

As part of our "Maintaining A Strong Immune System" series

Tip 9: VITAMIN D AND IMMUNITY

As a valued member of Rolling Strong, your safety and well-being are important to us. With continued news around coronavirus (COVID-19), Rolling Strong will be sending tips on maintaining a strong immune system so you can be armed with the best chance of staying healthy!

The pandemic of Covid-19 has made us need to be more aware of how important it is to have a strong immune system. It is important to note that no supplement is known to cure or prevent Covid-19 and the most important thing you can do for yourself is to follow the guidelines of the CDC and practice social distancing and proper hygiene. However, having a strong and healthy immune system is always important when it comes to your health, disease resistance and overall well-being. Lifestyle habits such as 5+ servings of fruits & veggies, 150 minutes of moderate exercise, 7-9 hours of sleep, stress management and good hydration can all help to support a healthy immune system.



A Different Pandemic: Vitamin D is an important nutrient that we need for and has been termed "a silent killer" because of how it can affect immune function and inflammation. **Over one billion people in the world are deficient in Vitamin D.**



HOW DOES VITAMIN D SUPPORT IMMUNITY?

Vitamin D serves many functions to help with **immune function and inflammation** in the body. Studies show that being deficient in Vitamin D can increase your susceptibility to infection and to respiratory tract infections.

Vitamin D helps to activate and enhance the 'killer' T cells and macrophages that detect and fight off pathogens such as bacteria and viruses. A Vitamin D deficiency can also increase your susceptibility to asthma, COPD, tuberculosis, and lead to a decrease in lung function.

VITAMIN D AND INFLAMMATION



Vitamin D is also important in controlling inflammation in the body. It is responsible for regulating the production of immune cells and inflammatory cytokines.

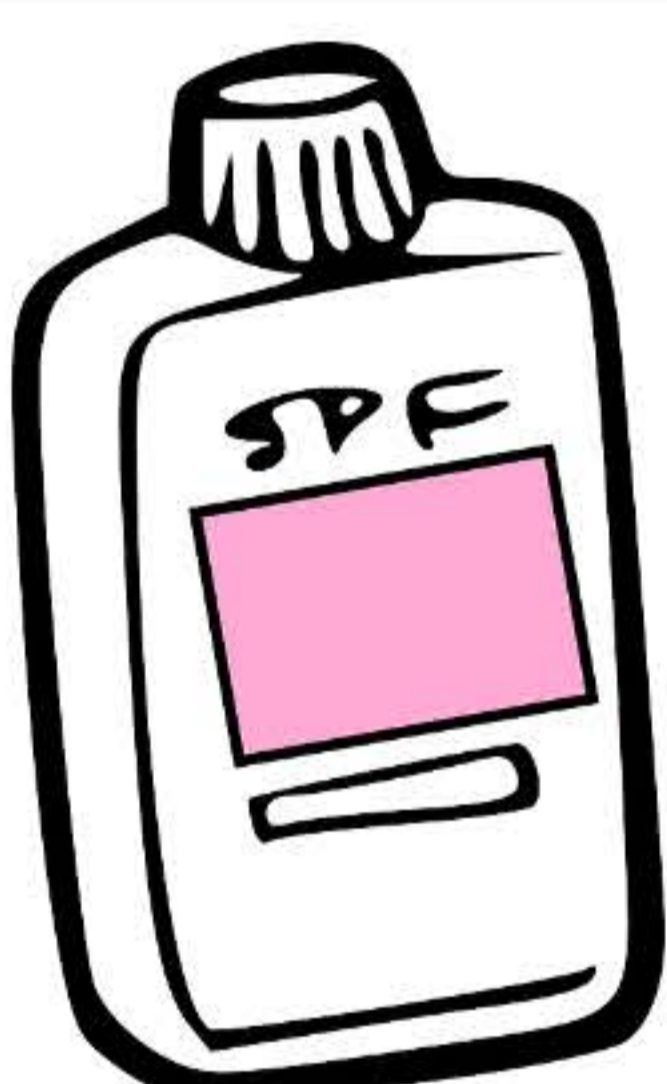
Science demonstrates that inflammation is at the root of many chronic diseases such as diabetes, heart disease, high blood pressure, periodontal disease, neuro-degenerative diseases, dementia and Alzheimer's as well as 17 different kinds of cancer.

Low blood levels of vitamin D any cause in women and men (average age 62).



WHAT IS VITAMIN D?

Vitamin D comes in 2 forms-D3 and D2. For the most part, we need to eat different foods to get the vitamins our bodies need to function. Vitamin D is different. We only get about 10% of our Vitamin D from our diet in fortified dairy foods, egg yolks, beef liver and fatty fish. **Almost 90% of our Vitamin D intake is from sunlight and supplementation. Through a complicated process, our bodies soak up the sun and convert it to Vitamin D3.** Vitamin D2, which comes primarily from plant sources, is not that easily used in the body.



WHY IS THERE AN EPIDEMIC OF VITAMIN D DEFICIENCY?

- **Sunscreen use:** Sunscreen with an SPF of 30 or more can reduce your body's ability to synthesize Vitamin D by 95%. The skin needs **direct bare exposure** to be able to synthesize vitamin D.
- **Where you live:** The further you live from the equator, the less UVB rays you can get from the sun.
- **Where you work:** Modern mankind tends to work indoors with windows that block UV rays.
- **Age:** Aging skin doesn't absorb or synthesize the sun's rays well. Infants are at risk.
- **Air Pollution:** High pollution in our cities can block the sun's rays.
- **Melanin:** Skin cells called melanocytes create melanin. If cells make small amounts of melanin then your hair, skin and eyes will be very light. If cells make more melanin then your hair, skin, and eyes will be darker and you run a high risk of deficiency because melanin blocks absorption of the sun rays.
- **Other Factors:** People who are home bound or cover their bodies and heads for religious reasons are at risk.

Tips to help you get your Vitamin D:

- **Sun Exposure:** The sun is foremost your best way of getting enough Vitamin D with midday sun being best. Get 15-30 minutes without sunscreen to produce the Vitamin D that you need. Make sure you expose large areas of your skin to maximize exposure. Unfortunately, we don't store up the Vitamin D we get from the sun. It needs to be reinforced daily.
- **Food Sources of Vitamin D3 (Best form for your body)**
 - Salmon, Herring, Sardines, Canned Tuna, Oysters and Shrimp as well as Cod Liver Oil
 - Liver
 - Egg yolks
 - Butter
- **Sources of Vitamin D2 (Not as effective as sources with D3)**
 - Mushrooms (grown in UV light)
 - Fortified foods-most milks, soymilk, nut milks, dairy products, orange juice and cereals are now fortified with Vitamin D2
- **Supplements:** Since getting enough sunshine year-round while protecting our skin from cancer produces a quandary for most of us, supplementing is probably your best insurance against being deficient. **It is important that you check with your doctor on how much amount for you to take based on your blood levels and your individual health concerns and medications.**

Improving your Vitamin D levels will support your immune system and help you ward off infections. Your mood, focus and outlook on life can improve when your blood levels are optimized. You also help protect yourself from osteoporosis, cancers, diabetes, heart disease, autoimmune problems, gum disease and degenerative brain disorders and a host of degenerative disease conditions. Every cell in your body needs Vitamin D3 every single day to help you stay healthy and strong.

Contact a Rolling Strong Wellness Coach, coachme@rollingstrong.com, to help you stay on track with nutrition, exercise, sleep, stress and hydration to keep your immune system running smoothly.