

# Protein Alternatives Market by Source (Plant Protein, Microbial Protein, Insect Protein), Application (Food & Beverages, Animal Feed, Pet Food), Form, Nature, Production Process (Qualitative), & Region - Global Forecast to 2029

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## Abstracts

The global market for protein alternatives is estimated to be valued at USD 15.7 billion in 2024 and is projected to reach USD 25.2 billion by 2029, at a CAGR of 9.9% during the forecast period. The increasing demand for protein alternatives is driven by several key factors, particularly the growing consumer preference for natural and clean-label ingredients in food and beverages. As health becomes a top priority, there is a rising desire for products perceived as natural and nutritious. Protein alternatives derived from plants like soy, peas, and lentils fit perfectly with this trend. These plant-based proteins not only serve as natural additives but also offer functional benefits, making them appealing for use in a wide variety of food and beverage products.

Additionally, there is a heightened awareness and adoption of plant-based diets, emphasizing the importance of protein-rich plant sources. Plant-based protein diets are known for their numerous health benefits, including better weight management, improved digestive health, and a reduced risk of chronic diseases such as heart disease and diabetes. Plant-based proteins from legumes, nuts, and seeds meet these dietary needs while offering sustainable and ethical alternatives to animal-based proteins, further driving their popularity in the market.

In May 2023, ADM (US) and Air Protein Inc (US) entered into a Strategic Development Agreement (SDA) to collaborate on developing new protein sources for nutrition. Air Protein specializes in producing protein from the air without the need for traditional agriculture, reducing supply chain risks. This partnership leverages ADM's expertise in

nutrition, formulation, and research with Air Protein's innovative landless agriculture platform to scale up cost-effective protein ingredients for meat substitutes. The agreement includes plans to build and operate the world's first commercial-scale Air Protein plant. ADM's investment in Air Protein and other partners has advanced the development of Air Protein's technology, including its Bay Area Air Farm. This agreement highlights the companies' commitment to sustainable food systems and meeting the protein demand of a growing global population.

“The conventional segment is projected to dominate the market in the nature segment during the forecast period.”

The market for protein alternatives is witnessing substantial growth as more consumers transition from animal-based proteins to plant-based options. This trend has significantly increased the demand for alternative protein products. Conventional crops, due to the use of fertilizers, pesticides, and synthetic chemicals in their cultivation, generally exhibit higher protein levels compared to organic crops. Thus, conventional plant-based proteins are well-positioned to meet this rising demand.

Health concerns and allergies associated with soy and wheat have led manufacturers to innovate. In January 2022, NuCicer, a US-based company, introduced a line of chickpea protein products as a more sustainable and cost-effective alternative. This high-protein, gluten-free products are intended to serve as viable substitutes for traditional protein sources such as soy, wheat, and peas. As demand for alternative proteins grows, companies are increasingly investing in research and development to broaden their product portfolios and address consumer preferences. In addition to chickpeas, other novel sources like hemp, algae, and quinoa are gaining popularity for their nutritional and sustainable qualities.

Technological advancements in food production are enhancing the taste, texture, and functionality of alternative protein products, further driving consumer acceptance and market expansion. With continuous innovation and growth in the protein alternatives sector, the future promises significant opportunities for both consumers and manufacturers.

“The dry sub-segment in the form of the segment is estimated to grow at a significant CAGR during the forecast period.”

The dry form of protein alternatives is experiencing substantial growth, marked by a significant compound annual growth rate (CAGR) during the forecasted period. This

surge is driven by increasing consumer demand for sustainable and plant-based protein sources, coupled with advancements in food technology that enhance the taste, texture, and nutritional profile of these products. The versatility and convenience of dry protein alternatives, such as powders and flakes, make them ideal for incorporation into a wide range of food products, including snacks, baked goods, and meal replacements. Additionally, the growing awareness of health and wellness trends, alongside environmental concerns associated with traditional animal-based proteins, further propels the market. As a result, manufacturers are increasingly investing in research and development to innovate and expand their product offerings, thereby fueling the continued growth and adoption of dry protein alternatives globally.

“Europe has consistently held a substantial market share within the protein alternatives sector during the period studied.”

The European region is at the forefront of the booming protein alternatives market, showcasing impressive growth and shifting consumer preferences. As health consciousness, environmental sustainability, and ethical considerations gain traction, European consumers are increasingly opting for plant-based protein alternatives over traditional animal-derived sources. This dietary shift is driven by growing awareness of the health benefits of plant-based diets, such as reduced risk of chronic diseases and improved environmental sustainability. Consequently, the protein alternatives market in Europe has experienced significant expansion, with a wide array of innovative products emerging to meet diverse consumer needs and preferences.

Additionally, the rising trend of adopting plant-based proteins extends to animal feed. With increasing concerns about the environmental impact and ethical implications of livestock farming, there is a growing demand for sustainable alternatives in animal agriculture. Plant protein-based animal feed presents a viable solution, offering a nutritious and eco-friendly substitute for conventional animal-derived feed ingredients. This trend is further supported by regulatory initiatives aimed at promoting sustainable agriculture and minimizing the ecological footprint of livestock production. As a result, the European market for plant-based animal feed is witnessing steady growth, creating lucrative opportunities for stakeholders across the agricultural value chain.

In January 2024, Roquette Frères (France) expanded its NUTRALYS plant protein portfolio by introducing four new pea protein ingredients, including isolates, hydrolysates, and textured variants. These multifunctional pea proteins are designed to address formulation challenges in plant-based foods and high-protein nutritional products, paving the way for innovation in applications such as nutritional bars, protein

drinks, and plant-based meat and dairy alternatives. This innovation is set to drive further growth and diversification in the protein alternatives market, enabling the development of more varied and appealing plant-based options for consumers.

The break-up of the profile of primary participants in the protein alternatives market:

By Company Type: Tier 1 – 25%, Tier 2 – 45%, and Tier 3 – 30%

By Designation: CXO's – 20%, Managers – 50%, Executives- 30%

By Region: North America – 25%, Europe – 20%, Asia Pacific – 30%, South America – 15% and Rest of the World –10%

Prominent companies ADM (US), Cargill (US), International Flavors & Fragrances Inc. (US), Ingredion (US), Roquette Frères (France), Wilmar International Ltd. (Singapore), Glanbia plc (Ireland), Kerry Group PLC (Ireland), DSM (Netherlands), AGT Food and Ingredients (Canada), Burcon (Canada), InnovaFeed (France), Emsland Group (Germany), Global Bugs (Thailand), Ynsect (France), Tate & Lyle (UK).

Other players include BENEIO GmbH (Germany), SOTEXPRO (France), Shandong Jianyuan group (China), AMCO Proteins (US), Emsland Group (Germany), COSUCRA (Belgium), Australian Plant Proteins Pty Ltd (Australia), PURIS (US), Mycorena (Sweden), CEAMSA (Spain), nextProtein (France), Hexafly (Ireland).

Research Coverage:

This research report categorizes the protein alternatives market by Source (plant protein, microbial protein, insect protein), by Form (dry, liquid), by Nature (conventional, organic), by application (food & beverages, animal feed, pet food) and by region (North America, Europe, Asia Pacific, South America, RoW). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the protein alternatives market. A detailed analysis of the key industry players has been done to provide insights into their business overview, services, key strategies, contracts, partnerships, and agreements. New service launches, mergers and acquisitions, and recent developments associated with the protein alternatives market. Competitive analysis of upcoming startups in the protein alternatives market ecosystem is covered in this report.

Reasons to buy this report:

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall protein alternatives market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (Growing interest in health-centric food and beverages), restraints (Possibilities of nutritional & vitamin deficiencies among vegans), opportunities (Effective marketing strategies and correct positioning of plant-based proteins), and challenges (Concerns regarding taste and texture of plant-based protein) influencing the growth of the plant-based protein market.

New product launch/Innovation: Detailed insights on research & development activities and new product launches in the protein alternatives market.

Market Development: Comprehensive information about lucrative markets – the report analyses the protein alternatives market across varied regions.

Market Diversification: Exhaustive information about new services, untapped geographies, recent developments, and investments in the protein alternatives market.

Competitive Assessment: In-depth assessment of market shares, growth strategies and product offerings of leading players like ADM (US), Cargill, Incorporated (US), International Flavors & Fragrances Inc. (US), Ingredion (US), Roquette Frères (France) and others in the protein alternatives market strategies.

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