EASY Does It: Taking Vitamin A Supplements

The EASY guide to deciding whether to try something for COVID

When you are choosing whether or not to do something for your health, take it EASY! All four factors - 1) Effects, 2) Access, 3) Safety, and 4) You – can help you make a decision.

Judy is a 55 year-old woman who just read that taking 25,000 IU of vitamin A per day might help her not feel as sick if she gets COVID.1 This sounded like a high dose to her, and she read that if she took that much, she should have her liver function checked often. She used the EASY guide to help her decide what to do:

Effects: Vitamin A is important for vision, growth, healthy skin and keeping infections away.2 We aren’t sure how vitamin A helps the immune system; we still have to do more studies on what dose is best. 25,000 IU is the dose some experts say is good, based on one study in healthy people that showed it helped.3 The problem was that the study was in healthy people, not people with an infection.

Access: Vitamin A comes in two forms. “Pre-formed” vitamin A is from animals. It is in foods like beef liver, cod liver oil, eggs, butter, and milk. “Provitamin A carotenoids” like beta-carotene can be converted into vitamin A in the body. Beta-carotene is found in orange and green fruits and vegetables like carrots, squash, sweet potatoes, pumpkin, mango, cantaloupe, and dark leafy greens. You can get plenty of vitamin A from eating a variety of foods like those, but only by taking a supplement can you get up to 25,000 IU. Most supplements have 2,500 to 10,000 IU. Beta-carotene is used more than other forms because it is safer (see Safety).

Safety: Preformed vitamin A easily gets into the body from the gut, and is stored in the liver. If large amounts are consumed for months or years, it builds up in the liver and can cause harm.2,3 Beta-carotene is safer because it does not go in through the gut as well, and the body keeps it from being made into too much vitamin A and going to the liver.2,3 The Recommended Dietary Allowance (RDA) for vitamin A is 2,300 IU for women and 3,000 IU for men.2 The daily upper limit is 10,000 IU. Getting more than that each day over time is linked to bone loss, hip fractures, liver damage, a higher risk of death, and more birth defects, especially if taken in the first 14 weeks of being pregnant.2,3,5-8 Also, for some people, vitamin A is toxic even below the upper limit. This is true for older people, people who drink too much, and some people where high cholesterol runs in their family.2

You: Judy wants to do all she can to fight off infections and stay healthy, but after learning more about vitamin A, she is nervous about large doses. She is a vegetarian, does not drink cow’s milk, and does not eat many foods where extra vitamins have been added. She tries to eat lots of fresh whole foods and colorful vegetables, but her diet is not perfect. If Judy was or might become pregnant, she would want to limit her vitamin A intake to the RDA (2,300 IU).

Judy decides to keep taking her multivitamin. It provides her with 100% of the RDA for vitamin A, and at least half of that is beta-carotene. She thinks of this as back up for when her diet is not so perfect. She decides it is too risky for her liver and bones to take the higher dose. 2,300 IU feels like enough to help without causing problems.
The information in this handout is general. Please work with your health care team to use the information in the best way possible to promote your health and happiness.

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References