

## ***EVERYTHING YOU WANT TO KNOW ABOUT COLLAGEN***

Collagen—it's one of the buzziest ingredients in skin care, but unless you're neck-deep in the industry, you might not fully understand what it is or why you want more. Unlike vitamin C fading your dark spots, or hyaluronic acid boosting your skin's hydration, it's hard to distinguish any noticeable difference in your complexion from a topical collagen treatment, if there's any effect at all. And yet, there are dozens of topical and ingestible products on the market right now that promise to boost your collagen levels, increase lost volume, and generally act as the answer to all your anti-aging prayers. So what's real and what's beauty hyperbole? To get the stats on everything collagen-related, we consulted New York plastic surgeon Dr. Melissa Doft. Here's what she had to say.

*At its most basic level, what \*is\* collagen?*

It's not just beauty addicts who should care about collagen—it's a vital molecule for overall health. Says Dr. Doft, "Collagen is a complex protein [found] in many of our organs—muscles, bones, tendons, skin, digestive system, blood vessels, etc. It provides a structural scaffold to allow cells to form organs. In the skin, it leads to strength and elasticity."

*What are the benefits of having high collagen levels in the skin?*

There's a reason collagen is such a popular ingredient in anti-aging. "Increased collagen leads to smoother, firmer skin. It is important in cell renewal and repair." Youthful, healthy skin is bouncy and glowy, with few wrinkles, and having more collagen will only help you achieve those results.

*When do collagen levels start to deplete, agewise?*

Your brain is fully mature at age 25, but your skin is reaching its physical peak as well. According to Dr. Dof, your collagen starts to decrease by 1 percent every year starting in your mid-20s. So if you don't have a skin-care routine by now, it's time to reconsider.

*Are topical collagen products effective?*

Yes, but not in the way you think. Dr. Doft explains, "A [double-blind] study [wherein subjects] applied collagen-like proteins topically was shown to decrease the depth of wrinkles. But collagen is a large protein, and very large molecule, and cannot penetrate the skin's barrier. Topical collagen is a great humectant and can add moisture to your skin, thus making your wrinkles appear improved."

*What about ingestible products?*

There's a powder or supplement for everything these days, including collagen, but it might not be necessary if your diet contains the right foods. "A study in which 35–55-year-old patients were given 2.5 g or 5.0 g of oral collagen daily demonstrated that oral collagen increased skin elasticity after four weeks. Naturally good sources of collagen are cow meat, chicken, fish, and egg whites. But orally ingested proteins are broken down in your gut, so a collagen protein ingested will turn into amino acids. Perhaps the answer to this study is that eating more protein improves your skin elasticity. But it is very unclear if eating collagen has any benefit."

### *Are there alternatives to topical collagen products that work better?*

Skin-care stalwarts prove their merit once again. "Instead of applying topical collagen, which cannot penetrate the skin, it would [be] better to apply ingredients known for boosting your skin's own collagen, like retinol and vitamin C." Remember not to use these two at the same time, as they can cause skin irritation. "Treatments which cause micro-insults to the skin lead to a boost in collagen, such as microneedling, lasers, and chemical peels."

### *How can you prevent collagen loss most effectively?*

Sunscreen! All day, every day, with at least a 50 SPF. You can get sun damage even on a cloudy day, so don't skimp. Also, quit smoking if you do, and never start if you're younger. Round it all out with a diet high in protein and rich in antioxidants so your skin can start to repair itself from the inside out.