

## Maple Syrup: A Brainy New Superfood?

Maple syrup might be more than just a sweet treat for your taste buds. Two new studies reveal that it could help prevent Alzheimer's and other brain diseases.

One study conducted on test tubes, led by Donald Weaver, PhD, director of the Krembil Research Institute at the University Health Network in Toronto, found that a maple syrup extract prevented two brain cell proteins (beta amyloid and tau peptide) from clumping together and folding the wrong way. When cellular proteins accumulate, they form the plaque that has been linked to Alzheimer's disease and other neurodegenerative diseases.

A similar study, led by Navindra Seeram, PhD, of The University of Rhode Island, showed that the extract also reduced inflammation created by microglial brain cells (the primary immune cells of the central nervous system that defend against illness-causing organisms) in addition to protecting neurons.

Don't start guzzling gallons of syrup *Elf*-style just yet, however. Further research is needed to pinpoint the compounds responsible for the effects and to see if the results can be mimicked in people.

Dr. Seeram recommends darker, pure maple syrups, which pack more healthy compounds, and avoiding "pancake syrup," which often contains high-fructose corn syrup and other additives.

## Rethink the Weekend Binge

If you religiously eat kale salads and acai bowls during the week but think it's OK to binge on pizza and wine all weekend long, it might be time for a little reality check. A new study from the University of New South Wales (UNSW) suggests that whole-weekend binge eating may be just as bad for your gut microbiome as a regular diet of junk food. Furthermore, the study found that yo-yo dieting reduced the number of microbial species capable of metabolizing flavonoids, which aid in weight loss and help protect neurons in the brain. In the study, lead researcher Margaret Morris, the head of pharmacology at UNSW, fed rats either a healthy diet of "chow" (low-fat rat food) or a diet of cafeteria food. The rats in the cafeteria-food group were fed foods like cakes, meat pies and dim sum three days per week but ate low-fat foods the other days of the week.

Science has already shown that

a disruption in normal gut bacteria, which has been linked to conditions such as inflammatory bowel disease and obesity. But what we didn't already know, as UNSW researchers point out, is that eating badly even three days a week is enough to alter the gut microbiota toward the pattern seen in obese rats. Though further study on humans is needed, Morris says that if you're generally eating a healthy diet of fruits, vegetables and good-quality proteins, then the occasional splurge should be fine. "It is likely that the occasional treat like a slice of cake or half a pizza, if consumed once a week, would not have enormously detrimental effects on the gut microbiota," she says. So to avoid reversing the effects of healthy weekday eating, keep your clean-eating lifestyle on track - even on the weekends. Instead of two days of indulging, strive for two treats instead!

eating unhealthy foods can lead to

chew on this **#93** 

Cut down on sodium by seasoning foods like scrambled eggs, meats and sauces with flavorful spices like paprika, turmeric and chile powder instead of salt. Not only will these perk up your dishes, but they'll also add plenty of health-boosting benefits since many spices have anti-inflammatory properties and are rich in antioxidants.

JUNE 2016 Clean Eating 19