

GUMC Home » News » Featured Stories

Food For Thought

The basis of all brain functions such as learning, memory, planning, organization, attention, reaction time, and emotions, involve tiny electrical impulses and chemical signals of your neurons.

Did you know that what you eat can have a great impact on the health and wellbeing of your hard working neurons? That subject is near and dear to the heart of Valerie Darcey, MS, RD. In addition to being a registered dietitian, Darcey is a doctoral student in the Interdisciplinary Program in Neuroscience at Georgetown University.

Darcey says your diet provides the building blocks for the neuron's ability to communicate with its neighbors. A healthy, balanced diet can help you optimize the functioning of your neurons and your brain.

As we start a new academic year, Darcey offers some food for thought with 10 brain-boosting tips. She says those who have a lot of room for improvement will see the most benefit.



[RSS](#)
[ShareThis](#)
[Print](#)

1. Eat more non-fried seafood. Sixty percent of the brain is made up of fat doing specialized jobs in the brain. The average American diet has more than enough fat in it but it's the balance between the right kinds of fats that makes the difference for brain function. To ensure you get enough of Omega-3 fats in your diet, aim for a variety of non-fried fish and seafood (including salmon, tuna, mackerel, and sardines) and plant-based sources (including ground flaxseed, walnuts, and canola oil). The 2010 Dietary Guidelines for Americans recommends about eight ounces of non-fried seafood per week.
2. Daily low-fat dairy and occasional lean meats. The many jobs of the brain require energy and lots of regular clean up and cell repair. Vitamin B12 is one important factor that helps the brain use energy and perform repairs. B12 is found naturally in animal foods including milk and eggs. Many products, particularly ready-to-eat cereals are fortified with it. Just under a few micrograms (2.5mcg) meets your daily requirement, an amount that's easily covered by two glasses of low fat milk.
3. Eat for heart health. Your brain is only two percent of your body weight but it receives up to 20 percent of your blood supply! Eat a diet that will keep your blood vessels in shape to ensure your brain gets the blood supply it needs. Limit your intake of processed foods, which are generally very high in salt content. When choosing fats, choose liquid oils (unsaturated) over solid (saturated) fats. Avoid products with trans fats and/or the words "partially hydrogenated" in the ingredients list.
4. Focus on slow fuels. Your brain needs energy to do work around the clock. To deliver a steady fuel supply to your brain, try the following: slowly increase your fiber intake to a goal of 25 to 30 grams fiber per day, all the while increasing your fluid intake too. Choose whole grain complex carbohydrates over the refined, processed types. Aim for a mix of food groups at each meal to keep energy delivery to the brain more even and space your meals evenly across the day.
5. Eat breakfast daily. Reduce that morning "fog": replace near-empty (brain) fuel reserves by eating a mixed-meal breakfast daily within an hour or so after waking. Not used to breakfast? Start out small and increase food types gradually.
6. Rethink your drink. Your brain relies on your blood pressure and the blood's contents to be in a balance. Aim to consume enough fluid each day from drinks and foods to keep electrolytes and blood volume in balance. Drink water when you're thirsty (or tea, coffee in moderation) or choose foods with high water content like most fruits and vegetables.
7. Get some sunshine vitamin. Immunity is just as important for your brain as it is for the rest of your body. Vitamin D can help the function of immune cells in your brain. Aim for an even vitamin D level across seasons (600 IU of vitamin D3 per day) from oily fish, eggs and fortified milk.
8. Vary your vegetables and fruits. Normal brain activity produces wear and tear that needs repair. Antioxidants, like those found in fruits and vegetables, help repair damage in cells. Eat a variety of colors to take in the most types of antioxidants. Aim for two cups of fruit and two and a half cups of vegetables daily on a 2000-calorie diet; adjust up or down slightly based on your calorie needs.
9. Move more. Not only can exercise improve blood flow to your brain, but it can also improve many aspects of brain function including memory. Aim for 150 minutes per week of moderate activity (brisk walking, swimming, lawn mowing) or 75 minutes of vigorous activity (running, jogging) spread out over at least three days.
10. Maintain a healthy weight. Even apart from diet and exercise, avoiding excess weight and aiming for a Body Mass Index between 18.5 and 24.9 kg/m² can help your brain function at its best.

In addition to the above tips, Darcey suggests practicing portion control, especially with higher calorie food choices. When it comes to diet, what's good for the body is also good for the brain, and that goes for other lifestyle factors as well, Darcey says. Remember that the goal is a healthy lifestyle; diet is a big part of lifestyle but not all of it. Adding other brain boosters to your lifestyle like getting enough sleep, minimizing stress, staying socially active, and challenging yourself mentally can maximize your benefits.

Reviewed by: *Thomas G. Sherman, PhD, associate professor of pharmacology*

This information was originally presented as part of the Hot Topics in Health Science lecture series sponsored by the Georgetown University Medical Center Graduate Student Organization. For more information about the Hot Topics series please visit: <http://www.facebook.com/HotTopicsinHealthScience>

Please note that Darcey's tips are tailored for a generally healthy adult. Nutrition needs can vary by the age and stage in life, and by medical condition. For specific nutrition needs, please consult a registered dietitian or physician.

For more information, check out the [USDA's My Plate](#), [the Academy of Nutrition and Dietetics](#) and [DC Metro Area dietetics association](#) to find a local Registered Dietitian and [BrainFacts.org](#) to learn more about the brain.

(Published July 18, 2012)

Featured Stories

- » The Campaign for Georgetown
- » HIV Reveals General Theory of Dementia
- » Newport Leads New Brain Center

[More »](#)