

## **Family Medicine Clerkship** **Plain Language Summary**

**Title:** Vitamin D and Mood

**Name:** Mariya Hachey

**Plain Language Summary:**

Vitamin D is a fat-soluble vitamin that has been the focus of significant attention recently. The role of this vitamin in bone health is well-established, but investigations into its association to symptoms and diseases such as muscle aches and mood disorders is ongoing.

Foods such as fish, fortified milk and eggs contain vitamin D. In addition, human skin uses sunlight to synthesize this vitamin. A diet low in vitamin D as well as limited sun exposure can lead to a deficiency. Risk factors for vitamin D deficiency include old age, dark skin, obesity, high latitude, and certain bowel diseases such as celiac and inflammatory bowel.

It has been postulated that low levels of vitamin D may play a role in mood disorders such as depression and seasonal affective disorder. Some researchers have found that people with low vitamin D, particularly elderly women, are more likely to have low mood. Nonetheless, there is not enough evidence to recommend that vitamin D supplementation alone can improve mental well-being nor can it take the place of treatments such as anti-depressants and phototherapy for people diagnosed with depression or seasonal affective disorder.

In summary, having adequate levels of vitamin D is important. It is recommended that adults take in 400 to 800 IU of vitamin D daily, either through diet or supplements. Adults older than fifty years should increase their intake to 800-1,000 IU daily. Health care providers may recommend even higher doses for persons found to be deficient.

**Additional Resources:**

Seasonal Affective Disorder – American Academy of Family Physicians:

<http://familydoctor.org/familydoctor/en/diseases-conditions/seasonal-affective-disorder.html>

Depression – National Institute of Mental Health:

<http://www.nimh.nih.gov/health/publications/depression/complete-index.shtml>

Vitamin D – Mayo Clinic and National Osteoporosis Foundation:

[http://www.mayoclinic.com/health/vitamin-d/NS\\_patient-vitamind](http://www.mayoclinic.com/health/vitamin-d/NS_patient-vitamind)

<http://www.nof.org/aboutosteoporosis/prevention/vitamind>

**Key Words:**

vitamin D, vitamin D insufficiency, vitamin D deficiency, depression, seasonal affective disorder

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