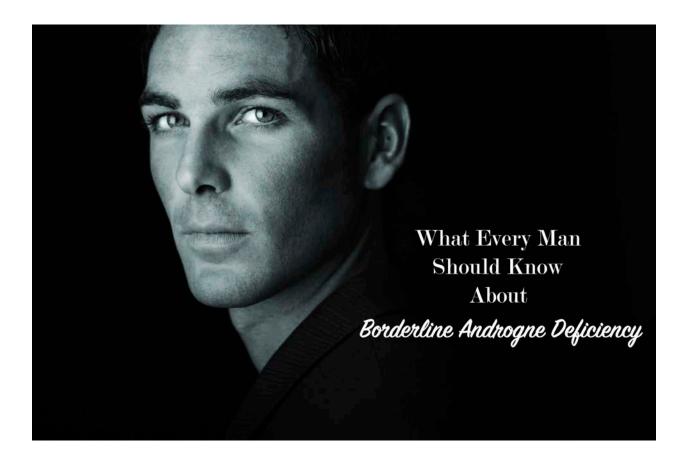
What Every Man Should Know About Borderline Androgen Deficiency

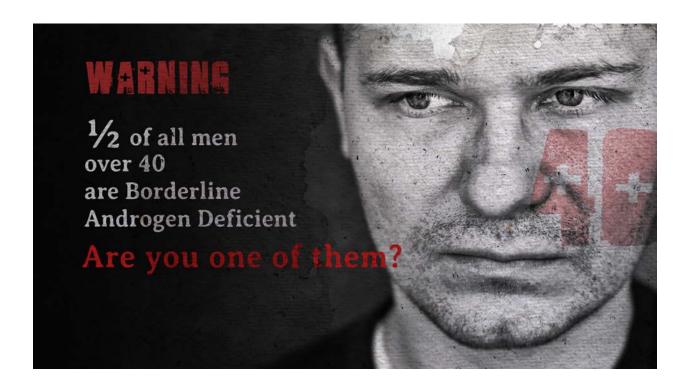
By Abbey Research Ltd



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Warning: Half of all Men over 40 are Borderline Androgen Deficient - Are you one of them?

Ever wonder what happened to guys like John Wayne, Lee Van Cleef, and Steve McQueen? A recent study published in the Journal of Endocrinology and Metabolism points to a population wide decline in testosterone levels in American men over the last three decades. Some studies estimate that up to 30 percent of men ages 40-79 have full blown testosterone or androgen deficiency. Many times that number are believed to have Borderline Androgen Deficiency.

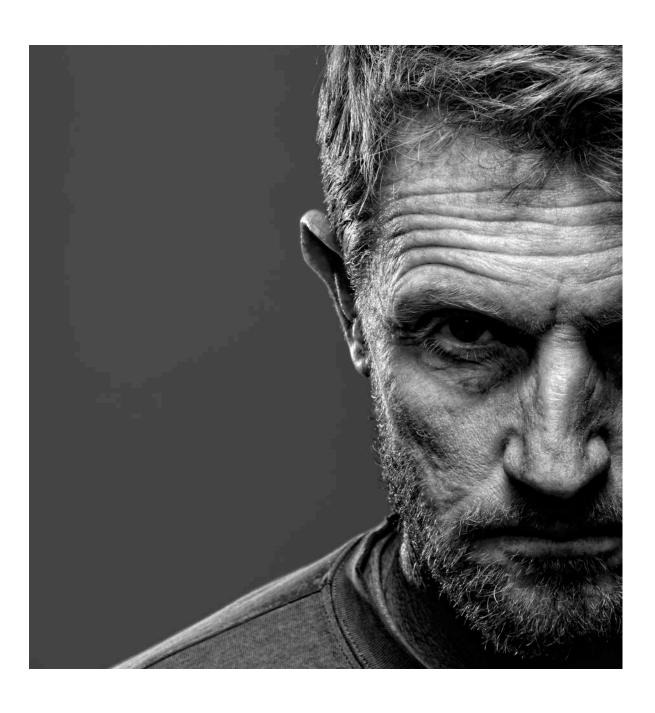
Do You Recognize the 9 Early Warning Signs of Borderline Androgen Deficiency?

Borderline Androgen Deficiency (BAD) is a condition in which a male exhibits many of the symptoms of androgen deficiency but whose testosterone levels are not low enough to meet clinical guidelines for androgen therapy.

A typical guy with Borderline Androgen Deficiency will experience some or all of the following:

- · low sex drive
- · occasional difficulty achieving an erection
- abdominal weight gain
- · low semen volume
- · hair loss
- fatigue and loss of energy
- · loss of muscle mass
- · loss of bone mass
- · mood changes

You know the guy, in fact, you may be the guy; mid-forties to mid-fifties, feels like he has reached a plateau in his career, younger guys seem to be landing bigger clients every day. He is probably a family man with a few extra pounds around the middle. He is secretly afraid his best days might be behind him. He is often worn out after a hard days work and would rather lay on the couch than toss the ball. What used to be a pretty active sex life has fallen into a once a month routine that is not really that fulfilling. The malaise in the bedroom has spilled out into other areas of his life, and he seems to be less outgoing, less friendly. Often feeling depressed or grumpy, he is known to raise his voice in traffic and sometimes even at the kids. Bottom line he just feels soft in all the wrong places. Frankly, my friend, that sounds like most of us.





Are You Ready to Feel Young Again?

The first thing you need to do is get tested. When you go to your doctors office, he will typically give you a 10 question written test (Found Here) and a blood test. If found to have full blown androgen deficiency, he will discus testosterone or other medical therapies. If, however, he rules out other possible medical issues and you are not clinically androgen deficient, he may offer that what you are going through is a normal part of the aging process. The fact is, it is normal. If you are experiencing the symptoms of Borderline Androgen Deficiency, you are normal. All men are on the path toward Borderline Androgen Deficiency. As we age our bodies produces less and less of the hormones, enzymes and cofactors that make us feel like men.

If you are anything like me, you are not going to take this laying down. I refuse to go silently into that dark night. Let women age gracefully, I am going to fight like a man.

But How Do I Know Where to Start?

The best place to start is at the beginning. Before you become a ninja, you have to master the basics. As any good football coach would tell you, it is all about blocking and tackling. No mater

how exotic one gets on the path to healthfulness, real pros always return to the basics: good sleep, proper nutrition, physical exercise, mental sharpness. Often the difference between success and failure is a good nights sleep and the right amount of protein for breakfast.

In order to start to reverse the symptoms of Borderline Androgen Deficiency, we are going to focus on the 4 Pillars of Physical Health; Sleep, Nutrition, Exercise, and Supplementation.

Now that we have defined the problem, there is one more thing you need to know. This book is not a high-level treatise or overview. We are going to get very tactical. Over the coming pages, you will be presented with a full range of tips, tricks, links and hacks to get you on track. Use this book as your personal health manual. Follow the links and dig deep. If a blog or podcast is referenced, it is top of class. If a diet plan or exercise coach is mentioned, it is for a reason. While this is not a one size fits all issue, the basics apply pretty much across the board. Remember, Borderline Androgen Deficiency is an issue that has taken half a lifetime to manifest, it is going to take some effort on your part to get the ship turned around.

Great! Now let's get started!



How I got healthy and reclaimed my sex life in 90 days

If you were asked to define success, you might use words like wealthy, powerful, business leader, freedom from stress and obligation. When asked to name a successful person many would offer names like Steve Jobs, Warren Buffet or even Donald Trump. However, when you think about the men you see in your daily life who seem to have it all figured out, seem to have the world beat, there is a good chance that they share some common characteristics.

You know the guy I am talking about; He is typically fairly easy going. He seems pretty healthy, seems to have an unlimited amount of energy. Some would say he is "comfortable in his own skin." This guy always finds conversation easy and never seems to get stressed out. Whether or not he runs his own business, men seem to naturally follow him. He is usually no slouch with the women ether. If he is married, his relationship with his wife and kids seems effortless. People love him, and he genuinely loves them back. If you start talking to this guy, you'll usually find he has a hobby or skill he is working on. Maybe he is fixing an old car in his garage; maybe he is learning a language or reading books on a particular subject. Maybe he is a collector of some kind, or he is a volunteer coach for his kids teams. The bottom line is he seems to be pretty solid physically, mentally and emotionally.

The contrast between this picture of health and success and the one we saw earlier of the man with Borderline Androgen Deficiency is pretty stark. Our goal through the remaining pages is to arm you with the tools necessary to take back your life. Those tools all fall into one of four buckets, or, as we call them pillars. The Four Pillars of Physical Health are Good Sleep Hygiene, Proper Nutrition, Adequate Exercise and Micronutrient Supplementation. We are going to spend a great deal of time on each of the four pillars. It is not necessary, or even possible, to master all of these tools and resources at once. If you can focus on one area at a time, make

small adjustments, experience small victories, in short order you will feel better than you have in years.

The basics of physical health are sleep, nutrition, exercise, and supplementation. We will look at each one of these in great detail. Again, this is not a book on exotic solutions. This work is about the basics. It is sometimes easy to get in the mindset that there must be some secret out there that others know that you don't. Heck, there are whole industries built on selling you a secret, the diet industry, and the supplement industry are two that come to mind. If there is a secret, it is that down deep, you already know most of this. It used to be called common sense. What we are going to focus on are ideas many of us learned as kids. These ideas used to be the foundation for how we lived our lives. You may argue that we are living longer than ever before, why would we want to emulate habits from the past. Our belief is that good old fashion, common sense, basic approaches to health coupled with modern tools and techniques is the ultimate ticket to a long and healthful life.

Give Me 5 Nights and I'll Give You Great Sleep

If you google "I'll sleep when I'm dead" you'll find that everyone from The Cure to Bon Jovi sang about it. There is a 2003 British crime drama with that title. There are even several books including the biography of Warren Zavon, the late singer-songwriter who is thought to have originally uttered those words. The image of a hard charging, go getter putting in long hours with little rest is stereotypically American. In much of our society, the idea that a man would need more than a few hours of sleep per night is viewed as a weakness.

It is unfortunate, but true that our cultural norms form the very basis of many of our health issues. In searching the literature, one cannot find a single study that suggests anything less than 7 hours of sleep for an adult male is essential. In fact, the range of 7-9 hours is most often cited as the optimal amount of sleep for the adult male.

According to the National Institute of Neurological Disorders and Stroke, "At least 40 million Americans each year suffer from chronic, long-term sleep disorders, and an additional 20 million experience occasional sleeping problems. These disorders and the resulting sleep deprivation interfere with work, driving, and social activities. They also account for an estimated \$16 billion in medical costs each year, while the indirect costs due to lost productivity and other factors are probably much greater. Doctors have described more than 70 sleep disorders, most of which can be managed effectively once they are correctly diagnosed. The most common sleep disorders include insomnia, sleep apnea, restless legs syndrome, and narcolepsy." A 2004 report in The Journal of Endocrinology and Metabolism clearly stated that "Total sleep restriction in humans is associated with increased daytime sleepiness, decreased performance, and hormonal/metabolic disturbances." Additionally, the report concluded that in "men and women, modest sleep loss is associated with significant sleepiness, impairment of psychomotor performance, and increased secretion of pro-inflammatory cytokines." Finally, a 2010 report in the Journal of Andrology concluded that "sleep duration was associated with androgen concentrations in men, and thus the evaluation of sleep hygiene may be beneficial in the management of men with low androgen concentrations."

The evidence is pretty clear; poor sleep habits lead to lower androgen levels. For our first order of business, let get you sleeping and resting better.

15 Tricks That Will Have You Sleeping Like a Baby

1. Sleep Routine

Get in the routine of going to sleep and waking up at the same time every day. Our bodies crave routine. In The Harvard Medical School Guide to a good Night's Sleep, Dr. Lawrence J. Epstein advises "Keeping a regular sleep schedule—even on weekends—maintains the timing of the body's internal clock and can help you fall asleep and wake up more easily."

2. Sleep in Total Darkness

Over on io9.com, George Dvorsky wrote an excellent article on the importance of sleeping in total darkness. We'll paraphrase it, but the full article can be Found Here.

Dvorsky explains that before the end of the stone age, humans were exposed to two different kinds of natural light responsible for regulating circadian rhythmicity. During the day, we had the sun, while at night we had the moon and the stars, and perhaps the light from campfires. The binary day/night pattern was unrelenting, and our biological programming followed suit. Today we have artificial lighting at night which is considerably more powerful than moonlight. This difference influences a series of critical biochemical cascades tied to light periodicity, including the production of cortisol and melatonin levels.

Neurologist George Brainard said, "Light works as if it's a drug, except it's not a drug at all." Light suppresses Melatonin. Melatonin is a workhorse biochemical produced when it's dark. It is a key regulator of our sleep-wake cycle. It lowers blood pressure, glucose levels and body temperatures - key physiological responses responsible for a restful sleep. Studies have shown that exposure to room light before bedtime shortens melatonin duration by about 90 minutes compared to dim light exposure. In addition, exposure to room light during usual hours of sleep suppresses melatonin levels by more than 50%.

Additionally, our eyes sense light and send a signal to our brain to wake up. It also kickstarts other processes like raising body temperature and producing hormones like cortisol. Our cortisol levels are relatively low at night, allowing us to sleep, and higher during the day, allowing for the stabilization of energy levels and the modulation of immune function. Unfortunately, light at night elevates cortisol levels which disrupts sleep and introduces a host of problems relating to bodyfat levels, insulin resistance, and systemic inflammation. It also contributes to sleep debt and a disruption the neuroregulation of appetite.

To put it all in simply bright lights, computer screens, flashing LED's and even the street lamp outside your window may be contributing to your lack of restful sleep. In order to get the rest you need, keep your bedroom as dark as possible. Turn off all light emitting gadgets and close the blinds. Turn off computers, smartphones and televisions in the hours preceding sleep. Tape over LEDs with electrical tape. Even the alarm clock can give off light so make sure you address that. Think of a cave or a coffin and then you will be able to visualize the level of darkness you are aiming for.

3. Choose the Right Bed Linens

In his article for Today's Health and Wellness Blog, writer Chris Sercio sheds some light on the importance of great bed linens and how to find them (Article Here.) Here is a quick rundown of the 9 points he makes:

- You want to buy quality bed sheets, but higher thread count does not always mean higher quality.
- · Some materials are cooler than others
- Wash new sheet before you use them
- For sleepers with sensitive skin, detergent may be more of an issue than bedding material
- · wash your linens every week
- · seasonal bedding might make a difference
- · buy new bedding every 18-24 months
- Buy some new pillowcases
- · Silk pillowcases do not help reduce wrinkles

The bottom line here is buy great bed linens, keep them clean and replace them often. The more comfortable you are during sleep, the more restful that sleep will be.

4. Make Your Bed Every Morning

At <u>lifehacker.com</u> Naval Admiral William McRaven suggests making your bed is one of the best ways to start your day. "If you make your bed every morning you will have accomplished the first task of the day. It will give you a small sense of pride, and it will encourage you to do another task and another and another. By the end of the day, that one task completed will have turned into many tasks completed. Making your bed will also reinforce the fact that little things in life matter."

Additionally, a study conducted by The National Sleep Foundation suggests that gong to bed in a bed that is made leads to a better nights rest.

5. Use White Noise to Mask Offending Sounds

The Definitive Guide to White Noise and Sleep (Found Here) is exactly what the title suggests. For a complete understanding of the science behind white noise use as a sleep aid, check it out. In a nutshell, using white noise is a way to employ sound masking. "When you add white noise (or a similar sound) to your sleeping environment, you're utilizing a principal known as sound masking. Rather than drowning out the offending sounds, they become 'masked' by the frequencies of the white noise signal."

Author Jeff Mann lists a host of machines, gadgets and apps to facilitate white noise in your sleeping environment. One of the easiest white noise hacks and the one we use is an old fashion desk fan.

6. Cold Room

Time magazine writer Markham Heid answered the question: *Is Sleeping In a Cold Room Better For You* (Found Here.) While there is much science around the best temperature for sleep, Markham states, "here's the bottom line: keeping your head nice and cool is conducive to good sleep. To achieve that, set your thermostat somewhere around 65 degrees, research suggests.

7. Magnesium

In 2006, the Journal Science Direct published *Rapid Recovery From Major Depression Using Magnesium Treatment*. Authors George and Keren Eby summarized the following: "Magnesium deficiency is well known to produce neuropathologies. Only 16% of the magnesium found in whole wheat remains in refined flour, and magnesium has been removed from most drinking water supplies, setting a stage for human magnesium deficiency." Additionally, "Magnesium was usually found effective for treatment of depression in general use. Related and accompanying mental illnesses in these case histories including traumatic brain injury, headache, suicidal ideation, anxiety, irritability, insomnia, postpartum depression, cocaine, alcohol and tobacco abuse, hypersensitivity to calcium, short-term memory loss, and IQ loss were also benefited. Dietary deficiencies of magnesium, coupled with excess calcium and stress may cause many cases of other related symptoms including agitation, anxiety, irritability, confusion, asthenia, sleeplessness, headache, delirium, hallucinations and hyper-excitability, with each of these having been previously documented."

The Journal Article *The effect of magnesium supplementation on primary insomnia in elderly: A double-blind placebo-controlled clinical trial* concluded "Supplementation of magnesium appears to improve subjective measures of insomnia such as ISI score, sleep efficiency, sleep time and sleep onset latency, early morning awakening, and likewise, insomnia objective measures such as concentration of serum renin, melatonin, and serum cortisol, in elderly people."

If you decide to use a supplement, magnesium threonate is one of the best sources of magnesium as it seems to penetrate cell membranes, including the mitochondria, which results in higher energy levels. Additionally, it also penetrates the blood-brain barrier and seems to do wonders to treat and prevent dementia and improve memory.

8. Power Down Electronics

The WebMD.com article entitled *Power Down for Better Sleep* (Found Here) states the following: "One of the most simple but important reasons technology affects our sleep is cognitive stimulation," says Mark Rosekind, PhD, former director of the Fatigue Countermeasures Program at the NASA Ames Research Center and president and chief scientist at the scientific consulting firm Alertness Solutions.

As your brain revs up, its electrical activity increases and neurons start to race -- the exact opposite of what should be happening before sleep. A second reason has to do with your body: The physical act of responding to a video game or even an email makes your body tense, explains Rosekind. As you get stressed, your body can go into a "fight or flight" response, and as a result, cortisol, a stress hormone produced by the adrenal gland, is released, creating a situation hardly conducive to sleep.

That "glow" from electronics is also at work against quality shuteye. The small amounts of light from these devices pass through the retina into a part of the hypothalamus (the area of the brain that controls several sleep activities) and delay the release of the sleep-inducing hormone, melatonin.

Altogether, our wired way of winding down at night means we're sleeping less and less. "As you stay up later on a consistent basis, you readjust your internal clock, and delayed sleep phase syndrome sets in," says Rosekind. "Now, your body physically can't fall asleep until that new, set time, whether it's midnight or 2 a.m."

The No. 1 way to get better sleep: Turn off the technology, especially in the sanctity of your bedroom

9. Use Your Bed for Sleep and Sex Only

The National Sleep Foundation recommends using your bed for sleep and sex only. Doing so strengthens the association between bed and sleep. According to a new study recently published in the Journal of Sleep Research, done by a group of researchers at the University of Bergen (UiB) and the National Competence Centre for Sleep Disorders, the bedroom should be reserved for sleep and sexual activity. However, many use it for working, eating, etc. It is thought that if you engage in these and other waking-hour activities over an extended period, in a while you will be linking the bedroom to activating stimuli. Instead of triggering sleep it will be associated with alertness and activation

10. Foam Roll Before Bed

How do you feel after you've had a massage? Right! Nice and relaxed. Foam rolling and other forms of massage activate our parasympathetic nervous system which help us calm down and relax.

Kelly Starrett is a physical therapist, author of <u>Becoming a Supple Leopard</u>, owner of San Francisco CrossFit, and creator of <u>MobilityWOD</u>, a resource for helping athletes address the issues that limit movement. He suggests that you take 10 to 15 minutes to roll as you are winding down for bed. Consider it a bedtime message. Keep the roller by you couch or nightstand and then roll as you watch the last few minutes of a show. In an interview with Men's Health Starrett said, "This is the perfect time to turn on your parasympathetic nervous system because you'll help your muscles recover, reduce tightness that built up during the day, and help your body and mind fall asleep faster."

We recommend the Trigger Point Performance "The Grid" Foam Roller found here.

11. Limit Alcohol Before Bed

The Cleveland Clinics neurologist and sleep expert Jessica Vensel-Rundo, MD (<u>Found Here</u>) states that "even though alcohol is a sedative, its effects wear off during the night." She adds, "there's more disruption. Deep sleep decreases during the second half, and REM, or dreaming, sleep increases." When you are sleeping alcohol in your system can cause vivid dreams and

nightmares as well as breathing problems. If you drink alcohol or take a drug before bedtime, you can expect to wake up with some degree of grogginess, Dr. Vensel-Rundo says.

12. Limit Caffeine

Researchers at Michigan's Henry Ford Hospital's Sleep Disorders & Research Center and Wayne State College of Medicine analyzed the sleep-disruptive effects of caffeine consumption at different lengths of time before bedtime. They found that caffeine consumed even 6 hours before bedtime resulted in significantly diminished sleep quality and sleep quantity. This is believed to be the first study to investigate directly the effects of caffeine at specific times before nightly sleep. Psychology Today's article *New Details on Caffeine's Sleep Disrupting Effects* (Found Here) advises sticking to a 2:00 pm cut off for caffeinated drinks, to tapper caffeine as the day progresses and to avoid jumbo drinks of coffee or other caffeinated beverages.

13. Hydration and Sleep

The excellent article *Hydration and Sleep Connection* (<u>Found Here</u>) summarizes: Many people do not realize that their health habits greatly influence or adversely affect their sleep quality. Drinking water is not only important for human survival but also essential to maintain healthy sleep patterns. Every cell, tissue, and organ require water to function properly. Therefore, proper sleep and adequate hydration work cell-and molecule with each other to maintain proper sleep.

14. Journaling

According to the National Institute of Health, one method of preventing worries from keeping you awake is to keep a journal before going to bed. List all issues that worry you. By this method, you transfer your worries from your thoughts to paper, leaving your mind quieter and more ready to fall asleep.

In her article *Journaling Before Bed Can Help Ward Off Sleeplessness*, (<u>Found Here</u>) Linda Wasmer Andrews notes that in one study 41 college students plagued by bedtime worries were randomly assigned to self-help strategies. One group was asked to journal every night for a week. The study found journaling reduced bedtime worry and stress, increased sleep time, and improved sleep quality.

To try the technique used in the study set aside 15 minutes each night for writing about a recent positive experience. Write about not only what happened, but also how you felt at the time. Forget what your high school English teacher would say about the grammar, punctuation, and spelling; the journal is for your eyes only.

By the time you put away the journal, climb under the covers and switch off the light, you'll be in a better frame of mind for drifting off into dreamland.

15. Meditation

Meditation is a practice with a many thousand-year history. It is often associated with spirituality and the seeking of higher consciousness. However, there are many different types of meditation; some are designed to help us relax.

According to an article in Psychology Today (<u>Found Here</u>), Mindfulness Meditation is unique in that it is not directed toward getting us to be different from how we already are. Instead, it helps us become aware of what is already true moment by moment. We could say that it teaches us how to be unconditionally present; that is, it helps us be present with whatever is happening, no matter what it is.

You may wonder what good that is. After all, don't we want to suffer less? Aren't we interested in tuning into this natural wisdom, this brilliant sanity, that we've heard about? Aren't those changes from how we already are?

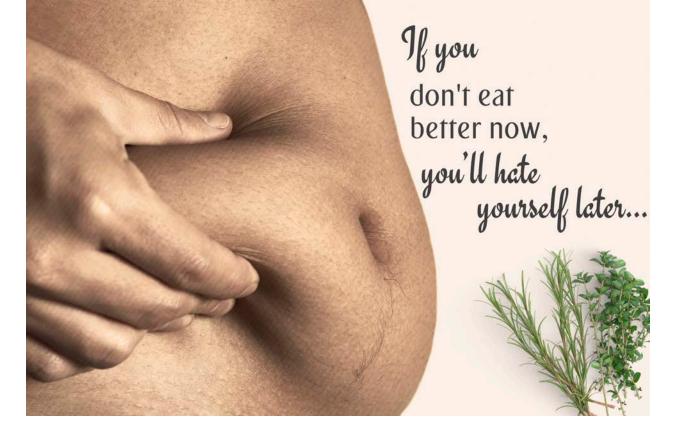
Well, yes and no. On the one hand, suffering less and being more aware of our inherent wakefulness would be changes from how we experience ourselves right now, or at least most of the time. On the other hand, though, the way to uncover brilliant sanity and to alleviate suffering is by going more deeply into the present moment and into ourselves as we already are, not by trying to change what is already going on.

The sitting practice of mindfulness meditation gives us exactly this opportunity to become more present with ourselves just as we are. This, in turn, shows us glimpses of our inherent wisdom and teaches us how to stop perpetuating the unnecessary suffering that results from trying to escape the discomfort, and even pain, we inevitably experience as a consequence of simply being alive.

The Effects of Mindfulness-Based Stress Reduction on Sleep Disturbance published in the Journal of Science and Healing (<u>Found Here</u>) concludes, there is some evidence to suggest that increased practice of mindfulness techniques is associated with improved sleep and that mindfulness-based stress reduction participants experience a decrease in sleep-interfering cognitive processes (e.g., worry).

There are many great resources online to help one develop a mindfulness practice. Headspace is an app we use and is designed to help make meditation simple. Another app that is getting rave reviews is Calm.

For a great 10 minute primer on Meditation check out Andy Puddicombe's TED Talk (Found Here)



If You Don't Eat Better Now, You'll Hate Yourself Later

By now you've heard the rant; Industrial food production and the Standard American Diet (SAD) made up of low fat, high carbohydrate, processed foods has lead to the current epidemic of overweight and unhealthy Americans.

The numbers are stark. According to The National Institute of Health, more than two-thirds (68.8 percent) of adults are considered to be overweight or obese. More than one-third (35.7 percent) of adults are considered to be obese. More than 1 in 20 (6.3 percent) have extreme obesity. Almost 3 in 4 men (74 percent) are considered to be overweight or obese.

The Article - Relative androgen deficiency in relation to obesity and metabolic status in older men Published in The Journal of Diabetes, Obesity, and Metabolism concluded that Androgen deficiency is the consequent of, rather than a cause of, poor metabolic status.

There is good news. The recently published *Fundamental Aspects of Hypogonadism in the Aging Male* states that "correction of poor nutrition, discontinuation of certain medications, and abstinence from alcohol may increase serum testosterone concentrations and circumvent the need for testosterone treatment."

What Nutritional Factors Suppress Testosterone Production?

Several factors can suppress testosterone output and ultimately reproductive function. These factors include:

- chronically low-calorie intake (>20% below basal needs)
- chronically high-calorie intake (especially if obesity results)
- low nutrient intake and vitamin/mineral deficiency
- · low fat intake
- · obesity and other metabolic disorders

Loose Weight by Reading a Book?

I am sorry to say it is not yet quite that simple. However, arming yourself with an understanding of basic nutrition can make a huge difference in the choices you make in regards to food consumption. A simple Google search of the term "Diet" yields 461 million results. Add in "Obesity," "Calorie" and "Fat" and you are well over a billion results.

Even when you refine your search to "Healthy Foods," "Safe Weight Loss," or "Fat Burning Diet," the result list is staggering. Numerous documentaries, thousands of pages and countless podcasts are dedicated to the subject.

The good news is, we love this stuff. We've spent years reading, watching and experimenting in order to develop our personal nutritional plan.

Here are a few of our favorite resources to get you started:

Nutrition and Health Documentaries (Link Here)

Supersize Me (2004)

Filmmaker Morgan Spurlock filmed his experience of eating three meals a day for a month at McDonald's. As you can imagine, the result was less than healthy. Spurlock checks in with doctors, health experts, nutritionists and folks who subsist largely on fast food. A great review of the film can be found here.

King Corn (2007)

Two friends from college move to lowa to grow America's most versatile crop (corn) and make a movie about it. As they chart their journey, they dig into big issues like government subsidies for agriculture and the nation's addiction to high-fructose corn syrup. A great review of the film can be <u>found here</u>.

Food Inc. (2008)

This documentary addresses the issue of corporate farming in America—and as you'll find out, it is a very big problem to tackle. There are three acts, tackling industrial meat production, large-scale production of vegetables and grains, and the ways in which economic and legal power is wielded in this country to product big business. Watch the YouTube trailer here.

Hungry for Change (2012)

This documentary claims to reveal the secrets kept from you by the weight-loss and diet industries. These secrets are mostly things that you've heard many times before, but will serve as fresh inspiration if you need it. Watch the YouTube Trailer here.

Bite Size (2014)

While the problem of childhood obesity is known, many people only encounter it through non-salient statistics and figures. Corbin Billings' 2014 documentary *Bite Size* helps put a face to the epidemic by following four overweight American kids as they struggle to lose weight and focus on healthier eating habits.

Fed Up (2014)

Stephanie Soechtig—in conjunction with *An Inconvenient Truth's* Laurie David—took on the topic of the unfettered amount of sugar that's been added to kids' meals over the decades. Soechtig looks at how that additive has ballooned childhood obesity and how powerful sugar-industry lobbyists have prevented any meaningful legislation from passing through Congress. Anyone who's concerned about how our diets are shaped—and the risks this type of eating presents—will find Fed Up incredibly fascinating. Check out the trailer <u>here</u>.

Nutrition and Health Books (Link Here)

<u>Sugar Nation:</u> The Hidden Truth Behind America's Deadliest Habit and the Simple Way to Beat It by Jeff O'Connell

- -Every five seconds, one more person develops diabetes.
- -Worldwide, 285 million people are affected by type 2 diabetes.
- -Many of them have no idea.

Here is the personal story of one man who has unearthed the mysteries of this global epidemic and offers hard-won practical advice for how readers can take control of their lives and combat this deadly disease.

Good Calories Bad Calories: Fats, Carbs and the Controversial Science of Diet and **Health** by Gary Taubes

For decades, we have been taught that fat is bad for us, carbohydrates better and that the key to a healthy weight is eating less and exercising more. Yet despite this advice, we have seen unprecedented epidemics of obesity and diabetes. Taubes argues that the problem lies in refined carbohydrates, like white flour, easily digested starches, and sugars, and that the key to good health is the kind of calories we take in, not the number. In this groundbreaking book, award-winning science writer Gary Taubes shows us that almost everything we believe about the nature of a healthy diet is wrong.

Why We Get Fat: And What to Do About It by Gary Taubes

An eye-opening, myth-shattering examination of what makes us fat, from acclaimed science writer Gary Taubes.

In his New York Times best seller, *Good Calories*, *Bad Calories*, Taubes argued that our diet's overemphasis on certain kinds of carbohydrates—not fats and not simply excess calories—has led directly to the obesity epidemic we face today. The result of thorough research, keen insight, and unassailable common sense, *Good Calories*, *Bad Calories* immediately stirred controversy and acclaim among academics, journalists, and writers alike. Michael Pollan heralded it as "a vitally important book, destined to change the way we think about food."

Building upon this critical work in *Good Calories*, *Bad Calories* and presenting fresh evidence for his claim, Taubes now revisits the urgent question of what's making us fat—and how we can change—in this exciting new book. Persuasive, straightforward, and practical, *Why We Get Fat* makes Taubes's crucial argument newly accessible to a wider audience.

Taubes reveals the bad nutritional science of the last century, none more damaging or misguided than the "Calories-in, calories-out" model of why we get fat, and the good science that has been ignored, especially regarding insulin's regulation of our fat tissue. He also answers the most persistent questions: Why are some people thin and others fat? What roles do exercise and genetics play in our weight? What foods should we eat, and what foods should we avoid?

Packed with essential information and concluding with an easy-to-follow diet, *Why We Get Fat* is an invaluable key in our understanding of an international epidemic and a guide to what each of us can do about it.

What to Eat by Marion Nestle

Marion Nestle's *What to Eat* has become the definitive guide to making healthy and informed choices about food. Praised as "radiant with maxims to live by" in The New York Times Book Review and "accessible, reliable and comprehensive" in The Washington Post, What to Eat is an indispensable resource, packed with important information and useful advice from the acclaimed nutritionist who "has become to the food industry what . . . Ralph Nader [was] to the automobile industry" (St. Louis Post-Dispatch).

How we choose which foods to eat is growing more complicated by the day, and the straightforward, practical approach of *What to Eat* has been praised as welcome relief. As Nestle takes us through each supermarket section—produce, dairy, meat, fish—she explains the issues, cutting through foodie jargon and complicated nutrition labels and debunking the misleading health claims made by big food companies. With Nestle as our guide, we are shown how to make wise food choices—and are inspired to eat sensibly and nutritiously.

<u>Appetite For Profit</u>: How the Food Industry Undermines our Health and How to Fight Back by Michele Simon

The United States is currently embroiled in a national debate over the growing public health crisis caused by poor diet. People are starting to ask who is to blame and how can we fix the

problem, especially among children. Major food companies are responding with a massive public relations campaign. These companies, including McDonald's, Coca-Cola, Kraft, and General Mills, are increasingly on the defensive. In response, they pretend to sell healthier food and otherwise position themselves as "part of the solution." Yet they continue to lobby against commonsense nutrition policies. Appetite for Profit exposes this hypocrisy and explains how to fight back by offering reliable resources. Readers will learn how to spot the PR and how to organize to improve food in schools and elsewhere. For the first time, author Michele Simon explains why we cannot trust food corporations to "do the right thing." She describes the local battles of going up against the powerful food lobbies and offers a comprehensive guide to the public relations, front groups, and lobbying tactics that food companies employ to trick the American public. Simon also provides an entertaining glossary that explains corporate rhetoric, including phrases like "better-for-you foods" and "frivolous lawsuit."

Big Fat Surprise: Why Butter, Meat and Cheese Belong in a Healthy Diet by Nina Teicholz

In The *Big Fat Surprise*, investigative journalist Nina Teicholz reveals the unthinkable: that everything we thought we knew about dietary fat is wrong. She documents how the low-fat nutrition advice of the past sixty years has amounted to a vast uncontrolled experiment on the entire population, with disastrous consequences for our health.

For decades, we have been told that the best possible diet involves cutting back on fat, especially saturated fat and that if we are not getting healthier or thinner it must be because we are not trying hard enough. But what if the low-fat diet is itself the problem? What if the very foods we've been denying ourselves—the creamy cheeses, the sizzling steaks—are themselves the key to reversing the epidemics of obesity, diabetes, and heart disease?

In this captivating, vibrant, and convincing narrative, based on a nine-year-long investigation, Teicholz shows how the misinformation about saturated fats took hold in the scientific community and the public imagination, and how recent findings have overturned these beliefs. She explains why the Mediterranean Diet is not the healthiest, and how we might be replacing trans fats with something even worse. This startling history demonstrates how nutrition science has gotten it so wrong: how overzealous researchers, through a combination of ego, bias, and premature institutional consensus, have allowed dangerous misrepresentations to become dietary dogma.

With eye-opening scientific rigor, *The Big Fat Surprise* upends the conventional wisdom about all fats with the groundbreaking claim that more, not less, dietary fat—including saturated fat—is what leads to better health and wellness. Science shows that we have been needlessly avoiding meat, cheese, whole milk, and eggs for decades and that we can now, guilt-free, welcome these delicious foods back into our lives.

<u>Grain Brain</u>: The Surprising Truth about Wheat, Carbs, and Sugar-Your Brain's Silent **Killers** by David Perlmutter

Renowned neurologist David Perlmutter, MD, blows the lid off a topic that's been buried in medical literature for far too long: carbs are destroying your brain. And not just unhealthy carbs, but even healthy ones like whole grains can cause dementia, ADHD, anxiety, chronic headaches, depression, and much more. Dr. Perlmutter explains what happens when the brain

encounters common ingredients in your daily bread and fruit bowls, why your brain thrives on fat and cholesterol, and how you can spur the growth of new brain cells at any age. He offers an indepth look at how we can take control of our "smart genes" through specific dietary choices and lifestyle habits, demonstrating how to remedy our most feared maladies without drugs. With a revolutionary 4-week plan, *GRAIN BRAIN* teaches us how we can reprogram our genetic destiny for the better.

Wheat Belly: Lose the Wheat, Lose the Weight, and Find Your Path Back to Health by William Davis

Over 200 million Americans consume food products made of wheat every day. As a result, over 100 million experience some form of adverse health effect, ranging from minor rashes to high blood sugar to unattractive stomach bulges preventative cardiologist William Davis calls "wheat bellies." According to Davis, that excess fat has nothing to do with gluttony, sloth, or too much butter: it's due to the whole grain wraps we eat for lunch.

After witnessing over 2,000 patients regain health after giving up wheat, Davis reached the disturbing conclusion that wheat is the single largest contributor to the nationwide obesity epidemic—and that elimination of wheat is key to dramatic weight loss and optimal health. In national bestseller, Dr. Davis exposes the harmful effects of what is actually a product of genetic tinkering and agribusiness being sold to the American public as "wheat"—and provides readers with a user-friendly, step-by-step plan to navigate a new wheat-free lifestyle.

Informed by cutting-edge science and nutrition, along with case studies from men and women who have experienced life-changing transformations in health after waving goodbye to wheat, *Wheat Belly* is an illuminating look at what is truly making Americans sick and an action plan to clear our plates of this seemingly benign ingredient.

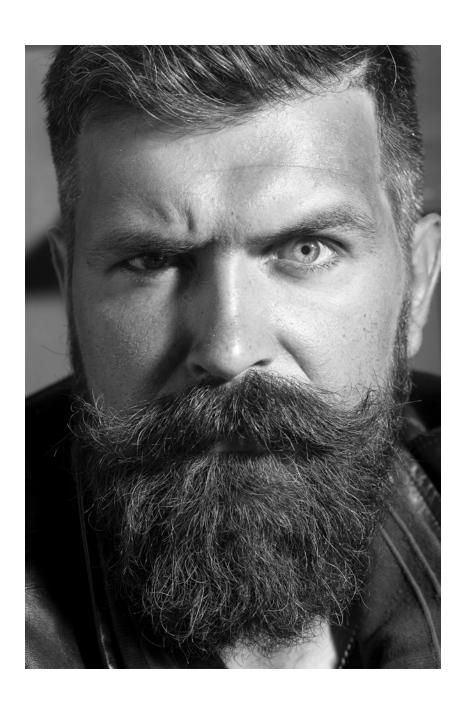
<u>Brain Maker</u>: The Power of Gut Microbes to Heal and Protect Your Brain for Life by David Perlmutter

Debilitating brain disorders are on the rise-from children diagnosed with autism and ADHD to adults developing dementia at younger ages than ever before. But a medical revolution is underway that can solve this problem: Astonishing new research is revealing that the health of your brain is, to an extraordinary degree, dictated by the state of your microbiome - the vast population of organisms that live in your body and outnumber your own cells ten to one. What's taking place in your intestines today is determining your risk for any number of brain-related conditions.

In *BRAIN MAKER*, Dr. Perlmutter explains the potent interplay between intestinal microbes and the brain, describing how the microbiome develops from birth and evolves based on lifestyle choices, how it can become "sick," and how nurturing gut health through a few easy strategies can alter your brain's destiny for the better. With simple dietary recommendations and a highly practical program of six steps to improving gut ecology, *BRAIN MAKER* opens the door to unprecedented brain health potential.

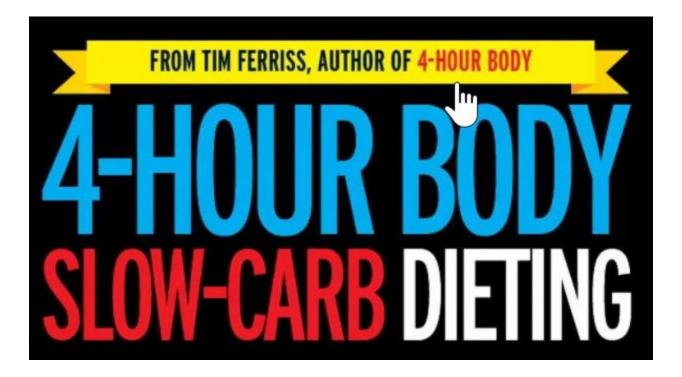
Nutrition and Health Podcasts

The Paleo Solution - Robb Wolf
Fat-Burning Man - Able James
Bulletproof Radio - Dave Asprey
ReWild Yourself - Daniel Vitalis
The Time Ferriss Show - Tim Ferriss
The Rich Roll Podcast - Rich Roll
The School of Greatness - Lewis Howes



Three Great Nutrition Plans - Which Will Work Best For You?

Slow-Carb Diet



From Wikipedia: The Slow-Carb Diet was popularized in The 4-Hour Body by Tim Ferriss, and first mentioned by him in a 2007 blog post titled "How to Lose 20 lbs. Of Fat in 30 Days... Without Doing Any Exercise". Ferriss claims to have lost about 25 lbs of body fat in six weeks on the diet. The Slow-Carb Diet is based on eating foods with a low glycemic index. It can be summarized as the elimination of starches and anything sweet (including fruit and all artificial sweeteners) and a strong preference for lean protein, legumes, and vegetables. The main foods are eggs, fish, grass-fed beef, lentils, beans, vegetables (like spinach, broccoli, cabbage, radish), mushrooms, fermented foods and drinks (natto, kimchi, sauerkraut), unsweetened tea or coffee and water. Calorie-dense nuts and legumes such as pecans, chickpeas, hummus, and peanuts are allowed under careful portion control. Plain coffee is allowed, but all milk products are to be avoided except cottage cheese.

Medium's article Everything You Need to Know About the Slow-Carb Diet (<u>Found Here</u>) is a great place to get started.

Alternatively, you could go straight to the source, Tim Ferriss (Here)

PALEO DIET



From Wikipedia: The Paleolithic diet is a diet based on the foods ancient ancestors might likely have eaten, such as meat, nuts, and berries, and excludes food to which they had not yet become familiar, like dairy. The Paleolithic era was a period lasting around 2.5 million years that ended about 10,000 years ago with the advent of farming. It was characterized by the use of flint, stone, and bone tools, hunting, fishing, and the gathering of plant foods.

The diet is based on the premise that Paleolithic humans evolved nutritional needs specific to the foods available at that time, and that the nutritional needs of modern humans remain best adapted to the diet of their Paleolithic ancestors. Proponents argue that this is because modern human metabolism has been unable to adapt fast enough to handle many of the foods that have become available since the advent of agriculture. Thus, modern humans are said to be maladapted to eating foods such as grain, legumes, and dairy, and, in particular, the high-calorie processed foods that are a staple of most modern diets. Proponents claim that modern humans' inability to properly metabolize these comparatively new types of food has led to modern-day problems such as obesity, heart disease, and diabetes. They claim that followers of the Paleolithic diet may enjoy a longer, healthier, more active life.

Medium's article Everything You Need to Know About the Paleo Diet (<u>Found Here</u>) is a great place to get started.

You might also try Robb Wolf's blog (robbwolf.com/category/paleo-diet-basics/)

Ketogenic or Low Carbohydrate Diet



From Wikipedia: Low-carbohydrate diets or low-carb diets are dietary programs that restrict carbohydrate consumption, often for the treatment of obesity or diabetes. Foods high in easily digestible carbohydrates (e.g., sugar, bread, pasta) are limited or replaced with foods containing a higher percentage of fats and moderate protein (e.g., meat, poultry, fish, shellfish, eggs, cheese, nuts, and seeds) and other foods low in carbohydrates (e.g., most salad vegetables such as spinach, kale, chard and collards), although other vegetables and fruits (especially berries) are often allowed. The amount of carbohydrate allowed varies with different low-carbohydrate diets.

Such diets are sometimes 'ketogenic' (i.e., they restrict carbohydrate intake sufficiently to cause ketosis). The induction phase of the Atkins diet is ketogenic.

The term "low-carbohydrate diet" is generally applied to diets that restrict carbohydrates to less than 20% of caloric intake, but can also refer to diets that simply restrict or limit carbohydrates to less than recommended proportions (generally less than 45% of total energy coming from carbohydrates).

Low-carbohydrate diets are used to treat or prevent some chronic diseases and conditions, including cardiovascular disease, metabolic syndrome, high blood pressure, and diabetes.

Mediums article I Need More Fat! A Skeptics Experience on a Low Carb Ketogenic Diet (<u>Found Here</u>) is a great place to learn more.

Two scientists who study and experiment with the Ketogenic Diet are <u>Dr. Peter Attia</u> and <u>Dr. Dominic D'Agostino</u>.



You Don't Have To Be A Star Athlete To Benefit From A Little Exercise

Now that you are sleeping and eating better, it is time to get some exercise.

First, some background.

In 1995, the American College of Sports Medicine and the Centers for Disease Control and Prevention published national guidelines on Physical Activity and Public Health. The Committee on Exercise and Cardiac Rehabilitation of the American Heart Association endorsed and supported these recommendations. In 2007, these recommendations were updated to better reflect the current scientific research.

The Journal Circulation reported the following findings: To promote and maintain health, all healthy adults aged 18 to 65 yr need moderate-intensity aerobic (endurance) physical activity for a minimum of 30 min on five days each week or vigorous-intensity aerobic physical activity for a minimum of 20 min on three days each week. Combinations of moderate- and vigorous-intensity activity can be performed to meet this recommendation. For example, a person can meet the recommendation by walking briskly for 30 min twice during the week and then jogging for 20 min on two other days. Moderate-intensity aerobic activity, which is generally equivalent to a brisk walk and noticeably accelerates the heart rate, can be accumulated toward the 30-min minimum by performing bouts each lasting 10 or more minutes. Vigorous-intensity activity is exemplified by jogging and causes rapid breathing and a substantial increase in heart rate. In

addition, every adult should perform activities that maintain or increase muscular strength and endurance a minimum of two days each week. Because of the dose-response relation between physical activity and health, persons who wish to further improve their personal fitness, reduce their risk for chronic diseases and disabilities or prevent unhealthy weight gain may benefit by exceeding the minimum recommended amounts of physical activity.

Minimum Daily Recommendations

Adults ages 18-65

Moderate-Intensity Aerobic Activity 30 minutes 5 days per week

or

Vigorous-Intensity Aerobic Activity 20 Minutes 3 days per week

and

Resistance Training for Muscular Strength 2 days per week

Get That "Feel Good" Sensation

According to the American Heart Association, regular physical activity can relieve tension, anxiety, depression and anger. You may notice a "feel good sensation" immediately following your physical activity, and most people also note an improvement in general well-being over time as physical activity becomes a part of their routine.

Additionally, moderate exercise, like brisk walking can have other benefits such as:

- · Improves blood circulation, which reduces the risk of heart disease
- Keeps weight under control
- · Helps in the battle to guit smoking
- Improves blood cholesterol levels
- · Prevents and manages high blood pressure
- · Prevents bone loss
- · Boosts energy level
- · Helps manage stress
- · Releases tension
- · Promotes enthusiasm and optimism
- Counters anxiety and depression
- Helps you fall asleep faster and sleep more soundly
- · Improves self-image
- · Increases muscle strength, increasing the ability to do other physical activities
- · Provides a way to share an activity with family and friends
- Reduces risk of developing CHD/CVD by 30-40 percent
- Reduced risk of stroke by 20 percent in moderately active people and by 27 percent in those who are highly active
- Establishes good heart-healthy habits in children and counters the conditions (obesity, high blood pressure, poor cholesterol levels, poor lifestyle habits, etc.) that lead to heart attack and stroke later in life
- Helps delay or prevent chronic illnesses and diseases associated with aging and maintains quality of life and independence longer for seniors

Great. However, how will this affect my Testosterone levels?

According to The Endocrine Society research, pre-diabetic, overweight men with hypogonadism show improvements in testosterone levels after lifestyle modifications consisting of calorie and fat reductions and exercise.

Researchers evaluated 891 middle-aged men with impaired glucose tolerance and low testosterone levels who undertook a 1-year lifestyle modification program involving 150 minutes per week of exercise and calorie and fat reductions in their diets.

Participants had a nearly 50% increase in testosterone levels, researchers announced.

So what is the Protocol?

Ben Greenfield, The get-Fit Guy, lays it all out in his article (Found Here)

Here are his six simple strategies for increasing testosterone with exercise:

Tip #1: Sprint

Multiple studies have shown that you can boost your testosterone levels by sprinting. In one study, testosterone levels increased significantly for people who performed a series of very short (but intense) 6-second sprints – and testosterone levels remained high even after those people had fully recovered from the sprint workout.

So how can you implement the strategy of sprinting to increase testosterone? Try performing several sprints on the treadmill after you've lifted weights at the gym, or just head out into the backyard, a park, or your neighborhood block and do a few sprint repeats on your days off from weight training. You can even do your sprints on a bicycle or elliptical trainer. Try to include 5-10 short sprints when you do a sprint workout, sprint no longer than 15 seconds, get full recovery after each sprint (generally 3-4 times longer than you actually sprinted) and do a sprint workout 2-3 times a week for optimal results.

Tip #2: Lift Heavy Stuff

While you can do high reps with low weights or low reps with high weights, studies have shown that it definitely takes heavy weights to significantly boost testosterone. Full body, heavy exercises like squats, deadlifts, bench presses, and Olympic lifts should ideally be used, at 85-95% of your 1RM (or one repetition maximum). You need to do 2-3 full body weight lifting workouts per week to get good testosterone-boosting results (in tip #5, I'll give you a sample workout).

If you are a beginner or new to weight training, don't let this concept of heavy lifting scare you away. You can simulate many of these exercises on weight training machines until you are strong and skilled enough to perform the free weight barbell or dumbbell versions.

Tip #3: Use Long Rest Periods

Scientists have studied the effects of very short rest periods on testosterone and found that longer rest periods of around 120 seconds between sets are better for building testosterone (although you can still build other hormones, such as growth hormone, with shorter rest periods).

Considering what you've just learned about lifting heavy weights, this makes sense – since the shorter your recovery periods, the less weight you are going to be able to lift. However, it can seem like a waste of time to be sitting on your butt for 3 minutes between each exercise. So if your goals are to increase testosterone, I recommend that you maximize your time at the gym by doing alternate activities during these long rest periods, such as stretching, or better yet, exercises that don't stress the same muscles you just worked.

For example, you can do one heavy set of bench presses, recover for just 30-60 seconds, then do one heavy set of squats. Go back and forth until all your sets are done, and you'll get twice as much done in half the time while still getting the testosterone boosting benefits of lifting heavy and long rest periods.

Tip #4: Do Forced Reps

To do a forced repetition, you perform a weight lifting exercise for as many reps as you can, and then have a partner (a "spotter") assist you with completing several additional repetitions (anywhere from 1-5 extra reps).

Research shows that this type of forced rep set generates more testosterone than simply doing as many reps as you can do by yourself.

It is best to do forced reps with a multi-joint, large motor movement exercise. For example, you can do a warm-up set of barbell squats, then, with a partner, a personal trainer, or someone you ask at the gym to help you, choose a weight that allows you to do 5-6 repetitions on your own, but requires an assistant to get another 3-4 reps done after that, for a total of 8-10 reps. You can repeat this for anywhere from 2-6 sets.

While you do not need to perform forced reps for every workout or set that you do, if you are trying to increase testosterone, it can be especially helpful to do your last set of any exercise as a forced rep set.

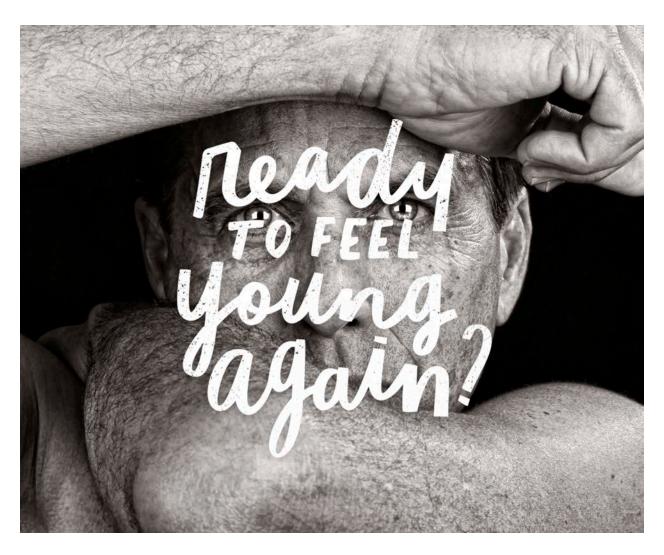
Tip #5: Use Your Legs

In another study that investigated the hormonal response to weight training, participants were split into an arm-only training group and a leg-plus-arm training group. Testosterone increases were significantly higher in the group that added lower body training to their upper body training. While it can be tempting, especially for guys, to focus on exercises like biceps curls and bench pressing, you'll notice far better results for lean muscle mass, energy, sex drive, and fat loss when you include multi-joint leg exercises such as lunges and squats into your regimen. So here's an example of a full body workout you could do three days per week to boost testosterone:

- Warm-up
- 4 sets of 8 repetitions bench press, paired with 4 sets of 8 repetitions squats.
- 4 sets of 8 repetitions deadlifts paired with 4 sets of 8 repetitions pull-ups.
- 6 sets of maximum 10 second sprints.
- Cool-down

Tip #6: Avoid Chronic Cardio

Long endurance sports such as cycling seem to lower testosterone in the same way that weight lifting and weight training seem to increase it. For example, one 2003 study found that testosterone levels were significantly lower in cyclists than age-matched weightlifters or even an untrained control group. Some researchers have even concluded that this type of low testosterone in endurance athletes is an adaptation that gives cyclists or runners a competitive advantage – since the extra muscle mass from testosterone would probably slow you down. So if you are trying to boost testosterone, avoid long jaunts on the treadmill, and accept the fact that if you are going to run marathons or do Ironman triathlon, you may have to settle for slightly lower testosterone levels.



How To Get Healthy Without Pharmaceuticals

According to the Journal of the American College of Nutrition "Inadequate micronutrient intake among older adults is common despite the increased prevalence of fortified/enriched foods in the American diet." Further, The Archives of Biochemistry and Biophysics article *A role for supplements in optimizing health: the metabolic tune-up* concludes An optimum intake of micronutrients and metabolites, which varies with age and genetic constitution, would tune up metabolism and give a marked increase in health, particularly for the poor, young, obese, and elderly, at little cost.

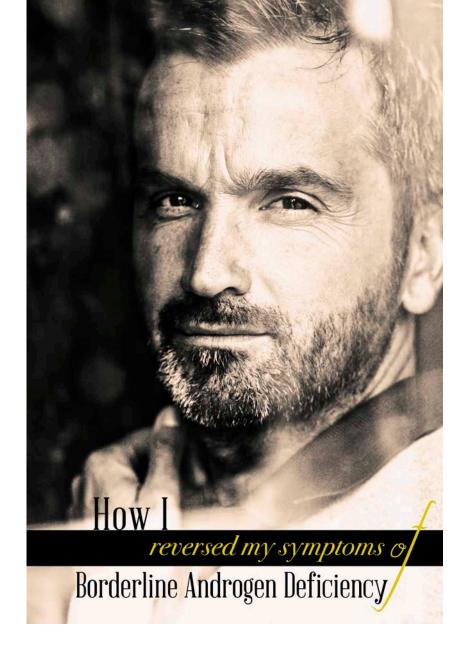
The American Diet and The Need For Dietary Supplementation (found here) sums it up nicely as follows:

There is general, if not universal, agreement among objective nutrition scientists, that the vast majority of the foods typically consumed by Americans are best described as fraudulent foods or, better yet, as "dismembered foods," a term used by Donald Davis, Ph.D., a nutritional biochemist at the University of Texas. Such food products include most snacks, virtually all foods sold in fast-food chains, over-processed and over-refined food products sold in supermarkets and grocery stores, and soft-drinks, both "naturally" and artificially sweetened. Collectively, these food products are high in added sugar, salt, saturated and omega-6 polyunsaturated fat and contain numerous additives, including artificial colors and flavors,

artificial sweeteners, preservatives and synthetic antioxidants. Annually, billions of dollars are spent in promoting sales of these food products through the mass media.

It goes on to say: One strategy that can be used to mitigate the poor dietary habits of Americans is to advocate the use of dietary supplements. There are numerous intervention studies that have shown the therapeutic effects of a wide variety of supplements in the alleviation and even, cure, of many common diseases.

Finally, what health care practitioners need to be especially aware of is the importance of increased micronutrient needs, especially during physiologically more demanding stages of the life cycle, such as growth, pregnancy and aging, and during excessive physical and emotional stress.



How I Reversed My Symptoms of Borderline Androgen Deficiency

Abbey Research Ltd. has spent the last decade studying the nutritional and metabolic causes underlying Borderline Androgen Deficiency. The culmination of that research led to the introduction of Stronvivo in January of 2013.

Stronvivo

Stronvivo is an Informed Choice certified nutritional supplement(1) comprised of natural, USP-verified, pharmaceutical-grade ingredients (2) designed to improve the health of the endothelium(3), stimulate the production of nitric oxide (4), improve circulation (5), increase blood flow(6), boost energy(7) and inhibit platelet aggregation and adherence(8), all of which play an integral role in both male(9) and female(10) sexual function.

- (1) http://www.informed-choice.org/faq
- (2) http://www.allamericanpharmaceutical.com/quality.php
- (3-8) http://circ.ahajournals.org/content/8/2/77.short
 http://circ.ahajournals.org/content/115/10/1285.full
 http://circ.ahajournals.org/content/100/19/1951.full
- (9) http://www.repositoryeffetti.it/2010/agoraDisfunzioneErettile/download/letteratura/sicurezzaCardiovascolare/Montorsi2005.pdf
- (10) http://europepmc.org/abstract/med/9647967

Why these ingredients?

Stronvivo is comprised of 5 ingredients, L-Arginine(1)(2), L-Citrulline(3), L-Carnitine (4)(5), Magnesium(6)(7) and Zinc(8)(9), all of which have been validated in numerous double blind placebo controlled studies of large patient populations spanning continents, age, sex and BMI

- (1) http://circ.ahajournals.org/content/93/12/2135.short
- (2) https://www.revlabs.com/musclerev-trial/lp2/L-Arginine-Study2.pdf
- (3) http://www.goldjournal.net/article/S0090-4295(10)01661-4/abstract
- (4) http://circ.ahajournals.org/content/77/4/767.short
- (5) http://link.springer.com/article/10.2165/00003495-198734010-00001
- (6) http://circ.ahajournals.org/content/102/19/2353.short
- (7) https://air.unipr.it/retrieve/handle/11381/2380048/8653/ magnesium%20and%20anabolic%20hormones%20in%20older%20men.pdf
- (8) http://www.sciencedirect.com/science/article/pii/S089990079680058X
- (9) http://jn.nutrition.org/content/116/6/1045.full.pdf

Clinical Results

Published in the Journal of Sexual Medicine in June of 2015

Oral Supplementation with Stronvivo Improves Male Erectile Function and Female Sexual Desire

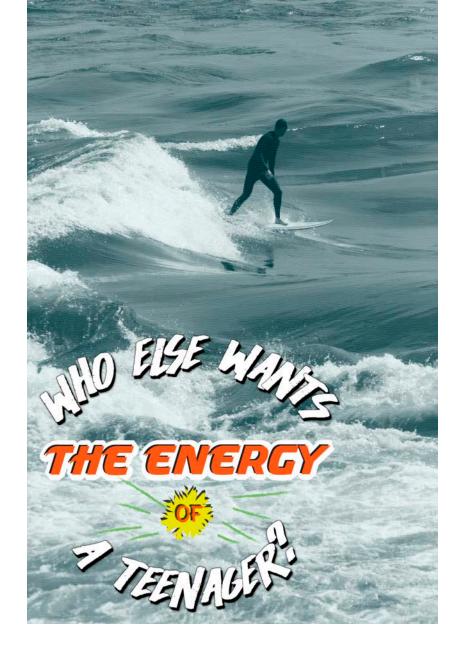
Vascoe, J 1; Merrill, R 1; Vieira, K 2 1: Abbey Research Ltd., USA; 2: The Med Writers, USA

Objective(s). Stronvivo is an Informed Choice certified nutritional supplement, comprised of USP-verified, pharmaceutical grade ingredients, designed to improve the health of the endothelium, stimulate the production of nitric oxide, improve circulation, boost energy and inhibit platelet aggregation and adherence. Given that these processes play an integral role in sexual function, it was hypothesized that Stronvivo would have additional beneficial effects in this area. The current study was an open-label trial exploring the effect of Stronvivo supplementation on various subjective ratings of sexual functioning.

Material(s) and Method(s). The sample included 60 adults (m/f 51/9), ages 30-84, BMI 21-56. Patients were administered 6 capsules of Stronvivo daily for 90 days, which equated to a total daily intake of 2,000mg of L-arginine, 1,000mg of L-citrulline, 1,000mg of L-carnitine, 30mg of zinc, and 400mg of magnesium. Patients were assessed at four time points: baseline (prior to supplementation with Stronvivo), 30-day follow-up, 60-day follow-up and 90-day follow-up. Measures included: FSFI, IIEF, ADAM, and PHQ-9.

Result(s). Mean scores on the subscales of the FSFI, (i.e., Desire, Arousal, Lubrication, Orgasm, Satisfaction, Pain) demonstrated linear improvement. Mean full-scale FSFI scores were as follows: baseline M=20.84; 30-day M=24.77; 60-day M= 25.39; and 90-day M=29.33 with the biggest improvements shown in the domains of Desire (1.94), Arousal (1.47), Orgasm (1.42) and Lubrication (1.26). For males, significant improvement was noted in terms of IIEF total scores from baseline (M=43.65) to 60 days (M=52.40). Ratings of erectile dysfunction improved from baseline to 60 days and ratings of sexual desire improved from baseline to all other time points. On the ADAM, over half the sample meeting criteria for androgen deficiency at baseline no longer met criteria after 30 days (n=22; 51%). Finally, significant improvement in depressive symptoms (PHQ-9) was noted for males after 30 days and for females after 60 days.

Conclusion(s). Though results must be interpreted with caution, females reported improvements in all areas of sexual functioning, as well as significant improvements in subjective mood while taking Stronvivo. Males reported improved erectile function and sexual desire following initiation of Stronvivo. Further, taking Stronvivo for a month led to reduced symptoms of androgen deficiency and significant improvements in subjective mood.

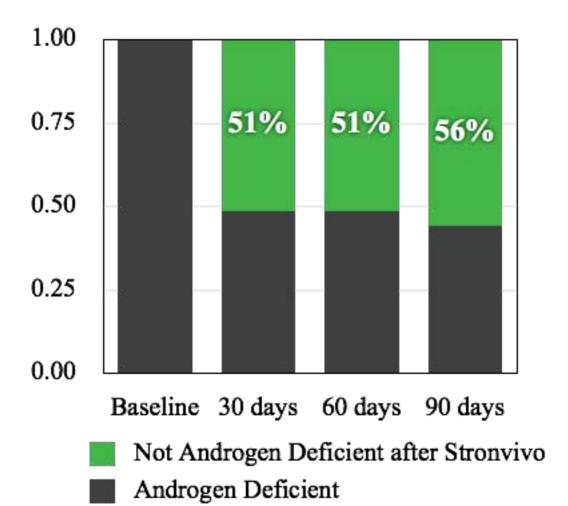


Who Else Want's To Feel Like a Kid Again?

Most interesting in term of Borderline Androgen Deficiency were the results seen on the Androgen Deficiency in Aging Male (ADAM) Questionnaire. ADAM (Androgen Deficiency in Aging Males) is designed to assess for symptoms of low testosterone. The questionnaire contains ten items.

ADAM - over half (51.2%) of the men meeting criteria for androgen deficiency at baseline no longer met criteria after 30 days of stronvivo supplementation. The percentage held constant at 60 days. After 90 days of stronvivo supplementation, 55.8% of the men meeting criteria for androgen deficiency at baseline no longer met criteria. The labeled/green areas indicate the percentage of men whose ADAM results indicated androgen deficiency at Baseline who subsequently indicated not likely to be androgen deficient after taking Stronvivo for the time period noted on the x-axis.

ADAM



Stronvivo Fast Facts

73% of Patients Feel More Alert

Patients report being wide-awake and ready to go in the mornings as well as more rested throughout the day.

78% of Patients Have More Energy

Reports include having significantly more energy, better physical endurance, more energy for sexual activity and a need for less sleep, all without stimulants.

68% of Patients Report a Greater Sense of Well-Being

More peaceful, less stressed, more content and more emotionally connected to others are common experiences

So How Does Stronvivo Work?

Stronvivo was designed to help the Endothelium produce more Nitric Oxide. Nitric Oxide has a relaxing effect on your blood vessels, which helps keep blood circulating smoothly throughout your body, delivering nutrients and oxygen to the brain, muscles, organs and skin. When your body is getting nutrient and oxygen rich blood, you naturally feel more rested, have

When your body is getting nutrient and oxygen rich blood, you naturally feel more rested, have greater endurance and are more content.

- Improved Blood Flow

Nitric Oxide has a relaxing effect on your blood vessels, which helps keep blood circulating smoothly throughout your body

- Healthy Hormone Levels

The ingredients in stronvivo have been shown to support healthy hormone levels and slow the pace of breakdown of hormones in the body

- Supports Immune System stronvivo includes amino acids and minerals shown to support a healthy immune system

Patient Feedback

"Stronvivo increased my energy levels, upped my stamina, rejuvenated my sex life and provided me a superior sense of well-being!"

"I feel like I'm 20 again! I wake up with so much more energy and my wife and I are having better sex than when we were dating! Stronvivo is a must for all men, and women!"

"It's like Yoga in a bottle! I'm feeling rested, peaceful, and my libido is way up!"

"Before taking Stronvivo, I would fall asleep every night after dinner. I generally had low energy and my sexual performance was terrible. Now that I am taking Stronvivo, I have much more energy, and my sex life is much better. I am extremely happy that Stronvivo is available to me. It has significantly improved my life. Thank you, Stronvivo!"

Improved Blood Flow

To understand how Stronvivo works, you have to get to know your endothelium. Never heard of it? That's okay — medical researchers have only recently begun to recognize the importance of the endothelium. Picture the vast network of arteries, veins, and capillaries that make up your circulatory system: The endothelium lines all those blood vessels, which means you have roughly 60,000 miles-worth of endothelium cells.

One of the endothelium's primary jobs is to help regulate blood flow through that maze of blood vessels. It does this in part by producing nitric oxide. Simply put, nitric oxide has a relaxing effect on your blood vessels, which helps keep blood circulating smoothly throughout your body, delivering nutrients and oxygen to the brain, muscles, organs, and skin. When nitric oxide levels fall, arteries stiffen and blood circulation is compromised; as a result, your heart is stressed, your brain activity suffers, and your energy drops. Poor circulation can also impair sexual performance in men and women because the genitalia depend on a vigorous blood supply for you to achieve satisfaction.

When the endothelium begins to break down, scarring and inflammation can harm the walls of blood vessels. Inflammation is the cause of many diseases in the body, but we know that it is directly tied to heart disease. What's more, the drop in nitric oxide can lead to hardening of blood vessels, raising blood pressure and the risk clots and strokes. When nitric oxide is in good supply, the endothelium can actually heal the plaque and scarring in arteries and repair itself, according to studies in the AHA journal Circulation. As a result, blood pressure drops and circulation to the brain, muscles, organs, and skin improves.

Looking at research on nitric oxide, Doctors discovered that certain amino acids such as L-arginine and L-citrulline could enhance the endothelium's nitric oxide production. When patients received supplements containing these amino acids, the results were dramatic. "They had more energy, they were excited about exercise, they slept better, their circulation improved, and their sex lives benefited as well."

Energy

Remember that boundless energy of youth? That was due in part to brimming levels of nitric oxide. As it helps dilate blood vessels, nitric oxide smoothes the delivery of nutrients and oxygen to muscles and helps clear waste products that can hinder muscle performance, allowing you to tire more quickly. As your energy increases, so does your activity throughout the day, and that in turn will help you sleep better at night. Fitness researchers have found that regular exercise dramatically improves the quality of sleep.

Alertness

Nitric oxide does more than relax blood vessels: It also smoothes communication in the nervous system. When brain researchers study memory and learning, they find that boosting levels of nitric oxide increases recall and the ability to learn new skills. Some studies have linked the low levels of nitric oxide to the buildup of plaque in the brain that is the hallmark sign of Alzheimer's disease.

Quality

Manufacturing

Stronvivo is made in a US manufacturing facility/plant that is cGMP certified by the FDA and has been developing and producing quality products for the past three decades. The plant has the following certifications; FDA Registered Facility, USDA Certified Facility, Safe Quality Food, Informed-Choice, and NSF. The standard of quality at the plant are higher than those required for nutritional supplements. The quality assurance process starts before raw materials enter the plant and continue throughout the manufacturing and packing process.

Only USP Grade materials (tested per the United States Pharmacopeia monograph procedures) are used at all times. Through inbound testing of each and every barrel, contaminated raw materials are caught before they even make it through the doors. The plant receives raw materials from around the globe. To ensure that only pure ingredients are used, each batch of raw material undergoes rigorous scientific testing by quality control experts. Each material is sampled and guarantined until it is completely approved.

Next, full Microbiological testing is performed. This assures that every product meets the FDA standard for contamination. The material is also screened for steroids, melamine and other unwanted substances that may have been put into the raw material. Once all testing is completed, reviewed, and approved; each ingredient is issued a Certificate of Analysis. This is the first defense to guarantee that strict purity, safety, and efficacy standards are met.

Designed specifically for FDA validation, the Bran & Luebbe & Buchii FT-NIR Analyzer is used at the plant as one of the most efficient and effective methods of quantitative and qualitative testing. This sophisticated laboratory equipment uses High-Performance Crystal Spectroscopy to test and certify every single molecule in each batch of our product. In the same way that CSI Laboratories dissect DNA evidence, our products are scientifically justified and 'fingerprinted'.

High-Performance Liquid Chromatography, Gas Chromatography, Mass Spectrometry, and Melting Point analysis is also used as needed.

With full inline testing from start to finish and independent laboratory testing for cGMP Qualification, cGMP Quantification, Microbial, Steroid Screen, Stimulant Screen, Heavy Metals, and Nutritional Facts, 100% of all inbound raw materials are FDA validated, 100% of all finished product is FDA validated, and 100% of all finished product always meets label claims.

cGMP Facts

Facts About Current Good Manufacturing Practices (cGMPs)
Current Good Manufacturing Practices (cGMPs) for human pharmaceuticals affect every
American. Consumers expect that each batch of medicines they take will meet quality
standards so that they will be safe and effective. Most people, however, are not aware of
cGMPs, or how FDA assures that drug manufacturing processes meet these basic objectives.

What are cGMPs?

cGMP refers to the Current Good Manufacturing Practice regulations enforced by the US Food and Drug Administration (FDA). cGMPs provide for systems that assure proper design, monitoring, and control of manufacturing processes and facilities. Adherence to the cGMP regulations assures the identity, strength, quality, and purity of drug products by requiring that manufacturers of medications adequately control manufacturing operations. This includes establishing strong quality management systems, obtaining appropriate quality raw materials, establishing robust operating procedures, detecting and investigating product quality deviations, and maintaining reliable testing laboratories. This formal system of controls at a pharmaceutical company, if adequately put into practice, helps to prevent instances of contamination, mix-ups, deviations, failures, and errors. This assures that drug products meet their quality standards. The cGMP requirements were established to be flexible in order to allow each manufacturer to decide individually how to best implement the necessary controls by using scientifically sound design, processing methods, and testing procedures. The flexibility in these regulations allows companies to use modern technologies and innovative approaches to achieve higher quality through continual improvement. Accordingly, the "c" in cGMP stands for "current," requiring companies to use technologies and systems that are up-to-date in order to comply with the regulations. Systems and equipment that may have been "top-of-the-line" to prevent contamination, mix-ups, and errors 10 or 20 years ago may be less than adequate by today's standards.

Why are cGMPs so important?

A consumer usually cannot detect (through smell, touch, or sight) that a drug product is safe or if it will work. While cGMPs require testing, testing alone is not adequate to ensure quality. In most instances, testing is done on a small sample of a batch (for example, a drug manufacturer may test 100 tablets from a batch that contains 2 million tablets), so that most of the batch can be used for patients rather than destroyed by testing. Therefore, it is important that drugs are manufactured under conditions and practices required by the cGMP regulations to assure that quality is built into the design and manufacturing process at every step. Facilities that are in good condition, equipment that is properly maintained and calibrated, employees who are

qualified and fully trained, and processes that are reliable and reproducible, are a few examples of how cGMP requirements help to assure the safety and efficacy of drug products. How does FDA determine if a company is complying with cGMP regulations? FDA inspects pharmaceutical manufacturing facilities worldwide using scientifically and cGMP-trained individuals whose job it is to evaluate whether the company is following the cGMP regulations.

If a manufacturer is not following cGMPs, are drug products safe for use?

If a company is not complying with cGMP regulations, any drug it makes is considered "adulterated" under the law. This kind of adulteration means that the drug was not manufactured under conditions that comply with cGMP.

For consumers currently taking medicines from a company that was not following cGMPs, FDA usually advises these consumers not to interrupt their drug therapy, which could have serious implications for their health. Consumers should seek advice from their health care professionals before stopping or changing medications. Health care professionals are best able to balance risks and benefits and make the right decision for their patients.

Informed-Choice

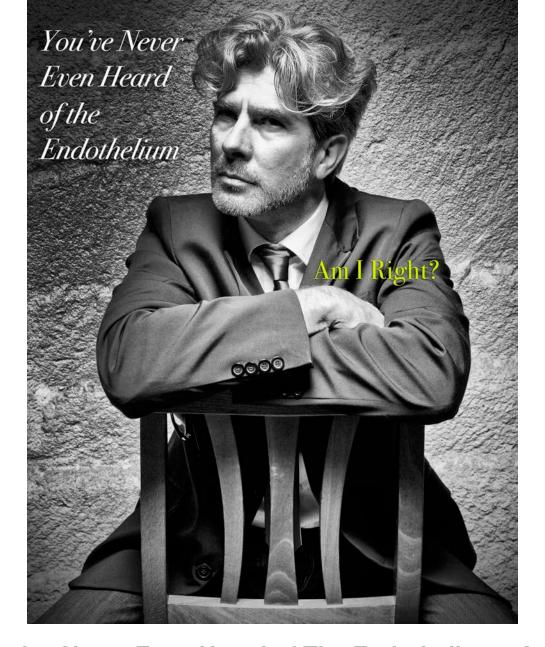
INFORMED-CHOICE is a certification program for sports supplements, ingredients and manufacturing facilities, which assures athletes that products carrying the INFORMED-CHOICE mark have been regularly tested for substances considered prohibited in sport. In addition, INFORMED-CHOICE also ensures that products have been manufactured to high-quality standards. Responsible supplement companies have made INFORMED-CHOICE part of their existing quality assurance systems to ensure their products are safer for athletes to use.

Research has shown that some supplement products have been found to be contaminated with low levels of substances that are prohibited by WADA (the World Anti-Doping Agency) and other sporting bodies. The INFORMED-CHOICE program aims to work closely with supplement manufacturers and suppliers by reviewing the quality systems they have in place at the manufacturing facility and by providing high quality analytical testing for products/ ingredients to minimize the incidence of banned contaminants finding their way into sport. It also aims to provide athletes with an effective risk management service so that they can choose products that have undergone additional quality control testing as required in elite sport.

The INFORMED-CHOICE certification program was established in 2007 by one of the world's leading sports doping control laboratories, HFL Sport Science. Although HFL has been testing supplements since 2002, it became clear that there was a need for a comprehensive certification program which not only tested products for banned substances, but that also ensured that products were manufactured in accordance with good manufacturing practices.







You've Never Even Heard of The Endothelium - Am I Right?

Understanding the Endothelium

There are approximately 60,000 miles, over 300 million feet, of blood vessels in an adult human body. This vast network of arteries, veins and capillaries is maintained and a protected by an inner sheath of microscopic cells called "endothelial" cells. These many hundreds of thousands of cells, together comprising the "endothelium," form the inner lining of blood vessels and lymph vessels, forming a thin layer between the vessel walls and the flowing blood, and serving as an interface between the blood and the rest or our body.

Once considered merely an inert "Teflon-like" inner lining of the blood vessels, the endothelium is now understood to be the single largest secreting organ in the body. Further, the endothelium is highly active in regulating circulatory stability through blood pressure functions (e.g. vessel dilation and contraction), inflammatory processes, and coagulation.

The Role of Nitric Oxide in the Vascular System

In the early 1980s, after having established that the endothelium played a surprisingly active role our vascular system, researchers Robert F. Furchgott and Louis J. Ignarro sought what was called the EDRF, or the "endothelium-derived relaxing factor," an unknown signaling mechanism through which the endothelium could communicate with and regulate surrounding vascular tissues. During their research, Furchgott and Ignarro independently discovered that the healthy endothelium secretes substances which protect vascular health. Chief among these is nitric-oxide, a tiny two-atom gas, which is now considered the hallmark of normal endothelial function and the elusive "signaling factor" they had been searching for. Importantly, this was the first time that a gas had been implicated as a signaling mechanism in any biological system, let alone in the human body. For this remarkable discovery, Furchgott and Ignarro, together with Dr. Ferid Murad (who had initially proposed that a gas could be controlling aspects of vascular function) were awarded the Nobel Prize in medicine in 1998.

Building on Furchgott et al.'s work, it has now been established that Nitric Oxide (NO) is involved in local regulation of critical processes, including:

- · Vascular tone
- Inflammation
- Coagulation
- Oxidation

If these processes are not strictly regulated, they can lead to impaired vascular health, potentially creating atherosclerosis, cardiovascular, and autoimmune disease. Further, NO has been show to protect the heart, stimulate the brain, and kill bacteria, thus playing a pivotal role in a wide variety of diseases and conditions.

If the endothelium becomes damaged and the NO levels become imbalanced, cells which should remain in the blood can leak through blood vessels and into adjacent body tissue. Some of the leaked cells can include proteins, such as the C-Reactive protein, which is produced by the liver and causes inflammation. By inhibiting NO, endothelial signaling can become impaired, and disease may result.

Because the endothelium actively maintains approximately 60,000 miles of blood vessels in our body, endothelial dysfunction has been linked to a wide variety of diseases, including:

- Diabetes
- Atherosclerosis
- Heart Disease and Stroke
- Hypertension
- Multiple sclerosis
- Lupus
- Scleroderma
- Rheumatoid arthritis
- ALS
- Parkinson's
- Hypercoagulation of blood, thrombosis, clotting disorders
- Renal Failure

- Metabolic Syndrome- abdominal obesity, hypertension, insulin resistance
- Sleep Apnea (as a cause of endothelial dysfunction)
- Glaucoma

Given that a wide body of research has established the role of the endothelium (and nitric oxide) in the overall health of the human body, the importance of understanding how the endothelium becomes damaged, and how to repair that damage, becomes clear.

History

Stronvivo is a nutritional supplement based on the Nobel Prize winning work of Dr. Louis Ignarro, among others. A product of years of research by a select number of the countries leading medical research doctors Stronvivo was originally conceived as an alternative to the daily aspirin (lowering risk of heart attacks) with the benefits of an erectile dysfunction medicine (i.e. Cialis, Viagra, etc.).

It is now understood that the stronvivo formula both strengthens and repairs the endothelium, the largest secreting organ in the human body. A healthy endothelium relaxes smooth muscle tissues that limit blood flow and enables your body to create more Nitric Oxide (NO), which is used for controlling the nervous system, protecting against infection, regulating blood pressure, and maintaining optimum circulation.

Research conducted by the American Heart Association shows that our bodies produce less and less Nitric Oxide as we age. When taken daily, the ingredients of Stronvivo have been shown to have a positive effect on replacing your lost Nitric Oxide, improving your blood flow, giving you more energy, supporting healthy testosterone levels and improving performance throughout your body - mind (cognition and concentration), muscles (endurance and recovery), organs (including sexual organs) and skin (healthier and more elastic).

Clinical research shows that increased levels of NO leads to approximately 24% faster healing post surgery, a decrease in blood pressure in the hypertensive by as much as 60 points, a significant reduction in bad cholesterol levels, reduction of the common cold infection, symptom intensity and symptom duration. A recent study in the Journal Circulation showed that despite exposure to high risk factors (smoking, alcohol, sedentary lifestyle, poor diet, over-weight, chronic exhaustion...) improved NO bioavailability leads to improved endothelial function which has a positive cascading effect throughout the body.

Conclusion

The science is clear. The stresses of modern life (pollution, toxic chemicals in our food and the products that we use, nutrient poor diet, stress, lack of sleep and a sedentary lifestyle) are at the very foundation of many of the medical issues we currently face. Staggering numbers of Americans suffer from Obesity, Cardiovascular Disease, Metabolic Syndrome and Dementia.

Borderline Androgen Deficiency is often one of the initial stops on the road to these critical chronic conditions. Identifying Borderline Androgen Deficiency is step one. Making the lifestyle changes necessary to reverse Borderline Androgen Deficiency is paramount.

Before you do another thing, take the test (Found Here.) Consult with you Doctor or Healthcare provider. Show them your test results. Use their feedback and this manual to develop your strategy. Get to know the Four Pillars of Physical Health; Good Sleep Hygiene, Proper Nutrition, Adequate Exercise and Micronutrient Supplementation. Remember, If you can focus on one area at a time, make small adjustments, experience small victories, in short order you will feel better than you have in years.

We look forward to supporting your efforts and would be honored to be part of your "good health" team.

Sincerely,

The Stronvivo Team

stronvivo.com

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