Meat substitutes Delivering an authentic meaty experience



Plant-based meat isn't just for vegetarians anymore

Until recently, meat substitutes have been primarily consumed by vegan and vegetarian consumers seeking more ethical, sustainable and healthy alternatives to meat.

Now a group of mainstream consumers called 'flexitarians' or 'reducetarian' are increasingly aware of how meat consumption impacts their health and our environment. This awareness drives a reduction of meat consumption and a demand for alternative sources of protein, thus creating new opportunities for plant-based meat.



What motivates consumers to eat meat substitutes?



Health

Consumers increasingly draw connections between their own health and negatives associated with animal protein (cholesterol, saturated fat) as well as additives (hormones, antibiotics) added while the animals are raised



Ethics

Animal cruelty concerns are increasing consumer demand for alternative sources of protein that provide nutrition without any guilt



Sustainability

Livestock are responsible for 18 % of the greenhouse gases that cause global warming

\$7.5B

From now until 2025, the global market for plant protein based products will rise by 7.7% to reach 7.5 billion dollars Source: alliedmarketresearch.com

30% consumers

30% of consumers around the globe were flexitarian and reducetarian in 2016

Source: linpacpackaging.com

What do consumers say about plant-based meat?

Givaudan has done extensive consumer research to uncover deep insights and white space opportunities. When thinking of plant-based meats, we've found that taste, texture and variety are key factors in the minds of consumers. To help you capitalise on these opportunities, and speed up your innovative product design, add in a bit of our foundational and technical knowledge of plant-protein in meat-like applications and a well connected operational network. As your innovation partner of choice, Givaudan will be right there with you to meet constantly changing consumer needs.

Key challenges

Taste

"What I would like to have is that hearty and savoury taste that a piece of meat has"

- Value hunter, Spain
- "Meat substitutes have a strange aftertaste"
- Eco Warrior consumer, Germany

Texture

"It doesn't pick up the flavours and the juices and that fat that I'm looking for"

- Eco Warrior consumer, UK
- "I still don't feel that I get necessarily that much of a texture of beef or something like that"
- Flavour Craver, UK

Variety

- "Maybe more barbecue lines, vegan barbecue ribs would be awesome, maybe a garlic rib"
- Trendy trialist, Spain
- "I've yet to find anything I'm happy with at all. One thing that could be improved would be just to get a new flavour line"
- Trendy trialist, USA

Our solution

Masking off-notes

Depending on the quality and type of the protein source, it can have an off-taste or off-note that flavours can mask

Culinary notes

Adding a recognisable cooking technique note, such as smoked, fermented or roasted, to the product



Application knowledge

Technical know-how to support your product development

Succulence of meat

Improving the juicy, succulent flavour profile with vegan or vegetarian flavours

Authentic meaty taste

2 years in-depth analysis of animal and vegetal protein resulted in a patent pending technology that significantly bridges the taste gap between meat and plant proteins

Knowledge leads to a "textbook" example

Making a meat alternative product that exceeds consumer demands means understanding taste, texture, moisture, mouthfeel, colour, aroma and other product attributes. Givaudan is an expert in high moisture extrusion of texturised vegetable protein and how to deliver the best taste and texture at an affordable cost.

The result

- Mastery of high moisture extrusion process to texturise soy protein
- Solid understanding of flavouring options and how to compensate for the effect of flavour on texture
- Pilot plant that mimics industrial production so you can test your base and we can collaboratively develop flavouring solutions



Together we can recreate the enjoyment of real meat

For more information, please contact us: global.protein_solutions@givaudan.com

