

The essentials you need to know about collagen

Collagen seems to be everywhere nowadays. You get the impression that there is no food supplement brand without a collagen product (pill or powder). There are also all sorts of aesthetic treatments and skincare products that are supposed to increase the collagen content of your skin, in order to make it firmer and more youthful. If you don't want to be overloaded with too much information, but would just like to get a general idea of what collagen is and if it could be good for your skin, this article is for you.

What is collagen?

Collagen is a strong and fibrous protein that our body makes. It forms part of our bones, ligaments, tendons, skin and more. It acts as a support structure and "glues" everything together.[1]

Different types of collagen

There are 16 different types of collagen that all have different roles. For example, type I helps to build tendons and bones and type III is found in muscles and blood vessels. Type I is the most common type of collagen in our skin, where it provides support and shape.[1,2]

A three-dimensional matrix

In the skin, collagen forms a three-dimensional matrix called the dermal collagen matrix. This matrix helps to make our skin firm and youthful-looking. Collagen is said to be a hallmark of young and bouncy skin. When we lose it, we also lose our youthful appearance. Our skin can become loose and saggy.[3,4]

The matrix gets fragmented and frayed

With age, the dermal collagen matrix gets fragmented and frayed and that’s why our skin can lose its firmness and shape as we grow older.

Did you know that we lose 1% of the collagen content in our skin per year from the age of 20? And that we have lost 25% of skin collagen by the age of 45?[5]

The pinch test

How do you know if your skin has lost some of its firmness? When you pinch your skin, do you feel that it has changed with time? Does it take longer for the skin to return to its regular shape after you have pinched it? Does your skin feel looser? In that case, the collagen content in your skin may have decreased.

What can you do about it?

If you think your skin is not as firm as it used to be and are bothered by it, there are several things you can do to increase its collagen content. For example, you can:

1. Use skincare with vitamin A
2. Take collagen supplements
3. Have collagen stimulating aesthetic treatments

Skincare with vitamin A

Skincare products that contain vitamin A or its derivatives tretinoin and retinaldehyde have been shown to stimulate collagen formation in the skin. Vitamin A in skincare can also reduce the enzymes that degrade collagen.[6]

Food supplements with collagen

Studies have shown that skin dryness and wrinkles can be improved with collagen supplementation.[7] However, supplements often come in a complex together with other nutrients, so it can be difficult to know if it was the collagen only that improved the skin. Eating a nutritious diet is of course always good for our skin and overall health!

Aesthetic treatments

There are many aesthetic treatments that can increase the collagen content of the skin, such as peels, lasers, IPL and collagen stimulating injections.[6] A qualified healthcare practitioner can advise you which kind of treatment will work best in your case. Here we'll look a bit into collagen stimulation injections, as they have been shown to have such a profound effect on skin collagen.

Injectable aesthetic treatments for more collagen

Injectable treatments can activate the skin's own natural collagen production. One such product is Sculptra®.[8-12] Sculptra has been shown to increase collagen type I by as much as 66.5% in three months.[9]

The effect is not instant like a filler treatment, but a gradual increase of collagen over the course of several months. Since it's your own natural collagen production that increases, Sculptra provides natural-looking results. It doesn't alter your facial features.

How do I know which treatment is right for me?

An easy do-it-at-home start is to try a vitamin A cream or serum and/or to try a collagen supplement. If you haven't noticed any result, or the result you want, after a few months, you could consider an aesthetic treatment

instead.

Make sure you only consult qualified healthcare practitioners. They will know if you will benefit from a Sculptra treatment, or if there’s something else you could do to improve the quality and look of your skin.

Aesthetic treatments are all about personalization. To get the best result, we need our own individualized treatment plan.

References

1. WebMD; Collagen and Your Body: What to Know; Medically Reviewed by Debra Jaliman, MD on January 13, 2022; Sourced 28th Aug 2022
2. McIntosh J. Collagen: What is it and what are its uses? Medical News Today. June 16, 2017.
3. Fisher GJ et al. Arch Dermatol 2008;144(5):666–72.
4. Werschler WP et al. J Clin Aesthet Dermatol 2015;8 (10 Suppl):S2–S7.
5. Shuster S, Black MM, McVitie E.; Br J Dermatol. 1975;93:639-643.
6. Ganceviciene R. et al, Dermatoendocrinol. 2012;4(3):308–319.
7. Vollmer DL., Int J Mol Sci. 2018 Oct; 19(10): 3059.
8. Stein P et al. J Dermatol Sci 2015;78(1):26–33.9.
9. Goldberg D et al. Dermatol Surg 2013;39(6):915–22.
10. Vleggaar D et al. J Drugs Dermatol 2014;13 (4 suppl): s29–31.
11. Moyle GJ et al. HIV Med 2004;5(2):82–7.
12. Bohnert K et al. Plast Reconstr Surg 2019;127(4):1684–92.
13. Lowe NJ. J Eur Acad Dermatol Venereol. 2006: 20(1):2-6
14. Narins RS et al. J Am Acad Dermatol 2010;62(3):448–62.
15. Brandt FS et al. Aesthet Surg J 2011;31(5):521–8.

Hide

Share this article