

Nutrition and Mood



How simple changes to your diet can improve brain-growth and reduce depression

The food we eat is used as building blocks in our brain. For example, 30% of the brain is made of omega-3 fatty acids, and depletion of these has been linked to depression, bipolar disorder and irritability.

A healthy diet can also help brain growth. A diet low in sugar and saturated fat can improve brain growth in ways that help prevent mood disorders.

Depression and appetite

Stress and depression disrupt the hormone system, which can make people crave comfort-foods that are high in fat and sugar. One way to counter this effect is to eat more proteins (including nuts and beans), eat within 30 minutes of waking, and eat five small meals throughout the day. All these changes help to stabilize appetite.

For the sections below, “Best sources” means you can eat as much as you want, “Sources to limit” means you should eat in small quantities.

Omega-3 Fatty Acids

These healthy-fats protect brain cells and reduce depression, bipolar and irritability.

Best sources: Fish (2 servings of farm-raised salmon per week has enough omega-3 to treat depression), dark greens (spinach, kale), kiwi fruit, butternuts.

Sources to limit: There is controversy about pollutants such as mercury in fish, but the benefits of eating fish overwhelms any risk and most experts still recommend eating at least 1-2 servings of fish per week. The concern about mercury may be greater if you are pregnant, but even there the harm of not eating omega-3's is greater if you are pregnant. Fish with high mercury content are shark, swordfish, tile-fish, king mackerel.

Probiotics

Probiotics are “healthy bacteria” found in yogurts and other foods. They have long been known to help the digestive track work better and to relieve symptoms of irritable bowel syndrome. Newer studies have found benefits in anxiety. This study used a combination of *Lactobacillus helveticus* and *Bifidobacterium longum*, available in the Serolife brand, though other probiotics are likely to be helpful.

Best sources: The study used Lallemand's Probio'stick, and the Serolife brand has the same type of probiotics. It is not known if other probiotic strains will help, but gastrointestinal doctors recommend the *Align* brand. Many yogurts and other foods advertise that they contain probiotics.

Flavanoids

These improve brain-growth and may enhance memory and mood.

Best sources: Blueberries in particular. Citrus fruits, green tea.

Sources to limit: Dark chocolate. Red wine (too much alcohol, in fact often any more than 5 ounces of wine per day for women or 10 ounces per day for men, is toxic to the brain and can cause dementia, depression and mania).

Reduce sugar by eating whole fruit instead of fruit juice. Or, for a drink, make your own smoothie by blending whole or frozen fruit in a food processor with water or yogurt.

Curcumin

This ingredient of turmeric and curry spice may help prevent dementia (it improves brain function in research and there are low rates of dementia in India where it is eaten).

Vitamins for the Brain

B Vitamins (B₆, B₁₂, Folate)

Best sources: Fruits and vegetables, whole grains, beans, whole grain cereals/oats, chicken, fish. Enriched soy or rice milk (low sugar).

Vitamin D

Best sources: Fish, fatty fish (salmon), mushrooms, whole grain cereals/oats.

Sources to limit: Liver. Enriched soy or rice milk (low sugar). See above warnings on fish.

Vitamin E

Best sources: Asparagus, avocado, nuts (walnuts, almonds, pecans), olives, seeds, chia seeds, spinach, healthy oils (olive, walnut, canola, safflower, sunflower oil), wheatgerm.

Sources to limit: Peanuts, pistachio, macadamia nuts, red palm oil.

Selenium

Best sources: Nuts, whole grain cereals/oats, fish.

Sources to limit: Lean red meat, eggs (no more than 1 yolk/day; as many whites as you want).

Iron (for menstruating women)

Brain benefits: For menstruating women, improves cognitive function (may help prevent effects of blood loss caused by menstruation).

Best sources: Fish, chicken, lentils, beans.

Sources to limit: Lean red meat.

Foods to Avoid

Saturated and Trans-fats

Brain Problems: Contributes to aging and decline of brain function. Causes brain changes that are similar to those seen in depression.

Sources: Dairy products (milk, cheese), fried foods, processed or non-lean meat (e.g. meats with nitrites, bacon, fast food burgers, processed lunch meats). Some snack foods (check the label for amounts of saturated and trans fat). Margarine, lard.

Healthy Substitutes:

For Dairy: Plain or vanilla yogurt (add fruit/honey yourself), low fat milk/cheese; tofu, soy, almond or rice milk (without added sugar).

For Snacks: Snack foods low in saturated and trans fats (check the label). Corn/tortilla chips (check label for trans fat/corn syrup), Popcorn without butter, dried fruits (in small quantities, they have lots of sugar in them), nuts, seeds, fresh fruits, almond butter/peanut butter, celery/carrot sticks. Kashi products. Yogurt or dark-chocolate covered raisins.

For Meat: Grilled lean meats (chicken, fish and lean meats).

For Oils & Butter: Healthy oils (olive, walnut, canola, safflower, sunflower oil).

Simple sugars

Brain Problems: Reduces brain growth, increases diabetes. Causes brain changes that are similar to those seen in depression.

Sources: Sweets, white flour, white bread (pizza, white sandwich bread/rolls). High fructose corn syrup (present in many sodas and sweets).

Healthy Substitutes:

For sweetness: honey, maple syrup, rice syrup (made from brown rice), agave syrup/nectar, stevia, xylitol. Reduce sugar by eating whole fruit instead of fruit juice. Or, for a drink, make your own smoothie by blending whole or frozen fruit in a food processor with water or yogurt.

For white bread: Whole grain breads, wheat breads/cereals, oatmeal, brown rice, bulgur, wheat berries, whole wheat pasta.

—Chris Aiken, MD, Ann McCarty, PA, 9/10/14