

3 Reasons Collagen Levels Decline & Lead to Wrinkles (Besides Age)



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By Hannah Frye
Beauty & Health Editor

Hannah Frye is the Beauty & Health Editor at mindbodygreen. She has a B.S. in journalism and a minor in women's, gender, and queer studies from California Polytechnic State University, San Luis Obispo. Hannah has written across lifestyle sections including beauty, women's health, mental health, sustainability, social media trends, and more. She previously worked for Almost 30, a top-rated health and wellness podcast. In her current role, Hannah reports on the latest beauty trends and innovations, women's health research, brain health news, and plenty more.

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Have you ever wondered why you get wrinkles as you age? At the core, it has to do with naturally declining collagen levels. While this is a completely normal (and unavoidable) process, there are other factors at play (unrelated to age!) that can damage the collagen you already have, leading to premature wrinkles.

1. UV exposure

There's a research-backed link between UV overexposure and loss of collagen: One study observed collagen under UV light and found that there was a "significant decrease" in collagen structure.

UV rays negatively impact collagen through various mechanisms, board-certified dermatologist Gary Goldenberg, M.D., assistant clinical professor of dermatology at the Icahn School of Medicine at Mount Sinai in New York previously told mbg. This includes DNA changes to the cells that make collagen, as well as the production of free radicals that can affect collagen directly via oxidative stress.

2. Stress

Research shows that stress can be pro-inflammatory, which can lower your ability to naturally produce collagen. Stress also causes an increase in hormones like cortisol, which research has found can decrease the production of collagen.

"Less collagen is produced in high-stress states since more of the body's resources are used to combat stress and the inflammation it produces," Goldenberg says.

3. Inflammatory foods

In case you aren't aware, "Inflammation is one of the main enemies of any tissue," Goldenberg notes—and the connective tissues fueled by collagen are no exception. Inflammatory diets, which often include eating plans that are high in sugar, simple carbohydrates, and processed meats, activate the immune system and promote inflammation throughout the body, board-certified dermatologist Joshua Zeichner, M.D., once shared.

"This may interfere with healing, including healing of environmentally damaged skin cells," he says. Sugar, in particular, can be tough on collagen. "High sugar levels can lead to hardening and fragmentation of collagen, weakening the skin foundation, and promoting premature skin aging," Zeichner adds.

Essentially, there are more than a couple of reasons your collagen levels don't stay in tiptop shape throughout your life, some unrelated to age entirely. However, that doesn't mean you can't combat the decline.

Many experts recommend adding a collagen supplement to your routine, as research shows that they can stimulate the skin's fibroblasts to encourage the natural collagen production process⁴. While they won't protect your skin from the sun or fend off stress, collagen supplements can help support your internal collagen bank.

What's more, some blends even include ingredients like hyaluronic acid to further support plump, hydrated skin. (Remember: 50% of the body's total amount of hyaluronic acid resides in the skin⁵, and consuming it can help replenish your natural reserves.)

Not sure where to find a trusted option? Here's our curated list of the best collagen supplements on the market, all approved by a nutrition Ph.D., to get you started.

The takeaway

While age certainly plays a role in declining collagen levels, it's not the only thing impacting your body's collagen bank.

Do your best to protect your skin from excess UV exposure, consume anti-inflammatory foods, ease daily stress when you can, and add a collagen supplement to your routine for extra support. Believe it or not, these aren't the only reasons why collagen declines—check out our full guide for more tips.

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