



What are Collagen Shots?

Collagen Shots are clinically formulated functional beauty drinks to naturally support firm, youthful skin.

Collagen Shots naturally supplement your skin's collagen levels and hydration to improve its firmness and texture, reducing the appearance of fine lines and wrinkles associated with ageing.

The unique and unrivalled formulation of Collagen Shots combines a blend of peptide rich amino acids with hyaluronic acid, natural antioxidants and a range of vitamins and minerals clinically proven to improve the tone and texture of the skin.

Compared to rival products, Collagen Shots contain more hydrolysed collagen (10,000mg/serving)

How the body uses Collagen?

Collagen Shots is an easy-to-drink beauty product that provides high levels of natural marine collagen to help improve the appearance and function of your skin by supporting and increasing the body's natural collagen production.

Collagen Shots are easily used by the body due the following:

- The peptides that we use are extracted using a gentle enzymatic process to achieve a very low molecular weight which is easily digested and absorbed into the blood stream.
- The high bioavailability of the hydrolysed collagen enables 90-95% of the collagen peptides reach to reach the target sites in the body.
- Collagen peptides stimulate fibroblasts in the skin, which increase collagen production and restore the structural integrity of the fibroblasts, promoting firmer, stronger skin.

Can Collagen improve your skin?

YES! Research has shown that orally ingested collagen can increase collagen synthesis and improve hydration levels in the skin, which has been reported to:

- Reduce the appearance of lines, wrinkles & 'crow's feet'
- Make skin appear younger
- Increase skin firmness
- Improve elasticity of the skin
- Reduce skin dryness
- Increase skin smoothness

Benefits to your body

Collagen, specifically type I collagen, is not just part of skin, it is the largest and most abundant protein in the body, making up about a third of all the protein in the body (Di Lullo et al., 2002). Collagen is predominately found in the connective tissue of the body, and due to its strong fibrous structure is an integral support element for muscles, bones and ligaments. It is also a crucial protein for good joint health.

Collagen also provides strength to certain body parts, such as nails and is important for strong, healthy hair. As discussed above, as we age, our ability to produce collagen reduces significantly and therefore supplementation with a highly bioavailable hydrolysed collagen product such as Collagen Shots can be highly beneficial to the whole body.

Joint Health

Studies have found that collagen can help reduce pain, swelling and stiffness of the joints (Bruyère et al., 2012) and may be especially beneficial for those with rheumatoid arthritis (Barnett et al., 1998). Studies have shown that ingested collagen positively affects joints by improving the density of the cartilage in the joints (McAlindon et al., 2011).

Flexibility and Mobility

Collagen supplementation may improve the flexibility and mobility (Moskowitz et al., 2000; Carpenter et al., 2005), which is especially important for maintenance of an active and healthy lifestyle.

Circulation

A major constituent of the structure of blood vessels is collagen, and ingestion of gelatin has been shown to increase the elasticity of blood vessels and blood flow to the finger, increasing the finger volume (Kadison, 1965).

Increased blood vessel elasticity may help to reduce the risk of hardening of the arteries and associated heart diseases (McEniery et al., 2007). A healthy circulation and the increased finger volume associated with the gelatin ingestion (Kadison, 1965) may help to boost the radiance and fullness of the skin.

Hair

Collagen is an important element for healthy, strong hair growth. Supplementation with collagen for 62 days resulted in an increase in the thickness and strength of the hair and once the supplementation ceased hair thickness returned to its original level (Scala et al., 1976).

Nails

As with hair, collagen is an integral part of strong, healthy nails. Research has shown that supplementing individuals with brittle nails with 7g collagen a day reported that 86% of participants saw improvement in the quality of their nails and when the collagen supplement ended the nail defects returned (Rosenberg et al., 1957).

Similarly, in a second study, 80% of subjects saw improvement in their nails after taking collagen peptide (Schwimmer & Mullnos, 1957).

Wound Healing

Following fractional photothermolysis treatment, half the patients received 3g of collagen peptide each day for 4 weeks. The results showed that by day three, those taking the collagen had significantly better skin hydration. Furthermore, by day 14, skin elasticity had improved significantly in these patients compared to a control group (Choi et al., 2014).

Weight loss

It is well established that hydrolysed collagen is very effective at suppressing appetite, and therefore supplementation may aid weight loss (Martin, 2001). From an anecdotal perspective, many Collagen Shots customers have reported improvements in many of the above factors as well as in their skin, giving even more reason to include Collagen Shots into your daily health and beauty regime.

Collagen Drinks v. Tablets and Creams

Collagen Shots provide all the benefits of collagen in an easy to prepare, easy to drink formula. Freeze drying the enables 10,000mg marine collagen to be packed into each serving, an amount that would be impractical to achieve in tablet form.

In comparison to collagen products applied directly to the skin, Collagen Shots have several distinct advantages. The skin is a multi-layer protection system for the body with the thick stratum corneum being the outer most of these.

The fibroblasts that are central to the promotion of healthy skin are located in the dermis which is situated deep below the layers of the epidermis. The skin is specifically designed to prevent unwanted things to cross through it and enter the body.

Therefore, collagen creams applied to the skin need to have a very small molecular size in order to reach the active fibroblasts in the dermis. Research suggests that to enter the body via the skin, molecules need to be less than 500 Daltons in size (Bos & Meinardi, 2000).

As discussed above, even hydrolysed collagen has a molecular weight of approximately 2000 Daltons. Therefore, it is unlikely that the collagen in creams applied to the skin would be able to cross the skin-body border and reach the fibroblasts.

Indeed, if they were able to cross the skin-body barrier and enter the circulation, they would need to be registered and tested a medical product.

In contrast, the hydrolysed collagen as found in Collagen Shots has been shown to pass through the intestinal wall into the blood (Iwai et al., 2005) in humans with a 90% of ingested collagen reaching the target cells in mice (Oesser et al. 1999).

A 2009 study by Koyama, reported significant reports of improved skin condition following collagen supplementation with 5g and 10g daily, but there was no difference in the water content or barrier function of the skin compared to the control group. These findings suggest that the effect of collagen is located in the deep dermis layer of the skin, where creams are unlikely to reach.

Additional Benefits from Collagen Shots by Rejuvenated

Rejuvenated Collagen Shots have been especially formulated with 10,000 mgs of marine collagen, hyaluronic acid and the super antioxidant Açai berry combined with vitamins B3, B5, C with minerals zinc and copper to optimise the use of collagen in the body and provide a whole range of further health benefits.

A significant contributing factor to the ageing process and aging skin is the production of free radicals and subsequent oxidative stress in response to factors such as UV radiation, smoking and pollution.

Collagen Shots have been specifically formulated to optimise antioxidant levels that are a powerful way to counter the effects of this oxidative stress;

Açaí Berry: has been proclaimed as a 'Super Food' and with a 19 amino acid profile and an array of vitamins (A, B1, B2, B3, C and E) Açaí Berry is an exceptional antioxidant. Research in humans has shown that antioxidant capacity following a single 7ml/g body weight dose of Açaí pulp increased up to 3 times of a placebo (Mertens-Talcott et al., 2008).

A reduction in oxidative stress has been proposed as crucial in maintaining normal metabolism and reducing the risk of conditions such as diabetes and cardiovascular disease (Grattagliano et al., 2008).

The most prominent fatty acid in Açaí Berry, contributing 56.2%, is oleic acid, followed by followed by palmitic at 24.1%, and linoleic acid contributing 12.5% (Schauss et al., 2006). Oleic Acid has been suggested to have modulating effects of many physiological functions, to improve immune function, and may be beneficial against several inflammatory diseases and cancer (see Sales-Campos et al., 2013 for review).

Research in rats suggests that Palmitic acid may act as an antioxidant and potentially contribute to the prevention atherosclerosis (Cho et al., 2010). Finally, animal research suggests that Linoleic acid may help prevent heart disease and cancer, and studies with humans have provided convincing evidence for its role in reducing body fat (see McCrorie et al., 2011 for review).

Hyaluronic Acid: has often been called the fountain of youth as it contributes to the plumpness of well hydrated skin. One of the most abundant elements of the skin is water and crucial to retaining the skins moisture is a mucilaginous mucopolysaccharide macromolecule called hyaluronic acid (Baumann, 2007).

Hyaluronic acid is made by the body, but as with collagen, its production decreases with age (Longas et al., 1987) and its loss contributes to the dry, inflexible and saggy skin associated with older age. Ingestion of collagen has been shown to enhance the production of hyaluronic acid, due to its stimulation of the fibroblast cells in the dermis (Ohara et al., 2010).

Vitamin C (Ascorbic acid): is an essential vitamin that not only protects the body against oxidative stress but is also essential for collagen production in the body (Peterkofsky, 1991). As we age, the levels of Vitamin C in both the epidermis and dermis of the skin fall (Rhie et al., 2001) and thus for the collagen provided in Collagen Shots to be optimally effective the inclusion of adequate Vitamin C in the product is vital.

In addition, Vitamin C also increases the growth and production of fibroblast cells which as discussed preciously are central to healthy skin, and as this fibroblast proliferation declines with age, maintaining adequate Vitamin C is very important (Phillips et al., 1994).

Observational research has also associated higher Vitamin C intakes with better skin condition and a noticeable reduction in wrinkles (Cosgrove et al., 2007; Purba et al., 2001).

Where do you source your fish?

The fish used for Collagen Shots is sustainably sourced from free running fresh water to ensure that they are low in sodium and eliminate the potential for mercury contamination. The fish is of European origin. The types of fish are white flesh, such as perch, tilapia and carp.

We batch test our products with an independent laboratory so that you can be assured of efficacy and quality at all times.

Why are Collagen Shots formulated as a powder?

By using freeze dried ingredients you can be assured of 100% potency overtime you drink Collagen Shots. Currently there is not a recognised method of putting such formulas into a ready made drink without heat treating the ingredients to pasteurise them, it's believed this process can affect the potency of collagen and vitamin C.