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WHEN FLOWER POWER BEATS BIG PHARMA

hen a new patient walks through the door of the **Sears Institute for Anti-Aging Medicine**, they're usually taking at least one medication they don't need.

Often what's ailing them can be resolved through the right diet and right form of exercise, or I can recommend a natural treatment that's safer than a prescription drug.

But sometimes a new patient is taking a dangerous prescription drug for a disease they *don't* have — and that gets my blood boiling.

I'm talking about high blood pressure — also known as hypertension. Doctors like to call it "the silent killer."

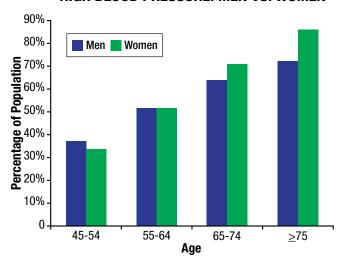
The older a person is, the better their chances of being diagnosed with high blood pressure: more than half of all people aged 55 and up, and two-thirds of people 65 and older are diagnosed with hypertension. And the number continues to rise with age.¹

But here's the thing...

Not everyone who is diagnosed with hypertension actually has it.

A study by researchers at the University of Montreal Hospital Centre (CRCHUM) found that

HIGH BLOOD PRESSURE: MEN VS. WOMEN



From the age of 65 on, women are more likely to be diagnosed with hypertension than men.

over half of family doctors are still using outdated manual cuffs to measure blood pressure, which often leads to misdiagnosis.²

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That means up to 20% of patients may be misdiagnosed with hypertension — and are taking dangerous medications for a disease they don't have.

But it's not just outdated equipment that's the problem... there is a right way and a wrong way to take blood pressure.

Here's how it should work:

- First, empty your bladder.
- Avoid caffeinated or alcoholic beverages and don't smoke during the 30 minutes before the test.
- Sit quietly for up to half an hour prior to taking the reading.
- Don't eat prior to a reading.
- No talking or outside stress while the reading's being taken.

Is that how your doctor's office does it?

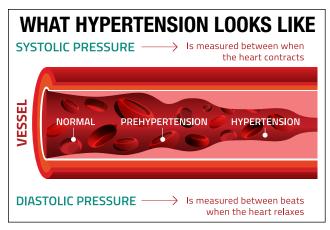
Or is your blood pressure taken while you're being quizzed about your current state of health — often after a stressful drive to the office or frustrating wait to see your doctor?

Try to relax and take a deep breath. Because just one high reading can be enough to land you on a lifetime of dangerous medication.

Your blood pressure is changing constantly something as simple as standing up from a chair or reading an upsetting article on your phone can be enough to cause your blood pressure to spike.

Even the time of day or what you've had to eat or drink can affect your reading. That's why it's often better to track your own pressure at home rather than rely on one "snapshot" taken at your doctor's office

In fact, just being in the doctor's office is enough to spike blood pressure in up to 30% of patients. 3 Called "white-coat syndrome," it's more likely to occur in seniors and women 4



You have high blood pressure — or hypertension when the force of the blood pushing against your arteries' walls is too high.

Why Blood Pressure Matters

High blood pressure is a serious condition. It's potentially deadly... which means it's important to diagnose it properly. If you have it, it's not something you can ignore.

Blood pressure is the force of blood pushing against blood vessel walls. High blood pressure means the pressure in your arteries is higher than it should be.

The increased pressure can damage the lining of your arteries' walls. This can lead to atherosclerosis (hardening of the arteries). It can triple your risk of heart attack. And it can spike your risk of stroke seven-fold.

But the prescription drugs used to treat it are no joke.

Blood Pressure Drugs May Cost You Your Health

If you are diagnosed with high blood pressure, there are four different types of drugs your doctor might prescribe.

1. Diuretics are simple water pills. They remove water from your bloodstream. They reduce blood volume and blood pressure.

They can also cause weakness, dizziness, muscle cramps, impotence, gouty arthritis, diarrhea, joint pain and more.

2. Calcium channel blockers cause your arteries to relax and dilate. This reduces blood pressure and improves circulation. At the same time it slows the heart rate

Studies show that people taking calcium channel blockers have a 60% increase in heart attack compared to people who used other blood pressure meds. Other side effects include headache, flushing, constipation, nausea, high cholesterol, edema and low blood pressure.

3. ACE inhibitors are supposed to cause blood pressure to fall, and the amount of blood pumped by the heart to increase.

These drugs are linked to severe reactions including heart fibrillation, kidney failure and death.⁶ Other side effects include constant fatigue, weakness, shortness of breath and reduced white blood cell count.

4. Beta blockers bind to receptors in the heart and blood vessels. They block their response to norepinephrine, a hormone that tells the arteries to tighten and the heart to speed up. These drugs lower blood pressure by slowing the heart and relaxing the blood vessels.

Beta blockers have serious side effects. They include fatigue, dizziness, insomnia, nausea, depression and loss of libido. Worse yet, they can raise triglyceride levels, lower HDL cholesterol and cause heart palpitations.

Flower Power: 3 Tropical Treatments for Healthy Blood Pressure

If you suspect you've been misdiagnosed with hypertension, talk to your doctor and track your blood pressure at home. I recommend several natural treatments for my patients that are safe to take whether you have high blood pressure or not.

I discovered them on one of my many trips to Bali. The natives of the tropical island in the South Pacific experience very low rates of high blood pressure, and I wanted to know why. When I looked closer, I found they include many heart-healthy plants in their diet every day.

There are three tropical healers that the women of Bali have trusted for generations to support healthy blood pressure. I was so impressed with their healing power that I dedicated a chapter to each in my book *Healing Herbs of Paradise*.

But you don't have to travel to Bali to find these incredible herbs. Here's how to benefit from them right in your own home.



Hibiscus Tea for Hypertension

If you live in a tropical or sub-tropical area — like I do here in South Florida — you may have hibiscus growing in your yard. But there's much more to this flower than just a pretty addition to your garden.

Drinking hibiscus tea is an effective way to maintain healthy blood pressure.

The *anthocyanins* and other antioxidants in hibiscus work together to protect blood vessels against damage that causes them to narrow.

In a double-blind trial, 60 patients were randomly assigned to drink two cups of hibiscus tea or black tea a day. After 30 days, the hibiscus tea lowered systolic pressure (the top number) by a mean of 22 mmHg and pulse pressure (the difference between the top and bottom numbers) by 18 mmHg. Black tea

drinkers saw their pressure increase.7

I recommend drinking two cups of hibiscus tea every day. You may also see it called sour tea, red tea or red sorrel.

You can make your own hibiscus tea by steeping the petals of fresh or dried hibiscus flowers for 10-15 minutes. The brewed tea will have a tart taste almost like cranberry.

You may want to sweeten it with honey or stevia. Also, remember that hibiscus tea is very acidic, so it's best not to add milk because it could curdle.

Celestial Seasonings makes a nice blend of hibiscus, rosehips, orange peel and lemongrass called "Red Zinger" that's widely available in supermarkets.



Cananga (Ylang-Ylang) Lowers **Blood Pressure**

Cananga is a holy flower for the Balinese. It's frequently used for offerings in Bali, and it is often used as a ceremonial flower.

The locals believe that women should be able to live like a cananga flower. As you age you get more beautiful, more fragrant and stronger. Cananga is so special that there is a traditional Balinese ceremony where they put cananga in a woman's hair to attract a man for her to marry. The fragrance is so sweet and

pure it is believed to be an aphrodisiac.

But there's another — much more important use for cananga in Bali. One of the most important traditional uses for cananga, for women and men alike, is that it lowers blood pressure.8

The essential oil of ylang-ylang is available from many Asian specialty stores and online. Look for 100%-pure, therapeutic-grade oil. You can use ylang-ylang orally. In addition to lowering your blood pressure, it will wash away fatigue and anxiety and strengthen your nervous system.

If you live in the south, you can grow ylang-ylang. Young plants are sold on sites like toptropicals.com and rareflora.com, or you can visit gardenweb.com or davesgarden.com.

My friend Lelir from Bali taught me a simple way to make a lovely cananga tea.

All you need are 10-15 grams of ylang-ylang flowers that have not bloomed yet (they will still be slightly green).

Add a bit of ginger and pepper, and crush it together.

Then boil some water and strain it through the ylang-ylang mixture.



Lotus Is Bali's Sacred Healer

Healers in Bali and India have used lotus as medicine for hundreds — probably thousands — of years. They didn't need scientific reassurance to know what was happening right in front of their eyes... people were healthier when they used the sacred lotus.

But now science is confirming these ancient uses and traditions, plus new effects against modern diseases... including high blood pressure.

A recent study demonstrated that neferine, found in lotus seed embryos, increases Nitrous Oxide (NO) production. NO regulates your blood pressure by dilating your blood vessels.9

NO also protects blood vessels from vascular aging — the gradual changes that happen to the vascular structure and function, including hardening of the arteries and increasing blood pressure.

You can find fresh lotus leaves in a grocery store that specializes in Asian food. Dried lotus leaves are available online.

You can prepare the fresh leaves in a wok right at home, like I do:

- First, heat up a wok on the highest temperature setting you have. Add just one tablespoon of oil and stir fry whatever vegetables you like for no more than a couple of minutes. Set those to the side for just a minute.
- Add a bit more oil and stir fry the rice and set that aside.
- Take your lotus leaf and lay it in a large bowl. Spread the stir-fried vegetables in the center of the leaf, and add the rice around it.
- Now, fold the lotus leaves around the rice and vegetables. Press down until it's flattened.
- Steam the entire thing for around four minutes. Then take the bowl out of the steamer or off the steam, and turn upside down on a plate.

You can also get lotus extract as a powder and make a tea with it, or boil it down to make a decoction. Look for powder that's made from the flower and the leaves. You can also use the whole fresh flowers as a garnish for your soups and main dishes. I like using the stamens to flavor my lotus tea.

References

- 1 High Blood Pressure Facts. Centers for Disease Control and Prevention. Page last reviewed: November 30, 2016.
- 2 Kaczorowski J, Myers MG., et al., How do family physicians measure blood pressure in routine clinical practice? Canadian Family Physician Mar 2017, 63 (3)
- 30'Brien E., et al. "Use and interpretation of ambulatory blood pressure monitoring: recommendations of the British hypertension society." BMJ. 2000;320:1128-1134.
- 4 Verdecchia P., et al. "Independent predictors of isolated clinic ('white-coat') hypertension." J Hypertens. 2001;19:1015-1020.
- 5 B. Psaty et al., "The Risk of Myocardial Infarction Associated with Hypertensive Drug Therapie." Journal of the American Medical Association (1995) 274: 620-625.
- 6 Weaver C. "Potassium and Health." Advances in Nutrition An International Review Journal. 2013 May 1.
- 7 H Mozaffari-Khosravi, B-A Jalali-Khanabadi, M Afkhami-Ardekani, et al. "The effects of sour tea (Hibiscus sabdariffa) on hypertension in patients with type II diabetes." J Hum Hypertens. 2009 Jan;23(1):48-54.
- 8 Cha J, Lee S, Yoo Y. "Effects of aromatherapy on changes in the autonomic nervous system, aortic pulse wave velocity and aortic augmentation index in patients with essential hypertension." J Korean Acad Nurs. 2010;40(5):705-13.
- 9 Peng Z, et. al. "Protective effect of neferine on endothelial cell nitric oxide production induced by lysophosphatidylcholine..." Can J Physiol Pharmacol. 2011;89(4):289-94.

Have the Best Sex of Your Life With This 15-Minute Fix

hen I was at a conference in Rome a couple of years ago, I heard that the actress Sophia Loren once asked her grandmother Luisa when she lost interest in sex — and the 80-year-old replied: "I don't know, dear, you'll have to ask someone older than me."

That story may or may not be true. But the sentiment behind it is.

Age has nothing to do with the desire for sex. We're hardwired to want it.

As a doctor who treats a large number of people over the age of 75, I can assure you that men of all ages want to be virile and perform well in the bedroom.

And there's absolutely no biological reason why they can't.

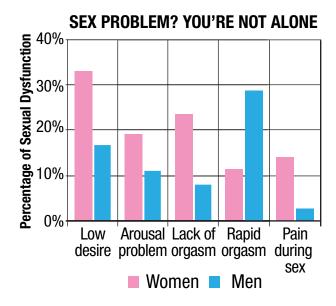
Contrary to what you might hear from health experts about "slowing down," studies show that older people who engage in regular sexual activity live longer, have more active lives, have better brain health, and are less likely to lose their memory.^{1,2}

Sadly, sexual dysfunction — both for men and women — is one of the most common but least understood medical conditions.

It's also one of the cruelest, because of its dual physical and emotional components.

Sexual dysfunction erodes your confidence and sense of self-worth. Men suffer anxiety, depression and low self-esteem. Women are often left feeling isolated and frustrated. And it can have a devastating effect on your relationship.

If you talk to your doctor, you'll probably get a quick checkup and a prescription, like Viagra or Cialis. Women either get an antidepressant or maybe



This chart shows the estimated percentage of Americans who experience at least one type of sexual dysfunction. But the latest advances in stem cell medicine mean you don't have to suffer anymore.

Flibanserin, Big Pharma's "female Viagra" for low female libido — or both.

Sure, synthetic drugs can sometimes help. But they're just a temporary fix. And the side effects of many popular sex drugs (and antidepressants) can be nasty and dangerous, including increased risks for heart attacks and strokes.

You may have heard about therapies using *platelet-rich plasma*, or *PRP* for short, as a treatment for healing sports injuries, aching joints or even the popular "vampire facelift." The good news is that recently discovered PRP treatments can now also provide an all-natural solution to revitalizing your sexual health — both for men and women.

And it's so effective, it threatens to make all of Big Pharma's sex drugs obsolete.

Today, you'll learn about the quick, painless natural

procedure that can get your sex life back on track
— and put spontaneity and passion back into your
life. I'm also going to tell you about some great sex
nutrients that have worked for millennia — without
side effects.

PRP and the Real Problem With Your Sex Life

PRP is a simple treatment that involves injecting your own blood back into your body. Athletes like Tiger Woods, Kobe Bryant, Atlanta Braves pitcher Bartolo Colón and others all swear by it for sports injuries.

The treatment uses your body's own platelets — the colorless cell fragments in your blood that allow your blood to clot — so there's *zero chance* of an immune system reaction.

PRP works because plasma is also your body's natural reservoir for hundreds of proteins called *growth factors*. When PRP is injected into an injured area, these powerful growth factors promote healing and regenerate injured tissue.³

PRP has already been shown to be a potent treatment for:

- Acute ligament and muscle injuries
- Chronic tendon injuries, like tennis elbow and Achilles heel
- Osteoarthritis
- · Bone fractures
- Healing after surgery
- Wrinkle removal (the "vampire facelift")

But the growth factors in plasma are also responsible for a new sexual revolution.

You see, tissue injuries that stubbornly won't heal have the same root physiological problems as many forms of sexual dysfunction — *reduced blood flow*.

Insufficient blood supply causes tissue to become

starved of oxygen, which causes even more damage. And it starves the injured tissue of the growth factors in your plasma it needs to carry out the repair work.

That's why chronic inflammation is at the core of sexual dysfunction — in men and women. Years of eating an inflammatory high-carb, high-sugar diet damages blood vessels throughout your body, including your sex organs. High blood sugars also reduce levels of the powerful vasodilator *nitric oxide*, eroding and narrowing your vessels.

In the case of *erectile dysfunction (ED)*, it's the blood vessels in your penis that become so damaged by chronic inflammation and high sugar levels, they restrict the flow of blood — not to mention intimacy.

If the arteries that lead to the penis don't open up properly — and blood can't enter the penis quickly — it's difficult or impossible for it to become erect.

That's why ED is often a symptom of heart disease, chronic heart failure, high blood pressure and diabetes.

Viagra works precisely because it increases blood flow to the penis by compensating for reduced levels of nitric oxide.

At the same time, recent studies now reveal that childbirth, illnesses, medications, heart disease, high blood pressure, hormonal changes and even smoking all cause blood vessels to constrict. This reduces the flow of blood to your heart, lower extremities and pelvic area, which can cause *sexual dysfunction in women*.

Common symptoms of reduced blood flow to female sex organs include:

- Decreased desire or no interest in sex
- · Vaginal dryness
- Difficulty having an orgasm

You see, the less blood that reaches your vagina and clitoris, the less chance there is for arousal and orgasm. Diminished blood flow can also cause vaginal dryness and reduced sexual sensation.

And your clitoris needs to become engorged to attain orgasm — which is impossible without healthy blood flow.

Sexual dysfunction is a major modern health problem, even though many people are hesitant, or embarrassed, to talk about it — even with their partners, let alone their doctor.

Yet studies of national population samples reveal that more than 4 in 10 American women and around a third of men suffer some form of sexual dysfunction — from erectile dysfunction to vaginal dryness and pain, to low libido.^{4,5} And that's just the people who report it.

Now you don't have to suffer in silence anymore...

Welcome to the New Sexual Revolution

PRP increases blood flow through its powers of healing and regeneration where ever it's applied.

All of the growth factors are involved in each key stage of healing and the regenerative processes — from cell division to the forming of new, youthful tissue.⁶

Two of the growth factors you carry in your blood plasma are amazing little chains of proteins called *vascular endothelial growth factor* (VEGF) and *platelet-derived angiogenic factor* (PDAF).

When PRP is injected into vaginal or penis tissue, VEGF and PDAF activate the growth of new blood vessels from existing and damaged blood vessel tissue, allowing for increased blood flow and sexual response. ⁷

The P-Shot for Men: Its full name is the "Priapus Shot," named after the Greek god of fertility.

This non-surgical treatment involves having your own blood drawn and then spun in a centrifuge to create PRP.

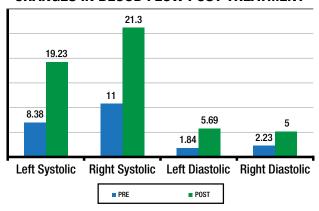
This PRP is then injected into your penis — but fear not, a strong numbing cream makes the

procedure virtually painless. And the injections only take about 15 minutes.

A recent clinical study reveals that improved blood flow resulting from PRP-induced regeneration and repair of blood vessels can boost:⁸

- Erection firmness and strength
- Sexual sensitivity and pleasure
- Sexual stamina
- Penis health

CHANGES IN BLOOD FLOW POST TREATMENT



Studies show that 70% of men given the P-shot also enjoy a 10-20% increase in penis size — both in girth and length.

You should experience improvements immediately — although there is usually a return to pretreatment status in three to five days. This is only because water is being absorbed and the stem cells and fibroblasts haven't completely formed the new tissue yet. Your penis is actually rejuvenating and growing, stimulating new blood vessels and blood flow.

Within two to four weeks, you should see and feel the full effects. The results usually last for 15 to 18 months, or longer — although every person's body reacts differently.

You don't have to take any drugs and there are no harmful side effects, repeat visits to the clinic, worrying immune system reactions, and virtually no downtime or recovery period. Studies have also shown that if you still need to take Viagra or Cialis, it will work better.

The O-shot for Ladies: This quick treatment is the same PRP therapy as the P-shot, except it's injected into an area near the clitoris and an area just inside the vagina — the "o-spot."

A recent pilot study shows that injections of PRP are a safe and effective treatment for female sexual dysfunction and for generally improving sexual function.⁹

The PRP's concentration of growth factors — usually taken from the arm — rejuvenates the vaginal and clitoral tissue, bringing in a greater supply of blood and enhancing sexual sensitivity and pleasure.

The pilot study found that 71% of women in a sample group experienced significant sexual improvements after PRP treatment, including: 10

- Enhanced sensitivity
- Greater levels of arousal
- Enhanced desire
- Alleviation of pain during sex
- Improved orgasm

Like the P-shot, there's no downtime and you can even resume sexual activity within hours of the procedure.

And there's often an immediate improvement in arousal. This is the result of the volume effect of the PRP. The effects diminish over a few days, but they'll improve over the next few weeks, with full effect often achieved at between three to five months — and thereafter.

According to the makers of the O-shot, tens of thousands of women have already had the procedure done.

If you're interested in the P-shot or the O-shot, or in any other type of PRP, just call my staff at the **Sears Institute for Anti-Aging Medicine** at 561-784-7852 for details. Or you can visit my website at www.searsinstitute.com.

Great Sex Boosters You Can Use Right Now

My patients are always happy to hear that performance problems in the bedroom can often be solved with diet and supplements.

For starters, you should avoid the typical inflammatory American diet of excessive sugar, carbs and omega-6 oils in place of saturated fats. Remember that inflammation leads to inadequate production of nitric oxide and sexual dysfunction.

I recommend a primal, anti-inflammatory diet of grass-fed meat, wild-caught fish, pastured poultry and plenty of organic fruits and vegetables.

Here are a few proven sex boosters I tell my patients about:

1. L-arginine and L-citrulline: I advise my patients — both men and women — to adopt a diet rich in these biochemical cousins. They're amino acids that team up to make nitric oxide, which boosts blood flow to give your lovemaking a real lift. 11, 12

Great food sources of these great sex nutrients include: peanuts, almonds, sunflower seeds, walnuts, tuna, chicken, salmon, shrimp, eggs and watermelon. Supplement capsules are available online and from most health food stores. I recommend daily doses of 1,000 mg of L-citrulline and 6,000 mg of L-arginine.

2. Beet juice: The Romans are known to have drunk beet juice two hours before having sex. It has also been shown to heighten the bedroom performance of both men and women by raising nitric oxide levels. The beet's ability to improve circulation has been documented in numerous studies.¹³

Drink it straight or mix a teaspoon of beet powder into fruit juice. You can also get beet capsules online or from health food stores. I recommend 1,000 mg a day.

3. Bulbine Natalensis: This African herb has been used by traditional healers to treat male impotence for centuries. It works by amping up the volume of a testosterone-boosting hormone (GnRH) from the hypothalamus in the brain... kind of liking turning your car radio to full volume. This stimulates the testes to produce testosterone.

A South African study showed that Bulbine produced a stunning 347% increase in testosterone.¹⁴

And as an added bonus... Bulbine acts as an aphrodisiac. It even outperforms "the little blue pill" for improving sex drive. I suggest 100 mg per day. *Please note that bulbine should only be used by men*.

4. Sacred blue lily: Traditional African healers use a beautiful flower called the sacred blue lily to jumpstart a woman's libido. In fact, the chemical makeup of the blue lily is what many of our modern drug-based aphrodisiacs are based on. The benefits this flower can offer you are astonishing. It contains quercetin, a known performance enhancer, and beta-sitosterol, which stimulates our natural desire for sex.

It also increases blood flow — a crucial piece to feeling sensual and alive.

The sacred blue lily can be used by both men and women... I recommend 200 mg a day.

References

- 1 Smith, G.E., et al. "Sex and death: Are they related? Findings from the Caerphilly Cohort Study." *British Medical Journal*. December 20-27, 1997. 315, 1641-4.
- 2 Persson, G."Five-year mortality in a 70-year-old urban population in relation to psychiatric diagnosis, personality, sexuality and early parental death." *Acta Psychiatri*; ca.1981 Sep;64 (3):244-53.
- 3 Middleton KK, Barro V, et al. "Evaluation of the effects of platelet-rich plasma (PRP) therapy involved in the healing of sports-related soft tissue injuries." *IOWA Orthop J.* 2012;32:150–163
- 4 Laumann E, Paik A, Rosen RC. "Sexual dysfunction in the United States: prevalence and predictors." *JAMA*. 1999 Feb 10;281(6):537-44.
- 5 Simons J, Carey MP, et al. "Prevalence of Sexual Dysfunctions Results from a Decade of Research." *Arch Sex Behav.* 2001 Apr; 30(2): 177–219.

- 6 Wang L and Avila G. "Platelet Rich Plasma: Myth or Reality?" Eur J Dent. 2007 Oct; 1(4): 192–194.
- 7 Bennett NT, Schultz GS. "Growth factors and wound healing: biochemical properties of growth factors and their receptors." *Am J Surg.* 1993;165:728–737.
- 8 Chalyj ME, Grigorjan VA. "The effectiveness of intracavernous autologous platelet-rich plasma in the treatment of erectile dysfunction/." *Urologiia*. 2015 Jul-Aug;(4):76-9.
- 9 Ibid
- 10 Runels C, Melnick H, et al. "A Pilot Study of the Effect of Localized Injections of Autologous Platelet Rich Plasma (PRP) for the Treatment of Female Sexual Dysfunction." *J Women's Health Care*. 3:169. (2014)
- 11 Boger, R.H., et al." Restoring vascular nitric oxide formation by L-arginine improves the symptoms of intermittent claudication in patients with peripheral arterial occlusive disease." *J Am Coll Cardiol.* 1998 Nov;32(5):1336-44.
- 12 Cormio L., et al. "Oral L-citrulline supplementation improves erection hardness in men with mild erectile dysfunction." *Urology*, 2011 Jan; 77(1): 119-22
- 13 Hobbs, D.A., et al."Acute ingestion of beetroot bread increases endothelium-independent vasodilation and lowers diastolic blood pressure in healthy men: A randomized controlled trial." *J Nutr.* 2013 Sep;143(9):1399-405. doi: 10.3945/in.113.175778.
- 14 Yakubu MT, Afolayan AJ. "Anabolic and androgenic activities of Bulbine natalensis stem in male Wistar rats." *Pharm Biol.* 2010 May;48(5):568-76.

Use This Little-Known Cure for a Healthy Gut — and a Sharper Brain, Too

s an anti-aging doctor, I have all the tools under the sun at my disposal to help my patients achieve their healthiest lives possible.

But I'll tell you exactly what I tell my patients...

Unless your gut is in prime working order, nothing else I do for you matters...

Healthy aging begins with your gut.

And because there's a special connection between your gut and your brain, when you heal your gut, you heal your brain, too.

Today, I want to talk to you about a little-known acid made by your own gut bacteria that could be the key to preventing — and healing — diseases that affect both your gut and your brain.

The acid is called *butyrate*, or butyric acid.

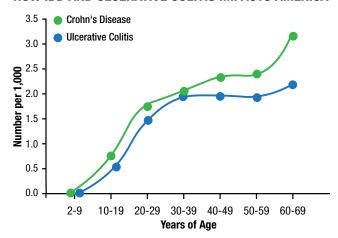
It has an interesting history. Although butyrate was discovered more than 200 years ago by a French chemist named Michel Eugène Chevreul, until recently it was mostly used as an ingredient in stink bombs and livestock feed!

But things began to change in the 1990s. Scientists from the University of Bristol, in England, discovered that butyrate is formed in your colon when your gut bacteria break down dietary fiber.

They also discovered that butyrate made colon tumor cells self-destruct.¹

Now compelling new research reveals that butyrate is also a powerful weapon against gastroenteritis, ulcerative colitis, irritable bowel syndrome, inflammatory bowel disease, Crohn's disease, diabetes, obesity, as well as mental health disorders like depression and Parkinson's disease.

HOW IBD AND ULCERATIVE COLITIS IMPACTS AMERICA



Approximately 2 million Americans suffer from IBD or Ulcerative Colitis. The rate increases with age.

Mainstream medicine hasn't caught up with these latest studies yet — and who knows if they ever will. Most doctors prefer to prescribe dangerous Big Pharma drugs with long lists of side effects, instead of a natural acid made in your own gut.

Today you'll learn some of the astonishing new research on butyrate, how you can easily boost your own levels, and how it can work wonders for your gut and brain.

The Story Begins in Your Gut

Most doctors still ignore the important role played by the 100 trillion or so microbes each of us carries in our bodies — but I've been fascinated by these tiny organisms and their impact on human health since I was in medical school more than 30 years ago.

The modern medical establishment is fixated on how to kill bacteria, but I believe we need to accept the symbiotic relationship we have with them.

Let me explain...

You probably think of yourself as an individual — but actually your body is an ecosystem of many microbe communities — some good and some bad. In fact, there are more microbial cells in your bodies than human ones.

These single-celled bacteria in our gut — called microflora — are the good guys.

They help keep your digestive system on track by breaking down food, turning nutrients into vitamins, and squeezing out the "bad bacteria."

They also protect your nervous system. And these tiny gut organisms play a key role in regulating your immune system.2

Recent studies have found that gut microbes also influence how your organs function. Microflora appear to activate your liver, and benefit your kidneys, colon, digestive tract, blood plasma, metabolism and reproductive system.

Other studies reveal they stimulate an enzyme needed to keep your cholesterol levels normal.3

When one major group of microflora — called firmicutes — breaks down fiber in your colon, they produce the short-chain fatty acid, butyrate.

Why Butyrate Works in Your Gut and Brain

Scientists have recently discovered that butyrate is not only crucial for your gut and brain to function properly, it's a powerful healer for both.

You see, nerve and biochemical pathways run between these two parts of your body. They also share the same nerve chemistry and, with the help of your microflora, your gut and brain are in constant conversation.

That's why when you experience stress and other strong emotions, like fear, it can lead to gastrointestinal symptoms that can sometimes make you feel the need to rush to the nearest restroom.

Your microflora are like a kind of biochemical telegraph system that sends messages back and forth along your *vagus nerve*, which has a branch that runs directly between your gut and brain.

So it's no surprise that butyrate has been proven to be an effective treatment in both areas

The real surprise is that its powerful healing properties could be the key to preventing — and reversing — conditions ranging from Crohn's disease, IBS and colon cancer to Parkinson's disease, anxiety, depression and addictions.

What Butyrate Can Do for You

Since the early 1990s, when scientists discovered butyrate's power to coax colon tumor cells to commit suicide, many human and animal studies have been undertaken

It turns out butyrate has many roles, including preventing inflammation and helping the movement of digested food through your gut.

But it's butyrate's astonishing healing powers that excite me the most. Here are just a few of the conditions that have been targeted by the latest research into butyrate:

Irritable Bowel Syndrome (IBS): Many studies have shown how IBS is linked to changes in the intestinal microflora caused by altered brain-gut function, chronic intestinal inflammation, emotional stress and diet.4,5,6

Studies also show that people with IBS — that's more than 11% of the world's population — produce less butyrate than those with normal guts.⁷

You see, short-chain fatty acids like butyrate are important because they maintain the cells that line your digestive tract.

When your microflora produce too little butyrate, these cells — especially the ones in your colon start to digest themselves. That's why butyrate keeps your gut lining healthy and sealed, and prevents leaky gut syndrome and other issues linked to IBS.

Multiple studies also note that higher levels butyrate production in your gut can lead to

substantial decreases in abdominal pain and diarrhea in patients with IBS.8,9

Crohn's Disease and Inflammatory Bowel

Disease: These painful conditions are caused by immune-system imbalances thought to be triggered by low levels of butyrate production in your gut. Researchers at Harvard University confirmed that high levels of butyrate are linked to a lower risk of these diseases.¹⁰

Mainstream medicine's answer is to write up prescriptions for potent immunosuppressive meds, which have been linked to an increased risk of lifethreatening intestinal infections and pneumonia.

Butyrate has been shown to be essential for controlling inflammation throughout your digestive tract, while at the same time strengthening the cells in your intestinal wall. It has a powerful anti-inflammatory effect on Crohn's and other inflammatory bowel diseases like *ulcerative colitis*, as well as reducing the risk of colon cancer.

A recent study revealed that butyrate causes changes in immune system cells that reduce the secretion of inflammatory factors, like interleukin 6.11 Researchers found butyrate supplements resulted in improvements in 53% of Crohn's disease patients.¹²

Diabetes: Scientists are just beginning to understand that people with diabetes have fewer butyrate-producing microflora in their gut. It's a vicious downward spiral, because another of butyrate's special roles is to maintain the microbial balance in your gut — so the less butyrate you have, the greater your imbalance.

But scientists have also proven that raising butyrate levels can be a powerful treatment for the disease.¹³

A meta review completed in 2014 of both animal and human studies reported that butyrate was especially effective against type 2 diabetes, a condition characterized by high blood sugar levels and insulin resistance.

A recent study by the University of Utah showed that after five weeks of taking butyrate supplements, test subjects showed major improvements in blood sugar levels and insulin resistance. 14,15

Another study showed butyrate can reduce insulin sensitivity by up to 300%.16

Emotional and mental health conditions: The link between healthy gut bacteria and its impact on brain physiology and neurochemistry is now one of the hottest research topics in science.

Researchers at Cornell University recently discovered butyrate has a profound impact on many brain chemicals. It even changed which genes are turned on and off.17

They found butyrate fortified the blood-brain barrier by tightening connections between cells. Without enough butyrate, microbes can enter your brain and alter neurotransmitter levels and brain chemistry, leading to multiple chronic mental health problems and mood disorders.

Other studies revealed that butyrate can stimulate your brain the way exercise does, getting it into a state of readiness for learning and adaptation. It's also been shown to support the development of new nerve cells and improve long-term memory. 18,19

In animal studies, butyrate has been shown to significantly alleviate the symptoms of *depression*, anxiety, autism and addiction by directly influencing your hippocampus, the brain's center for emotions, memory, reward and satisfaction.^{20,21}

And compelling evidence suggests butyrate may be able to alter gene expression in the brain to prevent neurodegenerative diseases like Parkinson's, Alzheimer's disease and schizophrenia and promote regeneration.²²

It's Also a Natural Way **To Slim Down**

Researchers have found significant differences between the gut bacteria of people who are overweight and those of normal weight. A recent groundbreaking study published in the journal Science revealed one of the key factors involved in these differences is the level of butyrate-producing bacteria.

Each and every study into gut hormone metabolism brings us a step nearer to understanding the roots of obesity and metabolic disease.

A recent animal study of mice at the University of Utah showed that after five weeks of being given butyrate supplements, mice lost more than 10% of their body weight.²³

Now butyrate supplements are being prescribed to overweight children in a study at the University of Naples in Italy.

Researchers have not only revealed that butyrate can prevent and reverse the storage of fat in cells, they say there is clear evidence that butyrate acts on brain chemicals that control appetite and metabolism.

Butyrate suppresses food cravings by triggering the release of gut hormones that signal fullness in your hippocampus. In animal studies, butyrate also influenced metabolism and energy expenditure, pushing your body to burn more fat for energy.

Supplementing the diet of animals with butyrate has also been shown to prevent obesity.²⁴

3 Easy Ways To Boost Your Butyrate Levels

There are no dietary guidelines from the government for butyrate, and you won't see it mentioned on any nutrition label.

But there are three ways to get more butyrate into your body:

Eat it directly: There are just a few food types that contain butyrate. The best sources are foods made from the full-fat milk of animals that eat grass — cows, sheep, goats and buffalo — where it's found in the form of sodium butyrate.

Monsieur Chevreul, the French chemist who first identified butyrate, named his discovery after the Greek word for butter — because

that was the animal fat he happened to be experimenting with.

And butter is by far nature's richest source of butyrate. All full-fat butter contains between 2% and 3% butyrate.



Other good sources include full-fat *cheddar*, *Camembert* and *Parmesan cheese*, *cream* and *whole milk yogurt*.

But eating butyrate is not the most effective way to increase levels of this critical s fatty acid in your gut. Instead, you need to...

2. Coax your body to make butyrate by itself:
Remember butyrate is produced when good gut
bacteria breaks down and ferments dietary fiber
in your colon. The best way to boost butyrate
levels is by adding more fiber into your diet.

Fiber is basically carbohydrates that humans cannot digest. Instead, your good gut bacteria eat it.

Gut bacteria eat both forms of dietary fiber — soluble and insoluble. But while many nutritionists like to divide fibers into these two groups, the labels have nothing to do with producing butyrate.

What really matters is which fibers are more fermentable. I recommend foods that contain the indigestible prebiotic plant fibers *inulin* and *oligofructose*.

Although whole grain wheat products, like breads and pastas, are rich sources of these

fermentable fibers, I suggest keeping these foods to a minimum because they cause inflammation.

There are much healthier foods you can choose. You can find fermentable inulin and oligofructose in foods like:

- Asparagus
- Bananas
- Chicory root
- Garlic
- Jerusalem artichoke
- Leeks
- Onions
- Sweet potatoes

Most people don't eat nearly enough fermentable fiber to make serious health improvements. The key to success lies in eating a variety of these fibrous foods every day.

3. Butyrate supplements: Studies show that low dosages (below 3.5 grams daily) of butyrate supplements are the most beneficial to your digestive tract. But excessive rates (above 7 grams daily) can disrupt the intestinal barrier.

Start with 500 mg a day and build up to 2 or 3 grams over a period of four or five weeks. You should always take butyrate with healthy fatty acids like omega-3 to replenish your cell membranes.

I recommend *calcium/magnesium butyrate* supplements for inflammatory bowel and digestive tract problems, and *sodium butyrate* for mental health and mood disorders.

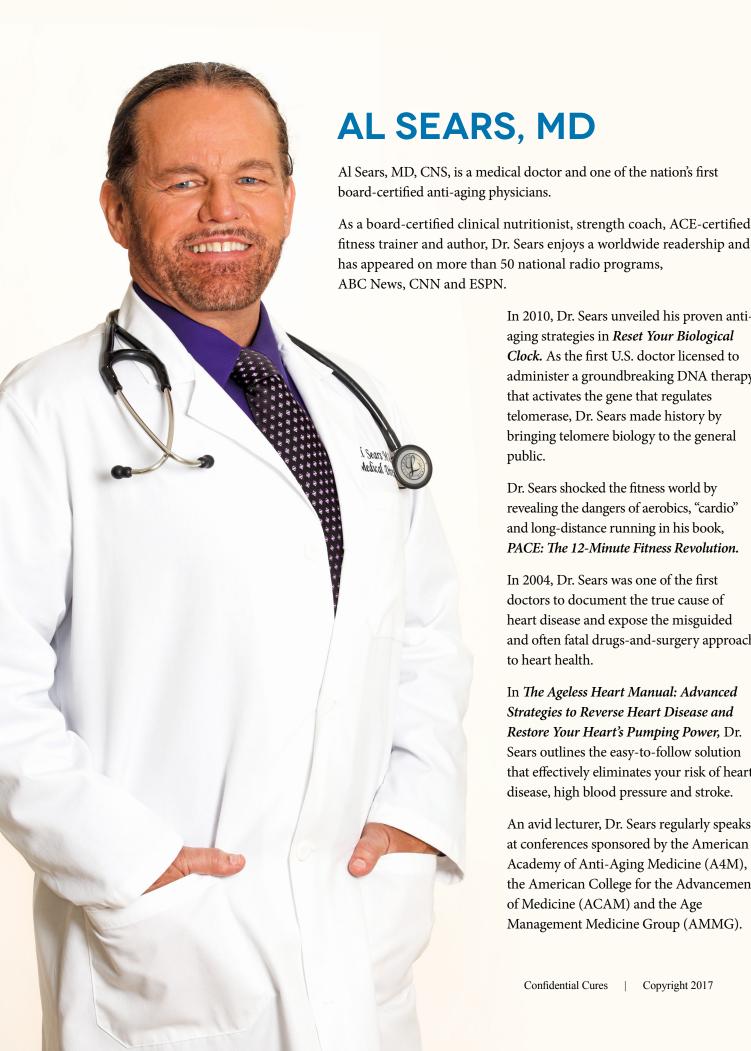
And studies also shown sodium butyrate to be an effective prevention and a treatment for colon cancer.

Butyrate enemas are available online and at some pharmacies. These have been shown to be

especially beneficial to patients suffering from inflammatory bowel disease.

References

- 1 Canani RB, Di Costanzo M, et al. "Potential beneficial effects of butyrate in intestinal and extraintestinal diseases." *World J Gastroenterol.* 2011 Mar 28; 17(12): 1519–1528.
- 2 Zhang YJ, Li S, et al. "Impacts of Gut Bacteria on Human Health and Diseases." Int J $Mol\ Sci.\ 2015\ Apr;\ 16(4):\ 7493-7519.$
- 3 Ricketts M, et al, "The Cholesterol-Raising Factor from Coffee Beans, Cafestol, as an Agonist Ligand for the Farnesoid and Pregnane X Receptors," *Molecular Endocrinology* 2007;21(7):1603-1616
- 4 Mortensen PB, Andersen S, et al. "Short chain fatty acids and the irritable bowel syndrome: the effect of wheat bran." *Scand J Gastroenterol.* 1987;22:185–92.
- 5 Mortensen PB, Clausen MR. "Short-chain fatty acids in the human colon: relation to pastrointestinal health and disease. *Scand J Gastroenterol.* 1996;216:132–48.
- 6 Pozuelo M, Panda S, et al. "Reduction of butyrate- and methane-producing microorganisms in patients with Irritable Bowel Syndrome" *Scientific Reports* 5, Article number: 12693 (2015)
- 7 Ihid
- 8 Załeski A, Banaszkiewicz A, et al. "Butyric acid in irritable bowel syndrome." *Prz Gastroenterol.* 2013; 8(6): 350–353.
- 9 E Scarpellini, EC Lauritano, et al. "Efficacy of butyrate in the treatment of diarrhoeapredominant irritable bowel syndrome." Digestive and Liver Disease Supplements 1 (translation) (2007) 19–22.
- 10 Gevers D, Kugathasan S, et al. "The treatment-naïve microbiome in new-onset Crohn's disease Cell Host Microbe." 2014 Mar 12; 15(3): 3828392.
- 11 Chang PV, Hao L, et al. "The microbial metabolite butyrate regulates intestinal macrophage function via histone deacetylase inhibition." *Proc Natl Acad Sci USA*. 2014 Feb 11:111(6):2247-52.
- 12 Di Sabatino A, Morera R, et al. "Oral butyrate for mildly to moderately active Crohn's disease." *Aliment Pharmacol Ther.* 2005 Nov 1;22(9):789-94.
- 13 Tilg H, Moschen AR. "Microbiota and diabetes: an evolving relationship." *Gut.* 2014 Sep;63(9):1513-21.
- 14 Gao Z , Yin J, et al. "Butyrate Improves Insulin Sensitivity and Increases Energy Expenditure in Mice." Diabetes 58(7):1509-17 May 2009.
- 15 S. Khan , G.B. Jena, et al. "Protective role of sodium butyrate, a HDAC inhibitor on beta-cell proliferation, function and glucose homeostasis through modulation of p38/ERK MAPK and apoptotic pathways: Study in juvenile diabetic rat," *Chemico-Biological Interactions* Volume 213, 25 April 2014,
- 16 "Gao Z, Yin J, et al. "Butyrate Improves Insulin Sensitivity and Increases Energy Expenditure in Mice." *Diabetes*, Vol. 58, July 2009.
- 17 Bourassa MW, Alim I, et al. "Butyrate, neuroepigenetics and the gut microbiome: Can a high fiber diet improve brain health?" *Neurosci Lett.* 2016 Jun 20;625:56-63.
- 18 Intlekofer KA, Berchtold NC, et al. "Exercise and sodium butyrate transform a subthreshold learning event into long-term memory via a brain-derived neurotrophic factor-dependent mechanism." *Neuropsychopharmacology.* 2013 Sep;38(10):2027-34
- 19 Kim HJ, Leeds P, Chuang DM."The HDAC inhibitor, sodium butyrate, stimulates neurogenesis in the ischemic brain." *J Neurochem.* 2009 Aug;110(4):1226-40.
- 20. Varela RB, Valvassori SS "Sodium butyrate and mood stabilizers block ouabain-induced hyperlocomotion and increase BDNF, NGF and GDNF levels in brain of Wistar rats." *J Psychiatr Res.* 2015 Feb;61:114-21
- 21 Takuma K, Hara Y, et al,. "Chronic treatment with valproic acid or sodium butyrate attenuates novel object recognition deficits and hippocampal dendritic spine loss in a mouse model of autism." *Pharmacol Biochem Behav.* 2014 Nov;126:43-9
- 22 Dinan TG, Borre YE, et al. "Genomics of schizophrenia: time to consider the gut microbiome?" *Molecular Psychiatry* (2014) 19,.
- 23 Gao Z , Yin J, et al. "Butyrate Improves Insulin Sensitivity and Increases Energy Expenditure in Mice." Diabetes 58(7):1509-17 · May 2009.
- 24 Lin HV, Frassetto A, et al. "Butyrate and Propionate Protect against Diet-Induced Obesity and Regulate Gut Hormones via Free Fatty Acid Receptor 3-Independent Mechanisms" *Plos One.* April 10, 2012.



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

Dr. Sears shocked the fitness world by revealing the dangers of aerobics, "cardio" and 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).