



# Does Gout Impact the Brain and Cognitive Function?

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## Gout and Cognitive Function

Is there any association between gout and your cognitive function? Researchers are still in the process of understanding this link, as past studies yielded mixed results : some research papers suggested that higher-than-normal levels of uric acid (as in gout) can protect your brain and possibly decrease the risk of Alzheimer's disease, while other studies found a negative impact on the cognitive function.

### High Levels of Uric Acid – bad or good for the brain?

Uric acid is considered to have antioxidant qualities, and therefore has the ability to fight free radicals (free radicals are associated with the aging process and degenerative conditions such as Alzheimer's disease). Some studies showed that high levels of uric acid were linked with a decreased risk of dementia and better cognitive function later on in life.

Other studies found that patients with mild cognitive problems and Alzheimer's disease have lower levels of uric acid compared with healthy individuals.

A 2013 research paper reveals that high uric acid levels found in gout sufferers do correlate with the shrinkage of the white matter in the brain and worsen cognitive function. This study followed the participants over 5 years, and the white matter of the brain was measured with MRIs. This study found a significant decreased in white matter volume (of the brain) and impairments in cognition (affecting executive function and information process speed) in the subjects who had high uric acid levels.

### Considerations

The results are mixed regarding the link between cognitive function and hyperuricemia. However, it is well known that high levels of uric acid cause the typical symptoms of gout, and also increase your risk for heart attacks, stroke and death. This happens because uric acid influences the smooth muscles found in the walls of the blood vessels and it also promotes inflammation. There is no doubt that too much uric acid in your blood can have an impact on your joints and heart, therefore, you should have gout well controlled with medication and diet. Keep your uric acid levels within normal ranges and consider adding more brain-healthy antioxidants to your body from other sources.

### How to Manage Gout and Cognitive Function

A review of several studies published in 2013 found that Mediterranean diet had been linked with slower cognitive decline and a lower risk of developing Alzheimer's disease. A 2012 study found this diet beneficial to improve uric acid levels, and therefore was suggested for preventing and/or managing gout. This diet is rich in antioxidants, being based on fresh fruits and vegetables, healthy oils, legumes, whole grains and lean meats.

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You can further adapt this diet and make it even more gout-friendly by replacing high purine foods (that are detrimental for gout) with alternative options. For example, you should choose salmon, crab or lobster (which has moderate levels of purine) over sardines, herring, mussels, codfish or scallops (which are high purine foods). Fava beans and chickpeas have more purines compared with most other beans. Talk to a dietician about an individualized diet.