



Dr. Sears'

CONFIDENTIAL CURES

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

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Dear Friend,

There's an exciting new breakthrough study from a team of Israel's top scientists that proves — *for the first time ever in humans* — that it's possible to consistently reverse your biological age by making your telomeres longer.

In this landmark experiment, using nothing more than high-pressure oxygen — or hyperbaric oxygen therapy (HBOT) — scientists **reversed cellular aging by 25 years**.

This is big news. We now have a major study that identified a systematic and proven protocol for lengthening your telomeres and rolling back your biological age by decades.

At the **Sears Institute For Anti-Aging Medicine**, I've used this powerful therapy to neutralize some of the most devastating chronic diseases like cardiovascular disease, diabetes, brain injury from stroke, dementia, Alzheimer's, autoimmune diseases, Parkinson's, depression and more.

In this *Confidential Cures* issue I'll also show you...

- **How you can give your aging telomeres new life** — and in the process, increase your odds of gaining up to 25 healthier, disease-free years.

- **The secret soldier that arms your immune system's killing power.** It's an extraordinary molecule that powers up your immune system and is responsible for arming your white blood cells to seek and destroy disease-causing invaders.

- **How the Environmental Protection Agency is quietly dismantling** regulations that protect our air, land, and water, increasing our exposure to heavy metals and other toxins. And, what you can do to protect yourself and your family.

To Your Good Health,

Al Sears, MD, CNS

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Groundbreaking New Study Confirms... **Human Aging Reversed 25 Years By Extending Telomeres with Oxygen**

A breakthrough study from a team of Israel's top scientists proves — *for the first time ever in humans* — that it's possible to consistently reverse your biological age by making your telomeres longer.

In this landmark experiment, using nothing more than high-pressure oxygen — or hyperbaric oxygen therapy — scientists *reversed cellular aging by 25 years*.

Let me explain.

As a regular reader, you may remember telomeres are the bits of DNA at the end of each chromosome that regulate aging.

Like the fuse on a stick of dynamite, telomeres get shorter and shorter as your cells divide over time. The shorter they get, the older your cells behave.

The opposite is also true. When you lengthen telomeres, your cells act and behave like younger cells. **Telomeres are the true mechanism of aging.**

That's what makes this study so remarkable.

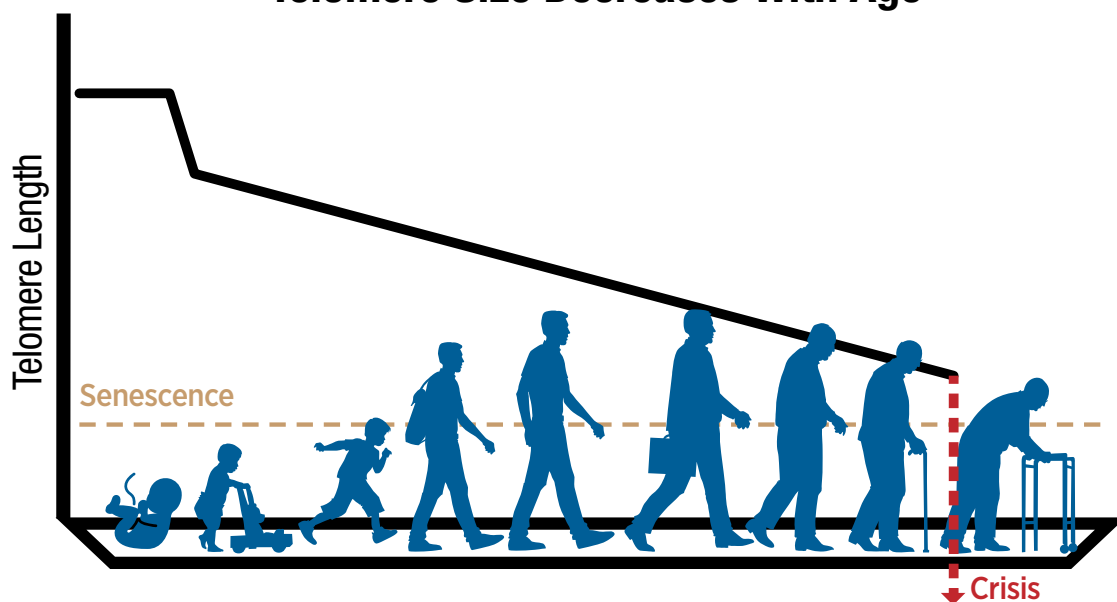
In a controlled setting, scientists methodically lengthened human telomeres and successfully rolled back 25 years of aging.

After administering hyperbaric oxygen therapy to a group of older adults, the Israeli researchers were able to reverse two key biological hallmarks of aging:

1. *Telomere shortening*
2. And the *accumulation of old and malfunctioning cells* in the body.

More on this revolutionary research in a moment...

Telomere Size Decreases With Age



Telomere length decreases with age at a rate of 25-28 base pairs per year.

HBOT therapy provides life-saving benefits, as my regular readers know.

At the **Sears Institute For Anti-Aging Medicine**, I've used this powerful technology to neutralize some of the most devastating chronic diseases... like cardiovascular disease, diabetes, brain injury from stroke, dementia, Alzheimer's, autoimmune diseases, Parkinson's, depression and more.

The biological deterioration of aging is a major risk factor for these diseases. But it doesn't need to be. In this **Confidential Cures** issue, you'll learn how you can give your aging telomeres new life — and in the process, increase your odds of gaining up to 25 healthier, disease-free years. But first, let me tell you about this incredible research out of Israel.

Reverse Aging Process And Grow Biologically Younger

In the study, researchers from Tel Aviv University (TAU) and the Shamir Medical Center followed 35 healthy adults aged 64 and older for 90 days. None of the volunteers made any diet, lifestyle, or medication changes during the trial.

Whole blood samples were collected prior to treatment, at the 30th and 60th session, and one to two weeks after the last HBOT session. The researchers analyzed various immune cells in the blood to compare before-and-after results.

After 60 HBOT sessions, the scientists discovered that the:

- Number and percentage of dying or senescent T cells decreased by almost 40%.
- Telomere length of T cells, Natural Killer cells and B cells grew longer instead of shorter, at a rate of 20 to 38% depending on the cell type. The most significant change was in the telomere length of B cells, which increased over 50%. The B cell is one of the most important cells in your body since they form a big part of your adaptive immune response.

In other words, the volunteers' immune cells **aged backwards**.

“When you turn on telomerase, your telomeres start to regenerate and grow longer. And, as this study now proves, that lengthening is what reverses aging.”

Telomeres Prove Aging Is Reversible

You know that I consider telomeres to be the biggest medical breakthrough of the past one hundred years. Telomeres are the little caps on the end of each strand of your DNA that controls how your cells age.

Longer telomeres mean better health. Shorter telomeres signal premature aging.

In fact, your telomeres shorten relentlessly, especially with the environmental assaults on our cells we experience every day, until they get critically short.

When you get enough critically short telomeres, it's game over. It causes permanent cell damage.

Your telomeres control your healthspan and your lifespan by shortening. When too many get short, the cell self-destructs.

At my clinic, we've designed a number of protocols that turn on an enzyme called telomerase. More on this in a moment.

When you turn on telomerase, your telomeres start to regenerate and grow longer. And, as this study now proves, that lengthening is what reverses aging.

But increasing telomere length does so much more. It prevents the other diseases of “old age” and heals the whole body...

Heal Broken Heart By Increasing Telomere Length

Telomeres are one of the best signals I've found for whether someone is at risk for a heart attack. And a recent study backs up what I've seen in my own patients.

Researchers measured the telomere lengths of nearly 4,000 heart attack patients within 24 hours of their attacks. They found that the heart attack victims had shorter telomere lengths when compared to a healthy control group.

In fact, every time telomere length dropped by one unit, heart attack risk more than doubled.¹

Another study measured the telomeres of 337 people who had a heart attack (myocardial infarction, or MI). They also measured 337 people who did not. The graph on the right shows the result.

The blue line represents the average telomere length of people who did not have a heart attack (MI). The red line shows the much shorter telomere length in people who did have a heart attack.

You can see that heart attack victims had much shorter telomeres than healthy people. For those with shorter telomeres, the risk of heart attack went up by 62%.²

In a study published in the journal *The Lancet*, researchers found an association between short telomeres and atherosclerosis.³ The people with short telomeres had accelerated aging of their blood vessels and had a buildup of plaque that correlated to arteries that acted 8.6 years older.

This increased risk extends into the very fiber of your heart muscle. In a study published in the *Journal of the American College of Cardiology*, researchers discovered that people with heart failure had telomeres that were 40% shorter than normal.⁴

Increase Telomere Length To Cut Cancer Risk

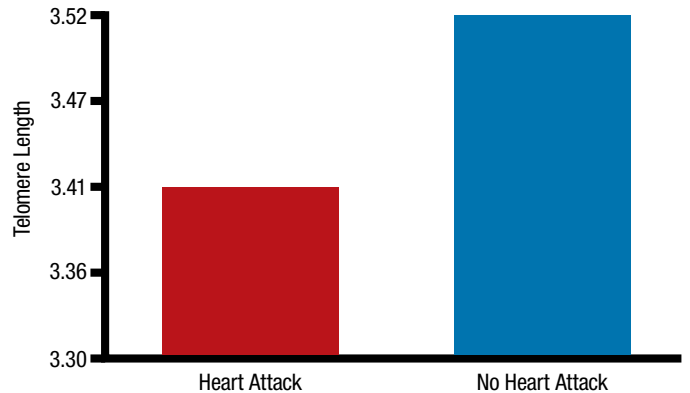
Two new meta-analysis, looking into more than 51 earlier published studies, found that short telomeres are linked with increased cancer risk.⁵

There's a lot of evidence linking short telomeres to a higher risk of cancer. For instance:

- A Virginia study found that breast cancer cells had shorter telomeres than normal cells.⁶
- A research team at Harvard discovered that having short telomeres nearly doubled the risk for bladder cancer.⁷
- According to Japanese researchers, cancers of the mouth begin in cells with short telomeres.⁸
- Even colon cancer cells have shorter telomeres.⁹

But a recent study published in the *Journal of the American Medical Association* found that longer telomeres can dramatically reduce your risk of cancer.¹⁰ This Italian research is important because it measured *overall* cancer risk.

Telomere Length And Cardiovascular Disease



Short telomeres increase your risk of heart attack by 62 percent.

The researchers found that people with the longest telomeres were the least likely to develop cancer. In fact, they were more than 10 times less likely to develop cancer than people with short telomeres.

And people with short telomeres are twice as likely to *not survive* cancer.

Lengthen Telomeres To Reduce Arthritis Pain

Telomere length is also linked with another condition we associate with aging — arthritis.

Research published in the journal *Arthritis Research & Therapy* shows that cells from osteoarthritic knees have abnormally shortened telomeres and that the percentage of cells with ultra-short telomeres increases the closer to the damaged region within the joint.¹¹

According to the lead researcher, telomeres and the cartilage connected to joint pain and arthritis are connected in two ways...

1. Age-related shortening of telomeres leads to the inability of cells to continue dividing and therefore, cell death.
2. Ultra-short telomeres, probably caused by compression stress from use, lead to cell death and failure of the joint to repair itself.

And the more the telomeres shrink, the more severe the case of osteoarthritis.

Telomeres also appear to shorten faster for people with rheumatoid arthritis. Longer telomeres are associated with lower risk for the disease.¹²

Are You Ready To Reverse Aging By 25 Years?

In the Israeli study, just three months of the HBOT protocol was able to slow down, stop, and reverse the normal aging process on the cellular level.

I use hyperbaric oxygen therapy every day at the **Sears Institute for Anti-Aging Medicine** to treat a variety of today's chronic diseases and conditions associated with aging. Research has found that HBOT can:

- Improves heart function and cardiac performance.¹³
- Help stroke survivors regain movement following paralysis.¹⁴
- Inhibit the development of arthritis and diseased joints. In the study, arthritic patients reported a stunning 91% improvement rate.¹⁵
- Revive “dead” brain cells in patients with Alzheimer’s and dementia.¹⁶
- Reduce blood glucose levels in diabetics.¹⁷
- Improve behavioral and motor deficits in Parkinson’s patients.¹⁸
- Significantly relieved migraines compared to a placebo therapy.¹⁹
- Eliminate joint pain and inflammation in arthritis patients.²⁰
- Ease tinnitus symptoms by 50%.²¹

HBOT encourages the healing and regeneration of tissues, blood vessels and nerves for three major reasons:

1. **Oxygen is used to produce and burn the cellular energy that powers every biochemical function in your body.** Hypoxia (low oxygen in your blood) and hypoxemia (low oxygen in your tissues) are at the root of multiple illnesses in our polluted modern world.²² When you suffuse your cells with oxygen, it's equivalent to breathing life



HBOT adds length to aging telomeres and increases the release of stem cells by an astounding 800 percent.

into a drowning victim. Tissues and organs begin to function as they were intended.

2. **HBOT stimulates the release of stem cells.**²³ A study out of University of Pennsylvania School of Medicine found that after just one HBOT treatment, stem cell concentrations doubled — but after 20 treatments, they increased a staggering 800%.²⁴ And another study found HBOT not only reactivates and mobilizes “sleeping” stem cells — these stem cells have a higher concentration of inflammation-regulating proteins that battle and repair cellular damage where it occurs.²⁵

3. **HBOT increases synthesis of nitric oxide (NO).** NO is one of your body's key signaling chemicals.²⁶ Multiple studies also reveal that NO signals the release of stem cells, and plays a key role in how stem cells divide and grow into specific tissue, organ and immune cells.²⁷

And now, we know that HBOT can increase telomere length...

As you probably know by now, HBOT is the delivery of high-pressure oxygen to your body. At my clinic, I treat patients with 100% oxygen at two times the normal atmospheric pressure.

You see, HBOT works because it infuses your body with oxygen. It increases oxygen levels in your red blood cells, encouraging the healing and regeneration of tissues, blood vessels and nerves.

With HBOT, your lungs take in more oxygen than would be possible if you were breathing pure oxygen at normal air pressure.

The combination of pressure and oxygen physically dissolves more oxygen into your red blood cells, boosting oxygen levels and encouraging healing and regeneration. Studies show breathing pressurized oxygen also stimulates the release of growth factors and stem cells. This also promotes healing and gets the cells working again.

During an HBOT session, you sit or recline comfortably in a pressurized chamber. And you breathe in 100% oxygen through a mask. You can listen to music, watch a movie or simply relax.

A typical HBOT session lasts 45 minutes to two hours. Treatments are repeated, depending on the condition, anywhere from five to 40 times.

If you want more information about HBOT and how it might help you, please contact my staff at **561-784-7852**. They will be happy to explain it all to you.

3 More Ways To Activate Telomerase And Reverse Aging

Here's what you can do right now to activate telomerase and lengthen your telomeres.

1. **Get more sunshine.** The sun's UV rays lengthen telomeres by making vitamin D... In one study of telomerase, people took either a placebo or 2,000 IU of vitamin D a day. After only four months, telomerase activity in the vitamin D group skyrocketed by 19.2%. Those taking the placebo had no change.²⁸ If you can't get 20 minutes of sun daily, start out with 2,000 IU every day of vitamin D3. And the next time you get blood work ask your practitioner to test your vitamin D levels so you'll know if you need more.

2. **Then, take a potent antioxidant.** Raising the level of vitamin C in your cells stimulates telomerase. It could slow down the shortening of telomeres up to 62%.²⁹ To protect telomeres, I recommend taking 5,000 mg to 8,000 mg every day. Be sure to divide that amount into smaller doses throughout the day.

3. **And, eat more fat.** Omega-3 fatty acids activate telomerase. A study in the *Journal of the American Medical Association* found patients with the lowest levels of omega-3 fats had the fastest telomere shortening. Those with the highest levels had the slowest shortening.³⁰ Your body can't make omega-3s. You have to get it from food. Some of the best food sources are wild, cold-water fish. But I've found most people need to supplement. Try to get 3 grams of omega-3s a day. I recommend krill and calamari oil. They're not polluted like regular fish oil.



During one of my trips to India, I saw gotu kola plants (Centella asiatica) growing in the wild. This herb increases telomerase activity nearly 9-fold.

4. **Supplement with this Ayurvedic herb.** A new study in the journal *Molecular Medicine Reports* found that human blood cells treated with a compound containing *Centella asiatica* extract — from the medicinal plant also known as gotu kola — saw a nearly 9-fold increase in telomerase activity compared with untreated cells.³¹ When choosing a gotu kola supplement, look for one with more of the active components. Select one that is standardized to the asiaticosides or asiatic acid. I recommend taking 300 mg a day.

5. Finally, boost this red wine compound. Studies show resveratrol activates telomerase.³² It also “turns on” genes that promote longevity and “turns off” genes that promote disease. Red wine is a good source of resveratrol. But you’d need to drink gallons of wine to get the telomere benefits. That’s why I recommend supplements. Take at least 50 mg per day for telomerase activation. But resveratrol is safe, so you could take up to 200 mg per day.

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The Secret Soldier That Arms Your Immune System's Killing Power

You may know *nitric oxide (NO)* as the “circulation miracle”... or the secret switch that saves a man's flagging sexual prowess.¹

But nitric oxide has a hidden power no doctor is likely to tell you about.

Truth is, this extraordinary molecule powers up your immune system and is responsible for arming your white blood cells to seek and destroy disease-causing invaders.

Without nitric oxide, your immune system would collapse, leaving you defenseless in a world full of deadly pathogens.

Now more than ever, it's critical you fortify your defenses. Today, I'll show you why nitric oxide is such a major contributor to your immune strength and how it arms your T cells to be the trained killers they should be.

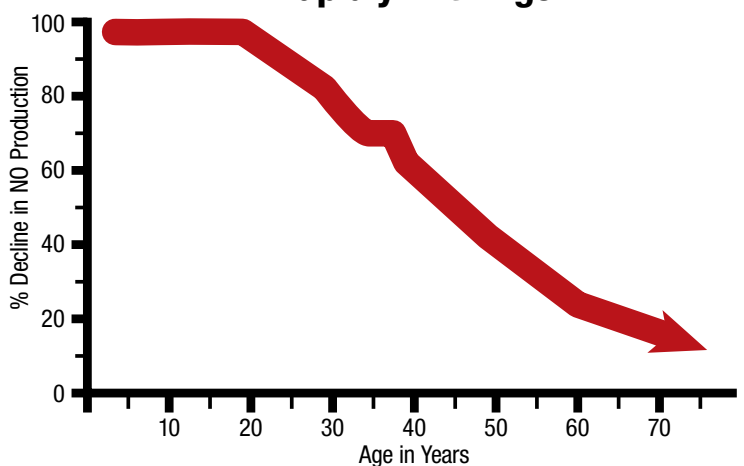
But you're in a race with time... because nitric oxide disappears rapidly as you age. By the time you're 60-years old, nitric oxide is circling the drain. And that's devastating for your immunity.

In this *Confidential Cures* article, you'll learn exactly how you can trigger your body to produce more of this Nobel Prize-winning molecule to protect you from the stress and overwhelming challenges we face today.

Born From Obscurity... Nitric Oxide Takes Center Stage

In 1998, American pharmacologist Robert Furchgott was awarded a Nobel Prize for providing the first proof that nitric oxide performs critical biochemical functions in your body.

Nitric Oxide Declines Rapidly With Age



By the time you're 60 years old, nitric oxide has declined by almost 80 percent.

NO is a critical *signaling chemical*, and its primary function is to send “blood flow signals” that tell your blood vessels to relax and expand.

In this way, NO controls every corner of your body, and regulates the behavior of nerves in organs as diverse as the lungs, brain, and vasculature.

And in the decades since Furchgott made his amazing discovery, study after study has proved its power over multiple illnesses.

Boosting NO levels is hands down the fastest and most efficient way to ramp up your body's natural defenses.

Sadly, without enough NO, your immune system is weak and defenseless when it encounters foreign invaders, like viruses, bacteria and even cancer cells.²

Is Your Immune System Gasping For Air?

Oxygen is the source of life. Without it, you wouldn't be alive. All parts of your body require oxygen to make and burn fuel — and thus live.

When you inhale, the oxygen present in the air you breathe is transported throughout your body via your blood vessels after it binds to a protein molecule called *hemoglobin* in your red blood cells.

The super power of NO lies in its ability to ensure that the maximum possible amount of oxygen is delivered around your body — to every cell, tissue, organ and organ system.

NO does this by sending “blood flow signals” that relax your arterial walls. This dilates and expands your blood vessels, which literally opens the way for blood and oxygen to be carried throughout your circulatory system.

Unfortunately, you face two intrinsically-connected problems:

1. **Pollution:** Most of us who live in the industrialized, developed world suffer from low oxygen. Studies show that breathing polluted air — especially air containing nanoparticles from traffic congestion and heavy metal industrial toxins like *mercury, lead, cadmium and arsenic* — results in significantly reduced oxygen saturation in your body.^{3,4}
2. **Low NO levels:** Your supply of NO drops as you age. By the time you reach 50, you produce less than half as much NO as you did in your 20s. That makes it much harder for your blood to flow, and even harder for your organs and tissues to get enough oxygen.

This can result in serious conditions called *hypoxia* (low oxygen in blood) and *hypoxemia* (low oxygen in tissues), and they are at the root of multiple illnesses in our polluted modern world.⁵

To get an idea of what happens to your body's tissues and organs when they're low on oxygen, just press down on one of your fingernails and then release the pressure. The bed of your nail will turn whitish for a moment before regaining its pink color.

Had you not been able to release the pressure, all the cells at the tip of your finger would soon suffocate and die, because you stopped the flow of oxygen-carrying red blood cells.

This is exactly what's happening to your cells, tissues and organs with low NO levels in today's polluted world.

At the same time, low oxygen levels cause your body to become more vulnerable to all manner of infection and disease.

Your Body's Defenders Need Oxygen To Fight

All human cells thrive on oxygen. And the *leukocytes*, or white blood cells, that make up your body's natural defense system are no different.

This army of natural defenders consists of various kinds of white blood cells, including:

- **Cytokines**, like *interleukins* and *interferon*
- **Phagocytes**, like *neutrophils* and *macrophages*
- **Lymphocytes**, like *B cells*, *T cells* and *Natural Killer (NK) cells*

“The super power of NO lies in its ability to ensure that the maximum possible amount of oxygen is delivered around your body.”

White blood cells work together to identify, attack and kill "foreign" microbes and chemicals that invade your body, including those that cause infections and diseases like cancer.

All of these immune cells require oxygen to function optimally. A recent study conducted by researchers at the University of Erlangen-Nuremberg in Germany noted that oxygen is “indispensable” for your immune system to work properly.⁶

Although white blood cells don't carry oxygen the way red blood cells do, they still require it as a source of energy.

Additionally, when white blood cells metabolize oxygen, they make a byproduct called *hydrogen peroxide*, which is broken down by the enzyme *peroxidase* and converted into some of your body's most powerful antioxidants.

You may already know about the power of your body's own antioxidants as another critical line of defense used by your immune system.

Studies show that your immune system also deploys *hydrogen peroxide* as a kind of “first responder” that attacks bacteria and other harmful pathogens, while at the same time alerting the army of white blood cells to mobilize for defense.⁷

At the same time, antioxidant “super oxides,” like *Superoxide Dismutase (SOD)*, *Catalase* and *Glutathione Peroxidase* — can't synthesize properly without enough oxygen.

Research by immunologists at UCLA has proven that an aging body's ability to reinvigorate its antioxidant defenses against free radicals can literally reverse the negative effect of these harmful molecules on the immune system.⁸

Other studies reveal that low levels of oxygen cause your immune system to release surges of pro-inflammatory cytokines, which can lead to the chronic inflammation that results in heart disease, and other conditions like diabetes, arthritis and cancer.

Without NO, your immune system simply can't get enough oxygen to function at its best.

But NO's immune-boosting properties extend far beyond its power to relax blood vessels to maximize oxygen delivery...

NO Is Your Immune System's Secret Weapon

In the decades since Furchgott won a Nobel Prize, a veritable cascade of findings have revealed that nitric oxide plays its own intrinsic role in your immune system, and provides it a special kind of *superpower*.

Studies now reveal that many immune system cells, like macrophages, produce their own nitric oxide, boosting the killing power of immune cells to help them kill invading organisms.

These parasitic invaders, like the *mycobacteria* that cause *tuberculosis* and *leprosy*, or the invasive *cryptococcus* fungus and *toxoplasma* organisms that often plague people with AIDS, slip inside healthy cells and try to take up residence there.

But research shows that a fully functioning immune system can destroy these invaders by literally puffing nitric oxide at them.⁹

Meanwhile, NO has been shown to possess powerful anti-microbial properties of its own. Studies also reveal that NO is puffed out in large quantities by immune cells in response to inflammation.^{10,11}

And it plays a key role as a signaling molecule to activate disease-killing T cells in your immune system when they encounter invaders, like viruses, bacteria, fungi and cancer cells. Studies show when cancer cells start to produce NO, they suddenly stop growing.^{12,13,14}

Four Great Ways Boost Your NO Levels

There are a number of excellent and easy ways to increase nitric oxide in your body. I recommend the following 6 methods....

1. Seek Out Hyperbaric Oxygen Therapy:

Also known as HBOT, this therapy is as easy as breathing — except you're getting 100% oxygen under higher pressure (up to 2.5 times) than we have normally in the air.

This is an excellent way to counter *hypoxia* and *hypoxemia*, because your lungs take in more oxygen than would be possible if you were breathing oxygen at normal air pressure. The higher pressure physically dissolves more oxygen into your red blood cells.



Hyperbaric oxygen therapy stimulates nitric oxide production and a more youthful immune system.

Studies also show that HBOT increases the synthesis of nitric oxide, boosting your immune system and relaxing all of your blood vessels — from the largest arteries and veins to the tiniest of capillaries, allowing oxygen-rich blood to reach every part of your body.

Getting hyperbaric oxygen therapy is easy and painless.

*If you're interested in HBOT therapy at the **Sears Institute for Anti-Aging Medicine** and are in the South Florida area — or are considering a trip to South Florida — just call my staff at 561-784-7852 for details. Or visit my website at www.searsinstitute.com.*

2. Bolster Your Immune System with the Building Blocks of Nitric Oxide: L-arginine is an amino acid that causes a biochemical reaction that creates nitric oxide and dilates blood vessels. Some of the best arginine-rich foods include:

- Lobster
- Crab
- Spinach
- Spirulina
- Turkey
- Game meat
- Chicken
- Goat
- Fish

You can also supplement. But make sure you buy L-arginine, not the synthetic DL forms. You can find it in capsules or powders.

And if you do take L-arginine, there's another amino acid you should take with it. You see, after you've been using L-arginine a while, an enzyme starts blocking the NO conversion. That's why you need **L-citrulline** as well. It blocks this enzyme, so L-arginine is free to make NO.

Take L-arginine and L-citrulline in a 5-to-1 ratio. I recommend daily doses of 1,000 mg of L-citrulline and 5,000 mg of L-arginine.

3. Power Up Your Immunity with Pomegranates: This fruit has been shown to increase nitric oxide in all of your blood vessels. In one study, mice fed pomegranate juice formed about 50% less brain plaques than a control group — thanks to NO boosts and increased blood flow.¹⁵

Look for cold-pressed, organic pomegranate juice with no syrups or sweeteners. I recommend drinking two ounces of the juice a day. And eat the seeds, either fresh or dried. Throw a handful on top of salads or in your yogurt or smoothie.

You can also find pomegranate extract in supplement form. I recommend taking 500 mg to 1,000 mg per day.



Pomegranate increases nitric oxide production and protects your brain from amyloid plaques.

4. Discover the Food of Champions: Popular with athletes, eating more beets is one of the best dietary ways to increase your oxygen intake. And thanks to large amounts of nitrates in this root vegetable, beets boost your body's production of nitric oxide.

When you eat beets, it mixes with your saliva and bacteria on the inside of your mouth. This combo turns into nitric oxide.

You can get the most out of beets by either chewing them raw or throwing them in your juicer. If possible, use organic beets and throw in the roots, fruits, and the leaves.

Here's my easy recipe for fresh beet and vegetable juice:

- 2 raw organic carrots
- 3 organic celery sticks
- ½ an organic cucumber
- 1 organic beetroot

Chop all the vegetables, put them in your juicer, and blend. You can buy organic beet juice in most supermarkets and health food stores.



When eaten, red beets combine with saliva to generate nitric oxide.

For maximum effect, add ***hawthorn extract***, a member of the rose family that's been used by herbal healers for centuries as a remedy for chest pain. It's also used to treat enlargement of the heart, as well as high blood pressure.

Take one glass (250ml) of fresh beet juice along with 15 drops of liquid Hawthorn extract daily to boost nitric oxide levels.

You can also take a supplement, but make sure to choose an activated beet extract at no less than 2,500 mg of fresh beet powder. Open two capsules

into water or juice and then add the liquid hawthorn. Swish it around your mouth, so it mixes with your saliva to activate the nitric oxide.

Other foods that will boost your nitric oxide levels include:

- Garlic
- Dark chocolate
- Leafy greens, like spinach, arugula, kale and cabbage
- Foods high in CoQ10, like organ meats, fatty cold-water fish and muscle meats like beef, chicken and pork

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Death By Air Pollution?

As Covid-19 Continues to be a Distraction, EPA Rollbacks Are Quietly Making a Bad Situation Worse

Few seem to notice that our Environmental Protection Agency is quietly dismantling regulations that protect our air, land, and water.

These rollbacks will only increase our exposure to heavy metals and other toxins that get into our bloodstream just by breathing the air and living in our homes.

And that's bad news. Our bodies are not equipped to handle the onslaught of the thousands of highly toxic compounds we face every day.

In a moment, I'll share with you the most effective ways you can eliminate these dangerous toxins from your body. First, let me show you what these bureaucrats are doing and what we're up against.

Corporate Interests Lobby The EPA To Relax The Rules

Global corporations are successfully influencing the EPA to give them the upper hand. These efforts resulted in:

1. **Relaxed rules on oil and coal-fired power plants.** The regulations that had been in place were designed to limit the amount of mercury, arsenic, lead and other heavy metals spewed into the air.

A review of 113 studies from the past 30 years provided evidence that people who live near coal-fired power plants not only have higher death rates and at earlier ages, but a dramatic increase in:¹

- asthma and other respiratory diseases
- lung cancer
- brain damage
- cardiovascular disease



Over 160 million Americans breathe dangerous levels of pollution every day.

2. **Eradicated protections for wetlands.** That means that tens of thousands of miles of waterways are open for Big Agra and Big Oil to directly dump pesticides, farm waste and other toxins into previously preserved bodies of water. These waterways provide drinking water for millions of Americans. Contaminants in drinking water — from arsenic to copper to lead — have been found in the tap water of every single state. This kind of heavy metal poisoning leads to:

- hypertension and heart disease
- decreased kidney function
- brain damage
- liver damage
- cancer

3. Refused to regulate a rocket fuel chemical found in drinking water. Perchlorate is a component of rocket fuel, fireworks and highway flares that frequently contaminates drinking water sources. Perchlorate has been found in the water and soil of 45 states. But in a statement defending their position, the EPA has determined that “perchlorate does not occur with a frequency and at levels of public health concern, and that regulation of perchlorate does not present a meaningful opportunity for health risk reduction for persons served by public water systems.”

But according to scientists who looked into this contamination, 74% of foods analyzed contained this toxin.² Consuming perchlorate through water or food harms brain development and growth in children. And in adults, it eventually disrupts thyroid function and leads to:

- heart problems
- depression
- loss of kidney function
- memory loss
- chronic fatigue syndrome
- weight gain, hair loss and dry skin

The Out-Of-Control Chemical Experiment Going On In Your Body

I’ve been warning you about the toxins in our environment for years. And how they trigger inflammation... lead to accelerated aging of the lungs, heart and brain... make you gain weight... cause you to feel fatigued... and are responsible for as many as *5 million premature deaths* every year.³

There are over 80,000 synthetic chemicals produced and used in the U.S. Right now, the average adult has about 700 chemical contaminants in the body.

Do you know how many of these chemicals require testing by the EPA? Just 200... and only five have been regulated.

“Air pollution is a 21st century problem. Our ancestors certainly didn’t worry about poisonous air.”

Every woman, man and child now bears a slew of synthetic chemicals and heavy metals. This is known as our chemical body burden.

But our exposure to them starts *before* we’re even born. One study found 287 chemicals and toxins in the blood of newborn babies. It’s shocking.⁴

Air pollution is a 21st century problem. Our ancestors certainly didn’t worry about poisonous air.

You may think that because you don’t live in a polluted urban area you’re safe from pollution... That may have been true at the start of the industrial revolution. Unfortunately, that’s no longer the case.

Today, 160 million Americans live in areas with dangerous levels of pollution. Persistent organic pollutants (POPs) are non-biodegradable compounds that stay in the atmosphere forever. Even if you choose to live on a mountaintop or a deserted island, wind and water currents would guarantee these pollutants soon found their way to you.

Some of the nastiest POPs include:

- **BPA** – polycarbonate plastics found in water bottles and other food containers.
- **PCBs** – these are all over your house... in paint, wiring, old fluorescent fixtures and sealants like caulk.
- **PBDE** – a flame retardant used in fabrics, furniture foam and some appliances.
- **PFOS** – used in nonstick pots and pans, stain-resistant products, carpets and upholstery.
- **Atrazine** – banned in Europe, but used in the U.S. in parks and on Big Agra crops.

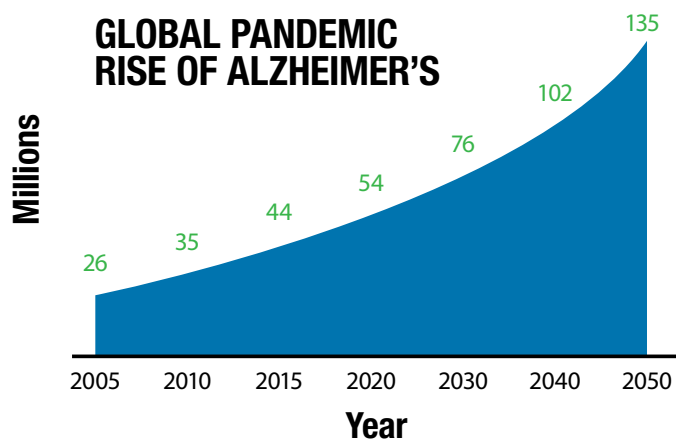
Other common pollutants are heavy metals, noxious gases and tobacco smoke.

One of the most dangerous and insidious ways these poisons enter our body is through the air we breathe. And this invisible contamination is leading to a number of diseases and conditions, including one of the fastest-growing epidemics of the century — Alzheimer’s and dementia.

Air Pollution Leads To Alzheimer's?

For years, I've been saying that our toxic environment is driving up rates of chronic diseases — including Alzheimer's. Now research is finally catching up...

A new study from researchers at the University of Southern California found that older women who lived in areas of high pollution were **81% more likely to experience cognitive decline** and **92% more likely to develop Alzheimer's disease** than those who live in less polluted areas.⁵



Today, almost 55 million people worldwide are living with Alzheimer's or other kinds of dementia, with the vast majority of them in Western Europe and America.

The USC researchers estimate that more than 20% of dementia cases worldwide may be due to air pollution.

You see, in areas where there's heavy traffic and exhaust fumes, the air is loaded with "particulate matter," or PM. These are tiny particles of toxins like sulfate, nitrate, ammonium, black carbon and heavy metals. They're 30 times smaller than the width of a human hair.

And when it comes to toxins, size matters.

The smaller the particles, the more oxidative stress they cause in your cells.

But there's another reason... Because they're so small, they can travel along nerve byways directly to your brain after you inhale them through your nose. Once there, they begin to wreak havoc.

A 2015 analysis of MRI brain scans by researchers at Harvard Medical School found that the closer

people lived to a major road, the more their brains shrank.

And in January, *The Lancet* published a study that looked at dementia rates in the Canadian province of Ontario. Researchers found that people living within 50 meters of a major road — where levels of PM are often 10 times higher than just 150 meters away — were 12% more likely to develop dementia than people living more than 200 meters away.

Sadly, the news gets more grim...

It's Not Only Adults Who Are Affected

According to researchers from the University of Montana, living in polluted megacities significantly boosts risk for Alzheimer's disease, especially in children and young people.⁶

Researchers in Mexico City tested a group of 57 children and 48 of their parents. Mexico City has gone through extreme urban growth recently. Growth that comes with serious pollution. Millions of children exposed to harmful levels of toxins every day.

The researchers focused on a part of the brain called the hippocampus. This is the region that handles higher cognitive function and memory. They measured three major brain metabolites in each child and parent pair. And tested them for the APOE gene that's been linked to higher Alzheimer's disease (AD) risk.

What they found was pretty shocking...

Children with the risky AD gene who were exposed to more toxic air showed markers of neurodegeneration. The kind of brain damage usually seen in adults with mild cognitive impairment. You also see it in AD patients. These children also had evidence of the tau or brain tangles you see in AD. And they had high levels of brain inflammation and a build-up of metals tied to pollution.

And even though the children looked healthy, they had deficits in their attention and short-term memory. They also scored lower on verbal and IQ tests compared to children exposed to less polluted air. It's likely they won't do as well in school or with their social skills.

Air Pollution Also Linked To Obesity And Diabetes

I recently read a study that stunned me — but shouldn't have. It suggested that the air we breathe is making us fat.

A researcher from Duke University placed two groups of rats in separate chambers. One group was exposed to Beijing's super toxic air. That city has some of the worst air pollution in the world. The second group breathed filtered air.

The two groups ate *exactly* the same diet.

After 19 days, the rats exposed to the air pollution were 18% fatter. Their LDL levels were 50% higher and their triglycerides were 46% higher. This indicates high levels of fat in their blood. To make matters worse, their lungs were 25% heavier and their livers weighed 16% more — a clear sign of inflammation.⁷

These pollutants settle deep in your skin and organs, changing the way your body and your metabolism function. And metabolic dysfunction leads to obesity.

These environmental toxins scramble your hormone signals. This tricks your fat cells into storing more fat. Your pancreas starts to secrete too much insulin — a condition that leads to insulin resistance. Over time, high insulin levels lead to weight gain and type 2 diabetes.

I wanted to know more, so I looked into other studies linking air pollutants to insulin resistance.

An Ohio State researcher exposed groups of mice to different kinds of city conditions. These included smoke, smog, car fumes and more. After 10 weeks, all the mice had a dramatic increase in belly fat. Belly fat is a key indicator of heart disease, diabetes, high blood pressure, cancer and mortality.⁸

A Swedish study measuring human fat mass found that people with the most pollutants in their blood were 10.6 pounds fatter than those with less pollution in their blood.⁹

A study published in *The Lancet Planetary Health* detailed the harmful effects of poor air quality and diabetes. The scientists followed a group of United States veterans for about 8.5 years. Using a variety

“These pollutants settle deep in your skin and organs, changing the way your body and your metabolism function.”

of variables, they determined that air pollution contributed to 3.2 million cases of diabetes and the loss of 8.2 million years of healthy life in 2016. This last figure represents about 14% of all years of healthy life lost due to diabetes from all causes.¹⁰

Further diseases caused by particulate matter, pollutants and unhealthy air include:

- **Acute Respiratory Disease:** Exposure to polluted air triggers inflammation and irritation in the lungs, increases your likelihood for infection and encourages changes to lung function.
- **Chronic Respiratory Disease:** Air pollution worsens asthma and aggravates chronic obstructive pulmonary disease (COPD). This inflammatory lung disease is characterized by an obstructed flow of air in the lungs.
- **Heart Disease and Stroke:** Exposure to air pollution also increases the risk of heart disease and stroke.^{11,12} The 10-year study found a direct link between air pollution and atherosclerosis — the narrowing or blockage of arteries that leads to heart disease. The researchers also found that long-term exposure to pollution accelerates the buildup of calcium in the coronary artery, worsens inflammation and prematurely ages blood vessels. These factors dramatically increase the risk of heart attack and stroke.

3 Easy Ways To Detox And Safeguard Your Future

Here are three ways to cleanse and detox naturally.

1. **Intravenous Chelation:** I offer safe intravenous (IV) chelation to just about every patient I see. Studies show chelation restores brain function lost from mercury poisoning. It's also proven to reverse symptoms of Alzheimer's.

For IV chelation, I inject calcium disodium EDTA directly into your bloodstream. In no time at all, EDTA grabs toxins and drags them out — painlessly. If you would like more information about IV chelation, please contact the **Sears Institute for Anti-Aging Medicine** at **561-784-7852**. My staff will be happy to answer your questions.

2. **N-acetyl-cysteine (NAC):** This powerful detoxifier boosts your levels of glutathione, your body's strongest antioxidant. NAC directly elevates cells' defenses against lead, aluminum and other heavy metals in your organs and bloodstream. When researchers bathed cells in lead, the DNA of the NAC-treated cells lived longer and had their DNA better protected from damage.

You can buy NAC online or at health food stores. As a complement to your at-home regimen, I recommend one 500 mg tablet per day. After a couple of weeks, take 500 mg twice a day.

3. **Modified Citrus Pectin:** The inner peel of citrus fruits contains one of the most potent detox substances I've ever found. In one USDA study, people taking modified citrus pectin for six days were able to excrete 150% more mercury... 230% more cadmium, and... 560% more lead.⁸

But make sure you get the right kind. Most pectin is made of large long-chain carbohydrate molecules. They're too big to digest and will just pass through your body. The citrus pectin used in clinical studies is specially formulated for absorption, so it can easily find and bind to toxins.

You can find modified citrus pectin online. I recommend taking 5 grams a day.

Protect Yourself From Pollution

1. **Check Levels Where You Live.** You won't always know if pollution where you live has reached a dangerous level. To find out, log on to <http://www.airnow.gov/>. Or download **IQAir** on your smartphone. This app provides air pollution data from all over the world.

2. **Avoid The Hottest Time of Day.** Air quality is lowest when the temperature is highest. Plan your outdoor activities for early morning or evening when temperatures aren't at their highs.

3. **Filter Indoor Air.** Home air filters can block particulate matter. Make sure yours rates a 9 or higher on the MERV scale (Minimum Efficiency

Reporting Values). When sitting in traffic, use the recycled-air setting on your air conditioner so you don't breathe in fumes.

4. **Don't Bring Chemicals Into Your Home.** I know this is easier said than done. But as you know, consumer products are a major source of indoor air pollution. And in the U.S. only 1% of these chemicals have been tested for human safety.¹³ Some of the worst offenders include flame retardants in furniture, insulation and carpets. PFAS in takeout cartons and pizza boxes, Teflon cookware, pesticides and even dental floss.

5. **Increase Foods That Fight Inflammation and Antioxidants.** Stock up on foods high in antioxidants, like cherries, kale, and tomatoes. Antioxidants trap free radicals, which help pollutants do their dirty work in the body.

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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.

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).

