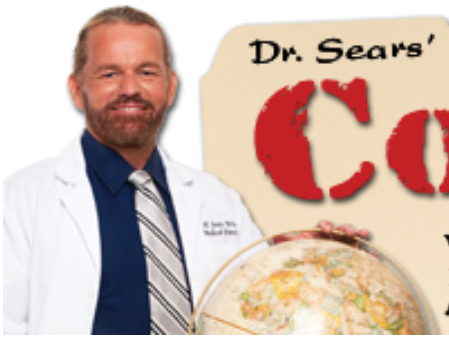


Dr. Sears'
CONFIDENTIAL CURES
Your Guide to Truth and Lies in Medicine from Around the World

July 2016 Vol. V Issue 7

— SPECIAL EDITION —

Stop — and Reverse — the Clock: Conquer the Seven Biomarkers of Aging With REAL Anti-Aging Strategies

There is a feature of aging that makes it different from other problems. It's not a disease. It's not a mistake. Your body is aging on purpose.

Your body is on a suicide mission. From the time you were born, you were programmed with death from aging as part of evolution's great plan.

It's by design.

As you age, your body starts to break down. Your cells divide and divide until they begin to die off. You start to experience the symptoms that go along with "old age." It's the natural order of things…

You'll have less energy…

Your heart will pump less efficiently…

You'll lose lung volume…

You'll lose muscle mass and bone density…

But here's the truth. It's not only possible to stop the clock on these symptoms of aging… you can ***reverse*** them.

The reality is that your body is capable of living as if it were 18 — in perfect condition — until you are 80 or more.

As someone who has devoted decades to studying the aging process, I can tell you without hesitation that aging is an "inside job." My REAL anti-aging strategies work because they get inside your body's aging program and change the seven real biomarkers of aging.

At the ***Sears Institute for Anti-Aging Medicine,*** my anti-aging strategies take aim at the seven real biomarkers of aging:

1	Shortening of your ***telomeres***
2	Depleted ***cellular energy***
3	Decreased ***lung power and capacity***
4	Decreased ***cardiac output***
5	Loss of ***muscle tissue***
6	Loss of ***bone mineral density***
7	Loss of ***brain power and memory***

This information is so important that I've decided to devote this entire issue of ***Confidential Cures*** to this one topic. I'm going to teach you how you can strengthen and protect each of these source areas individually — so your body and brain don't slow down as you age, but instead you get stronger and smarter.

Your telomeres, shown in pink, are the little end caps at the ends of your chromosomes. They get shorter each time your cells divide. When they get too short, the cell dies. The good news is that we know how to rebuild your telomeres.

Biomarker #1: Telomere Shortening

It's important that you understand how the mechanism of aging works.

It all begins with your telomeres — the little caps at the end of your chromosomes that protect your DNA from unraveling.

Your telomeres also control how your cells *age*. As you get older and your cells divide more and more, your telomeres get shorter. And eventually, when telomeres in a cell get too short, that cell stops working.

These "dormant" cells get in the way of other cells trying to do their jobs. And they're a big reason aging isn't such a pleasant process…

Why you feel tired and achy all the time…

Why it's hard for you to get out of bed in the morning…

And why you feel like your body just isn't what it used to be.

Research shows cells with longer telomeres "act" younger than cells with short ones. This means long telomeres are associated with strong, energetic cells. And when all your cells are strong and energetic, you'll feel that way too.

You have an enzyme in your body called telomerase. Its entire job is to lengthen your telomeres.

In our cells, this enzyme is "turned off." That means there's usually no way to stop the loss of your telomeres, or to rebuild them.

But we now know how to "turn on" telomerase. It's like flipping the switch on the aging process.

In 2010, Harvard researchers conducted a revolutionary experiment.

They started with mice with short telomeres. These mice were predictably old, infertile and frail.

But when the researchers activated the mice's telomerase, ***the old mice began looking and acting like young mice.***

In less than a month…

Their brains gained healthy function. Their organs were running in tip-top shape. Their fur had a youthful sheen again. They could smell as well as when they were young mice. Once sterile in their old age, they began having sex and reproducing again![1]

And you can activate your telomerase, too.

In fact, my PACE exercise program does just that. There are a lot of benefits to doing PACE (Progressively Accelerating Cardiopulmonary Exertion). You'll read about more of them throughout this article. But one of the most stunning is that it can actually take years off your biological age… by lengthening your telomeres.

In a study of 2,400 twins, researchers found that people who did high-intensity PACE-like exercise had longer telomeres than those who did no exercise or got too much exercise. In fact, their telomeres looked a full nine years younger.[2]

There are also several nutrients that have proven to not only prevent the loss of the telomere, but to *activate telomerase and rebuild the telomere.*

Nutrient 1: Resveratrol

Studies have shown that this popular anti-aging nutrient "significantly increases telomerase activity." It does this by helping to "turn on" genes that promote longevity, and "turn off" genes that promote disease.[3]

By influencing the way genes are expressed, resveratrol has the ability to activate anti-aging genes called *sirtuins*.

Sirtuins transmit signals to every cell in your body that literally cancel out the effects of aging. They bring the processes that lead cell death to a crawl, buying your body more time to repair the DNA damage that brings life to an end.

Resveratrol is in the skin of grapes. It protects the grape from threats such as cold weather, UV radiation and microbes. The amount of resveratrol in wine differs. White wine is not made with the skins like red is — so white wine has little resveratrol. Red wines from colder regions have the most resveratrol.

If you're not a fan of red wine, resveratrol is also in:

- Raisins
- Purple grape juice
- Peanuts
- Mulberries
- Eucalyptus trees
- Japanese knotweed

The problem lies in getting sufficient amounts of resveratrol. You'd need to drink 1,000 to 3,000 glasses of wine to experience the life-extending benefits of resveratrol.

Resveratrol supplements are a better option. They're inexpensive and completely safe. You can take it any time of day, with or without food. You can find them in health food stores or online. *I recommend taking around 10 mg to 20 mg per day for telomerase activation.*

Nutrient 2: N-Acetyl-Cysteine (NAC)

This potent amino acid is a building block of your body's primary antioxidant called glutathione (GSH) and ***has the ability to prevent the death of cells by activating the human telomerase gene, your "fountain of youth gene."***

Just one of the many examples of how NAC protects your cells from early death is in your inner ear. Our military now treats soldiers with NAC during training to protect them from blast noise from gunfire and explosions.[4]

In fact, one study looked at military officers after shooting practice. The guns are incredibly loud. A roaring jet engine from a plane taking off a few feet above your head would be about 120 decibels. These officers were hearing gunfire that was up to 160 decibels.

After the noise exposure, one group took NAC and one got no treatment. The NAC group had much better hearing. Not only that, but the unprotected group had damage to the inner ear structure that's responsible for turning sound into nerve impulses so your brain can make sense of it. But the NAC group stayed completely normal and totally protected.[5]

To stimulate the activation of telomerase, I recommend a dose of 1,800 mg to 2,400 mg a day. NAC is available at your local nutrition and/or health food stores.

Nutrient 3: L-Arginine

A popular amino acid for improving blood flow, ***l-arginine increases telomerase activity by stimulating the production of nitric oxide (NO)***, the molecule that relaxes your blood vessels.[6]

The real star here is nitric oxide (NO). And the first step to more NO is a simple amino acid called l-arginine. Your body uses this amino acid to trigger the release of NO.

Body builders have been using l-arginine for years. Taken before a workout, it gives them a "muscle pump" by getting more blood and oxygen to their muscles.

Sometimes referred to as the "miracle molecule," NO is a gas produced by a single layer of cells that line your blood vessels. When NO is released, it causes your blood vessels to relax and expand, sending a rush of oxygen through your body.

This expansion of your blood vessels, and the increased flow of blood and oxygen that follows, is essential for life. *You couldn't live without it.*

And with new research showing NO increases telomerase activity, l-arginine is even more

important. Fortunately, l-arginine is inexpensive and easy to find at just about any vitamin shop or health food store. *I recommend 500 mg to 1,000 mg a day.*

Nutrient 4: Vitamin C

We knew vitamin C prevented the loss of your telomeres, but ***we now have evidence that it increases telomerase activity in specific stem cells.***[7]

Your telomeres are very sensitive to oxidation. And as you know by now, the shorter your telomeres, the older your cells act and the more susceptible they are to becoming cancerous.

The new, exciting discovery about vitamin C is that it's very effective at slowing down this aging process.

A Japanese study tested vitamin C's effect on telomeres. It was found that raising the level of vitamin C in the cells could slow down the shortening of telomeres up to 62%.

Another study found that skin cells treated with vitamin C kept their young, firm shape because it slowed shortening of the cell DNA's telomeres. The telomeres also suffered less damage in the presence of vitamin C.[8]

Vitamin C isn't just "good for you." It protects your DNA. *And according to this new research, you should take at least 540 mg per day.*

Nutrient 5: Vitamin D3

Famous for its ability to increase immune function and prevent cancer, *vitamin D also activates telomerase.* One very recent study showed vitamin D increased telomerase activity by 19.2%.[9]

Vitamin D may be the single most important nutrient in your body.

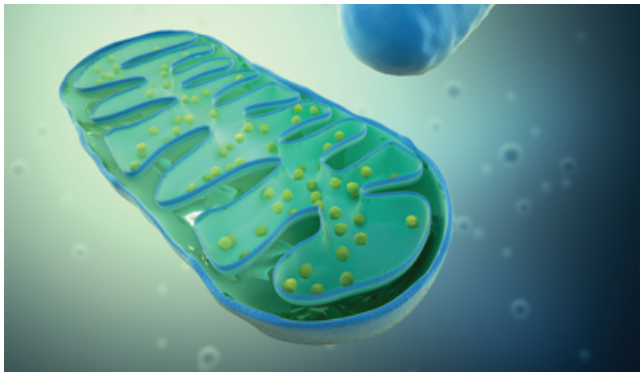
Vitamin D helps:

- Boost your mood and mental performance;
- Prevent prostate, breast, ovarian, and many other cancers;
- Reduce your risk of skin cancer;
- Prevent and treat bone diseases;
- Prevent diabetes.

Vitamin D is used by every cell and keeps them healthy and functioning at their best, and it's critical for your immune system. If you don't have enough, some cells may end up damaged and diseased. To prevent cancer, your levels of vitamin D must be much higher than the 400 IU our government recommends. *Based on this new data, I recommend taking at least 2,000 IU per day.*

You can also get vitamin D from Nature. The best sources include:

- Cod liver oil
- Herring
- Catfish
- Salmon, cooked
- Mackerel, cooked
- Sardines, canned in oil, drained
- Tuna, canned in oil



Your mitochondria are your cells' power plants. If you keep them healthy, your body will have all the energy it needs to fight off the diseases of aging.

Biomarker #2: Depleted Cellular Energy

Nothing frustrates my patients more than failing energy levels. And to add insult to injury, most doctors will just tell you to suck it up and remember your age.

And you believe it, because that overwhelming sense of fatigue that comes when you do even routine activities around the house feels like the very definition of "old and tired."

Everyone feels it at some point.

But if you accept the idea that you can get older and still feel alert and energetic, a whole new world opens up in front of you.

Let me show you what I mean…

You're already familiar with your mitochondria — the tiny power generators inside your cells. Throughout your whole life, your experience of energy and alertness comes from these tiny power generators. And it is crucial to keep your mitochondria powered up in your heart cells.

But mitochondria provide energy to every one of the 37.2 trillion cells in your body.

If you have a lot of them in each cell, and they're all running at full speed, you feel like you can do anything… just like you did in your youth.

That's why we're most energetic as children — when we have the highest number of healthy mitochondria.

But your mitochondria decay as you age. They become weaker and die off. The mitochondria that survive can't make enough *adenosine triphosphate* (ATP) — the gasoline that fuels your cells — to power your body.

The first thing that happens is your cellular energy levels take a dive. You feel tired and fatigued.

Today, this happens at a faster rate than during your parents and grandparents' time, because now we're living in a highly toxic environment. And exposure to toxic chemicals ages you fast.

But if you keep your mitochondria healthy, your body will have all the energy it'll ever need to stay strong and ward off the diseases of aging.

Here at the *Sears Institute for Anti-Aging Medicine*, I help my patients prevent and repair damage to the mitochondria — before disease strikes.

And I do it not with Big Pharma meds, but with nutrients and my PACE exercise program.

*Nutrients like **CoQ10** (See Page 10) can spark your aging cell engines to make more energy. But to regain the lost energy of your youth you need to produce new mitochondria.*

This process is called "mitochondrial biogenesis," and it's a huge deal in anti-aging medicine, because it gives you the power to halt and reverse cell death and degeneration.

There are two proven methods of sparking mitochondrial biogenesis in your body.

Method 1: PQQ.

The cellular spark plug. Scientific research shows that *pyrroloquinoline quinone*, or PQQ, can stimulate energy and growth in every living organism on the planet. But it is particularly effective when it comes to your mitochondria.

You see, your mitochondria have their own supply of DNA. So they can multiply within each of your cells. *But they need the right nutrient to get the process going...*

That's where PQQ comes in. Multiple studies show that PQQ triggers mitochondrial biogenesis. [10,11]

In one study, published in the *Journal of Nutrition*, researchers fed mice a diet supplemented with PQQ, and they grew a staggering number of new mitochondria in just 8 weeks.

PQQ can reverse the energy loss that happens as you age, and at the same time keep your cells young and robust.

I recommend combing PQQ and CoQ10 together. PQQ acts as the "spark plug" inside your cells, helping you to make new mitochondria. Then CoQ10 helps each individual mitochondria make energy.

A full 10 mg of PQQ along with a full 50 mg of ubiquinol CoQ10 will significantly increase your energy levels. This will give you one of the best natural anti-aging effects for increased energy that you can get.

Method 2: PACE – It takes just a few minutes a day.

The research I've done with my own patients over the years has revealed that the most effective way to increase mitochondria is with brief bursts of vigorous exercise. My PACE program can actually increase the

number of mitochondria in your cells — I've seen the proof in both biochemical analysis and the visible rise of energy levels of my patients.

And a recent study by the Karolinska Institutet in Sweden backs me up. Researchers investigated what happens in muscle cells during bouts of short, high-intensity exercise.[12]

They had subjects perform 30 seconds of maximum exertion cycling followed by a brief period of rest. The subjects repeated this six times and then had their muscle tissue examined for the effects.

The results were astounding…

A mere six short bursts of exercise followed by rest were enough to trigger a noticeable generation of healthy new mitochondria in all of the subjects.

And the study also revealed why…

Biochemical analysis showed that short, intense bouts of exercise break down calcium channels in your muscle cells and signals those cells to increase the production of new mitochondria to improve muscular endurance.

The key to staying young is creating MORE mitochondria that are healthy enough to produce this energy and endurance.

And that's exactly what this type of exercise makes your body do… all in just a few minutes per day.

I also recommend three other powerful mitochondria boosters and protectors: you keep taking CoQ10 and PQQ, but to protect your mitochondria and give them an extra charge, here are the three most active ingredients in my new formula…

Booster 1: L-Carnitine. See Section #4 (page 11) for more details about this powerful amino acid that has been shown to reverse malfunction in mitochondria as you age.[13]

Booster 2: N-Acetyl-Cysteine (NAC). Another amino acid that's also a powerful antioxidant. NAC helps make glutathione, the body's most powerful antioxidant. Glutathione is the main line of defense for mitochondria. It helps prevent and repair oxidative damage, thus protecting your mitochondria.[14,15]

Studies show it also protects your telomeres from oxidative damage.[16] So it throws a one-two anti-aging punch. I advise supplementing with 500 mg per day.

Booster 3: Rhodiola Rosea. This tough, little yellow flower is native to the arctic mountains of Eastern Siberia and it's a great herb for enhancing mitochondrial energy production. I've seen its power to energize my patients. In just a few months, they are visibly younger and stronger. And they tell me they feel that way, too.

You can find rhodiola tea in your local health food store. Or you can take it in capsule form. It's also called "golden root" or "roseroot." But make sure you get a formula with enough of the herb's active compounds. Look for an extract standardized to contain at least 3% rosavins and 1% salidroside. That's the same ratio found in the natural root.

I recommend taking 250 mg a day on an empty stomach, preferably in the morning because rhodiola stimulates your brain.

Biomarker #3: Decreased Lung Power and Capacity

It's the most serious consequence of aging — but no one's doing anything about it.

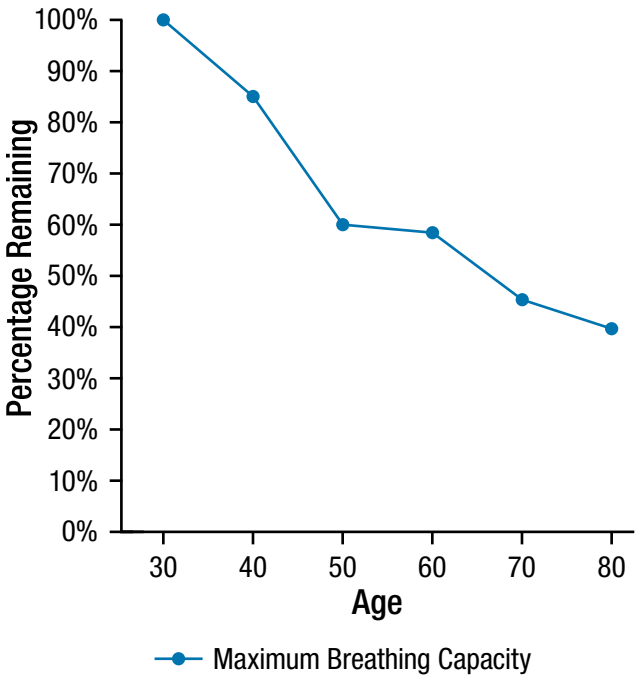
Lung power is the best predictor of how long you'll live. How well you breathe determines how long you'll stay active and healthy.

The problem is that as you age, your ability to breathe gradually decreases. Your lungs actually shrink. If you don't do anything about it, you'll lose 45% of your lung capacity by age 75.[17]

On top of this, everyday air pollution can slash your lung capacity by up to 20%.[18]

Around 35 million Americans now suffer from chronic obstructive pulmonary disorder (COPD), a

AGE-RELATED LOSS OF LUNG FUNCTION



On average, by the time you are 50, 40% of your lungpower is gone. By the time you're 80, you lose over 60%. But you CAN reverse this.

progressive disease that makes it harder and harder to breathe. Your doctor might have told you — or someone close to you — that you have chronic bronchitis or emphysema, two of the most common forms of COPD.

You may even recognize the debilitating symptoms of COPD:

- Chronic cough;
- Shortness of breath while doing everyday activities;
- Frequent respiratory infections;
- Fatigue;
- Wheezing.

Reduced lung capacity is the most destructive effect of aging. It impacts your 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.

The medical journal *Chest* did a 29-year follow up to the Buffalo Health Study, which observed more than 1,100 people up to age 89. They found that the better your lungs work, the less likely you are to die of *any* cause.[19]

But when your lungs hold less air, it can be deadly:

- A study published by the European Society of Cardiology reported that even a moderate decline in lung volume increases your risk of **heart disease** by 200%. This is the case even for those who have no family history of heart disease.[20]
- The Copenhagen City Heart Study found that a loss of lung volume raises the risk of first-time **stroke** by more than 30%. Low lung function also spikes your risk of a fatal stroke by *200%*.[21]
- Loss of lung function is tied to a huge increase in the risk of **heart failure**. A *European Journal of Heart Failure* study followed 16,000 people for 15 years. And even after they adjusted for age and other cardiovascular risk factors like smoking, or even if the people in the study never smoked at all... there was still as much as a *391% increased risk for heart failure* for the people with the lowest lung volume.[22]

The obvious connection between lung power and heart disease should have shocked the medical establishment years ago.

But for more than 30 years, mainstream medicine has pushed "cardio" endurance exercise as a treatment for COPD — and a way to better, stronger lungs.

Doctors will also tell you that COPD is irreversible.

They couldn't be more wrong on either count — and the effects have been devastating. Cardio exercise actually wears down your heart and lungs. That's why endurance runners have a 50% greater risk of dropping dead from a heart attack than other athletes.[23]

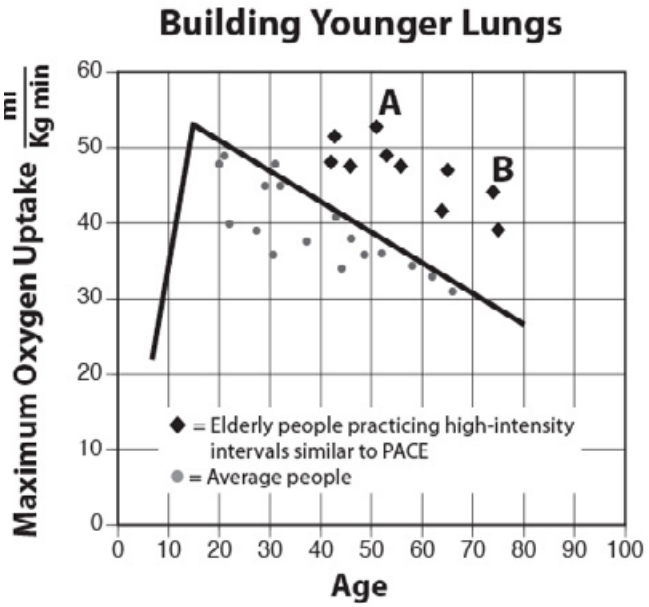
At my clinic, I teach my patients how to coax their heart and lungs to increase their power using a simple two-punch treatment…

Treatment 1: My *PACE* exercise program.

PACE stands for *Progressively Accelerating Cardiopulmonary Exertion* and it uses brief but vigorous routines of increasing intensity to help ramp up the strength and capacity of your lungs. That's why I developed it.

After only a few weeks of doing PACE, even my older patients begin to develop the lung power of much younger people — even those with heart disease.

You see, PACE builds up your lung power to get more life-giving oxygen flowing throughout your body, especially your heart.



Adapted from: von Ardenne, M. *Oxygen Multistep Therapy.* Thieme. 1990. p. 31

As this graph illustrates, people who did PACE-like exercise were able to dramatically improve their lungpower — even the elderly.

Studies show PACE works up to 18 times better than light exercise, such as the kind of walking your doctor might suggest.[24] It gets 400% more oxygen to your lungs and 331% more oxygen to your heart.

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 choose any exercise that will make you stop and pant for breath.

All you have to do is increase the challenge to your lungs and heart little by little, and then accelerate it. This will give you the extra capacity your lungs need to do the things you want to in your everyday life. Like take a long walk with your dog. Roughhouse with the kids or grandkids. Have an intense session in the bedroom with your partner.

The secret is pushing yourself in your workouts so you have to catch your breath.

When you breathe hard, your body is trying to get more oxygen faster. By increasing the intensity of your workouts, your lungs respond and adapt by getting stronger and increasing capacity.

If you're just beginning PACE, I recommend a simple starting exercise known as ***alternating lunges***. And like all PACE exercises, this is safe at any age.

- With your hands at your hips, take a step forward with your right leg until your front knee is bent 90 degrees and your back knee almost touches the ground.
- Push off from your leading foot and return to starting position.
- Repeat with your left leg. Continue until you feel winded.
- Rest, recover and do two more sets.

Start at a speed and level of intensity you're comfortable with. From there, be sure to progressively increase the intensity over time.

The key is to listen to your body. You should be panting at the end of each exertion period. You should *not* be taxed and exhausted throughout the whole workout.

If you want to learn some other good PACE exercises, go to my YouTube channel. I have more than 30 different exercises and a complete workout to help you get started.

Treatment 2: Add *quercetin* to your diet.

This special plant antioxidant has been proven in multiple studies to increase lung capacity.

Researchers at the University of South Carolina tested quercetin on healthy but untrained people. They measured their lung capacity and the time it took them to tire out while exercising. Then they split them into two groups. One got 500 mg of quercetin twice a day and the other got a placebo.[25]

After just seven days, they found the quercetin group had increased lung capacity by 3.9% without doing anything else. And their performance increased by an incredible 13.2%.

You can get quercetin in a variety of foods. Some of my favorites include:

- Apples
- Broccoli
- Capers
- Cherries
- Citrus fruit
- Cranberries
- Leafy green vegetables
- Raspberries
- Red grapes
- Tomatoes

Plants of the allium family also have quercetin, including onions, scallions, chives, leeks, shallots and garlic.

To boost your lung capacity, you can also take quercetin in supplement form. I recommend a 500 mg capsule twice a day.

Quercetin and PACE complement each other perfectly.

Biomarker #4: Decreased Cardiac Output

One of the first casualties of aging lungs is almost always *your heart's pumping power.*

Less cardiac output means your heart is failing to pump as much blood as your body needs. So your blood isn't carrying enough oxygen around your body — and your tissues and organs are being slowly suffocated.

You may have heard your cardiologist talk about *heart failure* or ***CHF***, which stands for ***congestive heart failure***. It's one of America's biggest killers. Symptoms include:

- Shortness of breath during daily activities;
- Breathing trouble — even when lying down;
- Weight gain with swelling in the feet, legs, ankles or stomach;
- Weakness;
- Fatigue;
- Dizziness.

But your lungs aren't the only cause of this debilitating disease.

Your mitochondria — the little power generators inside each of your cells — need oxygen to produce *adenosine triphosphate* (ATP), the cellular fuel that powers everything your body does. (In Section #4, we'll look even closer at your mitochondria and how important it is to keep them healthy and plentiful.)

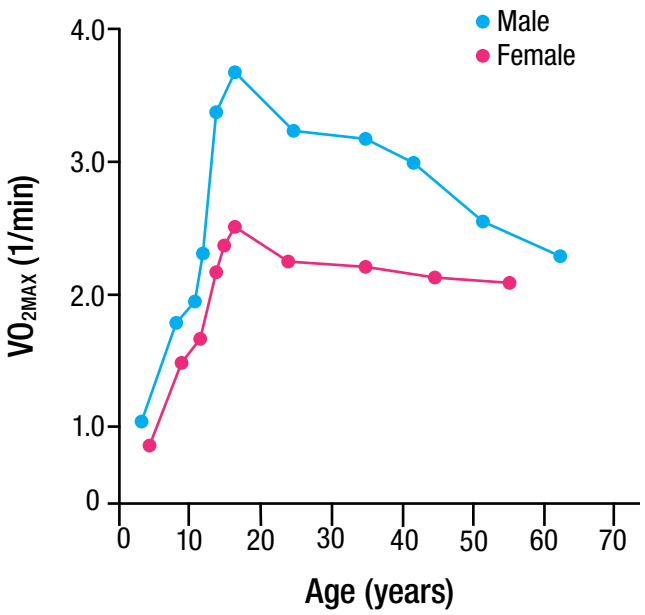
Your heart muscles have about 5,000 mitochondria per cell — far more than any other organ in your body. That's because your heart has an extra-special need for ATP — it has to keep your heart pumping 24/7 over the course of your lifetime.

But as you age, your mitochondria decrease in number — and the ones that are left get weaker.

The result is less ATP and less cardiac pumping power.

Your heart muscles can get so weak, they don't have the energy to pump enough blood into the aorta, the main artery that supplies oxygenated blood to your body. So blood and water pool in your heart, and back up into your lungs, liver and abdomen, causing

MAXIMAL OXYGEN CONSUMPTION VS. AGE



Your VO_{2max}, the numerical measurement of your body's ability to consume oxygen, begins to decline around the age of 20.

"congestion." That's when heart failure becomes *congestive heart failure*.

More than 5.1 million Americans are diagnosed with CHF every year, and about half die within five years.[26,27]

It's a terrible tragedy, because heart failure is preventable — and reversible.

But mainstream medicine's textbook treatments have the opposite effect. If you have heart failure, most doctors will tell you to take it easy… stay in bed.

That's extremely dangerous advice — because the real cure for heart failure is ***increased*** cardiac output.

And bed rest isn't the only bad advice cardiologists give to heart failure patients. They prescribe Big Pharma drugs that make the condition worse. Most doctors almost reflexively prescribe:

- **Diuretics and ACE inhibitors:** These drugs can cause constant fatigue, weakness, shortness of breath and swelling — worsening the very symptoms they're supposed to treat.[28]
- **Beta-blockers:** These decrease cardiac output by blocking hormones that allow the heart to beat faster and harder.
- **Statins:** These cholesterol-reducing meds make $30 million a year for Big Pharma, but they deplete your heart's cellular energy and steal its power to pump.[29]

None of these drugs build heart strength. Instead they contribute to earlier death.

Instead of dangerous drugs and bed rest, I recommend PACE (for details, see previous section; Page 8) to help my heart failure patients build stronger heart muscles.

It's the most effective kind of exercise for heart failure, because it boosts your heart's capacity and pumping power. It's exactly what a failing heart needs to build strength.

And it only takes 12 minutes a day. Start off with an easy exercise, but remember that PACE works by gradually increasing intensity, so your heart can adapt to the increases by building more strength.

As well as PACE, I also recommend my patients take four heart-boosting nutrients:

Turbo Charge Your Heart

Nutrient 1: Coenzyme Q10 (CoQ10)

No one should face heart failure without CoQ10. It's the most powerful treatment I know of for your heart.

CoQ10 is produced in your body, and it acts like a turbo booster for your mitochondria, sparking them to make extra *ATP* — especially energy-hungry organs, like your heart.

If you take cholesterol-busting statins — and the chances are you have — it's especially important that you replenish your CoQ10 levels. You see, statins, which are routinely prescribed to all patients with heart failure, dramatically reduce the CoQ10 in your body, making it harder for your heart to pump.

Decades of research have linked low CoQ10 levels with heart failure. In fact, 50% to 75% of patients with any kind of heart disease have low CoQ10.[30]

The problem begins with age: the older you get, the fewer mitochondria you have and the less CoQ10 your body makes — and the less powerful your heart gets.

But it's the statins that do the real damage to your CoQ10 levels. Clinical studies show statins can lower CoQ10 levels by as much as 40%, making your heart even weaker.[31]

Big Pharma's powerful propaganda has made sure most American doctors are ignorant of the link between statins and CoQ10. Although, in Canada, statins by law must carry a warning, highlighting the risk of CoQ10 depletion.

The good news is that supplementing with CoQ10 can bring immediate, often lifesaving benefits. Studies show CoQ10 not only reduces the common weakness and fatigue symptoms of CHF, it can also halve the risk of acute heart problems.[32]

Some of the best sources of CoQ10 are beef, chicken and fish. But if you are taking statins or suffer from heart failure, your levels are likely to be dangerously low. That's why I recommend taking a supplement.

Take at least 100 mg a day. You can buy CoQ10 as tablets, chewable wafers or gel caps. Powdered capsules are not well-absorbed. Because CoQ10 is a fat-soluble nutrient, take it with a meal for optimal absorption.

And look for the ***ubiquinol*** form of CoQ10. It's eight times more powerful than the more common ubiquinone form.

Nutrient 2: PQQ

While CoQ10 does an amazing job of squeezing more power out of your remaining mitochondria, it does nothing for the mitochondria you've already lost. That's where the little-known nutrient PQQ comes in.

PQQ triggers your heart cells to build healthy new mitochondria, producing more fuel so your heart pumps with more energy. At the same time, PQQ protects your mitochondria by neutralizing free radicals that damage and kill your mitochondria.

Good sources of PQQ are kiwi fruit, sweet green peppers, carrots, potatoes, cabbage, sweet potatoes and bananas.

But for heart failure patients, I recommend going straight to a supplement. Take 10 mg of PQQ daily with your CoQ10.

Nutrient 3: L-carnitine

This powerful amino acid lives in the inner skin of your mitochondria. It acts like a border agent, getting fuel across the cell membrane barrier.

Your body converts L-carnitine to acetyl-L-carnitine (ALC). Studies show that when your mitochondria slow down, ALC can fire them up again.[33]

Congestive heart failure patients have significantly depleted levels of L-carnitine.

You can replenish lost L-carnitine by eating red meat and whole dairy products. But with congestive heart failure, you should also take a supplement.

Look for a formula that contains only L-carnitine — not DL-carnitine, which is synthetic and interferes with the action of natural L-carnitine. I recommend 1,000 mg daily.

Nutrient 4: D-ribose

This carbohydrate is found in every living cell in the body. Without it, cells can't produce energy. And it is essential to the energy levels of the muscle tissue in your heart.

Studies show D-ribose improves your heart's ability to relax. With better relaxation, it has more power to pump blood to the rest of the body.[34]

D-ribose has also been shown to reduce the classic CHF symptoms of fatigue and weakness. At the same time it boosts heart-muscle strength and oxygen intake.[35,36]

Researchers at the University of Utah gave D-ribose to 15 heart failure patients and after just 8 weeks recorded heart and breathing improvements in all of them.[37]

You can't get D-ribose from food. You have to take a supplement. I recommend 5 grams of powdered D-ribose three times a day. You can mix it into an 8-ounce glass of water or juice and then drink it all down at breakfast, lunch and dinner.

Biomarker #5: Loss of Muscle Tissue

As you age you get weaker. In fact, three pounds of your muscle disappear every decade. If this goes on for long enough, you wind up with a medical condition called ***sarcopenia***.

Visit any nursing home and you'll see sarcopenia all around you. Most of the residents aren't there because they're sick. They're there because they're too weak from muscle loss to take care of themselves.

Women have the greatest risk of sarcopenia, because they have about a third less muscle mass than men to start with. That's one reason why there are more women than men in nursing homes.

Loss of muscle mass and strength affects your balance, gait and overall ability to perform the tasks of daily living.

You won't see any TV commercials telling you to take a drug for muscle loss. Because there aren't any. Mainstream medicine regards sarcopenia as an irreversible, untreatable and inevitable part of the aging process.

They couldn't be more wrong. Let me explain.

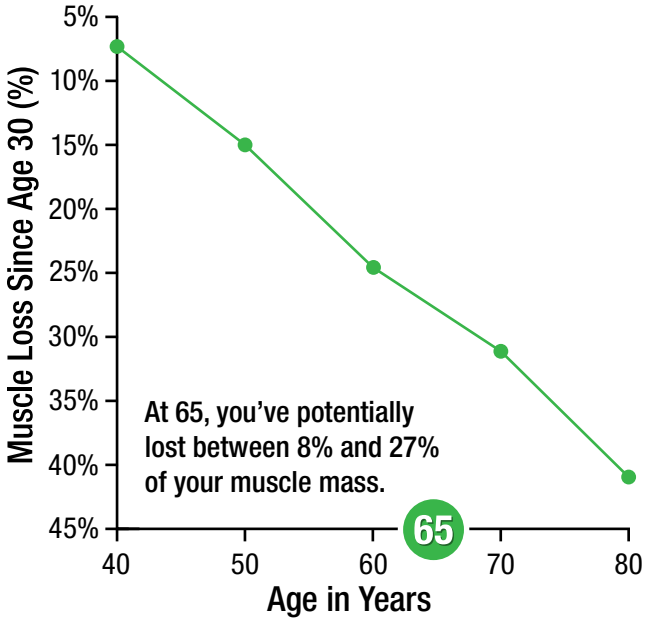
Typically, after the age of 40, you lose 8% or more of your muscle mass *EVERY YEAR*. And this process accelerates significantly after age 70.[38]

That's why preserving and building muscle mass is one of my top priorities with all of my over-40 patients at the *Sears Institute for Anti-Aging Medicine*.

Because growing older doesn't have to mean the loss of your independence. Muscle power means youth, vitality — and independence.

You see, the cure for sarcopenia was handed down to us by our ancient ancestors. The problem is, mainstream medicine has lost sight of this ancient wisdom.

CHANGE IN MUSCLE MASS OVER TIME



It surprises many people that the steep drop in muscle mass begins after the age of 40. Most people don't recognize it because the muscle is replaced by fat. But the process is completely reversible. Research shows that even people as old as 100 have been able to recover lost muscle mass.

Your hunter-gatherer ancestors enjoyed strong, lean bodies throughout their lives without even thinking about it. Their physical needs were perfectly matched to their environment, activity level and diet.

Traveling in some of the world's most remote places, I've seen the same thing with indigenous peoples that have maintained their traditional diets. The elderly in communities I visited in the Amazon rain forest, the Andes and parts of Africa remain active at every stage of life.

We don't live in our native environment any longer, and we don't eat the native diet we evolved to eat. Corn, grains and insane amounts of carbohydrates and sugar have overwhelmed our modern culture — and it's affected how we age.

At my clinic, I use a four-step "Native Health" approach to avoiding and reversing muscle loss…

Step 1: Get More Protein

Protein is the wisdom of our ancestors, and it's backed up by multiple scientific studies. Eating protein-rich foods builds muscle mass that helps you stay mobile, healthy and independent far into old age.

Forget the "tea and toast" diet often given to the frail and the elderly — that's why they're frail.

A study from Tufts University directly links our modern lack of protein with the rise of sarcopenia. Researchers showed that older people who consumed low levels of protein lost muscle mass in just 8 weeks. But the opposite happened when they increased their protein consumption.[39]

The American Journal of Clinical Nutrition has also said there is "compelling data" to support the use of protein to reverse the effects of sarcopenia.[40]

Protein is an essential building block of muscle. It's composed of 20 amino acids, eight of which your body can't make — but to stay healthy you must eat them every day.

Today, we consume less protein than at any time during our million-year history.

And you don't need muscle mass just for strength. When you're sick, your body withdraws protein from your muscles to help produce the antibodies that fight infection.

If you have less muscle, you have less ammunition to fight illness — and that makes you susceptible to other diseases of aging.

All the best sources of protein come from animals — eggs, beef, fish and whole milk.

Focus all your meals around high-quality protein. Fruits and vegetables, not grains or treats, should make up the bulk of your carbohydrates.

Grass-fed red meat with organic fruit and vegetables is one of the most nutritious and balanced meals you can eat.

You can also supplement with protein — but be careful: not all proteins are created equally. If it's not grass-fed, chances are you're consuming protein from pesticide-treated, grain-fed animals.

I recommend grass-fed whey protein as the best protein supplement. Whey is a by-product of cheese production and contains a wealth of the amino acids and other vital nutrients we need from protein.

Step 2: Ursolic Acid and Tomatidine

I often recommend two tiny and overlooked natural molecules to my patients as helpers to counter muscle loss.

Muscle loss is triggered by the protein ATF4, which reduces the level of protein synthesis in your muscles. This causes your tissue to break down. As a result, you have less strength and less muscle mass.

Research from the University of Iowa, published in a recent issue of the *Journal of Biological Chemistry*, reveals that ursolic acid tested on mice can block ATF4 activity in the skeletal muscle.

The researchers also found that ursolic acid and tomatidine together dramatically reduce the mice's muscle weakness and atrophy. And they found that both compounds increased muscle mass by 10% and increased muscle strength by 30%.

You can find tomatidine in green tomatoes. And you can find ursolic acid naturally in:

- Apple peel
- Cherries
- Prunes
- Holy basil
- Lavender
- Oregano
- Sage
- Thyme

You can also find ursolic acid capsules online and in health food stores. I recommend the ones that

contain both ursolic acid and tomatidine, and work your way up to a limit of 300 mg per day.

Step 3: Creatine

This is one of the safest and most researched supplements to increase muscle mass and strength. Creatine increases sports performance, endurance, strength and speed and will increase the muscle built during resistance training.

One recent study analyzed 28 healthy participants over the age of 65. Half of the participants took creatine, while the other half took a placebo. All of the subjects followed the same weight-training program for four weeks.

The participants taking creatine had a larger increase in muscle mass than those taking the placebo.[41]

I recommend taking 5 mg of creatine daily until you build the muscle you need.

Step 4: A Muscle-Restoring Workout Everyone Can Do

PACE is also ideal for rebuilding your muscle mass. I usually recommend that my sarcopenia patients work on bodyweight exertion exercises, because the movements resemble the challenges you face in your everyday environment.

You're also avoiding the kinds of stress injuries that conventional training techniques often cause.

The exercise from my PACE program that I mentioned earlier (See Page 8), called *alternating lunges,* is also one of the best and easiest ways to build up your strength in your body's most powerful muscles, your quads.

To make it truly PACE, remember to increase the challenge slightly with each set. Start slowly and work your way up. It's that easy.

Biomarker #6: Loss of Bone Mineral Density

I have a bone to pick with any physician who prescribes Big Pharma drugs to prevent osteoporosis. These meds don't work and, frankly, doctors should know better.

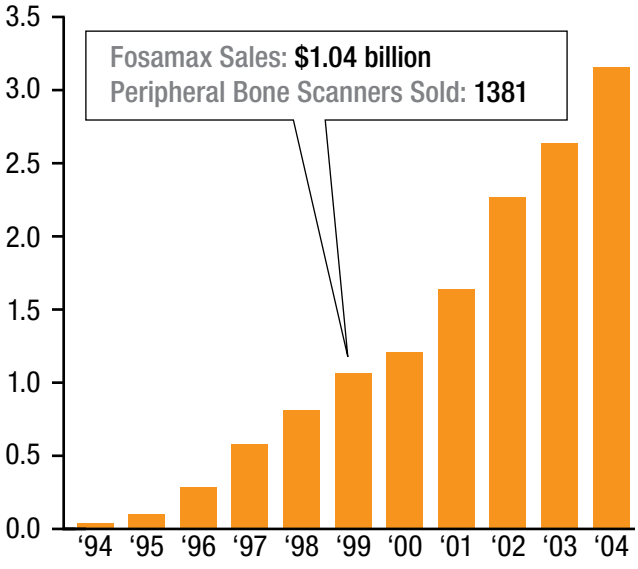
Loss of bone mineral density is yet another condition that mainstream medicine has labeled a "disease of aging" that's irreversible and treatable with only drugs.

Now, here's something that's true: Bones should — and do — last a lifetime, and can be strengthened naturally at any age.

I've seen the damage Big Pharma drugs do myself with patients at the *Sears Institute for Anti-Aging Medicine* — because most osteoporosis drugs actually *poison your bones*.

Bisphosphonate drugs, like *Fosamax*, *Boniva*, *Reclast* and *Actonel* are supposed to help stop you from getting bone fractures as you get older.

THE MAKING OF A BLOCKBUSTER DRUG



Even though drugs like Fosamax poison your bones, they're a billion-dollar business for Big Pharma.

But they kill your own cells and stop new bone getting built — and they can actually cause bones to break.

Researchers recently studied women taking bisphosphonates. More than 65% had the same rare

fracture in the same area at the middle of the thigh bone — where you should never get a fracture.[42]

And these were the women who had been on the drugs for the longest periods.

Another study from Finland looked at women aged 55-81 and found that you're over *90 times more likely to have a rare bone break if you take bone drugs* than if you don't.[43]

You see, you have two kinds of bone remodeling cells in your body: *osteoblasts* that lay down new bone and *osteoclasts* that break down old bone.

Big Pharma's strategy is to kill off the cells that break down your bone.

What happens is that you take their meds, the osteoclasts absorb it, and it poisons them by cutting off their blood supply.

Your bones become denser with these drugs, but they don't get stronger. Your bones are denser but not with new bone, but instead with old bone and with old calcium deposits.

What's worse is that osteoblasts can't make new tissue if the old tissue is still there.

After a while, the old-bone tissue becomes brittle and *more prone to fracture*.[44]

So you end up with technically "dense" bones — and that's how they look in scans — but they are weak and fragile bones.

Besides breaks, the other thing that can happen — although almost no one talks about it — is osteonecrosis.

When bones become too dense with old tissue, there's not enough space in the inner bone for your bone marrow, which keeps your bones alive. And your bones then start to die.

You don't need risky drugs to keep your bones strong.

This is not about debate or opinion. It's a fact. Archeological evidence reveals that average humans 7,000 years ago had skeletons so strong they could make a modern orangutan jealous.

And, amazingly, they achieved this without the help of Big Pharma and risky osteoporosis drugs.

These people were Neolithic hunter-gatherers. They weren't born with bones of steel. But their bones became stronger with age — not weaker.

Stop Bone Loss Naturally

The real answer to preventing — and reversing — bone loss is with your *hormones*, where all bone building begins.

I tell my patients that the only way to make your bones healthy and strong for life is to take back control of your hormones.

The hormones of your ancestors weren't under daily attack — as ours are — from environmental toxins and our unnatural modern diet.

At the *Sears Institute for Anti-Aging Medicine*, I focus on four easy steps to balance your hormones for great bone health:

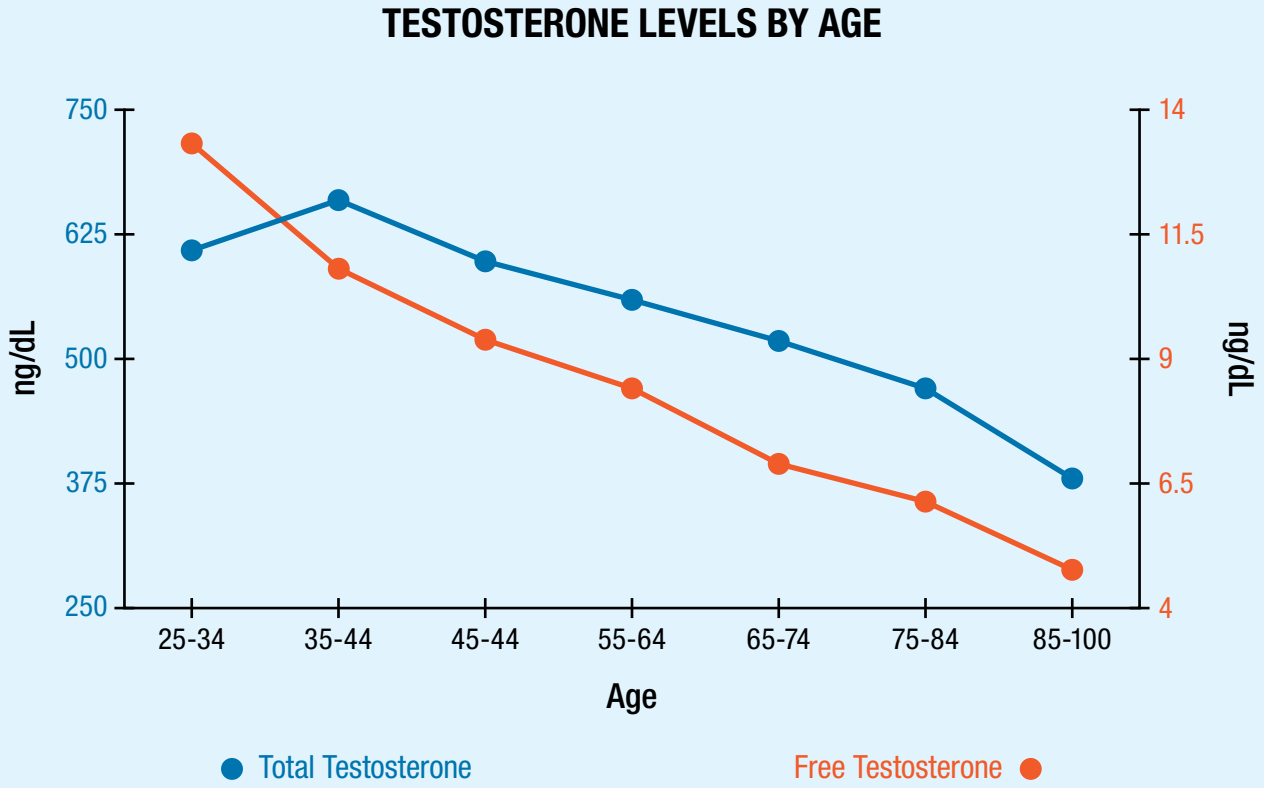
Step 1: Both men and women need this #1 bone hormone. The most powerful bone builder in both men and women is testosterone.

But the amount you have declines as you age. The result is decreased bone strength and a bigger risk of fracture. It's a problem in both men and women.

I treat a number of patients with *bioidentical testosterone replacement therapy* to help with bone loss issues — but it's not the only way to boost your testosterone levels and build bone mass.

I'm talking about an herb called *Urtica dioica,* better known as *nettle*.

With men, only about 2% of testosterone is free to be active at any one time. The rest is bound to another sex hormone called SHBG, which serves as a kind of transporter that carries testosterone and other hormones to the receptors around your body.



Your risk of bone fracture increases as your testosterone decreases with age. Boosting testosterone levels is one way to build stronger bones.

Source: Vermeulen, A. (1996). Declining androgens with age: An Overview.

But as you age, the amount of SHGB in your system goes up. So larger amounts of your testosterone gets stored away.

Nettle contains a compound that binds with SHBG and frees up some of this testosterone reserve so it can do its job of building bones.

Two good ways to get nettle are from a tincture and a capsule. If you're going to use a tincture, make sure the nettle comes from fresh leaves for the most bioavailability.

Also, when you're looking at the bottle, make sure the mixture is at least 65% nettle.

For a capsule, some will have just the extract of the root. Make sure you get at least 140 mg of the root extract.

Step 2: Drive down cortisol to form more bone. Cortisol, the hormone that's secreted when you're stressed, directly blocks the formation of osteoblast cells that make new bone. Cortisol also reduces calcium absorption.

Both mental and physical stress increases cortisol. And while most hormones decline with age, cortisol increases.

The easiest and most effective way to counter cortisol is physical exertion.

My PACE program is designed specifically to return your body and metabolism to their natural states. With PACE, you incrementally challenge your body and restore your native metabolism and hormone levels.

A lifestyle of physical activity is why your ancient ancestors had perfectly balanced hormones and bones of steel.

I recommend using PACE with weight-bearing exercises, which is one of the most effective ways to increase your bone strength and prevent fractures. These include walking, bicycling, sprints, swimming or weight training. Focus on increasing intensity, not duration, in all of these exercises.

Step 3: Soak up the sunshine hormone. Vitamin D is a vitamin and a hormone. It directs how much calcium you store in your bones so you can use it when you need it. Too little vitamin D can lead to thin, brittle bones and osteoporosis. Studies show that more than half of those with osteoporosis-related fractures also had low vitamin D.[45]

In other words, vitamin D prevents bone loss. It's been shown to:

- Reduce the risk of breaking a bone in any part of the body by 33%.
- Reduce the risk of breaking a hip by 69%.
- Reduce the risk of having constant bone pain — a condition called osteomalacia.

The best source of vitamin D is *sunshine*. You don't need more than 20 minutes in the sun to get all your vitamin D for the day. But because we spend most of our time inside, you might have to get your vitamin D from other sources.

Food sources of vitamin D include salmon, mackerel, tuna fish, sardines, eggs, beef and cheese.

I recommend taking a supplement of vitamin D3 called *cholecalciferol*. It's the same vitamin D that your body produces. Just be sure to avoid the synthetic form of vitamin D2 in most multivitamins. It's less potent and less absorbable.

Cod liver oil is also a great source of vitamin. Take up to one teaspoon a day, which is the equivalent of about eight capsules.

Step 4: Make "superior" bones with vitamin K. I've helped hundreds of patients regulate their calcium and stabilize their bones using vitamin K. A recent study found that high vitamin K intake means higher bone mineral density, and less bone loss with aging.[46] The authors wrote that vitamin K gave people "superior bone properties."

Foods with vitamin K include dark leafy vegetables like kale, spinach and collard greens. Parsley and green olives also have vitamin K, as do the spices basil and thyme. I recommend at least 90 mcg a day.

Biomarker #7: Brain Power and Memory

Here's a scary statistic: After age 65, you have a 63% chance of ending up in a nursing home — and the likelihood is you'll have some form of dementia, probably Alzheimer's.[47]

You lose your memory, language skills, independence and even your sense of self. Alzheimer's also impairs your ability to recognize faces, one of the most painful aspects of the disease, because it widens the gulf between victims and their loved ones as the disease progresses.[48]

Mainstream medicine will tell you there is no cure for it and that its effects are irreversible.

The truth is, most forms of mental decline — even Alzheimer's — are not hopeless. And they're also avoidable. I've been helping to prevent and reverse mental decline for years at my clinic with ancient nutrient remedies that modern medicine ignores.

You see, Alzheimer's is not a natural condition — even though it affects more than five million Americans and strikes one in nine people over 65. After 85, that figure rises to a shocking one in two.

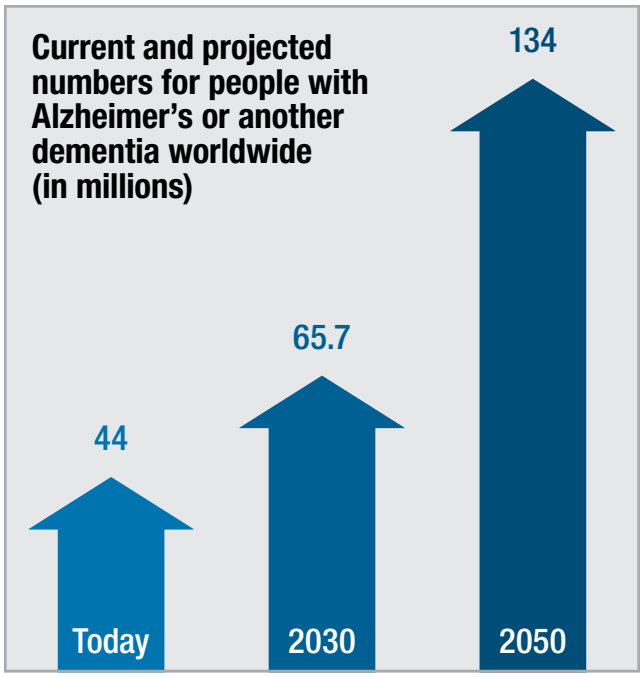
But the sharp increase in sufferers is a relatively recent phenomenon — and it's also a Western phenomenon. Today, about 44 million people worldwide suffer from Alzheimer's, with the vast majority of them in Western Europe and America. And that number is expected to more than triple to 134 million by the year 2050.

By contrast, Alzheimer's in Sub-Saharan Africa is extremely rare.

There's a clear link between our poisoned environment and the surge in the number of Alzheimer's cases. But the strongest link of all is the massive carb and sugar overload in our Western modern diet.

Increasing numbers of researchers now refer to Alzheimer's as "type 3 diabetes."

Studies show a 300%-plus increased risk of



Alzheimer's disease and other forms of dementia are predicted to increase drastically in the next few decades. But age-related mental decline is both preventable AND treatable.

vascular dementia and a near-200% increased risk of Alzheimer's in seniors with type 2 diabetes.

In fact, other studies show around 75% of diabetics are likely to develop Alzheimer's.[49]

Most mainstream doctors don't know that insulin also plays a crucial role in the formation of your memories. Insulin works to enhance memory and learning.

But with so much sugar and carbs in our modern, Western diet, your body develops insulin resistance. And with an insulin deficiency in your brain, the result is cerebral dysfunction, inflammation, oxidative stress and an inability of your neurons to repair themselves.

Mainstream medicine waits for the symptoms of Alzheimer's and mental decline to become severe before it even recognizes the condition. But did you know that changes in your brain can begin up to 20 years before you're diagnosed?[50]

You shouldn't wait until dementia has progressed to the point that it can't be reversed.

You Don't Have to Wait

You can restore damaged brain cells, promote healthy brain function and significantly reduce your chances of developing Alzheimer's by drastically reducing your sugar and carbohydrate intake. This will normalize your insulin levels, and help you maintain a sharp mind and total recall now and throughout your golden years.

Carbohydrates should comprise no more than 20%-30% of your diet.

But there's much more you can do. I recommend these nutrients to my patients to boost brain power and protect against dementia…

Nutrient 1: Coconut oil

This has been shown to control and even reverse the progression of Alzheimer's. And the great thing is that coconut oil takes action on the brain after just one 40 ml dose.

When brain cells deteriorate because of insulin resistance and can no longer accept glucose, the fatty acids in coconut oil, called medium-chain triglycerides (MCTs), break down into *ketones* in the liver. These provide an alternative fuel for the brain as efficient as glucose.

MCTs also help boost brain metabolism and increase cognitive functioning. A recent study showed that patients experienced significant neurological healing after four-to-six weeks of including coconut oil in their nutritional plans.[51]

The great thing about coconut oil is that you can eat it by the spoonful or use it to cook. It also makes a good substitute for butter on your toast and for sugar in coffee and tea. And if you like to fry your foods, use organic, virgin coconut oil instead of vegetable oil.

The following three key nutrients lower blood sugar. These three nutrients drastically lower the risk of developing insulin resistance in your body and your brain.

Nutrient 2: Cinnamon

Cinnamon enables your body to respond better to

insulin. It contains methyl hydroxychalcone (MHCP), a polymer that balances your blood sugar and increases your body's energy stores. Studies show that cinnamon can reduce blood sugar by 29%.[52]

Nutrient 3: Chromium

Chromium removes glucose from your blood. When you eat sugar, your body utilizes its supply of chromium, so it's essential to your diet. A Canadian study found that chromium reduced fasting blood sugar levels as well as glycated haemoglobin (HbA1c), a common measure of blood-sugar control over a period of weeks and months.[53]

Nutrient 4: Gymnema sylvestre

This herb is used in Ayurvedic medicine in India — the oldest health system in the world. This herb slows the conversion of sugar to blood glucose.

I recommend supplementing with 1-6 grams of Ceylon cinnamon, 600 mcg of chromium polynicotinate, and 200-800 mg of Gymnema sylvestre per day.

And finally…

Nutrient 5: Omega-3s

These essential fatty acids have anti-inflammatory properties that counter protein build-up and cognitive decline to improve brain function. And they cause brain cells to produce more LR11, a protein that helps clear the amyloid protein, which is a cause of brain plaque found in Alzheimer's patients.

The best sources are fish: mackerel, herring, salmon, trout and fresh tuna. Two servings in your diet should provide you with between 800 mg and 1,000 mg of vital omega-3s a week.

But after years of tracking my patients' omega-3 levels, I know it's almost impossible to get enough from your diet.

Based on my experience, I recommend that you supplement. You need at least 500 mg of DHA omega-3s and about 60 mg of EPA omega-3s — EVERY DAY!

If you take care of the "Big 7," you don't have to dread aging — you can look forward to it! You will have all the strength, stamina and good health to enjoy the fruits of your labor for the decades ahead of you.

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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.

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