

Sunshine & Vitamin D

DIRECT SUNLIGHT IS THE BEST SOURCE OF VIT D

UV-B rays from the sun are the best direct source of Vitamin D for your health. Unfortunately due to lack of sun exposure or use of sunblock, up to 90% of Americans are estimated to have low levels of Vitamin D3 in their blood.

HOW MUCH SUN EXPOSURE DO YOU NEED?

If you have fair skin, it is estimated that you need at least 10 minutes of sun exposure daily without using sunblock or protective clothing.

10 min exposure = 10,000 IU

If you have darker skin, the melanin in your skin slows down the production of vitamin D with sun exposure, and it is recommended that you spend at least 40 minutes in the sunshine daily.

Food Sources Of Vitamin D

Food sources of Vitamin D are important, but cannot reach the level of vitamin D that sun exposure provides.

Foods rich in Vitamin D include:

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|---------------|--|
| Halibut | Cod Liver Oil |
| Carp Fish | Sardines |
| Mackerel | Tuna |
| Eel | Portobella Mushrooms (exposed to UV light) |
| Salmon | Maitake Mushrooms (exposed to UV light) |
| Whitefish | Eggs |
| Swordfish | Raw Milk |
| Rainbow Trout | |

Symptoms & Diseases Associated With Vit. D Deficiency

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|---------------------|-------------------------------|
| osteoporosis | multiple sclerosis |
| heart disease | chronic pain |
| high blood pressure | psoriasis |
| cancer | fibromyalgia |
| autoimmune diseases | memory impairment |
| depression | Alzheimer's disease |
| insomnia | worsening Parkinson's disease |
| arthritis | weakened immune system |
| diabetes | |
| asthma | |

Lab Evaluation For Vitamin D Deficiency

Laboratory testing to assess for your vitamin D levels consists of fasting blood tests. These labs can be ordered by your primary care physician and are traditionally covered by your health insurance.

1. 1,25 dihydroxyvitamin D
2. 25 hydroxyvitamin D

Additional labs that may get tested in relationship to symptoms of Vitamin D deficiency:

1. Liver function tests
2. hsCRP (highly sensitive c-reactive protein)
3. parathyroid hormone tests
4. serum calcium levels

WHAT IS THE CORRECT VITAMIN D LEVEL IN ADULTS?

Controversy remains between the traditional medical community and the progressive integrative/functional medicine community about your Vitamin D levels. A general rule is to treat the person's symptoms and not their labs.

Traditional medicine: normal above 20 nmol/L

For optimal wellness: range is 50-100 nmol/L