

Getting personal: Nutrition in the digital age

September 2024

Nutrition gets personal

Post-pandemic, global consumers have been taking a more proactive, holistic approach to their wellbeing.¹ With dietary changes a key part of their strategy for living both longer and better, they are increasingly seeking out products with health claims and advice to target their specific concerns.²

Key areas of consumer focus for healthful eating are functional ingredients, the importance of gut health for overall wellness, and the influence of genetics on personal responses to food.³ Meanwhile, with a 40% global increase in the number of video gamers since 2020,⁴ support for gaming has become a key area in the performance nutrition space.

Together, these trends are powering dynamic growth in the worldwide market for personalised nutrition products. Estimated to be worth USD 8.2 billion in 2020, it is predicted to double to USD 16.4 billion by 2025 (15% CAGR).⁵

New Prinova research

To provide new insights, Prinova commissioned a survey of 1,582 adult consumers in six of the world's largest nutrition markets (France, Germany, Italy, Spain, the UK, and the US).⁶

Additional quantitative and qualitative research was conducted into trends within the functional health market.³ This covered retail, foodservice, and social media across key geographical regions of Prinova's operation, as well as other influential territories for health.

This report examines how factors including age, sex, and nationality influence how and why consumers purchase and use nutrition products to support their health. It also explores current market trends and highlights opportunities for targeted innovation.

15%
CAGR

Estimated to be worth USD 8.2 billion in 2020, the personalised nutrition market is predicted to double to USD 16.4 billion by 2025 (15% CAGR).⁵



Hack my health – the new nutritional frontier

One of the key megatrends shaping consumer product demand could be summarised as “Hack my Health”, with growing interest in the ways our genetic make-up influences our bodies’ response to food.³

This was strongly reflected in our survey. Eight in ten respondents believed their genetic make-up affected their nutritional needs to some degree, with 38% overall and 40% of women saying it had a significant impact. Millennials and those in Spain, Italy and the US were particularly likely to agree.

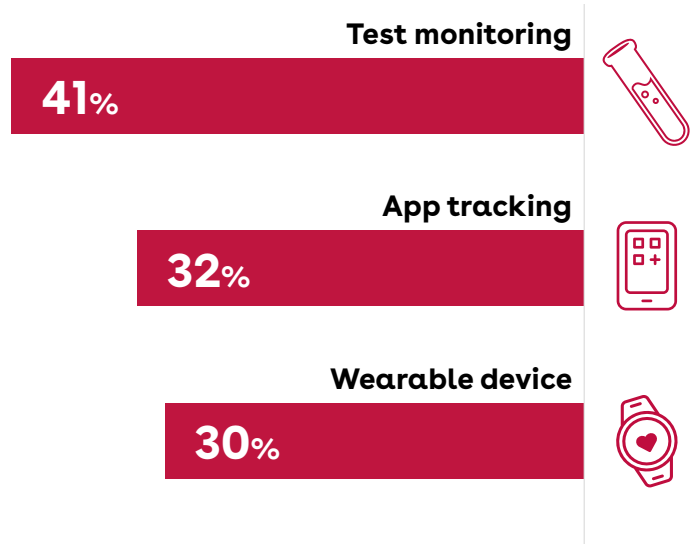
How much do you think your genetic make-up affects your nutritional needs?

Not at all
Don't know
Slightly
Significantly



Prinova’s recent trends report³ highlighted how the market is leveraging advances in research and technology to make personalised nutrition more accessible. An increasing range of services including apps, wearable devices, and specialised tests, are available to consumers seeking tailored approaches to help them meet their specific health goals.

Our respondents showed high levels of interest in personalised nutrition services:



- 41% were keen to try a test that monitored how foods affected their body, with Spanish and Italian consumers the most interested, along with younger cohorts (18-54 years).
- 32% were interested in a service to track their diet and nutrition through an app or questionnaire, particularly Spanish and Italian consumers. Interest in this concept was significantly higher among women than men.
- 30% expressed an interest in a wearable device to monitor their blood sugar levels, especially US and Italian consumers. This was also highly appealing to those aged 25-34, while men showed significantly more interest than women.

In all cases, the oldest consumers were the least interested in these services, while the youngest (18-34 years) were the most likely to have already used them.



Taking steps towards better wellbeing

We next asked our consumers if they had made any dietary changes to improve their health over the previous 12 months (selecting all options that applied from a list of seven). Nine in ten had consciously tried to do this, with sugar and fat reduction and increased vitamin/mineral intake the most common strategies.

- Italian consumers and the over 65s were the most likely to have cut down on sugar.
- Respondents in Italy and Spain were particularly keen on reducing fat.
- Boosting vitamin and mineral intake was particularly popular with women, those aged over 25 and US consumers.

Increasing protein intake was a common strategy, in particular for US and female consumers. This reflects growing awareness of protein's benefits for general daily wellness, including promoting satiety and brain health.



Supplying high-quality protein ingredients for health and nutrition

Proteins are vital to the daily nutrients we need to keep muscles, bones, and entire bodies happy and healthy. Whether you're looking for practical or nutritional benefits in your food or drink products, our animal-derived and plant-based proteins consistently deliver improved health and physical performance.

Women were keener than men to reduce their carbohydrate intake (36% vs 29%), suggesting an opportunity for female-orientated, reduced-carbohydrate products. Female respondents were also more likely than men to have increased their intake of gut-health ingredients such as probiotics, along with those in Italy, the US and the over 45s.





Proactive approaches to improving health



Prinova: the global leader in vitamins, minerals, and derivatives

As the leading global food-grade vitamin supplier, Prinova offers vitamins, derivatives, custom vitamin and mineral premixes, and market-ready blends. Our comprehensive inventory and reliable supply of high-quality micronutrients ensure ready access to ingredients for a wide range of applications.



Bioactive marine minerals

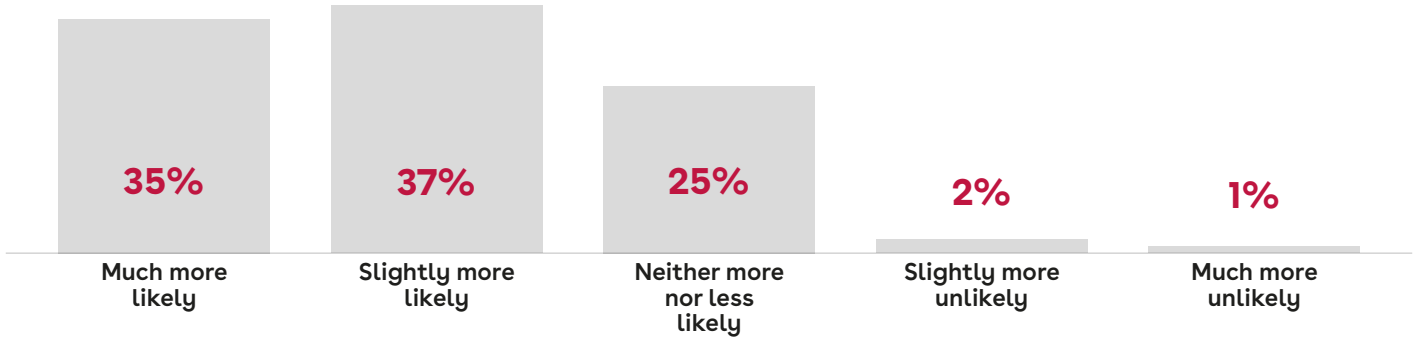
Aquamin is a range of plant-based marine multi-mineral complex products, including calcium, magnesium and 72 other trace marine minerals. Over 40 peer-reviewed scientific publications support its benefits, including for bone, muscle, digestive and cardiovascular health. It's available in heat-stable and fully soluble grades for use in beverage applications.

The power of health claims

As consumers become more health-conscious and nutritionally savvy, they are increasingly checking product labels for claims and advice targeting their specific areas of concern.

Over seven in ten of our respondents said they were “much more” or “slightly more” likely to buy a food or beverage product if the packaging mentioned a benefit for their health. This tendency was most marked in the Southern European countries (Italy 86%, Spain and France 82%).

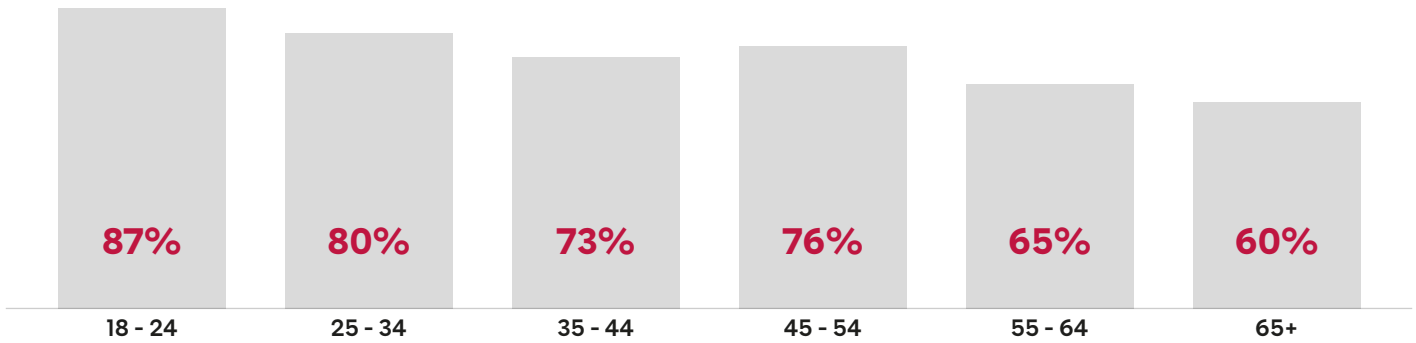
Influence of health claims on purchase intention



There was also a split between age groups, with younger consumers – and millennials in particular – more likely to be influenced by health claims than older cohorts.



Influence of health claims on purchase intention by age



When consumers were asked to choose five health claims from 15 options, the three most likely to influence purchase decisions were low sugar, weight management and energy support.

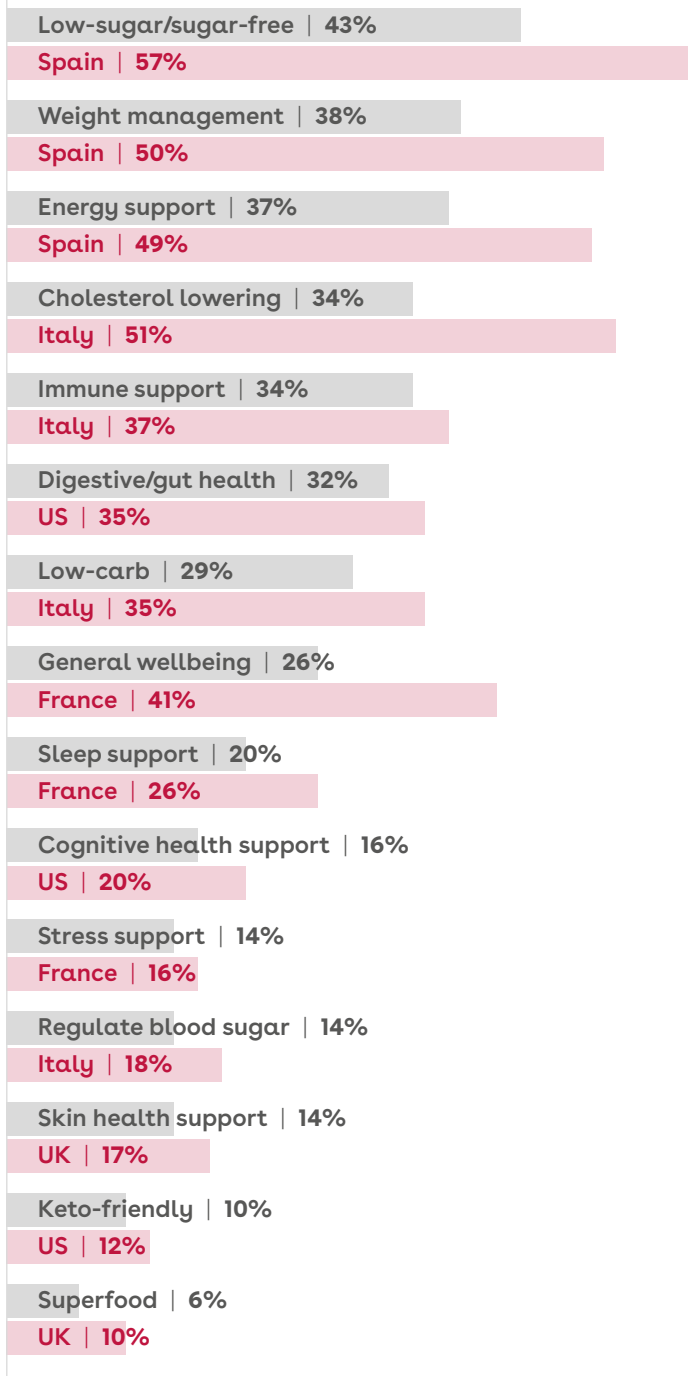
Sugar-consciousness is on the rise, not just among consumers but also at the policy level, with countries adopting tougher rules and regulations on its inclusion in food and beverage products. In the UK, for example, “HFSS” (high in fat, sugar and salt) regulations came into force in 2023 to restrict the promotion of less healthy products, including those high in sugar.⁷

In this context, product launches with “no sugar” and “low sugar” claims have become popular with consumers looking to reduce their sugar intake.³ The emerging trends for better metabolic health and the everlasting quest for weight management are natural partners to this movement. Excess weight is now more likely to be seen as a metabolic issue that needs to be fixed.

In our survey, millennials were keener on weight management claims than other age groups, and also on low-carb and keto claims.

Energy claims scored the highest among those aged 18-44. This presents opportunities for targeted products with ingredients supporting sustained energy release, such as B vitamins and slow-release carbohydrates like enduracarb®.

Overall % | Most popular by country %



Solutions for sweetness

Prinova offers a wide range of sweeteners and sweetness enhancers to support sugar-reduction claims for your products.

These include single ingredients, blends, high- and low-intensity sweeteners and plant-based options for reduced-sugar, sugar-free, and low/no-calorie formulations.



enduracarb®
The fuel of choice for endurance

enduracarb® trehalose is a carbohydrate designed to fuel muscles over long periods of time, providing sustained energy. An Informed Ingredient, enduracarb® trehalose is a slow-acting “double sugar” and has been shown to outperform other carbohydrate sources during extended periods of intense exercise.

- Supports hydration
- Plant-based, fructose-free, non-GMO
- Masks the bitterness of other ingredients, such as proteins
- Provides exceptional stabilisation against moisture absorption and discolouration



A gut instinct for healthy ingredients

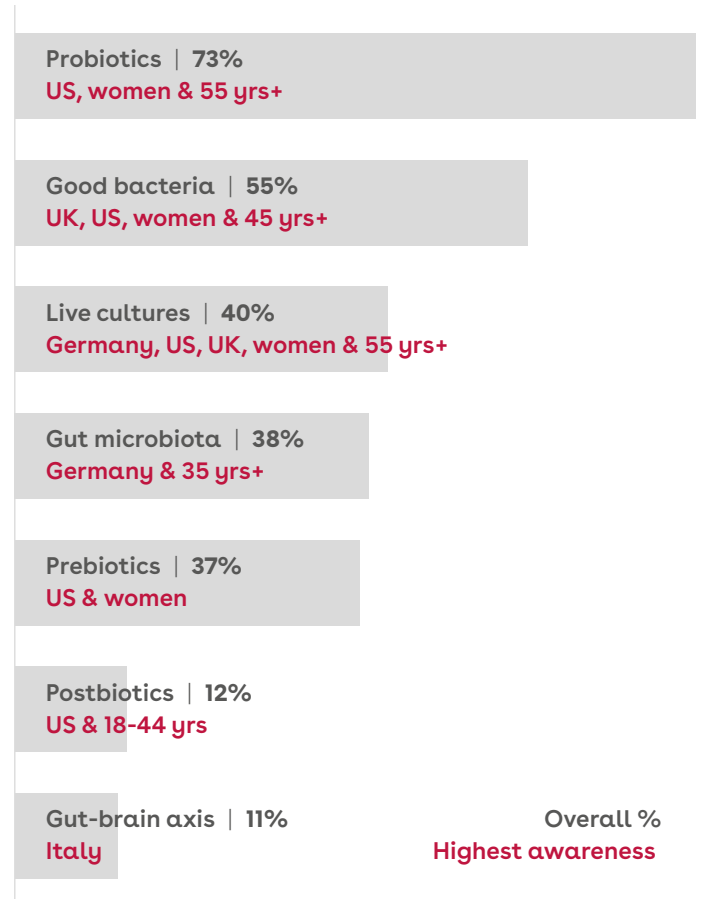
When we asked which ingredients (from a list of 29) were most likely to influence purchase decisions, three of the top ten choices – probiotics (#1), fibre (#3) and prebiotics (#6) – were related to gut health:

- Probiotics were particularly popular in Italy and the US, and with consumers aged 45-64.
- Fibre ranked highly for consumers in Spain, Italy and the UK, and also the oldest cohorts (55+).
- Prebiotics were a big hit in the US and Spain, and among those aged 45-54.

Gut health is now firmly established as a megatrend. Research into the microbiome is booming, and the market is awash with claims around immunity, mood, cognition, skin and more. This is reflected in our survey, where respondents said digestive/gut health was the health concern most likely to affect their purchase decisions (from a list of seven).

There was also generally high awareness of terms relating to gut health, especially in the US and among women. However, only 12% of consumers overall were familiar with “postbiotics”. Manufacturers could increase awareness through targeted marketing and on-pack information.

Consumer familiarity with gut health terminology





The shelf-stable probiotic

LactoSpore® is a clinically validated, shelf-stable probiotic which contains lactic-acid-producing Bacillus coagulans. These friendly bacteria have been found to do much more than support digestive health. Several studies have suggested their supportive role in managing the immune system, irritable bowel syndrome, weight, and cholesterol.

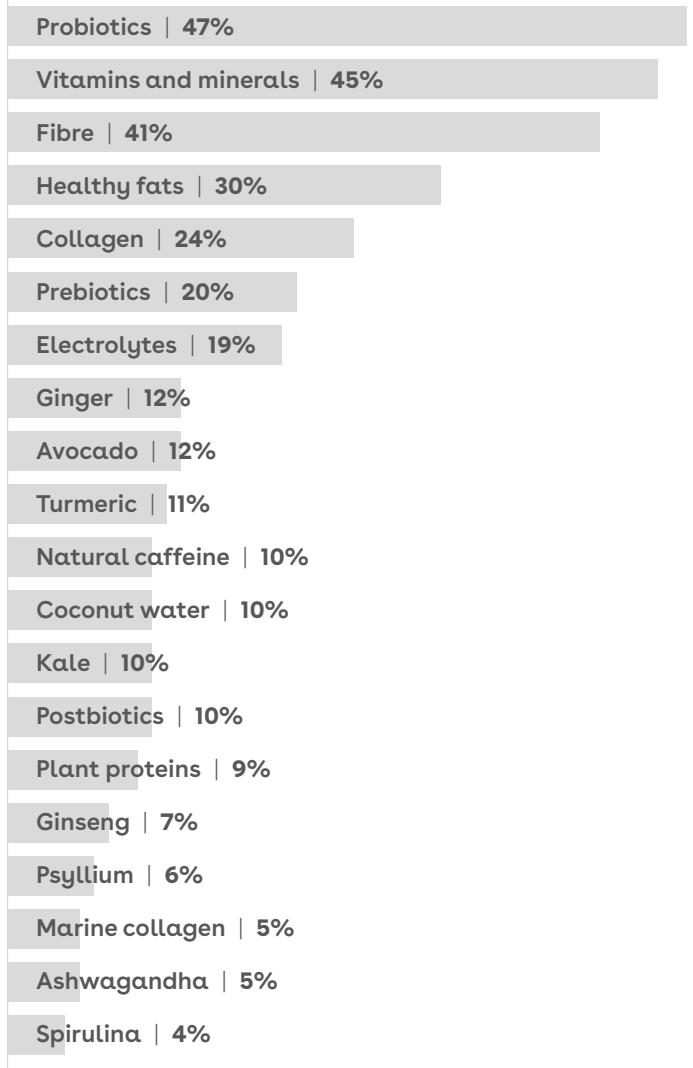
- Excellent health benefits
- Shelf stable at room temperature for over 36 months
- High versatility, suitable for beverages, functional gummies, capsules, and powder blends

Vitamins and minerals retain their popularity

Vitamins and minerals (#2) continue to exert a powerful pull. They were particularly popular with consumers in Spain, the US and Italy, older respondents (aged 45+) and women. Healthy fats (#4) were also a key purchase driver, especially for the youngest and oldest cohorts, and for German and Spanish consumers.

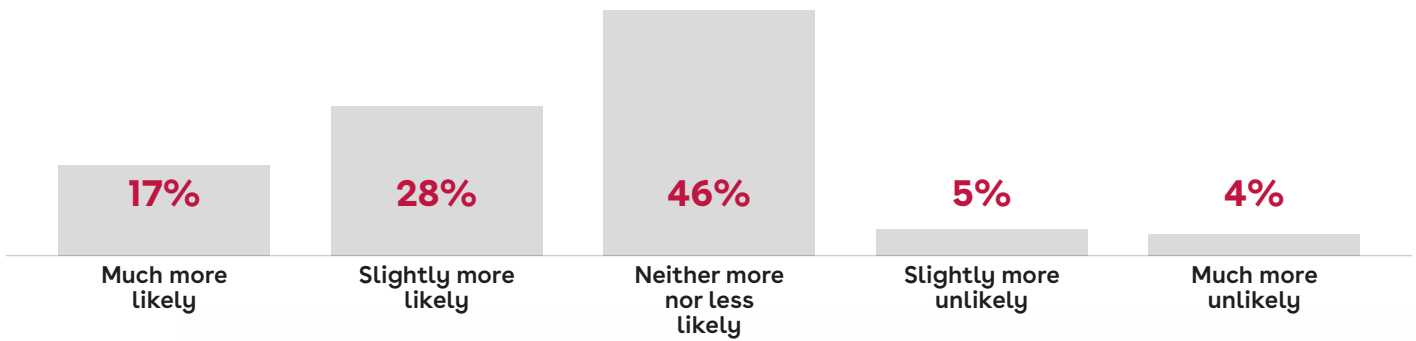
Collagen (#5) scored highly with Spanish consumers, the youngest cohort and women, while marine collagen (#18) was almost twice as popular among women than men. Combining scores for collagen and marine collagen would place them just behind healthy fats in our rankings.

Botanicals were also popular, with six making it into the top 20 ingredients – ginger, turmeric, ginseng, psyllium, ashwagandha, and spirulina.



Influence of health claims on purchase intention by age

When asked if products featuring ingredients used in traditional medicine (such as ayurveda or traditional Chinese medicine) would make them more likely to buy, 45% of consumers agreed. This was particularly marked in France and among the youngest consumers.



Prinova botanicals

Prinova is one of the world’s leading suppliers of generic and branded botanical extracts. We prioritise traceability, so we can tell you where all our extracts have come from. We work only with trusted producers who share our commitment to promoting safety and purity through measures such as minimising pesticide use and preventing adulteration.



Curcumin C3 Complex®: Harnessing the power of turmeric

Curcumin C3 Complex® is the most studied curcumin product on the market, supported by over 80 research papers and 45 clinical studies. It harnesses the unique chemical compounds of turmeric (curcuminoids) and their ability to support health and wellness, including antioxidant and anti-inflammatory properties.

- Colourless
- Tasteless
- Suitable for beverages, functional gummies, powder blends, capsules, and tablets



Key health concerns in the post-pandemic era

Primary areas of health concern

Digestive/gut health | 85%

Healthy ageing/longevity | 84%

Fatigue | 82%

Immune health | 80%

Brain health/mood | 80%

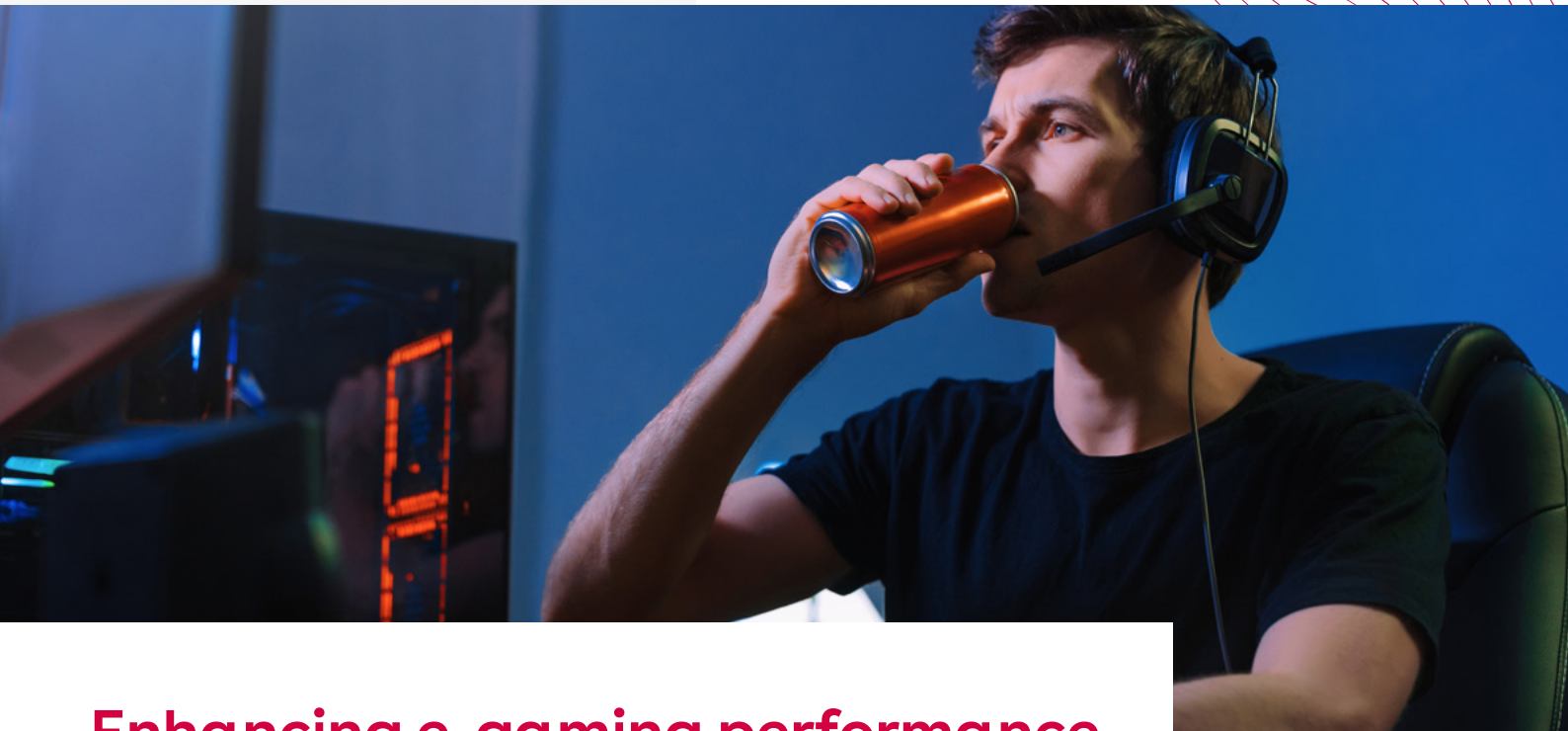
Sleep | 78%

Physical appearance | 77%



In addition to digestive/gut health, our trends research³ identified growing emphasis on longevity and health span: ageing as well as possible to prolong healthy years. Again, our survey reflected this, with healthy ageing/longevity being respondents' second most important health concern, particularly for Italian and younger consumers.

Fatigue (#3) scored most highly with those aged 25-34 and in Italy. Immune health (#4) ranked highest with Italian consumers. It tied with brain health/mood, which was significantly more important to women than men, and in those aged 25-34. Sleep concerns resonated most with 18-34-year-olds, while women rated health concerns related to physical appearance more highly than men.



Enhancing e-gaming performance with targeted nutrition

While sports nutrition is most associated with physical activity, the growing popularity of video gaming and e-sports has led to increased demand for products improving gaming performance. Cognitive enhancement is especially important, with focus, memory and faster reaction times all crucial. There tends to be a preference for products that are easy to consume, given that they will often be eaten or drunk during play, while many options focus on easy satiety and energy.

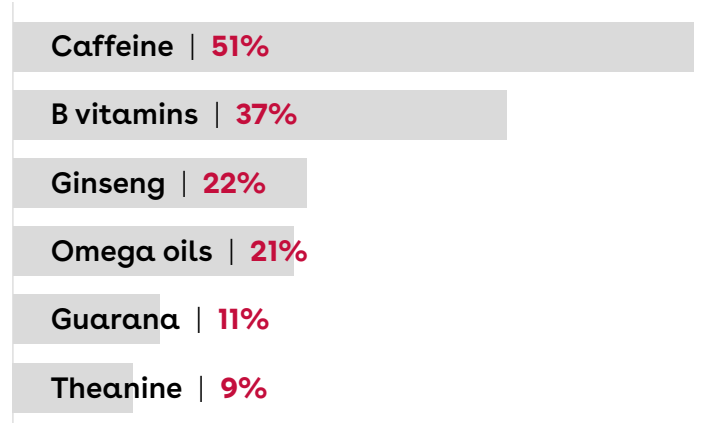
Our survey results strongly reflected this trend. Three in four of our respondents said they played computer/video games, with 66% doing so at least once a week. Most of these regular gamers – 61% overall and 65% of male gamers – used food or nutrition products to improve their gaming performance.

Asked to select all that applied from a list of six options, gamers in Italy were the most likely to use shakes and supplements, those in Germany to use bars, and Spanish gamers to use smoothies. The two youngest cohorts (18-34 years) were particularly keen on drinks, shakes, bars and smoothies. Supplement and powder use was more likely in those aged 25-54 and 25-34 respectively.

Popular food and nutrition product formats to improve gaming performance



Ingredients most associated with superior gaming performance



Caffeine was most commonly associated with superior gaming performance, particularly among male gamers and those in Spain, Italy and Germany. B vitamins were the most popular with younger gamers (18-44 years), ginseng with Italians and omega oils in Germany and with those aged 18-44 years.

Prinova caffeine solutions

Prinova offers both natural and synthetic caffeine, alongside ingredients for gamers keen on steady energy without the caffeine crash, such as B vitamins and slow-release carbohydrates like enduracarb®. Our solutions also include natural caffeine alternatives, including guarana, yerba mate, and matcha.



Prinova: Supporting personalised nutrition

The increasing personalisation of nutrition creates exciting opportunities to tap into a fast-growing market.

Prinova offers an extensive range of premium ingredients sourced from around the world to meet your consumers' nutritional needs. It includes exclusive branded ingredients that deliver the best in science-backed nutrition, proteins, plant-based solutions, food and beverage ingredients, and market-leading positions within key categories, including vitamins and derivatives.

We can accelerate your new product development with bespoke premixes and ready-to-use blends, plus value-added capabilities from concept development to final delivery.

With our optimised, reliable supply chains, vertically integrated manufacturing capabilities, and unrivalled marketing, regulatory and R&D expertise, you can be sure of 360° service tailored to your specific business needs.

Contact us to explore the opportunities.

Click here



References

- ¹ FMCG Gurus, Top Ten Trends for 2023
- ² FMCG Gurus, Top Ten Trends for 2022
- ³ Prinova, 2024 and 2025 Trends (2023)
- ⁴ Statista, Number of Video Game Users Worldwide from 2019 to 2024 (2024)
- ⁵ Statista, Size of the Worldwide Personalized Nutrition Market in 2020 with a Forecast for 2025 (2023)
- ⁶ Research conducted online between May and June 2024
- ⁷ <https://www.gov.uk/government/publications/restricting-promotions-of-products-high-in-fat-sugar-or-salt-by-location-and-by-volume-price/restricting-promotions-of-products-high-in-fat-sugar-or-salt-by-location-and-by-volume-price-implementation-guidance>



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