

WHAT UV IS WHAT YOU GET

VITAMIN D IN DEVELOPMENT AND EVERYDAY LIFE

Vit. D in Pregnancy and Development

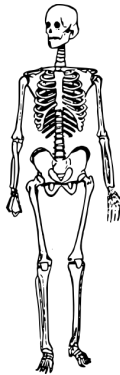


- Preeclampsia
- Low birth weight
- Neonatal hypocalcemia
- Poor postnatal growth
- Bone fragility
- Autoimmune diseases
- Brain development

Importance of Getting Sun

Vitamin D deficiency can result in:

- Leg paresthesia (pins & needles)
- Joint stretching
- Abnormal bone development
- Rickets



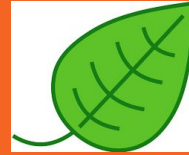
Recommended Daily Dose

400 IU for ages 0-12 mo.

600 IU for ages 1-70 yrs.

800 IU for ages 80+ yrs.

Environment



- Vitamin D is gained most readily though the sun
- For people living in places like WNY, they experience winter ~7-8 mo. a year, making it hard to get required levels
- Taking a vit. D supplement can increase muscle strength, immune function and reducing the risks of heart disease.

Social



- Reduced sunlight is linked to: Anxiety, Panic Attacks, Seasonal Affective Disorder, and Irregular Sleep Patterns
- The more likely people are suffering from these disorders, the less likely they are socializing and being active outside
- Vitamin D deficiency is more common in individuals with darker skin and presents healthcare inequality for these individuals.

Economics

Supplements: ~ \$8/ 250 capsules



- Families may have to choose between other food items for supplements depending on need
- People cannot necessarily afford to move to a climate where they can get more vit. D
- Fortifying flour was found to be cost efficient in adding VD3 to flour and reducing VDD without the use of supplements

References

Aguiar M;Andronis L;Pallan M;Högler W;Frew E; “The Economic Case for Prevention of Population Vitamin D Deficiency: A Modelling Study Using Data from England and Wales.” *European Journal of Clinical Nutrition*, U.S. National Library of Medicine, <https://pubmed.ncbi.nlm.nih.gov/31427760/>.

Mulligan, Megan L, et al. “Implications of Vitamin D Deficiency in Pregnancy and Lactation.” *American Journal of Obstetrics and Gynecology*, U.S. National Library of Medicine, May 2010, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3540805/>.

Tavakolizadeh, Reza, et al. “Is There Any Relationship between Vitamin D Deficiency and Vitamin D.” *Mayo Clinic*, Mayo Foundation for Medical Education and Research, 9 Feb. 2021,

“Vitamin D.” *Mayo Clinic*, Mayo Foundation for Medical Education and Research, 9 Feb. 2021, <https://www.mayoclinic.org/drugs-supplements-vitamin-d/art-20363792#:~:text=The%20recommended%20daily%20amount%20of,for%20people%20over%2070%20years.>

Wagner, Carol L., and Bruce W. Hollis. “The Implications of Vitamin D Status during Pregnancy on Mother and Her Developing Child.” *Frontiers*, Frontiers, 1 Jan. 2018, <https://www.frontiersin.org/articles/10.3389/fendo.2018.00500/full>.
