



Proteins in Europe 2021 report



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Protein has become a purchase driver for many consumers, from sportspeople looking for protein-boosted products to build muscles and improve performance, to mainstream shoppers seeking products for satiety, post-workout recovery, or to help prevent the age-related muscle loss known as sarcopenia.¹

Protein requirements

Most Europeans consume more than enough protein according to the European Food Safety Authority (EFSA), which recommends 0.83g per kilogram of bodyweight for all adults, including older adults.² However, some groups may find it more difficult to consume enough protein, while others find its effect on appetite provides weight loss benefits, and the timing of consumption matters too, especially in sports nutrition.³

For sportspeople, researchers have demonstrated that eating protein shortly after intense exercise helps increase its uptake in muscle tissue, resulting in better recovery and muscle building.⁴ However, some protein sources may cause digestive issues, meaning that product developers must bear this in mind, too.⁵

NPD activity

Protein has become a major target nutrient for consumers in recent years, and the number of product launches making protein claims has been rising steadily, according to Mintel.⁶ Despite a slight dip in high protein launches in Europe in 2020, its figures show the number of new products carrying a high protein claim was still 58% higher than in 2016.⁷

In Europe, food companies aiming to take advantage of this increased interest, can claim that their product is a 'source of protein' if at least 12% of its energy value comes from protein, or that it is 'high protein' if at least 20% of energy is from protein.⁸ Permitted health claims refer to protein's contribution to growth and maintenance of muscle mass, and its capacity to maintain normal bones as well as normal growth and bone development in children.⁹

Global insights

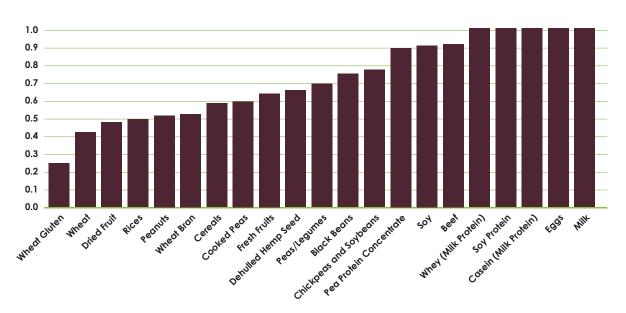
Quality insights - innovations - connecting people working on food ingredients and their applications insights.figlobal.com



New protein sources for sport nutrition

The sports sector has traditionally relied on whey protein for powdered products, and with good reason: whey provides a complete protein and it is relatively cheap, at about USD 7.50 per kilogram – and it is these two factors that matter most to consumers and manufacturers alike when it comes to protein in sports nutrition products.¹⁰

Complete protein ingredients are those that contain all nine essential amino acids, and include animal proteins like those from dairy, eggs, and meat, as well as soy protein. The digestibility of protein also matters, and protein quality is measured by its protein digestibility-corrected amino acid score (PDCAAS), which refers to both its amino acid composition and how easily it is digested.¹¹



Protein Digestibility Corrected Animo Acid Score (PDCAAS)

Sources of information included: Hoffman et al. (2004), Schaafsma (2000), and Suárez (2006), and Rutherford et al. (2015)

Source: https://doi.org/10.1080/10408398.2017.139620212

The plant-based trend has taken off in sports nutrition, providing new opportunities – and challenges – for manufacturers.¹³ Soy protein is a complete protein that has long been used as an alternative to whey. It remains the most bioavailable and cheapest plant protein available – cheaper than whey at USD 2 per kilogram – but a range of other ingredients have come to the fore in recent years, each with their pros and cons.¹⁴ Soy itself has suffered from an image problem among some consumers, as its production has been linked to deforestation, and it is often a genetically modified crop.¹⁵ Additionally, the European Union has identified soy as a major allergen, and it must be listed as such on product packaging.¹⁶

Other plant protein sources include those from wheat, rice, oats, canola and hemp, and interest in protein from algae also has grown rapidly, although more research is needed to realise the full potential of marine plants for protein, according to Mintel.¹⁷ Pea protein is the fastest growing plant protein source in new product launches, and has an advantage of being a less common allergen when compared to soy or dairy protein.¹⁸ Like soy or whey, it is a complete protein, but its PDCAAS score is lower, partly because it contains tannins and other components that affect digestibility.¹⁹ In terms of cost, it falls between soy and whey proteins, at about USD 5 per kilogram.²⁰

Combinations can also be used, taking advantage of the different amino acid composition of various plant proteins to build complete proteins.



Source: purasana.com²¹

Increasingly, protein products in the sports nutrition sector are combining other ingredients as a point of differentiation as well, such as botanicals, or tapping into broader consumer demands for natural colours and flavours, for example.²² The mainstreaming of protein, particularly in sports products for more serious amateur athletes, has also led to the adoption of these more mainstream food trends in the category.

According to research from Innova Market Insights, other plant-based ingredients are increasingly being used in sports nutrition product development, alongside protein.²³ It found that new European sports nutrition launches containing nuts and seeds, for instance, had a CAGR of 23% from 2014 to 2018, led by almonds, peanuts and sunflower seeds.²⁴

Rossmann WellMix Sport – Salty Peanut Flavoured Vegan Protein Bar



Source: rossmann.de²⁵

Isostar Cereal Max Energy - Hazelnut and Chocolate Flavoured Sport Bar



Source: isostar.com.ro²⁶

Targeted towards amateur sportspeople, dairy or soy protein is often included in snack bars, and ready-todrink protein shakes may provide a more accessible format than powders, which can be seen as fiddly or messy. Such products provide active consumers the potential benefits of post-workout protein, as well as helping them with their day-to-day healthy eating goals.²⁷

Protein for ageing consumers

A growing body of research shows that sarcopenia is a particular problem for quality of life in later life and that high protein consumption can help slow muscle loss.²⁸ However, the European Commission suggests that more protein-

dense diets may be more useful than higher amounts of protein in absolute terms.²⁹

Nevertheless, Euromonitor International points out that the market potential of this group is enormous, saying that if everyone aged 65 and over in North America and Western Europe were to spend five dollars a month on high protein milk drinks, retail value sales would reach USD 16 billion within five years.³⁰

While most people do consume enough protein, research suggests that older adults may fall short because of lower energy consumption overall, combined with less efficient protein synthesis.³¹

Professor Emma Stevenson of Newcastle University's Human Nutrition Research Centre says there are a range of other contributing factors, too, including loss of appetite, poor understanding of the importance of protein for maintaining muscle mass with ageing, only eating high protein foods with an evening meal, lack of access to a range of foods, or financial issues – as protein foods are often more expensive.³² Professor Stevenson told Informa that:

"From mid age we should be focussing on messages around protein intake and healthy ageing to maintain muscle mass."³³

For new product developers, she said high protein products targeting older consumers should not suppress appetite, and should be cost effective, palatable, easy to chew and swallow, and available in appropriate portion sizes.³⁴

Mintel has suggested that high protein breakfast cereals could be one untapped opportunity to target this group, particularly in conjunction with claims related to immunity and bone health.³⁵ The market researcher added that such products would likely hold appeal across demographics too, as cereals tend to be nutrient-dense, and easy to prepare and eat.³⁶

Layenberger LowCarb.One - Red Berry Mix Protein Muesli



Source: layenberger.com³⁷

Protein in everything

Protein is increasingly highlighted on-pack for a wide variety of foods, from snacks and baked goods, to dips, spreads, and even ketchup.³⁸ Protein in such products may not be strictly necessary for good health, but plays on the increasingly prevalent idea that when it comes to protein, you can't have too much of a good thing.39

Key takeaways

- Protein is sought after for sports nutrition, but also for satiety and healthy ageing
- Most Europeans get enough protein although some groups may benefit from higher amounts
- New product development with added protein was up 58% in 2020 compared with five years earlier
- Companies can make 'source of protein' or 'high protein' claims depending on the amount
- Whey and soy protein are widely used and are cheap and bioavailable
- Pea protein is gaining ground most rapidly among plant proteins
- Protein products increasingly are tapping into mainstream food trends
- There are untapped opportunities for high-protein foods for older consumers

The information provided here was compiled with due care and up to date to the best of our knowledge on publication.

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