

FOOD & MOOD: WHAT'S THE LINK?

Whether it's a magazine ad, television commercial, or advice from a registered dietitian, messages that guide us towards making sensible food choices that influence many aspects of our health – heart, eyes, skin, gastrointestinal tract, and immune system – are all around us. Growing scientific evidence suggests that food can also influence other, less visible yet equally important aspects of wellness: energy levels, stress levels, mood, memory, and sleep-wake cycles.

Memory & Concentration

- Antioxidant-rich berries have been shown to slow memory decline. Add to yogurt, oatmeal, salads, and smoothies.
- **Dark leafy greens** may also help with age-related memory decline. Use as a base for salads, sauté with olive oil and garlic for a side dish or toss into omelets and smoothies.
- Consume at least two servings of fatty fish per week for a healthy dose of omega-3 fatty acids.
- Flavonoids found in dark chocolate may enhance learning and memory, while also slowing down age-related mental decline. An ounce of dark chocolate a day can also boost your mood.
- Low levels of the neurotransmitter acetylcholine have been linked to Alzheimer's disease and poor memory. Choline, a vitamin B-like compound, is a precursor to acetylcholine. Choline-rich foods include eggs, liver, lean beef, and poultry.

Mood

- Maintaining stable blood sugar levels throughout the day can help stabilize mood. Try to eat something
 every 3-4 hours throughout the day and avoid skipping meals.
- Too little **selenium** may have a negative impact on your mood. Get your daily dose by eating Brazil nuts, tuna, sunflower seeds, whole grain cereals, and swordfish.
- Deficiencies in **Folic Acid** have been linked to depression. Consume plenty of folate-rich foods, such as leafy greens, citrus fruit, and legumes.
- There are **Vitamin-D** receptors in the area of the brain that affects depression, and a deficiency may make you prone to depression and other mood disorders. Some foods that are rich in Vitamin D include fatty fish, egg yolks, and fortified milk.
- Omega-3 fats are present in the brain in greater quantity than anywhere else in body and therefore they have been shown to help alleviate and reduce symptoms of depression. Fatty fish is the most direct source of omega-3s, but you can also get your daily dose from walnuts, flaxseeds, and chia seeds.
- Magnesium helps to regulate our emotions and balance mood. A deficiency can lead to irritability, fatigue, and predispose us to stress. To make sure you're meeting your needs, fill up on almonds, spinach, cashews, peanuts, edamame, pumpkin seeds, guinoa, sesame seeds, and whole grains.

Energy

- B vitamins help the body convert food into energy, but do not provide energy on their own. Suboptimal intake of B vitamins can interfere with the body's ability to convert carbohydrates and fats into energy. Be sure you get enough B vitamins by eating plenty of fortified cereals, whole grains, beans, and peas.
- Overeating at any one meal can zap your energy level. Eat your biggest meal at breakfast; eat a
 moderate-sized or light lunch and a light meal at dinner.
- Dehydration can zap energy levels. Be sure to stay hydrated by drinking at least two liters of water every day.



Sleep

- Eating carbohydrates triggers the release of insulin into the blood stream, allowing tryptophan, a
 precursor to the brain neurotransmitter serotonin, to enter the brain. Elevated serotonin levels produce a
 sense of calm and may induce sleep.
- A small bedtime snack can consist of healthful carbs plus a small amount of tryptophan-rich food like whole grain cereal and milk, sliced half banana topped with yogurt, a few whole grain crackers and low fat cheese, or a half turkey sandwich on whole grain bread.
- Lighter dinners are more likely to give you a restful night's sleep than large, heavy ones.
- Avoid caffeine-containing foods, beverages, and medications close to bedtime.

Red Flag Food Behaviors

Excessive coffee drinking. Drinking coffee may offer a temporary burst of energy, but for most people, the spurt is short-lived. In fact, for some, caffeine may worsen depression. Studies have found that in people with caffeine sensitivity, eliminating caffeine may actually improve mood and boost energy. Aim to consume no more than 2 cups (16 ounces) per day, and don't drink coffee too late in the day as this can negatively impact sleep.

Overdoing sugar. Eating sweet foods triggers a release of endogenous opiates – opium-like compounds made in the body, which lead to a temporary feeling of pleasure. Constantly seeking comfort in sweet carbs and sugarrich foods can lead to a never-ending cycle of excessive calorie intake, according to one researcher.

Skipping meals, especially breakfast. Eating a healthy breakfast provides the fuel your body and brain need to start the day. Breakfast provides energy for mental and physical activity and improves productivity. It also increases the rate at which you burn calories throughout the day. Skipping breakfast is likely to leave you feeling sluggish, tired, and hungry.

Overeating at lunch. Beware of lunch buffets or business lunches where there is a tendency to overeat. Try to steer away from heavy lunches that include fried or fatty foods. These energy-zapping lunches leave you feeling stuffed, sluggish, and ready for a nap.

5 Steps to a "Good Mood" Eating Plan

- 1. Try to eat several times a day: three meals and one to two snacks. Following a regular eating schedule provides your body—especially your brain—with a steady supply of energy throughout the day. A mood-boosting diet is rich in complex carbohydrates (whole grains, beans, fruits, and vegetables), with ample lean protein and unsaturated fats.
- **2. Include breakfast every day.** The benefits are many, including improved attention span and productivity. Breakfast helps "jumpstart" calorie-burning that will last throughout the day.
- 3. Limit sweet and sugar-containing foods to one or two per day maximum. Replace refined grains and sweets with more nutritious sources of carbohydrates like fruit, veggies, yogurt, whole grains, and legumes.
- **4. Limit caffeine-containing beverages including coffee, tea, and colas, to two per day.** The "kick" is typically short-lived and can leave some people feeling depressed. Caffeine, a known diuretic, can increase the body's need for water. Most important, too much caffeine can disrupt the delicate balance between sleep and wakefulness.
- **5.** Drink plenty of water; aim for eight cups per day. Shorting your body on water can lead to fatigue. Individual fluid needs can vary widely depending on activity level, environmental conditions at home and work, and how much you sweat. A general rule to help know whether or not you are drinking enough is to check the color of your urine. If it is pale, like the color of lemonade, you are probably drinking enough. If it is dark, resembling the color of apple juice, then you need to up your fluids. Water should fulfill at least half of your daily fluid needs, if not more. Other good choices include decaffeinated tea, seltzer, and low-fat or nonfat dairy.