Eating more berries may reduce cognitive decline in the elderly

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Blueberries and strawberries, which are high in flavonoids, appear to reduce cognitive decline in older adults according to a new study published today in *Annals of Neurology*, a journal of the American Neurological Association and Child Neurology Society. The study results suggest that cognitive aging could be delayed by up to 2.5 years in elderly who consume greater amounts of the flavonoid-rich berries.

Flavonoids are compounds found in plants that generally have powerful antioxidant and anti-inflammatory properties. Experts believe that stress and inflammation contribute to cognitive impairment and that increasing consumption of flavonoids could mitigate the harmful effects. Previous studies of the positive effects of flavonoids, particularly anthocyanidins, are limited to animal models or very small trials in older persons, but have shown greater consumption of foods with these compounds improve cognitive function.

According to the 2010 U.S. Census, elderly Americans-those 65 years of age and older-increased by 15% between 2000 and 2010, faster than the total U.S. population, which saw a 9.7% increase during the same time period. "As the U.S. population ages, understanding the health issues facing this group becomes increasingly important," said Dr. Elizabeth Devore with Brigham and Women's Hospital and Harvard Medical School in Boston, Mass. "Our study examined whether greater intake of berries could slow rates of cognitive decline."

The research team used data from the Nurses' Health Study-a cohort of 121,700 female, registered nurses between the ages of 30 and 55 who completed health and lifestyle questionnaires beginning in 1976. Since 1980 participants were surveyed every four years regarding their frequency of food consumption. Between 1995 and 2001, cognitive function was measured in 16,010 subjects over the age of 70 years, at 2-year intervals. Women included in the present study had a mean age of 74 and mean body mass index of 26.

Findings show that increased consumption of blueberries and strawberries appear to slow cognitive decline in older women. A greater intake of anthocyanidins and total flavonoids was also associated with reduce cognitive degeneration. Researchers observed that women who had higher berry intake delayed cognitive aging by up to 2.5 years. The authors caution that while they did control for other health factors in the modeling, they cannot rule out the possibility that the preserved cognition in those who eat more berries may be also influenced by other lifestyle choices, such as exercising more.

"We provide the first epidemiologic evidence that berries may slow progression of cognitive decline in elderly women," notes Dr. Devore. "Our findings have significant public health implications as increasing berry intake is a fairly simple dietary modification to test cognition protection in older adults."

More information: "Dietary Intake of Berries and Flavonoids in Relation to Cognitive Decline." Elizabeth E. Devore, Jae Hee Kang, Monique M.B. Breteler and Francine Grodstein. *Annals of Neurology*; Published Online: April 26, 2012 (DOI:10.1002/ana.23594).

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