

News and our views

Dark chocolate: A nibble a day may lower blood pressure

You may not be able to have your cake and eat it too, but you may be able to have some dark chocolate and be healthier for it.

A small German study reports that a daily nibble of dark chocolate — in this case chocolate containing 50 percent cocoa — may modestly lower your blood pressure without raising your weight, cholesterol or glucose levels.



The study, published in the July 4, 2007, issue of the *Journal of the American Medical Association*, involved 44 older adults with high blood pressure (hypertension) or prehypertension. Participants were assigned to eat a small square — about 6 grams or 30 calories worth — of either dark or white chocolate each day for 18 weeks. Dark chocolate is a good source of flavonoids — an antioxidant that's thought to improve the function of blood vessels — and a small amount of caffeine. White chocolate contains no flavonoids or caffeine.

At the end of the study, the dark chocolate eaters saw a drop in their top (systolic) blood pressure number of almost 3 millimeters of mercury (mm Hg). The bottom (diastolic) blood pressure number fell by about 2 mm Hg. The white chocolate group saw no reduction in blood pressure. No changes in weight, cholesterol or glucose levels were noted in either group.

Although this study adds to a small but growing body of chocolate research, Mayo Clinic doctors say that it's still too early to recommend eating chocolate for controlling hypertension. □

Vitamin K linked to bone strength

A recent study out of the Netherlands suggests that a particular form of vitamin K may be of value in helping to maintain bone strength.

Vitamin K is recognized as a possible factor in the process of bone remodeling — the complex, continuous process of old bone being broken down and new bone being formed. Most dietary vitamin K comes from leafy green vegetables in the form of vitamin K1 (phylloquinone). Another form — vitamin K2 (menaquinone-4) — is found in fermented foods, such as cheese and fermented soybeans.

The study, published in the July 2007 issue of *Osteoporosis International*, involved 325 postmenopausal women who didn't have osteoporosis. For three years, half of them took 45 milligrams of vitamin K2 on a daily basis and the other half took an inactive placebo. Although bone mineral density decreased over time in both groups, other X-ray measures of hipbone strength were a different story. Hipbone strength remained steady among those taking vitamin K2 supplements, but decreased in women taking a placebo.

Mayo Clinic experts say the findings are supported by other studies, but more research is needed to better understand the role of vitamin K2 in managing bone health. In addition, if you take the blood-thinning drug warfarin (Coumadin), it's important to talk with your doctor before taking a vitamin K supplement. □

Improving your balance

Exercises that help

You've walked down your front steps countless times. But lately you've been feeling a bit less steady than usual. It scares you to think that, as you age, your balance may get even worse, slowing you down and increasing your risk of falling.

You're right to be concerned. For older adults, falls are a major cause of broken hips and wrists and other injuries that often lead to long-term disability. Diminished balance can also affect your mobility.

Fortunately, most older adults can improve or maintain their balance with a few simple steps.

Striking a balance

Balance takes practice. When you first learned to walk or ride a bicycle, it took time — and likely a few tumbles — to learn how to keep yourself upright.

Your ability to keep your balance results from the coordination of several body systems. These include your vision, the sensory nerves in your skin, muscles and joints, and the balance (vestibular) system of your inner ear.

The ability to maintain your balance is often taken for granted throughout much of life. But as you age, a number of factors may affect your stability, including:

- Vision problems, which become more common.
- Loss of strength. Muscle mass naturally declines with age, a process that's accelerated by a lack of physical activity.
- Any number of conditions, such as Parkinson's disease, stroke, arthritis or inner ear abnormalities.
- Side effects of medications, seizure drugs and sedatives.

Some of these can be medically correctable, such as working with your doctor to adjust medications.

Use it or lose it

It's said that once you learn how to ride a bicycle, you never forget. But that's not totally true. Although you may not "forget" how to balance, your balancing skills can significantly diminish if you're not regularly using them. You can exercise your sense of balance with:

■ *Many types of physical activity* — Walking, or any exercise that gets you on your feet, and your arms and legs moving in coordination, helps work the muscles — and stimulate the nerve communication — you need for balance and coordination. You'll also get practice at correcting yourself if you get off balance, such as when catching a toe on something, or changing directions quickly.

■ *Everyday balance exercises* — Try rising up on your toes, or balancing on one foot, then the other, while doing the dishes, brushing your teeth or waiting in a check-out line. A more advanced exercise is to walk heel-toe, heel-toe, as if walking on a line. Do these exercises near something that you can steady yourself with if need be. Another exercise is to stand up and sit down in a chair without using your hands. You'll have the chair to catch you if you lose your balance.

■ *Advanced balance training* — As your skills advance, a personal trainer or physical therapist may be able to get you started with more advanced balance exercises, which often involve use of a large, inflatable "stability" ball or a balance trainer, such as a half-ball attached to a flat base.

■ *Strength training* — Regularly doing exercises to strengthen your muscles can help you achieve better balance and coordination. If you already do strength training, you can

1. Place five pieces of tape on the floor to mark the points of an imaginary star. Balance on your right leg with your hands on your hips or, if needed, hold on to a stationary object.



2. Slowly reach out with your left foot toward the star point directly in front of you, without touching the floor. Return your foot to the starting position, not touching the floor.



3. Repeat reaching out with your left foot to the point at your left, as shown.



4. Repeat reaching out with your left foot to the point slightly to the back.



Using your right leg, repeat the exercise.

add variations to further enhance your balance. For example, try doing arm curls with one hand at a time — or standing on only one leg.

■ *Tai chi (TIE-chee)* — This gentle form of Chinese martial arts consists of a series of gentle, graceful movements that help improve your balance and coordination. Health clubs and community centers frequently offer classes with experienced instructors. If you can't find a class, consider renting or purchasing a video or DVD. Tai chi is noncompetitive and self-paced, so look for instructions geared to your activity level and start slowly.

Not too late

If you think it's too late to do anything about your balance, think again. A recent study that measured the balancing ability of 130 older adults found — not surprisingly — that those who had routinely exer-

cised or had been physically active throughout life had the best balance. Those with the worst balance were those who hadn't routinely exercised or been physically active throughout life.

Encouragingly, the study also found that older adults who had started exercising after retirement had balance nearly as good as those who had always been active. Those who had once exercised or been physically active and then stopped had balance nearly as poor as those who had never been active.

If you avoid exercise because you feel afraid of falling, talk to your doctor. Your doctor may be able to determine if something specific is causing your imbalance. If nothing can be found, your doctor may refer you to a physical therapist who can help devise a safe, custom exercise program to improve balance, muscle strength and gait. □