

Emerging Trends that will Shape the Protein Alternatives Market in the Year Ahead



ADM, a global leader in nutrition that powers many of the world's top food, beverage, health and wellness brands, has identified the seven biggest trends in the protein alternatives market, which is expected to climb to a staggering \$125 billion by 2030¹.

This examination of the top trends in alternative protein builds upon [ADM's 2022 Global Consumer Trends](#), which highlight the eight mega trends that will gain prominence in the year ahead. Each of these trends are evolving rapidly, with new solutions continuously coming to market.

Looking specifically at the alternative protein segment, there are two core drivers helping to spur global interest in the space.

Trend Drivers

1. Concerns about how to feed a growing global population sustainably

The world's population is expected to reach 8.5 billion by 2030, up from 7.8 billion in 2020, according to data from the United Nations. Assuming this growth rate continues, current projections indicate that we will need to produce more food in the next 40 years than we have in the past 8,000 years to feed the world's population. This is going to require alternatives that extend well beyond conventional protein sources.

2. Heightened consumer demand for health-forward solutions

Today's consumer is seeking protein alternatives that support their health and wellness goals. They want solutions that support their mental, emotional and physical selves as they head into year three of a global pandemic. ADM Outside VoiceSM research finds that close to half (46%) of plant-based consumers believe that eating plant-based protein will support their overall health. Likewise, almost a third (27%) of consumers plan to change their diet to be more plant-based as a result of the pandemic³. Consumers want functional solutions that don't require they sacrifice on evolving taste and texture expectations.

These factors, among others, are powering the mainstreaming of protein alternatives. In the last year alone, the amount of alternative meat, cheese and dairy products available to consumers has more than doubled. Looking ahead, we expect the rapid growth of the alternative protein market to continue at an accelerated rate, influenced heavily by the seven emerging trends highlighted below.

What to Watch in Protein Alternatives:



1 Introduction of novel protein sources, from cell-based to fungus and air

Imagine eating a steak produced from elements found in the air or eating a scoop of ice cream made from fungi with origins in a national park. Today's brands are exploring a number of innovative protein sources to complement their continued reliance on pea and soy.

Lab-grown meat alternatives are one of the fastest growing categories, with more than [\\$1.2B](#) invested in startups working on cell-cultured meat and seafood solutions. According to ADM Outside VoiceSM global plant protein discovery research, 68% of global consumers showed interest in lab-grown meat adoption.

Other novel sources coming from air particles to volcanic ash, seaweed and insects, have shown promise as it relates nutrition, functionality, flavor, sourcing and price. Regardless of the ingredient source, in all instances, brands and consumers are seeking out proteins that are local (non-GMO soy from Europe, for instance) and traceable.



2 Advent of fermentation-as-a-service (FaaS)

There's been heightened interest in microbial fermentation as a novel method for developing alternative protein products. Today, the U.S. consumes ~50 billion burgers per year, with many of those burgers being from alternative sources of protein. With the alternative meats market expected to grow at a rate of 16% through 2030⁴, the industry will need more than today's protein sources to meet evolving demand.

Global players, like ADM, are exploring new ways to serve brands that are seeking support with downstream processing. Expansive capabilities in food-grade fermentation are required to support the processing, lab services and consulting needs of food and beverage companies.

ADM just recently [announced](#) intent to partner with the Asia Sustainable Foods Platform, a company wholly-owned by Temasek, to provide precision fermentation consulting and technology development to companies serving the growing consumer demand in the wider Asia-Pacific region for bio-based products, notably alternative protein. Joint efforts, such as this one, are one of many ways industry leaders like ADM are trying to meet the skyrocketing demand for microbial fermentation solutions.



3 Next generation, plant-based, whole-muscle solutions

Whole-muscle, plant-based solutions, such as chicken breast alternatives, are becoming increasingly available to consumers in markets all over the world. These solutions will continue to evolve as brands seek out novel ways to reproduce the texturization of animal-based whole-muscle cuts, from T-bone steaks to shellfish.

According to ADM's Outside VoiceSM research on protein consumption, whole-muscle alternatives to meat are underrepresented in family meal occasions. Today, meat-based whole muscle cuts like steak, cutlets, chops, etc., dominate. Experts believe this represents a significant opportunity for food companies that can overcome remaining challenges, including texture and structure, to developing realistic whole-muscle meat analogues. As R&D work continues to advance in the industry, these products may also one day be sold in "raw" formats in the butcher's case, as opposed to pre-cooked, to enhance consumer perception of freshness.



percentage of family meal occasions where alternative meat products are being used



percentage of family meal occasions where real-meat products are being used

Source: ADM Outside VoiceSM

What to Watch in Protein Alternatives:

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Innovation and transparency from seed-to-fork

As concerns about climate change continue to grow, consumers are increasingly demanding greater efficiency in existing food systems.

Seed-to-fork initiatives, as an example, leverage cutting-edge technology to improve seed breeding, and lessen the cost, time and environmental impacts associated with creating consumer-ready protein sources. Active across the entire value chain, ADM is uniquely equipped to innovate at every step of the journey, from seed to fork.

Looking beyond producers, many food and beverage companies are also taking action. Companies are paying close attention to their supply chains, ensuring they are tracing everything from ingredient sources to processing, packaging and distribution methods.



Source: FMCG Gurus, 2021

As it relates to transparent sourcing, half (50%) of global consumers said they would be likely to use blockchain technology to find out more about food, drink and nutritional supplements⁵. This need to understand where products come from has intensified as a result of COVID-19. More than half (58%) of global consumers claim they will be more attentive to locality claims as a result of COVID-19. Many want safety assurances on the handling of food and drink products as a result of COVID-19, including 67% of Chinese consumers, 59% of Brazilian consumers and 45% of U.S. consumers⁵.

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Price reduction of cultivated meat products

Companies like Future Meat Technologies are helping power a move toward more affordable cell-based solutions. In December, the company [announced](#) that it is now producing cultivated chicken breast for just \$7.70 per pound, down from approximately \$18 per pound six months prior. These types of products will be more accessible to consumers in the near future, helping to further the democratization of plant-based eating.

Likewise, the year ahead could also bring significant advances in the space, with some experts predicting that the FDA and USDA will allow companies to begin selling cell-based meat within the U.S. by the middle of 2022. Future Meat has already said that it plans to start offering its products in U.S. restaurants by the end of 2022 pending regulatory approval. Meanwhile, the very first cultivated meat products were approved for sale to consumers in Singapore in late 2021.

What to Watch in Protein Alternatives:



Kid-friendly product formats

Plant-based chicken nuggets are just the beginning. New products featuring kid-friendly flavors, colors and formats (think fun, familiar and easy to eat and drink) are becoming a focus for brands looking to appeal to flexitarian parents and kids across varying life stages and ages.

Research from ADM's Outside VoiceSM finds that almost two-thirds of global flexitarians are looking to get more plant protein into their diets. These consumers are more likely to be families with parents and children seeking out options that are both tasty and beneficial to their overall health and well-being. In many cases, this growing desire to increase intake of protein alternatives has impacted entire families, with parents and children seeking out options that are both tasty and beneficial to their overall health and well-being.



Plant-based versions of traditional, authentic cuisines

To meet the growing global demand for traditional dishes, brands are exploring solutions that can provide the regional specificity and appeal that today's consumers desire, from plant-based shawarma to schnitzel and shrimp dumplings. Through new products featuring an assortment of globalized flavors, textures and product formats, brands are aiming to deliver an array of tasty, satiating comfort food analogues.

In India, for example, Bollywood stars Genelia and Riteish Deshmukh, co-founders of [Imagine Meats](#), are partnering with ADM to deliver a range of culturally relevant plant-based alternatives to consumers throughout the world. The brand specializes in a range of plant-based products, including biryani, a mixed rice dish originating from India that traditionally includes regional spices and meat. Other offerings include plant-based mutton and chicken kebab, both of which are popular in India and throughout the Middle East.

In the Americas, joint ventures such as [PlantPlus](#), led by ADM and Marfrig, the world's largest beef patty producer, are helping to develop and produce plant-based foods for their Americas. New and existing players from across the industry are joining forces to meet the tremendous consumer demand for plant-based meat and dairy.

Solving Global Nutrition Challenges of Tomorrow, Today

A myriad of forces, including a persisting global pandemic, will continue to shape consumer behavior over the coming year. While we don't have a crystal ball, there are clear signals in the marketplace that indicate the seven aforementioned trends are going to have a sizeable impact on the protein alternatives marketplace as it evolves in the months ahead. ADM, a global leader in nutrition, will be ready to support consumer brands with the leadership, insights, technology and science-backed solutions that they need to meet evolving consumer demand.

Sources:

1. FMI Global Plant-based Market Forecast Report, 2021
2. Euromonitor International, *Changing Attitudes in Health and Nutrition: Rise of Immunity-Boosting Strategies*, 2021
3. FMCG Gurus, 2021
4. FMI Global Plant-based Market Forecast Report, 2021
5. FMCG Gurus, 2021