



Neurological Effect and Benefits of Honey

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ABSTRACT

Honey is the only natural product which is derived by insects through nectar. Honey is used in many therapeutic, traditional, nutritional, cosmetic fields. Honey has many active natural compounds, one of them is a polyphenols. Raw honey possesses nootropic effect such as neuropharmacological activities and also boost memory and also improves general cognitive function. Research suggests that the polyphenol constituents of honey can extinguish biological reactive oxygen species and counter oxidative stress and also reinstitute the cellular antioxidant defence system. Honey polyphenols are useful in improving memory deficiency and can act at the molecular level. So the ultimate objective is the biochemical impact of honey on specific neurodegenerative diseases, apoptosis, should be calculated with appropriate mechanistic approaches using biochemical and molecular tools.

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Introduction

Honey is a sweet fluid which is made by bees using nectar from flowers. Honey is used as a traditional medicine from ancient days. Honey is present as a raw or pasteurized and in a variety of colour grades. It also contains 80% of sugar content. Some of the research work suggests that consuming raw honey may help with seasonal allergies and also can heal the wounds.

The honey contains mainly sugars and water and it also has several vitamins and minerals, including B vitamins and also amino acids, proteins, phenol antioxidants, and micronutrients present in honey.

Honey has been found to be beneficial to people suffering from anaemia. One of the studies stated that improved haemoglobin concentration which increased erythrocyte count and elevated haematocrit in the honey consumers. Human subjects related states that two honey treatments in a Californian study show that honey consumers have the benefit of haematoprotection and also increase in blood proliferation.

Neurological Effect of Honey

The brain is the supervisory organ which plays an important role in controlling such as body movement and other functions. Any neuro-damaging or failure leads to either the fatigue death or the functional aberration of neural cells, which results in neurodegeneration and damages the functions of the brain, such as memory. Honey is one such promising nutraceutical antioxidant

which plays an important role in neuroprotective therapy. Therefore, honey used appropriately in a great detailed study and mechanistic approach related to biochemical and molecular interventions help in future benefits. Several honey supplementation researches say that honey polyphenols have neuroprotective and nootropic effects. Polyphenol constituents of honey extinguish biological reactive oxygen species that leads to neurotoxicity and aging as well as the pathological deposition of misfolded proteins. Raw honey and honey polyphenol decrease the microglia-induced neuroinflammation that is created by ischemia reperfusion injury or immunogenic neurotoxins. Most importantly, honey polyphenols contrast with neuroinflammation in the hippocampus, a brain structure that is present in spatial memory. Honey polyphenols also encounter with memory deficits and induce memory formation at the molecular level. Several researches say that the modulation of specific neural circuitry highlights the neuropharmacological effects of honey.

Conclusion

Honey has many nutritional values. Due to the presence of agents like anxiolytic, antinociceptive, anticonvulsant, and antidepressant present in honey which increases the oxidative status of the brain. The neural circuits and receptors that are present cause neurological effects of honey. Use of honey should be studied and examined for further future scope.