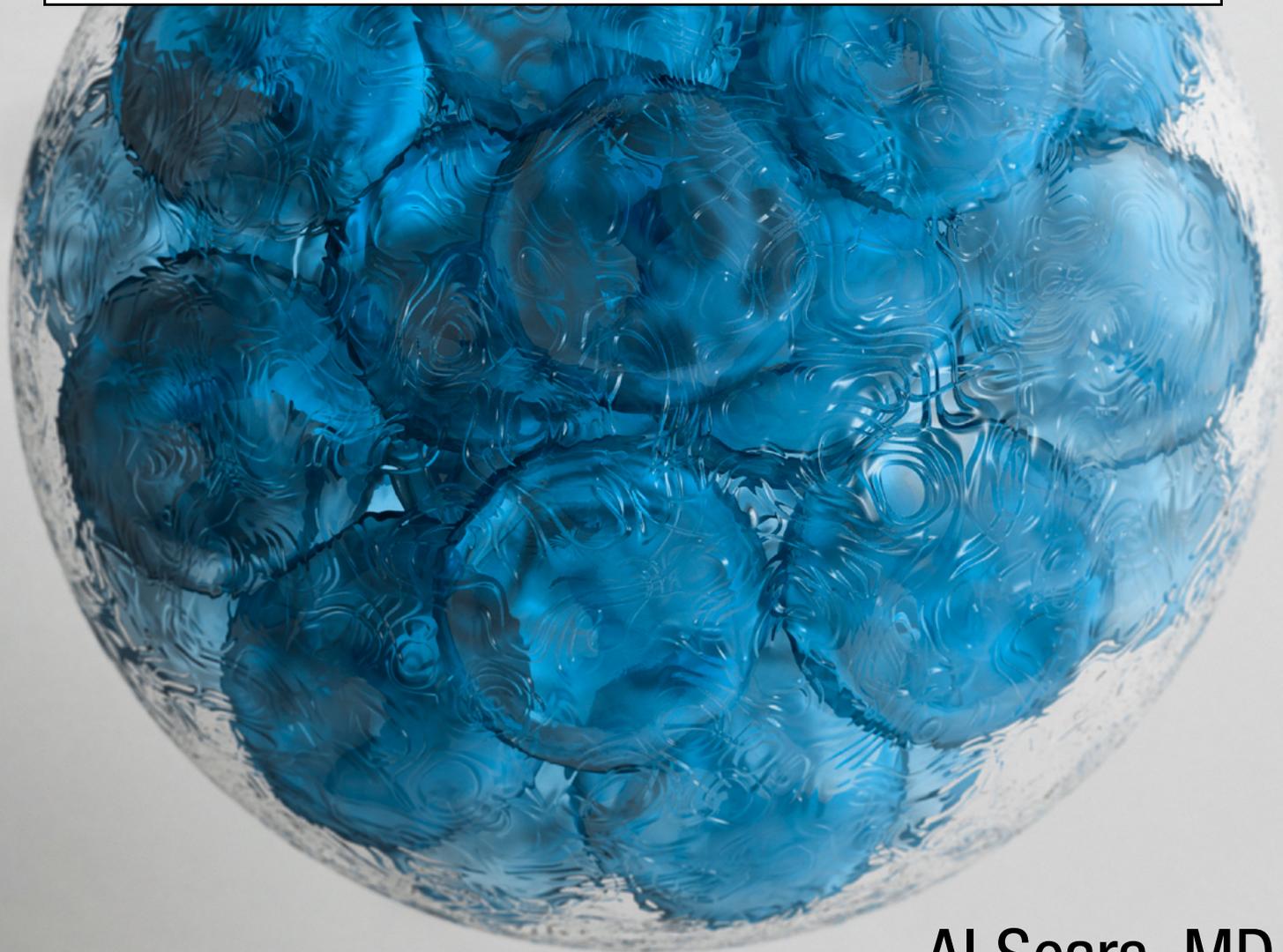


— A Dr. Sears Special Report —

THE GREAT STEM CELL BREAKTHROUGH



Al Sears, MD

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AL SEARS, MD

Al Sears, MD is America's #1 anti-aging doctor. He's made it his life's work to challenge conventional medical beliefs and bring his patients the latest breakthroughs in natural cures and remedies to diseases once thought to be "incurable."

Dr. Sears takes a fresh, novel approach to patient health and wellness. Our environment has changed for the worse — and it's affecting your health. He helps patients escape accelerated aging caused by modern toxins, chemicals and other hormonal threats you unknowingly face every day.

Every year, he travels over 20,000 miles to the most remote regions of the world searching for natural healing secrets unknown or ignored by mainstream medicine.

Since 1999, Dr. Sears has published 35 books and reports on health and wellness. He has millions of loyal readers spread over 163 countries.

Today he writes and publishes two monthly e-Newsletters, *Confidential Cures* and *Anti-Aging Confidential for Women*, and a daily email broadcast, *Doctor's House Call*, with more than 500,000 subscribers. He has also appeared on more than 50 national radio programs, ABC News, CNN and ESPN.

Dr. Sears was one of the first to be board-certified by the American Academy of Anti-Aging Medicine (A4M). More than 25,000 patients travel from all around the world to visit him at the *Sears Institute for Anti-Aging Medicine* in beautiful Royal Palm Beach, Florida.

Recently, Dr. Sears proved you can affect the way you age by controlling the length of your telomeres. He made history as the first MD to introduce the Nobel prize-winning, anti-aging breakthrough of our time, telomere DNA therapy, to the general public. And now he's working with the leading scientists in the field of telomere biology to further define how this incredible technology will shape the future of anti-aging medicine.

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Introduction

Advances in stem cell research and therapy in recent years have been nothing short of miraculous. Yet mainstream medicine still knows very little about these “miracle” cells you carry in your own body.

And in spite of the increasing use of stem cells, there’s still so much inaccurate, confusing and sometimes even scary information out there about them.

Some mainstream doctors still believe stem cell procedures are controversial. But I want to be clear: the stem cells used today are NOT the “embryonic” stem cells used years ago in research.

Most will tell you that the procedures are experimental — and that a breakthrough will come sometime in the future.

The truth is, you don’t have to wait...

This report is about the incredible recent research and the therapies that are available now using *adipose stem cells*. That means using stem cells that are harvested from your own fat tissue.

I call stem cells “the ultimate natural cure” for whatever ails you.

It’s true that we are at the beginning. Science is just beginning to understand that the healing possibilities of stem cell therapy are virtually limitless. It promises to fundamentally transform modern medicine by eradicating all illnesses.

Stem cell therapy allows your body to regenerate damaged tissue in any organ — from your brain to your heart to your liver. They can rebuild aching joints, and they have the potential to cure cancer, heart disease, diabetes, Alzheimer’s, Parkinson’s disease and blindness — to name just a few. They can even make your face and skin look 15 years younger.

You may have wondered if stem cells can help you or a loved one with a chronic disease, autoimmune disorder or even damage from an automobile accident or an old football injury.

The answer to that question is YES.

A Stem Cell Game-Changer

Stem cells are master cells, and they are the basic building blocks of your entire body. Researchers describe them as “unspecialized” cells that can become any other kind of cell — whether it’s a heart muscle cell, blood cell, retinal cell or nerve cells.

Unlike heart, blood or brain cells, for example, stem cells have the unique ability to keep replicating into the same “unspecialized” stem cell types for a long time. A small stem-cell population can replicate itself many times over months or even years to produce billions of cells.

Stem cells are the supply of healthy “replacement cells” you were born with. Your body assigns them regularly to replace cells that are damaged, old or dying.

The problem is that you lose stem cell activity as you age (stem cell senescence), making your body's recovery process longer and harder.

And as traumas and illnesses strike, your body loses its ability to heal. Stem cell senescence means you are less able to regenerate new cells. That's when chronic problems start.

The amount of adult stem cells available to your body was once very limited. But recent scientific advances have identified a way to solve that problem.

While adult stem cells live in various human organs and tissues, they've been relatively scarce and difficult to isolate. They typically generated only the cell types of the tissue in which they're found.

Until recently, it was thought that *pluripotent* human stem cells (cells that have the ability to form all adult cell types) could only be harvested from embryos, umbilical cords or, more recently, directly from the bloodstream via bone marrow.

But that changed in 2013 when researchers at the University of California, Los Angeles, discovered stem cells in human adipose (fat) tissue that can be differentiated into virtually every cell type in the human body!

This new reserve of regenerative cells found within fat tissue was a game-changer...

Suddenly, a new, abundant source of stem cells was available with the potential to create new bone and cartilage tissue to provide relief for debilitating diseases like chronic joint pain... or to build and regenerate blood vessels for those suffering from poor blood flow to their vital organs... or ramp up your immune system so your body can fight back against chronic and autoimmune disease.

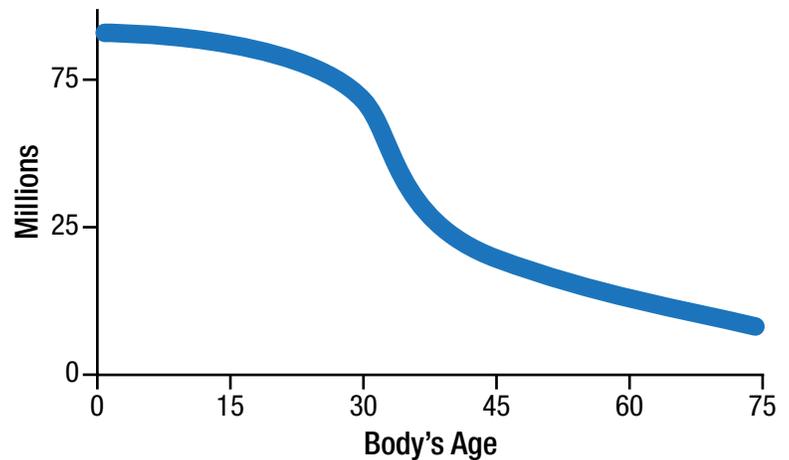
There's even the prospect of adult adipose stem cells creating new, healthy organs from scratch, including the heart, liver, pancreas and lungs.

I have no doubt that one day stem cells will offer us an easily renewable source of replacement cells to regenerate damaged organs and tissues to reverse every disease.

So we have already seen the beginning of the end of most diseases... because stem cells one day will cure them all.

Just as the health of the entire world was revolutionized in the 20th century by antibiotics and vaccinations for diseases like smallpox and polio, we are now at the dawn of stem cell revolution

Number of Active Stem Cells in the Body



By the time you are 75, you have less than one-third of the stem cells you had at birth.

that soon will see these “miracle cells” used in every area of medicine.

‘Incurable’ Conditions Can Now Be Reversed

Stem cells have been used routinely for decades as a standard treatment in transplant procedures for patients with cancers like leukemia and lymphoma, and other disorders of the blood.

These stem cells have mostly been taken from bone marrow and blood — sometimes the patient’s own and sometimes from donors. According to the Leukemia & Lymphoma Society, more than 17,000 blood cancer patients have had successful stem cell transplants in the U.S.⁴

To date, the FDA has approved only a handful of stem-cell treatments, mainly for blood diseases. In 2016, the FDA even began cracking down on physicians who use stem cell therapies.

The problem is that the FDA can’t keep up with the blistering pace of stem cell research.

Only recently have scientists begun to understand the true potential and benefits of using stem cells derived from your own fat tissue. Not only is there no chance of rejection or an immune system reaction — because they come from your own body — fat tissue is a much richer source of stem cells than bone marrow.

It’s not uncommon to harvest hundreds of millions of dormant stem cells from a tiny 120-200 cubic centimeters of fat tissue. By comparison, the same amount of bone marrow usually yields tens of thousands of cells.

There are currently around 250 clinical trials being conducted into therapies using adipose stem cells, according to the National Institutes of Health. And the results have been overwhelmingly positive.⁵

Stem Cells Produce ‘Secret Weapons’

The real power of stem cells lies in their ability to spawn tiny polypeptides (proteins) called human growth factors. These turbo charge your body’s recovery process.

Human growth factors are essentially small pieces of protein that make up an amino acid chain. They are cellular messengers that send signals to activate the production of new cells, or instruct a cell to create new cells with different functions.

This special signaling mechanism is the secret weapon behind the wondrous healing power of stem cells.

Stem cells and human growth factors have been shown to stimulate your skin’s natural healing response and are widely used in dermatology and the cosmetic skincare industry. Researchers have also revealed that growth factors have a key role in speeding up wound healing.^{2,3}

Scientists are just beginning to understand that if stem cells and human growth factors can reach target cells in your skin, they can stimulate other types of cells to regenerate.

Adipose-derived stem cells have already been shown to be effective treatments for multiple diseases. Here are just a few of them:

- **Stroke and “Brain Bleed”:** Multiple studies have shown the remarkable healing power of adipose stem cell therapy on *ischemic* and *hemorrhagic* stroke patients.

Researchers have now revealed that adipose stem cells can grow into *glial* and *neural* cells, two types of brain cells severely impacted by stroke. Neural cells transmit information through electrical and chemical signals, allowing you to move and think. Glial cells act as your brain’s immune system, anchor neurons, and they help clean up waste.

Strokes occur after a failure of blood supply to the brain. This starves your brain of oxygen and other nutrients, which causes brain cells and tissue to die. Researchers have discovered that adipose stem cells can coax areas of dead brain tissue back to life, dramatically reducing the size of the “dead zone” and halting any further degeneration.⁶

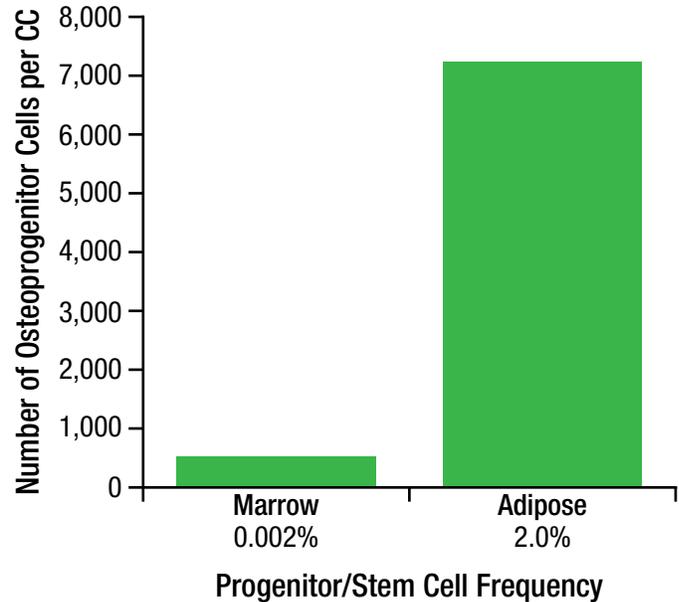
Stroke patients given adipose stem cell therapy have also shown vastly improved neurological function and reduced brain inflammation, including patients whose stroke had caused severe disability.

Certain types of strokes produce *intracerebral hemorrhage*, or “*brain bleed*.” This happens when blood suddenly bursts into cerebral tissue, causing damage to the brain. Although “brain bleed” accounts for around 10-15% of all strokes, it is far more deadly than ischemic strokes. Animal models have revealed adipose stem cell therapy is highly effective at repairing the brain damage done by “brain-bleed” strokes.⁷

- **Heart Attack and Heart Disease:** Important scientific findings in recent years suggest considerable regenerative potential for adipose stem cell therapy for acute myocardial infarction (heart attack) as well as chronic heart disease, such as left ventricular remodeling and heart failure.⁸

Studies in animal models of myocardial infarction show fat-derived stem cells have the ability to differentiate into various kinds of heart cells, such as *cardiomyocytes* and *vasculature* cells.

Bone Marrow vs. Adipose



Many more adult stem cells are found in adipose tissue than in bone marrow.

Adipose stem cells also secrete a wide variety of growth factors, including those that stimulate new blood vessels and prevent cell death.

The formation of new blood vessels is the cornerstone of any meaningful cardiac repair.

Multiple preclinical and clinical trials also show a significant reduction in scar tissue around the heart in patients who underwent adipose stem cell therapy after their heart attacks.⁹

These cells have also been shown to improve overall heart function in patients with heart disease and can reverse remodeling in the injured hearts.¹⁰

- **Macular Degeneration and Other Eye Diseases:** Macular degeneration is a common and devastating eye problem related to age. It's a disruption of nerves in the retina and it's the leading cause of blindness in older people.

Your macula is a small area at the back of your retina that's responsible for central vision, which is essential for tasks such as reading, driving and facial recognition. It is densely packed with *photoreceptor* cells called rods and cones, which react to light and send electrical nerve impulses to the optic nerve and to the brain.

Macular degeneration is one of the most exciting areas of stem cell research. This disease causes the cells in the pigmented layer of the retina, known as the RPE, to stop performing their support functions. Eventually, the rods and cones die.

Scientists have made astonishing progress in their efforts to regenerate damaged retinal nerve cells and replace the pigmented layer of the retina, known as the RPE, which may halt or even reverse the vision loss that results from macular degeneration.¹¹

Animal models have already demonstrated that stem cell therapy can regenerate inner retinal neurons. And some researchers have even used stem cells to grow rods and cones, as well as RPE cells.

Stem cells have also been used to combat other eye diseases, like glaucoma, diabetic retinopathy and cataracts.

Hospitals in China have already carried out numerous stem cell operations on babies with childhood cataracts — a condition where a baby is born with clouded lenses in their eyes, blocking vision. With the use of stem cell therapy, Chinese doctors now create new working lenses in the babies' eyes.¹²

- **Autoimmune diseases, like Diabetes, Rheumatoid Arthritis and Multiple Sclerosis:** Standard treatment for many autoimmune conditions often include immune suppressive agents such as steroids, methotrexate, cyclosporine, and Big Pharma drugs like Humira, Remicade and Enbrel. These so-called “biologic” drugs work to suppress patients' overactive immune systems, and that makes them vulnerable to dangerous infection, like pneumonia.

Stem cells have been used as a treatment for severe autoimmune diseases since the 1990s.

Stem cells that come from your fat tissue have distinct functional properties — including *immunomodulatory* and *anti-inflammatory* functional properties — that can repair and regenerate tissue and cells that have been damaged from an autoimmune disorder.

Rigorous human trials have consistently shown the effectiveness of stem cell treatments in the fight against *type 1* and *2 diabetes*.¹³

In one long-term study done at Harvard Medical School, in which 65 individuals with type 1 diabetes were treated with stem cell therapy, a large portion of participants no longer had to take insulin injections.¹⁴ In a recent Chinese study, researchers found stem cells were able to reprogram liver cells — instead of the pancreas cells — allowing the body to produce enough insulin to lower blood sugar levels.¹⁵

Stem cells have also been shown to dramatically lower blood sugar levels in people with type 2 diabetes. Stem cells work to make your body more receptive to insulin and thus more efficient at transporting glucose to your cells, reducing the levels in your bloodstream, where it wreaks havoc.

Stem cell treatments have also been effective for **rheumatoid arthritis**. A recent Australian study showed that just one stem cell injection produced a 70% improvement in symptoms. Some responses occurred in as little as one week.

And in what may be the most dramatic of recent results, a study published in *The Lancet* last year showed that stem cell transplants **stopped the progress of multiple sclerosis**, a disease marked by damage to the myelin that coats nerve fibers. Patients were followed for four to 13 years. And in all cases, damage to the nerve fibers was halted.¹⁶

Stem cells have also been effective at treating other autoimmune disorders like *lupus*, *Crohn's disease* and *psoriasis*.

- **Repairing the Damage of Breast Cancer Surgery:** In a Japanese study, 21 women had stem cells derived from their fat tissue implanted after cancer surgery that involved a partial mastectomy, where part of the breast was removed and followed by radiation treatment, causing tissue loss and skin damage.

In all 21 women, breast tissue thickness increased significantly within just one month. And follow up studies 12 months later showed the tissue recovery had continued and improvements had lasted.¹⁷

Stem cells have also shown tantalizing promise for treating *Alzheimer's* and *Parkinson's disease*, and are already being used commonly as therapies outside the U.S. — for example, in Germany, Peru, India and China. Clinical trials and treatments have also shown adipose stem cells to be powerful healing therapies for *skin burns*, *nerve damage from toxins*, *cartilage damage* and even *hair loss*.^{18, 19}

The Key To Restoring Your Immune System

One of the most surprising discoveries about harvesting stem cells from fat tissue is that they contain large numbers of *mesenchymal* stem cells. Until recently, scientists thought these “multipotent” stem cells could only be obtained from bone marrow and that they were simply precursors to a variety of specific cell types — like bone, blood, cartilage, muscle and fat cells.

These powerful stem cells have a wondrous regenerative affect on tissue damage. And researchers are now studying their ability to hone in on tumors.

But mesenchymal stem cells are also the key to restoring your immune system, giving your body the ability reverse chronic diseases — and even ward them off even before they develop.

As you age, your immune system gets slower and less effective — because you have fewer immune cells to heal you. But hiding in your fat tissue is the solution to reversing your aging immune system.

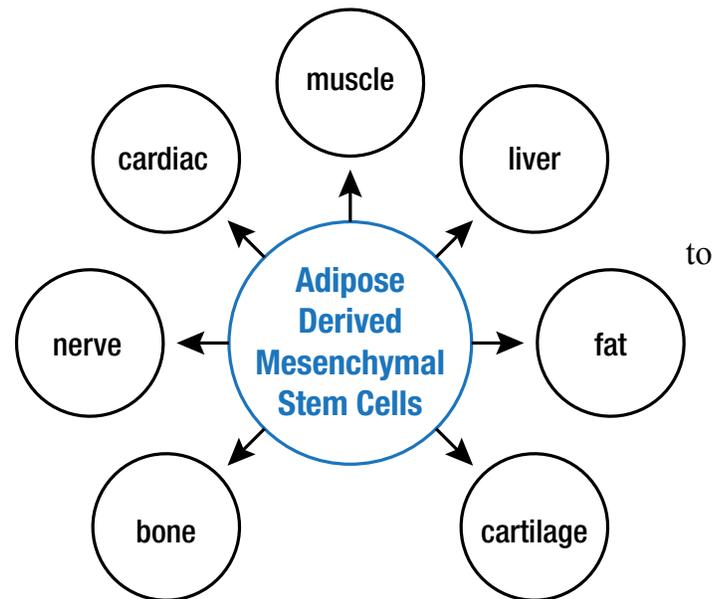
Scientists are just beginning to understand that mesenchymal stem cells interact with key immune system cells, like T-cells and natural killer (NK) cells — types of white blood cells. They are part of your internal defense army that attacks the bacteria, viruses, fungi, cancer cells and other toxins that cause chronic inflammation, damaging your health and bringing on chronic disease. Mesenchymal stem cells tell your immune system to ramp up its defenses or stand down, as necessary.

But the role of these cells is even more complex. Mesenchymal stem cells are immune system cells in their own right. Not only do they modulate T-cells and NK cells, they also secrete blasts of anti-inflammatory growth factors, like interleukin, which can turbo charge your immune response.^{20, 21, 22}

You see, your immune system is fighting a constant war against inflammation.

Of course, all inflammation isn't bad. You need it when you have a nasty cut or a broken bone. Without inflammation your body would never heal, because no white blood cells would ever rush to the rescue and fight off those foreign bodies.

It's not this kind of “acute” inflammation you have to worry about. The real problem is the low-level inflammation you can't see.



Stem cells taken from fat tissue are “multipotent” — they can develop into many other types of cells.

In fact, your body has been under a steady attack from inflammation-causing irritants for years and you've been unaware of it. And they are slowly killing you.

These include:

- Environmental toxins and pollutants;
- Poor diet;
- Excess weight;
- Cigarette smoke;
- Stress.

Chronic stress has an extremely damaging effect on your immune system, and has been linked to the inflammation at the root of heart disease, high blood pressure and cancer. Numerous studies reveal that the overall response to chronic stress by the cells that make up the immune system is inflammation.²³

Mesenchymal stem cells may be able to turn it all around.

A number of clinical trials and research studies now reveal how treatments with mesenchymal stem cells can reduce disease progression and the severity of immune disorders, like *arthritis*, *autoimmune encephalomyelitis* (inflammation of the brain and spinal cord), *colitis* and *septicemia* (blood poisoning).^{24, 25, 26}

Mesenchymal stem cells also appear to be the real power behind adipose derived stem cell therapy and why they have shown such promise in treating so many autoimmune disorders, including *inflammatory bowel disease*, *lupus*, *multiple sclerosis* and *rheumatoid arthritis*.^{27, 28, 29, 30}

What Happens When You Get Adipose-Derived Stem Cell Therapy

Getting adipose stem cell therapy is a simple outpatient procedure. There are now more than 500 stem cell clinics in the U.S. — but if you are interested in adipose stem cell therapy, I recommend making sure the clinic you choose is operated by board-certified physicians with a full clinical and nursing staff.

The procedure is minimally invasive time and is done in a matter of hours. Here's the simple four-step protocol we use at the *Sears Institute for Anti-Aging Medicine*:

- 1. Harvest:** Using a painless liposuction procedure, 50-100 cubic centimeters of adipose tissue is taken from the patient's abdomen or just above the *superior iliac spine* (aka love handles). This is a much easier process, and far less invasive, than a bone-marrow extraction. And because the stem cells are taken from your own fat tissue, it means the recipient is the same person, completely removing the risk of rejection.

2. **Separate:** a high-speed stem cell centrifuge machine separates your stem cells from your fat cells.
3. **Isolate:** The isolated adult stem cells are added into your own platelet-rich plasma (PRP).
4. **Infuse:** The stem cells that have been hiding in pockets in your fat tissue, along with the PRP, are then administered intravenously into your bloodstream or, sometimes, directly into the problem tissue.

The stem cells are attracted to signals from areas of inflammation. Various biochemical distress signals trigger the stem cells to integrate with target tissues and organs so your immune system can mount a strong defense and regeneration can begin.

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

You Can Boost Your Stem Cell Activity at Home

One of the easiest ways to stimulate the healing power of stem cells is exercise. A recent study in the *European Heart Journal* showed that vigorous exercise in mice activated 60% of their cardiac stem cells. After just two weeks of exercise the mice showed increased *cardiomyocytes*, the “beating” cells in heart tissue.³¹

It works for humans, too. In another study, a simple exercise program made dormant stem cells become active. And amazingly, these new stem cells could help remodel the heart in a group of heart failure patients.³²

Italian researchers also recently proved that strenuous exercise can lead to high levels of stem cells in bone, liver, and other organs.³³

Exercise has also been shown to activate stem cells in bone marrow and get them circulating in the blood. They've been called “circulating paramedics.” Once in the bloodstream, they patrol tissues to halt infections and repair muscle and tissue damage.³⁴

But before you set out for a walk, it's important to know that not all exercise will activate stem cells. You have to do a program like my PACE anti-aging system.

Just walking, running, cycling, or swimming for 30 minutes won't get you the results I'm talking about. You have to reach a high enough intensity to work up a sweat.

With PACE, your goal is to hit a peak of intensity in a short timeframe and then rest. You don't have to do hours of cardio. You'll be done in 20 minutes or less.

And it doesn't matter what shape you're in when you start. You can start with the level that's right for you and slowly progress to more intensity.

But PACE isn't about going all out as hard as you can. You always leave yourself a little bit of room in your workout where you could have gone harder. As you get closer to your peak, you control it so you have room to improve the next day.

To start optimizing your body's stem cell production today, I recommend trying this classic PACE exercise at home. It's a simple crunch.

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

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

Start slowly. It will take a few sessions to build up your **stamina, strength** and **balance**.

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

Four Ways To Naturally Boost Your Body's Stem Cells

1. **Eat fresh blueberries:** They're available for nearly eight months of the year from producers across the United States and Canada. If you can't get fresh blueberries, supplement with 500 mg of organic whole blueberry extract per day.³⁵
2. **Add carnosine:** I recommend getting 1,000 mg of carnosine every day. Grass-fed, pasture-raised meat is the best way to get carnosine from food. A typical 7-ounce serving of beef has about 250 mg of carnosine. If you can't get enough by eating red meat, I recommend you supplement with natural L-carnosine. Take 500 mg twice a day.³⁶
3. **Take green tea extract twice a day:** The active ingredient in green tea, EGCG, can prevent and repair cell damage, including stem cells. And green tea can stimulate the genes that activate stem cells.³⁷ I recommend 200 mg to 350 mg twice a day.
4. **Get sunshine:** Getting 15-20 minutes of unprotected sun each day is safe and will provide roughly 5,000 IUs of vitamin D. If that's not an option for you, take a vitamin D3

supplement of at least 5,000 IUs. This “super nutrient” has been shown to stimulate stem cell production and activity — and it also fights cancer, heart disease, Alzheimer’s disease, multiple sclerosis, diabetes and a host of other illnesses.³⁸

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