

BLOOD PRESSURE FACTORS

Do you ever feel dizzy or faint when you stand up? Here's one common reason, and what to do about it.

Your blood pressure fluctuates throughout the day, with lots of small ups and downs punctuated by occasional peaks and valleys. Just as a thermostat adjusts your furnace or air conditioner to keep your house at a comfortable temperature, your body has a built-in mechanism to keep your blood pressure relatively stable (see box).

But aging, some medications, and certain medical conditions can interfere with this regulatory mechanism. If that happens, your blood pressure may drop dramatically when you stand up—a condition known as orthostatic hypotension (hypotension means low blood pressure). The result: not enough blood reaches your brain, which can lead to dizziness, lightheadedness, and blurred vision.

However, people with orthostatic hypotension don't always have these symptoms, or they have them only occasionally, says Harvard professor Dr. Lewis A. Lipsitz, who directs the Institute for Aging Research at Hebrew Senior-Life and the Division of Gerontology at Beth Israel Deaconess Medical Center in Boston. "The problem often isn't brought to a doctor's attention until the person faints and falls," he says. According to some estimates, as many as 30% of emergency room visits for fainting are due to orthostatic hypotension.



To avoid feeling dizzy or faint when you first get up in the morning, pump your legs a few times to get your blood flowing before standing up.

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The age factor

About 5% of people younger than 50 have orthostatic hypotension, but the prevalence rises to 30% over age 70. As people age, arteries throughout the body become stiffer (which can cause high blood pressure), and their pressure-monitoring sensors may become less sensitive. As a result, older people can't respond to blood pressure drops as effectively—particularly if their blood pressure is high. And the higher a person's blood pressure is, the farther it can fall, says Dr. Lipsitz. Older people are also more likely to take drugs that may worsen orthostatic hypotension. Common culprits include beta blockers (which reduce heart rate) and alpha blockers used in men to treat an enlarged prostate. Cold and allergy drugs—especially diphenhydramine (Benadryl)—and most antidepressants can also contribute to the problem. In addition, people may lose their sense of thirst as they age, and dehydration makes the problem worse.

Diabetes or other diseases, such as Parkinson's disease or cancer, may also cause orthostatic hypotension.

Diagnosing the problem

Ask your doctor to measure your blood pressure after you've been sitting quietly or lying flat for five minutes and again one and three minutes after you stand up. After you stand up, if your systolic pressure (the first number of the reading) falls more than 20 mm Hg or your diastolic pressure (the second number) drops at least 10 mm Hg, you may have orthostatic hypotension. You can also use a home blood pressure monitor to check your pressure first thing in the morning and throughout the day (especially after a dizzy spell or taking medications), which may help you to pinpoint possible contributing factors.

Dealing with dips

A range of strategies may help prevent episodes of low blood pressure. The first step should be a careful review of your medications with your doctor or a trusted pharmacist. The following suggestions may also help:

- **Focus on fluids.** Drink water throughout the day; don't wait until you're thirsty. But avoid alcohol, which can cause you to become dehydrated.
- **Shake some salt.** If you don't have high blood pressure, try eating more salty foods or drinking tomato juice or sports drinks.

- **Support your legs or lower belly.** Compression stockings that squeeze the legs may help. Thigh-high or waist-high versions are best, because knee-high stockings may bunch and tighten, cutting off blood flow. Some people find that a girdle-like abdominal binder that fastens with Velcro also helps, says Dr. Lipsitz.
- **Get a leg up.** Getting out of bed is a common trigger, so pump your legs up and down a few times while still sitting on the edge of your bed to get your blood flowing. During the day, try crossing your legs if you feel faint while standing.

Responding to pressure

Your body monitors blood pressure through special sensors called baroreceptors. They're located in the aortic arch (the top of the heart's main blood vessel) and the carotid arteries, which run up either side of the neck. When blood pressure falls, the baroreceptors activate nerve and hormonal signals that make your heart beat stronger and faster while narrowing your blood vessels. When blood pressure rises, they do the opposite.

Source: Z. McGee, Morgan Co.