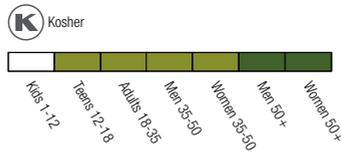




Vitamin D



ITEM# 109
AUST L 166636

It is common knowledge that vitamin D plays an important role in helping the body to absorb calcium and in bone mineralisation. However accumulating scientific evidence is proving that vitamin D provides more health benefits than simply bone health. Evidence is emerging that there is wide spread vitamin D deficiency in the broader population.

Vitamin D is synthesised in the skin after exposure to sunlight, and is also obtained through the diet, however is only present in limited number of foods.

Vitamin D deficiencies can occur when exposure to sunlight is limited or as the body ages, the ability to produce vitamin D is impaired. Vitamin D deficiency during bone development and growth causes rickets among children. In adults, vitamin D deficiency may increase the risk of developing osteoporosis.¹

A simple blood test is all that is required to determine your levels which you should check annually.

Vitamin D for Strong Bones

Numerous scientific studies have shown that calcium plus vitamin D supplementation promotes the growth and maintenance of strong, mineral-rich bones. Vitamin D supplementation is highly recommended as a standard preventative measure in osteoporosis management.² Vitamin D is essential for the maintenance of calcium homeostasis, supports efficient calcium absorption and is necessary for normal bone mineralisation. Calcium and vitamin D supplementation may reduce the risk of osteoporosis.

Vitamin D and Healthy Muscle Function

Vitamin D deficiency appears to be a risk factor for poor muscle strength and coordination, particularly in the elderly.^{3,4} Several clinical trials and meta-analyses were conducted to evaluate vitamin D supplementation, with and without added

calcium. Most studies demonstrated significant benefits particularly at the higher vitamin D doses. Improvement in muscle strength was one among the improvements being measured. This may involve a link between muscle calcium status and function, and a link between vitamin D and calcium and neuromuscular performance.⁵

Vitamin D for Immune Function

1,25-Dihydroxyvitamin D₃ (1,25(OH)₂D₃), the biologically active form of vitamin D₃, not only regulates bone and calcium metabolism but also exerts other biological activities, including immunomodulation.⁶ By binding to its receptor, the vitamin D receptor, 1,25(OH)₂D₃ regulates the expression of various genes and consequently affects the behaviour of different cell types within the immune system.⁷ Adequate vitamin D intake is important in maintaining the balance in immune health.

Why Vitamin D?

Diet is a secondary source of vitamin D in that most foods contain only small amounts of this nutrient. It is estimated that average intake of vitamin D for most Australians is less than 100 IU per day from diet alone⁸, leaving a gap in vitamin D nutrition for those with insufficient sun exposure.

USANA's NEW **Vitamin D** is formulated with maximum strength to help you bridge the vitamin D deficiency gap in your dietary consumption. It is a maximum strength supplement created to combat vitamin D deficiency. It provides you with 1000 IU per tablet to support optimal intake of vitamin D.

Using Vitamin D

Take one (1) **Vitamin D** tablet daily, preferably with meals.

EACH TABLET CONTAINS: VITAMIN D3 (1000 IU: CHOLECALCIFEROL)	25 µg
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USANA
HEALTH SCIENCES



Optimizers
Micronutrition

Vitamin D

- Helps to maintain healthy bones
- Supports efficient calcium absorption
- Necessary for normal bone mineralisation
- Important for the maintenance of muscle strength
- Supports robust and healthy immune function
- Vegetarian safe

References

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6. Van Etten E, Mathieu C. J Steroid Biochem Mol Biol. 2005;97:93-101.
7. Baeke F, Van Etten E, OverberghL, Mathieu C. Nutr Res Rev. 2007; 20:106-118.
8. Vitamin D and adult bone health in Australia and New Zealand: a position statement; MJA 2005; 182 (6):281-285

Vitamin supplements should not replace a balanced diet.

USE ONLY AS DIRECTED. ALWAYS READ THE LABEL.

