

# Food For Brain Health

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## ADD

A few ingredients that have been shown to be beneficial to brain:

- Omega – 3 fats
- Salmon, trout
- Walnuts
- Flax seeds
- Chia seeds/grain
- Caffeine In tea, coffee
- Tumeric
- Flavonoids and polyphenols
- Blueberries
- Brown rice
- Almost any fruit or vegetable
- Spinach
- Tea
- Tomatoes
- Onions
- Apples (especially skin)
- Insoluble fiber
- Barley
- Quinoa
- Chia

## Other things for the brain

- Social connections
- A purpose in life
- Mental game stimulation
- Challenging new tasks
- Deep breathing
- Meditation
- A few (1-2) minutes of very intense exercise three times a week following 30 minutes of moderately intense exercise (heart rate greater than 80% of 220 minus your calendar age): **the single most important item in this section**

## AVOID

- Avoid saturated fat (more than 4 grams in a meal)
- Trans fat (totally)
- Added sugars, syrups (any)
- Any grain but 100% whole grain

**Syrups.** The serial killer (or soda killer if you will) of this category is high fructose corn syrup (HFCS). It's so ubiquitous in prepackaged foods that roughly 10 to 12 percent of people's daily calories come from this added fructose. Getting too much of this syrup in your diet interferes with telling your brain that you're full and should stop eating—a genius way to get people to feel the need to buy a super-sized version for a dollar extra. The food industry's been pumping more and more HFCS into foods since the 1970s because it's cheap, mixes easily into beverages, and enhances flavor and shelf life. The result: We eat 1,000 times more HFCS now than when Nixon was president—on average 63 pounds a year!

The bottom line: Getting the obvious, and not so obvious, sweeteners out of your diet will save you hundreds of calories a day—and remove a substance that could be flipping metabolic switches without your permission. Here's how:

**Say no to soda and other sweetened drinks.** The calories alone are enough reason to stop sipping liquid candy: A single 18-ounce soda, sweet iced tea, or fruit drink can pack 200 or more calories — courtesy of the 15 teaspoons of full sugar like sweetener, usually HFCS, these beverages contain.

**If you're breaking a serious soda habit,** transitioning to an artificially-sweetened, 0-calorie version is a good

stepping stone on your way to healthier drinks—as in water, unsweetened iced tea, tea or black coffee or skim milk.

**Read labels to find hidden HFCS.** Check the ingredients lists of all the processed foods you buy for HFCS (as well as other sweeteners you don't need, like rice syrup). You'll find it in many breads, sweetened yogurts, and condiments. Only buy the brands without them, and certainly without them in the first five ingredients.

**Enriched, bleached, or refined flour.** All three words mean this flour has been stripped of its nutrients. Yes, even "enriched" just means some of the stripped nutrients have been put back. Instead, look for 100% whole grains. Why? These empty grains can pass through your intestines and into your blood at lightening speeds spiking your blood sugar and causing other unnecessary stress to your body — increasing blood pressure, scraping at your intestines and bowels, accumulating around your waist, need I say more. For younger arteries, better bowel function, clearer skin, lower cancer and diabetes risk, and even healthier gums, switch out your white rolls for 100% whole grains (6 servings daily). Exactly how eating whole grains may affect gum health isn't totally clear. But we already know that whole grains help make our hearts and our blood sugar healthier. And research on people with diabetes has found that lower blood sugar levels may mean lower gum disease risk, too.

**Saturated fat.** The kind found in meat, poultry skin, full-fat dairy foods, and palm and coconut oils that considerably increases your lousy LDL cholesterol as well as your belt size. Saturated fat may also increase small intestine cancer risk because of the bile acids your body uses to digest the fat. These acids can cause oxidative stress and subsequent cancer-causing damage to the DNA in the small intestine. And cancer of the small intestine may be extra hazardous because it could increase the risk of other forms of cancer, including colon and rectal cancers.

So FYI, that juicy steak you're planning on eating for dinner is probably chock full of this nasty fat. We're not saying that you should completely eliminate red meat from your diet (although we'd love to), just consume in moderation. Eating four ounces of red meat on your typical day (that's an average burger) ups your risk of fatal heart disease or cancer by almost 30%, versus people who eat only 4 ounces a week. So cutting that burger to once a week may mean a lot to you if you care about having enough blood to make your brain function, or avoid wrinkles, or erectile dysfunction. And processed meats—hot dogs, sausage, bologna, bacon—aren't noticeably better for you than that quarter-pounder. So try cutting back on beef without giving up

that meaty satisfaction. Here's how:

**Do a swap.** Instead of beef burgers, how about burgers made from skinless ground turkey or chicken or even soy or mushrooms? The same study found that people who ate the most chicken and fish were 8% less likely to die than those who ate the least white "meat." Just make sure your white-meat burgers are made from skinless breast meat. There's a big difference. For instance, if the label just says "ground turkey," it probably includes dark meat and skin. That jumps your saturated fat intake from 1 to 3% to as high as 17% — more than some lean ground beef!

For a sophisticated change of pace, how about salmon burgers or broiled crab cakes? Love beans? Try recipes for lentil-almond burgers (on RealAge.com) or chickpea patties (great with a Middle Eastern yogurt sauce).

**Move to the meaty mushroom.** Big, thick, and juicy, Portobello mushrooms rated as satisfying and tasty as beef in studies and make your arteries younger. Use in place of beef in stroganoff or throw 'em on the barbecue for a "make yourself younger with great tasting " burger. Remember there is no dividing line between great for you and great taste—yes it does take a few hours to learn how to make it taste great for you—but that few hours will be paid off in years of better sex, fewer wrinkles, and less disability,

**Use "stealth" soy.** Make meatless chili or meatloaf with soy crumbles. Give them a hearty Italian spin with sautéed onions, green peppers, mushrooms, garlic, and a dash of oregano, and no one will taste the difference. Cook it smarter. High-heat cooking methods, such as grilling, broiling, or pan frying, are what form cancerous HAAs. You can significantly reduce HAAs by marinating meat for an hour (heck use canola oil and balsalmic vinegar for even 15 minutes and reduce by 90%) before cooking, cooking it over medium heat and by using rosemary extract (available from several online companies, and shown to reduce the formation of HAAs by about 70% ) before cooking.

**Trans fats,** the ugly stuff still pumped into many snack foods and commercial desserts. Also known as hydrogenated oils, trans fats are artificially produced in the laboratory by adding extra hydrogen atoms to unsaturated vegetable oils. They have long been a favorite of the food industry for their increased shelf life over conventional oils. Unlike natural fats, however, trans fats have no nutritional value and drastically increase the risk of cardiovascular disease and death. Like saturated fats, they increase the body's levels of LDL ("bad") cholesterol, but unlike

those fats they also lower its levels of HDL ("good") cholesterol.

New research shows that trans fat isn't just bad for your heart. It may increase your risk of colon cancer, too. In one study, people who ate the most trans fat — an average of 6.5 grams per day — were 86 percent more likely to have potentially precancerous colon polyps compared with those who consumed the least trans fat — about 3.6 grams or less per day. Seems trans fats can mess with the colon's normal, healthy balance of bile and fatty acids and damage the mucus that protects this organ.

For heart health, the American Heart Association recommends that no more than 1 percent of your daily calories come from trans fat. That means if you eat 2,000 calories a day, no more than 2 grams should come from trans fat. Since trans fat is found mostly in packaged sweets, frozen dishes, and fried foods, steering clear of them will help. Your other option is to closely read the list of ingredients, keeping in mind that even products labeled trans-fat-free can still have up to 0.5 grams of the stuff per serving. So cut down on anything that lists hydrogenated or partially hydrogenated oils among the ingredients, too — "hydrogenated" is a red flag for trans fat.

### Summary:

#### Avoid these "Five Food Felons"

- 1 + 2. Simple sugars and syrups.** This includes brown sugar, dextrose, corn sweetener, fructose (as in high-fructose corn syrup), glucose, corn syrup, honey, invert sugar, maltose, lactose, malt syrup, molasses, evaporated cane sugar, raw sugar, and sucrose.
- 3. Saturated fat.** The kind found in meat, poultry skin, full-fat dairy foods, and palm and coconut oils that considerably increases your lousy LDL cholesterol, small intestine and colon cancer risk, as well as your belt size.
- 4. Trans fats,** the ugly stuff still pumped into many snack foods and commercial desserts. Also known as hydrogenated oils, trans fats have no nutritional value and drastically increase LDL (lousy) cholesterol, the risk of cardiovascular disease, colon cancer, and death.
- 5. Enriched, bleached, or refined flour.** All three words mean this flour's been stripped of its nutrients. These empty carbs can increase your risk of diabetes, hypertension, obesity, gum disease, arterial, intestinal, and bowel problems. Choose 100% whole grains instead.

### More on Food to Choose

#### Brain Food:

**Mediterranean diet.** People in their 70s who were the most active and adhered the best to a Mediterranean-style diet (mostly fruit, veggies, legumes, good fats, and fish) were more than 60% less likely to develop Alzheimer's than people who were the least active and Mediterranean-minded.<sup>1</sup>

**Spinach.** Seriously, filling up on this green can keep your brain so sharp you're the one who wins the million-dollar account, solves the global warming problem, and keeps doing the Saturday crossword puzzle in pen. Eating three or more servings of spinach and other leafy greens (such as kale and collard greens) slow mental decline due to aging by as much as 40 percent. Spelled out another way: Leafy greens can make your brain function more like the brain of someone who is 5 years younger! What makes these veggies so super for saving your smarts? Probably brain-friendly nutrients including carotenoids, and flavonoids. Keep extra power in your spinach by not letting it linger in the fridge. If you store it longer than four days after you buy it, these carotenoids, flavonoids and folate levels plummet, turning it into a wimpier green. Also, keep it as cold as you can, and it will hold onto carotenoids better. Can't plan on using it that quickly? Buy frozen. It's packaged so quickly after harvesting that the nutrients stay locked in.

**Low-carb diet.** There's a new bonus to good blood sugar control: better recall. It turns out that lack of insulin effect — a problem that allows blood sugar to get out of control — not only is bad for your organs and arteries, but it might keep you from remembering the name of your prom date, what month it is, or who the latest American Idol winner is. One piece of evidence: Men who had low insulin levels at age 50 had a greater risk of Alzheimer's and other types of dementia later in life. It's not clear yet how impaired insulin response bumps up Alzheimer's risk. But it is clear that the less insulin in the brain, the more it develops the hallmarks of that disease. In fact, researchers at Brown University refer to this low brain insulin problem (and the brain changes it's associated with) as "type 3 diabetes." While researchers haven't yet shown how to prevent type 3 diabetes, it's smart to do what you can to control your blood sugar. Brand new research found that while a low glycemic index (GI) diet is good at improving blood sugar control, a low-carb diet (less than 20 g of carbs per day) is even better. Ninety-five percent of diabetics on the low-carb diet were able to reduce or eliminate their meds, while 62% of those on the low-GI diet did. Both lost weight, which is also key: Obesity is linked to Alzheimer's risk, too.

**Delicious DHA.** It's the key omega-3 fat in fish oil. People who

took 900 mg of it made as few mistakes on a memory test as someone 7 years younger would have.<sup>2</sup> Get 600 mg a day from supplements. Not only does it protect your brain, your arteries benefit as well.

**Omega-3 foods.** Walnuts, avocados, flaxseeds, soybeans, canola or olive oil, fortified eggs, and juices all are good sources of Omega-3s, but by far the supreme source is fish. Try to eat 4 ounces of fish a week. Not a fish eater but wish you were? Start with flounder or salmon — and let a restaurant prepare it. Tastes and textures vary greatly, depending on whether fish is grilled, baked, or served sushi style, so you may find some preparations you like. A tip for those who frequently eat fish: Choosing the right kind can limit your intake of mercury, a harmful toxin that certain species of fish (long-lived tuna, for one) easily accumulate from the environment. Fortunately, some of the fish that are highest in omega-3s are lowest in mercury, including salmon, pollock, pickled herring, and cod — and of this group, salmon has the most omega-3 fatty acids and the least mercury. Also good to know: Canned light tuna is generally lower in mercury than fresh tuna.

**Walnuts.** Your heart will also love them. They help lower your lousy LDL cholesterol — that sticky blood-fat that clogs your arteries and boosts your risk of a heart attack. They are also particularly rich in alpha-linolenic acid (ALA), an omega-3 fatty acid with cardioprotective properties (lowers blood pressure). To top it off, they are loaded with other good-for-you nutrients, too, including vitamin E, folate, and fiber.

**Flaxseed.** May help bring blood pressure down a bit as well. Flaxseeds are abundant in alpha-linolenic acid (ALA), an omega-3 fat. And in a study, ALA-rich foods lowered blood pressure slightly — probably because this omega-3 fatty acid helps relax blood vessels, allowing blood to move more freely through arteries and to the brain. Even small drops in blood pressure can guard you against stroke and cardiovascular disease.

**Coffee.** People who drank at least 3 cups a day were 65% less likely to develop Alzheimer's or dementia than those who were less caffeinated.<sup>3</sup>

**Tea.** The amino acid called theanine in this brew — doesn't matter if it's green, black or oolong — is believed to help activate a part of the brain's circuitry that's tied to attention span.<sup>4</sup>

Peppermints. The strong scent helps people work more thoroughly and accurately.<sup>5</sup>

**Tumeric.** Indians and mice who consume a curry dish or its equivalent a day have 75% LESS Alzheimer's than North Americans who don't.

## Summary:

### Brain Workouts:

**Breathe.** Inhaling deeply brings a chemical called nitric oxide from the back of your nose and your sinuses into your lungs. This short-lived gas dilates the air passages in your lungs and does the same to the blood vessels surrounding them so you can get more oxygen into your body and brain.

**Exercise.** Activity boosts brain function by ramping up blood flow, so oxygen and nutrients get around to all parts of your body better, including your brain. It also stimulates the release of endorphins that boost your mood and ease anxiety and depression. Plus, a consistent workout can help improve your sleep so you're less drowsy and irritable, keep your blood pressure in check, and will normalize your bowel by getting your digestive system moving.

**Crossword puzzles.** Pushing your mind slightly beyond its capabilities causes regrowth of neurons and dendrites, so you're banking brainpower.

### Brain Food:

**A low-carb Mediterranean diet.** The carotenoids and flavonoids in fruit, veggies, legumes, good fats, and fish protect against Alzheimer's.<sup>6</sup> Lack of insulin effect — a problem that allows blood sugar to get out of control — can impair your memory and promote Alzheimer's so shoot for less than 20 g of carbs per day.

**DHA and Omega-3 foods.** Take 600 mg of DHA and eat walnuts, avocados, flaxseeds, soybeans, canola or olive oil, and fortified products. Also, eat 4 ounces of salmon, pollock, pickled herring, and cod a week.

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*About the Author:*

*Michael Roizen, MD is Chief Wellness Officer at Cleveland Clinic. Dr. Roizen appears regularly on television with Mehmet Oz, MD, promoting healthy living, and has co-authored a series of YOU books on the same subject. Dr. Roizen is a Past Chair of a Food and Drug Administration advisory committee and a former editor for six medical journals. His first general audience book, RealAge: Are You as Young as You Can Be? became a #1 New York Times bestseller. He is 64 calendar years of age, but his RealAge is 44.8. Dr. Roizen still practices internal medicine, using the RealAge metric to motivate his patients. He routinely takes patients at the Cleveland Clinic Wellness Institute who are in the midst of struggling with tobacco, heart, diabetic or arthritic problems and coaches them with simple but persistent lifestyle changes to be able to live, feel, look and be years younger.*

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- 1 <http://www.realage.com/tips/eat-greek-to-prevent-dementia>
  - 2 <http://www.realage.com/blogs/doctor-oz-roizen/>
  - 3 <http://www.realage.com/tips/coffee-refill-its-okay>
  - 4 <http://www.realage.com/ct/tips/5877>
  - 5 <http://www.realage.com/ct/tips/3110>
  - 6 <http://www.realage.com/tips/2-ways-to-dodge-dementia>
  - 7 <http://www.realage.com/eat-smart/food-and-nutrition/coffee-refill-its-okay>
  - 8 <http://www.realage.com/ct/tips/5877>