Food Sources: Vitamin D

Vitamin D is naturally found in very few foods, including fish liver oils, some fatty fish, beef liver and egg yolks. This fat-soluble vitamin can also be obtained from fortified foods such as orange juice, milk, and ready-to-eat breakfast cereals or dietary supplements.

At least some vitamin D needs are met through skin exposure to sunlight. How much vitamin D is made depends on the time of day, age, how much skin is uncovered, and skin tone. Without sunblock and with arms and legs exposed, the skin will make an average of 10,000 to 15,000 units of vitamin D in one pinking sun exposure. Sunblock with an SPF of more than 15 blocks 100% of vitamin D production in the skin.

Vitamin D helps the body absorb calcium and regulates both calcium and phosphorous levels in the blood. It plays an important role in bone growth and maintenance, influences cell growth and development, and is required for proper immune function.

Research indicates that the current RDAs may be too low for supporting optimal, non-skeletal health. Much higher intake may be required to maintain adequate blood levels. In some instances, optimal vitamin D levels can only be achieved with supplementation. Your functional medicine practitioner may suggest supplementing above the RDA based upon laboratory values, your individual health concerns, and other factors.

The Recommended Dietary Allowances (RDA) for vitamin D is as follows:

- **Females, ages 19-70**: 600 IUs per day
- **Females, ages 70+**: 800 IUs per day
- **Males, ages 19-70**: 600 IUs per day
- **Males, ages 70+**: 800 IUs per day

Food, Standard Serving Size	Average Vitamin D Content (IUs)
Cod liver oil, 1 Tbsp	1360
Salmon (pink, canned), 3 ounces	465
Salmon (sockeye, cooked), 3 ounces	447
Sardines (canned), 3 ounces	164
Tuna fish (canned in water, drained), 3 ounces	154
Milk (whole, 3.25% milkfat, fortified), 1 cup	124
Orange juice (fortified), 8 ounces	100
Beef liver (cooked), 3 ounces	42
Egg (cooked), 1 large	41
Cereal (fortified), 1 cup	40

References

1. U.S. Department of Health and Human Services, National Institutes of Health, Office of Dietary Supplements. Vitamin D. https://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional. Updated November 09, 2018. Accessed January 28, 2019.
2. U.S. Department of Agriculture, Agricultural Research Service, Nutrient Data Laboratory. USDA National Nutrient Database for Standard Reference, Legacy. Version. Current: April 2018. Internet: https://ndb.nal.usda.gov/ndb/. Accessed January 28, 2019.
3. Oregon State University, Linus Pauling Institute, Micronutrient Information Center. Vitamin D. http://lpi.oregonstate.edu/mic/vitamins/vitamin-D. Reviewed October 2017. Accessed January 28, 2019.