

September 2018

Vol. VII Issue 9

# FOUND: Our Ancient Ancestors' Long-Lost Food Group

**D**id you know that **our ancestors ate an entirely different food group than we do today?** One that helped them to thrive in the most extreme and challenging environments.

I call this the “missing” food group because it has pretty much disappeared from our modern diet. I’ll get back to that in a moment. First, I want you to know how we got here.

When it comes to our optimal nutrition, we’ve simply been making do ever since our “modern development.” As a result, your body is **starving** to death.

That might sound ridiculous, considering we live in one of the “best-fed” nations on earth. But you are the victim of a *malnutrition epidemic* that’s ignored by Western medicine.

It’s not your fault. For years, you’ve been lied to about our modern-day food supply.

Thanks to Big Agra, along with government agencies like the FDA and USDA, foods we’ve been told are “healthy” and “nutritious” are anything but. In fact, they’ve been stripped of crucial vitamins, minerals, proteins, amino acids and other compounds.

Acting together, these substances perform thousands of roles in your body. They are involved in almost all of our metabolic processes. Many vitamins can’t even be absorbed in your body without minerals.



*Our ancient ancestors ate foods that helped them thrive in the most challenging conditions... And allowed them to evolve into the humans we are today.*

They help shore up bones, heal wounds, convert food into energy and more. Others stimulate stem cell production, bolstering your immune system and regenerating damaged tissues and organs.

Without them, you unleash cascades of inflammation on your body and remove your natural protection against chronic conditions like diabetes, cancer and heart disease.<sup>1</sup>

## Also in This Issue...

- Renegade Researcher Discovers Missing Primal Nutrient... Now We Know How To Use It.....7
- Newly Discovered Stem Cell Organ Is Activated By Primal Nutrients.....12

## Don't Let Them Deprive You Of Your Most Basic Nutritional Needs

Many key nutrients are now entirely missing from your food — while others have been reduced so much, their effect is almost zero.

Supermarket apples, for example, have just 1% of the phytonutrients of ancient wild apples. Russet potatoes have only 4% of the antioxidants of wild purple potatoes. Collards have lost 84% of its magnesium. The list goes on.

And it's not just fruits and vegetables. When it comes to meat, we're missing an *entire food group*.

Fortunately, by bringing it back we can start to regain our native, primal health.

Your body evolved to derive nutrients from almost every part of an animal. When your primal ancestors went hunting for a woolly mammoth and big cats, nothing of what they caught was wasted. They ate pretty much everything.

From nose to tail, brain to bones, they devoured it all. And it turned our ancestors into the humans we are today.

Today, you might call it scraps — the stuff you'll never buy or can't even find from the supermarket... or what's left of your meals that you feed to the dog.

These forgotten superfoods include:

Organ meat	Entrails
Bone marrow	Gristle
Connective tissue	Oxtail
Skin	Cartilage
Pig's feet	Goats head

Now I don't expect you to go out hunting and eat the same way our ancestors did. I've tried a lot of exotic foods in my travels, but you won't see me cooking entrails on my grill. You don't have to. Because there's a simple way to get the same nutrition that comes from this missing food group.

You see, these animal parts are rich in vital nutrients, like *CoQ10*, *vitamins A, B12, D* and *E*, *iron*, *magnesium*, *selenium* and *zinc*. And the vast majority of Americans and Europeans are woefully deficient in all of them.

A recent *Journal of Nutrition* report reveals that a staggering 80% of us do not meet our most fundamental nutritional needs.<sup>2</sup>

Two of the most important nutrients found in "scraps" is collagen and another called *Activator X*. Both have been so drastically depleted in our diet, it's virtually impossible to fight any modern chronic disease without them.

I'll tell you more about the powers of **Activator X** and **collagen** later in this article.

We have become so conditioned by our industrialized, packaged food supply, that our nutritional heritage has been stolen right out from under us.

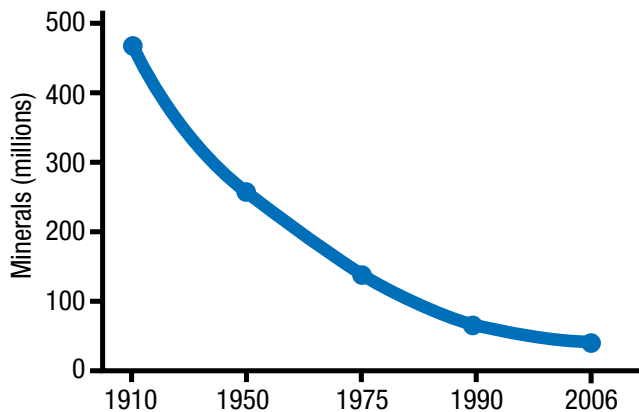
The good news is that you still have the inbuilt blueprint for primal health. In this article, you'll learn what you're missing the most in today's modern diet and how you can fix this problem fast.

## Big Agra And Their Government Cronies Have Robbed You Of Your Nutritional Heritage

The problem starts in our farm soil itself. Over the past 100 years or so, modern farming techniques have stripped vitamins and minerals out of crop soils at a shocking pace.

As a result, even the U.S. Department of Agriculture admits that vitamin and mineral levels in farm-cultivated foods have fallen by as much as 81% in just 30 years.<sup>3</sup>

## Minerals Are Rapidly Depleting From Our Soil



*There's a dangerous mismatch between what your body needs and what it gets. Our environment has changed drastically and even the soil we grow our food in, is not the same.*

You'd have to eat 10 servings of some vegetables today, just to match the nutrition of just one serving 50 years ago!

Big Agra's priorities have nothing to do with nutrition, but with modified crops that grow faster, bigger, and sweeter to make them cheaper and more profitable.

It's the same with 99% of the meat that's eaten in America. These cheap grain crops are fed directly to the animals instead of grass and then pumped full of hormones and antibiotics.

The levels of key amino acids, fats, proteins and vitamins from these malnourished, sick animals are downright puny, compared with the wild game our primal ancestors consumed.

At the same time, industrial food suppliers package only slabs of "muscle meat," neglecting other parts of the animals — the scraps — that are packed with important nutrients.

But it wasn't just your ancient ancestors who ate these so-called scraps. Back in the 19<sup>th</sup> century, you didn't just carve off steaks and chops from cows, pigs and sheep and discard the rest or dump it into a meat grinder.

You would have embraced the whole animal from snout to tail. Brains, tripe, tongue, eyes, heart, head, liver, feet, tail, ears, bone marrow... you name it, your

grandparents or great-grandparents knew exactly what to do with it.

Organ meat, in fact, is one of the richest sources of vital nutrients anywhere. And your ancestors ate plenty of it. This is what gave their bodies the strength and power to stave off diseases that were rare in their day.

Today, our nutrition-less, packaged diet has wrecked our metabolism and made our bodies act in ways nature never intended. The result is a generation of malnutrition and a plague of chronic disease.

Let me show you the evidence...

## Take A Closer Look — Our Western Diet Is Making Us Sick

There are now more than 20,000 clinical studies linking our bodily shortages in vitamins, minerals and fatty acids to health problems as diverse as depression, Alzheimer's, heart disease, diabetes, cancer, macular degeneration and osteoporosis.

A recent study published in *Nature* magazine linked the replacement of nutrient-rich traditional diets with the modern processed foods that line supermarket shelves, to the potential extinction of multiple animal species on the planet, including humans.<sup>4</sup>

The chronic diseases we face today are what I call "genetic mismatch" diseases.

You see, each of your cells contains your genetic survival code — precise instructions on the exact ingredients your body needs to stay strong, lean, alert and disease-free throughout your entire life.

Now there's a dangerous mismatch between what your body needs and the nutritionally empty diet it gets.

The U.S. now has the highest obesity rates ever recorded in its history — nearly 40% of adults<sup>5</sup> — and sky-high deficiency rates at the same time!

In just 30 years, the number of Americans with pre-diabetes and full-blown diabetes has jumped by **a staggering 1,900% to 111 million.**

Heart disease rates continue to rise. Last year, the condition killed almost 700,000 Americans and it's still the nation's number one killer — growing, along with national cancer rates, at about 3% a year.<sup>6</sup>

And don't get me started on junk food...

Junk foods, fast foods, canned and frozen prepared foods... All of them stripped of nutrition and laced with chemical flavor and texture enhancers, thickeners and preservatives that don't belong in your body.

## Bringing Back The Missing Food Group Is Your First Step To Primal Nutrition

I give all my patients the same simple advice: Eat naturally.

I'm not suggesting you go out and spear a wild beast for tonight's dinner. But you can easily create a primal meal plan by replicating your ancestors' nutrition levels and replacing harmful industrialized foods with natural alternatives.

It's much easier to eat natural, unprocessed foods like our ancestors did, than spend time reading labels. And you don't have to count calories or carbs either.

Focus all of your meals around high-quality protein. I always recommend eating whole foods, pastured beef, lamb, chicken and other properly raised, organic foods. Fruits and vegetables, not grains or starchy potatoes, 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.

Unless you know the source of the meat, dairy and vegetables and the practices of the ranch or farm, the safest foods are USDA-certified organic foods. If your grocer doesn't carry them, let them know you'll shop elsewhere.

My simple rule is to shop and buy local, in season, organic food. Nutrient-rich, properly raised food energizes your body and results in vigor, strength and long-term health.

One of the best ways to get the nutritional benefit of *all of the animal*, is to cook up a pot of old-fashioned **bone broth**. It's also loaded with the important amino acid, *glycine*, and the tissue-building protein, *collagen*.

All ancient cultures have their own version of bone broth — not just for its delicious flavor, but also for its healing properties.



*My grandmother's primal bone broth was packed with some of the most nutritious ingredients you can get in a meal.*

## Eat Like Your Ancestors With My Primal Power Bone Broth

### Ingredients:

- 4 pounds grass-fed beef bones, including marrow bones and bones with a little meat left on them. I like to use a mix of ribs, knuckle bones, oxtail and neck bones.
- 4 chicken feet (for extra collagen)
- ¼ cup apple cider vinegar
- 3 carrots, peeled and coarsely chopped
- 3 celery stalks, coarsely chopped
- 2 onions, quartered and peeled
- 1 head garlic, skin removed
- 2 bay leaves
- Himalayan salt and organic black pepper, to taste

## Directions:

1. Heat oven to 450 degrees Fahrenheit.
2. Spread the beef bones on a baking sheet and drizzle with olive oil. Roast until well browned, about a half hour.
3. Place roasted bones in a large stock pot along with chicken feet and vinegar. Add enough cold water to cover by 3 inches.
4. Bring to a boil, then reduce temperature to low. Simmer, uncovered, for 2 to 3 hours. Occasionally, you'll want to remove the scum that floats to the top.
5. Add the remaining ingredients. Continue to simmer, uncovered, for another 9 to 12 hours.
6. Remove meat and bones with a slotted spoon. Pour broth through a strainer into a large heat-proof container.
7. Use your bone stock for soups, stews, sauces or meat gravy. Or drink it like a tea.

## Replace These Four Missing Nutrients For Optimal Health

Here at the **Sears Institute for Anti-Aging Medicine**, I see **FIVE** mission-critical nutrients that are dangerously low in almost all of my new patients. Here's how to get them back:

**1. First, get the vitamin from the gut for an energy boost — folic acid (vitamin B12).** According to the USDA, nearly two fifths of the U.S. population has a folic acid deficiency.<sup>7</sup> And if you're on Big Pharma's diabetes blockbuster drug *metformin*, you're almost certainly going to be B12-deficient, because this drug interferes with your body's ability to absorb it.<sup>8</sup>

Folic acid is critical to your health. It helps maintain your nervous system and spinal cord. And it helps regulate nerve transmissions. It's also involved in the formation of red blood cells and helps to create and regulate your DNA.

B12 is produced in the gut of animals. It's found almost exclusively in foods like beef, liver, lamb, salmon, shrimp, poultry and eggs. Grass-fed meat

contains significantly more folic acid, along with other B vitamins, than grain-fed meat — which is why it's so important to eat the right kind of meat.

Most nutritionists say adults only need 2.4 mcg per day of B12. That's way too low. I recommend at least 100 mcg per day. But I advise many of my patients to take as much as 2,000 mcg per day for nerve function and energy.

**2. Replenish your potassium levels to mimic the optimal health of our ancestors.** Nearly 98% of Americans are deficient in the element potassium. That's largely because of mineral-depleted croplands. On top of that, most people eat fewer plant foods than in previous generations. Your ancient ancestors ate so many plants, they probably got as much as 10,000 mg of potassium in their daily diet. Today, you're lucky if you get 3,000 mg.

The widespread use of *diuretics* prescribed for high blood pressure also causes low potassium levels.

Every cell in your body requires potassium to function. You also need it for muscle mobility. And it's essential for maintaining healthy blood pressure, as well as reducing the risk of bone loss and kidney stones.

You can boost your potassium levels by eating more fruits and vegetables. There was wisdom in the old "meat and two veg" dinners our grandparents ate. Forget the banana myth. Bananas hold around 470 mg of potassium. You'll do better with 10 dried figs (1,350 mg), an avocado (1,330 mg) or a cup of pistachios (1,220 mg).

I only recommend potassium supplements as low-dose boosters. You should always consult a doctor before taking potassium supplements. It's far better to consume a diet rich in fruit and vegetables.



**Forget the old banana myth. Get a real potassium boost with a cup of pistachios.**

**3. Help your cells function at full capacity with magnesium.** Americans are magnesium-deficient<sup>9</sup> for much the same reasons we run low in potassium. The loss of this key mineral in our soil, water and daily diet has had devastating consequences on our health — from increased mental illness to heart disease and high blood pressure.

Most doctors still misdiagnose magnesium deficiencies. Yet more than 300 enzyme systems need magnesium to regulate multiple biochemical reactions in your body. Low magnesium has an extremely widespread affect on your body.

And if you're low in magnesium, the pumps in your cell membranes that concentrate potassium inside the cell don't work. So no potassium can get inside the cell where it needs to be. That's why I also recommend taking a magnesium supplement along with any prescribed potassium.

You can get more magnesium by eating nuts, seeds, dairy products and dark green leafy vegetables. But the average diet doesn't provide enough magnesium to maintain a healthy body and mind. Given the depleted state of our soil, there's not enough magnesium in vegetables anymore. You also get magnesium (and potassium) in sea salt.

If you prefer a supplement, I recommend between 600 mg and 1,000 mg a day. And take it with vitamin B6, which increases the amount of magnesium accumulating in your cells.

**4. Then supercharge your cells with the powerful antioxidant CoQ10.** In the mid-1990s, I was one of the few doctors in America testing CoQ10 levels — and found an astonishing 80% of my patients deficient in CoQ10. This supernutrient is found in large quantities in organ meats. But since the consumption of heart, liver and kidney is no longer popular, CoQ10 depletion is at a crisis point in most people. The widespread use of statin drugs, which also dramatically lowers your CoQ10 levels, has added massively to the problem.

CoQ10 is high-octane fuel for cells and a powerful antioxidant. It's used by every cell in your body to power everything it does. Among its many benefits, CoQ10 has also been shown to lower blood pressure, improve

memory and is especially effective at energizing your heart and lowering your risk of heart disease.

Your primal ancestors had it made — they ate the organs of every animal they hunted. But unless you're eating organ meats most days, you're probably not getting enough CoQ10 from your diet.

I recommend everyone takes 30 mg of CoQ10 daily. **If you're over 60**, double that to 60 mg. But to protect against disease, increase to 100 mg a day.

And be sure it's the right CoQ10. The more common form of CoQ10 is called ubiquinone. But the **ubiquinol form is the most potent**. Ubiquinol carries an extra electron and is eight-times more powerful than ubiquinone. And it stays in your bloodstream longer than conventional CoQ10.

These four nutrients are keys to your primal blueprint. But I did say I see FIVE mission-critical nutrients missing from our modern foods. Keep reading. In the next article, I'm going to reveal this nutrient that our ancestors got almost every day. And it kept them strong, lean and youthful throughout their lives.

#### References

1. Watkins BA, et al. "Nutraceutical fatty acids as biochemical and molecular modulators of skeletal biology." *J Am Coll Nutr.* 2001;20(5 Suppl):410S-416S.
2. Fulgoni VL 3rd, et al. "Foods, fortificants, and supplements: Where do Americans get their nutrients?" *J Nutr.* 2011;141(10):1847-1854.
3. Marles RJ. "Mineral nutrient composition of vegetables, fruits and grains: The context of reports of apparent historical declines." *J Food Comp Anal.* 2017;(56)93-103.
4. Tilman D and Clark M. "Global diets link environmental sustainability and human health." *Nature.* 2014;515(7528):518-522.
5. Gussone F. "America's obesity epidemic reaches record high, new report says." *NBC News.* Updated October 13, 2017. Accessed September 10, 2018.
6. Heron M and Anderson RN. "Changes in the leading cause of death: Recent patterns in heart disease and cancer mortality." *NCHS Data Brief.* 2016;(254):1-8.
7. McBride J. "B12 deficiency may be more widespread than thought." *USDA.* August 2, 2000.
8. Ahmed MA, et al. "Vitamin B12 deficiency in metformin-treated type-2 diabetes patients, prevalence and association with peripheral neuropathy." *BMC Pharmacol Toxicol.* 2016;17:44.
9. King DE, et al. "Dietary magnesium and C-reactive protein levels." *J Am Coll Nutr.* 2005;24(3):166-171.

# Renegade Researcher Discovers Missing Primal Nutrient... Now We Know How To Use It

**D**r. Weston Price suspected there was a “missing link” that held the key to the root of modern-day chronic diseases. And it had nothing to do with your genes or medicine.

When I studied this real-life Indiana Jones back in medical school, I was inspired. Like me, he didn't subscribe to the mainstream way of medicine. He truly wanted to find out what makes people healthy.

So he set off on an incredible journey to investigate.

He spanned the globe for more than nine years. He studied some of the world's most remote communities still untouched by Western diets.

Finally, he found his answer. One that the medical establishment still refuses to accept...

He found that the introduction of processed food and the loss of nutrients from our traditional diet have resulted in a massive decline in health for just about everyone in the developed world.

He found the tribes that stayed true to their native diets had no trace of heart disease, cancer, diabetes, obesity... or even crooked teeth. They all had wide, attractive faces, full smiles and no hint of excess fat.

They had primal health, just like your ancient ancestors.

But as soon as they started to eat refined sugar, grains and processed foods, they got sick and fat. Their offspring were born with narrow jaws and crooked teeth.

When Dr. Price analyzed his findings, he found the native diets contained 10 times the amount of fat-soluble vitamins, and at least four times the amount of calcium and other minerals than Western diets.



***Dr. Weston Price was a pioneering researcher and amateur anthropologist. His groundbreaking research still inspires me today.***

At the same time, their intake of omega-3 fats was at least 10 times higher than in today's diet.

And their diets were rich in other ways...

Wherever Dr. Price went, he found all native diets had one essential nutrient in common — an all-important fat-soluble nutrient, which he labeled “Activator X.”

He didn't know exactly how or why Activator X worked — he just knew that it was present and that if you took enough of it, it gave you perfect teeth... great physical strength... trim, muscular bodies... and NO chronic disease.

## Use Activator X Like Our Ancestors To Supercharge Your Stem Cells

Today, we know Activator X as **vitamin K2**. This is one of the five-mission critical nutrients I was telling you that we're severely lacking today. Yet, sadly, most doctors are still unaware of it.

Even though a growing body of research confirms what Dr. Price saw in the healthy native communities he studied.

Recent research has even revealed K2 as a “youth nutrient,” because it boosts the production of **stem cells** in your body — providing you with an impenetrable immune system and a heightened ability to regenerate and heal.

But that’s just part of what K2 does for you.

In this article, you’ll learn all about the astonishing power of this ignored vitamin, as well as other key stem cell-boosting nutrients that gave your ancestors primal health. And I’ll show you just how easy it is to boost your body’s levels of K2, so you can reap its benefits for yourself.

### 85 Years Later, We Still Don’t Get Enough Of Activator X

I call vitamin K2 the “missing link” to a life of longevity and robust health. The problem is that we’re not getting nearly enough of it.

Studies show that a whopping 98% of us are deficient.<sup>1</sup> One reason for this is that we no longer eat organ meat. It’s one of the richest sources of K2, it’s become a “relic” of our ancient human diet that most people just don’t eat anymore.

You see, ancient humans instinctively sought out the most nutrient-rich foods possible. It was a matter of survival.

Multivitamins won’t even get you close to the levels of K2 that your primal ancestors consumed.

That’s a huge problem, because medical scientists know that K2 is one of the most important heart- and bone-health vitamins of all — even though it’s still ignored by most doctors.

K2 plays a major role in keeping blood vessels healthy and flexible. That’s key to maintaining your healthy cardiovascular system — especially if you’re over 50 years old.<sup>2</sup>

That’s because it keeps the arteries supplying every square inch of your body with life-giving blood, supple and fluid.

Experts are now calling arterial stiffness — a condition known officially as *arteriosclerosis* — a “growing epidemic associated with increased risk of cardiovascular events, dementia, and death.”<sup>3</sup>

In a study published in *Thrombosis and Haemostasis*, researchers gave postmenopausal women a placebo or vitamin K2 for three years.<sup>4</sup>

The results were crystal clear...

The women taking vitamin K2 had 50% LESS arterial stiffness.

K2 also helps direct calcium into your bones. A shortfall can have real consequences, according to a Harvard study of more than 72,000 women, because those with the lowest K2 intake had a 30% higher risk of hip fracture.<sup>5</sup>

It even promotes joint comfort and ease of mobility.<sup>6</sup>

One study of 4,807 people even linked healthy K2 levels to a longer life, compared with those on low levels. And each 10 mcg boost was shown to correlate to better results.<sup>7</sup>

Meanwhile, the Rotterdam Study — a massive study started in 1990 that follows the nutritional habits of tens of thousands of citizens of the Netherlands — found people who took 45 mcg of K2 every day lived *seven years longer* than those whose intake was 12 mcg per day.<sup>8</sup>

And that’s not all.

“Ancient humans instinctively sought out the most nutrient-rich foods possible. It was a matter of survival.”



Researchers reporting in *Diabetes Care* found vitamin K2 can banish high blood sugars, because it makes the insulin receptors on your cells 50% more sensitive.<sup>9</sup>

This vital nutrient also boosts the production of testosterone, which is not only the hormone that makes a man a man. Both men and women need it for strong bones and muscles, a keen mind, positive mood, smooth skin, to control weight and for rip-roaring libido. It also supports protein synthesis, as well as red blood cell production.<sup>10</sup>

But recent studies now point to what is perhaps K2's most remarkable property of all — its power as a stem cell regulator, with the ability to boost production when needed. The effect that K2 has on the powers of your immune system is mighty.

Let me explain...

## Embrace Your Primal Nutrition To Activate The Incredible Healing Powers Of Stem Cells

A number of studies now confirm that consuming the right levels of nutrients exerts a powerful effect on the way stem cells perform in your body.

If you're a regular reader, you'll know that stem cells are the most powerful cells in your body. They are your reserve of healthy master cells that can grow into any other kind of human cell.

It's how your body was designed to repair itself. Most cells in your body are committed to specific functions — like heart, skin, blood, brain or nerve cells. But stem cells remain “uncommitted” until they receive a genetically programmed signal to regenerate damaged cells, tissue and organs by producing new specific cells.

Stem cells are also key to the strength of your immune system. Millions of them are destined to become vital defender cells that determine your body's ability to beat back infection and chronic

disease. They also have astonishing anti-aging properties.

We've known for a few years that some nutrients like, extracts from berries and green tea, along with *vitamin D* and *carnosine*, can favorably alter gene expression, and are capable of boosting the production of new stem cells in your body.<sup>11</sup>

But recent studies show the effect of vitamin K2 on stem cells goes a step further.

Dr. Weston Price would have been very excited by these astonishing discoveries. He found “what” — but only in the past few years have scientists learned the “why” and “how.”

“Weston Price discovered “what,” but now we know “why” and “how.”

Studies now show that K2 is a powerful stem cell regulator that supercharges bone marrow stem cells, the very source of your body's immune system.

It's the nutrient your immune system needs to stay strong and robust, so you don't have to worry about chronic diseases.

Bones and teeth are strengthened because K2 promotes the differentiation of *mesenchymal stem cells* into “osteo” cells — thereby generating new bone. Vitamin K2 has also been shown to reactivate “sleeping” adult stem cells, get them back to work keeping your bones and skeletal frame youthful and strong.

These mesenchymal stem cells also bolster the function bone marrow, which produces red blood cells, platelets, and immune cells that allow your body to stave off infections and diseases.

Other studies show K2 fights inflammation — the root of all disease — by controlling the production of certain immune system stem cells.

A Norwegian study published in the *Journal of Medicinal Food*, found that K2 blocks the production of pro-inflammatory signals by sending armies of new *macrophages* to shore up the defense.<sup>12</sup>

And K2 has also been shown to kill cancer. A study in the *Journal of Cancer Research and Clinical Oncology* found K2 can “regulate” leukemia, pancreatic and ovarian cancer cells down so they “self-destruct.”<sup>13</sup>

Other studies show it can suppress lymphocyte stem cells that grow into cancer cells — particularly in prostate and lung cancers.<sup>14</sup>

Our ancestors instinctively knew how to protect themselves from disease.

Vitamin K2 was their key — along with other stem-cell boosting nutrients, like *collagen*. I’m going to tell you more about collagen and its rejuvenation and disease-fighting powers in the next article.

But first, let’s take a look at how vitamin K2 can be easily replenished...

## Protect Yourself From Modern Diseases By Activating “Activator X”

Dr. Price found his “Activator X” in fish, shellfish, organ meats and butter from cows eating green grass. Our primal ancestors got plenty from eating organ meats like liver, kidney, heart, eyes and brains. In some Asian regions, monkey brain is still a delicacy. I never presume to tell you to eat anything like that. Fortunately, there are other ways to get enough K2.

**1. Eat these foods rich in activator X.** Goose and liver is particularly high in K2. Three and a half ounces of goose liver will provide at 369 mcg of K2. Natto, the Japanese dish of fermented whole soybeans, is also rich in K2. There are 200 mcg of K2 in a half ounce of natto.

Other good sources include:

- Meat
- Full-fat milk
- Cottage cheese
- Butter
- Cheese

*But all of these foods MUST come from grass-fed animals.*

You see, animals take in vitamin K1 from the grasses they eat. They convert it to vitamin K2 in their gut the same way we do. When you eat meat, fat, organs, and dairy from grass-fed animals you take in their vitamin K2.

Animals fed on soy, corn or other grains don’t get the vitamin K1 to convert to K2.

### Simple Roasted Bone Marrow



#### Ingredients:

- 8-10 center cut beef bones, 3 inches long
- 1 cup coarsely chopped parsley
- 2 shallots, sliced
- 2 Tbsp. extra virgin olive oil
- 2 tsp. fresh lemon juice
- Coarse sea salt

#### Directions:

1. Preheat oven to 450 degrees Fahrenheit. Place bones, cut side up in ovenproof skillet. Cook 15 to 20 minutes until marrow is soft.
2. Combine remaining ingredients in a bowl.
3. Drizzle over roasted bones. Scoop out with a small spoon and enjoy.

**2. Dine on this delicacy.** One of the best sources of all is what I call a “K2 Superfood” — *bone marrow*.

In almost every ancient fire pit discovered in caves dating back to the Paleolithic period, scientists have found piles of animal bones broken open with every trace of the marrow consumed.

Our ancient ancestors just devoured this soft mushy pulp inside the bone.

Marrow is the superfood no one talks about. It’s part of our evolutionary nutrition. It’s practically stamped into our DNA and for good reason... It’s **loaded with vitamin K2**.

Not to mention, growth factors, stem cells, collagen, fat-soluble vitamins, and fats your body needs to build, repair, and maintain your bones, teeth, skin, and connective tissues including ligaments, tendons and cartilage.

It’s considered a delicacy and a health food in France and China, where it’s often scraped onto toast as an *hors d’oeuvre* before a big meal.

You can add it in stews or even spread on toast like the French. Although it’s mostly composed of fat, it has multiple proven health benefits — including boosting your immune system, thanks to the *myeloid* and *lymphoid* stem cells it contains.

**3. Supplement with the right kind of K2.** Or you can also take a supplement. But make sure you get the right kind.

Vitamin K2 comes in several different forms called *menaquinones*. They’re numbered from four to nine. The higher the number, the more bioavailable and long-lasting the K2.

Look for vitamin K2 in the form of menaquinone-7. It’s much more bioactive than menaquinone-4.

You can find K2 at your health food store or online. I recommend up to 90 mcg a day to my patients. And, as it’s fat-soluble, take it with a meal to improve absorption.

#### References

1. Maresz K, et al. “New study shows evidence that MensaQ7 Positively Impacts Inflammation.” Paper presented at 13th international Nutrition and Diagnostic Conference. INDC 2013.
2. Geleijnse JM, et al. "Dietary intake of menaquinone is associated with a reduced risk of coronary heart disease: The Rotterdam Study." *J Nutr.* 2004;134(11):3100-3105.
3. Ziemann SJ, et al. “Mechanisms, pathophysiology, and therapy of arterial stiffness." *Arterioscler Thromb Vasc Biol.* 2005;25:932–943.
4. Knapen MH, et al. "Menaquinone-7 supplementation improves arterial stiffness in healthy postmenopausal women: double-blind randomised clinical trial." *Thromb Haemost.* 2015;113(5):1135-1144.
5. Feskanich D, et al. “Vitamin K intake and hip fractures in women: A prospective study.” *Am J Clin Nutr.* 1999;69(1):74-79.
6. Abdel-Rahman MS, et al. “Menaquinone-7 as a novel pharmacological therapy in the treatment of rheumatoid arthritis: A clinical study.” *Eur J Pharmacol.* 2015;761:273-278.
7. Geleijnse JM, et al. "Dietary intake of menaquinone is associated with a reduced risk of coronary heart disease: The Rotterdam Study." *J Nutr.* 2004;134(11):3100-3105.
8. Rotterdam Study. Wiki. Available here: [https://en.wikipedia.org/wiki/Rotterdam\\_Study](https://en.wikipedia.org/wiki/Rotterdam_Study)
9. Choi HJ. "Vitamin K2 supplementation improves insulin sensitivity via osteocalcin metabolism: A placebo-controlled trial." *Diabetes Care.* 2011;34(9):e147.
10. Ito A, et al. “Menaquinone-4 enhances testosterone production in rats and testis-derived tumor cells." *Lipids Health Dis.* 2011;10:158.
11. Liang R and Ghaffari S. "Stem cells, redox signaling, and stem cell aging." *Antioxid Redox Signal.* 2014;20(12):1902-1916.
12. Pan MH. “Inhibition of TNF- $\alpha$ , IL-1 $\alpha$ , and IL-1 $\beta$  by pretreatment of human monocyte-derived macrophages with menaquinone-7 and cell activation with TLR agonists in vitro.” *J Med Food.* 2016;19(7):663-669.
13. Shibayama-Imazu T, et al. “Vitamin K(2) selectively induced apoptosis in ovarian TYK-nu and pancreatic MIA PaCa-2 cells out of eight solid tumor cell lines through a mechanism different geranylgeraniol.” *J Cancer Res Clin Oncol.* 2003;129(1):1-11.
14. Nimptsch K, et al. “Dietary vitamin K intake in relation to cancer incidence and mortality: Results from the Heidelberg cohort of the European Prospective Investigation into Cancer and Nutrition (EPIC-Heidelberg).” *Am J Clin Nutr.* 2010;91(5):1348-1358.

# Newly Discovered Stem Cell Organ Is Activated By Primal Nutrients

You would think that when it comes to the human body, scientists know all there is to know. But they don't.

In fact, they recently discovered a whole new organ.

I know it sounds incredible. But this new organ was hiding in plain sight — despite being one of the largest in your body.

They weren't even looking for it. During an exam of a patient's bile duct, two researchers from Mount Sinai Beth Israel Hospital in New York were looking at what they believed to be long layers of dense connective tissue.

Then they discovered that this “connective tissue” was actually a series of never-before-seen fluid-filled compartments.

They noticed the cavities didn't match any known human anatomy. And they also soon discovered the cavities weren't just found in bile ducts, but throughout the body.

It's called the *interstitium*.

You can think of it as the “stem cell organ.”

Because this remarkable discovery has ushered in a new approach to stem cell therapy that is light-years better than what we have today.

It's given me a new idea of how to address a problem we've had for some time — that our stem cells are not what they should be because they are not being nourished sufficiently.

That's partly because of the lack of nutrients in the modern diet.

Without knowing it, your ancestors were so healthy because the nutrients they got from the missing food group were supporting their stem cell organ.



*The discovery of this previously unknown organ is a huge discovery — and a breakthrough in regenerative medicine.*

By addressing the primal deficiencies in what we eat today, you can unleash the full potential of your body's own stem cells to heal you.

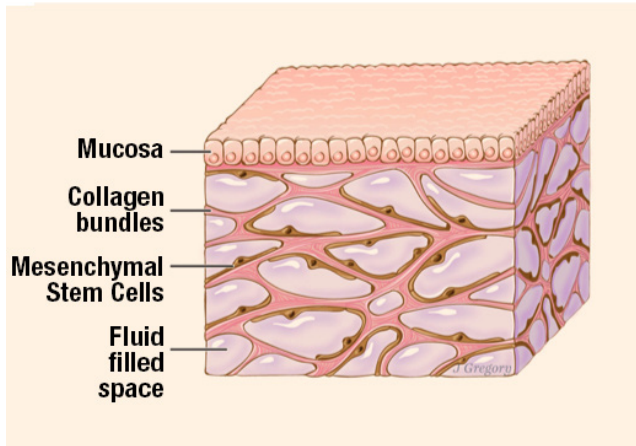
## You Have A Treasure Trove Of Stem Cells In This Hidden Organ

Your interstitium lies just beneath your skin, as well as in the lining of your gut, lungs, blood vessels and muscles. It all joins together to form a network supported by a mesh of strong, flexible proteins called collagen.

Previously, researchers believed these tissue layers were a dense “wall” of collagen — a strong structural protein found in connective tissue.

But in a new study published in the March issue of the journal *Scientific Reports*, the researchers reveal that, rather than a "wall," this tissue is more like an "open, fluid-filled highway."

It cushions all your organs and protects them from harm. But what really makes this discovery a dynamite breakthrough is that it opens the door to a new type of stem cell therapy that could banish illness from your life and change your entire future.



***Lying just below the skin, the interstitium is a network of interconnected fluid-filled compartments throughout the body.***

A healthy interstitium is one of the main reasons your ancestors enjoyed outstanding primal health: Their diet was rich in nutrients that supported it — long before the days of processed food and genetically altered crops.

Unlike the current pick of treatments that *inject* stem cells into your body, there are now ways to use this new organ to call your body's existing — but dormant — supply of stem cells into action.

You already know about one of interstitium's key activators... *vitamin K2*. And as you're about to see, harnessing this power can make you look and feel years, even decades, younger. And you don't need injections, surgeries, drugs or even doctors.

## **Your Interstitium Exists To Heal Other Organs**

Your interstitium surrounds your brain, heart, lungs and every joint in your body. It's a huge interconnected network of "sponge-like," fluid-filled tissues.

It contains *three times* more fluid in your body than blood.

It's made mostly of collagen, a crucial protein your body needs. Without collagen in your interstitium, your organs and organ systems would dislodge themselves.

This spongy protein network acts like a shock absorber to keep tissues from rupturing while your organs, muscles and vessels constantly pump and squeeze throughout the day.

But its larger purpose is to heal other organs. And keep them in perfect working order.

The latest scientific research reveals that your interstitium contains *nearly every important molecule* your body needs to survive, including:

- ✓ Vitamins
- ✓ Minerals
- ✓ Proteins
- ✓ Cells that repair damage
- ✓ Cells that power your immune system

Other cells that are surely important but we don't know what they do yet.

And — perhaps most importantly — a *vast supply of dormant stem cells*.

It's like an orchestrator... constantly communicating and directing nutrients to every single one of your other organs.

On top of supplying key nutrients to organs, the researchers found a trove of mesenchymal stem cells lining the interstitium.

And they also found collagen bundles that generated electrical currents that bend with the movements of organs and muscles.

As the researchers started looking deeper into this organ, they noticed that the signals shooting back and forth through the fluid also influenced stem cells.

Specifically, they noticed these signals would nudge stem cells in a certain direction.

Some signals would tell certain stem cells to mature into a muscle cells. Other signals made a stem cell mature into a bone cell. Still other signals would tell stem cells to divide and create more stem cells for the reserves — all transported via interstitium fluid.

“Your stem cell organ can only be activated by primal nutrients.”

In short, for the first time in human history, science can finally explain the mystery of the stem cell maturation process.

Acupuncturists have long known that applying pressure to one part of the body can have a dramatic affect on another. We know that the “signals” that come from acupuncture “pressure points” are most likely carried by the interstitium.

The researchers also observed that the interstitium feeds directly into *lymph*, the fluid that moves through the body's lymphatic system, and supports immunity and fights infection.<sup>1</sup>

The fluid carries *antigens* and *cytokines* — both critical elements in your body's immune regulation. It also carries the stem cells it activates in its store. Many of these will grow into powerful immune system defenders, like *T-cells* and *interstitial macrophages*, which has been shown to be potent protectors against lung diseases.<sup>2,3</sup>

And the research is already piling up...

## Your Interstitium Is Key To Keeping You Healthy

A mountain of research is quickly building to reveal the incredible benefits that a healthy interstitium can provide. Here's just a few of them:

### ✓ It helps your mind become razor sharp.

A study at New York University School of Medicine confirmed a healthy interstitium transports beta-amyloid, “from the interstitial space across the blood-brain-barrier and into the blood,” where it is

flushed out. These rogue amyloid proteins build up into clusters and plaques in the brains of Alzheimer's patients, gumming up the brain and causing memory loss and confusion”<sup>4</sup>

Harvard Medical School goes so far as to say, “facilitation of beta-amyloid clearance along the [interstitium] should be considered as a new target for therapeutic approaches.”<sup>5</sup>

✓ **It will supercharge your heart:** The famous Framingham Heart Study — which started in 1948 and has followed the cardiovascular health of three-generations of residents of Framingham, Massachusetts — looked at the interstitium surrounding the muscular tissues of the lungs and heart. Researchers found that people who had problems with interstitial fluid, had directly increased “morbidity and mortality in heart failure,” compared with those who had healthy interstitial fluid.<sup>6</sup>

In addition, heart surgeons from the Division of Cardiothoracic Surgery at the Medical University of South Carolina witnessed changes in the interstitium contributed to the progression of heart failure.<sup>7</sup>

And people with an ailing interstitium were found to have a resting blood pressure that was a *minimum three times HIGHER* than normal people... and in some cases six times higher.<sup>8</sup>

✓ **Regulates healthy blood sugar levels.** *The World Journal of Diabetes* reports people with blood sugar problems have highly acidic interstitial fluids, leading the researchers to conclude that acidic pH levels are “one of the causes producing insulin resistance.”<sup>9</sup>

✓ **Keeps your joints pain free and mobile.** Researchers at the University of Copenhagen Muscle Research Center examined the interstitial fluids of people before and after they did exhaustive leg exercises, and noted that, “accumulation of [waste products] in muscle interstitium may be an important factor in the development of fatigue.”<sup>10</sup>

And these are just a few of the findings.

If you look into all the studies — more than 20,000 of them are on PubMed, the medical database where every reputable study every conducted is stored — they reveal the health of your interstitium is a key player in *everything* standing in your way of a better quality of life.

Chronic pain	Depression
Anxiety	Sleep issues
Erectile function	Blood sugar
Vision and healthy eyes	Cholesterol and triglycerides
Even the common cold	

The discovery of the interstitium and its incredible potential is still fresh, and scientists are still a few years away from directly manipulating stem cells using this new organ.

And it will be a much longer time before mainstream medicine catches up.

But that doesn't mean you can't use this discovery to improve your health today, tomorrow, and in years to come.

## Kick Your “Stem Cell Organ” Into Overdrive

It's that simple. When this organ is healthy, you thrive. When it's not, the hallmarks of “old age” kick in and sickness and disease are quick to follow.

I've been doing my own research into the interstitium, and I've discovered 37 nutrients that support the healthy function of this vital organ.

With today's nutrition-deficient modern diet, it's hard to get all of these nutrients on a plate. You can

get a few of them in a multi-vitamin, but others — the most important ones — you either don't get at all, or levels are so low they're ineffective.

You already know about Weston Price's great discovery of **vitamin K2**. It's critical for the support of a healthy interstitium. Studies show that a vitamin K2 deficiency in your interstitium can trigger pneumonia, renal fibrosis, heart disease and other dangerous conditions.<sup>11,12</sup>

But there are other nutrients you're almost certainly not getting enough of — and they're just as vital.

These are the top three nutrients I find most deficient in my patients for the support of their interstitium...

### 1. Get more of the missing nutrient collagen.

This tough fibrous protein molecule is found in the bones, muscles, skin and tendons — and it's what your interstitium is made of.

Skin and bone both use collagen as building blocks. In the same way, collagen molecules pack together to form matrix-like scaffolding that provides your interstitium with strength and structure.

Your body produces collagen by itself. But here's the problem...

When you're young, your body makes enough collagen to keep tissues pliable and youthful. By your 40s, your body's ability to produce collagen drops about 25%. And your production is down by half of youthful levels by age 60.

If you don't get enough to replenish this key nutrient in your diet, you see the effects of this on the outside as wrinkles, scarring and sagging skin.

But that exact same process is happening on the inside too.

Furthermore, your interstitium is constantly rebuilding itself (for example, the interstitium surrounding your gut replaces itself every three days). So you need a constant new supply of collagen.

Our ancestors didn't shy away from collagen-rich animal parts, like bones and bone marrow or the sinewy connective tissue that most people today push to the side of the plate... they sought it out.

They knew it was critical for their musculoskeletal strength and that it kept them healthy. They couldn't hunt with pneumonia, heart disease or broken-down joints.

You can get the same benefits from collagen today. More collagen means more stability for your interstitium, your bones, skin and your 60,000-mile-long system of arteries, veins and capillaries.

Bone broth is where you can get the biggest collagen bang for your buck. Eggs, avocados and salmon are other high-quality collagen foods. You can make salmon bone broth by including the bones and scales, just as you would with bovine and chicken bone broth.

**2. You can also boost collagen and get a real boost with vitamin C.** Any food high in vitamin C will give your collagen levels — and your interstitium — a real boost. Most people don't get nearly enough of this powerful nutrient,

Studies show vitamin C helps the amino acids *proline* and *lysine* convert into collagen. On top of that, vitamin C also counteracts free radicals that contribute to premature collagen breakdown.<sup>13</sup>

Two common foods with a lot of vitamin C are red and green chili peppers (242 mg per 100 grams), and guava (228 mg).

Based on my own experience, I recommend you take between 5,000 mg to 8,000 mg of vitamin C daily. This will give you enough to produce the collagen required for a well-functioning interstitium, along with strong blood vessels and heart disease prevention.



*I've visited tribes around the world that thrive in the sun. And I find them to be healthier than most people I know in the U.S.*

In times of stress or sickness, you can take between 15,000 mg and 20,000 mg. A powdered form may be more convenient for larger doses, or you might want to consider IV vitamin C therapy.

If you're interested in IV nutrient therapy at my clinic, please call **(561) 784-7852**. My staff will be happy to answer any of your questions.

**3. Channel your ancestors living conditions by embracing the sunshine vitamin to support your stem cell organ.** The best way to get more **vitamin D** is from the sun. Our ancestors weren't covered head to toe with clothes and didn't spend all day indoors, so they got plenty of sun.

One large study concluded that 64% of all Americans are vitamin D deficient.<sup>14</sup> Another study looked at 1,600 people and found 89% of them had low vitamin D.<sup>15</sup>

We know now that vitamin D3 supports the healthy function of your interstitium.

A recent study showed a vitamin D3 deficiency was linked to 21% higher rates of a malfunction in the interstitium surrounding the lungs. This led the researchers to conclude "serum vitamin D deficiency is a risk factor" for lung problems.<sup>16</sup>



Next to sunlight, *cod liver oil* is the most concentrated natural source of this health-boosting, disease-preventing vitamin. Just one tablespoon of cod liver oil contains nearly 1,400 IUs of vitamin D3.

Although no foods will provide you with anything like the effect of direct sunshine, dietary sources are a good way to keep your vitamin D3 levels topped up.

I recommend taking a supplement called **cholecalciferol**, or D3. It's identical to the vitamin D your body produces. Take 5,000 IU per day.

#### References

1. Wiig H and Swartz MA. "Interstitial fluid and lymph formation and transport: Physiological regulation and roles in inflammation and cancer." *Physiol Rev.* 2012;92(3): 1005–1060.

2. Katakai T, et al. "Microenvironmental control of high-speed interstitial T cell migration in the lymph node." *Front Immunol.* 2016;7:194.

3. Liegeois M, et al. "The interstitial macrophage: A long-neglected piece in the puzzle of lung immunity." *Cell Immunol.* 2018;330:91-96.

4. Tarasoff-Conway JM, et al. "Clearance systems in the brain—implications for Alzheimer disease." *Nat Rev Neurol.* 2015;11(8):457–470.

5. Arbel-Ormath M, et al. "Interstitial fluid drainage is impaired in ischemic stroke and Alzheimer's disease mouse models." *Acta Neuropathol.* 2013;126(3):353-364.

6. Araki T, et al "Development and progression of interstitial lung abnormalities in the Framingham Heart Study." *Am J Respir Crit Care Med.* 2016;194(12):1514–1522.

7. Cohn JN and Francis G. "Failure, An Issue of Heart Failure Clinics." *Elsevier Health Sciences.* January 28, 2012.

8. Eckhouse SR and Spinale FG. "Changes in the myocardial interstitium and contribution to the progression of heart failure." *Heart Fail Clin.* 2012;8(1):7–20.

9. Marunaka Y. "Roles of interstitial fluid pH in diabetes mellitus: Glycolysis and mitochondrial function." *World J Diabetes.* 2015;6(1):125–135.

10. Bangsbo J, et al. "Effect of muscle acidity on muscle metabolism and fatigue during intense exercise in man." *J Physiol.* 1996;495(Pt 2):587-596.

11. Drent M, et al. "Pharmacogenetic variants and vitamin K deficiency: a risk factor or trigger for fibrosing interstitial pneumonias?" *Curr Opin Pulm Med.* 2018;24(3):287-295.

12. Scheiber D, et al. "High-dose menaquinone-7 supplementation reduces cardiovascular calcification in a murine model of extraosseous calcification." *Nutrients.* 2015;7:6991–7011.

13. Juliet M, et al. "The Roles of Vitamin C in Skin Health." *Nutrients.* 2017;9(8): 866.

14. Mitchell DM, et al. "Prevalence and predictors of vitamin D deficiency in healthy adults." *Endocr Pract.* 2012;18(6):914-923.

15. Schilling S. "Epidemic vitamin d deficiency among patients in an elderly care rehabilitation facility." *Dtsch Arztebl Int.* 2012;109(3):33-38.

16. Deng M, et al. "Vitamin D deficiency in connective tissue disease-associated interstitial lung disease." *Clin Exp Rheumatol.* 2018 May 24.

The information provided in this letter is for educational purposes only and any recommendations are not intended to replace the advice of your physician. You are encouraged to seek advice from a medical professional before acting on any recommendations in this publication.

# AL SEARS, MD

Al Sears, MD, CNS, is a medical doctor and one of the nation's first board-certified anti-aging physicians.

As a board-certified clinical nutritionist, strength coach, ACE-certified fitness trainer and author, Dr. Sears enjoys a worldwide readership and has appeared on more than 50 national radio programs, ABC News, CNN and ESPN.

In 2010, Dr. Sears unveiled his proven anti-aging strategies in ***Reset Your Biological Clock***. As the first U.S. doctor licensed to administer a groundbreaking DNA therapy that activates the gene that regulates telomerase, Dr. Sears made history by bringing telomere biology to the general public.

Dr. Sears shocked the fitness world by revealing the dangers of aerobics, “cardio” and long-distance running in his book, ***PACE: The 12-Minute Fitness Revolution***.

In 2004, Dr. Sears was one of the first doctors to document the true cause of heart disease and expose the misguided and often fatal drugs-and-surgery approach to heart health.

In ***The Ageless Heart Manual: Advanced Strategies to Reverse Heart Disease and Restore Your Heart's Pumping Power***, Dr. Sears outlines the easy-to-follow solution that effectively eliminates your risk of heart disease, high blood pressure and stroke.

An avid lecturer, Dr. Sears regularly speaks at conferences sponsored by the American Academy of Anti-Aging Medicine (A4M), the American College for the Advancement of Medicine (ACAM) and the Age Management Medicine Group (AMMG).

