

Does Collagen Work? How To Make Sure Your Supplement Does*



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When trends emerge, my first look is always a critical one. It's important to question and be skeptical as so much of this industry is about marketing. So when collagen supplements exploded in the market, I raised an eyebrow. As did many people, I might add. All it takes is a quick Google search and you'll see scores of dated articles talking about how "collagen supplements aren't worth the hype" and they're just a passing fad.

Well, with research comes changing opinions. There's robust research that points to many benefits of collagen supplements,* and it's time to put to rest the myth that they're ineffective.

Now that being said—not all collagen supplements are created equal. You can absolutely find a less-than-stellar formula, which can affect the efficacy (perhaps why the myth keeps persisting).

What is collagen?

Before we get into collagen supplement efficacy, we need to understand collagen itself. If you're into skin care, you've probably heard of collagen before. It's what helps keep your skin tight, structured, and firm.* But it's so much more than that.

Collagen is an impressive family of proteins that are actually the most abundant proteins in the animal kingdom. There are also different types of collagen in our bodies. There are at least 28 kinds of collagen that we know of that exist in vertebrates (yes, us included). Types I, II, and III are the most common in the human body, and thus what we talk about the most in skin and body care.*

Let's talk about what it does. Collagen's role in the body is both simple and complex (at the cellular level): It helps make up the architectural matrix or structure of our skin, bone, cartilage, and muscle, with the purpose of helping tissues be more elastic and withstand stretching (So, for example, it keeps skin looking young and supple).*

We synthesize our own supply of collagen, via our cells' fibroblasts (assuming they have the amino acids and other required nutritional building blocks they need). This process happens throughout our lifetime; however, it also decreases with age. "Our bodies always balance collagen production and degradation," says board-certified dermatologist **Gary Goldenberg, M.D.** "When we are young, our bodies produce more collagen than we break down. That balance tips the wrong way with age since tissue regeneration decreases." Additionally, your natural levels can also be reduced by environmental factors and stressors.

How do collagen supplements work?

Collagen supplements are broken down, digestible forms of collagen (derived from animals like cows, fish, and chickens), usually in a powdered form. These are often referred to as hydrolyzed collagen, collagen hydrolysate, collagen peptides, or gelatin. They are broken down through controlled processes called hydrolysis, where water molecules rupture the chemical bonds in these animal-derived collagen proteins.

"Collagen is a complex protein made of three chains of amino acids, whereas hydrolyzed collagen is collagen that is broken down into small protein chains, called collagen peptides, that are made of a few amino acids," explains Nour Zibdeh, M.S., RDN, CLT. Those amino acids are things like proline, lysine, alanine, and glutamate (to name a select few).

Once ingested, these short peptides and amino acids are absorbed into the body through the small intestine. In the body, they travel throughout, supporting your body's natural production of collagen via the fibroblasts (or the things in our cells that create collagen and elastin). You can then reap the benefits of this in your skin, bones, joints, hair, nails, and muscles.*

What are the benefits of taking collagen, and how long does it take?

Speaking of those benefits, let's talk about them—and the scores of research studies that back up these claims.* "There are, in fact, numerous published studies on collagen peptides, and the science continues to build. When there are enough clinicals to compile them in a systematic review or meta-analysis, that's definitely a sign that a certain bioactive or nutritional component has a noteworthy breadth of clinical evidence," says Ashley Jordan Ferira, Ph.D., RDN, director of scientific affairs at mindbodygreen.*

- **Skin.** Perhaps one of the most robust areas of research has been conducted on collagen's effects on the skin. In 2019, the *J Drugs Dermatol* published a review of oral collagen's effects on the skin, showing that collagen peptides will support skin elasticity and hydration levels and promote youthful texture.*
- **Joint health.** One randomized clinical trial found that people who took a type II collagen supplement for 180 days saw support in their physical function and helped improve joint mobility.* Additionally, one meta-analysis, which combined data from five clinical studies, found that collagen supplements supported joint movement but didn't improve the joint comfort level or physical function.*
- **Gut support.** One of the main amino acids in collagen, L-glutamate, supports digestive health because it's a major fuel source for the cells in the intestine.* Our gut lining also uses proline and glycine for energy.*

- **Bone and muscles.** In one small human study, men who took collagen daily while participating in an exercise program gained more muscle mass than those who only did the exercise program.* For bones, this long-term study found that postmenopausal women experienced enhanced bone density.*

If you want a more thorough guide to the specific benefits you can expect, check out our comprehensive guide to collagen supplements.

How long does it take collagen to work?

So part of seeing if a supplement supports a particular targeted health area is knowing how long it takes. You can't try something for a few days, expect magic, and then deem it a failure if it doesn't work, no? For our full guide on this topic on collagen timing, please see this piece on collagen supplement results. But for a quick list, we've broken the time frames out here:*

- Skin support benefits: 4 to 12 weeks (1 to 3 months)
- Muscle mass and strength (combined with resistance training): 3 months
- Less soreness after physical training: within a few days
- Joint health support: 4 to 6 months
- Tendon support (combined with strengthening exercise): 3 to 6 months
- Bone-density support: 12 months
- Hair: unclear
- Nails: 6 months

What types of collagen can you use?

Collagen supplements come in many different forms: powder, capsules, gummies, drinks, to-go packets, and more. Of course, what option you decide to use is largely a personal choice. Some people like the ease of capsules, others enjoy the taste of gummies, and still others like the variety of powders, as they can blend in practically anything.

Your preferences and lifestyle will influence your choices, but as far as efficacy: Powders are the best, as they are able to deliver the most potent amount of collagen.* In powders you'll get dosages as high as 15 to 20 grams per serving—as opposed to gummies and drinks, which are usually much lower. Of course, it's fine to choose a supplement with a lower dose if the collagen supplement comes with additional bioactives, but it's just something to note.

Want some recommendations that include all of the above? Here are our all-time favorite collagen supplements.

4 things to make sure of so that your collagen works:

1. Dose

Collagen dosage can get quite nuanced. You may find definitive recommendations on intake levels (like a Recommended Daily Allowance, or RDA) and status blood biomarkers for things like vitamin D, with specific needs depending on your age, sex, dietary pattern, and lifestyle; it's just not the same for collagen at this time (yet). But we recommend looking for a supplement that delivers 10 to 20 grams per serving. As we've noted, collagen powders are the best delivery format for packing in these higher doses.*

2. Source

Look for brands that describe in detail where their collagen is sourced from (the animal, the country or region, etc.), be it on the packaging or website. Phrases like "grass-fed, pasture-raised bovine collagen," or "sustainably, wild-caught cod" are all good signs. Ideally, they'll also note what collagen types (type I, II, or III) and share the amino acid profile. You can find "vegan" collagen; however, it's important to clarify that those products don't actually contain collagen itself—instead, they are simply nutrients and bioactives to help you produce or maintain your natural collagen levels.*

While deciding sourcing will likely depend on your dietary needs, we prefer a grass-fed bovine collagen supplement, which contains collagen types I and III, the types of collagen that are widespread in the human collagen network and, thus, vital in promoting overall health.*

3. Clean formulas

As with most things we recommend, make sure the formula is clean. Less is more here: Skip artificial colors, sweeteners, and flavors, as well as fillers, chemical preservatives, gluten, GMOs, soy, and other known food allergens. If your collagen product is flavored, look for natural and responsibly sourced varieties (such as organic cocoa and organic vanilla). If there's a sweetener, we recommend premium options like organic monk fruit extract or organic coconut sugar.

4. Timing

There are plenty of claims out there about the best time to take collagen, be it morning, as an afternoon snack, or right before bed. Here's the deal: There is no scientific consensus on the "best time" to take collagen or even that the time of day matters at all. "Think of collagen as more of a general in-your-system-type supplement," says Albert Matheny, M.S., R.D., CSCS.

Conclusion

Yes, collagen supplements do work (and have the research to back it up).* But you have to find one that is high-quality if you want results.*

If you are pregnant, breastfeeding, or taking medications, consult with your doctor before starting a supplement routine. It is always optimal to consult with a health care provider when considering what supplements are right for you.

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