Worried About Dementia? More Veggies and Less Meat Might Help People With HIV

Meat, sugary beverages and whole milk were associated with more trouble thinking.

June 3, 2021 By Heather Boerner

People with HIV may eat roughly the same way as their HIV-negative peers, but that doesn't mean that food and drinks affect their brains in the same way. Or, at least, that's one reading of new data published in The American Journal of Clinical Nutrition.

Access to enough food is associated with better cognitive function and lower rates of dementia. The challenge, of course, is that a lot of low-cost food is not nutritious. Food insecurity has been linked to eating calorie-dense food with lower nutritional value (think fast food), which in turn is associated with higher rates of obesity and fatty liver disease. This is in addition to any antiretroviral-related weight gain.

But researcher Leah Rubin, MD, of Johns Hopkins University School of Medicine, and colleagues, weren't interested in weight. They wanted to see whether the types of food and drinks people with HIV consumed were associated with neurocognitive impairment, including Alzheimer's disease.

So in 2013, they asked 729 women with HIV and 346 HIV-negative women living in the Bronx, Brooklyn, Chicago, Washington, DC, and San Francisco to fill out an 18-question National Cancer Institute dietary screening form. The women were members of the Women's Interagency HIV Study, an ongoing study that follows women living with HIV, who had semiannual neurocognitive tests and viral load measurements available during that time.

The women with HIV were a median of 49 years old, 69% of them were Black, 14% were Latina and 12% were white. Half of participants earned $12,000 or less in the last year, 37% smoked and they had a median body mass index of 30, which falls into the category of obesity. In addition, 31% met criteria for depression, 20% had used marijuana recently and 13% were heavy drinkers. And the women had multiple other chronic conditions: 19% had hepatitis C, 22% had diabetes, 44% had hypertension and 42% were on one or more medications that affect the central nervous system.

But the women's HIV was generally well controlled: 91% of them had a CD4 count of 200 or more,

and 59% had an undetectable viral load; however, 36% had a history of AIDS.

Overall, women with HIV and their HIV-negative peers basically had a similar diet. Indeed, the only way they differed significantly was in sugary drinks—and women without HIV were more likely to consume those. But HIV-positive women with the same diets were more likely to experience neurocognitive impairment, including impaired attention and working memory and impaired executive function, such as decision-making and learning difficulties. However, it's important to note that two thirds of the women still had healthy attention and memory scores, and 74% had healthy levels of executive function.

But when the researchers ran an analysis looking at types of food and drinks and the frequency of consuming them and cross-checked that with global neuropsychological health, a pattern emerged.

For women with HIV, frequently eating processed meats (lunch meat, bacon, sausage or hot dogs) was associated with a 91% increased likelihood of cognitive impairment. Frequent consumption of sweet beverages (sodas and fruit juice) was associated with a 75% increased risk, frequently eating fish or seafood was associated with a 70% increased risk and frequent consumption of whole milk (including yogurt, cheese and whole milk on cereal) was associated with a 66% increased risk of cognitive decline. Meanwhile, frequent consumption of vegetables was associated with a 35% decrease in such impairment.

When the researchers broke the data down even further, they found that frequently consuming processed meats and sweet drinks was associated with worsened motor skills, while frequently consuming fish or dairy products was associated with lower scores on attention and working memory tests.

Interestingly, no such association among women who weren't living with HIV was observed, even though women in the two groups had roughly similar diets and HIV-negative women drank more sweet drinks.

"It is unclear why associations were observed among women with HIV and not HIV-seronegative women," wrote Rubin and colleagues. "The metabolic aberrations that occur with HIV infection, as well as those occurring with [antiretroviral therapy], may make [women with HIV] more susceptible to neuropsychological impairments, in association with dietary exposures; however, further research is needed."

Click here to the full study.

Click here for more news about healthy eating with HIV.

© 2026 Smart + Strong All Rights Reserved.