

The collagen report

How well do you really understand the collagen market?

Uncover the latest market insights to inspire your next innovation



Foreword

Collagen. It's everywhere. But do we really know everything there is to know about this popular supplement ingredient?

The collagen market is fast growing, powered by evolving consumer preferences and lifestyles, rising management of health and increasing demand for collagen-based solutions. But we think there is much more brands can do to educate consumers about what collagen is, the different types available and how it can benefit their health in varying ways.

That's why we want to help you better understand the collagen buyer and inspire new innovations that speak to the masses. This report outlines the key trends shaping the collagen market in 2023 and beyond, barriers to purchase and what steps brands can take to develop truly stand-out products that will appeal to today's consumer.

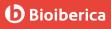


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Consumer data provided by Industry Transparency Center (ITC) – Consumer Supplement User Survey, 2022.¹

The study interviewed 3,500 supplement and non-supplement users across the US, China, United Kingdom, Germany and Italy.



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It's time to open consumers' eyes to collagen

Collagen awareness is high amongst consumers, with 48.0% saying they are familiar with the ingredient. However, despite its popularity, many individuals remain mystified by the molecule. Generally, people have a top-level view of collagen benefits – including it being a good source of protein and supporting general health – but few consumers understand its full range of functions or the varieties available.

Of consumers who take collagen:

- **+50.0%** don't seek out a specific collagen type
- **75.0%** say they wish they knew more about collagen supplements
- 45.0% think the collagen market is confusing.

Reasons consumers don't take collagen:

- Don't understand the benefits
- Don't know enough about it
- Think it's not necessary for their health
- Primarily take supplements to strengthen immune health, support heart health or "fill nutritional gaps".

Collagen supplements are the third most familiar amongst consumers

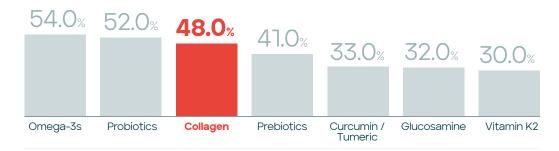


Figure 1: Ingredient familiarity amongst supplement users.¹

When investigating supplement usage in 2022 versus 2021, the percentage usage increase was highest for collagen supplements

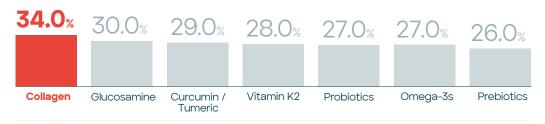


Figure 2: Percentage of users taking more vs. previous years.¹

Despite relatively high awareness of collagen, there is a clear opportunity to help consumers make more informed choices regarding collagen supplementation and how it can support their health. This may inspire consumers to increase the purchase and intake of collagen products.



Getting to know collagen

What is collagen?

Collagen is the most abundant protein in the human body, found in the bones, muscles, skin and tendons. It is synthesised from the amino acids: glycine, hydroxyproline and arginine.

What role does it play in the body?

Collagen's main role is to provide structure, strength and support throughout the body. It has several benefits, including preventing bone loss, supporting joint movement, increasing muscle mass, supporting wound healing, boosting hair and nail growth and improving skin strength and elasticity.

90.0%

of collagen found in cartilage is type II collagen.²

Are there different types of collagens present in the body?

There are 28 known types of collagen in the body and five different types are commonly used in supplements – categorised as type I, type II, type III, type V and type X (most collagen products contain type I, II or III). 90.0% of the collagen found in the body is type I and provides structure to the skin, bones, tendons and ligaments. Type II is present in cartilage and is important for joint support. Whereas type III is found in skin, blood vessels, muscles, arteries and organs and promotes elasticity.

How is collagen supporting new developments in the healthcare market?

The numerous functionalities of collagen make it an attractive candidate for innovation in multiple health areas, including skin & beauty and mobility. Additionally, more consumers are turning to collagen – 33.0% more users in 2022 compared to 2021 – highlighting demand for the ingredient and opportunities for new product development.

Is there an opportunity to innovate in the joint health space specifically?

Interest in protecting joint health is at an all-time high – largely because consumers of all ages now understand the importance of staying mobile and flexible for their overall health and wellness.

However, the joint health category is a diverse landscape with a variety of ingredients competing for attention. Nevertheless, collagen has gained significant momentum in the space due to its demonstrated health benefits for joint health.

26.0% Joint health products

with collagen increased by 26.0% in 2021.³

77.0%

of collagen users are interested in branded ingredients.

Who is today's collagen consumer?

Today's collagen consumers are comprised of 52.0% women and 48.0% males. Individuals who are 35-54 years of age are the most common collagen users, followed by consumers aged 65+. Younger generations (18-34 years) are increasingly choosing collagen products too, though.

43.0% of consumers take it daily; **23.0%** one-to-two times a week; and **16.0%** three-to-six times a week.⁴ Regular collagen users learn about the benefits of the ingredient primarily via healthcare professionals and friends and family. However, other popular sources of education include health-focused TV shows, online research and supplement supplier websites.

What's more, 77.0% of collagen users "look for" or "appreciate" branded collagen ingredients, and 21.0% are willing to pay a premium for solutions containing branded ingredients.



The collagen consumer is... everyone. Because people of all ages can benefit from collagen supplements, there is significant opportunity for innovation in the market - both to inspire people to take collagen and convert irregular users.

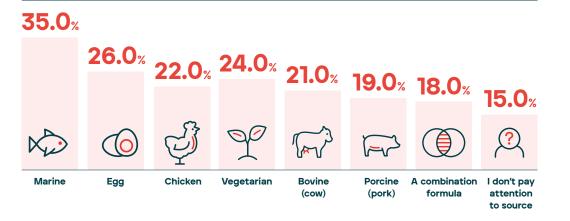
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Collagen by source

There is a variety of sources of collagen ingredients – all animal-based. Many people **(42.0%)** don't have a preference regarding collagen source and **15.0%** do not pay attention to the source at all – but this is likely due to lack of understanding of what collagen is and where it comes from.

Of those collagen supplement users that do have a preference, marine **(35.0%)** is the preferred source, followed by egg **(26.0%)**, vegetarian **(24.0%)** and chicken **(22.0%)**.

Figure 3. Preferred sources of collagen.¹



The vegan collagen 'myth'

Since collagen is an animal-based protein, there are currently no vegan collagen supplements available on the market. However, plant-based supplements known as 'collagen boosters', 'vegan collagen' or 'vegan collagen builder' do exist. They don't contain collagen, but are instead composed of a variety of ingredients – from plant extracts to amino acids, vitamins and minerals – and help to enhance the body's ability to produce collagen.

As well as not being able to exert the same effects as real collagen products, they typically don't have the science to back them up – so be aware of brands claiming to have an 'all vegan' option that's just as good as the real deal.

A great deal of mystery remains surrounding collagen and its various forms and sources. There is much work to be done to differentiate collagen types and understand their associated mechanisms of action - and then the next step would be to communicate this effectively to consumers.

Joint health in the spotlight

Each year, interest in collagen continues to expand beyond skincare and beauty a result of the growing body of science supporting its many overarching benefits. Joint health - in particular- is now a top priority for consumers globally, and a key reason for taking supplements. Mobility issues affect most people as they get older – and with the global ageing population, the number of individuals with joint problems is predicted to rise. Although, seniors only represent one segment of today's joint health opportunity.

Consumers of all ages and fitness levels are increasingly making mobility a priority because they understand its link to overall wellness. People also want to protect their joints at any earlier age to futureproof against any issues in the future. To support this, they are proactively looking to maintain healthy joints throughout life with proven and effective ingredients, like collagen.

What does this mean for the collagen market?

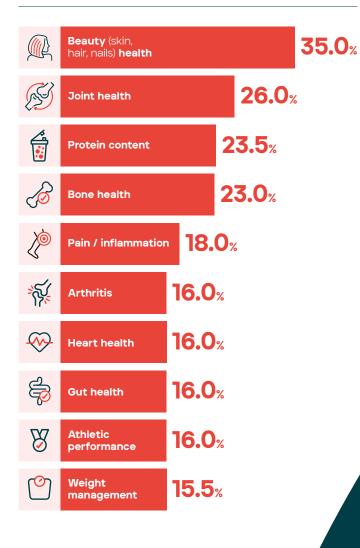
The growing joint health category is a key driver of rising collagen supplement usage. In the US alone, the use of collagen in dietary supplements for joint health increased **26.0% in 2021** – a significant uptick from previous years.⁵

Joint health is top health issue for 27.0% of supplement users.¹



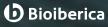
Delving deeper into the top health concerns of collagen users specifically, research suggests they take supplements containing this ingredient for a number of different reasons – including for beauty, joint health support and protein content.

Figure 4. Why consumers take collagen regularly.¹





Collagen is the go-to supplement for healthy hair, skin and nails. But it's becoming increasingly attractive to consumers concerned about joint health, general health and as a source of protein too.



Inspiring formats that appeal

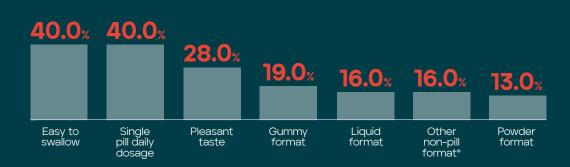
Consumers want convenience and formulators can give it to them with collagen-based products.

When it comes to format, collagen users like capsules, powders and pills. In terms of preferences on supplement physical characteristics, the most important purchasing criteria are 'easy to swallow' and 'single daily dose', as well as 'pleasant taste'.

Consumers are increasingly opting for formats beyond pills, capsules and softgels too – including gummies and functional products – to help them meet specific health and nutrition goals. In fact, almost **30.0% of collagen products regularly used by consumers now come in gummy and chewable tablet formats.**⁴ Moreover, they are increasingly interested in products that combine multiple ingredients in one solution, including collagen blended with other well-known ingredients for more holistic health benefits. Figure 5. Collagen product format preferences.¹



Figure 6. Go-to collagen supplement characteristics.¹



*i.e. stick pack, chew, effervescent



Pills and capsules remain a firm favourite amongst consumers, but innovative product formats are making their way to the fore – like gummies, liquids and powders – that offer people a novel way of supporting their health.

Choosing collagen supplements: top 5 considerations

No matter the collagen solution you choose, it's important to consider the key factors influencing consumers' purchasing decisions to make sure your collagen products satisfy their needs.



5 factors powering purchasing decisions



Consumer preferences Keep in mind key preferences like 'easy to swallow', 'single daily dosage', 'pleasant taste', 'gummy format' and 'liquid format'.

Trust

Consumers are most likely to trust a supplement based on consistent product quality, efficacy and safety, certifications and seals and recommendations from healthcare professionals.



Quality

Consumers say that 'safety' (48.0%), 'quality' (47.0%) and 'regulatory' compliance (41.0%) are extremely important to them.



Transparency

Ingredients from a natural source, that are supported by clinical research and backed by detailed ingredient information are top of mind.



Social activism

With options such as fish/marine collagen and vegan collagen-booster supplements entering the marketplace, sustainability and animal welfare claims are rising in importance too.

Science-backed ingredients under the microscope

Sound scientific support of ingredients' health benefits is essential to building and maintaining consumer trust. **Today's joint health consumers prefer solutions that offer clinical proof of efficacy.**

The best way to make an impact in the mobility space, therefore, is to tap into science-backed ingredients that drive innovation, while aligning with broader trends across the supplement industry.

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Today's consumers are savvier than ever before, with many undertaking (often extensive) research to support their health goals before making a purchasing decision. It's time to get clued up on what's driving consumers to tailor collagen products to these factors. nding

Understanding the different collagen solutions on the market

There are three main types of commercially available collagen ingredient: collagen peptides (hydrolysed), native (undenatured) type II collagen and gelatin. Collagen peptides are well-established in multiple health areas, whereas native type II collagen is a next generation collagen specific for joint health due to its molecule characteristics (triple helix structure) and mechanism of action. Figure 7. Get to know your collagens: collagen peptides versus native type II collagen.

	Collagen solution	
	Collagen peptides (hydrolysed)	Native (undenatured) type II
Collagen type	Non-specific (usually type I)	Туре II
Structure	Small molecules	Triple helix form
Main sources	Bovine, porcine, marine	Poultry
Uses	Skin & beauty Joint health Bone health	Joint health
Mode of action	Building block of cartilage	Signals immune system to reduce collagen degradation in the joints
Main applications	Supplements, foods & beverages, personal care	Supplements, functional foods
Daily dose (for joint health)	High (10 g)	Low (40 mg)

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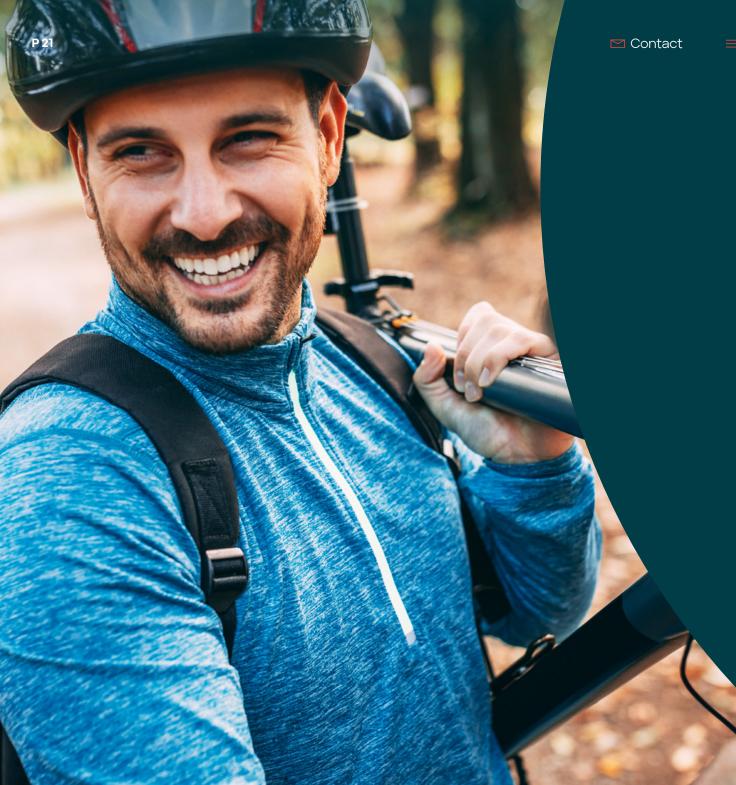
Step up with native (undenatured) type II collagen

New joint health and mobility products must capture and retain consumer attention in a convenient and effective dosage form. However, most joint health products rely on making building blocks of collagen available to the body – using collagen peptides – which requires a high dose to be effective.

Native (undenatured) type II collagen offers an alternative solution. Unlike other forms of collagen - such as collagen peptides - native type II collagen is effective at a dose as low as 40 mg/day. It also targets joint health specifically, rather than offering general benefits like collagen peptides do. This is possible through a mechanism of action that signals the body's immune system to turn off its response against endogenous collagen, reducing collagen degradation in the joints.⁶

Thanks to its demonstrated benefits, native type II collagen is making waves in the mobility market. Although traditionally available for supplements only, key market players are now pushing the boundaries of native type II collagen formulation – making it available for functional foods.

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Native type II collagen offers a new approach to joint health innovation



Next generation collagen



Demonstrated efficacy in joint health



Low dosage (only 40 mg/day)



Unique mechanism of action



Powers new product development



Native type II collagen sales are expected to grow at a CAGR of 8.0% up to 2025.⁵ There is a clear opportunity to innovate in the mobility market with this science-backed ingredient.

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Expert summary



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Brands can take some simple steps to tap into consumer needs and differentiate their products in the collagen space. Here, we have summarised three top tips for seizing new opportunities in the collagen market and coming out on top with products consumers will love.

- **1.** Help consumers make more informed choices about collagen and how it can support them
 - Educate consumers about the different collagen types available, their mode of action and respective health benefits
 - Clearly label and explain the different collagen types (type I, II and III)
 - Signpost the collagen source (sustainability claim).
- 2. Develop unique formats to appeal to evolving consumer preferences
- 3. Use science-backed, high quality branded ingredients



Stay one step ahead in the collagen market with Collavant n2

Collavant n2 is a next generation collagen for joint health innovation. It is a trusted source of quality, science-backed native (undenatured) type II collagen extracted from chicken sternum and 100% sourced and manufactured in Europe. As well as supporting joints at a low dose of 40 mg/day – meeting preferences for convenient dosage forms, it is suitable for a variety of delivery formats, from pills, capsules and softgels to gummies, protein blends, shakes and beyond.

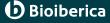
Want to know more about Collavant n2? Contact us today to start your journey.

Visit: **www.bioiberica.com** Email: **healthcare@bioiberica.com** Call: **+34 93 490 49 08**

References

- 1) ITC Insights 2022, Consumer Supplement User Survey, Collagen Category Report.
- Von Der Mark. Structure, biosynthesis and gene regulation of collagens in cartilage and bone. Dynamics of Bone and Cartilage Metabolism, 2006.
- 3) Nutrition Business Journal (2022), 2022 Condition Specific Report.
- 4) Nutrition Business Journal Consumer Survey (2022).
- 5) Nutrition Business Journal Collagen Report, 2022.
- 6) Park et al. Type II collagen oral tolerance: mechanism and role in collagen-induced arthritis and rheumatoid arthritis, Modern Rheumatology, 2009.

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