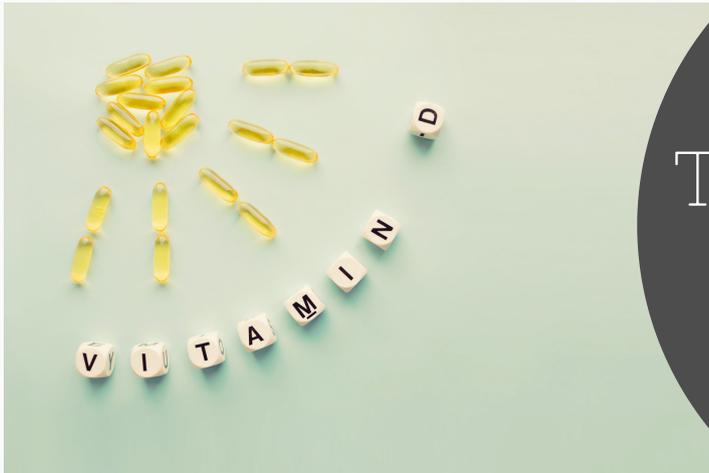


NUTRITIONAL ROOTS WELLNESS

MONTHLY INSPIRATION FOR A BETTER YOU.



Vitamin D:
The surprising
benefits
from it!

Vitamin D: The surprising benefits from it! *And, 3 ways you can get it!*

Vitamin D may be one of the most fundamentally important building blocks available to us for creating and sustaining vibrant health.¹ Vitamin D is a fat-soluble vitamin that promotes calcium absorption in the intestine and maintains calcium and phosphate levels in the blood, protecting against osteoporosis, rickets, and bone fracture. It also regulates immune function, cell growth, and neuromuscular function.²

There are two main forms of vitamin D: vitamin D3, which is formed in the skin after exposure to sunlight and

from consumption of animal-sourced foods, and vitamin D2, which is obtained mainly through plant sources and fortified foods.³ One interesting fact about vitamin D is that in its active form it is a hormone! Despite the original misnaming of vitamin D,⁴ this term has continued to be used.

Vitamin D is complex and requires other synergistic nutrients to be utilized in our bodies. For starters, vitamin D is fat-soluble, meaning, fat is a necessary vehicle for vitamin D to be absorbed.

Another example is vitamin D's role in building and maintaining healthy bones. While calcium is the primary component of bone, it can only be absorbed by your body when vitamin D is present.⁵

Another complex relationship is between the fat-soluble vitamins A, D, and K. Vitamin A is an essential factor in vitamin D's hormonal function, and vitamin K is necessary to activate the proteins made in response to vitamins A and D.⁶

Recommendations for what constitutes adequate intake of vitamin D varies.

Nutritional biochemist Dr. Chris Masterjohn has presented evidence



suggesting that optimal vitamin D levels may vary from population to population. One must take into consideration other vitamin deficiencies and lifestyle factors that may play a role in your overall vitamin D need. It's best to find an integrative and functional healthcare practitioner that can test your vitamin D status while comparing those results with your overall health presentation.

There are three ways to obtain vitamin D: exposure to sunlight, food, and supplements.

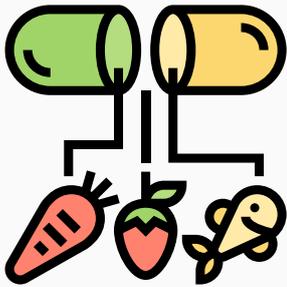
The most effective of all of these methods is exposure to sunlight! Your body makes vitamin D when direct sunlight converts a chemical in your skin into an active form of the vitamin.⁷ The next best source of vitamin D is from whole foods. Compared to other nutrients, the list of vitamin D containing foods is short. According to the World's Healthiest Foods, wild-caught salmon is the best food source of vitamin D. A single serving contains more than the generally suggested Daily Value (DV). Sardines, tuna, and pasture-raised eggs are also great sources! Some mushroom species, including shiitakes, contain 5% of the DV.⁸

There are three ways to obtain vitamin D: exposure to sunlight, food, and supplements.

You may be asking, "why isn't milk on this list? I always see 'fortified with vitamin D' on the container?!" This is where things get tricky. While milk does supply a high dose of vitamin D, I want to provide a caveat when relying on processed foods to meet your vitamin and nutrient requirements.



In the United States, as in most parts of the world, fortification of food was initiated as a systematic approach to correct identified nutrient deficiencies in the population.⁹



The problem with fortification is that the body does not absorb individual nutrients added to processed foods as efficiently compared to nutrients naturally occurring in whole foods.¹⁰ Whole foods contain synergistic nutrients that work together to enhance the bioavailability and utilization of each other in our bodies. For example, any milk that has been processed to remove the fat loses the fat-soluble vitamins A, D, and K. Although vitamins A and D are added back, our bodies cannot absorb them without a fat vehicle, nor can they function optimally without the assistance of vitamin K.¹¹ Through this processing of the milk, we're losing vital nutrients.

With all of that being said, milk does provide vitamin D. However, sourcing is very important! Ensure that your milk is from pasture-raised, organic, grass-fed cows that have ample access to the

outdoors and sunlight, as their milk may contain vitamin D even if non-fortified.¹²

Rounding this all out, the very best way to obtain vitamin D is to get plenty of sunlight combined with a nutrient-dense, whole foods diet. However, our modern sedentary and mainly indoor lifestyle, combined with a heavy reliance on processed foods has left the majority of Americans deficient in this vital nutrient. If after proper testing it is determined that you are deficient in vitamin D, a recommended source of supplementation is Rosita's Extra

Whole foods contain synergistic nutrients that work together to enhance the bioavailability.

Virgin Cod Liver Oil, as it provides all of the co-factors needed for adequate utilization of the vitamin. While vitamin D is generally regarded as safe, always consult with your doctor before considering the use of any Vitamin D supplement, especially if you have health conditions or diseases that need to be addressed or are pregnant or breastfeeding.



VITAMIN D

MADE

EASY

Make Your Own:

Your body makes vitamin D! This happens when direct sunlight converts a chemical in your skin into an active form of the vitamin. There are some limiting factors, however, such as location, time of year, skin pigmentation, age, pollution, and application of sunscreen.

Foods/Supplements:

Whole foods is the next best source of vitamin D. Wild-caught salmon is the best food source of vitamin D as a single serving contains more than the generally suggested Daily Value (DV). Sardines contain over 40% of the DV, and tuna contains just under 25%. Pasture-raised eggs are a good source of dietary vitamin D, with about 10% of the DV per egg. The vitamin D is concentrated in the yolk, so you'll need to eat the whole egg to get it. Some mushroom species, including shiitakes, contain as much as 5% of the DV.

Rosita's Extra Virgin Cod Liver Oil is a great supplement choice!

Purchase (actually - free!) Options:

A great, free app, to learn how much time to spend in the sun depending on your age, skin color, and location is dminder! Due to the varying factors listed above, it's challenging to state a general amount of time one must spend outside. This app takes into account the unique YOU and informs you about possible vitamin D exposure times.

RESOURCES

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