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Ultraprocessed food linked to dementia

More evidence links ultraprocessed foods to dementia

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People who regularly eat processed red meat, like hot dogs, bacon, sausage, salami and bologna, have a greater risk of developing dementia later in life. That was the conclusion of preliminary research presented last week at the Alzheimer's Association International Conference.



The study tracked more than 130,000 adults in the United States for up to 43 years. During that period, 11,173 people developed dementia. Those who consumed about two servings of processed red meat per week had a 14% greater risk of developing dementia compared with those who ate fewer than three servings per month.

Eating unprocessed red meat like steak or pork chops did not significantly increase the risk for dementia, though people who ate it every day were more likely to report that they felt their cognition had declined than those who ate red meat less often. (The results of the study have not yet been published in a journal.)

The majority of processed meats are classified as “ultraprocessed foods” — products made with ingredients that you wouldn't find in a home kitchen, like soy protein isolate, high fructose corn syrup, modified starches, flavourings or colour additives. Many of these foods also have high levels of sugar, fat or sodium, which have long been known to adversely affect health.

Ultraprocessed foods, which also include items like sodas, flavoured yoghurts, instant soups and most breakfast cereals, make up a huge part of the American diet. They account

for about 58% of the calories consumed by children and adults, on average. Researchers have linked these foods to ailments such as heart disease, Type 2 diabetes, obesity, cancer and gastrointestinal diseases.

Now scientists are examining the connection between these foods and brain health.

WHAT DOES THE RESEARCH SUGGEST?

Several studies published in the past few years have found an association between eating more ultraprocessed foods and cognitive decline. In one study of more than 10,000 middle-aged adults in Brazil, for example, people who consumed 20% or more of their daily calories from ultraprocessed foods had more rapid cognitive decline, particularly on tests of executive functioning, over the course of eight years.

Research tracking more than 72,000 older adults from Britain for 10 years found that a diet containing 10% more ultraprocessed foods was associated with a 25% increased risk for developing dementia. Similarly, a study following 30,000 Americans for an average of 11 years reported that a 10% increase in ultraprocessed food intake corresponded to a 16% higher risk for cognitive impairment. Greater processed food intake was also tied to an 8% higher risk of stroke.

The primary limitation of these types of studies is that, while they show an association between ultraprocessed foods and brain health, they cannot prove that the foods directly harm the brain.

And not all studies have found a consistent link between ultraprocessed food consumption and cognition.

You cannot conclude that if you eat a certain amount of processed red meat, “you’ll definitely get dementia”, said Dr Dong Wang, an assistant professor at Brigham and Women’s Hospital and Harvard Medical School who led the new red meat study. “That’s not the case.”

But given that several studies have reported similar results around ultraprocessed foods, “we have to take it seriously”, said Dr Hussein Yassine, a professor of neurology at the Keck School of Medicine at the University of Southern California.

Experts aren’t sure how ultraprocessed foods might affect brain health, but they have a few theories. It could be one of these things happening, or a combination.

■ Theory 1: They can harm vascular health

Chronic health conditions like high blood pressure, obesity and diabetes — all of which are also associated with consuming a diet high in ultraprocessed foods — “have an impact on the health of our blood vessels”, said Dr Taylor Kimberly, the chief of neurocritical care at Massachusetts General Hospital. “And the brain, in particular, is exquisitely sensitive to the delivery of normal nutrients and oxygen” from the blood vessels.

Unhealthy blood vessels can make the brain more vulnerable to “wear and tear”, Kimberly added, “and that, in turn, is associated with risk of stroke and cognitive impairment”.

■ Theory 2: They displace healthy nutrients

Good nutrition is essential for a healthy brain. Research has shown that diets high in fruits and vegetables, beans, whole grains, nuts, lean meats and healthy fats — like the Mediter-

ranean and MIND diets — are associated with a decreased risk for dementia.

It's possible that diets high in ultraprocessed foods are bad for the brain in part because they're lacking more nutritionally rich choices. "If you're consuming a lot of ultraprocessed food, that means you're consuming less of fresh fruits and vegetables and other healthier options," said Puja Agarwal, a nutritional epidemiologist at the Rush Alzheimer's Disease Center in Chicago.

■ Theory 3: They damage brain cells

Ultraprocessed foods are also thought to be "very taxing on the brain", said Dr Karima Benameur, an associate professor of neurology at Emory University School of Medicine. For example, prior research has shown that harmful compounds found in certain foods — especially foods high in added sugars or animal fats, or those cooked at very high temperatures, like by frying — can be damaging to brain cells. These compounds can accumulate in the brain and promote inflammation and oxidative stress. Some studies have linked these compounds to cognitive decline and dementia.

WHAT DOES THIS MEAN FOR YOU?

While researchers are still trying to tease apart exactly how ultraprocessed foods may interfere with brain health, they say it's clear that making adjustments to your diet could benefit your brain. "Even modest changes over time can have an impact, and that's important because it means it's achievable," Kimberly said.

Rather than trying to eliminate all ultraprocessed foods from your diet — what Benameur calls "a recipe for failure" — focus on cutting back on some of the worst offenders and replacing them with healthier options.

When Yassine talks with patients about reducing their ultraprocessed food consumption, he suggests they start by cutting down on sugary beverages like soda and switching to water or unsweetened (or lightly sweetened) iced tea. Next, swap processed red meats with other sources of protein like fish, chicken, beans, lentils and nuts, he said. Then focus on adding more fibre-rich unprocessed foods, like fruits, vegetables, legumes and whole grains.

"It's really hard for people to change their habits," Yassine said, "take it one step at a time."