

September 2023

Dear Friend,

I've been warning you about toxins in our environment for years.

And how they trigger inflammation... make you gain weight... cause you to feel fatigued... lead to accelerated aging of the lungs, heart, and brain...

And are responsible for as many as 7 million premature deaths every year.

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.

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

A lot of my patients thought they were safe from these toxins because they never lived in a "polluted urban area. 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 particulate matter pollution. These are tiny particles of toxins like sulfate, nitrate, ammonium, black carbon, and heavy metals. They're 30 times smaller than the width of human hair.

And when it comes to toxins, size matters. The smaller the particles, the more damage they cause in your body.

For years, I've been saying that our toxic environment is driving up rates of Alzheimer's. And the case of a teenage boy in China who was just diagnosed with the disease proves it. In your September issue of **Confidential Cures**, you'll learn about this case. You will discover:

- 1. The tragic case of a 19-year-old teen who is the youngest person with Alzheimer's. Two years ago, he started to experience memory loss and impaired problem-solving. A year later, he couldn't remember what he'd had for dinner the night before. Researchers have yet to connect the dots between our environment and his condition. But I'll show you where these toxins are lurking, and more importantly, how you can protect yourself — and your brain.
- 2. How increasing a unique kind of body fat most often found in babies — can help you burn calories, improve a broken metabolism, and protect you from disease.
- 3. The latest breakthrough treatments that have recently become available for cataract prevention and removal, but are still ignored by most optometrists and ophthalmologists. You'll also learn that these methods are safer and more natural than conventional surgery, and come with the promise that the cataracts won't return.

To Your Good Health,

At SSOLAD.

Al Sears, MD, CNS

Also in This Issue...

World's Youngest Alzheimer's Patient Proves Condition ISN'T Genetic	2
Increase This Unique "Baby" Fat To Burn Calories, Boost Broken Metabolism, And Protect Yourself From Disease	7
Vision Breakthroughs Ignored By Conventional Medicine	12

Vol. XII Issue 9

World's Youngest Alzheimer's Patient Proves Condition ISN'T Genetic

Could Our Toxic Environment Be To Blame?

The traditional medical establishment has totally missed the mark when it comes to Alzheimer's research, prevention, and cures.

Most doctors still believe that Alzheimer's is caused by bad genes.

But they couldn't be more wrong.

It is true that about 5% of the world's population is at risk for what's known as "early-onset" Alzheimer's. This disease, which affects patients in their 40s and 50s, does run in families.

But late-onset Alzheimer's is the most common form. It strikes after age 60. And the drastic increase in patients is a recent phenomenon.

Between 2000 and 2020, U.S. Alzheimer's deaths skyrocketed by 146%. Alzheimer's cases are expected to more than double by 2050, affecting 14 million Americans.¹

Bad genes can't explain how this huge increase happened in only a few generations...

Evolution just doesn't work that fast. Human genes can't change so drastically in just two or three generations.

And the tragic case of a teenager who was diagnosed with Alzheimer's confirms it...

Earlier this year, a 19-year-old in China became the youngest person in the world with the condition.²

The teen initially started experiencing symptoms two years earlier...including memory loss, difficulty concentrating, and impaired



Researchers say they're "at a loss" as to how a teenager could develop Alzheimer's. But you've seen me connect the dots between this devastating condition and our toxic environment.

problem-solving. One year later, he couldn't remember what he'd had for dinner the night before.

By the time he was seen by doctors in Beijing, his memory loss was so severe that he had to drop out of school.

Brain scans revealed that his hippocampus, the area of the brain where memories are stored, had atrophied considerably.

He also had damage to his temporal lobe and elevated levels of a protein called tau, both symptoms — but not causes of — of Alzheimer's.

Genome sequencing of his DNA ruled out any gene mutation or genetic predisposition.

Scientists Miss The Connection Between Alzheimer's And The Air We Breathe

Researchers who wrote the boy's case study in the *Journal of Alzheimer's Disease* are at a loss to explain how he developed the disease.

As a regular reader, you've seen me connect the dots between our toxic environment and this brain-wasting condition...

And once you dig deep enough, the research proves it.

Researchers at the University of Southern California found that older folks 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.³

The USC researchers determined 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.

These are tiny particles of toxins like sulfate, nitrate, black carbon, and heavy metals like ammonium, lead, cadmium, and mercury.⁴ 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.

Remember, this 19-year-old teen lives in China. Despite making progress to clean up their air, the country continues to be ranked one of the top 10 most polluted places in the world.

In fact, 99% of China's 1.4 billion people live in areas where the annual average particulate matter greatly exceeds what is considered "safe" air quality guidelines.⁵

But air pollution isn't just a crisis in China.

A recent study by MIT's Laboratory for Aviation and Environment calculated that outdoor air pollution causes more than 200,000 premature deaths in America every year — along with millions made ill and infirm.⁶

A recent analysis of MRI brain scans by Harvard researchers found that the closer people lived to a major road, the more their brains shrank.

And *The Lancet* recently 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 particulate matter 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.

Where World's Deadliest Particulate Matter Comes From

Particulate matter is formed when particles of different toxins join together in tiny droplets of liquid to produce one of the most lethal forms of air pollution. The pie chart below shows the sources of particulate matter in the environment.



Exposure to particulate matter has been linked to an increased risk of Alzheimer's, heart disease, certain kinds of cancer, and runaway inflammation.

SOURCES OF PARTICULATE MATTER

Factories, mines, and power plants release tons of toxins and heavy metals into the air you breathe every day.

Big Agra also produces huge volumes of particulate matter. Fertilizers used in agriculture release ammonia and nitrous oxide into the atmosphere to create particulate matter.

But the biggest culprit of all is coal-burning emissions — and the smaller these toxic particles are, the more deadly they are.

A new study from NYU Langone Medical Center provides alarming evidence that, in terms of public health, coal power plants are the most toxic industry in America.

The researchers studied data from 45,000 people in 100 American cities to establish the health impact of various types of air pollution from sources such as coal burning, traffic emissions, oil burning, and wood burning.⁷

Not only did they discover that more toxins were released from coal-powered energy plants than other sources — they are also small and more dangerous because they can penetrate much deeper into your lungs and bloodstream.

The study noted that coal-burning particles are five times more damaging than other particle types of the same size.

That means the toxins spewed out by the power industry — like sulfur dioxide, nitrogen oxide, arsenic, mercury, formaldehyde, and cadmium lodge deep in your body.

And these toxins cause more damage than just Alzheimer's...breathing these small particles has also been linked to:^{8,9,10,11,12,13,14}

- Heart attack and cardiovascular death
- Lung disease and lung cancer
- Cancer of the prostate, breast, pancreas, and kidney
- Type 2 diabetes
- Osteoporosis
- Autoimmune diseases including multiple sclerosis

The heavy metals that attach themselves to particulate matter also cause runaway inflammation.

One Of The Worst Cases Of Particulate Matter Toxicity I've Seen

I've seen the effect of particulate matter pollution firsthand in my patients. In fact, it affects almost every patient I see at my clinic. Let me tell you about one of them...

By the time he came to see me, my patient was feeling extreme fatigue. He couldn't focus at work. He had no appetite and was suffering from stomach upset and an overall sense of weakness and malaise.

He'd already seen two doctors who sent him for standard blood work. But the results didn't reveal anything out of the ordinary.

His second doctor told him he had high blood pressure and prescribed one of Big Pharma's beta blockers. But he didn't feel any better...

I told him that we were going to stop the medication and test for a suspicion I had.

So I measured his heavy metals and found that his cadmium was six times the upper limit of normal. It was one of the worst cases of heavy metal toxicity I'd seen.

None of his previous physicians thought of testing for this. But I don't blame them. It's not something you typically learn in medical school.¹⁵

Another thing most traditionally trained doctors don't know is that even so-called "acceptable" amounts of heavy metals trigger a runaway inflammatory response.

And despite what the EPA tells us, there is no safe level of heavy metal exposure. Your body can't break these metals down easily, which allows them to build up in your body.

My Patient Is Not An Isolated Case

Unfortunately, heavy metal poisoning sneaks up on you over time, so symptoms are often overlooked or chalked up to other causes. I don't know how this patient got so much cadmium (he isn't a smoker), but it's not hard to guess.

Common sources are things you encounter every day... burning waste, cigarette smoke, car exhaust, coffee, some

processed and refined foods like hydrogenated oils — even shellfish and tap water.

I recommended chelation.

Within days, he told me, "I feel young again instead of tired and weak." His blood pressure was also back to normal.

My patient is not an isolated case.

I've treated hundreds of patients for heavy metal toxicity that leads to chronic inflammation.

Chances are you have some level of exposure to heavy metals. You can become toxic from:

- Eating foods that contain metals especially predatory fish, wheat cereals,¹⁶ certain root vegetables
- Inhaling it through the air
- Drinking water from tainted supply systems
- Taking medications or supplements containing high amounts of metallic elements
- Dental work that used "silver" amalgams

But the biggest contamination comes from the manufacturing.

These poisons are used in producing things like pesticides, glass, wood preservatives, fertilizers, paint, batteries, plumbing, hobby paints, and ink.

Personal care products products including cosmetics are also a known source.¹⁷

Protect Yourself From Toxic Particulate Matter With IV Chelation

At the Sears Institute for Anti-Aging Medicine, I routinely test patients for lead exposure and other heavy metal toxicity. And they are always shocked by the results.

"I've been helping patients use chelation for years to rid their bodies of heavy metals and other toxins. It's a safe, easy, and fast solution, with a very low risk of side effects." The best way to detoxify your body is with chelation. I recommend IV chelation.

At my clinic, I've been helping patients use chelation for years to rid their bodies of heavy metals and other toxins. It's a safe, easy, and fast solution, with a very low

risk of side effects. IV chelation delivers calcium disodium EDTA directly into your bloodstream.

In just about an hour, this "claw" binds to the heavy metals and toxins in your bloodstream and those that have accumulated in the fat around your tissues, like your liver, and pulls them out.

EDTA is the only procedure able to remove toxic metals from human organs, tissue, and blood.

If you're interested in checking your heavy metals levels and getting IV chelation, please call my clinic at 561-784-7852. My staff is happy to schedule your appointment.

3 More Ways To Detox Pollutants And Protect Your Brain And Health

1. **Protect Your Brain With B Vitamins.** New research from an international team studying the effects of particulate matter found that a high-dose daily supplement of these essential nutrients "completely offset" the damage particulate matter causes.¹⁸ Toxins like particulate matter attack the genes in our immune systems. That lowers our ability to fight off disease.

In the study, participants took B vitamins for four weeks. Researchers found that supplementing reduced the effect of particulate matter by up to 76% at 10 different gene locations. The vitamins also reduced damage to mitochondrial DNA.

Another study found that supplementing with B vitamins slowed shrinkage by as much as seven-fold in areas of the brain known to be most impacted by Alzheimer's.¹⁹

For the best protection, I recommend supplementing with 800 mcg of folic acid (folate), 1,000 mcg of B12, and 2 mg of B6.

2. Supplement With 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. I recommend 500 mg per day. After a couple of weeks, take 1,000 mg a day.

3. **Detox With 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.²⁰

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.

References

1. Alzheimer's Association. "Facts and figures 2023" https://www.alz.org/media/documents/ alzheimers-facts-and-figures.pdf. Accessed on July 12, 2023.

2. Jianping J, et al. "A 19-year-old adolescent with probable Alzheimer's disease." *J Alz Dis.* 2023;91(3):915-922.

3. Cacciottolo M, et al. "Particulate air pollutants, APOE alleles and their contributions to cognitive impairment in older women and to amyloidogenesis in experimental models." *Trans Psych.* 2017; 7(1):e1022.

 Sakunkoo P, et al. "Human health risk assessment of particulate matter_{2.5}-bound heavy metal of anthropogenic sources..." *Heliyon*. 2022;8(6):e09572.

5. Air Quality Life Index. Country Spotlight: China. https://aqli.epic.uchicago.edu/country-spotlight/china/. Accessed on July 12, 2023.

6. Chu J. "Study: Air pollution causes 200,000 early deaths each year in the U.S."

7. New MIT study finds vehicle emissions are the biggest contributor to these premature deaths." *MIT News*. Aug 29, 2013.

8. Thurston GD, et al. "Ambient particulate matter air pollution exposure and mortality in the NIH-AARP Diet and Health Cohort." *Eniron Health Perspect*; DOI:10.1289/ehp.1509676. 5 Jan 2015.

9. Brook RD, et al. "Particulate matter air pollution and cardiovascular disease: An update to the scientific statement from the American Heart Association." *Circulation* 2010;121;2331-2378.

10. Pesch B, Ranft U, et al. "Environmental arsenic exposure from a coalburning power plant as a potential risk factor for nonmelanoma skin carcinoma: results from a case-control study in the district of Prievidza, Slovakia." *Am J Epidemiol.* 155(9):798-809.

11. Newman, T. "Coal burning emissions 'five times worse' for health." 2015, December 2. https://ttmagazine.com/miscellaneous/coal-burning-emissions-five-times-worse-for-health Accessed on September 11, 2023.

12. Wiseman CL, Zereini F. "Airborne particulate matter, platinum group elements and human health: a review of recent evidence." *Sci Total Environ*. 2009;407(8):2493-500.

 Fortoul T, et al. "Health effects of metals in particulate matter." <u>Current Air Quality Issues</u>. 2015. Edited by Farhad Nejadkoorki.

14. Anka A, et al. "Potential mechanisms of some selected heavy metals in the induction of inflammation and autoimmunity." *Eur J Inflam.* 2022:20.

 ACAM Integrative Medicine Blog. "IV chelation therapy: finding a doctor who will test for and treat heavy metal toxicity." 2017. https://www.acam.org/blogpost/1092863/268860/ IV-Chelation-Therapy-Finding-a-Doctor-Who-Will-Test-for-and-Treat-Heavy-Metal-Toxicity. Accessed on September 15, 2023.

16. Spungen J. "Children's exposures to lead and cadmium: FDA total diet study 2014-16, Food Additives & Contaminants: Part A." 2019;36:6:893-903.

17. US Food and Drug Administration. "FDA's testing of cosmetics for arsenic, cadmium, chromium, cobalt, lead, mercury, and nickel content." www.fda.gov. Accessed on August 15, 2023.

18. Zhong, Jia, et al. "B vitamins attenuate the epigenetic effects of ambient fine particles in a pilot human intervention trial." *PNAS*. 2016;114(13):3503-3508.

19. Douaud G, et al. "Preventing Alzheimer's disease-related gray matter atrophy by B-vitamin treatment." *Proc Natl Acad Sci U S A*. 2013 Jun 4;110(23):9523-8.

20. Zhao ZY, et al. "The role of modified citrus pectin as an effective chelator of lead in children hospitalized with toxic lead levels." *Altern Ther Health Med.* 2008;14(4):34-38.

Increase This Unique "Baby" Fat To Burn Calories, Boost Broken Metabolism, And Protect Yourself From Disease

Most traditionally trained doctors and dieticians have a huge bias against eating any kind of fat. They say it clogs your arteries and causes heart disease.

But thanks to people like you, I'm beginning to see a small sliver of hope.

After being told for decades that eating fat is the worst thing you can do for your health, the most popular meal plan in the country is based on getting a huge percentage of your calories from fat.

Of course, you know that's just not true.

A large study of more than 135,000 people in 18 countries proved it. The Prospective Urban Rural Epidemiology (PURE) study looked at the diets of those people over seven years. The findings turn fat phobia on its head. Results showed:

- High carb not high fat diets increased the risk of death by 28%.
- Higher fat was linked to a 23% lower risk of death.
- Higher fat was not linked to more heart attacks or more deaths from heart disease.
- Higher saturated fat was linked with a 21% lower risk of stroke.¹

The truth is that not all body fat is harmful.

In fact, eating the RIGHT fats can actually help you stay slim. In fact, some types of fat are the secret to a slim body. Let me explain.



Your body has two types of fat — white and brown.

1. White Fat: This type of fat is fairly inert. It has cells that store energy in the form of a single large, oily droplet. It accumulates under your skin and pads your hips when you take in too many calories. It also builds up around your internal organs to cushion and insulate them. But when too much of this white fat collects around your organs it becomes dangerous "visceral" fat.

2. Brown Fat: This type of fat is also called "brown adipose tissue" or BAT. It is much more active than white fat. Brown fat cells have a larger number of smaller, oily droplets. But here's the big difference...

Brown fat cells contain mitochondria. These little organelles are like cellular power plants. They allow brown fat to generate heat. They help regulate your body's internal temperature when temperatures outside change. In fact, brown fat is the

kind that bears pack on to keep them warm as they hibernate all winter long.

Babies were born with lots of brown fat. It's wrapped around their central organs to keep them warm. This is nature's way of keeping us warm as we adapt to life outside the womb.

You see, babies don't have the ability to shiver when they're cold. Shivering is a response we develop as we get older to generate heat when temperatures drop.

Since babies can't shiver, nature supplies them with brown fat stored in the neck and around the shoulders. Brown fat is responsible for regulating temperature without shivering.

In other words, babies must rely on this brown fat to turn up their body heat. As we grow up, the brown fat in our bodies decreases. And for a long time, researchers assumed ALL of that brown fat disappeared during childhood once we had the ability to shiver.

But exciting new research shows that adults have brown fat, too.

A trio of papers published in the prestigious New England Journal of Medicine showed that adults have brown fat.² And they found that brown fat has a critical role in regulating body weight.³

Brown Fat Burns 5 Times More Calories

Unlike white fat, which clings to your hips and expands your waistline, brown fat keeps the weight off. This fat produces lots of heat by burning calories.

In one study in *The New England Journal of Medicine*, researchers reviewed PET scans and CT scans from 1,972 adults. They found BAT most often in people under 50 years old.

"Unlike white fat, which clings to your hips and expands your waistline, brown fat keeps the weight off. This fat produces lots of heat by burning calories." And they said that "...there appears to be more, or at least more active, brown fat in lean, young individuals than older, obese individuals; this suggests that having more brown fat may protect against obesity."⁴

In other words, they found that people with more brown fat were not as obese as people who did not have as much.

Another study, published in the *Journal of Clinical Investigation*, found that brown fat can burn at least five times more stored energy than other fat.⁵

The more brown fat you have, the more calories you burn — and the more weight you lose.

And brown fat can help you burn calories.

You see, BAT is actually a heat-producing organ.⁶ The cells use more calories than other types of fat cells to regulate your internal temperature. They are designed to help you survive even in cold climates. So it can be helpful to burn off excess calories you eat.

But brown fat does more than just burn calories. It can:

- Melt Dangerous Visceral Fat. By burning up calories, BAT can decrease white fat stores that build up in excess around your organs. That's another way it helps lower your risk for chronic diseases like diabetes, heart disease, stroke, and obesity.
- Lower Blood Fat Levels. A mouse study published in the journal *Nature Medicine* showed that brown fat can lower your triglyceride levels.⁷

As you already know, high triglycerides in your blood are a risk factor for heart disease, stroke, and diabetes. The researchers proved that BAT can fuel itself with triglycerides from the bloodstream.

• Stabilize Blood Sugar Levels. Researchers at Stockholm University proved that brown fat cells draw sugar out of the blood to fuel muscle cells.⁸ This helps to stabilize blood sugar levels. That can help prevent things like fatigue, cravings, headaches, and overeating. It can also reduce your risk of type 2 diabetes.

The good news is that you can produce extra brown fat or rev up your existing brown fat. That can help you burn more calories, reduce white fat, and lower your risks of heart disease and diabetes.

Flip On Your Brown Fat Switch

We now know that white fat can be transformed into tissue that acts like brown fat. We call it "beige" or "brite" (brown in white) fat.

In 2015, researchers identified this new type of fat in adults. This beige fat exists in pockets within fat tissue. They also found that mice with more beige fat were protected from diabetes and obesity. By burning calories to generate heat, the mice were more easily able to shed excess white fat.⁹

One way to make the conversion of white fat to beige fat is to chill out...

In a recent study, Japanese researchers enrolled 12 young men with lower-than-average amounts of brown fat. They asked the men to sit in a 63-degree Fahrenheit room for two hours a day for six weeks.

At first, the men burned an average of 108 extra calories in the cold compared to more normal indoor temperatures.

And after six weeks, they were burning an extra 289 calories in the colder conditions. In addition, PET and CT scans showed that their beige fat activity had increased.¹⁰

The study found that six weeks of cold increased the activity of a gene that triggers the conversion of white fat into beige fat. The gene is called uncoupling protein 1 (UCP1).

Only brown and beige fat cells have this protein. It works by redirecting energy flow in mitochondria. It changes these cellular power plants to produce heat rather than cellular energy.

In another study, six men stayed inactive for three hours while wearing a cold suit. The suit circulated water at 64.4 degrees Fahrenheit over their skin. It was cold enough to lower their body temperature without causing too much shivering.

The men burned an extra 250 calories. That's not bad... If you burned an extra 250 calories a day for two weeks you'd lose a pound of fat.

But most people would find that a very uncomfortable way to lose weight. In fact, most women have gotten very used to our modern central heating keeping temperatures in the 70s. That may dampen your brown fat activity even more.

So don't worry... You don't have to freeze yourself.

Here at the Sears Institute for Anti-Aging Medicine, I'm helping my patients dial up their brown and beige fat for a healthier, more metabolically active body.

Rev Up Your Brown Fat

As you've probably guessed, exercise is key to bringing your brown-white fat into balance. Exercise boosts the activity of UCP1 proteins.

Your muscles also release a hormone known as irisin after exercise. Irisin helps white fat mimic brown fat. In other words, it makes beige fat.

In one study, researchers tripled the amount of irisin in obese mice with high blood sugar levels. The mice lost weight and regained control of their blood sugar in just 10 days.

And research presented at a meeting of the American Diabetes Association found that exercise prompted the browning of fat in men who worked out on exercise bikes. The benefits continued to increase even after 12 weeks of training.

But there's so much more you can do to increase your brown fat. Here's what I tell my patients:

1. Increase Healthy Fats. I advise my patients to eat a meal plan that contains near-zero levels of carbohydrates and moderate amounts of protein, but is high in healthy fat. Too little fat or the wrong kinds of fats can reduce your brown fat activity.

I help my patients focus on the right kind of fats. Omega-3 fatty acids are essential for brown fat activity. Your body can't make omega-3 fats. You have to get them from food. To get more omega-3s, I advise my patients to eat like our primal ancestors:

- Enjoy Wild-Caught Fish Often. I recommend eating at least two servings of fatty cold-water fish like salmon every week. Other good sources of omega-3s are oily fish like mackerel, herring, anchovies, sardines, trout, and fresh tuna. Keep in mind that farmed fish have very few omega-3s but are high in inflammationcausing omega-6s.
- **Go Primal.** Eat plenty of grass-fed beef and organ meats, wild game, and pastured eggs and poultry.
- Also Include Plant Sources. After years of tracking my patients' omega-3 levels, I know it's almost impossible for most people to get enough omega-3s from food. You'll want to supplement. Try to get 3 to 5 grams of omega-3s every day.
- Follow This Fat Advice. Avoid trans fats and so-called vegetable oils like corn, sunflower, safflower, soy, and canola. Instead, choose olive oil, coconut oil, avocado, butter, ghee, and heavy cream. I also recommend MCT (medium chain triglycerides) oil for a keto diet. Your liver converts it directly to ketone bodies.
- 2. Increase Your Metabolism With Thermogenic Foods. Certain natural foods can activate your brown fat and increase your metabolism. These "thermogenic" foods include:
 - Hot Peppers. Capsaicin is a compound that makes hot peppers hot. It is known to burn off calories and fat. Capsaicin can raise your energy expenditure in just minutes of eating one jalapeño pepper.¹¹
 - Green Tea. This tea has long been known to have thermogenic properties. It helps you activate brown fat, lose weight, and detoxify all at the same time.
 - **Ginger.** You may have noticed that eating ginger makes you feel warm. Researchers believe that gingerol, a compound in ginger, or ginger extract, triggers beige fat to burn more calories.



There is a compound in ginger called gingerol that triggers beige fat to burn more calories.

- Aged Garlic. A study in the *International Journal Cardiology* proved that aged garlic extract alters the ratio of brown fat to white fat around the heart muscle. And it found that the more brown fat people had around the heart the less calcification they had in their coronary artery and heart.¹²
- **Apples.** A study from the University of Iowa found that ursolic acid boosted brown fat in mice. Ursolic acid is found in apple peels and gives apples their sheen.

3. Boost Your Melatonin Levels. You know melatonin as the sleep hormone. But it also activates brown fat...

A study in the *Journal of Pineal Research* found that rats who had more melatonin also had more activated brown fat. And they burned more calories.¹³

To make sure you're getting enough melatonin, here's what to do:

- Get Some Natural Sunlight Every Day. Sunlight triggers your pineal gland to produce melatonin. I encourage patients to practice what I call gentle tanning. Here's how it works:
- Take It Slow At First. Start gradually if you haven't spent much time in the sun. If you're fair-skinned, go outside for about 10 to 20 minutes daily. You can push it to about an hour if you have a darker complexion.

- Put Some Skin In The Game. This means peeling down and getting a good area of your skin exposed. You can roll up your sleeves and pant legs. But do wear a hat. Your face gets enough natural sunlight exposure every day.
- Pay Attention To The Time. Get out in the sun when your shadow is shorter than you are. Typically, that's between 10 a.m. and 2 p.m. That's when the sun is highest and the rays are strongest, so you can get good exposure over a short time.
- Eat Melatonin-Rich Foods. Eggs and fish are your best animal sources. Tropical fruits also help boost melatonin. Pineapples have been shown to increase blood levels by 266%. Bananas boost it by 180% and oranges by 47%.¹⁴ Other foods that increase melatonin include tart cherries, ginger, pistachios, tomatoes, and mangosteen.
- Take Melatonin Supplements. Melatonin is widely available in health food stores. I recommend about 3 mg a day. Take it about 20 minutes before you want to fall asleep. But get the right kind...

When you take melatonin by mouth, it breaks down in the liver. Most of it never gets to the bloodstream. Instead look for sprays, drops, or a sublingual tablet. They're easier to absorb and work faster.

References

 Dehghan M, et al. "Associations of fats and carbohydrate intake with cardiovascular disease and mortality in 18 countries from five continents (PURE): a prospective cohort study." *The Lancet*. 2017 Nov 4;390(10107):2050-2062.

5. Cannon B, Nedergaard J. "Yes, even human brown fat is on fire!" *J Clin Invest.* 2012 Feb 1; 122(2): 486–489.

6. Cannon B, Nedergaard J. "Brown adipose tissue: Function and physiological significance." *Physiological Rev.* Jan 2004;84(1):277-359.

7. "Brown adipose tissue activity controls triglyceride clearance." Nat Med. 2011 Feb;17(2):200-5.

Ben Short. "mTORC2 helps brown adipose tissue fuel up." *J Cell Biol*. 2014; 207 (3) 318.
 Ikeda K, et al. "UCP1-independent signaling involving SERCA2b- mediated calcium cycling regulates beige fat thermogenesis and systemic glucose homeostasis." *Nature Medicine*. 2017; doi: 10.1038/nm.4429

10. Takeshi Y, et al. "Recruited brown adipose tissue as an antiobesity agent in humans." *J Clin Invest.* 2013;123(8):3404-3408. doi:10.1172/JCI67803.

11. Saito M, "Capsinoids and related food ingredients activating brown fat thermogenesis and reducing body fat in humans." *Curr Opin Lipidol*. 2013;24(1):71-7.

12. Ahmadi N, et al. "Aged garlic extract with supplement is associated with increase in brown adipose, decrease in white adipose tissue and predict lack of progression in coronary atherosclerosis." *Int J Cardiol.* 2013;168(3):2310-4.

13. Jiménez-Aranda A, et al. "Melatonin induces browning of inguinal white adipose tissue in Zucker diabetic fatty rats." *J Pineal Res.* 2013 Nov;55(4):416-23.

14. Johns NP, et al. "Dietary intake of melatonin from tropical fruit altered urinary excretion of 6-sulfatoxymelatonin in healthy volunteers." *J Agric Food Chem.* 2013;61(4):913-9.

Saito M, et al. "High incidence of metabolically active brown adipose tissue in healthy adult humans: effects of cold exposure and adiposity." *Diabetes*. 2009 Jul;58(7): 1526-31.
 Moyer Wenner M. "Supercharging brown fat to battle obesity." *Scientific American*. July 15,

<sup>2014.
4.</sup> Cypess A, et al. "Brown adipose tissue: therapeutic target in obesity treatment?" *N Engl JMed.* 2009;360:1509-1517.

Restore Your Native Eye Health With Vision Breakthroughs Ignored By Conventional Medicine

Modern medicine's fear of the sun has gone way too far.

Eye doctors tell you to wear sunglasses every time you step outside. They say it protects your eyes and your vision.

What they don't take into account is that your eyes need sunshine. You see, the natural light of the sun is what gave our primal ancestors healthy vision. Wearing sunglasses and blocking the light deprives your eyes of vital nutrients like vitamin D.

I've visited native tribes in remote villages all around the world. And one of the many things you won't see are sunglasses. But just like our primal ancestors, the tribes have perfect vision.

Now don't get me wrong...

Just like your skin, your eyes can be damaged from TOO MUCH sun exposure.

Ultraviolet (UV) rays from the sun can damage the whites of your eyes, your retina and iris. Too much UV light can lead to sunburned corneas and cataracts.

But new research shows the importance of the sun for your eyes.

A British study from the University College London revealed that vitamin D3 — the kind you get from sunshine — improves vision and reduces inflammation of the retina. They also found that it may prevent age-related macular degeneration (AMD), the biggest cause of blindness in people older than 50.¹ Another study found that people with the most vitamin D had a 59% lower risk of AMD.²

Low vitamin D levels are also linked to dry eye syndrome. This inflammatory condition causes discomfort, stinging, redness, and fatigue in your



Source: National Eye Institute (NEI), U.S. National Institutes of Health

Around half of all Americans over the age of 75 have cataracts, the leading cause of blindness.

eyes, as well as blurred vision. Studies show that up to 74% of people with low vitamin D levels had dry eyes compared to just 12% for a control group.³

Other research shows that more exposure to bright sunshine slashes your risk of myopia or nearsightedness.⁴

If an ophthalmologist has diagnosed you with cataracts, you're one of more than 24.4 million Americans over the age of 40 who suffer from this worrying condition.⁵

It's a big problem. Around half of all Americans over the age of 75 have cataracts, a progressive eye disease that causes a cloudy area to appear over the lens of your eye, blurring your vision and making it seem as if you're looking at the world through a fogged window. According to the World Health Organization's 2019 World Report on Vision, cataracts are also the leading cause of blindness in the world, affecting around 2 billion people^{6,7}

The condition is caused partly by age, but additional risk factors include excessive exposure to ultraviolet rays in sunlight, tobacco smoke, diabetes, high blood pressure, poor diet, and certain meds, such as long-term use of corticosteroids like prednisone.

In healthy eyes, the lens — which sits just behind your cornea — is clear and allows light entering the eye to clearly focus an image on the retina.

But with cataracts, sugar molecules attach themselves to proteins in the lens in a process called glycosylation. Over time, this causes these lens proteins to twist, bend over and clump together, causing your lens to become cloudy and less elastic.

If untreated, cataracts can cause serious damage to your eyes and can lead to total, irreversible blindness.

There are no medicines that treat cataracts, and no middle ground. Once they prevent you from living normally, conventional doctors will tell you the only option is surgery. Cataract procedures are among the most frequently performed surgeries in America.

What most mainstream doctors won't tell you is that surgery is NOT your only option.

Like all surgeries, they are expensive — costing up to around \$7,000 per eye — and they also come with the risk of infection, blurred vision, detached retina, and even sight loss.

At the Sears Institute for Anti-Aging Medicine, we offer other solutions.

In this article, you will learn about the new breakthrough treatments that have recently become available for cataract prevention and removal — but are still ignored by most optometrists and ophthalmologists. You'll also learn that these methods are safer and more natural than conventional surgery, and come with the promise that the cataracts won't return.

Where Do Cataracts Come From

Although cataracts can occur at any time in your life, they're far more common as you age. And many seniors have cataracts significant enough to impair their vision.

You see, the lens that you're born with changes as you age, with new layers of material being added over the course of your life.

As a result, the part of the lens you start out with as a baby begins to break down as you age, and your vision gradually becomes blurrier.

But beyond that, conventional medicine doesn't know much about how cataracts develop.

Four signs you might have cataracts

1. Blurred vision – One of the most common symptoms of cataracts is blurred sight. If you wear glasses, they may seem dirty.

2. Dazzled by light – If car headlights and other bright lights dazzle you, or leave you unable to see clearly for a few moments, cataracts may be to blame.

3. Color changes – Cataracts can affect the way you see color and make things appear faded or washed out. Commonly, objects take on a yellowish hue. If you notice these symptoms, or perhaps you disagree with friends and family about the color of objects, you should see a specialist.

4. Frequent change in glasses – As a cataract begins to form, the lens inside your eye increases in size, often resulting in a need to change the prescription of your glasses. If this becomes necessary at increasingly frequent intervals, it may be an early sign that a cataract is developing.

There is no routine eye test for the condition, as there is for glaucoma. Simple eye exams won't detect them in the very early stages either. So often, optometrists don't check for cataracts until you complain about blurred vision.

We know that some of the main drivers of cataracts include oxidants caused by free radicals in the bloodstream (another good reason to take antioxidants), coupled with excessive exposure to UV light — so farmers, skiers, truckers, and the like should take extra care to protect their eyes.

In some cases, these changes to your lens don't develop into a serious problem. But in the vast majority of cases, the blur can block your vision.

Symptoms of early cataracts can be similar to those of other eye-blurring conditions, such as allergies, colds, or the flu. But eyedrops used for allergy relief won't make cataracts go away.

How You Can Avoid Cataract Surgery

The procedure for cataract surgery involves removing the clouded lens of your eye and inserting an artificial plastic version in its place. The artificial lens is then sealed inside your eye — unlike a contact lens, which sits on top of the cornea.

Aside from the cost, the problem with cataract surgery is that a large number of patients are still left with poor vision after the procedure. Studies reveal that around 20% of patients suffer blurry or distorted vision after cataract surgery.⁸

But most importantly, you should be aware that cataract surgery isn't inevitable, or even your only option.

Early detection, lifestyle choices and making sure that your diet contains the right eye nutrients can make an enormous contribution to slowing the progress of cataract formation, and in some cases can even reverse the condition.

You see, certain key nutrients are essential for preventing damage to the lens. And if you're deficient in them, your eyes' natural defense

"Aside from the cost, the problem with cataract surgery is that a large number of patients are still left with poor vision after the procedure." mechanisms don't work as they should.

A number of studies have found that simple antioxidants, such as zinc and vitamins C and E, can produce dramatic effects in preserving your eye health.^{9,10}

In one study, the use of vitamin C supplements for more than 10 years was associated with a 77% lower rate of cataract formation, compared with those who did not take a vitamin C supplement.¹¹

Meanwhile, lutein and zeaxanthin, make up the most potent combination of carotenoids we know for protecting eye health. And they go hand in hand with preventing all kinds of eye diseases, including cataracts.

A number of studies have linked higher levels of lutein in the bloodstream to a significant reduction in the rate of cataracts.¹²

At the same time, glutathione — your body's master antioxidant — also plays a vital role in the lens as your body's primary defense against free radicals and oxidation, which are among the primary causes of cataracts¹³

Your best food sources for lutein and zeaxanthin are dark, leafy vegetables like spinach, kale, and collard greens. But, it's not easy getting enough from your foods.

I recommend supplementing with 20 mg of lutein and 1 mg of zeaxanthin.

You can also increase your glutathione levels through your diet. Choose foods high in glycine and cysteine, like meat, eggs, and fish. These amino acids are also found in yogurt, sunflower seeds, horseradish, broccoli, cauliflower, cabbage, red peppers, and Brussels sprouts.

But the most effective way to boost your body's glutathione levels is to take an amino acid supplement called N-Acetyl Cysteine (NAC).

NAC is a precursor to glutathione. In one study, cancer patients were given 600 mg of NAC a day for three months. At the end of the three months, their blood plasma levels of glutathione had increased by 38%.¹⁴

I recommend taking 600 mg by tablet or capsule per day. After a couple of weeks, take 600 mg twice a day.

But you can do even better...

Welcome To The Next Generation Of Cataract Treatment

Almost certainly, the greatest paradigm shift in the way cataracts can be treated is by using a patient's own stem cells to re-create new working lenses in their eyes.

In an amazing treatment developed by collaborative researchers at Sun Yat-sen University in China and the University of California, San Diego, surgeons reversed blindness in 12 infants born with congenital cataracts by removing the damaged lens and then coaxing nearby stem cells to repair the damage.¹⁵

The results were compared with a group of 25 babies who had a traditional plastic lens fitted. After three months, a clear, regenerated curved lens had developed in all of the trial patients' eyes.

This astonishing development now paves the way for millions of older people with cataracts to have their sight restored using their own stem cells.

The new technique removes the lens but leaves behind the lens capsule — a membrane that helps give the lens its required shape. Nearby regenerative stem cells are then moved to the membrane where they grow into a new, fully functioning, and transparent lens.

The therapy proves that cataracts can be completely cured without the need for transplanting an artificial lens.

Apply This Anti-Cataract Supplement Directly To Your Eyes

Scientists have known for a while that the nutrient carnosine helps to slow the development of cataracts, and that it improves the visual performance of cataract-damaged eyes.¹⁶

Carnosine is a combination of two amino acids, alanine, and histidine. Your body makes some of its own carnosine. It is found in higher concentrations in muscle, the brain, and in lenses of the eyes.¹⁷

One of best dietary sources of carnosine is red meat, but most doctors warn you to reduce or avoid it altogether.

But there's another problem. Even red-meat eaters only have protective carnosine levels for part of the day. That's because the amount of carnosine in red meat — and even in supplements — is rapidly degraded by carnosinase enzymes in your body.

Another problem is that when carnosine is applied directly to the eye, it can benefit the surface of the cornea, but it can't penetrate the eye lens.

But in an astonishing breakthrough, a topical application of a derivative form of carnosine called N-acetyl-carnosine can penetrate the lens and then undergo a conversion into carnosine.

Human studies have demonstrated that N-acetyl-carnosine 1% eye drops lead to improvements in cataracts and visual performance of cataract-affected eyes.¹⁸

Specifically, the studies demonstrated improvement in overall light transmission, glare sensitivity, and, most importantly, visual sharpness.

To prevent the progression of cataracts, I recommend applying N-acetyl-carnosine drops into the affected eye twice per day.¹⁹

Expose Your Eyes To 20 Minutes Of Sunshine

I advise patients to expose their eyes to natural — indirect — sunlight for at least 20 minutes. Here's what else I suggest:

1. **Listen To Your Body.** If the sun is strong enough to make you squint, get some shade. Instead of sunglasses, wear a hat with a brim or a visor. Most of the time this is plenty to protect your eyes from direct sun rays. But you still get the benefit of full-spectrum light.

2. Check Your Medication. Some medications can increase your eyes' sensitivity to the sun. These include diuretics, tranquilizers, tetracycline, and some other antibiotics.

3. When to wear sunglasses. I reserve my sunglasses for high-intensity sun activities like skiing, water sports, or high altitudes. Snow and water can magnify the sunlight and increase your risk of damage. I also use them when I'm out in the intense sun for extended hours. When picking glasses, choose the right kind of sunglasses. Look for a pair with "99-100% UV absorption." Or look for "UV 400." This means they block all UVA and UVB rays. "Polarized" glasses help reduce glare but they don't necessarily meet that UV standard.

References

1. Vivian L, et al. "Vitamin D rejuvenates aging eyes by reducing inflammation, clearing amyloid beta and improving visual function." *Neurobiol Aging*. 2012;33(10):2382-2389. 2. Millen AE, et al. CAREDS Study Group. "Vitamin D status and early age-related macular

degeneration in postmenopausal women." Arch Ophthalmol. 2011;129(4):481-489.

4. Rose KA, et al. "Outdoor activity reduces the prevalence of myopia in children." Ophthalmology. 2008;115(8):1279-1285.

5. Eye Health Statistics. American Academy of Ophthalmology. 2015. Available at: https:// www.aao.org/newsroom/eye-health-statistics

6. World Health Organization. "World report on vision." October 2019. ISBN: 978-92-4-151657-0

7. Hashemi H, et al. "Global and regional prevalence of age-related cataract: a comprehensive systematic review and meta-analysis." *Eye* 34, 1357–1370. 2020.

8. Gurnani B. "Posterior Capsule Opacification." EyeWiki: American Academy of Opthalmology 2023

9. Varma SD, et al. "Prevention of cataracts by nutritional and metabolic antioxidants." Crit Rev Food Sci Nutr. 1995 Jan;35(1-2):111-29

10. van der Pols JC. A possible role for vitamin C in age-related cataract. PNS: Cambridge University Press:28 October 2011

11. Rautiainen S, et al. "Vitamin C supplements and the risk of age-related cataract: a population-based prospective cohort study in women." *Am Jo Clinical Nutrition*, Vol 91, Issue 2, 2010.

12. Liu XH, et al. "Association between lutein and zeaxanthin status and the risk of cataract: a meta-analysis." Nutrients. 2014 Jan 22;6(1):452-65.

13. Lou MF. "Redox regulation in the lens." Prog Retin Eye Res. pp. 657-682. 2003.

14. Bongers, V. et al. Antioxidant-related parameters in patients treated for cancer chemoprevention with N-acetylcysteine. Eur J Cancer. 1995 Jun;31A(6):921-

15. Lin H, et al. "Lens regeneration using endogenous stem cells with gain of visual function." Nature 531, 323-328. 2016.

16. Javadi S, et al. "Protective effects of carnosine on dehydroascorbate-induced structural alteration and opacity of lens crystallins: important implications of carnosine pleiotropic functions to combat cataractogenesis." J Biomol Struct Dyn. 2017;35(8):1766-84.

17. Miyaji T, , et al. "Expression profiles of carnosine synthesis-related genes in mice after ingestion of carnosine or ss-alanine." J Int Soc Sports Nutr. 2012;9(1):15.

18 Babizhayev MA, et al. "Efficacy of N-acetylcarnosine in the treatment of cataracts." Drugs R D. 2002;3(2): 87-103

19. Dubois VD, Bastawrous A. "N-acetylcarnosine drops for age-related cataract." Cochrane Database Syst Rev. 2017 Feb 28;2(2):CD009493.

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.

^{3.} Yildirim P, et al. "Dry eye in vitamin D deficiency: More than an incidental association." Int J Rheum Dis. 2016;19(1):49-54.

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).

Confidential Cures | Copyright 2023