

# Strong scientific evidence that eating berries benefits the brain

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Strong scientific evidence exists that eating blueberries, blackberries, strawberries and other berry fruits has beneficial effects on the brain and may help prevent age-related memory loss and other changes, scientists report. Their new article on the value of eating berry fruits appears in *ACS' Journal of Agricultural and Food Chemistry*.

In the article, Barbara Shukitt-Hale, Ph.D., and Marshall G. Miller point out that longer lifespans are raising concerns about the human toll and health care costs of treating Alzheimer's disease and other forms of [mental decline](#). They explain that recent research increasingly shows that eating berry fruits can benefit the [aging brain](#). To analyze the strength of the evidence about berry fruits, they extensively reviewed cellular, animal and human studies on the topic.

Their review concluded that berry fruits help the brain stay healthy in several ways. Berry fruits contain high levels of antioxidants, compounds that protect cells from damage by [harmful free radicals](#). The two also report that berry fruits change the way neurons in the brain communicate. These changes in signaling can prevent inflammation in the brain that contribute to neuronal damage and improve both motor control and cognition. They suggest that further research will show whether these benefits are a result of individual compounds shared between berry fruits or whether the unique combinations of chemicals in each berry fruit simply have similar effects.

**More information:** Berry Fruit Enhances Beneficial Signaling in the

Brain, *J. Agric. Food Chem.*, Article ASAP. DOI: [10.1021/jf2036033](https://doi.org/10.1021/jf2036033)

## Abstract

Increased lifespans have led to population aging and brought attention to healthcare concerns associated with old age. A growing body of preclinical and clinical research has identified neurological benefits associated with the consumption of berry fruits. In addition to their now well-known antioxidant effects, dietary supplementation with berry fruits also has direct effects on the brain. Intake of these fruits may help to prevent age-related neurodegeneration and resulting changes in cognitive and motor function. In cell and animal models, berry fruits mediate signaling pathways involved in inflammation and cell survival in addition to enhancing neuroplasticity, neurotransmission, and calcium buffering, all of which lead to attenuation of age- and pathology-related deficits in behavior. Recent clinical trials have extended these antioxidant, anti-inflammatory, and cognition-sparing effects to humans. This paper reviews recent evidence for the beneficial signaling effects of berry fruits on the brain and behavior.

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