

THE GUMMIES GUIDE TO ACTIVE NUTRITION



SIRIO®

Get in the game with gummies

The facts:

- Between October 2017 and September 2022, the number of gummy supplement launches grew by **54%**.¹
- A recent study found that in 2021, gummy formats saw a **74.9%** sales growth and had the largest market share among non-pill formats at **21.3%**.²
- **43%** of consumers in EMEA who use supplements said they would be willing to increase their monthly expenditure on supplements, despite cost-of-living concerns.³

No longer a niche market for elite athletes, sports nutrition has hit the mainstream. Today's health-conscious consumers – from casual gym goers to gamers – are looking for solutions to help boost performance, increase energy levels and aid recovery, as well as support better sleep, focus and even immunity. Enter the era of active nutrition.

In a space that has been the domain of bulk powders, drinks and bars for decades, there is an opportunity for new, exciting nutritional supplement formats to rise to the top. Through them, brands can help any consumer, regardless of fitness level, take the steps they need to stay active and lead a healthier life.^{4,5} And what better way to make this a reality than through one of the few truly universal crowd pleasers: gummies.

Convenient, fun and versatile, nutritional gummies have been a popular choice for decades and now represent one of the fastest

growing formats in the nutrition space. The appeal of gummies is clear and the opportunity within active nutrition enticing, but they can be a challenging application to get right.

Balancing the need for great taste with demand for low-sugar positioning, for example, is key to crafting winning gummy products. And that's in addition to ensuring bioavailability throughout shelf life, as well as catering to the growing cohort of climate-conscious, flexitarian consumers who wish to reduce their consumption of animal-based products.

If you, like us, are fascinated by the endless possibilities gummies unlock for unique, trend-defining active nutrition supplements, then this is the guide for you. Here you'll find everything you need to deliver innovative formats designed to please, with exceptional taste, guilt-free indulgence and functional benefits that will help you stand out from the pack in an increasingly competitive market.

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¹ | <https://www.nutritioninsight.com/news/gummies-in-the-spotlight-supplement-launches-and-format-innovations-feature-at-ism-cologne-2023.html>

² | <https://www.nutritionaloutlook.com/view/innovations-in-gummy-manufacturing-at-vitafoods-europe-2023>

³ | FMCG Gurus, Research commissioned by Sirio, 2023, NS668

⁴ | <https://fmcggurus.com/blog/fmcg-gurus-the-evolution-of-active-nutrition-in-emea/>

⁵ | <https://www.nutritionaloutlook.com/view/active-nutrition-for-all-sports-supplements-court-a-broader-audience>

**ON YOUR
MARKS**

**GET
SET**

GO



What's the score?

Hot off the starting blocks, let's explore why gummy supplements show so much potential in the context of today's top active nutrition trends:



Beyond bulk powders

Familiar favorites like dissolvable powders, gels and energy bars remain well-loved according to consumer surveys, but new nutraceutical formats are starting to make their presence known. Well over a third of nutritional supplement users cite gummies and jellies as their preferred format option, pointing to their significant, and growing, appeal.

Focus first

The rising popularity of e-sports and community gaming is driving demand for solutions that provide an energy boost and help sharpen focus, so players can operate at peak mental and physical performance over extended periods. Providing a quick hit of key dietary nutrients in a format made to appeal to the typically young, 'gamer' demographic, gummies are ideal for giving players the nutritional support their body needs to beat the competition.



New health priorities enter the ring

Beyond macronutrient supply and maximizing physical strength, 72% of consumers state that additional functional benefits are important to them when choosing an active nutrition product.⁷ Top claims include cognitive health, stress relief and eye health support⁸, which have all become increasingly commonplace on nutraceutical gummy packs in recent years.



Grab 'n' go

Convenience is key across all consumer demographics, cited by at least half of survey respondents as an important factor in their decision to purchase a nutritional supplement.¹⁰ Quick, easy and fun to consume, nutritional gummies dovetail neatly into the growing 'snackification' trend sweeping the segment too.



Exercise for all

Sports nutrition is now a mass market, with consumers of all ages, backgrounds and activity levels looking for solutions to support a healthier lifestyle.⁹ With crowd-pleasing appeal and capacity for endless customization, gummies are the ideal format to deliver sports supplements for all.

Indulgence

Pleasure can't be an afterthought, even in sports supplements. Whether it's through a delicious flavor, captivating appearance or satisfying texture, gummies provide active consumers with the guilt-free, affordable 'moments of pleasure' they crave.



⁷ | FMCG Gurus, Research commissioned by Sirio, 2023, SN66804

⁸ | New times, new habits and new opportunities: Where to play and how to win in sports nutrition

⁹ | GlobalData, Sports And Active Nutrition Market Opportunities, Trends, Growth Analysis And Forecast To 2027, April 2023, <https://www.globaldata.com/store/report/sports-and-active-nutrition-market-growth-analysis/>

¹⁰ | FMCG Gurus, Research commissioned by Sirio, 2023, SN66804

“ Consumers want supplements they can take anywhere without having to measure out doses from a large container: at the gym, before leaving the office, or on the school run. They won't settle for chalky protein bars or sports drinks with metallic or off-tasting notes.

Delicious flavors, exciting formats and endless application potential – gummies are the guilt-free treat that tick every trend box. It's no wonder we have seen a significant increase in requests from supplement brands, all looking to get in on the gummy game.

Sara Lesina

General Manager, Sirio



Myth-busting:

Addressing the common misconceptions around gummies.

Are all gummies unhealthy or full of sugar?

While this might have been true in the past, particularly for confectionery gummies, the advancements in production that we've seen over recent years have unlocked a whole new healthy side to this bite-sized format. Recent studies demonstrate that gummies can contribute to the reduction of post-meal blood glucose levels, known as glycemic response, owing to their sustained release of carbohydrates. Furthermore, when formulators opt for alternative sweeteners such as maltitol or erythritol, the impact on reducing glycemic response is even greater.¹¹

Supplement manufacturers and ingredients suppliers are driving nutraceutical gummy innovation, offering a wide range of formulation and sweetening solutions to create a balanced nutritional profile. The option to sweeten sugar-free gummies using natural prebiotic fibers, for instance, is a great example of how brands can avoid the use of artificial sweeteners and respond to demand for clean and clear labels.

Do all gummies contain animal products?

In the past, most gummies were made using gelatin, a gelling agent derived from animal bones and skin. This has led to the perception of gummies as 'animal-derived' products, but since the introduction of plant-based ingredients for gummy production this image has started to shift. Gelatin alternatives, like pectin – a gelling agent derived from fruit skin and peel – are well established solutions for making plant-based gummy production possible at scale.¹²

But this isn't just a win for brands hoping to appeal to vegans and vegetarians. With climate-anxiety on the rise and consumers across the demographic range looking to reduce their consumption of animal products, pectin gummies are truly a solution for everyone.

Brands looking to harness the power of pectin should partner with an experienced manufacturer who knows how to work with this gelatin and deliver the same, quintessential gummy mouthfeel consumers know and love.

¹¹ | Gan D, et al. Intake of Sugar Substitute Gummy Candies Benefits the Glycemic Response in Healthy Adults: A Prospective Crossover Clinical Trial. *Gels*. 2022 Oct 10;8(10):642.

¹² | <https://generics.pharmaintelligence.informa.com/RS150981/As-Sustainability-Concerns-Grow-PlantBased-Gummy-Gelling-Agents-Gaining-On-Gelatins>



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Are there risks with over-consumption?

As with any nutraceutical product, it is possible to consume too much – and there are health risks associated with this, including an upset stomach, diarrhea and vomiting. Clear dosing guidance, as well as advice for parents on how to ensure supplements stay out of reach of children who could see them as just candies, are therefore essential to help avoid any instances of overconsumption.

Do the active ingredients in gummies last long enough?

Like virtually any other consumable product, gummies have a shelf-life. To extend product expiration dates as long as possible and maximize consumer satisfaction, producers need to maintain control at every step of the manufacturing process. Longevity is not just about freshness though. A supplement's capacity to remain bioavailable throughout its shelf-life starts with the manufacturing process too. For this reason, extensive testing should be carried out across gummy production lines, including temperature control and product handling systems, to ensure actives stay intact and effective to the very last gummy.

Are gummies as effective as powders or tablets?

In short, yes. However, for gummies to deliver the same amount of nutrients as tablets and powders, and match their efficacy, stability needs to be a key consideration. Gummy stability can be impacted by various factors, from the form of the nutrients to the combination of active ingredients, and poor stability can lead to nutrients losing their potency over time. Here, a manufacturing partner with technical know-how and experience is crucial, to ensure that quality isn't compromised throughout shelf life.

Gummies aren't new, will gummy supplements really excite consumers?

The gummy opportunity in the sports nutrition sector is yet to be fully explored. Some regions, such as Southern Europe, have yet to really tap into this format at scale – Italy contributed only 5.4% of European product launches in 2021, compared to 35% for the UK.¹³ And even where gummy supplements are more established, the category hasn't reached its full potential. For example, some brands are using the application as a source of pre-workout energy, but gummies can do so much more with the right formulation. Help maximize protein intake, reduce muscle inflammation, support muscle recovery and boost cognitive health. And that's without touching on the significant potential in the e-sports segment, by harnessing the benefits of various nutritional ingredients backed by science.

¹³ | Innova (2022)

Do you want to know more about different gummy options?
[CLICK HERE!](#)

Nailing the pre-game

Gummies may look deceptively simple, but getting the optimal active ingredient payload in the right gummy format, shape, taste and shelf life is not always easy.

Before entering the space, there are some important questions brands must ask:

Who is my target audience?

There are many potential routes to success when developing a gummy supplement, but they all start with knowing your target consumer. It is important to consider the intended consumption time or occasion (before/during/after exercise), as well as whether the gummy will be formulated with specific disciplines in mind (endurance, recovery, traditional sports versus e-gamers, etc.) or be more of a classic, multivitamin concept with broad appeal.

Another critical question to ask is whether your target consumer is likely to appreciate the gummy format? As with most innovations, there are early adopters and others who are more resistant to change. However, active nutrition gummies benefit from having broad consumer appeal. They sit perfectly in the sweet spot between novel and familiar; the format's long-established popularity is a win for 'traditionalists', but their relative 'newness' in the active nutrition market makes them exciting enough for the 'trend-setters', especially when an interesting or unique formulation is on offer.

How important is low sugar?

In short, a low- or no-sugar positioning is essential for addressing the needs of today's active nutrition consumer. This group tends to be more health conscious than the general population, as well as being well informed about the benefits and drawbacks associated with individual nutrients – including sugar. Indeed, Mintel research suggests that nearly half (46%) of consumers who use sports nutrition products avoid products that are high in sugar.¹⁴

Reducing sugar content is therefore a central goal, but it can create a unique challenge for formulators. Sugar substitutes impart a different taste profile and texture in the final product when compared with conventional sugar. Balancing off-notes is then a key consideration for ensuring the resulting end-product is still appetizing – whether it be sweet and fruity or tangy and sharp.

¹⁴ | Mintel. "Brits Build up Eager Appetite for Sports Nutrition: 27% of Brits are Sports Nutrition Users." July 14, 2017. <https://www.mintel.com/press-centre/food-and-drink/brits-build-up-eager-appetite-for-sports-nutrition>

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Am I up to speed on shelf-life and stability?

Gelatin plays an important role in offering gummies a unique texture and mouthfeel. However, gelatin's low melting point of around 35°C means gelatin gummies tend to melt if improperly stored during transportation, causing unappetizing lumps and imperfections. At its worst, melting can lead to supplements sticking together and forming an unappealing and inconvenient mass at the bottom of the bottle or pack. Storage temperature and time can also have serious implications for active ingredient stability and efficacy. Brand owners can formulate a more robust recipe by leveraging an experienced gummy producer with the expertise to manage the desired texture throughout the shelf-life.

Should I go plant-based?

The market for vegan-friendly gummies is booming, but formulation is not as simple as just replacing gelatin with a plant-based gelling agent. Alternative ingredients present their own challenges, such as increased sensitivity to the pH levels and metal ions present in some active ingredients. Formulators may need to make several changes to produce a stable product – this includes altering the order in which ingredients are added to a formulation or choosing a more acidic flavoring agent.¹⁵

¹⁵ | <https://www.nutritionaloutlook.com/view/gummy-supplements-benefits-challenges>





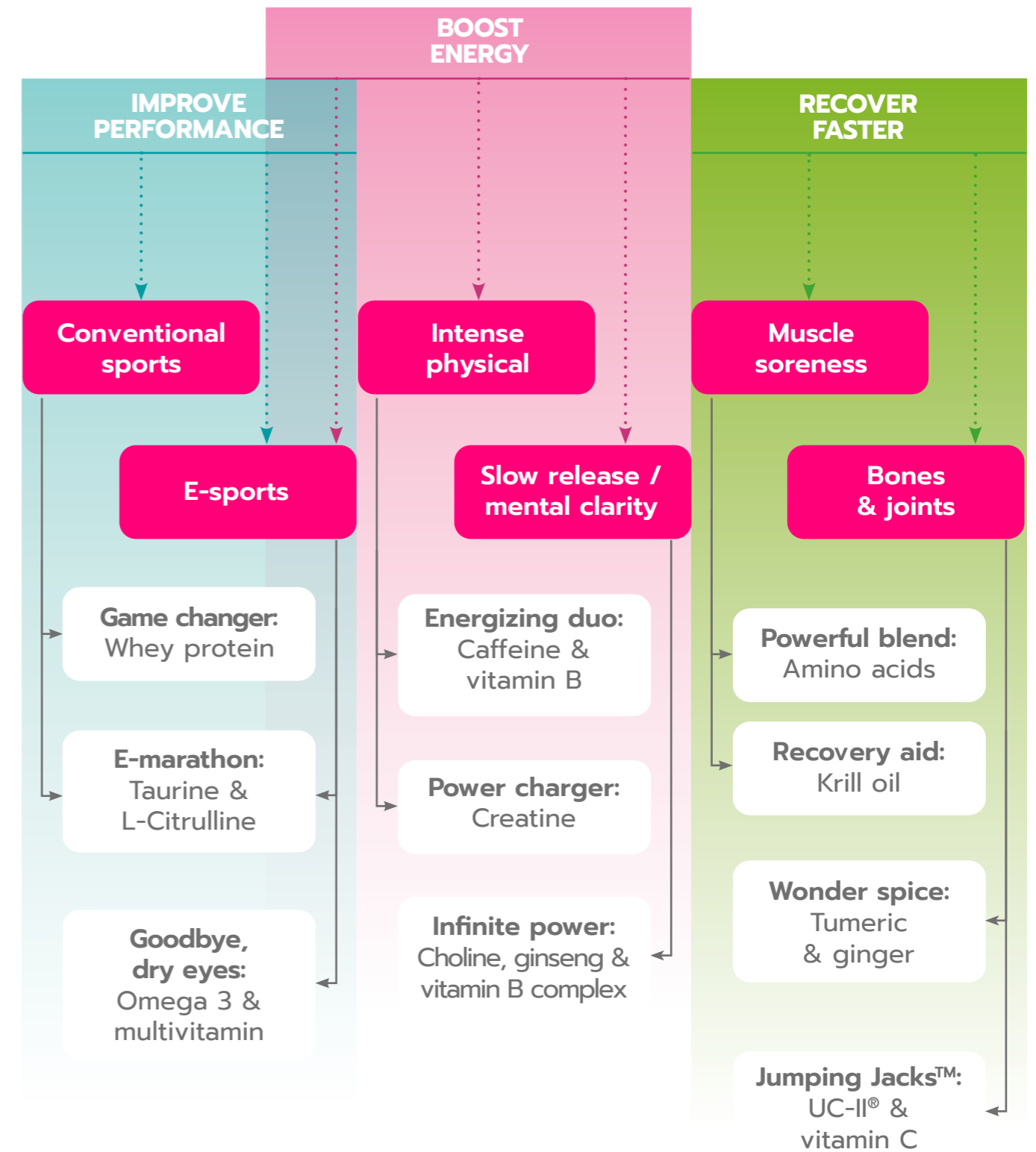
Going for gold: Consumer concept guide

Whether you're looking to develop products that power performance, speed up recovery or strengthen joint or bone health – gummies offer a versatile, fun and effective solution. From innovative formats including center-filled, aerated and double layer to customizable shapes and sizes (flowers or fruit, paw prints or pandas!) – gummies provide a playground of opportunities to help your products stand out from the crowd.

Here, we've shared some of our latest concepts to give you something to chew on...

Want to explore ready-to-launch gummy concepts for sports nutrition?
DOWNLOAD OUR CATALOGUE!

Consumers want to...



The recommended marketing positioning for these concepts is based on current studies, however all claims must be reviewed before launch in accordance to local regulations.



“Gummies aren’t the simplest product to formulate by any means – there are numerous technical considerations across the supply chain that need to be managed.

But delicious, visually appealing, high quality and effective gummies will be what consumers reach for, again and again, so supplement brands need to get in the game.”

Dr Youyou Zhao

Chief Scientific Officer, Sirio Group

Let's get practical: key formulation facts

Bringing any new supplement from concept to final product is a big undertaking, but nutritional gummy production requires especially careful management, from formulation to processing and packaging:

1. RM pre-treatment

The gummy production process begins with ingredient selection and recipe formulation. Here, the central challenge is balancing considerations including material properties, nutrient bioavailability, effectiveness and long-term ingredient stability against the equally important notions of taste and overall consumer experience.

2. Weighing & feeding

Once determined, the constituent parts of the formulation are mixed according to the precise proportions laid out in the recipe. Accuracy and efficiency of both the weighing and conveying equipment are critical at this stage to assure optimal consistency batch after batch.

3. Cooking & blending

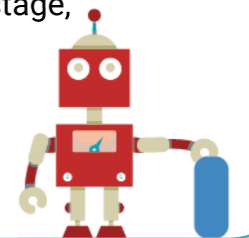
The next stage involves heating and blending together the pre-weighed ingredients to create a homogenous gummy solution. Temperature control is critical to preserve the efficacy of the active nutraceutical ingredients, while still allowing the gummy mixture to be molded into a rainbow of shapes.

4. Depositing

When fully blended, the solution is carefully maintained at a certain temperature range via a temperature control system. This helps to keep its rheological properties. It is then poured into specialized mold that will determine the gummies' final form – be it a bear, heart, fish or a simple circle. Though a core priority throughout the manufacturing process, maintaining stringent hygiene standards becomes especially vital at the depositing phase when the gummies are most at risk from foreign contaminants.

5. Drying & demolding

Gummies are solidified and dried to reach the desired texture and consistency, then they are carefully removed from the molds. Effective batch management techniques – often involving the use of smart monitoring processes – come to the fore at this stage, helping manufacturers keep track of stock levels and avoid over-drying.



6. After-treatment

The customization options for gummies don't end at the recipe, or even molding, phase. Following the drying process, they can be oiled or coated in sugar and other texture-enhancing additions, depending on the desired look and feel of the final product.

7. Packaging

Finally, the newly minted gummies are packaged and undergo strict quality control. Various tests are performed on the products in the finished package to ensure that they meet the desired specifications for nutrient content, taste, and overall quality. The type of packaging

chosen is another important consideration depending on the target consumer; handy blister packs are great for dosing on-the-go, while larger bottles with child-safe caps are ideal for families. A factor that remains consistent across product types and demographics however is sustainability – a must for any supplement packaged for the European market.

Partnering for success with Sirio

Helping you get exceptional, quality assured products to market, faster.

At Sirio Europe, we have been at the forefront of gummy innovation for more than 15 years. Our extensive experience of creating high-quality nutritional gummies means we're able to support the launch of more than 400 products and 4,000 ready-to-launch formulations each year. With over 200 R&D professionals working across five specialized R&D centers, we offer the expertise you need to keep pushing the nutraceutical status quo. Our secure, global supply chain flexes according to specific customer requirements, ensuring we deliver the highest possible quality – no matter the location.

This is where an expert partner can add real value...



The Sirio functional gummies portfolio encompasses a broad range of solutions to delight the senses – from center-filled and aerated formats, to fun shapes and multi-colored options. Our in-house flavorists and ingredients experts are on hand to guide you through the formulation process and create exceptional gummies that combine consumer appeal with optimal efficiency. Together, we can help your brand stand out from the crowd and win big in the booming active nutrition market.

Time for kick-off

Manufacturers of sports and active nutrition supplements have a clear mandate for innovation: consumers demand it, the market expects it, and insatiably curious minds within the industry are clamoring to make it happen. The opportunities are there for the taking, but as we've seen, the gummy manufacturing process can be challenging to navigate successfully.

Are you ready to start your path to nutritional gummy glory?

CONTACT US HERE!



To learn more about our product portfolio, ready-for-market concepts, and capabilities for developing your next innovation, download our

SPORTS NUTRITION CATALOGUE

or get in touch to order your samples.