



Dr. Sears'

# CONFIDENTIAL CURES

Your Guide to Truth and Lies in  
Medicine from Around the World

August 2019

Vol. VIII Issue 8

Dear Friend,

**I** saw a headline a little while ago that excited me. It said heart doctors should discuss herbal medications with their patients. This recommendation came from a study in the *Journal of the American College of Cardiology*.

*I thought it meant cardiologists had finally seen the light. But I should have known better.*

*Because, the article said doctors should learn about herbal medicines so they could STOP patients from using them.*

*It's a battle I've waged for years. But the tides haven't turned yet.*

*Even though supplementing with natural alternatives to prescription medications is at an all-time high — about 70% of Americans use them — Big Pharma continues to bad-mouth plant-based therapies. Why? Because they would love to recapture that market.*

*You see, Big Pharma can't get patents on herbs or other natural remedies. So they can't make any money on them. But they're trying to find a way around that by modifying them ever so slightly. In the end they come up with a new synthetic compound that they can patent. And profit from...*

*Today, about 25% of all drugs are derived from plants. And since the 1940s, 60% of new anticancer drugs can be traced back to natural products.*

*Here are just a few examples of plants turned into drug profits:*

- *Morphine comes from opium extracted from the poppy plant. Before Big Pharma, the plants were used for thousands of years to fight pain and promote sleep.*

- *Mold was used to treat infections in ancient Greece and Egypt. In 1938, penicillin from mold became the first antibiotic — and transformed the pharmaceutical markets.*
- *The cancer drug Paclitaxel comes from the bark of the Pacific yew tree. This bark was used by Native Americans to make anti-inflammatory treatments.*

*Millions of people around the world still rely on natural plant-based remedies. They use flowers, barks, herbs, fungi and more.*

*In Africa, up to 90% of people depend on traditional medicine. In India, 70% use natural remedies as their health care. In China, more than 90% of general hospitals have units for traditional medicine.*

*As you know, I've logged tens of thousands of miles searching the world for natural herbs and remedies to bring back to you. So you don't have to only rely on Big Pharma drugs with their dangerous side effects.*

*The theme of this month's **Confidential Cures** is finding safe, effective, proven alternatives to prescription drugs. Drugs that can end up causing more problems than they cure.*

To Your Good Health,

Al Sears, MD, CNS

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# Big Pharma's Money Grab Hijacks Telomere Technology

When I was in medical school, most scientists thought the idea that you could reverse aging was a joke.

But as I've told you before... the minute I learned about telomeres — even before the research earned a Nobel Prize — I knew it would change lives.

And I was right. By helping my patients keep their telomeres long they've seen incredible results. They've experienced benefits like having sharper memory, more energy, perfect blood sugar and healthy hearts.

In other words, they're living younger longer.

Yet, the medical establishment continues to look the other way.

Instead of acknowledging this discovery, they're stuck on turning the science into another synthetic drug for Big Pharma.

Why? Because that's where the big money is. And that's their primary goal... to profit from, not care about, our health challenges.

Let me give you an example...

I'm sure you've seen the ads for those \$99 mail order DNA-telomere tests. They're great for Big Business and Big Pharma.

But NOT so good for you.

You know the kits I'm talking about. You send in a cheek swab of saliva, or maybe a drop of blood. And they promise to tell you your genetic likelihood for getting a disease along with your telomere length.

Knowing your telomere length is important. But these home test kits don't work. The science just isn't there yet. What they are doing is making the test kit makers — and the pharmaceutical companies — a lot of money.



**Big Pharma giant GlaxoSmithKline partnered with mail order company 23andMe. Their goal is to develop new drugs based on your DNA.**

In fact, I just read in the *Wall Street Journal* that the at-home testing kit company 23andMe signed a \$300 million deal last year with Big Pharma giant GlaxoSmithKline.<sup>1</sup>

And the truth is their goal is to develop new drugs **based on your DNA**. And then to sell those drugs back to you...

Like I said, good for them. Not so good for you.

And this merger isn't the first time Big Pharma has tried to make money off of the science of telomeres.

A group of scientists at the University of California, Berkeley developed the first detailed picture of the molecular structure of human telomerase. Telomerase is an enzyme that rebuilds the telomere. They used advanced technology called "cryo-electron microscopy" to make 3-D images of the enzyme.<sup>2</sup>

What do they want to do with this new technology?

They want to use it to design new drugs to activate telomerase and market their new big money-making machine.

The good news is that you can get out from under Big Pharma's money-grab and dangerous drugs and naturally activate telomerase — right from your own home.

And, as a regular reader, I'm sure you're aware of the work I've been doing in my clinic. A few years ago, I embarked on the biggest and most important clinical trial my staff and I have done to date. The results of the first stage of testing were jaw-dropping. And now, I have even more exciting results to share with you. More on this in a moment.

But first I want to share the latest on this life-changing discovery.

You know that telomeres protect your DNA strands from fraying at the ends. They're like the plastic tips on the end of a shoelace.

As your cells divide, telomeres wear down. When your telomeres get too short, your cells stop dividing. New cells no longer replace damaged ones. You're left with older cells that lead to all of the diseases we associate with aging.

In other words, telomeres control the aging process.

Short telomeres dramatically boost your risk of serious diseases. In fact, short telomeres have been linked to a *300% increased rate of death from heart disease* and an *800% higher death rate from infectious diseases*.<sup>3</sup>

And increasing telomere length helps fight almost all "diseases of aging." I've seen it happen in my own clinical study.

## **We've Reversed Aging An Average Of 16 Years**

As I mentioned earlier, my staff and I embarked on a major clinical trial a few years ago. We designed a study to test our patients' number of critically short telomeres.

We were able to reverse the biological age of the handful of study participants enrolled by an average of 14 years.

And that was just the beginning...

Since then, the study has grown to more than 200 patients. It seems that once the word got out, everyone wanted to be a part of it.



***MF reversed the biological age of his lungs by 40 years. Overall, he grew 17 years younger.***

But even more importantly, we've continued to expand the study in other ways — adding more biomarkers of aging that allow us to further customize a treatment plan individual only to you.

On average the patients at my clinic who've gone through this age-reversing protocol have ***grown 16 years younger***.

Let me share the results of one of my patients...

His name is MF and he was 58 when he started the telomere protocol. By the end of his treatment, he was 61.

But his biological age was only 44. He grew 17 years younger.

In that time frame MF was able to:

- Reverse his "brain age" — the measure of his ability to concentrate, remember and process information — back to age 44.
- Reverse his "lung age" by almost four decades — back to that of a 24-year-old.
- Improve his eyesight, lower his triglycerides, increase his testosterone — and even lose 20 pounds.

Here's what happened with another patient who took part in our clinical trial...

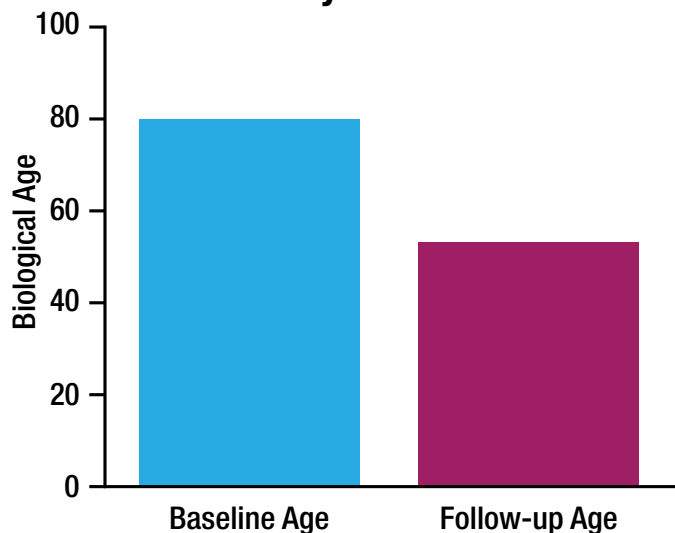
Her name is Lily. And when she started her telomere protocol, her overall biological age was 77. Her brain was in great shape — at only age 69.

However, she had the lungs of an 86-year-old!

I designed a telomere protocol and started Lily on it immediately. Her transformation was incredible. Today, Lily's overall biological age is **20 YEARS YOUNGER**.

- Her heart is 23 years younger.
- Her brain is almost a decade stronger and smarter.
- And Lily's lungs, which were her weak spot, are now 27 years younger.

### Lily Reversed Her Biological Age By 20 Years



*Lily — a patient enrolled in my groundbreaking age-reversing protocol — reversed her biological age years.*

If you look at the graph at the top of the page, you'll see how Lily's age dropped during the study.

Here are the results from a few more of my study patients:

- Brian is 70. But today he has the cellular age of a 42-year-old.
- Will turned 85 recently. But his heart age is only 50.
- 69-year-old Howard reversed his vascular age by 26 years.
- Bill is 65 with the lungpower of a 39-year-old.

As a pioneer in telomere science, I've been helping my patients protect and lengthen their telomeres for decades. I do this by helping them activate telomerase naturally.

When you turn telomerase on, your telomeres gradually get longer. Your body starts creating younger cells. And by activating telomerase you can improve and

support your heart function, kidney function, memory and vision. You can recharge your sexual desire, breathe easier, look younger and feel younger.

In other words, ***you can reverse the aging process.***

Although you won't hear that from the American Medical Association. They've been silent about telomeres and would rather continue their witch-hunt against anti-aging medicine and doctors.<sup>4</sup>

That's why I help my patients take control of how they age by activating telomerase naturally.

### Telomeres Are The True Mechanism Of Aging

Over the past century, dozens of ideas, theories and hypotheses have made their way through the halls of universities and laboratories around the world.

But as captivating as these ideas may have been at the time, I now know that all the factors I used to think of as "causes" of aging are merely the "consequences" of aging.

Most of the so-called "causes" come from internal sources. In other words, the hormones, cells and sources of energy inside our bodies start to decline over time and cause the loss of energy, vitality and immunity we associate with aging.

There's "menopause" the hormonal changes that usher women into middle age, "andropause" or the loss of male sex hormones like testosterone in men that cause a loss of sex drive, ambition and muscular physique.

There's "somatopause" the loss of growth hormone that immediately saps your physical performance and adds pounds of fat around your middle, there's "thyropause" the loss of thyroid hormones that throw off your metabolism and energy... and dozens of other "pauses" that rob you of your youth.

There were also the ideas that focused on external causes of aging such as poor diet, stress, lack of exercise or physical challenges, predation, contamination of our air, water and food supply, as well as the new modern threat, the toxic "chemical body burden" that accumulates in your blood from the time you're in the womb.

But ALL these influences, whether internal or external all point to ONE FINAL PATHWAY that determines how and why you age.

And that's the shortening of the telomere.

To better understand what this means... let's take a look at what the telomere or your "cellular control switch" really is.

## Your Telomeres Tell Your Cells How Old They Are

Deep within your DNA, located in the nucleus of each cell, are the building blocks or "blueprint" of every cell in your body.

At the end of each strand of DNA is a little bit of genetic material called the telomere.

The telomere is the part of your chromosome that controls aging. And every time your cells divide, your telomeres get shorter. And when your telomeres finally run out, cell division stops and life comes to an end.

But there's more to it than that. As you age and your telomeres get shorter, your body produces cells that are older, weaker and more decrepit.

It's programmed old age... complete with all the telltale problems that come with it.

In fact, the shorter your telomeres, the "older" your body is, regardless of your actual age. In this way, your telomeres "tell" or instruct your cells how to behave based on how old they are.

If 70% to 80% of your telomeres erode away, your cells can become permanently damaged. Critically short telomeres set in motion what Ivy League researchers call a "death spiral" in your cells.<sup>5,6</sup>

The shorter your telomeres, the more prone you are to the weakening effects of "old age," and diseases like cancer... heart disease... arthritis... Alzheimer's... Parkinson's... and diabetes.

But when you slow the countdown, you may be able to extend your lifespan, and live younger longer.

## Go Outside To Turn On Your Fountain of Youth Enzyme

As I mentioned earlier, telomerase is the enzyme that "rebuilds" your telomeres. In our cells, this enzyme is "turned off." That means there's usually no way to stop the loss of your telomeres, or to rebuild them.

Today, we are finding new ways to "turn on" this fountain of youth enzyme to prevent the shortening of the telomere and in many cases, lengthen it.

What could feel better than the warm sun on your skin? But exposing your skin to sunlight still gets a lot of bad press from the medical establishment. Far from being a source of illness that will kill you before your time, the sun is your best hope to live longer and prevent illness.

Did you know, for example, that people living in places that get more of the sun's UV radiation have the lowest incidence of cancer?<sup>7</sup> That doesn't mean sunlight lowers the "risk" of getting cancer. Getting more sunlight keeps people from actually getting cancer.

Studies show sunlight prevents skin cancer, prostate cancer, lung cancer, colorectal cancer... and it lowers rates of leukemia, breast cancer, bladder cancer and lymphoma.<sup>8,9,10</sup> I could list many more.

Part of the sun's protective power is that it "turns on" several processes in the body that lengthen telomeres. You might already know that sunlight gets turned into vitamin D in your body. But did you know that vitamin D also increases telomerase?

### OUTDATED: Theories on Why We Age

- **Disposable Soma Theory** – We just temporarily house our genes.
- **Oxidative Stress Theory** – Free radicals cause damage to cells.
- **Vital Substance Theory** – A vital substance is limiting.
- **Genetic Mutation Theory** – Accumulation of mutations cause aging.
- **Reproductive Exhaustion Theory** – After reproduction we die rapidly.
- **Aging by Design Theory** – Aging is programmed.
- **Mitochondrial Dysfunction Theory** – Mitochondria become altered.
- **The Neuroendocrine Theory** – Changes in hormone regulation.
- **Wear and Tear Theory** – Body wears out over time.
- **The Rate of Living Theory** – Similar to the Vital Substance Theory.
- **The Waste-Product Accumulation Theory** – Cells no longer function normally.
- **The Cross-Linking Theory** – Proteins such as collagen crosslink.
- **The Immune System Theory** – Decreased immune function.
- **Errors and Repairs Theory** – Inaccurate repair of damage.
- **The Order to Disorder Theory** – Decreased maintenance of order.

One study looked into the health records of more than 2,000 women, and found that women with the most vitamin D had the longest telomeres. And the women who took vitamin D supplements had longer telomeres than the women who didn't.<sup>11</sup>

Sunlight also encourages your skin to make melanin, a natural sunscreen which gives your complexion its color. And there's a relationship between how much melanin you have in your skin and the length of your telomeres.

When melanin becomes concentrated in a small area, it darkens the skin. This process keeps skin cells younger.

Cancer experts studied 1,800 people ages 18 to 79. The researchers compared the telomere length of the white blood cells of these women with more melanin-rich areas to the white blood cells of those without them.

There are two reasons they looked at white blood cells. The first is they are your body's "guardians" against biological enemies. They fight off diseases and infections that can age you. The second is that telomere length of white blood cells is also often used to extrapolate general telomere length and health.

Those who had more areas of melanin-rich skin had the longest telomeres. And their white blood cells ranged from six to seven years younger than those who had a less melanin.<sup>12,13</sup>

If you can't get 20 minutes of sun daily, start out with 2,000 IU every day of vitamin D3. And the next time you get blood work ask your practitioner to test your vitamin D levels so you'll know if you need more.

In one study of telomerase, people took either a placebo or 2,000 IU of vitamin D a day. After only four months, telomerase activity in the vitamin D group skyrocketed by 19.2%. Those taking the dummy pill had no change.<sup>14</sup>

## Add These 3 Nutrients To Increase Telomerase

At the **Sears Institute for Anti-Aging Medicine**, I help my patients activate telomerase with a variety of nutrients. Here are the steps you can take:

**1. First, boost this red wine compound.** Studies show resveratrol activates telomerase. It also "turns on" genes that promote longevity and "turns off" genes that promote disease.

Red wine is a good source of resveratrol. But you'd need to drink gallons of wine to get the telomere

benefits. That's why I recommend supplements. Take 100 mg per day for telomerase activation. But resveratrol is safe, so you could take up to 200 mg per day.

**2. Next, take a potent antioxidant.** Raising the level of vitamin C in your cells stimulates telomerase. It could slow down the shortening of telomeres up to 62%.<sup>15</sup> To protect telomeres, I recommend taking 5,000 mg to 8,000 mg every day. Be sure to divide that amount into smaller doses throughout the day.

**3. Finally, add L-arginine and L-citrulline.** Adopting a diet rich in these biochemical cousins boosts telomere length.

Studies show these amino acids team up to create nitric oxide in your body, which activates telomerase.<sup>16</sup>

Great food sources include peanuts, almonds, sunflower seeds and walnuts, tuna, chicken, salmon, lobster, shrimp, eggs, spinach and watermelon.

If you're not getting enough of these nutrients from your diet, I recommend supplementing with 1,000 mg of L-citrulline and 6,000 mg of L-arginine. But make sure you get the L form and not the synthetic DL forms.

### References:

1. Denise Roland. "23andMe and GSK are mining customers' DNA data in a hunt for new drugs." *The Wall Street Journal*. Published: July 23, 2019.
2. Nguyen T, et al. "Cryo-EM structure of substrate-bound human telomerase holoenzyme." *Nature*. 2018;557(7704):190-195.
3. Cawthon R, et al. "Association between telomere length in blood and mortality in people aged 60 years or older." *Lancet* 2003, 361(9355):393-395.
4. Dayton M, et al. "The non-science witch hunt against hormone replacement therapies for deficiency syndromes must end: An A4M Position Paper on Physician-Prescribed HRT." *Anti-Aging Therapeutics*. September 23, 2013.
5. Sahin E, et al. "Telomere dysfunction induces metabolic and mitochondrial compromise." *Nature*. 2011 Feb 17;470(7334):359-65.
6. Richards J., et al. "Homocysteine levels and leukocyte telomere length." *Atherosclerosis*. 2008;200(2):271-7.
7. Grant W. "Solar ultraviolet irradiance and cancer incidence and mortality." *Adv Exp Med Biol*. 2014;810:52-68.
8. Taksler G, et al. "Ultraviolet index and racial differences in prostate cancer incidence and mortality." *Cancer*. 2013 Sep 1;119(17):3195-203.
9. Zhao T, et al. "Inhibition of CK2 enhances UV-triggered apoptotic cell death in lung cancer cell lines." *Oncol Rep*. 2013 Jul;30(1):377-84.
10. Cuomo R, et al. "What is the relationship between ultraviolet B and global incidence rates of colorectal cancer?" *Dermatoendocrinol*. 2013 Jan 1;5(1):181-5.
11. Richards J, et al. "Higher serum vitamin D concentrations are associated with longer leukocyte telomere length in women." *J Clin Nutr* 2007; Vol. 86, No. 5, 1420-1425.
12. Bakalar N. The New York Times. www.nytimes.com. July 24, 2007. Retrieved December 22, 2014.
13. Bataille V, et al. "Nevus size and number are associated with telomere length and represent potential markers of a decreased senescence in vivo." *Cancer Epidemiol Biomarkers Prev*. 2007;16(7):1499-502.
14. Zhu H, et al. "Increased telomerase activity and vitamin D supplementation in overweight African Americans." *Int J Obes (Lond)*. 2012;36(6):805-809.
15. Furumoto K, et al. "Age-dependent telomere shortening is slowed down by enrichment of intracellular vitamin C via suppression of oxidative stress." *Life Sci*. 1998;63(11):935-948.
16. Hayashi T, et al. "Endothelial cellular senescence is inhibited by nitric oxide." *Proc Natl Acad Sci U S A*. 2006 Nov 7;103(45):17018-23.

# The Power Of This Natural “Antibiotic” Stomps Out Superbugs

The availability of antibiotics has revolutionized medicine allowing doctors to successfully treat life-threatening infectious diseases like tuberculosis, pneumonia and diphtheria.

It also enabled other life-saving procedures that once would have been fatal — like the use of ventilators and catheters in critical care medicine, cancer treatments, the care of premature babies, and pretty much any surgical procedure.

But there’s a modern downside that has emerged. And we run the risk of squandering one of the most important medical advances of the past century.

You see, doctors continue to dole out multiple types of Big Pharma’s antibiotics like candy, despite years of scientific warnings about over-prescription.

And what’s even more troubling is that the CDC says 1 in 3 of every antibiotic prescription is *unnecessary*.<sup>1</sup>

Our massive overuse of antibiotics has created “superbugs,” strains of microbes that have adapted to resist antibiotics — making them useless against more and more infections.

More than 2 million Americans now get antibiotic-resistant infections every year.

Even the CDC can hardly keep pace with the problem. Its estimate of 23,000 superbug deaths per year was recently shown to be wildly underestimated. A study concluded that the real annual death count in the U.S. is more than 160,000.<sup>2</sup>

Globally, more than 700,000 people die each year from infections that are drug-resistant.

In 2017, a 76-year-old woman in Nevada died of an infection that was resistant to *all 26 antibiotics available* in the U.S.

But the good news is that you don’t have to rely on increasingly useless pharmaceutical antibiotics



*New research shows CBD was highly active against a wide range of pathogens.*

anymore. Recently, scientists have discovered a natural replacement — with the proven power to kill superbugs in the most unlikely place.

Unfortunately, we’ll never be able to rely on Big Pharma to ride to the rescue — even though they created the problem in the first place. They go where the money is and most major drug companies ditched their antimicrobial research years ago — for the simple reason that it stopped making them money.

No drug company has brought out a new antibiotic in more than 30 years, as the big bucks shifted to heart disease and diabetes. Patents ran out, and cheap generic antibiotics now dominate the market.

I’m not surprised the former head of the U.K. government global review of antimicrobial resistance, recently accused Big Pharma of “endless talk and no action.” So what is this natural replacement for antibiotics?

It’s *cannabidiol*, or *CBD*, the non-psychoactive ingredient in cannabis, hemp and a number of other plants.

In this article, you'll learn all about the newly discovered "antibiotic" power of CBD — and how it can save the world from an antibiotic apocalypse. I'm also going to show you some little-known herbal antibiotics found in nature that are safer, gentler on your body and just as effective at killing infections as any Big Pharma drug.

## How To Create A Superbug Pandemic

First, let's talk about how "super bugs" came to be.

I'm not against antibiotics, *per se*. They have their place. Since the roll out of penicillin in the 1940s and the other antibiotics that followed, these drugs have helped save hundreds of millions of lives.

But we are all over-exposed to antibiotics in ways you might not even think of.

You see, antibiotics are not just found in prescription drugs. They are also used in soaps, shampoos and other toiletries, as well as household cleaning products.

And antibiotics are awash in our food supply. They're pumped into industrialized cattle and poultry to fight the bacterial infections that spread through cramped feedlots and battery chicken farms.

They're sprayed onto Big Agra's fruit and vegetable crops to prevent and treat infection. And during spraying, the wind can spread antibiotics into the water supply.

Now the bugs are fighting back against the drugs invented to wipe them out. And they're winning.

Call it evolution. These microbes — bacteria, fungi and viruses — were here long before we were, and they're evolving to survive us.

The number of resistant "super" versions of microbe pathogens — including *E.coli*, *Streptococcus*, *Staphylococcus aureus* (MRSA) and *C. difficile* — is rising rapidly. Scientists now believe around 70% of bacteria that cause infections are already resistant to at least one antibiotic previously used to combat it.<sup>3</sup>

The UN has already called the rise of superbugs a "global health emergency" — potentially as devastating

as warfare and climate change. Antibiotic-resistant infections are forecast to kill 10 million people per year by 2050 — more than all cancers combined.

## ALL Antibiotic Drugs Do THIS To Your Body

Antibiotics have never been harmless.

They have two ways of killing bacteria. They either prevent the reproduction of bacteria — like *fluoroquinolones* antibiotics, such as *Levaquin* or *Cipro*. Or they kill the bacteria by stopping the mechanism that builds their cell walls — like *penicillin* and *amoxicillin*.

The problem is that antibiotics can't distinguish between "good" and "bad" bacteria.

Your gut contains trillions of microbes — some good and some bad — that exist in a delicate balance with each other.

The good bacteria in your gut have a direct influence on your immune system and how often you get sick, how much energy you have, how well you digest your food and even whether or not you get fat.

Pharmaceutical antibiotics damage your body almost as soon as you swallow the pill and it lands in your digestive tract. Each time you take an antibiotic, you kill off good bacteria, jeopardizing your long-term health.

Repeated use of antibiotics can even turn your own good bacteria against you.

Studies have found that after just seven days, antibiotics can leave gut bacteria harboring antibiotic-resistance genes for up to two years after you take them — even if you take no further antibiotics.<sup>4,5</sup>

Even over-the-counter antibiotic creams like Neosporin are contributing to the rise of drug-resistant superbugs.

If nothing changes, deaths from minor events, like cuts, diarrhea and urinary tract infections could soon become everyday occurrences.

Despite mainstream medicine's opposition, nature has provided the answer...

"Scientists now believe around 70% of bacteria that cause infections are already resistant to at least one antibiotic previously used to combat it."



## Natural “Antibiotic” Powerhouse Stamps Out Super Bugs

New research recently presented at the annual meeting of the American Society for Microbiology revealed cannabidiol, or CBD — a primary ingredient in marijuana — was highly active against a wide range of microbial pathogens — even superbugs.<sup>6</sup> It does not contain THC, the mind-altering part of cannabis. These results included the drug-resistant versions of *Staphylococcus aureus*, which is responsible for MRSA, and *Streptococcus pneumoniae*, responsible for pneumonia, meningitis, diphtheria and other serious infections.

The researchers, from the University of Queensland, in Australia, found that even at low concentrations, CBD was highly effective against a panel of 132 MRSA variations.

They also noted that CBD was at least as potent as daptomycin or vancomycin, two of the more powerful antibiotics. What’s more, the bacteria didn’t develop resistance to the drug — even after 21 days of continuous treatment.

The exact mechanism of CBD’s antibacterial effect isn’t 100% clear yet. But research over the past decade has revealed that CBD has powerful anti-inflammatory properties, inhibiting inflammatory and neuropathic pain.

Previous studies have revealed a vast hidden network of chemical compounds and receptors connecting body and brain — called the *endocannabinoid system*, after the plant at the heart of the research — *cannabis sativa*.

Other mammals also have endocannabinoid systems, which suggests it’s an extremely ancient biological system.

CBD triggers this biological system that has developed over millions of years. Humans evolved tens of thousands of cannabis receptors throughout the body... long before anyone ever thought about smoking marijuana recreationally.

Your endocannabinoid system is known to help regulate everything from appetite, the inflammatory response and immune system to aging, mood and memory.

Now, I’m not advocating going out and getting high — especially since the use of cannabis isn’t legal in every state.

And CBD “antibiotics” may still be a long way away from being available over the counter at your local pharmacy.

But you can now easily treat skin infections with a CBD oil, which is available legally in all but nine states.

I recommend using it in place of topical antibiotic creams like Neosporin. Just be sure to read the ingredient list and select products with high-quality ingredients. And look for a product that’s been lab tested for consistency, and verified as free of mold, bacteria, pesticides, solvent residues and other contaminants.

CBD’s use as a natural antibiotic is great news for the near future. But there are also many other herbal alternatives to antibiotics you can use today. And you’ll never hear about them from a mainstream doctor.

## Nature’s Answer To Superbugs

Herbs exist in nature, and that means we evolved with them. They’re safer and gentler on your body, and they’re just as effective at killing infections as any pharmaceutical antibiotic.

Here are four “antibiotic” herbs I recommend to my patients...

**1. Curcumin:** This is the main ingredient in the spice turmeric and it’s one of the cornerstones of ancient Ayurvedic medicine. It’s one of the most powerful natural antibiotics that I’ve come across.

More than 6,600 studies prove curcumin beats a long list of modern drugs, including antibacterial ointments that end up doing more harm than good.

A recent study found that curcumin’s antibiotic action killed 100% of MRSA within 2 hours. E. coli was wiped out by 80%.<sup>8</sup>



***Curcumin creates a barrier that prevents further infection from entering a wound.***

And a South Korean study found that curcumin not only killed bacteria on the skin, it also created a barrier that prevented further infection from entering a wound.<sup>9</sup>

It also acts against the inflammation caused by the infection. Curcumin reduces inflammation by blocking two inflammatory enzymes (COX-2 and LOX).<sup>10</sup>

You'll get many of the natural antibiotic benefits of curcumin by using it in your cooking. I grind up some of the root and use it in everything from scrambled eggs to stir fries.

If you take a supplement, make sure you choose one with at least 90% *curcuminoids*. Also, look for one that contains *piperine*, a black pepper extract that boosts absorption.

I recommend taking between 500 mg to 1,000 mg a day.

Curcumin is also highly effective for skin infections. You can easily make your own paste at home to help heal wounds and prevent infection.

- Mix 1-2 tsp ground turmeric with enough water or coconut oil to make a thick paste.
- Apply the paste to the wound and cover with a bandage. Let sit for at least 12 hours, and up to 24. Do this for three days.

**2. Honey:** This is one the oldest known natural antibiotics, tracing back to ancient times. Egyptians frequently used honey as a natural antibiotic ointment to help wounds to heal infections.

Honey contains *hydrogen peroxide*, which almost certainly accounts for some of its antibacterial and antiseptic properties.

It also has a low pH level. This works to pull moisture away from bacteria, causing the bacteria to dehydrate and die.

A 2011 study reported that the best-known type of honey inhibits approximately 60 kinds of bacteria. It also found that honey successfully treats wounds infected with the MRSA superbug.<sup>11</sup>

You can apply honey as a natural antibiotic directly onto a wound or infected area. I keep a jar of raw, organic *Manuka* honey from New Zealand in my pantry, but any of the darker honeys are good for skin care.



***Honey is one of the world's oldest antibiotics.***

If you get a cut or a scrape...

- Apply honey directly to the wound.
- Cover the wound with a bandage or dressing.
- Change the dressing and add more honey as necessary because the honey will diffuse into the wound.
- Change the bandage if it sticks to the wound instead of the honey.

You can also ingest honey to help in the treatment of internal infections, like throat and chest infections. Simply swallow a whole tablespoon or stir it into a warm cup of herbal tea.

**3. Garlic:** Cultures across the world have long recognized garlic for its preventive and curative powers. And it's a proven natural antibiotic.

It was popular during WWII when soldiers ran out of penicillin on the battlefield. And several studies show that garlic extract increases the rate of wound healing while decreasing infection.<sup>12</sup>

Research has found that a compound in garlic called *alliin* is an effective treatment against many forms of bacteria, including E. coli, salmonella and MRSA. Garlic has also been shown to be effective against drug-resistant tuberculosis bacteria.

I recommend eating 1 to 2 cloves of fresh garlic a day. Or you can supplement with 200 mg to 400 mg of aged garlic extract three times daily. But be careful not to take too much. It can lead to stomach upset.

It's also a powerful antibiotic for skin infections. To keep the garlic extract from irritating your skin, I suggest mixing it with honey.



***Echinacea can kill the bacteria behind the flesh-eating disease.***

**4. *Echinacea Purpurea*:** Native American and other traditional healers have used this flowering plant for hundreds of years to treat infections and wounds.

It contains a complex mix of active substances with antimicrobial, antibiotic and immune system boosting properties.<sup>13</sup>

A study published in the *Journal of Biomedicine and Biotechnology* reveals that echinacea can kill many different kinds of bacteria, including *Streptococcus pyogenes* — the bacteria behind strep throat, toxic shock syndrome, and the flesh-eating disease called *necrotizing fasciitis*.<sup>14</sup>

Only take echinacea when you are exposed to infection. The jury is still out on how immune boosting herbs work long-term.

Before the introduction of pharmaceutical antibiotics, during the 19<sup>th</sup> century and the first 40 years of the

20<sup>th</sup> century, echinacea was the preferred treatment for infections and is still a powerful alternative to antibiotic drugs.

You can easily find echinacea in health food stores. I use 500 mg twice a day. I prefer liquid echinacea extract, which can have a powerful antiviral effect on the mucous membranes of the back of the throat.

**References:**

1. 1 in 3 antibiotic prescriptions unnecessary New CDC data show large percentage of antibiotics misused in outpatient settings." Centers for Disease Control and Prevention. May 3, 2016. Available at: <https://www.cdc.gov/media/releases/2016/p0503-unnecessary-prescriptions.html>
2. Burnham JP, et al. "Re-estimating annual deaths due to multidrug-resistant organism infections." *Infection Control and Hospital Epidemiology*. Vol 40, Iss 1, Jan 2019, pp 112-113
3. Kolirin L. "Superbugs kill 33,000 in Europe every year." *CNN Health*. Available at: <https://edition.cnn.com/2018/11/06/health/superbugs-kill-33000-in-eu-scli-intl/index.html>
4. C Jernberg, et al. "Long-term ecological impacts of antibiotic administration on the human intestinal microbiota." *The ISME Journal*, 2007.
5. "Antibiotics Can Turn Gut Bacteria Against Us." *Live Science* Nov 2, 2010. Available at <https://www.livescience.com/35122-antibiotics-gut-bacteria-resistance-genes-101102.html>
6. American Society for Microbiology. "Cannabidiol is a powerful new antibiotic." ScienceDaily. *ScienceDaily*, 23 June 2019.
7. Booz GW. "Cannabidiol as an emergent therapeutic strategy for lessening the impact of inflammation on oxidative stress." *Free Radic Biol Med*. 2011 Sep 1;51(5):1054-61.
8. Poonam T, et al. "Bactericidal activity of Curcumin is associated with damaging of bacterial membrane." *PLoS One*. 2015;10(3): e0121313.
9. Mun SH, et al. "Synergistic antibacterial effect of curcumin against methicillin-resistant *Staphylococcus aureus*." *Phytomedicine*. 2013 Jun 15;20(8-9):714-8
10. Rao CV. "Regulation of COX and LOX by curcumin." *Adv Exp Med Biol*. 2007;595:213-26.
11. Mandal MD and Mandal S. "Honey: Its medicinal property and antibacterial activity." *Asian Pac J Trop Biomed*. 2011;1(2):154-160.
12. Alhashim M and Lombardo J. "Mechanism of action of topical garlic on wound healing." *Dermatol Surg*. 2018;44(5):630-634.
13. Tierra M. "Echinacea: an effective alternative to antibiotics." *J Herb Pharmacother*. 2007;7(2):79-89.
14. Hudson JB. "Applications of the phytomedicine *Echinacea purpurea* (Purple Coneflower) in infectious diseases." *J Biomed Biotechnol*. 2012;2012:769896.

# FDA Approves Brand-New Opioid That's 10 TIMES More Addictive

The FDA just approved a powerful new opioid painkiller that's 10 times more potent than fentanyl — and 1,000 times more powerful than morphine.

I was downright angry when I heard about it.

Here at the **Sears Institute for Anti-Aging Medicine**, I see plenty of patients with chronic pain. But I can't begin to teach them how to manage their pain naturally and safely until they've been weaned off of lethal prescription opioids.

These drugs come from the same poppy plant used to make opium and heroin — they're synthetic versions with the same effect — and the same wickedly addictive properties, just like addictive street drugs.

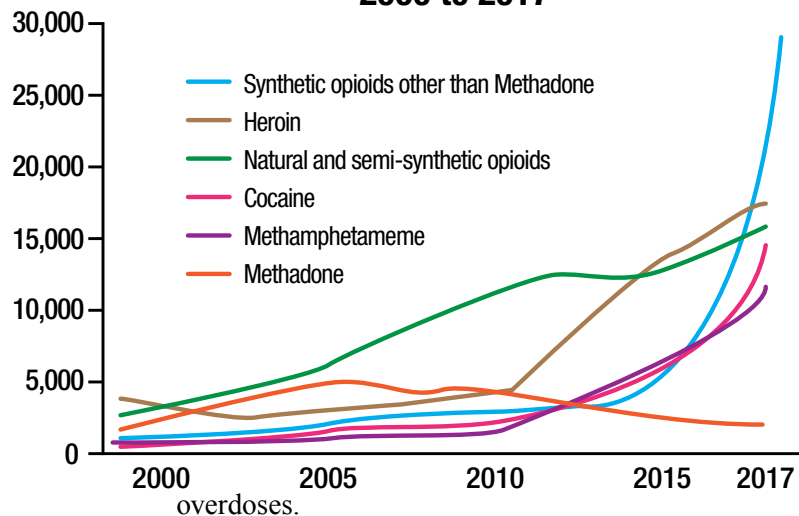
When I was in medical school, doctors only wrote prescriptions for opioids for terminal cancer patients, surgical patients and emergencies.

Today, you're likely to get an opioid prescription for anything from back pain, depression and fibromyalgia to headaches and even toothache.

This has led to the worst drug crisis in American history, and it's getting worse...<sup>1,2</sup>

- Drug overdoses claimed the lives of 72,000 Americans in 2017.
- More than 40% of all U.S. opioid overdose deaths in 2016 involved a prescription.
- In 2016, health care providers across the U.S. wrote more than 214 million prescriptions for opioid pain meds — that's 66.5 prescriptions per 100 people.
- As many as 1 in 5 Americans receive prescription opioids long-term for non-cancer pain in primary care settings.
- More than 11 million people abused prescription opioids in 2017.
- Every day, more than 1,000 people are treated in emergency departments for prescription opioids

**Drugs Involved in U.S. Overdose Deaths: 2000 to 2017**



*Among the more than 72,000 drug overdose deaths estimated in 2017, the sharpest increase occurred among deaths related to fentanyl and synthetic fentanyl with nearly 30,000 overdose deaths.*

But despite the scale of the epidemic, outrage from the public, and political promises to do something about it — drug companies continue to manufacture and push these dangerous drugs.

The good news is that you can stay as pain-free as possible and get back to living your life the way you want — without the very high risk of becoming addicted. More on this in a minute.

The current opioid crisis we're facing is caused by the FDA standing by and watching while Big Pharma has reaped obscene profits from the addiction epidemic it created.

*Dsuvia*, the latest lethal opioid painkiller — a sublingual version of an opioid already used intravenously — has already been railroaded through the approval process by former FDA chief Scott Gottlieb, a Big Pharma fat cat appointed by President Trump.

Never mind that this extremely addictive drug doesn't offer anything different than the opioids already out there, Gottlieb even turned a blind eye to some serious shenanigans to make sure the drug got through.

First of all, the advisory board voted to approve the drug in the absence of the board's chairman, who publicly opposed the application.<sup>3</sup> And on top of that, the FDA failed to consult the Drug Safety and Risk Management Advisory Committee for any guidance — which you might think would be mandatory for a drug like *Dsuvia*.

Gottlieb defended the drug's approval, citing its usefulness in battlefield scenarios, and insisted "tight restrictions" would be placed on its distribution.<sup>4</sup>

It seems the FDA has learned nothing from the lives, families and communities that have been torn apart, as opioids continue to be wrongly prescribed, marketed and abused.

An opioid that's a thousand times more powerful than morphine is a thousand times more likely to be abused — and a thousand times more likely to kill.

While you may not think opioid addiction can happen to you, these potent painkillers are prescribed so routinely, you're in greater danger than you realize.

In this article, I'm going to reveal a new natural and safe painkiller found in a rare type of moss that has unexpected similarities to marijuana. You'll also learn about some of the highly effective herbal pain cures I recommend to my patients. And I'm going to show you the eye-opening truth about what's really behind America's lethal opioid crisis...

## How An Epidemic Was Made

In the 1990s, mainstream medicine began to believe it could use drugs like morphine and methadone as magic bullets — without fear of addiction — against the scourge of chronic pain blighting millions of American lives.

They figured these drugs were so effective at easing the pain of terminal cancer patients the same opioids should be applied to people suffering debilitating pain from arthritis, wrecked knees, chronic back ache, old sports injuries, car accidents and bodies worn out by physically demanding jobs.

It was the buzz of the medical community back then. Opioid evangelists crisscrossed the country, visiting doctors' clinics, giving press interviews and academic lectures — all claiming that opioids had been used as medicine throughout history, and that it was only outdated fears about addiction that stopped the drugs being used today.

One of the new opioid evangelists, Dr. Russell Portenoy, at the Memorial Sloan-Kettering Cancer Center in New York, even told the *New York Times* in 1993 about "growing literature showing that these drugs can be used for a long time, with few side-effects, and that addiction and abuse are not a problem."<sup>5</sup>

But even as signs began to emerge that their theory didn't match reality, doctors were told they could repeatedly ratchet up the dosage.

## The Great Addiction Crisis Of 1908



Back in 1908, President Theodore Roosevelt was so worried that a national crisis of narcotics addiction was weakening America, he appointed the country's first opium commissioner, Dr. Hamilton Wright.

Then, as now, drug companies triggered the addiction crisis.

The abuse of opioids spread widely across America after the Civil War. Morphine-dependent veterans were said to have "soldiers' disease." Even genteel "society ladies" dosed up on Laudanum, a tincture of alcohol and opium.

But in 1895, German drug giant Bayer came out with a powerful new wonder drug they said worked extremely well as a cough suppressant, especially for children. Its name was "heroisch," meaning strong. In America, it was marketed under a different brand name... heroin.

By the early 1900s, heroin was being used for everything from anxiety to social performance and sleep. Pharmacists were notorious for their willingness to supply users. And drug companies were more than happy to keep up the supply.

Addiction rates in the U.S. and Europe skyrocketed. Wright, the new drug czar, called Americans "the greatest drug fiends in the world," and described opioids as a "national curse."

At its peak just prior to 1914, there were around 300,000 opioid addicts in America. Today, the U.S. has four times as many people but perhaps 10 times as many addicts.

Patient after patient soon discovered that the more drugs they took, the worse their pain became. And if they tried to stop or cut back, their pain also worsened. They were trapped.

Years later, as the death toll surged into the hundreds of thousands, Dr. Portenoy admitted it was mostly junk science.<sup>6</sup>

One study often cited back then asserted the risk of addiction from narcotic painkillers was “less than 1%” and that the doses could keep rising until the pain was eliminated. It turned out this pseudo-addiction theory was based on the study of just one cancer patient.<sup>7</sup>

But by then, Big Pharma was in on the act and used its political muscle with the FDA to loosen restraints on prescribing and pushed to make opioids a default treatment for pain.

To advance their cause even further, the American Pain Society — which is largely funded by Big Pharma — advocated for pain as the “fifth vital sign,” alongside heart rate, pulse, blood pressure and body temperature.<sup>8</sup>

Big Pharma knew there were huge profits to be made from mass prescribing drugs that were cheap to produce.

You probably recognize some of their names: *Lortab*, *Norco*, *Vicodin*, *OxyContin*, *Percocet*, *Roxicet*, *Demerol*, *Actiq*, *Duragesic*, *Fentora*, *Abstral* — to name just a few. You may even have been prescribed them.

In 2016, Big Pharma raked in a whopping \$23 billion in sales of opioids — almost 60% of it to Americans. And still, the number of deaths and patients who get hooked continue to rise.<sup>9</sup>

## Even The Mice Got “High”

In my practice, I seldom use drugs — and I never prescribe opioids. I’ve helped thousands of patients — both men and women — use safe traditional herbal treatments that work with your body to relieve pain.

These herbs are effective because they relieve the source of many kinds of pain, from *arthritis to muscle aches*. I’m talking about **inflammation**. Opioids, powerful as they are, only mask the problem.

In a minute, I’ll tell you about some of the best herbal painkillers I recommend to my patients. But soon I may be adding another one to my arsenal — a potent herbal pain remedy that’s been used by indigenous Māori people of Zealand for centuries.

Scientists recently discovered that chemicals found in a handful of liverwort plants — a relative of common moss — produce four of the same key effects as THC (*tetrahydrocannabinol*), the psychoactive ingredient in *Cannabis sativa*, or marijuana.<sup>10</sup>

When researchers gave these chemicals — called **perrottetinenes**, or *PET* — found in the liverwort *Radula marginata* to more than 100 mice, the mice:

1. Entered a trance-like state.
2. Lost some of their ability to move.
3. Experienced a drop in body temperature.
4. Became less responsive to pain.

The researchers also studied what PET did to the brain. When they ran tests, they found the PET compounds were extremely similar to THC, and acted on the same cannabinoid receptors in the brain as THC.

It was previously believed marijuana and hemp were the only plants that produced THC.

But there were some important differences...

The scientists reported that PET was only “moderately potent” — compared with the THC in marijuana.

But that relative weakness is also a strength — because PET provides the same painkilling benefits as THC, but with much fewer psychoactive side effects.

And there was more.

The researchers discovered that unlike THC, PET reduced the level of chemicals called **prostaglandins** that cause harmful inflammation. This hormone-like chemical is produced by your body in response to injury. It makes blood vessels dilate and expand. This causes the injured area to become swollen and arthritic.

Prostaglandins are also involved in memory loss, neuroinflammation, hair loss, vasoconstriction and high blood pressure.<sup>11,12,13</sup>

By directly attacking these **prostaglandins**, PET stops inflammation before it starts — and eliminates the pain associated with it.

Cultivating *Radula marginata* in America may be difficult, because the plant reproduces without seeds. And this PET-containing liverwort grows only in Japan, New Zealand, Tasmania and Costa Rica.

But you can buy it legally on the Internet. Anecdotal evidence suggests it's effective against arthritis, back pain and anxiety — and that the “high” is minimal. It also works as a mild sedative.

I recommend brewing into a tea or burning as incense.

## My Prescription For Pain

I don't prescribe opioids — neither natural “opiates” that are made directly from the opium poppy or any synthetic versions of them. Nature has provided us with a bounty of alternative medicinal painkillers that are both safe and effective. Many have been used for millennia by traditional peoples around the world.

But, along with medicinal herbs, there are other important ways to manage pain. Here are some of the recommendations I give to my patients:

**1. First, if you have to take pain medication.** There's no drug that we know everything about. But sometimes you have to use them. If you need to take a painkiller...

- Use them with a high level of suspicion.
- Have a good reason to take them.
- Take the minimum dose (the higher the dose and longer you take it, the worse it is).
- Take them as infrequently as possible.
- Avoid chronic use, especially the way doctors often prescribe them, which is often open-ended: “Here, take this”... and then you're on them forever.

**2. There's a dietary secret I use with my patients to help get rid of pain naturally.**

Drug companies and food processors don't want you to know this because it hurts their sales, but most Americans unknowingly eat foods that contribute to the problem of everything from headaches to pain and soreness in their tissues and joints.

Specifically, the Western diet contains too much omega-6 fatty acid. This substance is a necessary nutrient, but too much of it leads to inflammation. And inflammation causes pain.

These high levels of omega-6s make the few remaining omega-3s almost unusable by your body. The dominant omega-6s take all the conversion enzymes and produce an inflammatory compound called *arachidonic acid*, which causes pain, soreness and aches.

The answer is to consume less omega-6 and more omega-3 fatty acids. In America, the average dietary ratio between the two is about 20:1. You should bring it down to about 2:1.

It's not as hard as it sounds. You can boost omega-3s by eating more grass fed meat, cold-water fish, cage-free eggs, and pastured poultry. Nuts are also a great source of omega-3.

Cod liver oil and Sacha Inchi oil are also extremely effective, because they are the best supplement sources of omega-3s you can get. For many of my patients one tablespoon a day — taken regularly — relieves aches and pains.

**3. Use the natural, safe herbal pain reliever that works fast, with no nasty side effects... and no risk of getting hooked.**

• **CBD Products:** CBD is one of more than a 100 cannabinoids found in cannabis. It's extracted both from the flowers of the marijuana plant and the oil in the seeds of hemp, another member of the cannabis plant family.

The medicinal properties of CBD have been known since at least the ancient Egyptians. Today, studies prove that it's a highly effective, drug-free and affordable treatment for a wide variety of disorders, like epilepsy, multiple sclerosis, depression and chronic pain. It not only works against pain, it also attacks the inflammation at the source. Dozens of scientific studies prove it.<sup>14,15</sup>

The World Anti-Doping Agency has even given Olympic athletes the green light to use CBD products to manage their pain.

Now, I'm not advocating going out and getting high — especially since the use of cannabis isn't legal in every state. But CBD oil products, which contain undetectable amounts of psychoactive THC, can be purchased over-the-counter without a doctor's prescription.

You can buy CBD as liquid oil, tinctures and drops that are placed under the tongue, or as creams, lotions and salves that are typically made for local pain relief and healing. For chronic pain, I recommend 20 mg of CBD twice daily, and increased by the same amount every three or four weeks until you get the necessary relief. Just be sure to read the ingredient list and select products with high-quality ingredients. And, look for a product that's been lab tested for consistency, and verified as free of mold, bacteria, pesticides, solvent residues and other contaminants.

• **Holy Basil:** This herb has a long and ancient history of treating arthritis pain. It contains dozens of nutrients that reduce inflammation. One of the most powerful is called ursolic acid. It inhibits the inflammatory COX-2 enzyme. Clinical studies prove holy basil relieves pain and reduces inflammation.<sup>16</sup>

You can buy holy basil tea at most health food stores or on the Internet. Holy basil capsules are also for sale online.

Make sure the product you're buying has at least 2.5% ursolic acid to get the anti-inflammatory effect. I suggest 150 mg three or four times a day.

• **Try Ashwagandha (especially for chronic arthritis pain):** This "smart plant" is also called *Indian ginseng* and *winter cherry*.

In a recent study, researchers gave 60 arthritis patients *ashwagandha* or a placebo. After 12 weeks, those taking the herb had significantly less pain according to three different pain-score tests.<sup>17</sup>

I recommend 300 mg to 500 mg twice a day. Or you can buy dried ashwagandha root powder. Look for a product that's 100% organic with no artificial flavors or colors.

I like to add one teaspoon to a cup of boiling organic milk. I let it simmer for five minutes. Then I add a little honey to sweeten.

#### References:

1. "Opioid Overdose: Understanding the Epidemic." Centers for Disease Control and Prevention. Available here: <https://www.cdc.gov/drugoverdose/epidemic/index.html>
2. "Opioid Overdose: Prescription Opioid Data." Centers for Disease Control and Prevention. Available here: <https://www.cdc.gov/drugoverdose/data/prescribing.html>
3. Silverman E. "FDA Approves Controversial New Opioid 10 Times More Powerful Than Fentanyl." *Scientific American*. Nov 2, 2018
4. "Statement from FDA Commissioner Scott Gottlieb, M.D., on agency's approval of Dsuvia and the FDA's future consideration of new opioids." FDA. Available here: <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm624968.htm>
5. Rosenthal E. "Patients in Pain Find Relief, Not Addiction, in Narcotics." *New York Times*. March 28, 1993
6. McGreal C. "American Overdose: The Opioid crisis in three acts." *PublicAffairs*. Oct 2018. ISBN 978-1-610398-61-9
7. McGreal C. "American Overdose: The Opioid crisis in three acts." *PublicAffairs*. Oct 2018. ISBN 978-1-610398-61-9
8. Morone NE, Weiner DK. "Pain as the fifth vital sign: exposing the vital need for pain education." *Clin Ther*. 2013;35(11):1728-1732.
9. "Opioids Market Size, Share & Trends Analysis Report By Product, By Application (Pain Relief, Anesthesia, Cough Suppression, Diarrhea Suppression, De-addiction), By Region, And Segment Forecasts, 2018-2025." *Grandview Research*. March 2018.
10. Chicca, et al. "Uncovering the psychoactivity of a cannabinoid from liverworts associated with a legal high." *Science Advances*. 24 Oct, 2018: Vol. 4, no. 10, eaat2166.
11. Hein AM, O'Banion MK. "Neuroinflammation and memory: the role of prostaglandins." *Mol Neurobiol*. 2009 Aug; 40(1): 15-32.
12. Garza LA, et al. "Hair Loss Prostaglandin D2 Inhibits Hair Growth and Is Elevated in Bald Scalp of Men with Androgenetic Alopecia." *Science Translational Medicine*, 2012; Vol. 4, Issue 126, p. 126ra34
13. Swartz SL. "The role of prostaglandins in mediating the effects of angiotensin converting enzyme inhibitors and other antihypertensive drugs." *Cardiovasc Drugs Ther*. 1987;1(1):39-43.
14. Canabo Medical Clinic. "5 Health Benefits of CBD Oils." Available here: <https://www.canabomedicalclinic.com/5-health-benefits-cbd-oils/>
15. Project CBD: Inflammation. Available at: <https://www.projectcbd.org/inflammation>
16. Fernández-Ruiz J., et al. "Cannabidiol for neurodegenerative disorders: important new clinical applications for this phytocannabinoid?" *Br J Clin Pharmacol*. 2013 Feb.
17. Chopra A, et al. "Ayurveda—modern medicine interface: A critical appraisal of studies of Ayurvedic medicines to treat osteoarthritis and rheumatoid arthritis." *J Ayurveda Integr Med*. 2010;1(3):190-198.

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).

