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Plant-based meat substitutes

Plant-based meats (PBM) are high protein, plant-based foods designed to resemble the taste, texture and appearance of traditional meat products.

These substitutes are typically based on ingredients such as soy, pea protein, wheat gluten, and more. PBM has been increasingly recognised as an alternative to traditional meat products in recent years.

However, consumer awareness and acceptance vary widely, influenced by factors such as taste, health perceptions, and cultural attitudes.

Pre-pandemic, the plant-based alternatives market was booming globally. However, after experiencing remarkable growth during the pandemic, plant-based alternatives, especially plant-based meat, have encountered a slowdown after 2020.

To encourage uptake of PBM once again, the key drivers and barriers of consumption need to be tackled.

Health is biggest driver for choosing PBM

- The biggest driver for consuming PBM is health ("to feel healthier"), followed by avoiding long-term health risks associated with meat (e.g. heart issues, obesity).
- For numerous consumers, particularly vegans and vegetarians, the perception that PBM contribute positively to the environment a nd/or enhance animal welfare are drivers for repeat purchase.
- Curiosity and openness to trying new foods is a motivation for those who are open to new experiences. The interest in variety, new tastes, textures and concepts play a big role in wanting to try PBM.

Young, higher educated women most likely to choose PBM

- Women, younger consumers, and politically liberal individuals are more open to plant-based substitutes, as are consumers with higher education levels and lower meat consumption.
- In the past health-conscious individuals were more likely to opt for plant-based substitutes. However, this trend may be reversing, with health-conscious consumers growing concerns in the context of the emerging narrative around food processing.
- Among older consumers (65+) plant-based protein has been found to be the most accepted alternative protein source, followed by single-cell protein (e.g. mycoprotein or microalgae), insect-based protein, and in cultivated meat.

Taste and price remain key barriers for PBM adoption

- For those who haven't embraced plant-based alternatives, taste stands out as the main deterrent. Poor experiences with these foods leave a lasting impression, discouraging further exploration and repeat purchases.
- Food price inflation has seen consumers cut back, as plant-based products are mostly more expensive than their animal-based counterparts.
- PBM are less accessible than traditional meat products. This is particularly true when eating out and in convenience foods for on-the-go consumption.
- Even though healthiness is seen as a key selling-point of PBM, recent concerns about levels of processing and unnatural additives may be hindering consumption.
- Soy, often selected as a base ingredient for its high protein quality, is a common allergen and so not suitable for all. It has also been the subject of misinformation such as false claims pertaining to 'phytoestrogens' and conflations of the impact of soy production for animal feed (77% of global production) with production for human food.
- Eating PBM is perceived to be more appropriate in informal situations, where one eats alone or with family and friends, but less so in formal situations. Furthermore, plant-based meat has been found to be perceived as less fun, less popular, and less suitable for serving on festive occasions than meat.

Germany and the Netherlands are leaders in PBM consumption

- In 2023, Germany was the country with the highest PBM sales, worth over €922 million.
- To date, the Dutch consume the most PBM per capita, while the Netherlands is the 6th largest plant-based market in Europe (2023).

Strategies for increasing demand:

- Positive experiences with PBM are often related to the experience of the whole meal. Positioning PBM as part of a meal is more effective than promoting it as an individual product or ingredient.
- It's all in the name. Don't use: meat-free, vegan, vegetarian, healthy restrictive language such as 'low fat'. Do use: indulgent flavour descriptions (e.g. rich, zesty) and mouth-feel descriptions (e.g. juicy, fibrous, melt in mouth). Choose 'plant-based' over 'vegan', but avoiding this type of label altogether can be most effective.
- Addressing concerns about whether or not plant-based substitutes are ultraprocessed and what the health implications is important. Focus on the fact that they are free of antibiotics and hormones, unlike conventionally produced meat.
- Environmental labelling that specifies that the ingredients used are in fact sustainable. Terms like 'natural', 'locally produced', or 'organic' have a positive influence on acceptance.

Extra resources:

A systematic review on consumer acceptance of alternative proteins: Pulses, algae, insects, plant-based meat alternatives, and cultured meat
Consumers' associations, perceptions and acceptance of meat and plant-based meat alternatives
It's all in a name: How to Boost the Sales of Plant-based Menu items
Facing Plant-Based Challenges: Health, Price and Taste
Older Consumers' Readiness to Accept Alternative, More Sustainable Protein Sources in the European Union