



Effect of Berries on Cognitive and Neurochemical Functions

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Berries are an excellent source of numerous, unique, bioactive compounds, which play a pivotal role in attenuating stress-associated biological dysfunctions. The protective effects of berries play even more significance in brain health as brain alone utilizes from 10-50% of the body's total oxygen supply...

...Elderberry (*Sambucus* spp.) like blueberries, blackberries and other berry species, contains large amount of flavonoids, particularly catechins and anthocyanins. Our studies have shown that improvement of brain health by berry diets is a result of reduced oxidative stress and inflammation, and, at the same time, an upregulation of the endogenous defense system to ward off toxic protein accumulations, an improvement in neuronal signaling, and a promotion of adult neurogenesis in critical brain regions. We have show feeding aged rats (19-21 months old) with berries high in antioxidants is able to prevent and reverse the neurochemical and behavioral changes that occur in aging, such as loss of memory, cognition and motor functions. Therefore, it is critical to highlight the nutritional interventions of diets rich in nuts, berries, fruits and vegetables which may reverse or allay age-related motor or cognitive deficits, delay the onset of age-related neurodegenerative diseases and convey long-term health dividends in an aging population.

Read this abstract again and put its key points to work – especially that last sentence! Variety of high quality nutrient dense foods like berries, other fruits and nuts can even REVERSE brain damage due to aging. Of course, prevention is much better, but this study informs me that one can never start too late to improve his or her diet.

The advantage of elderberry, is its extremely high concentration of these indicated antioxidant and anti-inflammatory flavonoids, so that consuming small quantities of elderberry juice/flower products goes a long way to providing potentially effective nutritional boosts in the identified bioactive compounds. Since demographic trends indicate that older people will make up an increasing proportion of the population, the marketing future for dark berries is bright, if people can be educated about the huge potential for a superior quality of life due to a better diet rich in nuts, fruits, vegetables and (especially dark) berries.