

The Awful TRUTH About Vitamin C



Presented by
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There are many ways vitamin C can be depleted despite any food or supplement you might intake. Here's how much vitamin C to take in, what kind, what types to avoid, and what can drain your body of vitamin C, sometimes faster than you can replace it!

Chapter 1

Master and Commander

To keep the common cold away, get your vitamin C. Drink some orange juice every day. And, while you're at it, eat some oranges or grapefruit.

Old news, right?

If you still think that vitamin C is only useful for cold prevention, you've been relying on information that's not only wildly outdated, but dangerously incomplete.

But don't worry: this report will change all that for you.

You're about to read some cutting-edge information, based on real science and research. It will change the way you think about your old friend, vitamin C. And, it will give you the information you need to take control of the health problems that worry you.

Specifically, we'll be talking about:

- Chronic pain
- Weight gain or obesity
- Diabetes
- Loss of cognitive function, better known as "brain fog"
- Fatigue
- Chronic infections
- Cancer

There's no need to let any of these steal the zest and joy of living from you, or a loved one; not when you're armed with information like this:

- **Chronic pain** may be nothing more than a chronic vitamin C deficiency. Get enough vitamin C, and you eliminate the pain.
- **Weight gain** is inevitable as we get older, right? Wrong! Research has uncovered the connection between vitamin C and neutralizing body fat.
- **Diabetes:** the connection between vitamin C and blood sugar has been clearly shown
- **Brain fog** is reversible with the right levels of vitamin C. Sharpen your mind, regardless of your age!
- **Fatigue** is often one of the first signs of a vitamin C insufficiency.
- **Infections:** learn how to skyrocket your immune system and stay healthy and vibrant
- **Cancer:** the latest research into vitamin C as a powerful cancer therapy.

You'll also learn the best way to get enough vitamin C. (surprise... it's not by eating the right foods!)

So, read on, and get ready to make some life-changing discoveries.

How much vitamin C do you really need for optimal health and disease prevention?

Before November 2014, the esteemed World Health Organization would have had you believe that a meager 45 mg of vitamin C per day was quite enough. This is less than the 50 mg or so you'd get by eating an orange.

Who sets this standard?

The World Health Organization and the Food and Agriculture Organization, both parts of the United Nations, were the ones responsible for this abysmally low requirement for vitamin C.

These two branches of the U.N. meet annually to update the Codex Alimentarius, the group of standards and codes that dictate everything from how much of a certain vitamin we require, to how much food coloring is allowed into our food.

Codex also refers to the group who updates these standards.

You'd suppose that the United Nations could be trusted, wouldn't you? Well, there are some problems with that...

Vitamins: guilty until proven innocent

Codex prides itself on basing its standards on scientific input only from "reliable authoritative scientific bodies" (RASBs) such as the U.S. Institute of Medicine. Of course, an institute of "medicine" has a decidedly medical (read pharmaceutical) slant to its opinions.

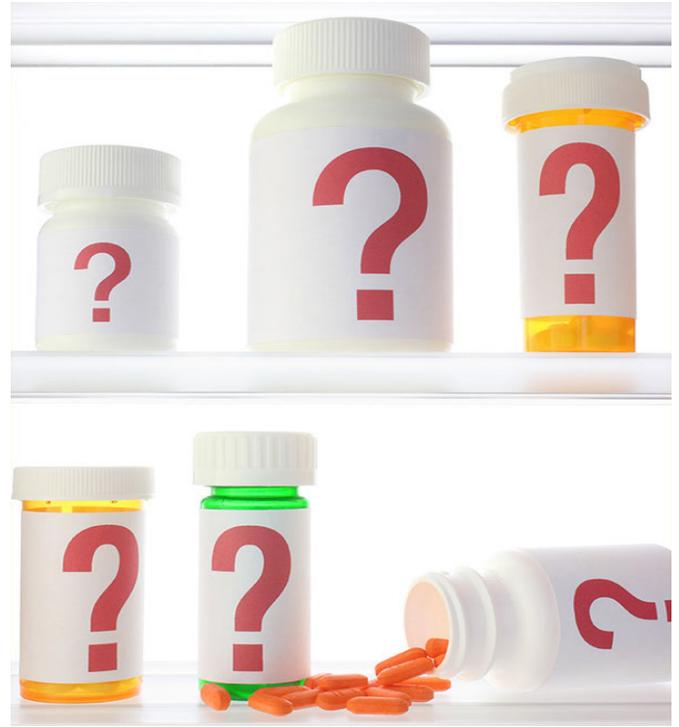
For example, no RASB acknowledged the 2011 study done in New Zealand. Researchers found that mice deprived of dietary vitamin C showed signs of impaired collagen formation, changes in aortic wall structure, formation of arterial plaque, and increased inflammatory activity. All of this within two weeks.

This kind of willful ignorance has given us the flawed nutritional standards we have today, like the 45-mg daily requirement for vitamin C. The Codex looks upon vitamins as toxic substances, until proven safe.

Fortunately, in 2014, the National Health Federation lobbied the Codex to increase the vitamin C minimum daily requirement to 100 mg. Still not enough for optimal health, but moving in the right direction.

So, how much Vitamin C should you be getting?

Based on their 2011 results, the New Zealand researchers stated that we should be getting *at least* 200 mg a day, in order to keep blood levels of C high enough, and to maintain levels in brain and organ tissues.



Optimal health is not just the prevention of disease. It's the living of an active, healthy, productive life every day. Read on to learn about the things that are robbing you of the vitamin C you need to maintain that state of optimal health, now and into the future.

Chapter 3

Danger: Modern World Ahead

Not only are we the victims of misguided health advice, but our own genetic makeup has set us up for vitamin C deficiencies that are destroying our health.

An unfortunate genetic mutation that probably occurred early in our existence cost us the ability to manufacture our own vitamin C. Along with fruit bats and guinea pigs, we are pretty much the only creatures with this problem.

This means we must depend on outside sources to keep our supply constant and at healthful levels.

Unfortunately, modern society conspires against this happening...

Modern habits that hurt

Cigarettes, alcohol, and other bad habits rob us of vitamin C.

Not to mention our addiction to medication as a way to cure our ills.

Instead of paying attention to nutrition and vitamins, we depend on Big Pharma to keep us healthy. Some of our favorite drugs deplete our vitamin C levels with every use. These include:

- Hydrocortisone
- Fluticasone (a steroid nasal spray)
- Prednisone
- Aspirin
- Diuretics

Alcoholism is another scourge that destroys our health. Chronic alcoholics are at high risk for vitamin C deficiency. They absorb vitamin C poorly, and excrete more of it in their urine.

But, you're thinking, I'm OK. I only have a drink or two after work... and sometimes before bed.

Here's the problem. Every drink you enjoy requires an extra piece of your vitamin C supply to metabolize it. So, while your body is fighting to add vitamin C to your body, alcohol is stealing it.



Then, there's smoking. This one's pretty clear: studies have proven that, the more you smoke, the more your vitamin C levels drop. In fact, smokers are caught in a deadly Catch-22 when it comes to vitamin C.

The more you smoke, the more vitamin C you lose from your tissues and blood. But, your body needs *more* vitamin C to control the cell damage caused by tobacco use.

Our culture's obsession with being thin is yet another societal ill that is killing us slowly.

Countless people are walking around with severe vitamin and mineral deficiencies, and vitamin C is no exception. What does this mean for their health?

It means they are missing the basic building blocks for making skin, tendons, ligaments and blood vessels. It means their wounds heal poorly. It means they are at more risk for gum disease and dental problems.

Ironically, vitamin C deficiency is responsible for the epidemic of obesity in our country. Research tells us that vitamin C plays a role in blocking the metabolism of fructose. Adequate levels of C are also associated with retaining less fat around the midsection.

In the chapters that follow, you'll learn how this amazing vitamin can eliminate pain, keep your brain sharp, and defeat diabetes, cancer, and more.

Chapter 4

Eliminate *ALL* Pain?

More and more research is revealing that a lot of our chronic pain really has its roots in a vitamin C deficiency.

Naturally, we're also seeing more and more proof that vitamin C *relieves* chronic pain, and should be our first line of defense before turning to the drugs that just deplete our supplies even further, continuing the vicious cycle of pain.

Severe vitamin C deficiency causes scurvy, a disease whose symptoms include chronic muscle and joint pain. However, you need not be that deficient to experience the negative effects of a depletion of vitamin C in your blood.



Numerous studies have connected vitamin C insufficiency with chronic neck and back pain, as well as chronically aching muscles and joints. If you live with this sort of pain, and it hasn't been explained by arthritis or other medical conditions, a vitamin C deficiency could be the cause.

Vitamin C helps *all* kinds of pain

Pain can originate in the bones, nerves, joints, or muscles. But no matter what kind of pain we're talking about, research has shown vitamin C to be an effective antidote:

- Complex regional pain syndrome (CRPS) can follow surgery or injury, and brings continual, burning pain to the affected limb. Research shows that vitamin C is effective in preventing the pain of CRPS.
- Rheumatoid arthritis – intravenous vitamin C has reduced pain and inflammation in RA patients, who are usually deficient in the vitamin to begin with.
- Paget's disease is a chronic bone disease. One study eliminated pain in 20 percent of patients, and reduced pain by half in others.
- Shingles episodes have been shortened with high doses of vitamin C, which slows down the reproduction of the shingles virus.
- Cancer – intravenous vitamin C has been successful in reducing cancer-related pain.

Researchers have also begun to look at the pain-fighting potential of Vitamin C for people suffering with pancreatitis, migraine headaches, and more.

Big Pharma is *not* your only option

Now, consider the potential side effects of pain relief medications.

They range from fairly minor but annoying symptoms like dry mouth or upset stomach, to others that are dangerous or life-threatening. We're talking about liver damage, diabetes, stroke, osteoporosis, stomach ulcers...

A daily vitamin C supplement should be your first line of defense against chronic pain. It may very well be the answer you've been looking for.

Chapter 5

Revitalize Your Metabolism, Change Your Body for Life

We all want to eliminate excess body fat. It's unattractive and unhealthy. Especially that expanding midsection a lot of us notice as we enter middle age.

But that ever-increasing waistline is also a threat to our health.

Research has proven that, without enough vitamin C in your system, fat buildup around your waistline will continue to expand, even if you are eating a healthy diet.

Fortunately, supplementing with vitamin C is a proven way to rev up your metabolism, counteract the creeping expansion of body fat, and avoid the health complications that go with it.

Not just good for colds

Besides being known as the ultimate cold-fighter, more and more research supports vitamin C's role in maintaining a healthy body mass index, or BMI. Your BMI is the proportion of body fat you're carrying around, based on your height and weight. An abnormally high BMI increases your risk of heart disease, diabetes and certain cancers.

What makes vitamin C such a vital part of maintaining a healthy BMI? Studies show that there are several mechanisms at work in your body.

First, it turns out that, without enough vitamin C, your body can't manufacture great enough supplies of carnitine, a protein-like molecule that acts like a taxi service, shuttling fat molecules to the sites where they will be burned for fuel. So, low vitamin C levels means you store more fat.

It may be no secret to you that, as we age, losing weight gets harder. But why? Pamela Parker Jones, an assistant research professor at the University of Colorado at Boulder, thinks it's because of increasing oxidative stress as we age.

As a result of lower levels of antioxidants, and vitamin C in particular, older adults seem to have lower metabolisms and burn fewer calories, resulting in that infamous 'spare tire.' But what if we replaced some of the Vitamin C?

When Jones and her research team administered infusions of vitamin C to subjects between 60 and 74 years old, their resting metabolism increased by an average of almost 100 calories per day.

The second reason vitamin C seems to improve our fat-burning abilities has to do with our adrenal system.

The other 'C' — Cortisol

When we're under stress, our adrenal glands produce cortisol, which causes weight gain.

Scientists at the University of Alabama found that vitamin C may be instrumental in reducing our stress response, protecting our adrenal glands and minimizing cortisol production. Less stress, less cortisol, less weight gain.



One more thing worth mentioning is that excess fat around the middle usually goes along with excess *visceral fat*, excess fatty deposits that surround the kidneys, liver, and pancreas.

Visceral fat deposits spell trouble, putting us at greater risk for heart disease and stroke, diabetes, and certain cancers. The positive outcomes of taking vitamin C, that we've discussed here, apply just as much to visceral fat as they do to visible fat.

Finally, Dr. P. Samuel Campbell, lead researcher in the University of Alabama study, believes that our prehistoric ancestors probably consumed very large amounts of vitamin C through a diet rich in tropical fruits. If this is true, we probably need way more vitamin C than the current recommended daily allowance to keep us healthy, especially during times of stress.

Chapter 6

Your Brain on Vitamin C

We all know that too much sugar is bad for you. It decays your teeth. It causes you to gain weight, strains your liver, and even increases your risk of heart disease. There's also an intimate connection between your brain, sugar, and vitamin C. Actually, it's more like a cycle, and it can become a vicious one.

Glucose crowds out vitamin C

For one thing, it seems that sugar, better known as glucose, has something in common with vitamin C.

As you already know, we humans cannot manufacture our own Vitamin C. So, we depend on our body to take the vitamin C we ingest and transport it to our cells, where it's needed.

But it seems there's something else competing for that transport mechanism. Yes, glucose.

Imagine a car with a limited number of seats. Sugar is pushy, so if we eat too much of it, those glucose molecules take the seats needed by vitamin C. As this process continues, we become vitamin C-deficient.

Low vitamin C makes us 'foggy'

If you're caught in this cycle, you'll have more and more episodes of brain fatigue, or 'brain fog'. You'll find yourself unable to concentrate or focus on tasks. You'll have trouble remembering where you put things. You'll just feel mentally exhausted all the time.



One thing that many people do to relieve brain fog is to reach for that caffeinated drink, or for something sugary to give them that spike in blood sugar and insulin that gives them a temporary 'high.' Eating processed sugar will also increase endorphins, our mood-boosting brain chemical.

So, you can see how the cycle goes: Eat too much sugar, lose vitamin C, feel foggy, and solve that by eating more sugar!

Eat fats, not sugar

Healthy fats are your brain's natural food. Not the fats that come from fried food, but the omega-3-rich fats found in foods like:

- Fatty fish
- Nuts
- Eggs
- Avocados
- Dark chocolate
- Olive oil

Research connects C with brain health

Numerous studies connect vitamin C intake with cognitive health, and lowered risk for Alzheimer's.

So, help your brain get its vitamin C. Walk away from the sugar when you need a boost, and feed your brain some good fats instead!

Chapter 7

Diabetes Defeated

Now that you know about the relationship between vitamin C and your sugar intake, it's a small step to understanding how vitamin C can have a positive impact on diabetes.

The more vitamin C in the blood, the lower your blood glucose levels. There just aren't enough seats in the car left for glucose molecules when you've loaded up with vitamin C.

But what about the other indicators of diabetes: triglycerides, insulin, and HbA1c?

Triglycerides are basically fat molecules in the blood. High triglycerides don't cause diabetes; instead, they are an indicator that your body's system for turning food into energy isn't working properly.

When things are working properly, your body produces insulin, which "escorts" glucose into your cells, to be used as energy. Insulin also allows your body to use triglycerides for energy.

High triglycerides usually are a signal of insulin resistance. You have excess insulin in the blood, because blood sugar isn't responding to insulin the way it should. The result is higher than normal blood sugar levels.

Insulin resistance is a marker for high risk of type 2 diabetes.

Vitamin C helps lower your blood sugar levels and reduce the amount of insulin your body needs to pump into the blood.

HbA1c is a form of hemoglobin, or red blood cell, which carries glucose. The level of HbA1c in your blood is a good indicator of blood glucose levels. A high level of HbA1c may mean you're pre-diabetic, or at risk for dangerous complications, if you're already diabetic.

Studies indicate that supplementation with vitamin C can help control levels of HbA1C.

Vitamin C supplements keep diabetes away



To sum up, there is ample research to connect vitamin C supplementation to controlling the signs and precursors of diabetes.

Vitamin C prevents glucose from entering your blood. It keeps insulin under control, and reduces the red blood cells that specialize in carrying glucose through your bloodstream.

All in all, starting a daily vitamin C supplement is a simple way to take control of your diabetes risk today.

Chapter 8

Kill Cancer Cells (Yes, kill adult cells, stem cells, tumor cells...)

Cancer. Even the word can strike us down with a feeling of fear and powerlessness.

But knowing about the cancer-fighting abilities of vitamin C will put some of that power back in your hands.

For almost fifty years, researchers have watched high doses of ascorbic acid (vitamin C) shrink tumors, kill cancer cells, and prolong lives.

For example:

- A team led by Dr. Lewis Cantley, of Weill Cornell Medicine in New York, discovered that high doses of vitamin C – about the amount found in 300 oranges – impaired the growth of tumors that cause colorectal cancer.
- Research published by the National Academy of Sciences in the United Kingdom saw high-dose intravenous vitamin C treatments shrink malignant tumors in mice by almost 50 percent, and prevent them from metastasizing to other parts of the body.

These researchers found a “firm basis” for investigating further into the power of vitamin C to combat some of the deadliest forms of cancer, including pancreatic, ovarian and brain cancer.

- Researchers at the Perlmutter Cancer Center at New York University discovered that vitamin C may "tell" faulty stem cells in the bone marrow to mature and die normally, instead of multiplying to cause blood cancers.
- Research has also demonstrated how high levels of stress, leading to adrenal depletion and the loss of vitamin C, often precede a cancer diagnosis. Therefore, they believe that replacing lost vitamin C may slow the process of cancer.

These are just a few examples that confirm vitamin C as a powerful, non-toxic cancer fighter.

Yet, the Cancer Chemotherapy National Service Center, in their search for cancer-fighting substances, has consistently failed to test vitamin C as a cancer-killer. Their reason: ascorbic acid is *too non-toxic* to fit into their program!

Western medicine remains tied to the drug companies who produce the range of toxic chemotherapy drugs.

Even the esteemed Memorial Sloan Kettering Cancer Center shows a huge disclaimer on their website before even showing you the page that discusses the “purported” uses of vitamin C to treat cancer.

So, don't be surprised if your doctor is hesitant to talk with you about this non-toxic cancer treatment, or simply doesn't know much about it.

What can you do to help yourself? If you do not have cancer, load up your diet with vitamin C-rich foods, and/or take a daily supplement.

If you are battling cancer, there are doctors who will talk with you about alternative treatments, including intravenous vitamin C. Seek out a naturopathic oncologist or other doctor open to this alternative.



Chapter 9

No More Infections

You've heard how vitamin C can prevent colds, or shorten their length. But that is just a small part of the infection-fighting power of this vitamin.

Based on the last sixty years of research, and all we know about how vitamin C fights infection, you'd think every doctor in America would be shouting its praises as a first line of defense for preventing pretty much any kind of infection.

But, in case you haven't heard the whole story from your doctor, here's the impressive list of ways vitamin C fights infection in your body...

- 1. Vitamin C stimulates the production of *interferon*,** a naturally-occurring protein that got its name because it *interferes* with the reproduction of viruses in the body. Taking Vitamin C ensures that your body is at the ready if a virus invades and tries to spread.
- 2. Vitamin C helps *phagocytes* to function.** Phagocytes are white blood cells that gobble up viruses before they multiply and spread.

3. **Vitamin C neutralizes oxidative stress**, which occurs when you are ill, and causes inflammation, susceptibility to infection, and fatigue. (Oxidative stress is also associated with cancer, heart disease, Alzheimer's disease, and diabetes).
4. **Vitamin C helps produce cytokines**, another protein that delivers messages between cells, promoting the immune response.
5. **Vitamin C supports antibody production**. Antibodies are an essential building block of the immune response.
6. **Vitamin C helps your body dissolve mucus**. Yes, it's a natural decongestant!
7. **Vitamin C is a natural antihistamine**.
8. **Vitamin C stimulates the body to produce prostaglandins**, a hormone-like chemical that helps to ease the inflammation that comes with infection.
9. **Vitamin C supports cells in making hydrogen peroxide**. There's a reason we pour H_2O_2 on a cut. It helps kill bacteria like pneumococci, the one that causes pneumonia.
10. **Vitamin C weakens bacterial membranes** and lets antibiotics enter more easily to do their job.

And, as if all that weren't enough, vitamin C is smart enough to go straight to your white blood cells and live there, so it can be delivered to the sites of infection at a moment's notice.

Without enough vitamin C, you're an infection waiting to happen!



Chapter 10

Boost Other Enzymes and Nutrients for Superior Body Function

Besides fighting infection, your body's cells fight a daily battle against free radicals.

Free radicals are unstable molecules that can damage the cells in your body. They're like bandits, constantly scavenging for that extra electron that will complete them.

The result of this scavenging is oxidative stress. While oxidative stress is a result of our normal metabolic and digestive processes, it also comes about through consuming fried foods, alcohol, smoking, air pollution, exposure to toxins, and ongoing stress.

Without enough antioxidants in our diet, our bodies lack the ability to fight oxidative stress and the resulting free radical damage.

Vitamin C is perhaps the most powerful antioxidant available to you. It “donates” electrons freely, protecting your body from the damage caused by free radicals.

As if this weren’t enough, vitamin C also comes to our rescue by helping us absorb more of other crucial nutrients, particularly iron.

C ramps-up other nutrients

With age, both men and women are likely to experience more difficulty in absorbing iron. Studies have shown that, left unresolved, anemia in older adults is associated with increased loss of physical function and independence, including chronic weakness, irritability, fatigue, and strain on the heart.

Fortunately, vitamin C helps the body absorb more iron. Therefore, taking these supplements together is better than taking them separately.



Vitamin C also plays a role in protecting against:

- High blood pressure – the DASH diet, frequently recommended by doctors to treat and prevent hypertension, is rich in vitamin C-loaded fruits and vegetables.
- People who eat diets rich in vitamin C are less likely to be diagnosed with arthritis. This makes sense, since vitamin C is essential to the formation of collagen.
- It appears that vitamin C, combined with a daily dose of zinc, beta-carotene and vitamin E, protects the eyes against the onset of macular degeneration, the leading cause of legal blindness in adults over 55 in the United States.

Foods rich in vitamin C include oranges, green peppers, watermelon, papaya, grapefruit, cantaloupe, strawberries, kiwi, mango, broccoli, tomatoes, Brussels sprouts, cauliflower, cabbage, and raw, leafy greens.

Since vitamin C is sensitive to light, air, and heat, it's best to eat these foods either raw or lightly cooked.

Chapter 11

Stop the Loss of This Disease-fighting Vitamin

There are many ways vitamin C can be depleted despite any food or supplement you might intake. Here's how much vitamin C to take in, what kind, what types to avoid, and what can drain your body of vitamin C, sometimes faster than you can replace it...

No matter how much orange juice you drink, you may still be at risk for vitamin C deficiency. More to the point, certain conditions and behaviors may cause your body may be losing vitamin C faster than you could possibly take it in.

Smoking

Nicotine is one of the biggest culprits in robbing our bodies of Vitamin C. The more you smoke, the more vitamin C you need to counteract the damage that nicotine does to your cells.

Studies show that people who smoke twenty cigarettes a day have 40 percent less vitamin C in their blood than non-smokers. If you smoke, you must eat a lot of vegetables and fruits, and probably should be taking vitamin C supplements.

Stress

During periods of stress, our body's demand for vitamin C increases dramatically.

Vitamin C is an integral part of the "fight or flight" mechanism that goes to work to produce cortisol whenever we are under extreme stress. Our adrenal glands store more vitamin C than any other part of our bodies.

Basically, stress sucks our vitamin C supplies dry, and it's difficult to replace them quickly enough.

Caffeine

Beverages with caffeine, like coffee and sodas are diuretics. They cause us to urinate more frequently. Since vitamin C is water-soluble and eliminated through the urine, too much caffeine can rapidly deplete our supplies.

Medications

Certain classes of medication rob our bodies of vitamin C. Diuretics, certain birth control pills, aspirin, and anti-inflammatory drugs are among those that can cause depletion of vitamin C.

A few medical conditions have also been associated with vitamin C loss. Peripheral arterial disease causes high levels of inflammation and demands for vitamin C.

Also, recurrent hemorrhoids in older adults, as well as Lyme disease, have been associated with loss of vitamin C.

Also, recurrent hemorrhoids in older adults, as well as Lyme disease, have been associated with loss of vitamin C.

How much should you take?

During illness or exposure to bodily stressors, like second-hand smoke or sick relatives' germs, taking an extra 1000 mg above the recommended 100 mg per day is a good idea. Your body will excrete what it does not use.

You should also eat vitamin C-rich foods while taking a supplement.



What type of vitamin C do I need?

Common forms of vitamin C are:

- Ascorbic acid – most supplements come in this basic form. Ascorbic acid is simply the chemical name for vitamin C.
- Sodium ascorbate – ascorbic acid that has been synthetically bonded to sodium.
- Calcium ascorbate, or ester-C – some people find this gentler on the stomach than straight ascorbic acid.

Other types of vitamin C are food-based, like rose hips or acerola cherry. Many people believe that ascorbic acid is more readily absorbed when combined with other natural ingredients.

Beware of artificial ingredients in synthetic versions of C. Some of these are sucrose, stearic acid, and carrageenan, as well as artificial colors and flavors.

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