



Vitamin A & D

(10,000 IU/400 IU)
Stock #4065-3 (100 capsules)

NSP's Vitamin A & D provides 10,000 IU of vitamin A (retinol) and 400 IU of vitamin D (fish oil) per capsule.

Vitamin A

The two major forms of vitamin A are retinol, which is provided in foods of animal origin such as liver, milk, cheese, butter and egg yolks; and beta-carotene, the latter of which is converted into vitamin A by the body as needed.

The *Textbook of Anatomy and Physiology* cites that a vitamin A deficiency is linked to conjunctivitis (pinkeye), night blindness, and softening of the cornea. Studies have found vitamin A is beneficial for a variety of other eye disorders. Retinitis pigmentosa (RP) is a disease that is inherited and is distinguished by the degeneration of retinal function. Results of a study from Harvard Medical School's Berman-Gund Laboratory for the Study of Retinal Degenerations demonstrated that vitamin A therapy would help ease the disorder and permit those afflicted to retain their vision longer. Though not a cure, it does offer help for the 1-in-4,000 individuals who suffer from RP. Please note, however, researchers recommend vitamin A therapy only with the supervision of an eye doctor.

Vitamin A is also known for curing and restoring the skin and is the base for the drug, Retin-A, which is used to treat acne, balding and wrinkles. Vitamin A is essential for the management of cell growth and multiplication. Insufficient levels can lead to alterations in the skin and mucous membranes, and may even contribute to pre-cancerous conditions.

Vitamin A has been shown to fight infection and enhance immunity with greater antibody activity. In Third World countries where measles is still a frequent occurrence, giving children vitamin A has lowered the measles death rate by 35%.

Vitamin A's ability as a cancer-fighting agent has become well established. Studies conducted in both the United States and England found individuals having a low dietary intake of vitamin A-rich foods face a greater risk of developing lung cancer. Unfortunately, it is estimated that less than 20% of the American population consumes adequate fresh fruits and vegetables to acquire even the RDA for vitamin A (5,000 I.U.), which itself is extremely low when compared to research indicating the greatest benefit from vitamin A is gained at 33,000 I.U. Interestingly, many researchers believe beta-carotene provides more protection against lung cancer than retinol does.

A 10-year Japanese study of men over 40 revealed a significantly lower death rate from prostate cancer among those consuming green and yellow vegetables (rich in vitamin A) daily. Not surprisingly, prostate cancer rates are lower and vegetable consumption higher among Japanese than Americans. Prostate cancer rates are also lower among American vegetarians than meat-eaters.

Finally, scientific research done at Cornell University has shown that taking vitamin A, along with vitamin C and rutin—a bioflavonoid—reduces the chances of stroke by 75%. Washington University conducted a separate study which supported these same findings.

If you are pregnant or planning pregnancy, your daily intake of vitamin A should not exceed 5,000 IU. Quantities exceeding 10,000 IU daily may cause reproductive hazards or birth defects. Beta-carotene, a natural plant source of vitamin A, poses no such risks.

Vitamin D

Vitamin D is the only vitamin whose "active form" is a hormone manufactured in the skin from the ultraviolet rays of the sunshine. Vitamin D can be found in trace amounts in certain foods, primarily egg yolks, fatty fish, liver, and milk fat. However, vitamin D is more commonly acquired through supplementation.

Vitamin D is necessary for the body to absorb calcium. A vitamin D deficiency in infants and children can result in the development of rickets, which causes abnormal bone formation. In adults, a vitamin D deficiency can lead to serious bone loss. It is not surprising, then, that vitamin D levels of the elderly tend to be about half that of younger people.

Unfortunately, the elderly are highly susceptible to vitamin D deficiencies as a result of insufficient vitamin D in their

diets, taking drugs which disrupt vitamin D metabolism, or simply not getting enough sunlight. Others at a risk of vitamin D deficiency are alcoholics, those with malabsorption problems, and people who live in areas with little sunlight. In fact, scientists discovered deaths from breast and colon cancer were most common in areas of the country which get the least sunshine. In 1985, the University of California, San Diego, published amazing results from a 19-year study. Of 2,000 men, the only significant difference between those who developed colorectal cancer and those who didn't was those diagnosed with cancer consumed diets with much lower quantities of foods containing vitamin D and calcium.

Studies have shown the minerals magnesium and boron can raise levels of vitamin D in the body.

Scientific studies are being conducted on the effect of vitamin D in the reproduction and differentiation of cells, which is having a great influence on understanding and treating cancer. Recent research suggests vitamin D inhibits breast and colorectal cancer, and may be useful for other varieties of cancer. Scientists have been able to use vitamin D to prevent the growth of human breast cancer, colon cancer, leukemia, lymphoma, and malignant melanoma cells, in test tube studies. In fact, some researchers theorize chronic vitamin D deficiency may eventually cause breast or colon cancer late in life.

Other studies are being done on the link between vitamin D and the aging process.

Vitamin D has also been used as a treatment for psoriasis.