

BRAIN HEALTH BOOST



Blueberries Pack a Powerful Brain Health Punch

*The Brain Health Initiative (BHI) is working to develop brain healthy communities, creating a culture that promotes brain health protective factors and decreases risk factors, thereby improving brain health, optimizing brain performance, and preventing and fighting brain illness across the lifespan for the Florida Suncoast region and beyond. **In this Brain Boost we celebrate the brain health benefits of blueberries during National Blueberry Month.***

When it comes to foods that protect our brain health, the tiny blueberry packs a big punch. These great tasting summer berries are packed with flavonoids, the powerful antioxidants that give them their rich color. Research shows the flavonoids in blueberries pack three times more antioxidant power than spinach.

The cells that make up our bodies, including our brain cells, rely on their energy-generating mitochondria to power the biochemical reactions that keep us healthy. A byproduct of this metabolic process is the production of free radicals — unstable atoms that bind to other atoms. Free radicals damage the cells they attach to and their mitochondria. Our bodies usually produce enough antioxidants to neutralize most of these free radicals but when there are more free radicals than antioxidants, we experience oxidative stress. Oxidative stress can cause damage to DNA, protein, and lipids, leading to such diseases as type 2 diabetes, Alzheimer’s disease, atherosclerosis, and cancer. Free radicals are also known to cause wrinkles and other signs of aging. The best source for supplementing antioxidant production is to include foods high in antioxidants — like blueberries — in your diet.

Research also shows flavonoids help improve brain performance, including memory. One study found that women who consumed two or more servings of strawberries and blueberries each week delayed memory decline by up to two-and-a-half years. Blueberries also score well in nutritional value being low in calories, fat, and sodium, but high in vitamins C and A, and fiber.

For an added boost, choose wild blueberries. Research shows these smaller, tastier blue wonders contain more anthocyanins than any other commonly consumed berry in our diet, including ordinary blueberries. They can be found in the frozen food aisle of the grocery store throughout the year.

WHAT YOU CAN DO TODAY TO PROTECT YOUR BRAIN HEALTH

Blueberries taste great and they are good for you. [Healthline](#) shares some of these top health benefits of blueberries.

- **Blueberries are low in calories and high in nutrients.** Blueberries are among the most nutrient-dense berries. A 1-cup serving of blueberries contains:
 - 4 grams of fiber.
 - Vitamin C: 24 percent of the recommended daily intake (RDI).
 - Vitamin K: 36 percent of the RDI.
 - Manganese: 25 percent of the RDI
 - Just 84 calories.
- **Blueberries are a top source of antioxidants.** Blueberries are believed to have one of the highest antioxidant levels of all common fruits and vegetables. The flavonoid anthocyanins found in blueberries is thought to be responsible for much of these berries' beneficial health effects.
- **Blueberries help reduce DNA damage.** Oxidative DNA damage is an unavoidable part of everyday life. It is said to occur tens of thousands of times per day in every cell in your body. Because blueberries are high in antioxidants, they help neutralize some of the free radicals that damage your DNA.
- **Blueberries protect your heart and a healthy heart supports a healthy brain.** Oxidative damage is not limited to your cells and DNA, it can also damage your cholesterol and oxidation of "bad" LDL cholesterol can lead to heart disease. The antioxidants in blueberries are strongly linked to reduced levels of oxidized LDL. Blueberries have also been shown to lower blood pressure, a risk factor for brain illness, especially if you are overweight or a postmenopausal woman. Observational studies suggest that people with high intake of the flavonoids in blueberries are at lower risk for heart attacks.
- **Blueberries can help maintain and optimize brain function and improve memory.** The aging effects of free radicals also accelerate the aging process of your brain, but studies suggest those wonderful flavonoids in blueberries appear to benefit aging neurons, leading to improvements in cell signaling, aiding brain function, and delaying mental decline.
- **Blueberries may have anti-diabetes effects, a risk factor for brain illness.** While blueberries contain a moderate amount of sugar, the bioactive compounds in blueberries appear to outweigh any negative impact of the sugar when it comes to blood sugar control. The antioxidants have a beneficial effect on both insulin sensitivity and glucose metabolism.
- **Blueberries may help fight urinary tract infections.** It is widely known that cranberry juice can help prevent UTIs, a common problem for many women, and because blueberries are closely related to cranberries, they boast many of the same active substances as cranberry juice. These substances help prevent bacteria like E. coli from binding to the wall of your bladder.
- **Blueberries may help reduce muscle damage after strenuous exercise.** Inflammation and oxidative stress in muscle tissue following

strenuous exercise can lead to muscle soreness and fatigue. Blueberries can help lessen the damage that occurs at a molecular level, minimizing soreness and reduced muscle performance.

And don't forget to **BE BRAIN HEALTHY** and adopt a lifestyle that includes thoughts, behaviors, emotions, responses, and language that promote brain health protective factors:

- Stress resilience
- Nutrition
- Physical activity
- Sleep
- Social connection
- Emotional wellbeing
- Meaning and Purpose
- Cognitive stimulation and creativity
- Engaging with nature
- General health
- Positive impacts

About the Brain Health Initiative (www.brainhealthinitiative.org)

The Brain Health Initiative (BHI) is a cutting-edge, new approach to protecting brain health, optimizing brain performance, and fighting brain illness across the lifespan. The BHI is a collaborative effort with Massachusetts General Hospital, a Harvard Medical School Teaching Hospital, to build brain healthy communities through education, collaboration, research, innovation, and action, with a specific focus on *brain health promotion, prevention, early detection, evidence-based intervention, and optimization of performance*. The BHI is creating a culture that promotes brain health protective factors and decreases risk factors, thereby improving brain health and optimizing brain performance outcomes for the Florida Suncoast region and beyond. Join the **Be Brain Healthy** movement, **because brain health matters, and lifestyle makes a difference**. To view all Brain Health Boosts [click here](#).