

Shocking New Insight Into the “Spread” of Alzheimer’s and Diabetes

Big Pharma and their doctors are on the wrong track with *Alzheimer’s disease* and *diabetes*. They keep telling us the problem is in our genes.

Doctors have a knee-jerk reaction to these devastating modern plagues that over the past 30 years have reached epidemic proportions.

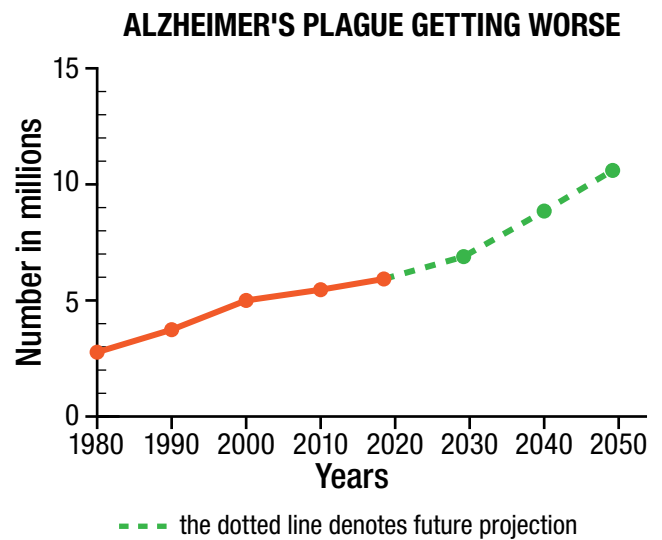
But they couldn’t be more wrong. You don’t get these diseases because your Aunt Mae or anyone else in your family had them.

In fact, the opposite is true. The problem is that the world has changed and there’s now a gaping mismatch between the nutrition your body needs and what it gets.

You see, your genetic code for survival evolved for an environment that doesn’t exist anymore. Both Alzheimer’s and diabetes are your body’s reaction to this genetic mismatch.

Together, these diseases afflict more than *500 MILLION* people worldwide. That’s almost one and a half times the population of the entire United States — and the numbers are rising dramatically.

Now a breakthrough study out of McGovern Medical School, in Houston, Texas, not only confirms that Alzheimer’s and diabetes are diseases caused by our modern environment — but they could even be contagious!



Just look at the explosive rise of Alzheimer’s disease in the U.S. over the past 37 years — and you can see how much the numbers are expected to surge even higher.

I know that may sound like a plot from a 1950s B movie. But it should give pause to every mainstream doctor who blames your genes for everything — and then just writes you a prescription.

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No Big Pharma drugs treat the underlying causes of these conditions. They only aim to slow their progress.

And most doctors don't even know about the connection between Alzheimer's and diabetes. Yet these two diseases are so similar at the molecular and pathological levels, it's almost certain they share the same cause.

*In this **Confidential Cures** article, I'll show you how to get to the true source of diabetes and Alzheimer's — using an ancient herbal treatment you might even have in your kitchen cupboard. You'll also learn just how closely these two conditions are linked, and that when you reduce your risk for one, you also reduce — and even eliminate — your risk for the other.*

But first, let's take a quick look at the astonishing new research from McGovern Medical School.

The Incredible Connection

The McGovern researchers found the mechanisms that drive type 2 diabetes are shockingly similar to the mechanisms of Alzheimer's disease.¹

They discovered that the same misfolded amyloid proteins — hallmark developments in the brains of Alzheimer's patients — also occur in the diabetic pancreas.

When these proteins don't fold properly, they build up into a plaque made of *beta-amyloid* and *amylin*, which form abnormal tangles and clusters.

With Alzheimer's, these tangles develop between brain cells, causing cell death and the loss of brain tissue.

In diabetes, they attack the *islets of Langerhans* — the part of the pancreas that produces insulin. This makes it harder for your body to transport glucose to cells for energy and to lower blood sugar levels.^{2,3}

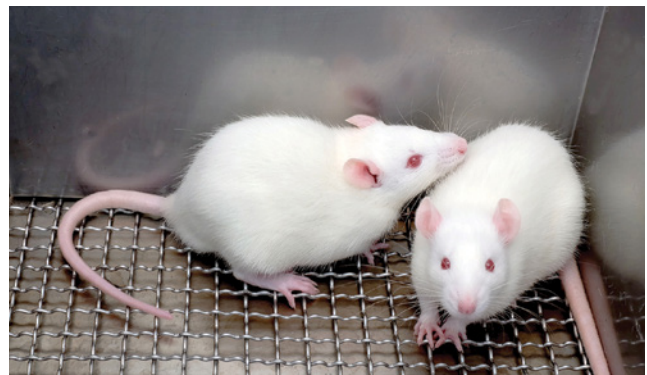
But the study also reveals these tangles aren't just the results of these two diseases — but the physiological mechanism that drives them.

These misfolded proteins, the researchers said, act as “seeds” that trigger other proteins to misfold. And the same amyloid proteins that form abnormal clusters between brain cells in Alzheimer's patients have been shown to stimulate the growth of clusters and tangles in the pancreas.^{4,5}

It's easy to see how diabetes might cause Alzheimer's — and vice versa.

But perhaps most shocking of all is the researchers' suggestion that type 2 diabetes and Alzheimer's may be “transmissible” from one cell to the next.

The diseases showed remarkable similarities to other transmissible neurological diseases known as *prion diseases* — the most famous being *Creutzfeldt-Jakob* disease, the human equivalent of “mad cow disease.”



Researchers at McGovern Medical School managed to transfer type 2 diabetes from one lab mouse to another.

The researchers even managed to transmit type 2 diabetes between mice by injecting them with misfolded proteins — and then they watched them “seed” and the disease develop.

These results don't suggest diabetes and Alzheimer's are contagious, like a cold or the flu — but blood transfusions, or even food, theoretically, could spread these diseases.

Is Alzheimer's Type 3 Diabetes?

There are compelling reasons why more and more researchers now refer to Alzheimer's as “type 3 diabetes.”

Let me explain... After you eat, the rise in sugar in your bloodstream tells your pancreas to boost insulin levels. This is how sugar is removed from your bloodstream and carried to your cells, which use it for energy.

But here's the problem: If you're subjected to years of excess sugar and carbohydrate — as in the typical Western diet — your pancreas will secrete more and more insulin. All that sugar overwhelms your body and your cells fail to respond.

That's when you become insulin resistant, when the glucose in your bloodstream can't make it into your cells. The result is dangerously high blood sugar levels and full-blown diabetes.

Most mainstream doctors don't know that insulin also plays an important role in the formation of memories. Insulin enhances memory, learning and thinking skills.

And the effects of insulin in the brain can be devastating. Studies show a 300%-plus increased risk of vascular dementia and a near-200% increased risk of Alzheimer's in older people with type 2 diabetes.

In fact, studies reveal that around 75% of diabetics are more likely to develop Alzheimer's.⁶

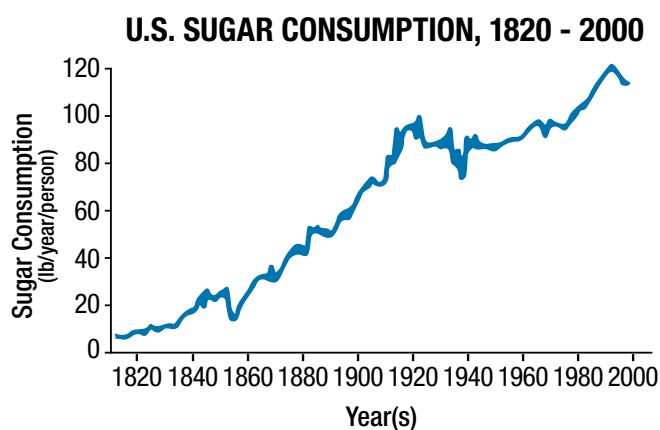
Your brain is the most energy-hungry organ in your body. While it makes up only 2% of your entire body mass, it uses 50% of the glucose.

But when your brain is deprived of insulin — and glucose — the result is cerebral dysfunction, inflammation, oxidative stress, and an inability of your neurons to repair themselves.

Get off the Carb Express

There's a clear link between our unnatural carb-overloaded, industrialized Western diet and the surge in the number of Alzheimer's and diabetes cases. I've seen it in my own research.

Today, around 44 million people suffer from Alzheimer's worldwide, with the vast majority in Western Europe and America. And that number is expected to more than triple by 2050.



Americans consume up to 170 pounds of sugar every year. Less than 100 years ago, the average intake was only 4 pounds per person.

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

At the same time another epidemic has taken hold of the world. The number of type 2 diabetes cases worldwide has skyrocketed by almost 500% to 450 million since 1980.

Yet numerous studies of African bushmen and tribal communities in South America that still live on traditional diets, show diabetes is almost unheard of.

Over the past few decades, the increase of processed foods, grains and hidden sugars in almost everything you eat has become the biggest threat to your health.

And you don't need to gorge yourself on junk food, candy bars and potato chips to put yourself at risk — because sugars and processed carbohydrates are everywhere. Most of the time, you're probably not even aware of them.

But the good news is that you can reverse diabetes *and* restore damaged brain cells. You can also significantly reduce your chances of ever developing either disease.

How to Beat These Killer Diseases Naturally

You can immediately begin to normalize your insulin levels by reducing your sugar and carbohydrate intake. It's the first step to defeating diabetes, and maintaining a sharp mind and total recall for the rest of your life.

This is what I tell my patients:

I recommend that carbohydrates should comprise no more than 20%-30% of your diet, preferably less.

But there's much more you can do...

I use four ancient herbs to reduce my patients' risk of Alzheimer's and diabetes — and for treating both conditions.

1. True Cinnamon. Scraped from the inner bark of tropical evergreen trees from the genus *Cinnamomum*, true cinnamon is a powerhouse when it comes to controlling blood sugar levels. In fact, I recommend replacing sugar and sweetener with cinnamon to everyone — not just diabetics.

Cinnamon enables your body to respond better to insulin. It contains methylhydroxy chalcone (MHCP), a polymer that balances your blood sugar and increases your body's energy stores.



One recent study of 109 people with type 2 diabetes divided the subjects into two groups. One group was given one gram of cinnamon per day and the other group a placebo. After three months, the subjects who had taken the cinnamon had HbA1c levels — the standard measure of long-term blood sugar control — were lower by almost one percentage point throughout the entire group.⁷

Some studies show that cinnamon can reduce blood sugar by as much as 29%.⁸

But cinnamon has an added benefit for Alzheimer's. It contains two compounds — *cinnamaldehyde* and *epicatechin* — which have been shown to prevent misfolded proteins developing into tangles.⁹

But the cinnamon you choose is important. The stuff you may sprinkle on toast or on your latte at Christmas time probably isn't "true" cinnamon (*Cinnamomum verum*). It's cassia cinnamon, a sweeter relative, and large dosages have been linked to liver and kidney problems in animal studies.

True cinnamon is much safer. I recommend about one gram of true cinnamon, also called Ceylon cinnamon, every day for long-term blood sugar control. That's *about half a teaspoon's worth*. You can add it to almost everything you can make — from omelets, yogurts and smoothies to salads, stews and desserts.

If you prefer to take a cinnamon supplement, look for one that says "water-soluble" on the label.

2. Gymnema Sylvestre. For more than 2,000 years, people in India have used the herb *Gymnema sylvestre* to help control blood sugar. The leaves of this climbing plant are prized in Ayurvedic medicine, the oldest health system in the world.

The herb is also called *gumar*, which literally means "destroyer of sugar" in Hindi. This name describes the way that chewing the leaves interferes with your ability to taste sweetness. Because this amazing herb decreases sweet sensations in many foods, it may reduce your cravings for sugary snacks.



Studies also show it slows down the conversion of sugar to blood glucose.

In one study, patients who took 400 mg of *Gymnema sylvestre* extract daily for 18 to 20 months, showed a significant reduction in blood sugar levels.¹⁰

I recommend supplementing with 200-800 mg per day. Work your way up to 800 mg over a period of weeks to find the dosage that works for you.

3. Bitter Melon. Ayurvedic medicine calls this plant karela and has treated diabetes with it for millennia.

Science backs up this use. In 2011, at the Patil Institute of Pharmaceutical Sciences and Research, researchers developed a patch with bitter melon to reduce blood sugar in diabetics — and they found it worked very well.



Another study showed that less than an ounce of bitter melon (also called bitter cucumber) per day lowered blood sugar in diabetics. In fact, it worked almost as well as Metformin, the drug commonly used to lower blood sugar, for type 2 diabetics.¹¹

Bitter melon is often used in stir-fry dishes. Cut the melon open lengthwise without peeling. Then remove the seeds and the white “pith” inside, and chop it like you would a green pepper. Boil the melon until the pieces are tender, and add them to your favorite stir-fry recipe.

4. Berberine. This ancient herbal medicine for treating diarrhea was used by Chinese doctors in the 1980s to treat a patient who was diabetic. And they accidentally uncovered berberine’s power to reduce blood glucose levels.

In fact, they had discovered one of the most successful type 2 diabetes treatments in the world... and Chinese doctors have been using it ever since.

Berberine is a plant phytonutrient extracted from a number of medicinal herbs, such as barberry and goldenseal. And its performance in human type 2 diabetes clinical trials has been simply amazing.

One study of diabetic patients who took 1,000 mg of berberine per day lowered fasting blood sugar

levels by more than 20%, from diabetic to normal levels. This same study also showed that berberine lowered hemoglobin A1c (the critical marker for long-term blood sugar levels) by 21%.¹²



And a comprehensive scientific review of 14 different berberine studies revealed that it was as effective at treating type 2 diabetes as metformin, with one huge advantage: Berberine has no nasty side effects.¹³

A dose of 1,000 mg to 1,500 mg is effective for most people, and that’s what the studies show as well. I wouldn’t go higher than that unless you speak with your doctor first.

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2 Roots From Tropical Paradise Can Reduce Your Cancer Risk

Bali's Rate Is 75% Lower Than Ours

I don't know if it's the same with you, but one of my favorite things to do when I travel is eat. I love to taste all the local cuisine. That's why, of all the adventures I had on the paradise island of Bali, some of my favorite memories are of mealtimes.

Because this is when my hosts brought out the “medicine.”

I'm not talking about the kind of medicine that Big Pharma produces for profit. I mean the natural herbal cures that have been part of Bali's traditional everyday diet — and their medicine chest — for thousands of years.

I remember having dinner one night at the home of my friends, Westi and Lelir, a married couple in the city of Ubad. Both of them are Balians — which means healers of Bali — and they've dedicated their lives to preserving the island's traditional herbal remedies.

As Westi and I chatted around the dinner table, Lelir came over with plates of vegetables that were sprinkled with *basa gede*, a spicy Balinese sauce. The smell was fresh and delicious.

When I inquired about it, Westi told me its main ingredient was one of Bali's two most potent cancer “cures.” The second cancer-killing ingredient came in the yellow rice Lelir brought for the next dish.

I'm talking about **galangal** and **curcumin**. These are among the most common cooking spices in Bali and other parts of Asia. But their potent medicinal properties are almost entirely unknown in the West.

It's not surprising that Bali's cancer rate is almost 75% less than in America.¹



My friend, Westi, and his family use galangal as a spice in their meals and to treat inflammatory and other medical conditions.

So why is it that if you're unfortunate enough to get cancer in America, your only option is to see an oncologist who'll almost certainly recommend radiation, surgery or chemotherapy drugs?

One reason is that it's all they know. Mainstream doctors only know what they're taught in medical school or told about by Big Pharma reps.

But there's another reason that's more concerning. Chemotherapy drugs can make oncologists very, very rich.

Most doctors will just write you a prescription for a drug. But oncologists buy chemo drugs at wholesale prices then sell them to cancer patients at marked-up prices.

In other words, they profit directly from these drugs and your illness — at your expense.

Today I will tell you about Bali's two-punch natural cancer cure, which costs pennies on the dollar — unlike chemotherapy drugs, radiation or surgery. And you'll also learn about some tasty ways to take galangal and turmeric.

Bali Cancer Punch #1: Galangal Root

Galangal (pronounced guh-LANG-guhl) is a root from the same family as ginger — the *zingiberaceae* family. Sometimes, it's called Thai ginger — but its peppery, citrus flavor is unique.

Its scent is cool and woody, and reminiscent of a lush pine forest after rain — just like Lelir's *basa gede* sauce.

Traditional healers throughout Bali and Southeast Asia have used it for hundreds of years as a powerful way to combat disease. In Bali, they use galangal to boost the immune system, treat flu and colds and reduce fever. They also prescribe it as an antibacterial, anti-inflammatory and antiviral treatment.

But Balinese healers have also known for generations that its Mother Nature's cancer killer.

Modern scientific research now backs up the ancient medicinal powers of galangal. Studies show it not only *destroys* cancer cells... but *prevents* them from ever forming in the first place.

You see, galangal is packed with powerful plant compounds, like *antioxidants*, *flavonoids* and *phenolic acids*, as well as other cancer-fighting compounds like *beta-sitosterol*, *galangin* and *emodin*. In studies:

- **Beta-sitosterol** decreased cancer cell growth by 24% and induced programmed cell death fourfold in a line of **prostate cancer cells**.²
- **Galangin** killed human **colon cancer cells**.³
- **Emodin** suppressed **breast cancer tumors** and improved immunity.⁴

And a study from Thailand showed that galangal is effective at treating different kinds of **throat cancer**.⁵



The galangal root has been used in Southeast Asian traditional medicine for hundreds of years.

Another study showed that it inhibits the growth of a type of gut bacteria that's been linked to **gastrointestinal cancers**.⁶

In the U.K., researchers found that an extract of galangal triggered enzymes that help cells rid themselves of carcinogens. It also killed **breast and lung cancer cells** and reduced the size of tumors.^{7,8}

And there's more...

- **Leukemia:** Researchers at Northern Caribbean University in Jamaica were looking for a natural alternative to chemotherapy to treat *acute monocytic leukemia* (AML), one of the most fast-moving forms of blood and bone marrow cancer, when they discovered the power of galangal. The researchers found that when AML cells were exposed to a liquid extract of galangal they stopped growing. And there was no damage to healthy cells, which is always the case with chemotherapy.

They even suggested that with further research, galangal could be a potential “lasting cure” for this type of leukemia — something you rarely hear from medical researchers.

- **Liver (Hepatic) Cancer:** This is one of the most aggressive and fast-spreading cancers. A recent study from Taiwan showed galangal significantly slowed the spread of cancer from the liver to other organs. Researchers discovered that it does this by preventing the hepatic cancer cells from attaching themselves to healthy cells nearby.⁹

- **Pancreatic Cancer:** A study just released earlier this year tested multiple compounds contained in galangal and their impact on pancreatic cancer cells. Cancer of the pancreas has the lowest survival rate after five years than any other cancer. The researchers discovered these galangal compounds stopped the growth of new cells and suppressed gene pathways that trigger pancreatic cancer cells to metastasize.¹⁰
- **Skin Cancer:** Galangal contains 40 types of antioxidants that help to minimize DNA damage caused by free radicals and other toxins that can cause skin cancer — making it extremely cancer protective.

The most antioxidative component in galangal is a flavonoid called galangin. And galangal has also been shown to suppress the *genotoxicity* of cancer-causing chemicals. Researchers in Taiwan studied the impact of three compounds from galangal — *transconiveril diacetate*, *acetoxyl chavicol acetate* and *asetoksi eugenol cetate* — on human skin cancer cells. They found that **all three compounds** stopped the growth of new cancer cells and tumors.

Bali Cancer Punch #2: Curcumin

Curcumin is a phytochemical with astonishing health properties — but its ability to fight cancer is nothing short of extraordinary.

You may even already have some in your kitchen cupboard, because it's the main component of **turmeric**. It's been used daily in Asia for at least 6,000 years as a medicine, beauty aid, cooking spice, dye and a lot more.

I've been recommending turmeric — as both a powerful medicinal herb and a cooking ingredient — since my first trip to Bali more than a decade ago.

In the wild, turmeric is a tall, leafy plant — but its medicinal powers are found in its knobby red root, which contains **curcumin**.



Curcumin is the main component of turmeric — and a powerful anti-inflammatory and anti-cancer treatment.

The ancient healers of Ayurvedic and traditional Chinese medicine didn't understand why turmeric was so powerful — they just knew it worked. Now, modern medical research is slowly catching up and proving them right.

Multiple scientific studies reveal that **curcumin** has more than 150 documented therapeutic benefits, and is a potent *anti-inflammatory*, *antioxidant*, *antifungal*, *antibacterial*, *antimicrobial*, *anti-venom* — and *anti-cancer* treatment.

In fact, curcumin is now known to target 10 separate factors that can lead to cancer. You'd have a good shot at preventing cancer by just eliminating one factor... by eliminating 10 of them, you're providing yourself with significant anti-cancer protection.

This is what Lelir, a fifth generation Balian healer, served us that night at dinner in the form of a dish called *Nasi Kuning*, or Balinese Yellow Rice, cooked in turmeric and coconut milk.

A recent study published in the journal, *Anticancer Research*, showed that curcumin targets and kills cancer stem cells — the young malignant cells that grow into tumors — but leaves normal, healthy stem cells untouched.¹¹



I've been using turmeric — as both a powerful medicinal and a cooking ingredient — since my first trip to Bali.

Studies have shown that curcumin also:¹²

- Regulates tumor suppressor pathways and starves tumors of vital blood supply;
- Triggers programmed cell death in *breast cancer* cells;
- Targets destruction of cancer-cell mitochondria while leaving healthy cells alone;
- Halts replication of cancerous cells;
- Blocks molecules to prevent tumors from growing and spreading;
- Prevents DNA damage.

Studies show that curcumin strikes at multiple targets in *prostate cancer*, interfering with the spread of cancer cells and regulating inflammatory responses through *NF-kB*, the master regulator.^{13,14}

Curcumin has also been shown to suppress colon cancer when combined with other polyphenols, such as resveratrol.¹⁵ And the combination of curcumin with green tea extracts has prevented experimentally induced colon cancer in animal studies.¹⁶

Other studies have shown the power of curcumin against:

- Blood cancers like leukemia, lymphoma and myeloma
- Brain cancer
- Pancreatic cancer
- Lung cancer
- Bladder cancer

Use Bali's Two-Punch Cancer Killer Yourself

I recommend galangal and curcumin to all my patients — as both a cancer preventer and treatment.

Not only do the remedies contain powerful cancer-fighting compounds, they're also loaded with antioxidants. These neutralize and remove dangerous free radicals from your body. And they're great at reducing inflammation, the main root cause of cancer in the first place.

Both are easy to add to your diet. I love to cook with them.

They make great additions to stir-fry dishes and stews. I put galangal and turmeric in soups, cooked vegetables, deviled eggs and salad dressings. I also use it in scrambled eggs and marinades.

Try throwing half a teaspoon of each into your pan when you're sautéing vegetables to give them a nice little kick... or add them into a smoothie.

Galangal also adds a distinctive flavor to fish dishes and helps cut down the “fishy” taste.

Or, if you're a tea drinker like me, you can also make a tea using dried roots infused in hot water. Just take one teaspoon of dried, ground galangal root and steep it in two cups of boiling water. Let it sit for at least 15 minutes.

Lelir also showed me how to make a daily herbal drink used by many Balinese that gives you a double anti-cancer hit in one — a *galangal and turmeric tonic* called *Jamu*.

Lelir made her juice the old-fashioned way. Here's her recipe...

Jamu Juice

Ingredients:

- 2 pieces of fresh turmeric root
- 1 bulb of alpinia galangal root
- 2 cups water
- 15 tablespoons of fresh, raw tamarind pulp
- ¼ cup raw palm sugar (you can substitute cane juice)
- 1 teaspoon of salt



Jamu juice has been used as a cure-all in Bali for more than 1,300 years.

Directions:

1. Peel the turmeric root and cut it up into small pieces.
2. Take the skin of one bulb of galangal root and cut into small pieces.
3. Place the roots together with the water in a blender. Blend for a minute or two.
4. Pour the mixture into a 5-quart saucepan.
5. Add the palm sugar, tamarind, a teaspoon of salt and mix with a spoon.
6. Put the saucepan on high heat and boil for 15 minutes.
7. Stir again and strain into a glass container. Cool and drink.

You can get fresh turmeric root at Indian specialty shops. Fresh galangal is available at Asian markets, but I recommend the dried root. It keeps longer.

But don't worry if the taste of galangal and turmeric isn't to your liking. You can also take a supplement.

Take a Galangal Supplement: Galangal is available in capsule form, as a powder, and in tinctures mixed with ginger.

If you choose to supplement, I recommend taking 100 mg twice a day.

Take a Curcumin Supplement: Turmeric is available as a supplement. Most studies use up to 3 grams of extracted root daily. But according to some researchers, your body doesn't absorb turmeric supplements as well as the fresh root itself.

So if you want to take a supplement, I recommend a curcumin supplement that contains *piperine*, a black pepper extract that supercharges curcumin's absorbency.

Optimal doses have not yet been established for cancer treatment. Clinical trials have used up to 8,000 mg per day. I regularly recommend dosages of 1,000 mg to my patients.

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Use My 5-Step Plan for ‘Positive Senescence’ as You Age

It’ll Help Keep You Out of the Nursing Home

Most people who end up in nursing homes aren’t sick. They have what I call “*muscle osteoporosis*.”

I coined that phrase to describe a medical condition that makes people so weak from muscle loss, they can no longer take care of themselves. They’re completely dependent on others...

The technical term is sarcopenia, a word that comes from the Greek for loss of flesh.

Simply put, sarcopenia is to muscle what osteoporosis is to bone — a slow and creeping frailty that strikes so gradually, you don’t even notice it happening.

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

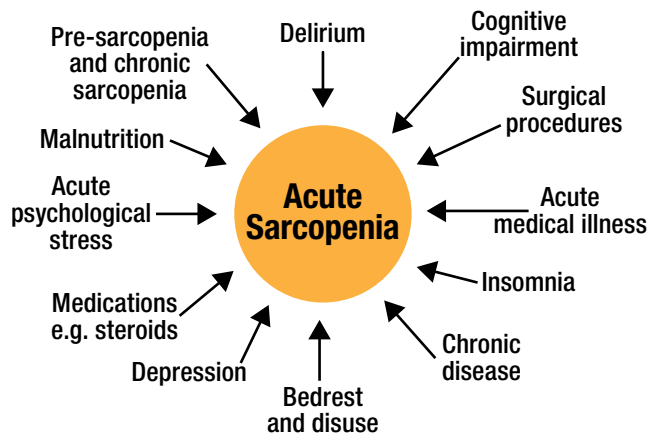
You won’t see any TV commercials telling you to take a drug for muscle loss. Because there aren’t any. That means no profit for Big Pharma. And while some pharmaceutical companies are currently looking for ways to make a buck off sarcopenia, it’s not even classified as a “disease” — so there’s no hope of getting drug approval from the FDA.

Mainstream medicine regards sarcopenia as an irreversible, untreatable and inevitable part of the aging process.

But sarcopenia isn’t inevitable. And it can be prevented and reversed.

Most doctors don’t know that sarcopenia is a modern condition caused not by age — but by a lifetime of eating an unnatural diet and a lifestyle of too little physical activity.

WHY WE MAY LOSE MUSCLE MASS



Although there are many causes of sarcopenia, it is NOT an inevitable part of aging.

Here at the *Sears Institute for Anti-Aging Medicine*, I’ve seen firsthand how the right treatment can overcome sarcopenia.

In this article, I will show you how the right nutrients and the right exercise can both prevent and reverse this awful condition — and keep you out of the nursing home. You don’t have to suffer years of decline and loss of independence before mainstream doctors finally figure out what’s going on. You can boost your muscle mass at any age — and in any physical condition.

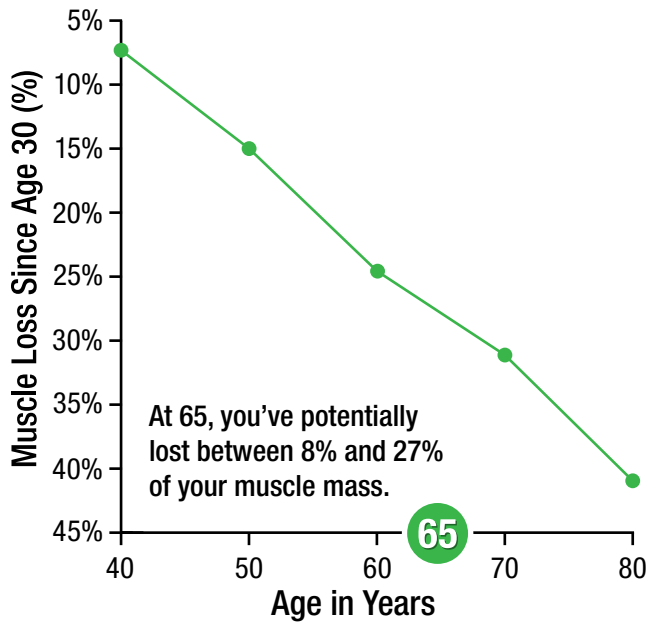
What Exactly Is Sarcopenia Anyway?

After the age of about 40, you lose about three pounds of your muscle mass *EVERY DECADE*. If you don’t do anything about it, you wind up with sarcopenia.

And this process speeds up significantly after the age of 70.¹

By the time you reach 80, you’ll have around 30% less muscle mass than a 20-year-old.

CHANGE IN MUSCLE MASS OVER TIME



It's never too late to build and replace lost muscle mass.

And strength declines even more than muscle mass. That's why weight-lifting records for 60-year-old men are 30% lower than for 30-year-olds. And for women, the drop-off is around 50%.

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

At first, you probably won't even notice sarcopenia developing, because your weight may not change — as fat replaces muscle.

But unless you do something about, a vicious cycle begins.

The symptoms of sarcopenia include musculoskeletal weakness and stamina loss. But the more fatigued you feel, the less active you are, which reduces your muscle mass even more.

Unlike bears, which emerge from months of hibernation with their muscles intact, if you were bedridden that long, you'd have trouble standing. Just like astronauts who spend long periods on zero-gravity space stations, your muscle mass would shrink.

Prolonged periods of muscle loss can even lead to chronic inflammation and loss of bone density.²

Here on Earth, the right kind of exercise is one of the main keys to preventing — and reversing — sarcopenia. But exercise is only part of the picture.

Let me explain...

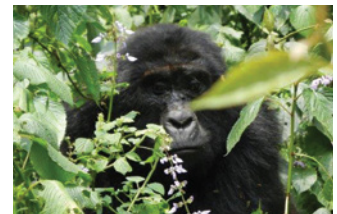
A Disease of Our Modern Age

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

I've seen the same thing with indigenous peoples that have maintained their traditional diets. The elderly in communities I visited in the Amazon rainforest, the Andes, and parts of Africa remain active at every stage of life.

Today, nearly 20 million people — around 45% of the older population in the U.S.³ — suffer from sarcopenia for the same reason gorillas — immensely strong and active at every age in the wild — become old and weak before their time in captivity.

Did you know that despite their incredible strength, gorillas rarely stress their muscles and spend most of their time relaxing? And they almost never get sick... no colds, flus or even cancers....



I was fortunate enough to capture an image of a gorilla in his habitat during my trip to Uganda.

But when taken out of their natural habitat, they get all the chronic diseases humans get. We don't live in our native environment any longer either, and we don't eat the native diet we evolved to eat.

We've swapped the muscle-building protein and nutrient-rich diet of our ancestors for a legacy of sarcopenia... and other modern plagues like mental illness, diabetes, heart disease, cancer, osteoporosis, insomnia, arthritis and obesity.

Corn, refined grains and insane amounts of sugar have overwhelmed our modern culture — and it has affected how we age.

My 5-Step Plan to Power Your Muscles At any Age

At the *Sears Institute of Anti-Aging Medicine*, I use a five-step approach for reversing muscle loss — and keeping my patients out of nursing homes...

Step 1

Get More Protein: Eating protein-rich foods builds muscle mass that helps you stay mobile, healthy and independent far into old age. Protein is the food of our ancestors, and its muscle-building benefits are backed up by multiple scientific studies.

A study from Tufts University directly links our modern lack of protein with the rise of sarcopenia. Researchers showed that older people who consumed low levels of protein lost muscle mass in just eight weeks. But the opposite happened when they increased their protein consumption.⁴

The American Society for Clinical Nutrition has also said there is “compelling data” to support the use of protein to reverse the effects of sarcopenia.⁵

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

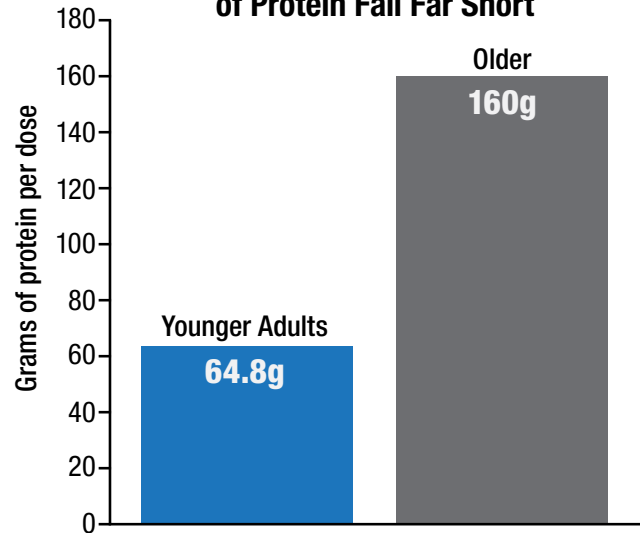
Today, we consume less protein than at any time during our million-year history.

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

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

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

Government Recommendations of Protein Fall Far Short



I recommend almost 3 times as much protein for a 180-pound man.

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

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

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

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

Step 2

Ursolic acid and tomatidine: I often recommend two tiny and overlooked natural molecules to help my patients counter muscle loss.

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

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

The researchers also found that ursolic acid and tomatidine together dramatically reduced the mice's muscle weakness and atrophy. And they found that both compounds increased muscle mass by 10%, and increased muscle strength by 30%.⁶

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

- Apple peel
- Cherries
- Holy Basil
- Oregano
- Sage
- Thyme

You can also find ursolic acid capsules online and in health food stores. I recommend the ones that contain both ursolic acid and tomatidine. Work your way up to a limit of 300 mg per day.

Step 3

A muscle-restoring workout everyone can do: Exercise is a vital component of rebuilding your muscle mass — and it's much easier than you probably imagine.

I usually recommend my sarcopenia patients work on body weight exertion with my *PACE* program, because the movements resemble the challenges you face in your everyday environment.

You're also avoiding the stress injuries that conventional training techniques can cause.

I recommend an easy but hugely effective exercise called *alternating lunges*. You can do it right now, to increase the strength in your most powerful muscles, the quads:

- Place your hands on your hips, and make sure you keep your back straight and hold your head high.



This simple exercise can increase your quadricep strength muscles by 226%.

- Take a step forward with your right leg until your front knee is bent 90 degrees and your back knee almost touches the ground.
- Use your quad muscle to push back off your leading leg and return to the starting position.
- Repeat with your left leg.
- Alternate until you are slightly out of breath.

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

Step 4

Omega-3s work on muscles too: You're probably not getting nearly enough of the right fats in your diet. Omega-3 and omega-6 fatty acids are essential to life. But these days, thanks to industrialized food production, you're getting increasing quantities of omega-6, while the natural levels of omega-3s in your food keep getting lower and lower.

But boosting your omega-3 levels can work wonders for your heart, brain, blood pressure, bones and muscles — to name just a few of its health benefits.

Here at the *Sears Institute of Anti-Aging Medicine*, I've seen how long-term use of omega-3 can slow declines in muscle mass and function, and has even reversed advanced sarcopenia in many of my senior patients.

And studies back me up.

Researchers at Missouri's Washington University School of Medicine randomized 60 men and women between 60 and 85 years old and gave them either omega-3 fish oil supplements daily or a placebo.

The researchers discovered that after six months of omega-3 therapy, all the study participants who had taken omega-3 showed “significantly” increased muscle volume, handgrip strength as well as maximum muscle strength in upper and lower body. Meanwhile, the placebo group showed no change.

The best animal sources of omega-3s are wild, cold-water, fish like pollock, salmon, tuna, lake trout and herring. Good plant sources are raw nuts and seeds, like walnuts, Brazil nuts, almonds and pumpkin seeds.

But it’s almost impossible to get enough omega-3s from your diet. You’ll want to supplement. Try to get 3 grams of omega-3s every day. I recommend krill oil and calamari oil to my patients.

Step 5

Use my top 4 muscle-building nutrients: There are also a number of inexpensive, widely available supplements that will keep your muscles strong and powerful.

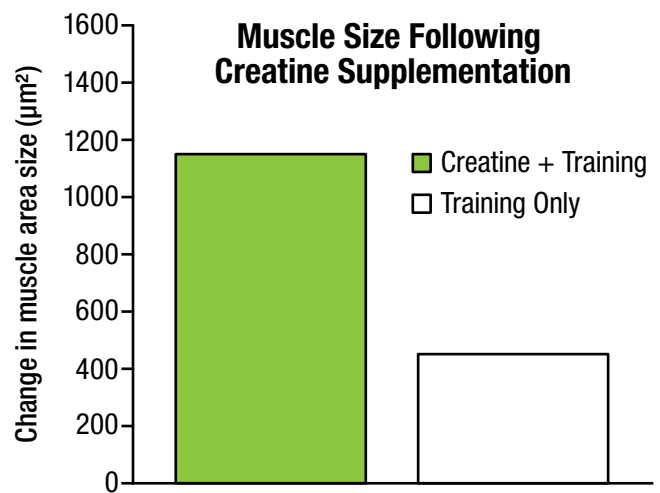
- 1. Creatine:** This is one of the safest and best-researched supplements to increase muscle mass and strength. It enhances performance, endurance, strength and speed and will boost the amount of muscle you pack on during resistance training.

I recommend a minimum of 5 grams of creatine daily until you build the muscle you need.

- 2. L-Arginine:** A double-blind study measured the change in muscle strength and lean muscle mass in men taking L-arginine versus a placebo.⁶ The men taking arginine showed a significant increase in muscle strength and lean muscle mass after only five weeks. I have used arginine-containing supplements for 30 years.

I suggest 500 mg to 1g of L-arginine a day.

- 3. Carnosine:** This is a multi-functional compound made from two amino acids. It’s naturally present in your nerve and muscle cells.



Creatine can increase your muscle mass by almost 300%.

It protects the integrity of the muscle you have, and will help ensure that the muscle you are building will be healthy and last. I recommend taking 500 mg of carnosine, twice a day.

- 4. Glutamine:** This amino acid is good for two reasons. First, glutamine helps stabilize your energy levels. More importantly, it actually boosts the natural growth hormone in your body. Growth hormone tells your body to shed fat and build muscle.

For maximum muscle growth, take 5 grams of glutamine powder per day. You can dissolve it in water or add it to a smoothie.

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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).