



Can the Wrong Exercise Cripple Cardiopulmonary Capacity?

If there's one thing most of my patients believe, it's that exercise is good for them.

Usually, their jaws drop when I tell them I don't recommend cardio for anti-aging. Now I have convincing new evidence that cardio not only does NOT deliver on its promises – it will actually prevent you from living the full, youthful life you're entitled to.

You see, durational cardio shrinks your telomeres.

This doesn't mean that you shouldn't exert yourself. Quite the contrary, but the type and duration of the exertion are key to its anti-aging benefit and its effect on your genetic aging as controlled by your telomeres.

Today, I'll show you the simple alternative to cardio that will preserve the length of your telomeres, so you can live stronger for longer.

I'll show you the world's only anti-aging fitness program known to protect your vital telomeres and reverse your biological age rather than accelerate the losses caused by typical exercise mistakes. One that's specifically designed to effectively challenge vital heart, lung and metabolic capacities to:

- boost your lung power
- strengthen your heart
- burn fat
- reverse telomere shortening
- give you back your youthful body

It's the opposite of aerobics and other endurance exercises, which shorten your telomeres and make you more susceptible to cancer and heart disease.

How Cardio Shrinks Your Telomeres – Making You Old Before Your Time

As you know, telomeres are the little strands of DNA found at the end of each of your chromosomes. When your telomeres are long, your body is strong and youthful. But as they shorten throughout your life, your body acts older. And if they shorten prematurely, your body acts much older than your years.

Cardio and other endurance exercise prematurely shorten telomeres. The more you do, the worse it gets.

Mainstream Fitness “Experts” Continue To Hide the Truth From You

There are two major studies out there that show just how destructive cardio can be – but they've been totally ignored by the mainstream.

Continued on the next page...

In This Issue...

Can the Wrong Exercise Cripple Cardiopulmonary Capacity?	1
New Weapons Against the Old Enemy of Stress	4
Outperform People Half Your Age.....	8

In one, researchers followed up on the well-established fact that long-term cardio damages muscle cells. Taking it a step further, they decided to measure the telomeres inside the muscle cells of athletes who were the study's focus.



Athletes with “exercise fatigue” – the athletes doing the long-duration cardio workouts – had much shorter than normal telomeres.

In fact, the study's title, as it appeared in *Medicine and Science in Sports and Exercise*, summed everything up perfectly: “Athletes with Exercise-Associated Fatigue Have Abnormally Short Muscle DNA Telomeres.”¹

Even a couch potato who does no exercise at all may be better off from a telomere-length standpoint than the folks who run marathons and spend hours on treadmills.

In another more recent study, researchers compared trained athletes to “sedentary individuals.”

They looked at the telomere lengths of trained athletes doing cardio vs. couch potatoes who did no exercise at all.

The couch potatoes had longer telomeres than the endurance athletes.

In fact, the experienced runners ALL had shorter telomeres than the people doing no exercise. What's more, the longer the runners ran, the shorter their telomeres.

The Hidden Key to Vibrant Fitness and a Much Longer, Healthier Life

Fortunately for you, we now have the ability to influence the length of these tiny genetic clocks. You can have younger-acting cells and help avoid age-related problems by maintaining your telomere length.

The most powerful way to do this is to do the opposite of what fitness experts recommend.

Instead of prolonged stretches of continuous cardio, what you should focus on is much shorter bursts of focused activity.

Researchers from the University of Missouri found that short bouts of exercise were more effective for lowering fat and triglyceride levels in the blood. (High triglycerides dramatically increase your risk of heart disease.)²

Another study revealed the duration of exercise predicts the risk of heart disease in men – shorter sessions were more effective at lowering the risk.³

Here's the study, though, that I think you'll find the most compelling – it involved 2,401 twins...

What it established, in a nutshell, is that there is a direct relationship between telomere length and physical activity – *and that vigorous exertion creates much longer telomeres than either extended exercise or even no exercise.*⁴

The twins were free to choose their kind of exercise, including running, swimming and tennis. Those who exerted themselves intensely for 100 minutes or so a week *had telomeres that looked five and six years younger.* Those whose activity was even more intense *had telomeres that looked nine years younger.*⁵

German researchers found that intense exercise keeps your cardiovascular system from aging by *preventing shortening of the telomeres.*

And in a study done at the University of California in San Francisco, people who exercised vigorously had lower levels of perceived stress and *were more likely to have longer telomeres.*

Aerobics and other traditional workouts don't slow telomere loss.

Continued on the next page...

Worst of all, though, these cardio-like exercises actually shorten your telomeres.

That's why I created an entirely new category of exercise I call PACE.

It's a true breakthrough – and no one else can offer you anything even remotely like it.

Longer Telomeres – and the More Youthful Life That Comes With Them

I developed PACE through years of research. It's the first anti-aging fitness system with the built-in intensity it takes to maintain long telomeres and slow their loss.

PACE is a handy acronym for Progressively Accelerating Cardiopulmonary Exertion.

It makes working out available to virtually everyone, regardless of condition. You can start out walking, if that's your level of fitness. From there all you have to do is boost the intensity of your exertion incrementally.

Instead of hours of low-power exercises like running and cardio, you can maintain the length of your telomeres with shorter periods of exertion where you challenge yourself a bit more.

You see, cardio is a low-power exercise. Think about what it's like when you run – it's steady plodding and pounding for a long period of time.

What you want to do instead is give your body a challenge, and do it over shorter periods of time.

For instance, one study done at the University of California in San Francisco found that vigorous exertion protects you from high stress by protecting your telomeres. And there are dozens more trials that show the same thing.⁶

Instead of cardiovascular endurance exercise, think “cardiopulmonary exertion.”

You can do this kind of exertion by keeping the time brief, and challenging your heart and lungs just a bit more with each set of exertion, and with each workout. This is called “progressivity,” and it's what every modern workout program lacks.

Progressivity means you increase the difficulty (pick up the pace or increase the resistance) just a little bit with each set, and in each workout after that.

Doing just a little bit more, or changing it up in some way to give your heart and lungs a different challenge, gives you the same benefit as increasing the time you spend working out.

You'll reprogram your muscles, heart and lungs to get stronger and more responsive. And you'll reverse the wear and tear on your body and maintain your telomeres instead of breaking them down faster.

With that in mind, let me give you one movement you can do right in your own home, no equipment necessary, that will challenge your heart, lungs and several large muscle groups.

It's called a Dive Bomber.



1. Begin with your body looking like an upside-down “V” from the side. Position yourself like you would for a pushup, but with your butt up in the air, and your head between your arms. (If you're familiar with yoga, it should look like a “downward-facing dog.”)

Continued on the next page...

2. Next, in a controlled manner, swoop your head, followed by your body, downward as if you were a bird or plane diving toward the ground, pushing forward through your arms. Be sure to keep your elbows close to your ribcage, pointing toward your heels, with your butt slightly elevated.

3. Then drive your torso straight up, so that you're looking directly ahead. Keep the hips low to the ground and your hands directly below your shoulders. It will be as if you were trying to dive under a large ball hanging over your back. (In yoga, this movement is called "chaturanga," which ends in a "cobra" position.)

A true dive-bomber pushup means you repeat the above steps in reverse order until you're back to your original starting position, staying as fluid and smooth as possible.

If you've never done a dive bomber before, start with just a few. Go slowly, especially if running or some extreme workout program has caused you to hurt your back in the past. This movement is designed so that you can be progressive without going faster to increase the challenge.

You can add progressivity by holding the pose in each direction a bit longer, or do a few more than you did last time. Or you can do a calf raise or a set of calf raises before each Dive Bomber.

And remember, working out should be fun. You don't have to do a regimented number of movements, and you don't have to strictly time yourself. You can change it up. Just keep it progressive. ■

References:

- 1 M Collins, et al., "Athletes with Exercise-Associated Fatigue Have Abnormally Short Muscle DNA Telomeres." *Medicine and Science in Sports and Exercise* 2003 Sep;35(9):1524-8.
- 2 "Short Bouts of Exercise Reduce Fat in the Bloodstream," American College of Sports Medicine Press Release, August 5, 2005.
- 3 IM Lee, et al., "Physical Activity and Coronary Heart Disease Risk in Men: Does the Duration of Exercise Episodes Predict Risk?," *Circulation*, 2000; 102(9): 981-986.
- 4 E. Espel, et al., "The Rate of Leukocyte Telomere Shortening Predicts Mortality from Cardiovascular Disease in Elderly Men," *Aging*, 2008, Vol. 1, No. 1: 81-88.
- 5 R.M. Cawthon, et al., "Association between Telomere Length in Blood and Mortality in People Aged 60 Years or Older," *Lancet* 2003, 361 (9355): 393-395.
- 6 Puterman E, Lin J, Blackburn E, O'Donovan A, Adler N, et al. "The Power of Exercise: Buffering the Effect of Chronic Stress on Telomere Length." *PLoS ONE* 2010. 5(5): e10837

New Weapons Against the Old Enemy of Stress

Our ancestors had only brief periods of stress and anxiety. Getting chased by a bear or a lion will definitely do that to you. But these stressors lasted only a few minutes at a time. And we are built to handle that kind of stress well.

Today, we have a different more chronic stress. We're constantly assaulted by continuous stressors that can last for days, or years. Car payments, saving for retirement or college... a 30-year mortgage.

Your body wasn't built for that. The system your body uses to deal with stress didn't evolve to be in a constant state of "fight or flight."

These modern stressors can make you sick and old before your time.



But you don't have to head to your doctor for a drug solution to these anxieties. In fact if you do, it could be deadly.

In my practice, I use simple steps that include a new technology to help my patients recreate their ancestors' stress-proof bodies.

New Measure of Damage From Anxiety Revealed With Telomeres

It's true that we have more anxiety and chronic stress than our ancestors had, but knowledge of telomeres can help us reverse the aging effect it has on our bodies.

You see, telomeres have hormone receptors on them. Telomeres "listen to" and "talk to" the hormones in your body. Hormone levels and the length of your telomeres control how much stress and anxiety affect your body more than anything else.

We always knew that anxiety makes you old before your time, and this could be the reason why.

Unfortunately, if you go to the medical establishment for an answer, they won't tell you that your stress response has gone haywire because of our modern environment.

Anxiety Drugs – "451% Greater Chance of Death"

A standard doctor is probably going to give you a drug. These are the only options from a system that has an overreliance on chemical medications.

The drugs are prescribed to be taken indefinitely. That's the way they're set up to be tested, and that's how the doctors are educated... because that's how the drug companies make money.

That distorts everything, so it's far too common to go to a doctor and hear them say, "Here, take this pill."

It's so common that "medicine cabinets" are built right into houses now. And you might have chemical medications in yours right now. They're being prescribed to millions of people as safe and non-addictive ways to stop anxiety and sleeplessness.

Rozerem, Lunesta, Ambien or any sleeping pill...

Valium, Restoril or any of the benzodiazepines... or you might have some Xanax.

Drug companies do a lot of advertising to make sure you see all of these as safe and effective...

Except they're far from safe.

In one study, researchers followed almost 35,000 people who filled prescriptions for anti-anxiety medications or sleep aids and compared their health with 69,418 people who did not.

What they found was worse than a slasher film...

After excluding things like smoking, age and alcohol that could interfere with the results, researchers were left with a horrifying fact: People who took sleep and anxiety drugs had more than double the risk of death than those who didn't. ¹

But further into the study it gets worse. For many people, the risk is much higher.

People who took 90 or more doses during the first year they were followed – that's the equivalent of only three months of any prescription – **had their risk of unnatural death skyrocket by 451%**.

For people over 60 on these anxiety and sleep pills, the risk of death was 500% greater!

An earlier study had a similar result, although no one seemed to notice. This one followed 14,000 Canadians of almost all ages, from 18 to 102, and tracked their use of sedative drugs, including Valium and sleeping pills. People who used these drugs had a 36% greater chance of dying over the 12-year study. ²

Cancer and Sleeping Pill Connection?

Those who take sleep and anxiety drugs get more lung disease and heart disease and live shorter lives. And there's a lot of evidence sleep drugs are increasing the incidence of cancer.

Researchers have found new cases of skin cancer and four other cancers among the people who got sleeping pills, and no new cancers among those who only received placebo. ³

Continued on the next page...

And those who averaged over 132 sleeping pills per year were 35% more likely to develop a new cancer. ⁴

These are FDA-approved drugs.

And their use is increasing everywhere. ⁵

Meanwhile, if you reach for a sleeping pill, you're probably not getting as much sleep as you think. On average, sleeping pills only give you an extra 11 minutes of sleep a night! ⁶

I've seen lots of frustrated insomniacs and people filled with anxiety who come to my clinic after being prescribed these dangerous drugs. They still can't sleep, they still feel terrible, and their doctors have told them, "Sorry, I'm out of options."

But there are other options. There are perfectly safe, natural, and highly effective treatments for anxiety and sleep disorders.

8 Simple Steps to Banish Anxiety Naturally

1. Longer telomeres keep you relaxed and calm with restful sleep – A Swedish study compared 91 people with major depression to 451 healthy people. They found that shortened telomere length was associated with depression and greater perceived life stress. ⁷

Scientists in China looked at the immune systems of people with sleep apnea compared to people who slept normally. The ratio of white blood cells with longer telomeres was significantly higher in healthy people than for people with sleep apnea. ⁸

So, how do you keep your telomeres long for sound sleep and less anxiety?

A study in the *Journal of the American Medical Association* looked at patients from the Heart and Soul Study and followed them for five years. Those with the lowest levels of omega-3 fatty acids had the fastest telomere shortening. Those with the highest omega-3 levels had the slowest telomere shortening. ⁹

You can get some omega-3s from plants in the form of ALA. But it's important to remember that the ability to convert ALA from plants into the omega-3s your body uses – EPA and DHA – can vary from person to person. So, getting an animal source is essential.

Animal sources of omega-3 are cold-water, high-fat fish like mackerel, wild salmon, lake trout and herring.

Some people don't like fish, and if you're one of them, try a quality fish oil that is highly absorbable and will not turn rancid. These are the ones where the omega-3 is in "phospholipid" form. This form is worth the little extra you'll pay for it. It's why I use krill and calamari oil. They're in the absorbable phospholipid form and they have the added benefit of much more DHA than other fish sources. The added penetrability increases the omega-3's penetration into your cells, where it can help maintain your telomeres.

2. Banish anxiety with this ancient technique – In stressful situations, you release the hormones cortisol and adrenaline. Constant stress elevates cortisol, which disrupts your metabolic system, signals cells to store fat, and can disable brain cells.

Breathing techniques and meditation can help calm your body, lower cortisol levels and reduce stress.

Our ancestors knew this... every ancient system of healing has a prescription for breathing to enhance health.

Using simple breathing techniques to relieve anxiety is quick and easy to do:

Sit or lie in a comfortable position. Listen to your breathing and follow it. Or repeat a word or short phrase that means something. You can speak it or just think it in a rhythm that is comfortable. Clear your mind of worries and focus on relaxing. Take 10 or 15 minutes out of your day to this. You can even meditate as you lie in bed at night.

3. Stop stress with exertion – Physical activity helps boost the production of endorphins, your brain's feel-good neurotransmitters. Brief progressive challenges are the best kind for this.

Continued on the next page...

In a study done at the University of California-San Francisco, people who exercised vigorously, but not those who exercised for a long time, had lower levels of stress.¹⁰

So, try a fast-paced game of tennis or several laps in the pool rather than aerobics or jogging.

Your mood will improve and you'll forget your worries.

4. Stay stress-free with nature's sex hormone –

Many studies have shown that oxytocin reduces fear and anxiety, but this powerful hormone also counteracts stress. Oxytocin is linked to lower secretion of cortisol, the "stress" hormone.

Having more oxytocin keeps you calm.

Even more than that, oxytocin is the hormone that acts as a catalyst to help you feel self-confident and in control. It gives you the feeling of "mastery" and that you are in control of your own life.¹¹

Oxytocin release also frequently accompanies the release of melatonin, the primary hormone that regulates our body clocks. So when you have more, you sleep better.

This is because the same area of the brain that produces melatonin – the sleep hormone – also makes oxytocin.

Traditionally, oxytocin has been given by injection through a prescription. The doses usually start at around 10 ml and go up from there.

This is a good method, but maybe not the most practical way for everyone. You can also get oxytocin through sublingual tablets or nasal sprays.

5. Use green tea's anti-anxiety secret – It's an amino acid called l-theanine that's in tea leaves. It reverses the stimulating effects of caffeine and creates a feeling of deep relaxation and mental alertness similar to meditation.

Not only does l-theanine reduce anxiety, but it also stops blood pressure spikes if you're overstressed.¹² This helps you feel calmer no matter the situation.

L-theanine also affects the levels of two important brain chemicals: dopamine and serotonin. These neurotransmitters help create a sense of emotional well-being. Other benefits include improved memory and learning ability.

L-theanine is not very well-known in the U.S., but Japanese researchers have studied it for decades. L-theanine is incredibly safe. There are no known adverse reactions and no drug interactions.

You can relieve stress and anxiety without feeling drowsy or sedated. L-theanine keeps you relaxed and alert.

The most effective dosage is between 50mg and 200mg. The benefits usually start within 30 minutes and last for about eight to 10 hours. Start at 50mg and work up to 200mg if needed. Don't take more than 600mg in a six-hour period.

6. Sweet de-stressing surprise from Bali – One of the plants traditional healers in Bali use often is cacao, or cocoa, the tree that gives us chocolate. So you can add local organic chocolate to my list of things that make you feel good.

Cocoa helps your brain fight anxiety because it has the amino acid tryptophan, which helps you feel relaxed and deal more positively with stress.

Cocoa also stops your brain from *losing* tryptophan, enhancing the effect.¹³ Plus, it contains the neurotransmitters anandamide and phenylethylamine (or PEA), which work in the brain to create feelings of pleasure and well-being.

Cocoa also has a set of flavanols – plant nutrients – that increase blood flow to the brain.¹⁴ One study where they gave people cocoa flavanols found their anxiety went down, and they reported much less mental fatigue.¹⁵

7. Use the "happy" berry – A native berry of China, the goji (or wolfberry) has been used for centuries to treat diseases like diabetes and high blood pressure.

But, what most people don't know is that it's also widely used to improve mental health, improve sleep, and help give a general feeling of well-being and happiness.¹⁶

8. Take the Chinese sleep secret – Another ancient tradition in China is to use the dried jujube fruit to flavor soups and aid digestion. Doctors of traditional Chinese medicine recognized the fruit's relaxing qualities and used jujube as a remedy for tension, nightmares,

Continued on the next page...

occasional night sweats and sleeplessness.

Modern science shows jujube fruit works by affecting your hippocampus.¹⁷ The hippocampus is located in the middle of your brain. It plays a major role in recalling memories and your emotions.

Jujube fruit acts to relax your hippocampus, which helps your mind relax and calms your emotions. It works especially well for people who can't seem to "shut off" their minds, so they lie awake thinking or worrying. Centuries of successful use and modern studies show jujube fruit is a reliable remedy for sleeplessness. ■

References:

- 1 Welch S, et. al. "Effect of anxiolytic and hypnotic drug prescriptions on mortality hazards: retrospective cohort study." *BMJ* 2014;348:g1996.
- 2 Belleville G. "Mortality hazard associated with anxiolytic and hypnotic drug use in the National Population Health Survey." *Can J Psychiatry*. 2010;55(9):558-67.
- 3 Kripke, D, MD. "The Dark Side of Sleeping Pills." e-book. darksideofsleepingpills.com. Retrieved Oct 1, 2012.
- 4 Kripke D, Langer R, Kline L. "Hypnotics' association with mortality or cancer: a matched cohort study." *BMJ Open*. 2012;2:e000850.
- 5 Hollingworth S, Siskind D. "Anxiolytic, hypnotic and sedative medication use in Australia." *Pharmacoepidemiol Drug Saf*. 2010;19(3):280-8.
- 6 Stephanie Saul, "Sleep Drugs Found Only Mildly Effective, but Wildly Popular." *New York Times*. October 23, 2007.
- 7 Wikgrenemail M, et. al. "Short Telomeres in Depression and

the General Population Are Associated with a Hypocortisolemic State." *Biological Psychiatry*. February 2012;Volume 71, Issue 4, Pages 294-300.

8 Lin L, Li T. "Alteration of telomere length of the peripheral white blood cells in patients with obstructive sleep apnea syndrome." *Nan Fang Yi Ke Da Xue Xue Bao*. 2011;31(3):457-60.

9 Ramin Farzaneh-Far, MD et. al. "Association of Marine Omega-3 Fatty Acid Levels With Telomeric Aging in Patients With Coronary Heart Disease." *JAMA*. 2010; 303(3): 250.

10 Puterman E, Lin J, Blackburn E, O'Donovan A, Adler N, et al. "The Power of Exercise: Buffering the Effect of Chronic Stress on Telomere Length. *PLoS ONE* 2010;5(5): e10837.

11 Saphire-Bernstein S, Way B, Kim H, Sherman D, Taylor S. "Oxytocin receptor gene (OXTR) is related to psychological resources." *Proc Natl Acad Sci U S A*. 2011;108(37):15118-22.

12 Yoto A, Motoki M, Murao S, Yokogoshi H. "Effects of L-theanine or caffeine intake on changes in blood pressure under physical and psychological stresses." *J Physiol Anthropol*. 2012;31:28.

13 Jenny M, et. al. "Cacao extracts suppress tryptophan degradation of mitogen-stimulated peripheral blood mononuclear cells." *J Ethnopharmacol*. 2009;122(2):261-7.

14 Ghosh D, Scheepens A. "Vascular action of polyphenols." *Mol Nutr Food Res*. 2009 Mar;53(3):322-31.

15 Scholey A, French S, Morris P, Kennedy D, Milne A, Haskell C. "Consumption of cocoa flavanols results in acute improvements in mood and cognitive performance during sustained mental effort." *J Psychopharmacol*. 2010 Oct;24(10):1505-14.

16 Hsu C, Nance D, Amagase H. "A meta-analysis of clinical improvements of general well-being by a standardized *Lycium barbarum*." *J Med Food*. 2012;15(11):1006-14.

17 Mittag H. "Cure Insomnia Naturally With Jujube Seed." *Cure Insomnia Naturally*. Retrieved April 20, 2014

21st Century Anti-Aging Secrets Strengthen and Rejuvenate Your Heart to Outperform People Half Your Age

I've always had an interest in science in general. While all my colleagues were just reading about medicine, I was reading just about anything that had anything to do with any branch of science.

In fact, the year I applied to medical school I read this article in the journal *Cell*...

It was by Carol Greider and Elizabeth Blackburn, and titled, "Identification of a specific telomere terminal transferase activity in tetrahymena extracts." They published it in December of 1985.

I read that Blackburn had noticed that the telomeres at the ends of the DNA in a single cell organism she was studying would sometimes grow.

She and Carol Greider proposed it was an enzyme that was making it happen.

TELOMERES SHORTEN AFTER MULTIPLE REPLICATIONS



The older the cell, the shorter the telomeres...

They won the Nobel Prize in Medicine for their discovery.

I remember thinking that this could be hugely important, because even back then, we knew that the telomere had the crucial job of holding the chromosome together.

But still, I admit being totally surprised by what happened next in the story of the telomere...

I was in my last year of medical school... I found an article in *Nature* titled, "Telomeres Shorten During Ageing of Human Fibroblasts" by Calvin B. Harley. It was published in 1990.

That's when it really gelled. That's when I knew this was going to change the world.

We had discovered that the telomere controls the aging clock, and that we could intervene in the aging process. It was the beginning of anti-aging medicine.

Around the same time, Dr. Daniel Rudman, M.D., of the Medical College of Wisconsin, led a team of researchers to find out if they could "reprogram" older men's bodies to work like that of a young adult.

After just six months of treatment with human growth hormone (HGH), it was as if the men in the study had traded in their fat, flabby bodies for younger, leaner, more energized versions of themselves.

It was more evidence from one of the most prestigious medical journals in the world that showed how the debilitating effects of aging could be treated and reversed.

It was a landmark study and added to the start of anti-aging medicine.

In 1993, my friend and colleague, Dr. Ronald Klatz, founded the American Academy of Anti-Aging Medicine (A4M) giving this new branch of medicine the structure and recognition it needed to thrive.

After the strong evidence of benefit and anti-aging effectiveness in Dr. Rudman's HGH study, anti-aging was the hot new science. Dr. Klatz made the rounds on all the talk shows including Oprah and Larry King.

Then the attacks began...

A4M quickly became a target. Mainstream medicine went on the warpath against the sorts of natural cures and youth-enhancing treatments anti-aging doctors were using with their patients.

I myself had to defend my medical license in front of the Florida board, because I had written that natural cures for pain were as effective as mainstream pain drugs. It took me two years to convince them I was right.

Dr. Klatz was attacked as well. They accused him of making false claims and attacked his credibility in the media.

The National Institute on Aging (NIA), which is part of the U.S. Government, reached into its deep pockets and started funding programs designed to discredit anti-aging medicine. They even paid journalists to write "hit pieces" in the national media.

Big Pharma and several universities added to the attacks by funding "education programs" to "warn" the public and calling all anti-aging physicians everything from quacks and hucksters to snake oil salesmen.

Of course, none of these enemies of anti-aging ever mentioned any of the breakthrough studies I just showed you that proved them to be shameless liars.

Continued on the next page...

Even today, they are so worried about protecting their drug empire that they continue to wage an all-out war against natural anti-aging medicine.

They even try to hide breakthrough technologies and natural cures they can't patent and monopolize.

But they cannot keep the public in the dark forever...

Thirty years later, there are thousands of published, peer-reviewed studies backing up the safety and effectiveness of natural anti-aging interventions... yet the only ones you hear about are the ones that seem to discredit the effects of natural compounds.

And that would be bad news for your heart ... but fortunately for you, you've subscribed to **Confidential Cures**, and no one can stop me from telling you the truth:

You can use what we now know about the Nobel Prize-winning discovery regarding the telomere – that the enzyme telomerase can make your body younger – right now to rejuvenate the most overworked organ in your body, the heart.

Short Telomeres Set You Up for Heart Attack, Heart Failure, Clogged Arteries and Early Death

When researchers investigated the first long-term connection between telomeres and heart health over the span of two decades, the results were clear and conclusive.¹

A team of doctors at a research hospital in Denmark followed almost 20,000 people for 19 years. The people with short telomeres had a 50% increased risk of heart attack and a 25% increased risk of death.

Another study, published in the same journal, found an alarming increase in heart attack risk... this time, **people with short telomeres had an increased risk between 280% and 320%!²**

These results confirm: *Shorter telomeres make you a target for heart disease.*

That's not all. Your risk of atherosclerosis, or hardening of the arteries, goes up too.

In a study published in the prestigious journal, *Lancet*, researchers found an association between short telomeres and atherosclerosis.³ The people with short telomeres had accelerated aging in their blood vessels and had a **build-up of plaque that correlated to someone 8.6 years older.**

This increased risk extends into the very fiber of your heart muscle.

In a study published in the *Journal of the American College of Cardiology*, researchers discovered that **people with heart failure had telomeres that were 40% shorter than normal.**⁴

So, how can you prevent telomere shortening and rescue your heart?

The secret is telomerase, which can extend the length of your telomeres and reverse the aging of your cells. This will rejuvenate your heart's cells... regardless of how old you are.

There are three important ways to protect your heart by reversing the age of your telomeres:

1) *The Real Anti-Aging Power of the "Red Wine" Nutrient and How the Media Got It Wrong.*

By now, I'm sure you've heard of *resveratrol*.

Mainstream medicine and the media are now bashing resveratrol because scientists now doubt that it turns on a certain "sirtuin" gene – SIRT-1 – which slows aging during calorie restriction.

But they have the resveratrol story wrong ... *because they've been looking in the wrong place.*

Resveratrol does have incredible anti-aging power. All you have to do is look at telomere biology.

- First, resveratrol has the power to switch on the gene that produces telomerase, the enzyme that rebuilds your telomeres.

Published in the English version of the *Chinese Medical Journal*, researchers found resveratrol, "*significantly increased telomerase activity.*"⁵

Continued on the next page...

- Second, resveratrol also activates a different sirtuin gene that controls DNA and specifically telomerase repair. It's the SIRT-6 gene. ⁶

And that's great news... it means you have a simple and reliable way of rebuilding your telomeres and keeping your heart young and vital.

And when we're talking about telomerase, it's important to remember that adding length to your telomeres means you can make your heart younger.

That's the key to understanding this newest breakthrough. You see, the length of your telomeres dictates the kind of cells your body produces.

Longer telomeres produce younger-acting cells.

That's what gives you the experience of a full "restoration." Your body is literally creating a younger, more powerful heart... even though you're technically getting older with each passing day.

When resveratrol acts on your telomeres, two things happen: First, as a powerful antioxidant, resveratrol protects your telomeres from becoming shorter. That immediately slows the aging of your heart.

Second, resveratrol activates the telomerase enzyme, and gradually starts to rebuild your telomeres. ***That enables your heart to produce younger cells.***

And that produces some remarkable benefits:

Resveratrol can prevent blood clots, a major cause of heart attack, particularly in older folks. In one study, researchers gave healthy male subjects a blood-clotting factor along with high doses of resveratrol.

They found that resveratrol ***prevented their blood platelets from sticking together.*** ⁷ Not only does this help your heart, it also prevents strokes, another effect of clotting.

Another way it powers your heart involves a miraculous capability called "angiogenesis," a fancy term for blood vessel growth. Resveratrol acts a bit like bypass surgery by creating new blood vessels to deliver more oxygen to your heart when it's not getting enough.

Finally, trans-resveratrol drives down levels of bad fats, called ***triglycerides.***

These are the fatty acids that clog your arteries.

Scientists have been able to lower triglyceride levels as much as 15 percent in pre-menopausal women using concentrated grape powder. ⁸

Real, Natural Resveratrol

Wine and related beverages are a particularly good source of dietary resveratrol. Different wines have different amounts. Red wines made from Muscadine grapes have the highest levels.

Beverage	Total Resveratrol (mg/L)	Total Resveratrol in 5 oz glass (mg)
Muscadine Wines	14.1 – 40	2.12 – 6
Red Wines (Global)	1.98 – 7.13	0.30 – 1.07
Red Wines (Spanish)	1.92 – 12.59	0.29 – 1.89
Red grape juice (Spanish)	1.14 – 8.69	0.17 – 1.30
Rose Wines (Spanish)	0.43 – 3.52	0.06 – 0.53
Pinot Noir	0.40 – 2.0	0.06 – 0.30
White Wines (Spanish)	0.05 – 1.80	0.01 – 0.27

If you're not a fan of red wine, you can also get resveratrol in a few foods. It's not very well known, but a good source of resveratrol is the pomegranate.

There's also resveratrol in peanuts, mulberries, and eucalyptus, as well as grape-related foods like raisins and purple grape juice.

My favorite treat with resveratrol is the pistachio nut. *Vaccinium* berries like blueberries, bilberries and cranberries also have dietary resveratrol.

Continued on the next page...



The Japanese knotwood (*Polygonum cuspidatum*, also known as Hu Zhang or kojo-kon, or in Japan, “itadori”) is full of resveratrol, so you can make tea from the leaves.

Another food with resveratrol is dark chocolate, where resveratrol joins other antioxidants and minerals that help your heart like copper and manganese.

Dark chocolate also lowers blood pressure and increases circulation, both heart-healthy effects. Look for chocolate that has over 70% cocoa.

It can be hard to get enough resveratrol through your food, so a supplement for anti-aging is a good way to go.

Try to get the more bioactive trans-resveratrol form instead of cis-resveratrol. Studies on resveratrol identify *trans-resveratrol* as the key to activating telomerase.

The problem is that the trans form is highly unstable. Research shows that it quickly turns into the cis kind when exposed to extended periods of heat or light during the manufacturing process.⁹

Pure, natural extracts that have been processed and stored in the right conditions are the best way to go. That means they have to be kept in cold conditions and away from natural light. Otherwise that “trans” turns to “cis”... and you’ve wasted your money. Use from 50 mg. up to 200 mg. a day for heart health and telomerase activation.

2) Reverse Cellular Damage with Potent Telomere Protector

Your heart has more of the tiny cellular engines called mitochondria than any other organ. The heart needs lots of energy, so its cells need lots of mitochondria...

Did you know that mitochondrial dysfunction and telomere shortening are linked? When your telomeres shorten, it causes a change in the expression of your genes. Your cells produce mitochondria that manufacture lots of free radicals that then damage telomeres even more.¹⁰

It’s a vicious cycle that can sap the pumping power right out of your heart.

But you can reverse this cycle with bacopa.

Bacopa is able to protect DNA because it’s a powerful anti-inflammatory that targets the main enemy of the telomere, H₂O₂ (hydrogen peroxide), a particularly nasty free radical. The potent way bacopa can eliminate these free radicals – that can shorten telomeres faster than any other metabolic enemy – is what gives bacopa its anti-aging power.¹¹

H₂O₂ is so damaging, it’s one of the main culprits in the development of Alzheimer’s... which is why researchers are testing bacopa’s effect against the disease. It completely protects cells against damage from H₂O₂.¹²

Bacopa’s protective power might be one of the reasons it can shield heart cells from damage during a stroke, and helps lower blood pressure in clinical trials.

The good news is it’s easy to add this ancient herb to what you eat to get its protective power.

Bacopa monnieri is the species used in Ayurvedic medicine that helps your heart the most.

You can buy bacopa plants at garden centers all over the southern U.S. It’s often sold online as an “aquarium” plant because of the colorful flowers. You also can buy bacopa plants and seeds online. Two websites that will help you find retailers are myfolia.com and davesgarden.com.

You can plant them in the ground where they grow to about 6 inches tall, or in a basket where they’ll hang down.

To grow them, you need sandy, acidic soil and lots of sunlight. They don't like cold, and need to stay moist... but otherwise, they're pretty low maintenance.

I make tea from the bacopa plant I have growing in and around the pond in my backyard.

You can use the leaves, stems and (dried) roots, but the leaves themselves work fine, too.

First boil some water, and add the leaves. Let steep up to 10 minutes, and strain off.

Here are three things to remember:

- Tear and bruise the leaves so the aromatic oils can be released into the water.
- You'll need to use more fresh leaves than you would dried.
- Because it's an herbal tea and has few tannins, you can steep bacopa for a long time, and it won't get more and more bitter like tea from regular tea leaves.
- Once brewed, keep your tea refrigerated and drink it within four days.

When I make tea, I like to add stevia leaves. This adds sweetness to the lime flavor of the bacopa.

I also sometimes add bacopa to salads and soups. The slightly tangy lime taste jazzes up the flavor.

As a supplement, bacopa usually comes in a standardized formula of 20 percent of the active ingredient bacosides A and B. You need at least 300 mg. of bacopa extract for it to be as effective as it is in the studies.

3) Give Your Heart's Telomeres Even More Specialized Protection

In a recent issue of *Confidential Cures*, I wrote to you about the compound in green tea that can maintain and lengthen telomeres called EGCG.

Recently, I have found another good reason to recommend EGCG.

EGCG specifically **protects the telomeres in your heart cells.**

The *International Journal of Cardiology* published a study showing that EGCG “remarkably” prevents telomere shortening and stops the process by which free radicals try to shorten telomeres.¹³ And, EGCG is known to elevate telomerase, to help rebuild telomeres. That's like getting double the protection.

And EGCG has other heart benefits as well:

- Lowers blood pressure
- Stops mitochondrial damage in heart cells
- Prevents hardening of the arteries near the heart
- Improves blood flow
- Protects heart cells from free radical damage

I always recommend food as your best source of nutrients. When you get something from its natural source, it will come with all the other nutrients and co-factors nature intended. That way, your body gets the nutrients in the form it's supposed to.

However, in today's world, there are a lot of things that can cause you to not be able to fully absorb all the nutrients you're getting. Toxins, additives in processed foods, and prescription medications are just a few things that can keep nutrients from being absorbed.

So, in many cases, I will recommend a supplement, because that's exactly what they're for: to supplement your food.

You can get EGCG in capsule form. But again, I recommend supplementing, not replacing your favorite green tea with EGCG.

I suggest you take 50 mg. of EGCG in an extract form. Make sure the product you get is at least 45% EGCG. Some of them will say “98% polyphenols” or “75% catechins,” but that's not the same thing. My own antioxidant formula that has EGCG, for example, is 50% EGCG.■

References:

- 1 Weischer M, et al. Short telomere length, myocardial infarction, ischemic heart disease, and early death. *Arterioscler Thromb Vasc Biol.* 2012 Mar;32(3):82209.
- 2 Brouillette S, et al. White cell telomere length and risk of premature myocardial infarction. *Atheroscler Thromb Vasc Biol.* 2003 May

1;23(5):842-6.

3 Samani NJ, et al. Telomere shortening in atherosclerosis. *Lancet*.

2001 Aug 11;358(9280):472-3.

4 van der Harst P, et al. Telomere length of circulating leukocytes is decreased in patients with chronic heart failure. *J Am Coll Cardiol*.

2007 Apr 3; 49(13):1459-64.

5 Wang XB, et al. Resveratrol-induced augmentation of telomerase activity delays senescence of endothelial progenitor cells. *Chin Med J (Engl)*. 2011 Dec;124(24):4310-5.

6 Sahin E, DePinho R. Axis of ageing: telomeres, p53 and mitochondria. *Nature Reviews Molecular Cell Biology* 2012;13, 397-404.

7 Wang, et al. Effects of red wine and wine polyphenol resveratrol on platelet aggregation in vivo and in vitro. *International Journal of Molecular Medicine*, 2007 9(1):77-9.

8 Zern, et al. Grape polyphenols exert a cardioprotective effect in pre- and postmenopausal women by lowering plasma lipids and reducing oxidative stress. *The Journal of Nutrition*, 2005, 135(8):1911-7.

9 Brent C. Trela and Andrew L. Waterhouse. Resveratrol: Isomeric

Molar Absorptivities and Stability. *Journal of Agricultural and Food Chemistry*. 1996. 44(5):253-1257.

10 Giuliano V. Nuclear Aging: The View from the Telomere end of the Chromosome – Part 3 – Telomere Molecular Biology and GUT implications – The two faces of P53. *Aging Sciences*. www.anti-agingfirewalls.com.

11 Russo A, Izzo A, Borrelli F, Renis M, Vanella A. Free radical scavenging capacity and protective effect of Bacopa monniera L. on DNA damage. *Phytother Res*. 2003;17(8):870-5.

12 Singh M, Murthy V, Ramassamy C. Modulation of hydrogen peroxide and acrolein-induced oxidative stress, mitochondrial dysfunctions and redox regulated pathways by the Bacopa monniera extract: potential implication in Alzheimer's disease. *J Alzheimers Dis*. 2010;21(1):229-47.

13 Sheng R, Gu Z, Xie M. Epigallocatechin gallate, the major component of polyphenols in green tea, inhibits telomere attrition mediated cardiomyocyte apoptosis in cardiac hypertrophy. *Int J Cardiol*. 2013;162(3):199-209.



Al Sears, M.D.

Al Sears, M.D., 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 Doctor's Heart Cure***, 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).

Share Your Story With Me

I've made it my personal mission to bring you back hidden and forgotten cures from around the world, and return to your body what's missing from our modern environment so you can live a full life without worry.

I often hear great things about my books, special reports, and products from patients who come in to my clinic. But I'd love to hear from you, too.

[Click here to take a moment to share your thoughts with me.](#)

The information and material provided in this letter are 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 competent medical professional before acting on any recommendations in this publication.