



ELITE

Personal Training and Fitness Solutions

# HEALTH TOPIC OF THE WEEK

## 12/19 - From Fog To Focus

### Introduction

Losing your train of thought and finding it hard to pay attention are common with age. If these activities interfere with daily life, you may be experiencing brain fog.

Brain fog involves decreased mental energy and focus. It may include mental fatigue, forgetfulness, fuzzy thinking, confusion, and difficulty concentrating.

Brain fog is more than an annoyance. It can decrease cognitive performance and make it difficult, if not impossible, to get work done.



### What Causes Brain Fog?

To pinpoint changes in the brain that may produce mental foggy, scientists researched medical conditions that exhibit some of the same mental symptoms. Complaints consistent with brain fog have been reported by people with:

- inflammatory disorders
- allergies
- immune disorders
- impaired nutrition
- dietary sensitivities

These observational studies led researchers to propose that brain fog results from inflammation, histamine (the chemical that causes allergic symptoms), neurotransmitter imbalance, and impairment of neuronal (brain cell) activity.



Elite Personal Training and Fitness Solutions does not provide medical treatment or intervention. We acknowledge scientific evidence that appropriately intensive exercise and sustainable nutritional intervention can have significant impact on chronic health disorders and obesity, dramatically improving symptoms when recommendations are followed. Please visit us at [Eliteptf.com](http://Eliteptf.com) for more information and to schedule your evaluation.

## Plant Extracts

Scientists have identified two plant-derived nutrients that appear to have the potential to prevent, or even reverse, symptoms of brain fog and its underlying biological changes.

- Mango leaf extract has been clinically shown to improve reaction time and reduce mental fatigue. It also boosts attention, performance accuracy and working memory.
- Peppermint oil has been clinically shown to significantly reduce the development of mental fatigue and improve aspects of attention and memory.



## How Mango Leaf Protects the Brain

Mango's benefits are due to the polyphenol (powerful antioxidants found in plants) mangiferin. Mangiferin's ability to protect the brain has been demonstrated in both animal and human studies. It decreases neural inflammation, reduces oxidative stress and provides neurotransmitter support. Human studies show that mango leaf extract improves areas of cognitive function including attention, performance, accuracy and working memory.



## How Peppermints Helps the Brain

Plants rich in monoterpenes have been shown in placebo-controlled studies to have cognitive benefits. Peppermint oil contains many of these compounds. Human studies have shown that peppermint teas improve memory and boost mental alertness as well as favorably modulate various neurotransmitters such as acetylcholine and GABA. These neurotransmitters play a pivotal role in mental alertness, cognition and mood.



**Feeling Foggy? Contact EPT for appropriate supplement recommendations.**



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## References

- Available at: <https://health.clevelandclinic.org/brain-fog/>. Accessed October 10, 2022.
- Lopez-Rios L, Wiebe JC, Vega-Morales T, et al. Central nervous system activities of extract *Mangifera indica* L. *J Ethnopharmacol*. 2020 Oct 5;260:112996.
- Wightman EL, Jackson PA, Forster J, et al. Acute Effects of a Polyphenol-Rich Leaf Extract of *Mangifera indica* L. (Zynamite) on Cognitive Function in Healthy Adults: A Double-Blind, PlaceboControlled Crossover Study. *Nutrients*. 2020 Jul 23;12(8).
- Kennedy D, Okello E, Chazot P, et al. Volatile Terpenes and Brain Function: Investigation of the Cognitive and Mood Effects of *Mentha x Piperita* L. Essential Oil with In Vitro Properties Relevant to Central Nervous System Function. *Nutrients*. 2018 Aug 7;10(8).
- Hartgerink-Lutgens I, Vermeeren A, Vuurman E, et al. Disturbed cognitive functions after nasal provocation in patients with seasonal allergic rhinitis. *Clin Exp Allergy*. 2009 Apr;39(4):500-8.
- Theoharides TC, Stewart JM, Hatzigelaki E, et al. Brain “fog,” inflammation and obesity: key aspects of neuropsychiatric disorders improved by luteolin. *Front Neurosci*. 2015;9:225.
- Balter LJ, Bosch JA, Aldred S, et al. Selective effects of acute lowgrade inflammation on human visual attention. *Neuroimage*. 2019 Nov 15;202:116098.
- Wightman EL, Jackson PA, Forster J, et al. Acute Effects of a Polyphenol-Rich Leaf Extract of *Mangifera indica* L. (Zynamite) on Cognitive Function in Healthy Adults: A Double-Blind, PlaceboControlled Crossover Study. *Nutrients*. 2020 Jul 23;12(8)
- Kennedy D, Okello E, Chazot P, et al. Volatile Terpenes and Brain Function: Investigation of the Cognitive and Mood Effects of *Mentha x Piperita* L. Essential Oil with In Vitro Properties Relevant to Central Nervous System Function. *Nutrients*. 2018 Aug 7;10(8).



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