

SuperNutrition's Fact vs Fiction



Rumors & Myths About Food-type Vitamins & USP Vitamins

Based on Scientific Studies

Registered in the National Library of Medicine

Aren't Food Vitamins Better Than USP Vitamins?

The vitamins in food are the same vitamins as USP vitamins. The body absorbs them and uses them exactly the same way. Both types have exactly the same nutritional effectiveness. Marketers may advertise differently, but this is just science.

The only measurable difference is that pure concentrated USP vitamins are over 200 times more concentrated than vitamins in food¹ and so, ounce for ounce, they produce hundreds of times more nutritional benefits than vitamins in food.

That's why you can get many times the RDA of vitamins in one tablet of pure, concentrated USP vitamins, but it actually takes over 250 tablets of nutritious food to deliver the RDA's.

But Aren't Vitamins Grown in Food More Effective?

Surprisingly, No. All of the independent university scientific research on vitamins since 1900 has found that regardless of the source, the body absorbs and uses a vitamin in exactly the same way. This includes vitamins found in food ("food vitamins"), "food grown" type, "food state" type, "whole-food" type, "probiotic" type, and USP vitamins.

Fact vs Fiction Clears Up the Myths

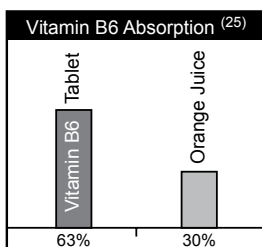
Following are some common myths (beliefs) about vitamins and foods with the facts about that myth.

You'll see small numbers in the text (superscripts) in the Facts sections. They refer to one or more of the many scientific studies on which the fact is based. You can view the full reference to the scientific study by clicking on the following link: <http://www.michaelmooney.net/FoodVitaminReferences.html>

You'll also see six charts comparing absorption of various foods to absorption of pure concentrated USP vitamins and minerals.

Fiction: Food-grown-type vitamins are food. They come directly from food.

Fact: The myth here is that because the USP vitamins are put into a living food, they become food. Food-grown-type vitamins are made using USP vitamins as a base. The USP

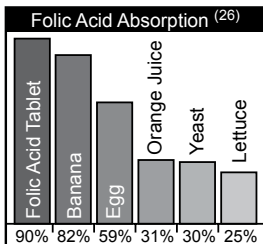


vitamins are mixed with living foods in a laboratory process. This does not result in a "natural" food vitamin. This process is actually defined as a synthetic process. (Synthesis is combining two or more things to make something else.) The foods containing the USP vitamins are then put into tablets.

The fact here is that even though USP vitamins are put into the growing food and may actually become attached to food, they do not lose their identity. There are merely USP vitamins attached to a food. No unbiased scientific research has found they act any differently than vitamins from any other source.

Fiction: Food-grown-type vitamin companies don't use USP vitamins. They make or grow their own vitamins.

Fact: This is perhaps the silliest mis-belief about food-grown-type vitamins. As stated above, all food-grown-type vitamins start with basic concentrated USP vitamins. There are no exceptions. Check with any food science department at any university.



In fact, if any label from any multivitamin company states it contains 1 mg or more of any vitamins, the multivitamin or the food has been "salted" with USP vitamins. This is because a tablet of even the most nutritious foods (like yeast) won't contain even 1/10th of a milligram of any vitamin. If there's more listed, it must be "salted" with USP vitamins to reach that potency.

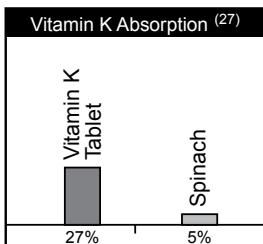
Fiction: Food-grown-type vitamins absorb far better than USP vitamins.

Fact: Vitamins absorb through the lining of the intestine and, to be absorbed, they must be in their free, isolated state.² If they are attached to food, the digestive process separates the vitamin molecules from the foods so that the body can absorb them. The body then absorbs the "isolated" vitamins directly through its lining, and to expedite the absorption process, the body sends out special molecules it makes (in the body itself) to escort the vitamin across the lining into the body.³

Fiction: "Isolates" are USP vitamins without accompanying "food factors" and they are harder to digest and worthless.

Fact: USP vitamins are sometimes called "isolates", as if that were "bad". But isolates are not bad. They are the body's preferred form for absorption.

USP refers to the standards all manufactured vitamins. In the U.S. must follow to ensure they are exact duplicates of the vitamins in food. The only differences are that USP vitamins are already in a free-state and easy to absorb, and that they are over 200 times



more concentrated than the vitamins in food. All the scientific studies showing anti-aging effects (slowing the aging process) were done using pure concentrated USP vitamins.

Since USP vitamins are already in their free, isolated state, they almost always absorbed better than vitamins from food. Why? Well, food vitamins have to be digested and separated from the food and any “food factors”. The body absorbs each vitamin molecule separately, not in a bunch with its “friends” from foods. So USP vitamins mostly absorb better because they are already isolated and ready for absorption and the body does not have to use the energy to put them into their free, isolated form. (Example Folic acid in yeast is 30% absorbed⁴ but USP folic acid is 90% absorbed.⁵ See the charts in this brochure comparing absorption of USP vitamins vs food vitamins.)

Fiction: USP vitamins are toxic. “Food-grown-type” vitamins are safe.

Fact: All vitamins are safe! In fact, regardless of the form or source, vitamins are the safest things we put in our mouths.

There have never been any reports of people dying from vitamins. And the records from the National Center for Disease Control and Prevention and the Poison Control Centers of America show that there are fewer reports of adverse effects from vitamins than from any other things we put in our mouths, including water, foods or drugs.⁶

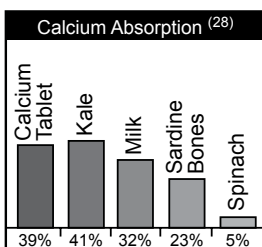
Fiction: Calcium carbonate doesn’t absorb 100% but “food-grown-type” calcium absorbs so well you only need 50 mg per day to build bone.

Fact: Calcium carbonate is the most studied form of calcium, with over 5900 studies. There are 2700 studies on calcium citrate. There is only one study in the National Library of Medicine on “food-grown-type” calcium, and it shows that food-grown-type calcium has comparable absorption to calcium carbonate.⁶ Thousands of studies show calcium is absorbed about 30% to 40% by the body, regardless of the form or source.⁷ There is no evidence that food-grown-type calcium absorbs better or is used more efficiently by the body.

Studies with postmenopausal women have shown bone regrowth (improved bone density) with calcium carbonate supplementation in daily doses of 1000 mg per day while lesser amounts of calcium allowed bone loss.⁷ And lower doses may allow even more bone loss. An amount as small as 50 mg of “food-grown-type” calcium is far too little to support bone health and will allow bone loss.

Fiction: USP vitamins don’t have protein chaperones like “food-grown-type” vitamins have, so they don’t absorb as well.

Fact: This is simply not true. There is no evidence in the more than 26,000 independent scientific studies on vitamin



absorption in the National Public Library of Medicine that indicate that “protein chaperones” from “food-grown-type” vitamins help absorption or utilization of vitamins. In fact, the phrase “protein chaperones from food” is not in any scientific literature. The phrase is used, however, by marketers. But if there are any “protein chaperones” from food, they are separated from the vitamins in the body’s digestive tract so that the vitamins can enter the body alone.

Some of the “food-grown-type” promotional literature quotes from the works of two famous scientists (Dr. Gunter Blobel and Dr. Michael O’Halloran) to affirm the existence of unique protein carriers (“protein chaperones”) in “food-grown-type” tablets that are claimed to improve absorption and utilization of food-grown-type nutrients. This promotional literature states that their claims about protein carriers “...have now been proven by the work of Dr. Blobel and Dr. O’Halloran.” But it turns out not to be true.

Upon being contacted about the above statements, the two scientists made the following statements:

“I know nothing of this...not endorsed anything of the kind.”

Dr. Thomas O’Halloran,
Northwestern University March 30, 2001

“...statements about me in their promotional literature are utter nonsense and misleading.”

“My work on protein carriers has nothing to do with their products, and what they are saying about their products having protein chaperones is not supported by my work.”

Dr. Gunter Blobel, Rockefeller University April 29, 2001
1999 Nobel Prize Winner in Physiology and Medicine

Fiction: Vitamin A is toxic. Use beta-carotene instead, because it is non-toxic.

Fact: Vitamin A is not toxic (except, like everything else, in giant quantities)⁹. It is a vitamin. The word “vitamin” means you need it to live, your body can’t make enough of it and you have to get it from sources outside your body or you will die.

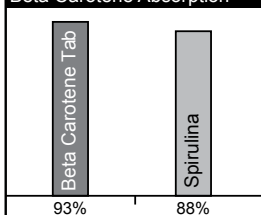
Science has found Vitamin A completely safe up to a dose of 21,000 IU even when taken over a long time.¹⁰ This dose is much higher than the doses found in multivitamins (which is commonly no more than 5000 IU). There have never been any reports of toxicity from Vitamin A in any multivitamin.¹¹

Fiction: Beta-carotene converts to Vitamin A in the body and you don’t need Vitamin A if you supplement with beta-carotene.

Fact: This is a dangerous myth. It can result in Vitamin A deficiency and can even result in birth defects. Vitamin A deficiency is not good, and is associated with a 74% increased chance of premature delivery.²¹

Although it is a popular myth, beta-carotene is not a good

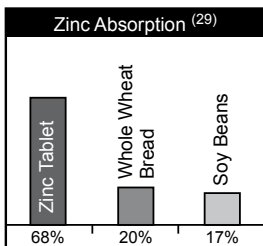
Beta Carotene Absorption (30)



substitute for Vitamin A. Even in times of Vitamin A deficiency, only some beta-carotene can be converted by the body into Vitamin A.¹² And the conversion is very inefficient, with some people needing from 6 IU to 20 IU of beta-carotene to make 1 IU of Vitamin A.^{13,14,15,16} That's why the World Health Organization recommends pregnant women take real vitamin A and not depend on beta-carotene for their vitamin A needs.¹⁷

Fiction: Vitamin A causes birth defects at 10,000 IU per day.

Fact: There are no records anywhere showing 10,000 IU of Vitamin A is toxic. The lowest report of any vitamin A adverse effects is over 20,000 IU of Vitamin A.¹⁸ There is one erroneous study that caused this rumor (Rothman, 1995).



In fact, the World Health Organization evaluated this study, found it wrong and stated, "It is safe to give pregnant women, independent of their vitamin A status, as much as 10,000 IU daily at any time during pregnancy."¹⁹ and supplemental doses of vitamin A are likely to "be associated with reduced.... risk of mal-formations [birth defects]."²⁰

Remember, vitamin A deficiency is not good and is associated with a 74% increased chance of premature delivery.²¹

Prenatal vitamins that have beta-carotene but no retinol vitamin A are likely to allow a vitamin A deficiency. Don't gamble on your baby's health by not taking enough real Vitamin A.

Vitamin A supplementation during pregnancy protects against premature delivery and supports the health of the baby's immune system, lungs, eyes, bones, skin and supports a full-term birth.^{22,23,24}

Summary: *The information in this brochure is not meant to disparage any type of multivitamin. All these multivitamin companies produce quality products. We just present you the choice of getting a tiny amount of food with a small amount of vitamins in a tablet or getting 200 times more nutrition from multivitamins with dose-effective potencies.*

Food Vitamins vs Science-Derived Vitamins

7000 Years Ago

Human Life Expectancy was 20 Years

About 7000 years ago, when civilization began to develop, humans ate only fresh highly nutritious foods and human life expectancy was only about 20 years.

Then It Jumped 25 Years in the Next 7000 Years

As civilization developed, the first scientists appeared. They were the shamans. They learned about the world around us and how to survive better. They found out how to eat more wisely. Over the centuries, they learned how to form cities, produce food all year (agriculture and farming), and how to protect us from the weather by covering our bodies (clothes) and building homes (construction). They actually “improved” on nature. And by the year 1900, science, “improving on nature”, had extended our expected lifespans to 45 years, an increase of 25 years.

Then “Super-Health” Appeared & We Live Even Longer

But then scientists got even better and began to “improve on nature” even more. They learned how to stop most germs from killing us, how to produce even more foods for the great numbers of humans living longer, and how to produce the elements in food that we need to be healthy and stay alive, the vitamins and minerals. And we became “super-healthy”. Today we’re healthier, stronger, smarter, and our athletes are breaking more world records every year. In just 100 years, our life expectancy has increased by 33 years!

Seven Times Faster!

That’s seven times faster than in 1900 when science started to “improve on nature”. Science works! Our modern life expectancy is now 78 and rising...fast! Science rules!

What Really Works!

Food is necessary for life. Actually, we need about $\frac{3}{4}$ of a pound of food per day, not just one tablet. (You’d need over 500 real food tablets to get the RDA’s as well as the associated co-factors and phytonutrients.) Remember, life expectancy was just 20 years with food alone, so food alone or food tablets don’t extend life expectancy. But supplementing pure concentrated vitamins and minerals in the higher, anti-aging potencies does extend life-expectancy.

Best Advice

Eat wisely. That means a varied diet of healthy foods, as fresh as possible. Supplement that diet with pure concentrated vitamins and minerals in anti-aging potencies, and join today’s anti-aging life expectancy revolution. You deserve it!