

# More antioxidants may not mean better health

By Nancy Shute, NPR

Antioxidants in foods are good for you, so more should be better, right?

Evidently not.

In a new study, people who ate more antioxidants overall didn't lower their risk of stroke and dementia in old age. That flies in the face of earlier research that found that the antioxidants in fruits and vegetables reduce stroke and dementia risk.



“We’re seeing strong and clear benefits with specific antioxidants, but not overall,” says Elizabeth Devore, an epidemiologist at Brigham and Women’s Hospital who led the new study, which was published online in the journal *Neurology*.

Last year, Devore found that eating lots of berries delayed cognitive decline among women in the big, ongoing Nurses Health Study. Berries have lots of chemicals called flavonoids, which researchers think probably have protective powers much like those of better-known antioxidants like beta-carotene, vitamin C and vitamin E.

Before that, Devore had looked at data from a long-term study of more than 5,000 people ages 55 and older in Rotterdam, The Netherlands. The people were followed for about 14 years. She found that people who ate foods with more vitamin E were less likely to suffer dementia, and people who ate foods with more vitamin C were less likely to have a stroke.

But now she's looking at the same people, and finds that having lots of antioxidants in the diet overall don't help with stroke and dementia. What gives?

Devore tells NPR that she re-ran the numbers from the earlier Rotterdam study, just to make sure she hadn't made a mistake, and it still showed that vitamins C and E were doing good things for the brain.

In the new study, the people with the highest levels of antioxidant intake were getting most of those antioxidants from coffee and tea. Evidently, the Dutch drink a lot of coffee!

Coffee and tea are "actually chock-full of antioxidants," Devore says, in the form of flavonoids.

And other studies on people in Europe have found that drinking a lot of coffee, say five cups a day, does help protect against Alzheimer's. But similar benefits didn't appear in the coffee-loving Dutch group in Devore's study, which leads her to suspect that total levels of antioxidant intake isn't the whole story. "It's nuance," she says.

An Italian study from 2011 also showed less stroke risk in people who had a high-antioxidant diet overall. But in that case, the people were getting their antioxidants from wine, fruits and vegetables, Devore says. That's very different than the diet of the Dutch study participants, who ate a lot of meat and dairy, and fewer vegetables and fruit.

Scientists have just started to really dig into the relationship between flavonoids and health, thanks to a big new USDA database on the still largely mysterious chemicals.

That should help resolve the confusion over the merits of antioxidants, Devore says. "As we're able to move into these more nontraditional antioxidant foods, we'll be able to tease out more specific information for people."