August 2017 Vol. VI Issue 8

# **Epidemic of Modern Disease Is NOT an American Issue...**

# It's Spreading Around the World

ou and I — and everyone we know — have the same serious problem... We are all in the midst of a health epidemic that started when we turned over the production of our food to strangers.

For years, this crisis was mislabeled as an American problem. People around the world thought it couldn't happen to them. They falsely believed that American food brands and industry practices were the problem.

But the progression of industrialization has spread this health epidemic around the world.

For hundreds of thousands of years, we ate what nature provided. We hunted, we fished and we gathered fruits, nuts, roots and berries.

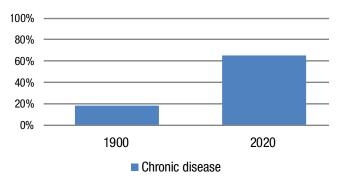
And as a species we thrived.

But fast forward to the  $20^{th}$  century in the Western world...

This is the first time in our history that we've given up the hands-on approach we had with our food. We put our trust in big institutions believing that they knew what was healthier for us.

And in doing so, we fundamentally changed our whole culture of food.

### CHRONIC DISEASE — THEN AND NOW



# A century ago, only a small percentage were affected by chronic diseases. Now they're our biggest killer.

Today's food industry isn't focused on nutrition and the well-being of our society. Instead, it's main goal is making a profit. And the most profitable foods aren't the natural foods we ate for millennia.

They're the foods that can be patented. The processed foods your competitor can't copy.

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Take corn flakes. It was touted as the original health food. Now there's nothing healthy about corn flakes... The main ingredients are grains and sugar.

This cereal is cheap to produce. The manufacturer can take 4¢ worth of corn and turn it into a \$4 box of cereal. That's a 1,000% markup.

It's great for the company. But bad for you.

And as a result, we're paying the price with our health. For the past hundred years or so, we've become overwhelmed with chronic diseases — from obesity and heart disease to diabetes and cancer. In 1900, these diseases accounted for 18% of deaths. Today that figure has soared to almost 65% and is projected to only increase.

But today it's no longer just an American and Western world problem. It has spread around the globe...

## From Traditional Diet to Diseased

This includes places that — until only recently survived and thrived on their traditional diets...

Like Africa. I travel to this continent frequently. Especially to Uganda, where my wife and her family are from. Until recently, the people here ate the traditional diet they followed for hundreds of years.

But things are changing in Africa. And not for the better.

I'll never forget when my brother-in-law Tevin moved here from Uganda...

He had to adjust to a lot of things. But one of the biggest things Tevin had to adjust to was the food.

When he first arrived, we had a party to celebrate. I threw steaks on the grill. Tevin took a bite and said: "This meat tastes spoiled!"

Then he tried an apple. But after one bite, he told us: "This is bad. Really bad..." In fact, he didn't believe it was a real apple!

Now, it was definitely an apple, and the steaks were not spoiled. But they were nothing like the foods Tevin grew up with in Africa. In his village, everything was grown locally and eaten fresh. Nothing was processed or genetically modified.

You can always taste the difference when food comes straight from nature. And the food Tevin grew up with in Uganda was as close to nature as you could get. At least, it used to be...

More and more Africans are turning away from their traditional cuisine and eating a more Westernstyle diet.

And the rates of chronic disease are skyrocketing because of it.

So what does this have to do with you?

Well, if you're a regular reader, you know how much I love Africa, its culture, its people and its rich tradition of natural healing. Every time I visit, I learn something new that I can share with you.

But it's more than that...

What's happening to Africans now is EXACTLY what's been happening to YOU for decades. A shift from our natural diet is the single most significant cause in the rise in all the health conditions we think of as the diseases of aging.

But here's the difference...

The shift in America took place over several generations. In Africa, it's occurred in just a fraction of that time.

I can't think of a stronger case to be made for the need to return to a primal diet and to avoid the food cartel's dangerous frankenfoods.

Today, I'll share with you the shocking facts and statistics about what's happening right now in Africa, as well as the changes I've witnessed firsthand during my travels. And I'll give you steps you can take right away to avoid the tragic consequences of our modern diet.

## **Chronic Disease Is on the Rise**

For decades, the top 3 causes of death in sub-Saharan Africa were infectious diseases like HIV/AIDS, malaria and tuberculosis. They still claim millions of lives each year — and AIDS is still the No. 1 cause of death among Africans of all ages.

But heart disease is now No. 2.

And if you're just looking at people over 30, heart disease is now the leading cause of death in the region — just like in America.

Nearly 1 out of every 2 Africans over the age of 25 now has hypertension — the highest rate of any continent in the world.

And those numbers are expected to rise. It's estimated that death rates from heart disease will rise by 70 and 74%, respectively, by 2030.

Heart disease was once considered a "disease of the West."

And many people in Africa go undiagnosed because there is still a mindset that heart disease can't touch them.

And it's not just heart disease that's on the rise...

Consider this...

- In just the last 10 years, new prostate cancer cases more than *tripled* jumping from 546 to 2,127.
- Breast cancer cases increased 139%.
- Stomach cancers doubled.<sup>2</sup>
- In the next 10 years, the number of people diagnosed with type 2 diabetes is expected to increase 161%.<sup>3</sup>
- The World Health Organization (WHO) predicts deaths from Western-style disease in Africa will nearly double by 2030.<sup>4</sup>

In that same time period, I have been back and forth to Africa. I have spent time with the Masai tribe in Kenya.

Their diet is made up mostly of red meat and raw milk. They eat very few vegetables and almost no grains.

They are some of the leanest, strongest, healthiest people I've ever met.

And their rate of heart disease is almost zero. There's a complete absence of dental cavities, obesity and they don't suffer from chronic aging problems like our culture does.

Then there's Uganda, where I've spent a lot of time in the past few years. In the capital city of Kampala, most people shop in the grocery stores that have popped up.

Just like in the U.S., these stores are filled with frozen, prepackaged foods. They're replacing the local markets because they're "convenient."

Fast-food restaurants — or "take-aways" as they're called — are the fastest-growing businesses on the continent.<sup>5</sup>

KFC, Pizza Hut, Dunkin' Donuts... Suddenly, they are everywhere.

And then there are the GMOs...

GMOs were first introduced to Africa about a decade ago.

In Uganda, it started with the banana. Bananas — known locally as *matooke* — are a huge crop here. They are the staple crop of every small farmer and they are a part of most traditional Ugandan dishes.

Ten years ago, Big Agra showed up and gave out genetically modified matooke seeds to local families. The farmers were told that the GMO matooke would improve the health of an entire generation. The bananas, they said, were disease-resistant and fortified with vitamins.

Families planted the seeds and harvested the fruit. But they found the "new and improved" matooke to be inedible. It not only looked all wrong, it tasted terrible.

The farmers burned down their fields to destroy any future seeds. They wanted to keep their food source traditional.

## Frankenfoods Near You

GMOs are created when a gene from one species is transferred to another. This creates a product that would never be found in nature

### WHEN FOOD STOPS BEING REAL WE ALL SUFFER



How safe can your food be when the scientists who research it have to cover themselves from head to toe?

Today, 85% of foods on supermarket shelves contain GMOs.<sup>6</sup> It's almost impossible to avoid them. That makes us all guinea pigs in an ongoing and deadly experiment...

A study published in the *Journal of Organic* Systems found that GMO foods are linked to more than 22 diseases and disorders, including liver failure, urinary and bladder cancers, hypertension, thyroid disease, stroke, obesity and more.7

Perhaps the most studied GMO product is corn. And what researchers found is terrifying...

This frankenfood contains cancer-causing toxins like formaldehyde and the herbicide glyphosate.8

These toxins enter your body every time you eat genetically modified processed foods. And they have serious health consequences.

A two-year study found that 80% of rats that were fed GMO corn developed cancer. And this wasn't any typical cancer...

The tumors these animals had were two to three times the normal size. Almost half of the males and 70% of the females died 9

# Solve One Problem, Create a Bigger One

People aligned with the food industry will argue that by introducing genetically modified crops and processed foods that don't spoil quickly, you are able to feed more people.

This is true, but at what cost?

We've known for at least 75 years that processed foods were linked to chronic disease. In 1940, a doctor named Francis Pottenger studied 900 cats over several generations. (Dr. Pottenger financed the research himself to prove he wasn't influenced by anyone.)

He divided his 900 cats into five groups.

He fed the first two groups raw food. They remained healthy throughout their lives.

The next three groups were fed processed foods. All of them developed degenerative health diseases like arthritis, high blood pressure and diabetes toward the end of their lives.

Their offspring, the second generation of cats, also developed these chronic health conditions. But they developed them much more quickly, around the middle of their life span. And the third generation of cats developed the same diseases at a very young age.

Since then, we've added more than 3,000 chemical additives to our food supply. And we continue to move further and further away from what nature intended. Today, 90% of the average American food budget goes toward processed foods.<sup>10</sup>

Many of the "ultraprocessed" foods in the typical American diet include ingredients you would never find in an actual kitchen. And, according to a 2016 study, they make up more than 60% of our daily calories.<sup>11</sup>

# **5 Steps for Toxin-Free Food**

While it isn't easy to completely avoid GMO foods, there are steps you can take to reduce how much you eat. Here's what I recommend:

- 1. Stick to the outside. When you grocery shop, keep to the outer aisles of the store. That's where you'll find produce, meat, eggs, dairy and seafood. These foods are either whole or minimally processed. Avoid the aisles in the center of the store. They're filled with nothing but processed foods loaded with harmful chemicals and additives.
- 2. Read food labels. Start out by looking for the label USDA Organic. It's the gold standard of organic foods. It means that the product contains at least 95% organic ingredients. The certification bans the use of GMOs, dyes, pesticides and fertilizers.

When you're buying fresh produce, look for the PLU — or price look-up — sticker on the item.

- A 5-digit code that begins with the number 9 indicates an organic fruit or vegetable.
- A 5-digit code that begins with the number 8 indicates a GMO crop.
- A 4-digit code starting with the number 4 indicates the produce was conventionally grown with chemicals and pesticides.
- **3. Choose grass-fed meats.** Most of the meat we eat comes from animals reared on GM corn and soy. Your local market may not carry grass-fed beef. To find a farmer in your area who raises grass-fed meats and pastured poultry, visit <a href="http://www.eatwild.com/">http://www.eatwild.com/</a> products/index.html.
- 4. Contact your Congressperson. Tell them you want GMO foods to be labeled. Sixty-four countries around the world require genetically modified foods to be labeled, but the U.S. isn't one of them. Find their email address at <a href="https://www.senate.gov/">https://www.senate.gov/</a> senators/contact/.

5. Get the app for that! The non-profit organization Center for Food Safety created an app for your smartphone called the <u>True Food Shoppers</u> Guide for Apple and Android.

It provides a list of brands to look for — and brands to avoid. You can browse the Shoppers Guide by category in a simple "Green" and "Red" list format. You can also search for products by brand name or food type.

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# Life-Changing Therapy Reverses Paralysis in Stroke Victims...

# So Why Won't the FDA Approve It?

espite what you may have been told, your brain has an amazing ability... It can heal itself months after a stroke.

This flies in the face of what mainstream medicine thinks. You see, most doctors believe that stroke recovery occurs within the first three months.

And many consider it pointless to continue therapy if a patient hasn't seen any improvement within six months.

I say that's nonsense. There's a proven therapy that can reverse many of the most devastating stroke symptoms.

Following this therapy, I've witnessed stroke victims who can:

- Speak clearly again after struggling with slurred speech
- Walk again unassisted following months of partial paralysis
- Live pain-free for the first time since
- Regain balance, bladder control and hearing

Some of these recoveries happened *years after* the initial stroke.

The secret to this kind of amazing recovery was first discovered in the late 1990s. That's when three Dutch neuroscientists did what no one ever believed was possible.

They brought brain cells from 30 dead people back to life by flooding the cells with oxygen.<sup>1</sup>

Here we are, two decades later, and this incredible piece of scientific research is *still ignored by mainstream medicine*.

But that single discovery has huge healing implications for what conventional doctors call "irreparable brain damage."

It also reveals what oxygen can do for damaged cells... and for patients who've suffered a stroke.

During a stroke, blood flow to the brain is interrupted and your brain is deprived of oxygen. We used to believe that the affected brain cells have died and that's the end of it.

But neurologists now also accept there's a much larger area known as the ischemic (bloodstarved) penumbra that isn't dead, but is physiologically traumatized.

In this article, I will show you how you can speed up your brain's healing power with a technology called **hyperbaric oxygen therapy**, or **HBOT**, for short.

Hands down, HBOT is the fastest and most effective way to replenish your brain's oxygen supply.

If you or someone you know has had a stroke, the information in this article could be life-changing.



We recently took delivery of the most advanced, state-of-the-art HBOT chamber available.

## What Exactly Is HBOT?

Hyperbaric oxygen therapy is the delivery of highpressure oxygen to your body. It was first used in the 1930s to treat deep-sea divers with decompression sickness and the bends. But doctors saw that the treatment also speeded up wound healing.

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

Breathing in 100% oxygen at 1.5 times normal atmospheric pressure allows for the super-saturation of tissues and organs with oxygen.

It works because the combination of pressure and oxygen physically dissolves more oxygen into your red blood cells, boosting oxygen levels, which encourages the healing and regeneration of tissues, blood vessels and nerves.

Studies show that HBOT also stimulates the release of growth factors and stem cells, which promote healing and get the cells working again.<sup>2</sup>

HBOT has been used successfully for decades to treat an enormous range of conditions — including anemia, arthritis, burns to cerebral palsy, diabetic foot ulcers, burns from radiation treatment and migraines, to name just a few.

But perhaps the most remarkable HBOT successes have come from stroke victims who were written off by their doctors as "incurable."

Some of the most incredible research about what HBOT can do for stroke victims comes from The Sagol Center for Hyperbaric Medicine and Research at Assaf Harofeh Medical Center in Israel.

They're one of the largest HBOT facilities in the world — treating up to 120 patients a day.

The center is led by Dr. Shai Efrati, a member of Tel Aviv University's Sackler Faculty of Medicine. He's spent 20 years studying the healing benefits of HBOT.

In one study, Dr. Efrati and his team conducted a prospective, randomized and controlled trial that included 74 patients divided into two groups. All patients had suffered a stroke 6-36 months prior to the study and had at least one motor dysfunction.

One group began an HBOT treatment protocol that included two months of treatment, a total of 40 sessions, five days a week. The other group received no treatment for two months, followed by the same HBOT protocol used for the first group.

The findings showed that the neurological functions and life quality of all the patients in the study had significantly improved following the HBOT sessions. The second group showed no improvement during the two-month control period prior to treatment.<sup>3</sup>

One of the women in the study could not speak at all prior to the HBOT treatment. She also couldn't use her right arm or hand. Her stroke occurred 14 months prior to the study.

During the course of treatment, she regained both her speech AND movement in her arm and hand.

There are no known side effects to HBOT because you're not putting anything unnatural in your body. Just pure oxygen, the very source of life itself.

# Why Aren't All Stroke Patients **Treated With HBOT?**

Stroke costs the U.S. \$33 billion dollars each year. And the conventional treatments do little to help victims of stroke recover.

So why don't more people know about how well **HBOT** works for stroke victims?

Look no further than the FDA.

You see, oxygen is cheap. It can't be patented. That means there's no billion-dollar drug waiting to be developed and sold — and so this means there aren't any pharmaceutical companies willing to pay for the studies the FDA requires to "approve" a cure.

The companies that make HBOT chambers are usually small and can't afford the millions of dollars to fund the studies necessary for FDA approval.

That means the FDA won't approve HBOT treatments, and insurance companies won't reimburse for it

Right now, HBOT is only approved for 14 conditions (Check out the chart below to see what they are.) To use HBOT to treat any other condition is considered "off-label" use.

Decompression sickness	Thermal burns
Non-healing wounds	Gangrene
Necrotizing soft-tissue infections	Crush injuries
Radiation tissue damage	Smoke inhalation/ carbon monoxide poisoning
Air or gas embolism	Anemia from severe blood loss
Compromised skin grafts	Brain abscesses
Chronic bone inflammation	Sudden sensorineural hearing loss

I can legally prescribe HBOT for "off-label" use. But if I promote or advertise these treatments, I could get shut down.

Fortunately, it's perfectly legal to tell you about HBOT's healing powers — as well as what it can do for stroke patients — in my newsletter.

## **Now Awaken Your Brain**

When you have a stroke, the blood supply to parts of your brain is cut off. It's usually caused by uncontrolled high blood pressure.

It's the same result whether you have an *ischemic* stroke (when a clot blocks a vessel supplying blood to the brain) or a *hemorrhagic* stroke (caused by the ruptured blood vessel in your brain). Blood vessels get damaged or destroyed. That means the oxygen your brain cells need to live and function is also cut off.

This lack of blood flow and oxygen often creates "dead zones" in your brain by killing the *neurons* (your gray matter) that store information, as well as your brain's *white matter* cells that form the connections that transport the signals between neurons.

Doctors used to think the debilitating symptoms suffered by stroke victims, such as paralysis and difficulty swallowing and speaking, were caused by the death of neurons.

But neuroscientists now know that the human brain regenerates neurons constantly — even after a stroke. In other words, given time, your neurons will replenish themselves.

The real problem is the damage done to your white matter. When white matter cells are deprived of oxygen and die, they cause lesions in your brain, like scar tissue. And like roadblocks, they prevent brain-signal traffic from moving.

That's why HBOT is such a breakthrough. It restores cerebral blood flow.

Studies now show that oxygen delivered at higher pressure actually speeds up the production of new gray matter neurons. Research has also demonstrated that HBOT reduces brain swelling after a stroke.<sup>4,5</sup>

But even more important, it boosts *brain neuroplasticity* after a stroke. That's your brain's ability to reorganize itself by forming new white matter connections that bypass and find their way through the roadblocks created by the lesions.<sup>6</sup>

And exciting studies have shown that these connections can still be re-formed and activated years after a stroke has taken place.<sup>7</sup>

Neurologists now know there's a large area of the post-stroke brain known as the *ischemic* (bloodstarved) *penumbra* that isn't actually dead. It's just traumatized.

But because so few doctors know how to treat this condition, eventually it *does* die.<sup>8, 9</sup>

Studies show that with intense doses of oxygen, this damaged brain tissue can function for up to eight hours after death.<sup>10</sup>

Ramping up your brain's oxygen supply in the aftermath of a stroke is often the difference between a full recovery and chronic, lingering disability.

## As Easy As Breathing

Oxygen restarts the same growth processes you enjoyed as a child. It encourages the regeneration of brain tissues, its blood vessels and nerves. Increasing oxygen loads up the red blood cells — and that promotes healing and regeneration.

The treatment itself is easy and painless. You just lie down and breathe. You can watch TV, read or even take a nap. The only difference is that you're breathing pure oxygen at 1.5 times normal atmospheric pressure.

But HBOT isn't only for stroke recovery. It's also an incredible treatment for Parkinson's and Alzheimer's patients, as well as those with other types of brain injuries.

Flooding your cells with healing oxygen boosts your immune system, destroys harmful bacteria and increases blood flow to help repair and regrow damaged cells.

Further benefits of HBOT can also:

- Reduce inflammation, the root cause of all chronic disease.
- Destroy cancer cells without harming healthy cells.
- Increase the number and activity of stem cells.
- Provide significant pain relief, whether your pain is the result of cancer, back injury, shingles or a wound
- Improve circulation and blood flow.
- Reduce infection by increasing white blood cells.

### **Learn More About HBOT**

HBOT requires a doctor's prescription.

If you have any questions about HBOT, or want to learn how it might help you or a loved one, please call the clinic and speak to a member of my staff at 561-784-7852.

Or, if you are in the South Florida area or plan to visit in the future, consider scheduling a consultation. My staff would be happy to show you around our beautiful facility. You can schedule an appointment by calling the above number, or by visiting my website at searsinstitute.com.

If you are not able to come to the **Sears Institute** for Anti-Aging Medicine, you can still find a reputable HBOT provider in your area. My recommendation would be to find a doctor who shares my philosophies and who understands the benefits of HBOT. One way to go about that is to visit the website of The American Academy of Anti-Aging Medicine at a4m.com. Click on the "Find a Doctor" tab in the directory at the top right-hand corner and locate a doctor in your area.

You can also find a list of HBOT providers at hyperbariclink.com. Many centers can refer you to a doctor who is knowledgeable about hyperbaric oxygen therapy, and who can write a prescription if you are a suitable candidate.

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# Could You Have 'Fat' Bones — And Not Even Know It?

They can even get *stronger* as you age — despite what you've probably been told.

But just like other parts of your body, your bones are also susceptible to getting fat... And fat bones leads to poor bone health, including osteoporosis.

For decades I've been telling my patients that there's no reason on Earth why a person born today should automatically develop osteoporosis.

While osteoporosis is now a worldwide epidemic that affects more than 75 million people <sup>1</sup> — the truth is...

It's *NOT* inevitable...

And it IS reversible.

And the last thing your bones need is Big Pharma's risky meds.

The latest scientific and archaeological evidence proves that mainstream medicine is dead wrong about osteoporosis.

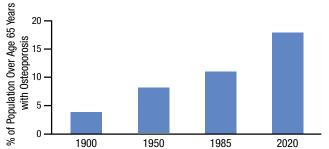
Earlier this year, researchers at the University of North Carolina School of Medicine, conducted a clinical trial that backs up what I've been saying for years.

They discovered that a buildup of bone fat — thanks to our modern diet and sedentary lifestyle — is directly linked to bone loss and is a chief cause of osteoporosis fractures.

But more importantly, they also discovered that when you reduce bone fat, your bones very quickly rebuild themselves.

Now, I'm not talking about reducing fat in your diet. It's not eating fat that is the problem, but a high-carb diet that makes you store fat in places you don't want it.

### **OSTEOPOROSIS IS AN EPIDEMIC TODAY**



Poor diet and a sedentary lifestyle have created an osteoporosis nightmare for increasing numbers of Americans over the past century.

How do you reduce bone fat? The clue is found in the skeletal remains of ancient hunter-gatherer communities.

You see, your body didn't evolve to sit in a car or in front of a desk or TV for hours.

#### You were born to move.

I'm not suggesting that you need to return to the life of a hunter-gatherer to build strong bones...

But today I'll show you how a simple, easy exercise program I developed replicates the ancient, natural movements of your ancestors. The scientists at UNC medical school proved that with the right kind of exertion, you can make bone fat literally *vanish*.

## Your Ancestors Had Strong Bones for Life

The proof that bone loss is not a natural condition of aging is found in archaeology.

In 2014, a key study conducted by researchers at Cambridge University in England looked at the bones of multiple Neolithic populations from around 7,000 years ago and found not one shred of evidence to suggest the presence of osteoporosis.

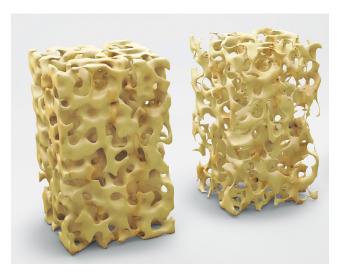
In fact, they discovered these hunter-gatherers had bones so strong they could make a modern orangutan jealous.3

And the evidence revealed these prehistoric humans weren't born with bones of steel.

But their bones grew stronger with age — not weaker.

The Cambridge archaeologists then did something even more interesting. They compared the bones of the hunter-gatherers with the bones of farmers who lived in the same area 6,000 years later — and what they discovered was shocking.

## **OUR ANCESTORS HAD BONES THAT WERE MUCH DENSER AND STRONGER**



Our ancestors' bones looked like the image on the left. Their bones were 20% greater than their modern descendants.

The bones of the farmers had become thinner and much more porous than those of their hunter-gatherer ancestors — thanks to the Agricultural Revolution, which brought diets lower in animal proteins and higher in processed cereals, and lifestyles that were significantly less active.

On average, the bone mass of the hunter-gatherers was a full 20% greater than their farming descendants.

You see, the hunter-gatherers developed their nearsuperhero frames in an environment that would kill most of us today.

Hunters roamed the forests and plains to find and kill game. Sometimes they had to run down their prey. Sometimes, they attacked them with knives and axes, using the power of their own muscles to take down wild beasts.

Meanwhile, gatherers searched hills and forests for edible plants and berries. They dug roots with their bare hands. And if wild animals attacked, they either ran or fought.

Their lives of daily activity broke down bone cells and replaced them with more and stronger cells. That's why serious athletes today have stronger bones than weekend warriors.4,5

But when farming was invented, everything changed. As a result, we have become puny weaklings, compared with our hunter-gatherer ancestors. And our bones are getting weaker and weaker with each generation.

Farming helped sustain larger populations, but it didn't challenge bones like hunting or gathering.

We were built to run and jump. But today, we mostly sit. Our skeletons have become lighter and more fragile — and our bones have become so laden with fat they can barely sustain themselves.

# **Osteoporosis: The Fat Connection**

Bone is living tissue that's perpetually renewing itself.

Your bone tissue undergoes constant remodeling, as old or damaged bone is dissolved and then reabsorbed to make new bone.

This vital work is carried out by two kinds of bone remodeling cells in your body: Osteoblasts that lay down new bone and osteoclasts that break down old bone.

You see, your bones are continually stressed, but this constant remodeling allows them to be strengthened and reinforced throughout your life. Weaker bone is removed and new, strong bone is laid down in its place.

At the center of all this activity is your marrow, the spongy tissue in the middle of your bones. Marrow is a hub of activity in your body, coordinating the formation of bone and cartilage, while simultaneously churning out blood and immune cells.

Marrow also produces fat, which has a lot to do with why it is a prized cuisine in many places around the world.

For years, scientists didn't understand the presence of fat in bone marrow — except that high levels were somehow linked to low bone density, osteoporosis and more fractures.

Previous studies have shown that *pro-inflammatory cytokines* released by fat cells in bone marrow "uncouple" the essential relationship between osteoblasts and osteoclasts, which can increase bone breakdown, but suppress new bone formation.<sup>6</sup>

They thought that marrow fat was a special kind of fat reserve not used to fuel energy during exercise in the same way other fat stores are used elsewhere in your body.

But the researchers at UNC just proved them wrong.

They discovered for the first time that vigorous exercise actually makes fat cells "vanish" from bone marrow and reverses osteoporosis within just a matter of weeks.<sup>7</sup>

You probably already know that exercise is good for your health — but this latest study proves it's simply amazing for bone health.

# Groundbreaking Bone Study in North Carolina

The UNC researchers performed their experiments on two groups of mice.

Although research on mice is not directly translatable to humans, the kinds of stem cells that produce bone and fat in mice are the same kind that make bone and fat in people.

# Beware Big Pharma's Osteoporosis Drugs

Big Pharma's bisphosphonate drugs — like Fosamax, Boniva, Reclast, and Actonel — are supposed to help stop you from getting bone fractures as you get older.

But instead they do the exact opposite and actually cause your bones to break.

Bisphosphonate drugs work by killing off the osteoclast cells that break down your bone. When you take these Big Pharma meds, the osteoclasts absorb it, and it poisons them by cutting off their blood supply.

These dangerous drugs kill your cells and prevent new bone from being built. It's true that your bones look denser on a scan. But they're filled with old bone and old calcium deposits. They certainly aren't any stronger.

Instead, they become more fragile and more prone to fracture — which is what you're trying to avoid by taking these drugs in the first place.<sup>2</sup>

In the experiments, one group of mice was fed a diet intended to make them obese. The other group ate a normal diet.

After four months, half the mice in each group were given a running wheel to use whenever they liked for the next six weeks. Because mice like to run, the group with a wheel tended to spend a lot of time exercising.

Researchers then looked at the body composition, marrow fat and bone density in the two groups of running mice.

As they expected, the mice on the fattening diet started with more fat cells — as well as larger fat cells — in their bone marrow. And their bones had already become weaker and significantly less dense.

But here's what really surprised researchers. After exercising for six weeks, both obese and lean mice showed a massive reduction in both the size and the amount of fat cells in their bone marrow.

In fact, the amount of marrow fat in the exercising obese mice dropped by more than half. And while exercise improved bone thickness and density in both groups, the improvement was particularly pronounced in obese mice.

This suggests that obese individuals — who usually have worse bone quality anyway — will get the greatest bone benefits of all from reducing the fat in the marrow

It turns out fat deposits in your marrow are not only a cause of weak, osteoporotic bones, but also that vigorous exercise actually burns it for fuel and at the same time builds stronger, more powerful bones.

## **Build Bones of Steel at Home**

The mice on the wheel had a lot in common with those 6,000-year-old Neolithic hunter-gatherers. Both fulfilled their evolutionary requirement to exert themselves — and, as a result, both developed strong, osteoporosis-free bones.

You see, you evolved to sprint, leap, lunge, stretch jump, twist and turn.

That's why the bones of your ancestors grew stronger with their daily challenges, and their muscles and tendons become powerful on diets that were high in animal protein and lifestyles in which they exerted themselves daily — even as they aged.

And that's why I recommend my **PACE** exercise program to my patients — because it replicates these ancient natural movements, and gives your body the same exertion and fitness levels as your ancestors.

My PACE program is designed specifically to return your body to its native state. PACE incrementally challenges your body with natural weight-bearing exercise to quickly increase your bone strength and help prevent fractures.

The beauty of it is that you can do **PACE** in just 12 minutes a day, and you don't need expensive equipment or a gym membership to do it.

Here are 4 of my favorite **PACE** moves:

## **Alternate Lunges**

- 1. Place your hands on your hips. Keep your back straight and hold your head high.
- 2. Then take a step forward with your right leg until your front knee is bent at 90 degrees and your back knee almost touches the ground.
- 3. Now use your quad muscle to push back off your leading leg and return to starting position. Repeat with your left leg. Alternate until you are slightly out of breath.

#### ALTERNATE LUNGES DEMONSTRATION



## **Hindu Squat**

- 1. Stand with your feet shoulder-width apart. Extend your arms out in front of you, parallel to the ground with your hands open and palms facing down. Inhale and pull your hands straight back toward you as if you're rowing.
- **2.** As you pull back, turn your wrists up and make a fist. At the end of inhaling, your elbows are behind you with both hands in a fist, palms up. From this position, bend your knees and squat.
  - 3. Begin to exhale slowly.
- **4.** Let your arms fall to your sides. *Continue to exhale.* Touch the ground with your fingers. *Continue exhaling.* Let your arms swing up as you stand back up to the starting position. Inhale and repeat.

## **Push-Ups**

1. Start face down on the floor, palms against the floor under your shoulders, toes curled up against the floor.

Push up with your arms keeping a straight line from your head through toes. Lower to within a few inches of the floor and repeat.

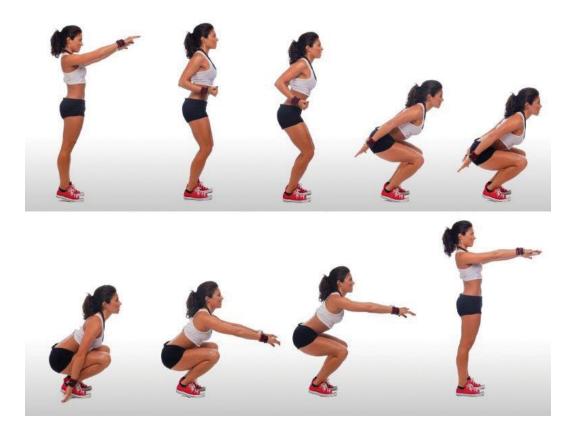
**2.** This exercise is great for your entire upper body. And if you're just beginning you can do push-ups from your knees.

## **Cross-Crunch**

- **1.** Stand with your legs together, arms extended in front of your chest, and elbows bent. Lift your right knee toward your left elbow.
- **2.** At the same time, swing your right arm down and behind you. Return to starting position. Repeat on the other side.
- **3.** Keep alternating. If you're just beginning, modify the cross-crunch by bringing your knee up to touch your hand instead of your elbow.

Choose one of these exercises to start. Try doing three sets of it. Perform each movement until you reach your desired intensity. Then rest and recover.

### **HINDU SQUAT DEMONSTRATION**



At first you'll have to take longer breaks, but they'll get shorter as you build your natural strength.

Increase the intensity with each set. At the same time, try to shorten your recovery time between sets, or get up to your desired intensity faster.

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

Focus on increasing intensity, not duration, and you'll build up your bone strength — and reduce marrow fat — in no time.

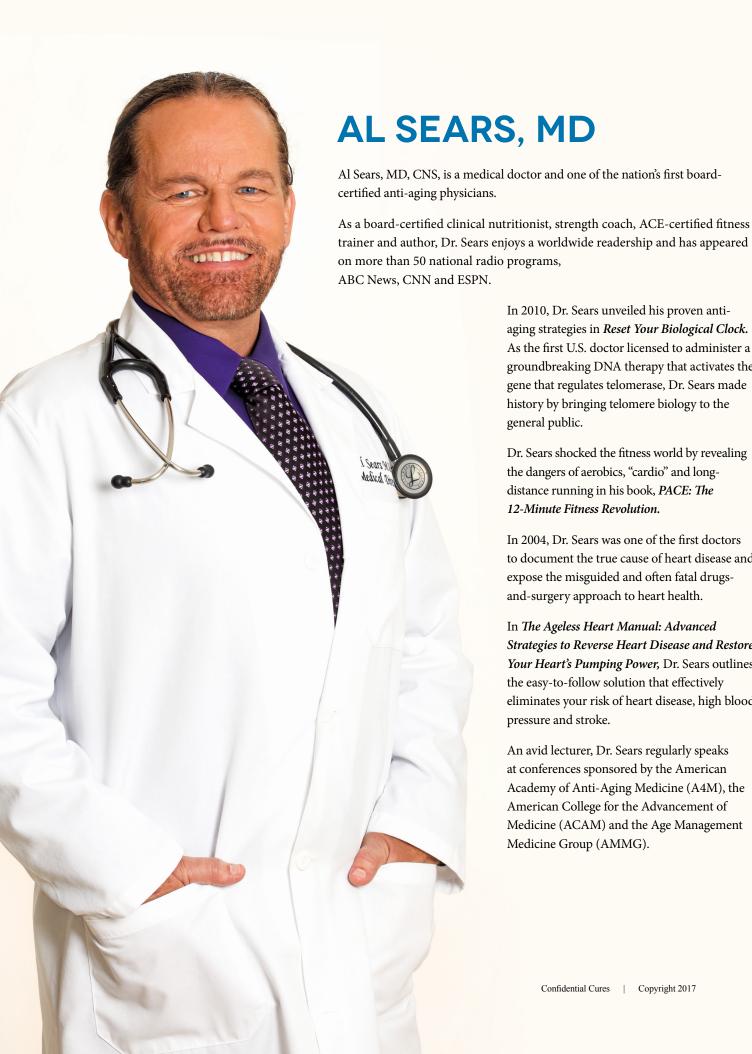
I realize that for some people, it's easier to learn new exercises by watching someone else do them.

That's why I created my <u>YouTube channel</u>. There you can watch 30 different exercises as well as a complete **PACE** workout.

#### References

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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.



In 2010, Dr. Sears unveiled his proven antiaging 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 longdistance 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 drugsand-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).