



ELITE

Personal Training and Fitness Solutions

# HEALTH TOPIC OF THE WEEK

## 10/17: Vitamin D



### Introduction

Vitamin D, aka the "sunshine vitamin," has been documented by myriad research to impact virtually every aspect of human health. Commonly known for its critical role in bone health, this vitamin's benefits extend to the heart, brain, respiratory system, and beyond. Vitamin D affects the health of your immune system as well.

Vitamin D is classified as a hormone, the only vitamin to fit this category. As a hormone, vitamin D is produced by the body.

Many of the body's organs and tissues have receptors for vitamin D. This suggests important roles beyond bone health.

### Immune benefits of vitamin D

Vitamin D has been shown to bolster immune function. How? Research suggests that vitamin D:

- interferes with viral replication.
- repairs cellular linings
- boosts the immune system's production of protective proteins
- prevents excess pro-inflammatory compounds in the lungs
- improves gene expression of immune cells to defend against pathogens

Given this vitamin's connection to a healthy immune system, it's not surprising what research has confirmed. Adequate vitamin D levels may lessen the severity of certain illnesses. In a meta-analysis of randomized, double-blind, placebo-controlled clinical trials, the odds of having acute respiratory infection was 12% lower among those taking vitamin D, compared to those who were not taking vitamin D.



Elite Personal Training and Fitness Solutions does not provide medical treatment or intervention. We acknowledge scientific evidence that appropriately intensive exercise and sustainable nutritional intervention can have significant impact on chronic health disorders and obesity, dramatically improving symptoms when recommendations are followed. Please visit us at [Eliteptf.com](http://Eliteptf.com) for more information and to schedule your evaluation.

## Vitamin D status: What is vitamin D deficiency?



It is estimated that anywhere from 42% – 80% of Americans have a vitamin D deficiency. Deficiency is defined as having vitamin D levels below 20 ng/mL (nanograms per milliliter). Optimal blood levels range from 50-80 ng/mL. There is a distinction between being deficient and not having optimal levels. Optimal means you have enough vitamin D to experience its benefits.

Vitamin D deficiency can affect everything from immunity to brain function. It even plays a role in erectile dysfunction. Inadequate vitamin D status is linked to worse outcomes for people with type 1 diabetes, type 2 diabetes, and autoimmune diseases.

## Vitamin D intake: vitamin D2 versus D3



Vitamin D comes in more than one form. Many believe that D2 (ergocalciferol) and D3 (cholecalciferol) are comparable. However, there is a significant difference. For example, D3 has more heart health benefits than vitamin D2.

Research has consistently shown that D3 supplements raise blood concentrations of the vitamin more and sustain these levels longer than D2. Vitamin D3 is also the preferred form because it is produced in the body. Plus, it's found in most foods that naturally contain the vitamin.

## Vitamin D3 and K2

Current research reveals a synergistic relationship between vitamin D3 and vitamin K2. Taking vitamin D3 with vitamin K2 helps calcium absorption in your bones, where it's needed, rather than accumulating as deposits in your arteries. Research also notes that vitamin K improves absorption of vitamin D3.



## The bottom line:

- In addition to building bone, vitamin D may reduce cancer cell growth, control infections and reduce inflammation.
- The incidence of vitamin D deficiency in America is significant.
- Few foods naturally contain vitamin D, although some are fortified.
- Elite clients benefit from vitamin D3 & K2 supplements.
- Please reach out for a consultation. We're here to help you achieve better health.



Tip of the week 10/17, page 2