

Heat Up Your Health

When I was in college, I spent a year abroad in Sweden and, while I was there, I developed a taste for saunas. A group of us would sit in a hot sauna for 10 or 15 minutes, work up a vigorous sweat, and then run outside to cool off. The truly hardy would actually roll around in a snow bank before going back for another two or three rounds! I wasn't doing this for my health; I did it because it was fun and because it was a very "Scandinavian" thing to do.

These days I'm still a sauna buff, but now I know that dry heat saunas confer a number of health benefits, from removing toxins to treating congestive heart failure and other cardiovascular conditions.

The Details of Sweat

The primary value of saunas is that they induce sweating. Although most of us go to great lengths to avoid sweating, using antiperspirants and turning on the air conditioner as soon as it gets warm, perspiration has two essential functions: It cools you down, and it rids the body of waste products.

There are two main types of sweat glands. Apocrine glands, located mostly in the armpits, pubic area, and scalp, secrete sweat that contains fats and other organic compounds. (Bacteria on the skin interacting with these compounds is what causes body odor.) These glands, which become functional

at p
beli

2 m
real
by h
secre
it ev

Swe

ture
cher
our
diet
trace

ive at puberty, also emit hormones and pheromones believed to attract the opposite sex.

ice Eccrine glands, which number more than 2 million and are scattered all over the body, are the real workhorses when it comes to sweating. Activated by heat as well as stress and emotions, these glands secrete odorless, watery sweat that cools you down as it evaporates on the skin.

Sweat Toxins Out

e
ises
al Sweat does more than regulate body temperature. Many of the tens of thousands of man-made chemicals in our environment make their way into our food, water, and air. No matter how pure your diet or lifestyle, I guarantee that your body contains traces of hundreds, if not thousands, of chemicals

such as pesticides, drugs, solvents, and dioxins. Even babies are vulnerable. The umbilical cord blood of the average newborn harbors around 200 industrial chemicals and pollutants!

But there are ways to get rid of stored toxins, and one of them is sweating. Sweating mobilizes toxins stored in the fat and enhances their elimination. If you've ever been around a heavy smoker or drinker, you know they reek of nicotine or alcohol—it literally pours out of their skin in their sweat. The same is true, although less obvious, of other toxins.

Here's where sauna comes in. On an average day, your eccrine glands put out up to a quart of sweat. But when you hang out in a sauna, they pump out much more in 15 minutes. Several researchers have

out that much in 15 minutes. Several researchers have looked at the effects of sauna on the body's toxic burden. The best-studied protocol is the Hubbard Sauna Detoxification Program, which involves daily exercise followed by saunas for two and a half to five hours a day, with breaks for cooling down and rehydrating. Participants in this program also take niacin to stimulate circulation and fat mobilization, as well as multivitamins and polyunsaturated oils.

Study of 9/11 Rescue Workers

The most recent study of this protocol is the New York Rescue Workers Detoxification Project. When the World Trade Center buildings collapsed on September 11, 2001, massive amounts of toxins were released, and the firemen, policemen, and other rescue and cleanup workers bore the brunt of this environmental disaster. As you might expect, acute respiratory distress was common in this group. However, over the subsequent weeks and months, a significant number of these individuals experienced a wide range of health issues, including gastrointestinal complaints, worsening pulmonary problems, depression, irritability, and cognitive disorders.

From September 2002 through September 2005, more than 500 of these rescue workers, the majority of them firefighters between the ages of 35 and 45, completed this sauna detox program, and the results were astounding. Before treatment, which averaged 33 days, they missed a median of 2.1 days of work per

days, they missed a median of 2.1 days of work a month and had 4.4 days of limited activity. Symptom severity scores—which rated 10 systems, including skin, respiratory, emotional, cognitive, and musculoskeletal—were high, and half of the participants were taking drugs to manage their symptoms.

After treatment, the number of days of missed work or limited activity fell to 0.2, symptom scores dropped dramatically, and 84 percent of participants

had discontinued all their drugs because their symptoms had cleared up. They also had significant improvements in thyroid function, balance, reaction time, and even IQ!

A Black Hawk Pilot's Story

One of those treated was a 34-year-old Black Hawk helicopter pilot in the Army National Guard who worked at the site from September 2001 through March 2002. In excellent health beforehand, he was first hospitalized days after 9/11 for acute breathing difficulties, and over the next few months he went back numerous times for asthma and pneumonia. He also developed irritable bowel syndrome, chest pain, sleep and memory problems, and flashbacks.

When he had these problems, plus the 10 drugs he was

may
have

Thanks to these problems, plus the 10 drugs he was prescribed, his flight clearance was revoked.

aily
five
hy-
acin
vell

Because they'd run out of treatment options, his doctors finally referred him to the sauna detox program. This man's recovery is nothing short of miraculous. During his treatment course, virtually all of his symptoms resolved, and he was able to get off his medications. At the program's conclusion, he was reevaluated and given a clean bill of health, save for mild pollen allergies. Within a few months, he passed the requisite physical and mental exams, regained his flight status, and is now a major.

it.
id
as

Sauna's Cardiovascular Benefits

of
oup.
a
ced a
stinal
res-

The benefits of sauna extend beyond detoxification; it's also good for your heart. Sitting in a sauna has effects akin to mild exercise. The heart gets a gentle workout while the heat of the sauna dilates the capillaries and improves blood flow. In a study published in the *Journal of the American College of Cardiology*, 15 minutes in a sauna a day for 14 days improved the function of the endothelial cells lining the arteries by 40 percent.

2005,
rity
45,
ults
ged 33
per
ptom

Japanese researchers have found that sauna is particularly helpful for congestive heart failure. After taking daily saunas for four weeks, 13 of 15 patients with serious heart failure had significant decreases in blood pressure and improvements in ejection fraction, exercise tolerance, and oxygen uptake.

Other conditions for which sauna is emerging as an effective therapy include chronic fatigue, mild

Other conditions for which sauna is emerging as an effective therapy include chronic fatigue, mild depression, rheumatoid arthritis, musculoskeletal pain, and skin conditions. And don't forget this very important point: Sauna just makes you feel good.

A Detox Program or a Home Sauna?

After considering all these benefits, my wife Connie and I started a sauna detoxification regimen

Vol. 18, No. 1

similar to the program used by the New York rescue workers. During our two-week program, we would go for a 30-minute slow jog to heat up and get our blood pumping. We'd then sit in the sauna at a low temperature (at least for a sauna) of about 140 degrees for two to three hours a day, broken up as needed by cool showers. We felt like a million dollars afterward.

I continued to use the sauna at sports clubs until six months ago, when we replaced the large bathtub in our master bathroom with a far infrared sauna. (Far infrared is part of the spectrum of natural sunlight.) We selected this type of sauna because it's relatively inexpensive and easy to install—it took just 30 minutes, is held together with magnets, and needs

no plumbing hookup. It also uses much less electricity and only requires a five minute warm-up period.

Above all, it's much more comfortable. Standard saunas heat the air, and the hot air coming into contact with the skin heats the body. Far infrared light directly and deeply penetrates the tissues and heats up the core body temperature. As a result, the air is much cooler, making it easier to breathe and allowing you to stay in longer and work up a better sweat.

Though we almost never used the tub, Connie and I use our sauna for about half an hour almost every day before showering, and we love it.

Recommendations:

- Good brands of far infrared sauna include Sunlight Saunas, sunlightsaunas.com, (877) 292-0020; EZe Saunas, ezesauna.com, (800) 952-5455; and MPS Global, mpsglobal.us, (866) 902-0677. Optimal use is 30 minutes, four to six times a week.
- For more about supervised sauna detox programs, contact the International Academy of Detoxification Specialists at detoxacademy.org, (801) 484-1430.

References

- Cecchini MA, et al. Chemical exposures at the World Trade Center. Use of the Hubbard Sauna Detoxification Regimen to improve the health status of New York City rescue workers exposed to toxicants. *Townsend Letter*. 2006 April:58-65.
- Imamura M, et al. Repeated thermal therapy improves impaired vascular endothelial function in patients with coronary risk factors. *J Am Coll Cardiol*. 2001 Oct;38(4):1083-1088.
- Miyamoto H, et al. Safety and efficacy of repeated sauna bathing in patients with chronic systolic heart failure: a preliminary report. *J Card Fail*. 2005 Aug;11(6):432-436.

less viscous and the ca

For years, orthopedic doctors have injected hyaluronic acid directly into the synovial fluid to provide relief of pain and inflammation. It's a pretty helpful treatment, and its effectiveness, many people

Fortunately, the latest research shows that when hyaluronic acid is injected into the joint, it makes it an excellent treatment for osteoarthritis. In an in-house, placebo-controlled trial with osteoarthritis of the knee, patients who received hyaluronic acid daily for 6 weeks had an average improvement in pain of 6 percent improvement.

So where does Hyaluronic acid come from? Truth is, they work on