



Vitamin A

WHAT IS IT?

Vitamin A is a group of fat-soluble vitamins found in many foods and also in multivitamins. It is essential for proper vision, as well as healthy immune and reproductive systems.

Vitamin A is typically in two forms. Preformed vitamin A (retinol) is found in meat, poultry, dairy, fish and fortified foods. Provitamin A (beta-carotene) is found in fruits, vegetables, and other plant sources. The body converts some of the beta-carotene in plants to retinol so that it can be used.

WHO MIGHT CONSIDER TAKING THIS?

Most Americans get adequate amounts of vitamin A in their diet. Some people may need more if they have trouble with fat absorption or liver disease. Vitamin A is often suggested for eye health, for this reason, many vision directed supplements contain vitamin A.

Vitamin A is also prescribed at pharmaceutical doses for several conditions, including some skin disorders and cancers.

PREPARATIONS AND DOSAGE

The RDA for preformed vitamin A in adults ages 14 and older is 3000 IU/day for males and 2333 IU/day for females. Breast-feeding women have a higher need with an RDA of 4000 IU per day. When reading the label of a vitamin supplement, preformed vitamin A is typically written as retinol or retinyl “palmitate” or “acetate”.

Dosages up to 2500IU of retinol per day should be safe and do not require monitoring by a physician. Some supplements offer retinol in much higher dosages (often 10,000–25,000IU per day) and while this may be safe

for short periods of time, taking these higher dosages longer than 30 days can lead to toxicity due to the fat soluble nature of this vitamin.

There is no RDA for provitamin A, the type in plants, since the body inefficiently absorbs this form making it difficult to reach toxic levels. Provitamin A is typically written as beta-carotene or mixed carotenoids on a vitamin label.

CONCERNS?

High doses of preformed vitamin A in pregnancy can cause severe, irreversible birth defects and must be avoided.

High doses of preformed vitamin A have also been associated with a possible increase in hip fracture.

High doses of vitamin A can elevate liver enzymes, a sign of liver toxicity—this resolves with discontinuance of the vitamin A.

Smokers should take caution in taking supplements containing high doses of beta-carotene, as one study showed an increase in lung cancer.

It’s best to limit the amount of preformed vitamin A in a supplement to 2500 IU or less, unless otherwise instructed by your physician.

Notes:
