



Lower your stroke risk with antioxidants

I heard recently that eating more fruits and vegetables can help prevent stroke. Having a stroke is something I have always worried about. Can you tell me more details?

You probably heard something about a Swedish study published Dec. 1 on the website of *Stroke: Journal of the American Heart Association*. That study, of nearly 37,000 Swedish women ages 49 to 83, found that women with high intakes of antioxidants had lower risk of stroke, even when other lifestyle factors were taken into account.

For most of the participants — those with no history of cardiovascular disease — the ones with the highest consumption of antioxidants had a 17 percent lower risk of total stroke compared with women with the lowest intake. Those with the highest intake got about 50 percent of their antioxidants from fruits and vegetables, averaging seven to eight servings a day. Other significant sources of antioxidants for this group were whole grains (accounting for 18 percent of their antioxidant intake, from an average of three to four servings per day), tea (16 percent of intake, from 12 to 13 servings per week) and chocolate (5 percent of intake, from one or two servings per week).

Results were a bit different for the 5,700 participants who had a history

of cardiovascular disease. For them, a higher antioxidant intake was associated with a lower risk of just one particular type of stroke. Those with higher levels of antioxidant intake had a 46 to 57 percent lower risk of hemorrhagic stroke than those with the lowest intake.

Antioxidants, including vitamins C and E, carotenoids (which become vitamin A in the body), and flavonoids have long been associated with health benefits. Just how exactly they work is not completely known, but we do know they battle free radicals — unstable molecules that can damage cells, leading to inflammation and stiffening and other damage to blood vessels.

No matter how antioxidants work, eating plenty of fruits and vegetables is always a good idea. Some tips:

- Pack an apple, plum or a serving of prunes in your lunch or to snack on at the end of your work day.
- Add frozen berries to a serving of plain or vanilla yogurt.
- Sprinkle fresh blueberries, blackberries, raspberries or strawberries onto salad or cereal.
- Add red beans, pinto beans or black beans — all very high in antioxidants — to soups, stews and casseroles.
- Add spinach, red cabbage or chopped broccoli to soups and salads.

Chow Line is a service of Ohio State University Extension and the Ohio Agricultural Research and Development Center. Send questions to Chow Line, c/o Martha Filipic, 2021 Coffey Road, Columbus, OH, 43210-1044, or filipic.3@cfaes.osu.edu.



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