



## The Functions of Vitamin D

**Vitamin D and Bone and Muscle Strength:** Vitamin D plays a prominent role in bone health and strength. It helps the body absorb and retain calcium and phosphorus, two minerals critical for building bone tissue. It also has been shown to increase muscle strength, which can reduce falls in older adults.

**Vitamin D and Heart Disease:** Like all muscle tissue, the heart has receptors for vitamin D. Researchers believe that vitamin D may play a role in controlling blood pressure and preventing artery damage with low blood levels being associated with a higher risk of cardiovascular disease and stroke.

**Vitamin D and Cancer:** Dozens of research studies suggest an association between low vitamin D levels and increased risk of colon and other cancers. The evidence is strongest for colorectal cancer which shows that the lower the blood vitamin D levels, the higher the risk of cancer. Extensive research is being conducted in this area of medicine to further determine the exact role vitamin D may play in reducing cancer risk.

**Vitamin D and Immune Function:** Researchers are exploring whether or not low levels of vitamin D contribute to the development of autoimmune diseases, which include Type 1 Diabetes and Multiple Sclerosis (MS). Researchers are also looking at the role vitamin D supplementation may have in helping to boost the body's defenses to fight infectious disease such as the seasonal flu and tuberculosis.

### Health Benefits of Vitamin D

Vitamin D is both a nutrient we eat and a hormone our bodies make. The body makes vitamin D from cholesterol, through a process triggered by the action of sunlight on skin, which is why it's commonly referred to as "the sunshine vitamin". Worldwide, deficiencies in vitamin D have been identified across all ethnic groups and ages. But why is this such a great concern? The answer lies in research that has been conducted over the past decade that suggests vitamin D plays a much broader disease-fighting role than previously thought.

### How much Vitamin D do we need?



The Institute of Medicine (IOM) recommended dietary allowance (RDA) of vitamin D is:

- **600 International units (IU) for everyone aged 1-70**
- **800 IU for adults older than 70 to optimize bone health**

Research indicates this is an overly conservative dosage and does not adequately provide for the actual need for most adults. The International Osteoporosis Federation recommends taking a vitamin D supplement of 800-1000 IU per day. Confusing? What's the right recommendation to follow?

**The best answer is to check with your medical practitioner to determine the correct dosage for your personal health needs.**

**There are some food sources of vitamin D:** dairy products, fortified cereals, and fatty fish such as salmon, sardines, and tuna. However, many people are still vitamin D deficient despite eating these foods so taking a supplement is usually necessary. In addition, although sun exposure is a great way for your body to make the vitamin D it needs, because of skin cancer risk, it is not ideal to spend excess time in the sun without sunscreen. A supplement can assure your vitamin D needs are met.



***As a reminder, check with your medical practitioner before starting any new vitamin or mineral supplement.***