



A lifestyle approach to improving mood and wellbeing

"LET THY FOOD BE THY MEDICINE AND THY MEDICINE BE THY FOOD."

HIPPOCRATES

## What Are Micronutrients and Why Are They Important to Mental Health?

According to the World Health Organization, micronutrients are vitamins and minerals needed by the body to perform a range of functions, including enabling the body to produce enzymes, hormones and other substances needed for normal growth and development. While the body needs only small amounts of these micronutrients, their role in maintaining physical and mental health is critical. Deficiency in any of them can cause severe and even life-threatening conditions, as well as increase the risk of developing or exacerbating symptoms of depression, anxiety and cognitive impairment. Micronutrients believed to impact mood and brain functioning include: Omega-3 and N-3 essential fatty acids, Vitamin B, Vitamin B-12, Vitamin C, Vitamin D, and Vitamin E, Magnesium, Zinc, Potassium.

Continue reading this month's newsletter for more information on micronutrients and their impact on emotional health.

### Omega-3 Essential Fatty Acids

Research shows that increasing essential fatty acids has an effect on the prevention and treatment of anxiety and depression. Omega-3 can optimize mood and cognitive function. Foods Rich in Omega -23 Fatty include: fish, chia seeds, walnuts, seeds, seaweed, and olive oil.



### Vitamin B-12

Vitamin B-12 is a critical brain nutrient necessary for the production of Serotonin (mood stabilizing chemical), and may prevent the loss of neurons. Foods rich in this micronutrient include: liver, shellfish, crab, fermented cheese, eggs, and tofu.



### Vitamin B

Vitamin B produces energy needed to develop new brain cells. Foods rich in this micronutrient include: Salmon, leafy greens, liver, eggs, oysters, legumes, turkey, chicken, and yogurt.



### Vitamin C

Crucial to cognitive performance. Helps the maturation of neurons and the formulation of the myelin sheath that protects neurons and speeds impulse transmission. Foods rich in this micronutrient include: citrus fruit, peppers, strawberries and broccoli.



### Vitamin D

Helps support the growth of new brain cells and Serotonin production. Low levels of Vitamin D have been correlated to memory loss. Food rich in Vitamin D include: Salmon, sardines, tuna, egg yolks, and fortified dairy.



### Vitamin E

An antioxidant that protects cells from the damage associated with oxidative stress. Foods rich in Vitamin E include: Sunflower seeds, almonds, peanuts, spinach, pumpkin, red bell pepper, plant-based oils.



### Magnesium

Acts as a gateway for NMDA receptors, which are involved in healthy brain development. Foods rich in Magnesium include: Spinach, seeds, almonds, cashews, and peanuts.



### Zinc

Maintains the integrity of DNA that helps the brain direct all cellular activities. Foods rich in Zinc include: Lamb, pumpkin seeds, grass-fed beef, chick peas, cashews, yogurt, & mushrooms.



### Potassium

Acts as a "brake" for the central nervous system. Low Potassium levels contribute to anxiety, worry, restlessness. Foods rich in Potassium include: avocado, pineapple, dried apricots, tomatoes, potatoes, and melon.



Sources for this month's Newsletter: [https://www.who.int/health-topics/micronutrients#tab=tab\\_1](https://www.who.int/health-topics/micronutrients#tab=tab_1); <https://www.samsha.gov/vitamins-and-nutrients>; [https://www.who.int/health-topics/micronutrients#tab=tab\\_1](https://www.who.int/health-topics/micronutrients#tab=tab_1):

The Food and Thought Program works to promote awareness and provide short term counselling around the important link between nutrition and emotional health. For more information or for a referral to the program, please contact the Food and Thought Program at 781-599-0110.

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