009). What are the consequences of the disappearing human microbiota? *Nature Reviews Microbiology*, 7(12), 887–894. <https://doi.org/10.1038/nrmicro2245>
6. Wise, A. (2014, May 26). "These Yogurts Have More Sugar Than A Twinkie." Retrieved from HuffPost website: https://www.huffpost.com/entry/yogurt-sugar-twinkie_n_5379590
7. "How high fructose intake may trigger fatty liver disease." (2020, September 14). Retrieved from National Institutes of Health (NIH) website: <https://www.nih.gov/news-events/nih-research-matters/how-high-fructose-intake-may-trigger-fatty-liver-disease>
8. Rivière, A., Selak, M., Lantin, D., Leroy, F., & De Vuyst, L. (2016). Bifidobacteria and Butyrate-Producing Colon Bacteria: Importance and Strategies for Their Stimulation in the Human Gut. *Frontiers in Microbiology*, 7. <https://doi.org/10.3389/fmicb.2016.00979>
9. Ross, R. P., & Arbolea, et al., S. (2016, August 19). Gut Bifidobacteria Populations in Human Health and Aging. Retrieved from Frontiers in Microbiology website: <https://www.frontiersin.org/articles/10.3389/fmicb.2016.01204/full>
10. Downey, M. (2020) "How To Achieve a Healthy Life With Prebiotics." Retrieved April 2, 2021, from <https://www.lifeextension.com/magazine/2020/11/prebiotics-for-better-health>
11. Gurung, M., Li, Z., You, H., Rodrigues, R., Jump, D. B., Morgun, A., & Shulzhenko, N. (2020). Role of gut microbiota in type 2 diabetes pathophysiology. *EBioMedicine*, 51. <https://doi.org/10.1016/j.ebiom.2019.11.051>
12. Finegold, S. M., Li, Z., Summanen, P. H., Downes, J., Thames, G., Corbett, K., ... Heber, D. (2014). Xylooligosaccharide increases bifidobacteria but not lactobacilli in human gut microbiota. *Food & Function*, 5(3), 436–445. <https://doi.org/10.1039/C3FO60348B>
13. Yang, J., Summanen, P. H., Henning, S. M., Hsu, M., Lam, H., Huang, J., ... Li, Z. (2015). Xylooligosaccharide supplementation alters gut bacteria in both healthy and prediabetic adults: a pilot study. *Frontiers in Physiology*, 6. <https://doi.org/10.3389/fphys.2015.00216>
14. Lin, S.-H., Chou, L.-M., Chien, Y.-W., Chang, J.-S., & Lin, Ching-I. (2016, August 29). Prebiotic Effects of Xylooligosaccharides on the Improvement of Microbiota Balance in Human Subjects. Retrieved April 11, 2021, from Gastroenterology Research and Practice website: <https://www.hindawi.com/journals/grp/2016/5789232/>
15. Na, M. H. (Dankook U., & Kim, W. K. (Dankook U. (2007). Effects of Xylooligosaccharide Intake on Fecal Bifidobacteria, Lactic acid and Lipid Metabolism in Korean Young Women. *The Korean Journal of Nutrition*. Retrieved from <https://agris.fao.org/agris-search/search.do?recordID=KR2007003116>
16. Vázquez, M. J., Garrote, G., Alonso, J. L., Domínguez, H., & Parajó, J. C. (2005). Refining of autohydrolysis liquors for manufacturing xylooligosaccharides: evaluation of operational strategies. *Bioresource Technology*, 96(8), 889–896. <https://doi.org/10.1016/j.biortech.2004.08.013>

Is Lung Power the Secret to Avoiding COVID-19?

The coronavirus pandemic put lungs in the spotlight. But not for the right reason.

Typically, the focus is on ventilators and **acute respiratory distress syndrome (ARDS)** that accompanies more serious cases of COVID-19.

So why aren't doctors telling the public the real truth?

Your lungs are not helpless targets of infection.

Truth is, your lungs have their own immune system. They have the power to resist and fight bacterial and viral infections, forming your first line of defense against unwanted invaders.

In this **Confidential Cures** article, you'll discover there are simple yet powerful ways to strengthen your lung power and protect against lung diseases, including ARDS, COPD, coronavirus, bronchitis, and emphysema.

I'm also going to tell you about the No. 1 "precursor" proven to be hugely beneficial for almost every respiratory illness... and the steps you can take to build real lung strength, so you can stay healthy and active for the rest of your life.

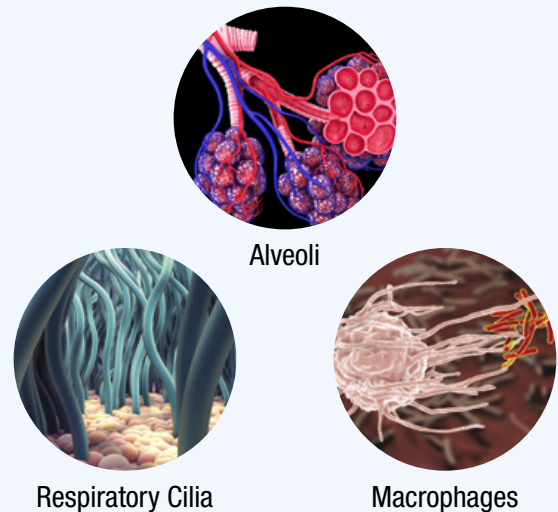
Your Best Predictor of Health and Longevity

Lung power is the number-one predictor of how long you'll live. How well you breathe determines how long you'll stay active and healthy.

It also determines how vulnerable you are to dangerous respiratory infections — and how quickly you'll recover if you pick up one of these nasty bugs.

In fact, the Buffalo Health Study — an ongoing research project involving 12,000 people in western New York State — found that the stronger your lungs are, the **less likely you'll die of any cause.**

Your Lungs Have Their Own Immune System



Epithelial cells in your alveoli, or air sacs, exchange oxygen and carbon dioxide and secrete mucus to trap unwanted particles. Small hairs called cilia remove unwanted debris that lead to infection. The lining of the lungs contain specialised white blood cells called macrophages, which engulf and destroy foreign invaders.

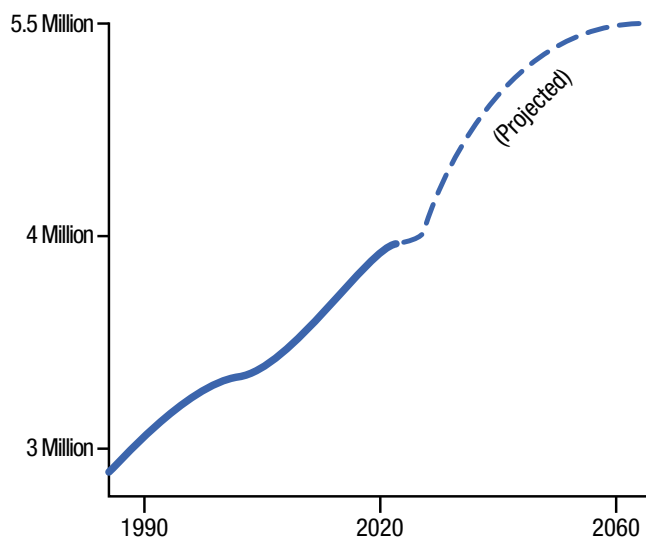
But weak lungs are an epidemic.

While mortality rates of chronic conditions like cancer and heart disease have been falling in recent years, *lung disease* is now killing more people than ever before.

Recent research published in the *British Medical Journal* revealed that respiratory illnesses have been surging under the radar for the past 30 years — and now accounts for a shocking 4 million deaths globally every year.¹ And it's a major cause of disability for millions more.

Chronic lung disease like *chronic obstructive pulmonary disease (COPD)*, *bronchitis* and *asthma* are the most widespread conditions, but others like *pneumoconiosis* (caused by dust inhalation), *interstitial lung disease*, as well as *pulmonary scarring* and *inflammation* are also common health burdens.

Global Respiratory Disease Deaths



Hidden epidemic... The number of deaths from lung diseases around the world has surged over the last 30 years — and they're expected to keep rising. Source: WHO

In America, lung disease is the fourth leading cause of death, according to the CDC² — but that's not including severe lung infections, like pneumonia, which can strike as a secondary complication, and often deal a fatal blow.

The loss of global lung health has a number of roots — including smoking, secondhand smoking, increased levels of environmental pollution, excess weight gain and our sedentary lifestyle.

A study conducted across four continents by YouGov, the market research group, showed that despite the rising incidence of lung disease, most people remain far more concerned about cancer, heart disease, Alzheimer's and stroke.³

Why Lung Power is So Critical

Your lungs are essential to every aspect of your life. They serve two very important functions. First and foremost, they allow your body to take in oxygen. Your lungs also cleanse your blood of toxins caused by everyday living.

Reduced lung power impacts your brain and heart health, and the ability of your arteries to pump life-giving blood and oxygen to every part of your body, including all your vital organs.

Without enough lung power, you risk a dangerous oxygen deficit in every cell, tissue, organ and organ system in your body.

And without enough oxygen your body's key cellular processes slow down.

- You lose vitality and stamina, and become short of breath.
- Your cells lose the energy they need to repair DNA.
- Your immune system slows down.

You also raise your risk of serious diseases — including *cancer*, *COPD*, *idiopathic pulmonary fibrosis (IPF)* and amyotrophic lateral sclerosis (ALS).

Low lung power also means your heart isn't as strong as it should be, your circulation slows down and not enough oxygen reaches your brain, raising the risk of cognitive decline.⁴

Lung diseases and infections trigger dangerous inflammatory responses. They reduce lung capacity and dramatically lower your body's oxygen levels.

This in turn causes your airways to produce excess mucus, resulting in inflamed, irritated and clogged lungs. Your air tubes become narrower and restrict the flow of air in and out of your lungs, making it difficult for you to breathe.

It's not surprising that the Framingham Heart Study, which reviewed 60 years of data, and the American College of Chest Physicians' 29-year follow-up study, both found poor lung health to be the primary indicator of all-cause mortality.^{5,6}

How Big Are Your Lungs?

Most mainstream doctors still ignore the vital importance of lung power. But they shouldn't.

I always recommend that patients with any breathing issues take a straightforward *spirometry* test and pay careful attention to *inspiratory capacity*, or *IC*.

This is one of the best ways to determine the health of your lungs. IC measures the total volume of air you take in during normal breathing activity.

An adult's normal inspiratory capacity is around three liters. But if your IC is lower, your lungs may be holding trapped air, because you aren't able to fully exhale. You may have obstructed or restricted airways.

Next time you visit your doctor, you should insist on getting your IC measured as part of a spirometry test.

But there's much more you can do...

Step 1: The Power of NAC

Conventional doctors usually prescribe Big Pharma meds for COPD, bronchitis, asthma, and other lung disorders — like bronchodilator drugs contained in inhalers, risky steroids and calcium-inhibiting drugs to reduce inflammation and relax the muscles around your airways.

While these drugs may help you breathe, they all come with a significant risk of side effects.

I almost never prescribe them. Instead, if patients visit my clinic with any lung conditions, I recommend a *two part-part solution* — the first part of which is the amino acid **N-acetyl-L-cysteine**.

NAC has a wide variety of powerful benefits for the pulmonary system, especially when it comes to protecting the lungs and airways of the respiratory tract.

A number of studies also show that it can dramatically reduce severe shortness of breath symptoms associated with COPD flare ups.^{7,8,9}

Clinical studies also show that NAC can help treat or prevent worsening of chronic bronchitis as well as acute respiratory distress syndrome, an often-fatal complication in patients with pneumonia or other severe lung infections. It does this by:

- Supporting overall pulmonary function
- Reducing excess airway mucus¹⁰
- Lowering inflammation¹¹
- Inhibiting colonization of infectious bacteria and viruses in the lungs.¹²

What makes NAC so powerful against lung conditions?

You see, N-acetyl-L-cysteine is a highly effective “precursor” to the antioxidant *glutathione*, your body's strongest antioxidant. Glutathione is found in every cell in your body, and is a powerful weapon against oxidative stress, inflammation and free radical damage to tissues — especially in the lungs.

“While these drugs may help you breathe, they all come with a significant risk of side effects.”

NAC is also a potent antioxidant in its own right — even before it converts to glutathione.¹³

Studies show that NAC also decreases the production of pro-inflammatory compounds that cause scarring in lung tissue.¹⁴

But its benefits don't end here. NAC is also a powerful detoxifier, it helps protect your liver and kidneys, and has also been shown to improve brain health, as well as a number of psychiatric disorders, including bipolar disorder, depression, schizophrenia, obsessive-compulsive disorder (OCD) and addictive behavior.¹⁵

Taken orally, NAC is absorbed quickly and distributed throughout the body, where it provides the benefits I just described, along with delivering the building blocks for cells to produce their own glutathione.

You can buy NAC online or at health food stores. I recommend 600 mg per day. After a couple of weeks, you can double your dosage to 600 mg twice a day.

And make sure you take NAC away from food. First thing in the morning, 30 to 45 minutes before eating is ideal. Then later in the evening before going to bed.

But taking NAC is just the first step to healthy lungs...

Step 2: Expand Your Lung Power

During a lockdown, it's often difficult to get outdoors and most gyms or parks are closed. But you can do my PACE program without leaving your home. And it doesn't require a lot of space or any special equipment.

PACE may be the easiest and fastest way to build lung power and restore health to aging or diseased lungs.

The YouGov study I referred to earlier in this article highlighted an astonishing public misunderstanding... 70% of the study's respondents thought that people with lung diseases should not take part in any kind of exercise.



Qi Gong Breathing — The Secret of Shaolin Monks

Qi gong (pronounced chi-goong) is a breathing technique that generates energy and well being, while at the same time expands your lungs' vital capacity.

Developed thousands of years ago by reclusive Shaolin monks, these deep breathing exercises are more important than ever. They are easy to do and don't take a lot of time. And you can practice just about anywhere.

The principle is similar to other "soft" martial arts like T'ai Chi and follows the idea that "energy follows breath." The flow of energy follows energetic highways called *meridians*, the same pathways used in acupuncture.

Not only will you power up your lungs' ability to fight off infection, you will also deliver increased oxygen to your entire body and feel a strong flow of healing energy.

If you need some inspiration, you can find many examples online. Like this one, for example:

www.youtube.com/watch?v=qViH3a4S-Uk This video is just for reference. I have no connection or commercial association with the makers of this video.

They couldn't be more wrong.

The fastest and most life-changing way to boost lung power and reverse lung damage is my PACE exercise program.

PACE stands for *Progressively Accelerating Cardiopulmonary Exertion*. It uses brief but vigorous routines of increasing intensity, and was specifically designed to help patients increase their lung capacity.

When your lungs hold less air, it means less oxygen can get to all your vital organs. But with PACE, you stretch your lungs and increase their capacity to hold oxygen.

Exercise also helps you to pump more blood through your lungs, which clears away pollutants that can cause irritation and infection.

PACE exercise routines are safe and easy. They can also be done at any age and in any condition.

If you're just starting to exercise, perhaps after a long absence, you can begin by choosing any activity that will make you stop and pant for breath.

It could be as simple as going up and down the stairs, jumping rope, biking, or swimming. The most important thing is to increase your challenge gradually over time.

The really great thing about PACE is you only need 12 minutes a day. And you don't need expensive equipment or a gym membership to do it.

You can boost your lung power right in your own neighborhood... or at home.

I have patients in Cincinnati who live near a hill. They practice PACE by walking up the hill as fast as they can. And by now they can run up the hill. He's in his 70s and she's in her late 60s. They say it's changed their lives.

Do you live on a hilly street? Is there a park in your town with a hill? You can follow their PACE workout, too:

1. Start by walking up the hill. Measure your heart rate when you get to the top after walking.
2. The next few times you go up the hill, give yourself more of a challenge. If you walked the

first few times, then “power walk” the next few times. Get your arms out in front of you and move your hips when you walk.

3. Take your heart rate again, stop and relax. Get a drink of water.
4. After a number of times, try jogging up the hill.

You’ll start to notice that it takes more effort for each set. You’ll be winded and panting. This is what we call “oxygen debt.”

When your body realizes that you are demanding more oxygen, it triggers the adaptive response of increasing your lung size.

You can also try this classic PACE exercise — the simple *crunch*.

1. Lie on the floor face up with knees bent and feet flat on the floor about hip-width apart;
2. Place your hands behind your head to support your neck;
3. Lift both your head and your feet at the same time and crunch together squeezing both the upper and lower abdominal muscles;
4. Release head and feet to the floor;
5. Repeat for three or four minutes at a speed and level of intensity you’re comfortable with;
6. Rest and recover.

Aim for three sets. To make it a true PACE workout, increase the challenge when you’re ready. For instance, instead of bending your knees, straighten your legs and stretch your hands toward your feet. Now lift your head and legs at the same time crunching your abdominal muscles together.

If you want to learn other good PACE exercises, go to my YouTube channel: www.youtube.com/user/AISearsMD/videos. I have more than 30 different exercises and a complete workout to help you get started, regardless of your fitness level.

Hyperbaric Oxygen Therapy (HBOT)

HBOT delivers pressurized oxygen to every cell in your body as you lie in a specialized chamber. It delivers a remarkable boost of oxygen to your lungs and increases your lung power in just days. If you have the opportunity, I highly recommend it.

If you’re in the South Florida area, call my clinic for more information: 561-784-7852.

References:

1. Li X, et al. “Trends and risk factors of mortality and disability adjusted life years for chronic respiratory diseases from 1990 to 2017: systematic analysis for the Global Burden of Disease Study 2017.” *BMJ* 2020;368:m23.
2. Center for Disease Control and Prevention. “Leading Causes of Death.” Available at: <https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>
3. Rattue P. “Lung Diseases Leading Cause of Death, Most People Don't Know.” *Medical news Today*. July 1, 2012. Available at: <https://www.medicalnewstoday.com/articles/247293>.
4. Dodd J. “Lung disease as a determinant of cognitive decline and dementia.” *Alzheimers Res Ther*. 2015.
5. Splansky GL, et al. “The third generation cohort of the National Heart, Lung, and Blood Institute’s Framingham Heart Study: Design, recruitment, and initial examination.” *Am J Epidemiol*. 2007;165(11):1328-1335.
6. Schünemann HJ, et al. “Pulmonary function is a long-term predictor of mortality in the general population.” *Chest*. 2000;118:656-664.
7. Santus P, et al. “Oxidative stress and respiratory system: pharmacological and clinical reappraisal of N-acetylcysteine.” *COPD*. 2014 Dec;11(6):705-17.
8. Sadowska AM, et al. “Role of N-acetylcysteine in the management of COPD.” *Int J Chron Obstruct Pulmon Dis*. 2006;1(4):425-34.
9. Sutherland ER, et al. “N-acetylcysteine and exacerbations of chronic obstructive pulmonary disease.” *COPD*. 2006 Dec;3(4):195-202.
10. Santus P, et al. “Oxidative stress and respiratory system: pharmacological and clinical reappraisal of N-acetylcysteine.” *COPD*. 2014 Dec;11(6):705-17.
11. Ibid
12. Riise GC, et al. “Inhibitory effect of N-acetylcysteine on adherence of Streptococcus pneumoniae and Haemophilus influenzae to human oropharyngeal epithelial cells in vitro.” *Respiration*. 2000;67(5):552-8.
13. Santus P, et al. “Oxidative stress and respiratory system: pharmacological and clinical reappraisal of N-acetylcysteine.” *COPD*. 2014 Dec;11(6):705-17.
14. Cu A, et al. N-acetylcysteine inhibits TNF-alpha, sTNFR, and TGF-beta1 release by alveolar macrophages in idiopathic pulmonary fibrosis in vitro. *Sarcoidosis Vasc Diffuse Lung Dis*. 2009 Jul;26(2):147-54.
15. Samuni Y, et al. “The chemistry and biological activities of N-acetylcysteine.” *Biochimica and Biophysica Acta (BBA)*. Volume 1830, Issue 8. 2013

The information provided in this letter is for educational purposes only and any recommendations are not intended to replace the advice of your physician. You are encouraged to seek advice from a medical professional before acting on any recommendations in this publication.

AL SEARS, MD

Al Sears, MD, CNS, is a medical doctor and one of the nation's first board-certified anti-aging physicians.

As a board-certified clinical nutritionist, strength coach, ACE-certified fitness trainer and author, Dr. Sears enjoys a worldwide readership and has appeared on more than 50 national radio programs, ABC News, CNN and ESPN.

In 2010, Dr. Sears unveiled his proven anti-aging strategies in *Reset Your Biological Clock*. As the first U.S. doctor licensed to administer a groundbreaking DNA therapy that activates the gene that regulates telomerase, Dr. Sears made history by bringing telomere biology to the general public.

Dr. Sears shocked the fitness world by revealing the dangers of aerobics, “cardio” and long-distance running in his book, *PACE: The 12-Minute Fitness Revolution*.

In 2004, Dr. Sears was one of the first doctors to document the true cause of heart disease and expose the misguided and often fatal drugs-and-surgery approach to heart health.

In *The Ageless Heart Manual: Advanced Strategies to Reverse Heart Disease and Restore Your Heart's Pumping Power*, Dr. Sears outlines the easy-to-follow solution that effectively eliminates your risk of heart disease, high blood pressure and stroke.

An avid lecturer, Dr. Sears regularly speaks at conferences sponsored by the American Academy of Anti-Aging Medicine (A4M), the American College for the Advancement of Medicine (ACAM) and the Age Management Medicine Group (AMMG).

