



In Defense of Testosterone

Testosterone: A hormone that causes facial hair, muscularity, a deep voice, speeding tickets, the desire to watch professional wrestling, Arnold Schwarzenegger movies, war, fistfights, and the need to purchase cocktails for women.

Corny joke, I know—maybe even a bit sexist. But there's some truth to it. Testosterone is responsible for many of the physical, mental, and emotional differences between males and females. But this hormone also has far-reaching physiological functions and a decline in its production—which is a normal part of aging—impacts multiple aspects of men's health.

Sex drive and erectile function, mood, sleep, energy, focus and motivation, body fat and muscle mass, bone density, insulin sensitivity, cardiovascular health: All may be adversely affected by decreases in testosterone—and improved by testosterone replacement therapy (TRT).

TRT gets a bum rap. After a steady rise in popularity following AndroGel's approval in the early 2000s, usage dropped drastically beginning in 2014, when the FDA reported "possible" links with heart attacks and strokes. Recent research, however, confirms that TRT is not only safe but actually protective against cardiovascular disease. Moreover, it has a broad range of additional benefits.

That's why I want to take the stand, make a case in defense of testosterone, and explain why I have

prescribed TRT to hundreds of patients—and use it myself—to bring hormone levels up into healthy range.

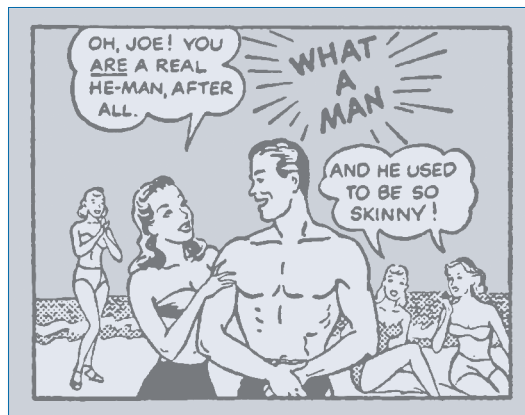
Safety First

Let's address safety issues first. The handful of studies that prompted the FDA's cardiovascular warnings struck fear into many doctors and patients. However, this finding is not supported by the bulk of the medical literature, as demonstrated by an exceptionally comprehensive meta-analysis published in 2017.

Canadian researchers reviewed 87 randomized controlled clinical trials and 51 nonrandomized studies to evaluate the harms and benefits of TRT in men with low testosterone levels. They concluded, "Consistent with most previous meta-analyses, we found that

the use of TRT improved quality of life, depression, libido, and erectile function, with no increase in cardiovascular death or other major adverse events." Although controversy persists, more and more experts now agree that TRT has a neutral to positive effect on risk of heart attack and stroke.

What about prostate cancer? This is a logical concern, since testosterone suppression is a common treatment for this disease. However, decades of research confirm that there is no relationship between a man's natural testosterone level and his risk of prostate cancer. Nor is there any evidence that



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Health & Healing

YOUR DEFINITIVE GUIDE TO WELLNESS MEDICINE

Julian Whitaker, MD, practiced medicine for over 40 years, after receiving degrees from Dartmouth College and Emory University. Dr. Whitaker has long been an advocate of living a healthy life. Dr. Whitaker is compensated on the sales of the supplements he formulates with Healthy Directions, LLC. He is not compensated for other companies' products that he recommends in this newsletter. He is the author of 14 health books including: *The Mini-Fast Diet*, *The Whitaker Wellness Weight Loss Program*, *Reversing Hypertension*, *Shed 10 Years in 10 Weeks*, *The Pain Relief Breakthrough*, *Reversing Heart Disease*, *Reversing Diabetes*, and *Dr. Whitaker's Guide to Natural Healing*.

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Dear Reader,

The world is alive with the sound of music at this time of year. Shopping malls and radio stations have been playing Christmas songs since early November, and although some complain that the holiday season is too long, I love everything about it—especially the music.

As the late, great Aretha Franklin said, “Music does a lot of things for a lot of people. It’s transporting, for sure. It can take you right back, years back, to the very moment certain things happened in your life. It’s uplifting, it’s encouraging, it’s strengthening.”

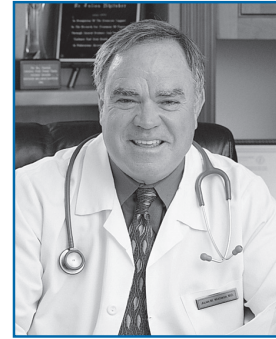
It most certainly affects mood and emotions. I am always stirred by the soundtrack of *Les Miserables*, and there’s a hilarious *Saturday Night Live* skit where everyone in an office ends up bawling their eyes out to Adele’s breakup song “Someone Like You.” Classical music, especially Baroque, helps with concentration and focus, and who doesn’t feel energized and motivated by a rousing favorite song?

Music also has physiological effects on the body via the autonomic nervous system, which controls unconscious functions such as heartbeat, breathing, and metabolism. Soothing, relaxing music is a proven treatment for insomnia that enhances sleep quality, duration, and the time it takes to fall asleep. Music therapy improves mood in patients with depression and anxiety, agitation in those with dementia, and communication skills in children who have autism. A 2017 study found that it also lowered pain scores of patients who had undergone spinal surgery.

Playing an instrument or singing provides additional benefits. There’s a perception that only kids can pick up a new musical skill, but that’s not true. And studies show that older adults who learn an instrument have improvements in memory, verbal fluency, hand-eye coordination, and processing speed. You may not be the next Maria Callas or Eric Clapton, but time and repetition pay off. Elli, who sang in a church choir decades ago, bought a keyboard and hired a voice coach at age 80. She performed at a recital the following year. Ron began taking piano lessons around age 50. Fifteen years later he is an accomplished pianist.

I’ve played the guitar on and (mostly) off for years, and although I’m not very good, I do enjoy strumming and singing every now and then. What I lack in talent and training, I make up for in enthusiasm!

Happy holidays,



Julian Whitaker, MD
 America's Wellness Doctor

Founder of the Whitaker Wellness Institute, Newport Beach, California

TRT raises PSA or increases cancer risk. Most telling, doctors are now prescribing TRT for men with a history of low-risk prostate cancer, as studies show that it poses no danger of progression or recurrence and dramatically improves quality of life.

Obesity, Diabetes, and Heart Disease

Most men use testosterone because it makes them feel better—sexier, stronger, and more positive, focused, and energetic. But there's more.

It's no secret that we are in the midst of an epidemic of obesity and diabetes. More than 40 percent of American adults are obese, and 12 percent have diabetes. What you may not know is that one in three men of all ages who are obese or diabetic have below-normal testosterone levels. Although TRT is rarely prescribed for males with "diabesity," it makes a lot of sense. Testosterone plays a central role in regulating muscle/fat mass and insulin sensitivity, and raising levels with TRT results in losses of body fat, gains in muscle mass, and improvements in insulin sensitivity and inflammation.

As noted earlier, many studies are finding that men with baseline low testosterone who were prescribed TRT had better cardiovascular outcomes than untreated men. Testosterone may even turn out to be an accepted treatment for cardiovascular disease. Patients with heart failure, for example, have significant declines in muscle mass, strength, and endurance. Research suggests that TRT reduces muscle wasting and improves strength and exercise capacity as well as some markers of heart function.

Women and Testosterone

Testosterone may be the quintessential male hormone, but women produce it too. As in men, testosterone affects sexual function, fat distribution, and muscle and bone mass—and like other sex hormones, levels decline during menopause. Although estrogen and progesterone are prescribed to ease menopausal symptoms, testosterone replacement is rarely discussed. This is unfortunate, because adding small amounts of testosterone to female hormone replacement therapy has several benefits.

Most noticeable is increased sex drive, which for many women bottoms out around menopause. It also improves energy, mood, and motivation, as well as muscle strength and bone density. Although a little testosterone is a good thing, too much may cause acne, hair growth in unwanted places, and other side effects. However, it is generally well tolerated, and most women—and their partners—give it a thumbs-up.

Natural Ways to Raise Testosterone

I am often asked about natural ways to raise testosterone. A good workout, especially resistance training, temporarily boosts levels, and regular exercise improves body composition and insulin sensitivity, which may result in increases over the long term. Although obesity is associated with suboptimal testosterone production, weight loss helps it bounce back—and the more pounds lost, the more significant the rebound.

Vitamin D, zinc, magnesium, and boron may also help, especially if nutritional status is low to begin with. But don't expect miracles. The same goes for supplements that claim to be testosterone boosters. Some of them, including maca, ginseng,

Tribulus terrestris, fenugreek, and D-aspartic acid, may give libido a lift and possibly have some effect on testosterone. But for optimal results, stick with TRT.

TRT requires a prescription and is available in gels, creams, patches, implants, injections, and pills. For several years I have been using testosterone gel that I order from a compounding pharmacy, and I'm quite satisfied with the results. I feel strong and generally upbeat with plenty of energy. I've also had a few speeding tickets and like Arnold Schwarzenegger movies—but I only buy drinks for my wife.

References

- Dhindsa S, et al. Hypogonadotropic hypogonadism in men with diabesity. *Diabetes Care*. 2018 Jul;41(7):1516-25.
- Elliott J, et al. Testosterone therapy in hypogonadal men: a systematic review and network meta-analysis. *BMJ Open*. 2017 Nov 16;7(11):e015284. doi: 10.1136/bmjopen-2016-015284.
- Nguyen TM, et al. Testosterone therapy among prostate cancer survivors. *Sex Med Rev*. 2016 Oct;4(4):376-88.

My Recommendations

- ▶ If you feel you could benefit from testosterone replacement therapy, talk to your doctor about a blood test to determine your level. All forms of TRT seem to be comparable except for oral, which is not recommended. Have your hormones retested periodically and your dosage adjusted, if needed, to make sure your testosterone is in the target range of a healthy young man.
- ▶ To locate a doctor knowledgeable in TRT, visit A4M.com or ACAM.org.

Dear Dr. Whitaker

Q *I have been advised to stay away from spinach and other foods high in oxalates to prevent kidney stones. I am finding a lot of greens supplements contain spinach. Any suggestions? — Barbara A., via email*

A Oxalates are naturally occurring compounds that are particularly abundant in spinach, rhubarb, bran, potatoes, beets, and some nuts and beans. They pose no problem for most people but may increase risk for anyone prone to calcium oxalate kidney stones. Although spinach is a common ingredient in these supplements (dehydrated powders of nutrient-dense green vegetables, fruits, and other plants), many brands contain low-oxalate greens such as kale, spirulina, and chlorella. Other preventive measures include a diet rich in calcium, which binds to oxalate and prevents its excretion in the urine, and drinking lots of water. Aim for two quarts daily, mixed with four ounces of lemon juice to further discourage stone formation. Helpful supplements include magnesium 400–500 mg and vitamin B6 75 mg daily.

Q *My husband is doing very well taking a comprehensive berberine supplement. His A1C is down to 5.7 from 5.9 and cholesterol is down 100 points. But I am somewhat concerned about some of the independent reviews on berberine reporting the inability for the body to build muscle while taking it. I also read it destroys gut flora. What is your comment about these two concerns? — Debbi H., via email*

A Berberine does alter gut flora—but in a good way. In fact, modifying the intestinal microbiota is one way in which berberine improves insulin sensitivity, blood sugar control, lipids, and weight loss. As for its effects on muscle, I am aware of a handful of animal studies suggesting berberine may affect muscle building, and its mechanism of action makes this theoretically possible. However, the bulk of the research shows that because this supplement inhibits fat accumulation, it encourages weight loss and improves body composition (muscle-fat ratio). Intensifying resistance exercise would likely counter any potential adverse effects on the muscles.

Q *I have been hearing good things about bone broth for skin and joints, but the brands in my health food store seem ridiculously expensive. Does homemade bone broth have the same benefits? — Elizabeth S., California*

A Whether it's store-bought or made at home by simmering beef or poultry bones for several hours (with a couple of tablespoons of vinegar to help leach out minerals), bone broth is a good source of protein, potassium, and collagen. Although there isn't a lot of research on this traditional food, one study found that chicken soup improved symptoms of upper respiratory infections, and collagen supplements and powders (not bone broth, per se) have been shown to reduce wrinkles and arthritis pain. Bone broth is also reported to support immune and gut health—and it's a great use for the remnants of your holiday turkeys and roasts.

 Read more at drwhitaker.com, and send your own questions to drwhitakerquestions@drwhitaker.com.

New Online: Antivirals: Overhyped



I hope the natural preventives discussed last month are helping you stay hale and hearty during flu season. If you do come down with a bug, rest, drink lots of fluids, and try traditional remedies such as saline nasal rinses for congestion and honey and herbal tea for coughs, along with short-term use of targeted over-the-counter drugs for symptomatic relief, if needed. Of course you should see your doctor if symptoms are severe or persistent—but don't request or accept drugs that have little to no chance of helping.

Antibiotics are worthless against viral infections, but they can leave you with diarrhea, a yeast infection, or worse. Tamiflu and related antiviral drugs may reduce flu symptoms by one day at most but only if started within 48 hours of the first signs of sickness. And contrary to popular belief, there is zero evidence that they prevent pneumonia or other flu complications. Nausea and vomiting are common side effects, and labels warn of confusion, abnormal behavior, and other “neuropsychiatric events,” especially in kids. The (only) good news is that these viral illnesses rarely last more than seven days. So hang in, take heart—and visit drwhitaker.com for other safe and effective natural remedies.

Works for Me...

► **Thyroid** Your October article on thyroid problems and anxiety really hit home for me. Last summer, I started having episodes of extreme anxiety and full-blown panic attacks—all very unusual for me. I also had countless other seemingly unrelated symptoms like fatigue, muscle and joint pain, hair loss, and jitteriness. The first doctor dismissed me, but the second doctor took me seriously, tested my thyroid hormones and antibodies, and voila—a diagnosis of Hashimoto's thyroiditis! I changed my lifestyle to follow an anti-inflammatory diet, and I take low-dose natural thyroid replacement along with vitamin D, selenium, magnesium, omega-3s, and probiotics to support my gut and thyroid. I feel great again! — T.S., Florida

► **Shingles** I didn't feel right, had big-time back pain, and thought something was going on with my kidney. So I went to the hospital and was informed I had shingles. I started taking olive leaf extract, three capsules three times a day. After a few days, the pain was gone, and pimples around my midsection started to go away. I was amazed how fast it worked. — David T., via email

► **Constipation** My daughter has struggled with constipation since she was very young. The pediatrician recommended that we try an herbal product called NDF Pooper by Bioray. I began giving it to her along with one tablespoon of Barlean's flax oil. It works like a charm. She went from having hard, painful bowel movements once or twice a week to daily, pain-free movements. — R.B., Texas

► **Urinary Tract Infections** I buy and freeze cranberries when in season. A cranberry smoothie once or twice a week does wonders to keep kidneys healthy. Also I cover them with water and cook for about five minutes, mash with a pastry cutter, and add xylitol. It makes a wonderful spread for pancakes or toast. I was subject to kidney infections and haven't had any problems since using this once or twice a week. — Dolores R., via email

Cranberry juice is a tried-and-true therapy for preventing urinary tract infections, and these suggestions for fresh or frozen cranberries are great. Another option is highly concentrated cranberry extract supplements such as [Cran-Max](#). Take daily if you are prone to kidney or bladder infections.

📧 Do you have a Health Tip to share? We'd love to hear it! Send it to worksforme@drwhitaker.com.

Health Hack: WHO's Solution for Rehydration

Dehydration is a serious concern during episodes of vomiting or diarrhea, especially in children. Many people turn to Gatorade, ginger ale, or Sprite to replenish lost fluids, but sports drinks and sodas contain too much sugar and not enough sodium or potassium to provide optimal protection against dehydration. The World Health Organization (WHO) recommends an inexpensive solution that you can make yourself. Simply combine one quart of water, half a teaspoon of salt, and six level teaspoons of sugar, along with half a cup of orange juice or a mashed banana for potassium replacement and to improve taste. Drink often to stave off dehydration.

Monthly Health Quiz:

Winter Health Challenges: Which of these health challenges surge at this time of year?

- A) Depression
- B) Hypertension
- C) Arthritis flare-ups
- D) Heart attacks
- E) Cardiovascular deaths
- F) New cases of type 1 diabetes
- G) Weight gain
- H) Autoimmune relapses



Answer: All of the above. Many experts believe that all these conditions are exacerbated, at least in part, by declining production of vitamin D during the darker days of winter.

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Notable Quote

“Christmas waves a magic wand over this world, and behold, everything is softer and more beautiful.”

— Norman Vincent Peale, minister and author of *The Power of Positive Thinking*, 1898–1993

No computer? Mail your question or health tip to *Health & Healing*, 6710-A Rockledge Dr., Ste. 500, Bethesda, MD 20817.

Surgery: Look Before You Leap

The year is drawing to a close, and the holidays are here. 'Tis the season to be jolly—and to have surgery. An analysis of 5 billion insurance claims reveals an end-of-the-year increase in elective surgeries. I suspect the explanation is largely financial. People realize they've already met most or all of their insurance deductible, which resets January 1, and will therefore have to pay less out of pocket. Convenience may also be a factor, since there's more time off over the holidays.

Whatever the reason, surgery should never be taken lightly. Some operations involve medical emergencies and must be done immediately to save lives. Others are non-urgent elective procedures that are scheduled in advance. Elective surgeries may also be necessary, but a disturbing number of popular procedures are completely ineffective and do nothing to improve health or quality of life.

Aching Knees, Shoulders, and Backs

Every year, hundreds of thousands of patients with degenerative osteoarthritis undergo **arthroscopic knee surgery**, in which a tiny camera and instruments are inserted through small incisions to remove damaged cartilage (meniscus)—even though it is no more effective than sham (placebo) surgery. Clinical practice guidelines issued by international experts in 2017 warn that risks outweigh benefits and make a “strong recommendation against the use of arthroscopy in nearly all patients with degenerative knee disease.”

A common treatment for shoulder impingement syndrome, which is diagnosed in about half of patients with shoulder pain, is **arthroscopic subacromial decompression**. This surgery involves smoothing the underside of the acromion (a small bone in the shoulder) to relieve pressure and irritation on the rotator cuff tendon. However, in a 2018 placebo-controlled trial, it worked no better than “pretend” surgery. Patients followed for two years after decompression or a sham procedure had similar improvements in pain at rest and with activity.

A large and growing body of research concludes that **spinal fusion** and **laminectomy** for low back pain, **vertebroplasty** for spinal compression fractures, and other surgeries for back pain have modest advantages at best over intensive rehabilitation and non-surgical management. Good outcomes seem to be hit or miss,

and doctors cannot predict which lucky few might get real relief—and who will be made worse by surgery.

The Heart Surgery Industry

Angiogram (cardiac catheterization) is an invasive procedure that requires snaking a catheter into the coronary arteries to look for blockages. Although it is performed a million times a year, angiography is not indicated for patients with asymptomatic or stable heart disease (chest pain only when exercising or under stress and relieved by rest or nitroglycerin). Furthermore, this intervention is a gateway to additional, often unnecessary heart procedures. If you're not interested in a coronary artery stent or bypass, don't have an angiogram.

The medical literature makes it clear that **percutaneous coronary intervention (PCI or angioplasty)**—clearing out and propping open blocked coronary arteries with metal stents—is entirely inappropriate in patients with stable heart disease, even if they have a mildly abnormal stress test or blockages seen on angiography. In the recent ORBITA trial, patients who had severe coronary artery blockages and were taking medications for angina were treated with either PCI or a sham/placebo procedure. Six weeks after surgery, there were no significant differences in chest pain or exercise tolerance between the two groups.

Blockages in the carotid arteries that deliver blood to the brain are considered to be a risk factor for stroke and are often treated with **carotid endarterectomy** to remove plaque buildup and restore blood flow. This surgery may be appropriate if blockages are severe and you've had a stroke or frequent transient ischemic attacks (mini-strokes). Otherwise, benefits are small and risks considerable.

Other Overused Surgeries

Prostatectomy (surgical removal of the prostate gland) can be lifesaving for aggressive cancer, but not for localized prostate cancer. In a recent *New England Journal of Medicine* study, 700 men randomly assigned to have prostatectomy or watchful waiting (observation and monitoring) were followed for 20 years. Survival rates and deaths from prostate cancer were similar in both groups.

A surprising number of women with early-stage cancer in one breast opt for **double mastectomy**, even though the American Society of Breast Surgeons recommends against it. These women have a low risk

of developing cancer in the other breast, and removing both breasts has little, if any effect, on their life expectancy.

Nearly one in three babies born in the US is delivered by **caesarean section**. Ideal rates, according to the World Health Organization, are 10–15 percent, as there is no evidence that rates above 10 percent improve outcomes for mothers or babies. C-section is a major operation that increases maternal risk of infection, hemorrhage, and subsequent delivery complications. It also appears to raise risk of asthma and obesity in offspring.

Every year in the US, 600,000 women have a **hysterectomy** and by age 60, one in three will have had their uterus surgically removed. The ovaries are often removed as well, despite data clearly linking this to worse long-term health, including increased risk of osteoporosis and heart disease. There is much debate as to how many hysterectomies are inappropriate. However, the UK's National Health Service has targeted hysterectomy for heavy menstrual bleeding as one of 17 “ineffective” or “risky” procedures slated to be dramatically reined in.

Proceed With Caution

Why are there so many unnecessary surgeries? It's not that doctors are unaware of the problem.

Surveys reveal that most physicians realize their responsibility in assuring that patients do not receive superfluous medical care. But they also admit to prescribing tests and procedures that are not needed, citing patient insistence and fear of malpractice as primary reasons. Money also factors in. When doctors benefit financially from unnecessary procedures, they're more likely to perform them.

Surgery, including elective procedures, is sometimes necessary, but I urge you to carefully consider all the pros and cons. Never forget that with any invasive procedure, things can go terribly wrong. Medical errors in hospitals are the third leading cause of death in the US, responsible for 700 deaths a day. Look before you leap.

References

[Visit drwhitaker.com, where I will post this article with links to all the pertinent studies on the homepage under Latest News & Research.](#)

My Recommendations

Before agreeing to any surgery, ask yourself these questions—and get a second opinion:

- ▶ What would happen if I didn't have surgery?
- ▶ What are the other options besides surgery?
- ▶ What complications could happen?
- ▶ What is the surgeon's complication rate?
- ▶ Is it covered by my insurance, and what is my out-of-pocket cost?

Three Myths About Surgery

Preoperative testing is required prior to all surgeries. Routine testing is no longer recommended for stable patients undergoing low-risk elective surgeries. Yet the practice of ordering pre-op blood tests, EKGs, and chest X-rays persists. Cataract surgery, for example, is a brief outpatient procedure that requires only local anesthesia and perhaps a mild sedative. Nevertheless, a 2018 study of Medicare beneficiaries found that 96 percent of them had pre-op testing—at an estimated cost of \$45.4 million annually!

Don't eat or drink anything after midnight. The American Society of Anesthesiologists' updated guidelines permit a light meal or milk up to six hours prior to elective procedures involving general or regional anesthesia. Water and clear liquids are allowed up to two hours before. Yet the majority of surgical patients are still told they can't eat or drink anything for eight hours before surgery.

All supplements must be stopped before surgery. Doctors don't know much about supplements, so they just say no to the whole lot. This includes nutrients that promote healing such as zinc, magnesium, selenium, L-glutamine, and vitamins A, C, and D, as well as probiotics, which protect the gut microbiota against the adverse effects of antibiotics.

Valerian, St. John's wort, kava, and other supplements with mild sedating effects *should* be stopped because they could potentially interfere with anesthesia. Ginkgo, curcumin, garlic, and high-dose vitamin E's slight blood-thinning properties might increase bleeding, so it is prudent to discontinue them as well.

I used to include fish oil in this list, but a 2017 Danish review of 20 studies found no associations between fish oil and increased bleeding or transfusions during or after surgery.

Innovations in Wellness Medicine

Nutritional Defense Against Air Pollutants

The World Health Organization reports that 3.8 million premature deaths per year from pneumonia, strokes, heart attacks, COPD, and lung cancer are directly attributable to indoor air pollution. Most of these occur in developing countries, where solid fuels and kerosene are burned for cooking and heating. But we are not immune. Outdoor pollutants get into our energy-efficient, airtight homes and workplaces and are joined by airborne toxins from cooking, heating, cleaning and personal care products, etc. These microscopic particles enter the lungs and bloodstream and wreak havoc throughout the body.

Do your best to limit exposure, consider getting an air purifier—and arm yourself with protective nutrients. Airborne pollutants generate reactive oxygen species that deplete the body of antioxidants, and vitamins C and E protect against pollution-generated oxidative stress. Omega-3s curb inflammation, which is another consequence of pollution. And both fish oil and B-complex vitamins guard against damage to the cardiovascular system. Finally, sulforaphane (a compound in broccoli) steps up the detoxification process and helps rid the body of chemical toxins. Sulforaphane is available in supplements such as [Jarrow's BroccoMax](#). Use as directed, along with a daily multivitamin and 1,000 mg EPA/DHA.

SAMe for Depression

“It’s the most wonderful time of the year,” or so the song goes. Then why are so many people depressed? It could be due to the stress of holiday preparations, memories of lost loved ones, and the like. It could also be seasonal affective disorder (SAD)—depression brought on by the dark days of winter, which affects up to nine percent of people in northern latitudes. SAD can be effectively treated with light therapy, but if you suspect something else, I recommend trying S-adenosyl-L-methionine (SAMe).

SAMe is a natural amino acid derivative that, among its many functions, is involved in the synthesis of neurotransmitters. Supplemental SAMe has been shown in dozens of clinical trials to be an effective treatment for depression. In one study, this supplement worked as well as antidepressants for treating major depression. In another, it improved outcomes when taken along with SSRI antidepressants by patients who had failed to respond to drugs alone. The suggested dosage is 400–800 mg, taken twice a day between meals. SAMe can be pricey, as quality products are enteric coated and sold in blister packs. [Swanson is a good, affordable brand.](#)

Did You Know?

- A review of more than 500,000 antibiotic prescriptions found that nearly half were inappropriate.
- The paint on many decorated glasses contains potentially harmful levels of lead and cadmium.
- On any given day, one in eight Americans eats pizza.
- Sleeping fewer than six hours a night markedly increases risk of catching a cold.
- Excessive use of Viagra has been linked with irreversible changes in color vision.
- Adolescents with type 1 diabetes who took B12 supplements had improvements in kidney function and glucose control.
- Almond, coconut, and soy are the most popular nondairy milks, but pea, oat, pecan, quinoa, and cashew are gaining ground.
- Marijuana use is increasing among Baby Boomers.
- Seventy-eight percent of healthcare workers got flu shots last year, but fewer than half did when it wasn't mandatory.
- Albumin in urine, a common finding in kidney disease, is also a marker of COPD.
- A recent study found that most privacy curtains in hospitals harbor antibiotic-resistant MRSA bacteria.

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