

## *Vitamin C Is a Very Misunderstood Vitamin*

by John Courtney for research and experimental use only

Vitamin C Is a Very Misunderstood Vitamin. The government is responsible for this because they have decided that you rate any vitamin C product according to the amount of ascorbic acid it contains. Ascorbic acid is an antioxidant. It is the preservative part of the C complex. To refine out or to synthesize the preservative, in our opinion, is a mistake.

The real vitamin C complex contains vitamin P factors (*flavonoids, rutin*) which maintain vascular integrity. These are deficient in people who bruise easily or who have "pink toothbrush." Their blood vessels break or rupture too easily and bleed. The P factors strengthen the vascular system. They make the vessels tougher and more durable.

Vitamin K is another part of the C complex. It promotes prothrombin. That means it helps in coagulation. Bleeders do not have enough vitamin K. If you have plenty of vitamin K, it's used in the formation of protein which is then transported to the injured tissue.

Another factor in the C complex is vitamin J. The J factor is part of the C complex which increases the oxygen-carrying capacity of the blood. If you have a cold, you want to get oxygen to your tissues where it oxidizes the toxins and carries them off with carbon dioxide.

In addition to these, the C complex contains enzymes, the outstanding one being tyrosinase. That's organic copper, an adrenal activator. If you want to rate vitamin C according to one factor, it would be logical to rate the tyrosinase. We have found that products containing the most tyrosinase produce the best clinical results. But all these other factors are important for results.

*In addition* to all these factors, the vitamin C complex *also* contains ascorbic acid. To say that ascorbic acid is vitamin C is like looking at a wheel and saying that it is an automobile, while it is just a small part of an automobile.

We make our vitamin C by removing the water and fiber from raw, whole foods – alfalfa, mushrooms, bone marrow, and buckwheat leaf. This leaves a powder containing the nutrients from these foods. This powder is then put into tablets.



In analyzing this nutrient powder, we find it is approximately point-zero-one (.01) ascorbic acid by weight. In fact, it contains about as much natural ascorbic acid as you will find in any of the vitamin C-rich foods, rose hips included. So, our vitamin C tablet, which is about a 500-milligram tablet, is .01 % ascorbic acid, or about 5 milligrams. This is why our CATAPLEX C has a label that says, "5 milligrams." But in addition to the five milligrams of ascorbic acid, each tablet contains about 495 milligrams of all the other C complex factors – the P factors, vitamin K, vitamin J, enzymes, and more unknown organic factors. It is the presence of all these synergistic factors which gives our product its functional potency.

What about high-potency vitamin C products? These are made by the addition of synthetic ascorbic acid to a food base, usually rose hips or acerola berries. Manufacturers of these products know that the public demand is for so-called natural or organic products, so food is used as a base. But they also know that people feel that if a little is good for you, more is better. So synthetic ascorbic acid is added to the food base to increase the label data potency. In such a product, you might have 500 milligrams of synthetic ascorbic acid--the preservative--and only 25 milligrams or so of the food base, which would contain the other C complex factors.

Unfortunately, this is hard to tell just by looking at the label unless you know what to look for. These high-potency mega-products usually have labels that say "natural" or "organic." This is because synthetic ascorbic acid, a derivative of petroleum, contains carbon and is therefore chemically organic--although it is hardly a food. It is, in fact, a drug. To put 500 milligrams of naturally occurring ascorbic acid into a tablet, the tablet would have to be as big as a ping-pong ball! To determine if a vitamin C product is natural as the label claims, just look at the potency. If the tablet is equivalent to ours in size, it's synthetic to whatever extent it contains more than five milligrams of ascorbic acid.

I might say that we have never seen any toxic effects from ascorbic acid if used in moderate amounts. We have never objected to it as such because it is an acidifying substance. Most people who are sick are too alkaline. A person with a cold, for example, is too alkaline. This is why he should avoid citrus fruit and juice. Although citrus juice does contain citric acid, this is quickly metabolized, leaving an ash that is quite alkaline. So, the person drinking orange juice ends up even more alkaline than before. Ascorbic acid is more like Betaine Hydrochloride in that it acidifies the system.

So, there is a lot of confusion about vitamin C. It is important to remember the other components of the C complex. We are interested in more than just ascorbic acid.