

## Practical recommendations from Dietitian to Dietitian episode 3: Can the foods we eat impact mental health?

- Nutrients of interest for mood disorders:
  - Omega-3 fatty acids:
    - Two grams per day is recommended
    - Choose food sources first:
      - Fish and other seafood (especially cold-water fatty fish, such as salmon, mackerel, tuna, herring, and sardines)
        - Tinned fish is an accessible and affordable option for many
      - Nuts and seeds (such as flaxseed, chia seeds, and walnuts)
    - Supplementation:
      - Can use a supplement in place of food sources; however, quality can be an issue with fish oil supplements
      - May not be appropriate due to access or food security issues
  - Vitamin D:
    - Check serum levels
    - Get outdoors
    - Be sure to include fat-containing foods in the diet in order to utilize this fat-soluble vitamin
  - Folate:
    - Be sure to include food sources such as green leafy vegetables and whole grains
  - Multivitamins:
    - Multi-nutrient supplements do not substantially reduce the risk of depression
    - Diet should be the focus and a multivitamin should only be used on a case-by-case basis depending on the patient
- Recommended blood work:
  - Screen for nutritional deficiencies:
    - There is a link between low vitamin D, zinc, magnesium, iron, and vitamin B12 and depression; correct as necessary on a case-by-case basis.
  - Use labs that are ordered medically to look for manifestations of mental health issues:
    - HbA1c – Blood sugar instability will often lead to mental health manifestations
    - Hepatic panel (alkaline phosphatase (ALP), ALT, AST) – Will show if the liver and heart are showing inflammatory signs indicating malnutrition
    - Chem panel (look at Na in particular; psychiatric medications INCREASE PO sodium needs)
    - Methylmalonic acid instead of B12 – Genetic mutations can affect serum B12 levels, so this shows a more accurate value for deficiency
    - If not limited by access to care, check "MTHFR" as a serum blood test. A positive test warrants special attention to the amount of methyl donors (aka fruits, vegetables, and methylated-MVI) available by the body. Furthermore, the MTHFR mutation increases risk for CVD, depression, miscarriage, and GI issues.

- MTHFR: <https://pubmed.ncbi.nlm.nih.gov/34093281/>; <https://pubmed.ncbi.nlm.nih.gov/30944507/>  
Vitamin B12 assessment via MMA: <https://pubmed.ncbi.nlm.nih.gov/27446930/>  
Depression and food: <https://pubmed.ncbi.nlm.nih.gov/30254980/>;  
<https://pubmed.ncbi.nlm.nih.gov/28137247/>

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