



Inside influencers: harnessing the collagen gummy opportunity



he beauty from within trend is converging with the rising popularity of the playful gummy format to create the perfect backdrop for collagen ingestible innovation. But developing high-concentration collagen gummies that combine tangible benefits for skin health with an appealing sensorial profile is not straightforward. Here, GELITA discusses how its game-changing VERISOL® HST (Hybrid Smart Technology) can take collagen peptide functionality to the next level, enabling manufacturers to harness this burgeoning opportunity.

The rise of gummy supplements for preventative health is one of the biggest success stories of the last few years, as 'pill-fatigued' consumers warm to the sensory experience this more user-friendly format offers.

According to figures from Innova Market Insights, the number of new gummy introductions globally leapt by 81% between 2020 and 2021 to command a 9.4% share of total supplement launches. From a geographical perspective, North America, Europe and Asia are leading the charge – collectively, these markets accounted for more than 90% of new product development in this space.

Looking good for beauty-from-within

Although vitamin and mineral fortified gummies have dominated the category to date, there are indications that their growth has peaked

– their share fell from 55% of gummy introductions in 2017 to 35% in 2021. At the same time, other platforms are gaining ground – botanical/herbal supplements accounted for 20% of all gummy launches in 2021, and nail, skin and hair became the third largest subcategory, with a 10% share – evidence that the beauty-from-within trend is gathering pace.

Beauty-from-within has long been talked about in terms of market potential, but from this data it is evident that ingestibles are building serious commercial traction as they prove that beauty can be more than skin deep. Food and beverage launches carrying skin health claims grew globally at a CAGR (Compound Annual Growth Rate) of 9.4% between 2016 and 2021, according



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to Innova Market Insights. Innova also reported that one in ten consumers globally said their main motivation for changing eating habits was to improve their skin, hair and nails.

Plumping up with collagen

Supplemental collagen is one of the most proven ways of influencing skin health from within. Collagen is the most abundant protein in the body and a key constituent in skin, nail and hair health. However, the amount of this natural protein that the body produces starts to decline from the age of 30 onwards. That is because the performance of skin cells, called fibroblasts, deteriorates and collagen synthesis is reduced. Consequently, the skin suffers from a loss of moisture and becomes increasingly dry.

While topical skin care solutions containing collagen can deliver temporary benefits in the epidermis – the outer layer of the skin, the beauty of ingestible collagen is that it has a more enduring effect. That is because it replenishes the body's resources of this vital nutrient by positively influencing the skin's collagen metabolism from the inside.

GELITA's breakthrough VERISOL® HST ingredient has provided the industry with a science-backed solution for developing effective collagen-rich gummies. VERISOL® contains natural BCP® (Bioactive Collagen Peptides) that have been developed to deliver the highest levels of efficacy in human skin. With their special peptide sequence, they pass the intestinal wall intact, enter the bloodstream and reach the fibroblasts in the dermis. In a completely natural process they stimulate collagen metabolism and help to strengthen the skin's connective tissue. This translates to improved elasticity, fewer wrinkles and a more youthful, healthier appearance.

A wealth of evidence

The effects of VERISOL® on the skin metabolism have been proven in a number of clinical studies. The first study was designed to evaluate the effectiveness of VERISOL® against biophysical skin parameters related to cutaneous ageing. In this double-blind, placebo-controlled trial involving 69 women aged 35-55, skin elasticity was shown to improve significantly after only four weeks of taking supplements with VERISOL®. The positive effect on skin elasticity was still detectable at the end of the four-week washout phase, indicating a long-lasting dermal physiological effect.

Wrinkle reduction

A second double-blind, placebo-controlled trial investigated the effectiveness of VERISOL® on wrinkle reduction and the synthesis of important dermal matrix components such as type I collagen, elastin and fibrillin, which are key components in connective tissue. 114 women aged 45-65 were randomised to receive either 2.5g of VERISOL® or a placebo, once daily, for eight weeks.

After four weeks of treatment, eye wrinkle volume had reduced by more than 7% in the VERISOL® group. The positive effect was more pronounced after eight weeks of intake, with some subjects achieving a 50% reduction in eye wrinkle volume. Four weeks after the last dose, the VERISOL® treatment group still showed a statistically significant decrease in eye wrinkle volume of 11.5%.

Further clinical studies have shown VERISOL® to be effective at counteracting cellulite and improving nail and hair health.

How much collagen?

One of the challenges for supplement developers is translating the doses from clinical studies into consumer-friendly products that deliver on taste, texture and mouthfeel. Scientific research has confirmed that a daily dose of just 2.5g of VERISOL® is associated with beneficial effects. Although this is much lower than some collagen solutions on the market (some of which require doses of up to 15g for a positive effect), it is still very challenging to incorporate this much collagen into a single gummy – or a handful of gummies even.



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When collagen meets gelatin...

This is where VERISOL® HST comes to the rescue. This game-changing ingredient allows for the incorporation of higher levels of BCP® into gummies. Using a conventional collagen peptide alone, it is only possible to formulate a fruit gummy that delivers 6% of the recommended daily intake of collagen, whereas with VERISOL® HST, the collagen content can be increased to 33% of the recommended daily intake. This means consumers only have to take three gummies daily – rather than 16 – to hit their daily target of 2.5g collagen peptides.

The key advantage of VERISOL® HST is that it combines the health benefits of collagen peptides with the technological benefits of gelatin. Therefore, instead of producing a gummy and then adding collagen peptides, manufacturers can simply replace both the gelatin and collagen peptides with VERISOL® HST. This single-step solution enables easy production of high collagen beauty gummies that deliver the texture and taste that are critical for market success.

One of the reasons that this solution enables the production of gummies with a high collagen content is that VERISOL® HST has better dissolution properties than conventional collagen peptides; adjustable particle sizes, improved wettability / dispersability profiles and a higher overall bulk density make it easier to create high concentration formulations. And thanks to its innate gelling properties, HST overcomes the challenges that are often encountered when working with

gelling agents, to achieve a desirable texture, taste and mouthfeel.

Easier gummy production

VERISOL® HST also makes the production process easier and more efficient. For instance, the denser particles sink to the bottom of dissolution vessels quickly, so fewer lumps form, and because less air is introduced during processing, foaming is reduced. Compared with conventional collagen peptides, VERISOL® HST also produces less dust during production, storage and transportation, so handling is easier and less cleaning is required.

The VERISOL® HST platform might be an 'all in one' solution but it is also an extremely flexible concept that can be tailored to cater for different audiences and tastes. By working with varying gel strengths or different concentrations, a product's firmness and elasticity can be adjusted, resulting in products with either a softer or firmer texture, or a shorter or longer bite, for example.

Formulating gummies for tomorrow's consumer

Gummy supplements have already come a long way in a short space of time and they have so much further to go. As this space evolves, manufacturers will seek out ingredient solutions that don't just deliver on taste, texture and efficacy, but also support the development of products that are lower in sugar, higher in protein, GMO-free, clean label, natural and non-allergenic. VERISOL® HST provides a flexible, consumer-friendly innovation platform that meets all of these demands, making it the ideal solution for today's reality as well as tomorrow's aspirations.

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