



4 Reasons to Break a Sweat

The Fast Path to Flushing Toxins

by Deanna Minich

Doctors, health experts and fitness gurus tell us that we should break a sweat every day—and for good reason. Sweat not only activates a host of benefits tied to health-boosting exercise, perspiring itself is curative. Whether sitting in a sauna, walking on a warm day or working out, sweating is a necessary bodily function with powerful healing effects.

By clearing out a range of toxins, sweat plays an essential role in the body's natural detoxifying function. Here are some of the toxins it helps eliminate:

1 Persistent organic pollutants (solvents, fumigants and insecticides): A clinical study of 20 participants published in *BioMed Research International* found that their sweat samples contained a range of toxins, including pesticides DDT/DDE, endosulfan, methoxychlor and endrin. Nearly all parent compounds of these pesticides were evident, demonstrating that sweating is an effective way of excreting and diminishing the body's toxic burden. One sweat sample contained some

pesticides not present in the subject's blood or urine samples, suggesting that some pesticides are only mobilized and eliminated through sweating.

2 Phthalate (plasticizer): Phthalate, found in plastic products, is also removed through sweat. Research published in the *Scientific World Journal* evaluated blood, sweat and urine samples from 20 individuals and discovered that all of them contained the common mono-2-ethylhexyl phthalate (MEHP). The concentrations of this toxin in sweat were more than twice

as high as those in the urine, showing that sweating may be the best way of ridding the body of this endocrine-disrupting compound.

3 Heavy metals: Another study of 20 patients reported in the *Archives of Environmental Contamination and Toxicology* found that subjects' sweat contained about 24 times more cadmium, 19 times more nickel, 16 times more lead and almost three times more aluminum than their urine. Overall, sweat proved more effective than urine at removing 14 of the 18 heavy metals studied. It also contained and, therefore, expelled larger quantities of 16 of the 18 metals than the blood samples did.

Of all the metals, aluminum was found at the highest concentrations in sweat, with zinc, copper and nickel also occurring at relatively high levels.

4 Bisphenol A (BPA): Researchers reporting in the *Journal of Environmental and Public Health* examined the blood, urine and sweat of 20 participants for BPA, an endocrine-disrupting toxin found in canned foods, plastic water bottles and other items. Of the 20 sweat samples collected, 16

contained BPA, while only 14 urine and 2 blood samples tested positive for the toxin. This reveals that sweat is the most effective way of removing BPA build-up in the body; just as vital, it demonstrates that testing blood or urine for toxicity levels may not present the whole picture.

A wide range of activities, including exercising and engaging in sports, can help us break a sweat. A low-impact option is spending time in a sauna. Notably, in a focused study, the sweat from an infrared sauna expelled more bismuth, cadmium, chromium, mercury and uranium than that produced by a steam sauna. The steam sauna caused higher levels of arsenic, aluminum, cobalt, copper, manganese, nickel, lead, tin, thallium and zinc to be excreted (*Archives of Environmental Contamination and Toxicology*).

Hydration is essential in maximizing all these health benefits. Failure to hydrate properly during and after sweating can lead to other health problems. An easy rehydration practice is to step on the scales right before and after sweating; the weight lost is the optimum amount of water to drink afterwards (*Clinical Journal of Sport Medicine*). For reference, one pound of water is slightly less than a one-half liter.

Sweat contains minerals essential for optimal functioning of the whole body. Following excessive sweating, it's important to replace the minerals lost, especially zinc, copper, selenium, chromium and potassium. Coconut water is a good source of potassium; nuts, seafood, whole grains and legumes generally contain relatively high doses of zinc, copper, selenium and chromium.

The next time the couch and air conditioning beckon, think of all the "sweaty" benefits about to be sacrificed. Breaking a sweat might seem like an effort, but it keeps internal detox systems healthy and optimally functioning.

Deanna Minich, Ph.D., is an author, teacher and researcher, as well as founder of Food & Spirit, a framework to integrate ancient healing traditions with modern science. She leads online detox programs as part of her whole-self approach to health. Connect at DeannaMinich.com.

Always do your best.
What you plant now,
you will harvest later.

—OG MANDINO
