



INSIGHTS REPORT:

# Creating next-gen meat alternative winners

**Driven by a growing consumer passion for balanced nutrition, sustainability and animal welfare, the market for plant-based meat alternatives is expanding rapidly.**

Gone are the days when meat alternatives were only marketed to a niche group of consumers. Today, companies are racing to create new products and brands that appeal to a more mainstream consumer. This means that these options are rating up an ever greater amount of space in the supermarket chill cabinet.

But product developers be warned: this mainstream appeal comes with higher expectations for taste, texture and appearance – and an increasingly competitive landscape vying for a place in shoppers' grocery carts. INFUSE by Cargill™ can help you create high quality meat-free sliced products that your customers can enjoy without having to sacrifice on texture or taste.



## THE MARKET FOR MEAT ALTERNATIVES



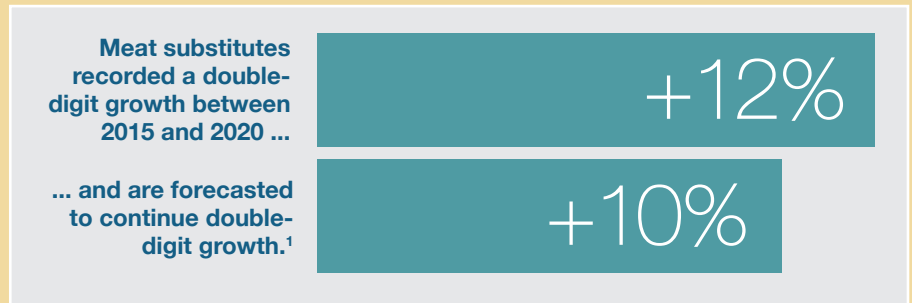
### Plant Popularity features highly in Cargill's TrendTracker™

Consumers are globally increasingly interested in **plant-based foods & beverages** with 55% of global consumers now stating that their diet includes meals without meat or fish, although they're not vegetarian or vegan.

Source: HealthFocus International, 2020

**As plant-based eating moves into the mainstream, plant proteins are in the spotlight benefitting from the health halo of both plants and protein.**

The Meat Substitutes retail market in Europe is set to account for 181,000 tons in 2020, which represents about **2.3% of the total retail volume** of animal-based Processed Meat (excluding Processed Fish and Seafood), and **2.7% of the total retail value**.



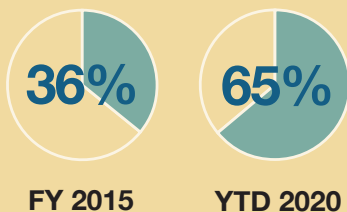
Europe is the world's biggest market for meat substitutes, accounting for close to 40% of retail volume in 2020, versus 29% of volume share for North America.

66% of the total European retail volume of meat substitutes is represented by the UK, Italy and Germany. The French market is one of the fastest growing markets, with 63% CAGR in terms of retail volume (2015-2020). Similarly, Scandinavian countries and Spain are seeing a very high growth (well over 20% CAGR (2015-2020)).<sup>1</sup>

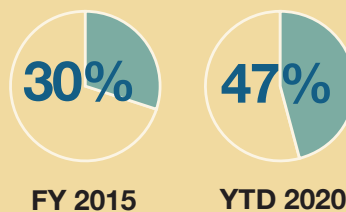
Meat substitutes launches have grown by 37% CAGR (2014-2019) in Europe, versus a 12% CAGR growth in for animal-based meat products (excluding deli meat, poultry and fish and seafood). Meat substitutes take a growing share in the total meat & substitutes market from 19 to 31% in 2020YTD, driven especially by the UK, Germany, Netherlands, Belgium and France.

### The focus for meat substitutes on packaging<sup>2</sup>

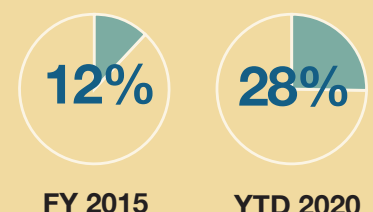
#### Vegan claims:



#### "High in Protein" or "High Source of Protein" claim:



#### "High in Fiber" or "High Source of Fiber" claim:



The incidence of "Vegetarian", "Organic" and "No additives preservatives claims" seems to be diminishing over the years.

<sup>1</sup> Source: All market data above is Euromonitor, 2015-2025, Europe

<sup>2</sup> Source: All launch data above is Innova, 2015-2020, Europe

## WHAT'S NEXT



**Plant-based meat alternatives are trending like never before. But offering yet another plant-based burger or minced meat just won't cut it on the crowded supermarket shelf. Today's vegetarian and flexitarian consumers are looking for great meat alternatives for light snacking too.**

Consumers now also want nutritious vegetable protein based cold cuts that are low in saturated fats, but without compromising on that succulent texture and great taste they get from 'the real deal'.

Getting there is easier said than done. Many of the products available today are either too hard & brittle, or too soft & crumbly. They also hide that telltale plant protein aftertaste by overdoing it on flavor.

But it doesn't need to be this way. Just let INFUSE by Cargill™ do the work for you!

# TASTY

## MEET INFUSE by Cargill™

# IN FUUSE

  
by Cargill

### Meeting consumers' organoleptic and texture expectations for meat alternatives is a major challenge.

By employing a multiple ingredient blending approach and through effective formulation finetuning, INFUSE by Cargill™ ingredient blend solutions can help you create high quality meat-free sliced products that your customers can enjoy without having to sacrifice on texture or taste.

Blending the best in hydrocolloids, fiber and functional, label-friendly starch, INFUSE has designed an ingredient blend, optimized for use in plant-based cold cuts formulated with pea protein.



## SPOTLIGHT

# IN FUSE

by Cargill



### **INFUSE by Cargill™ is the new service offering model from Cargill Starches, Sweeteners & Texturizers Europe.**

It brings together the company's extensive ingredient acumen to rapidly create tailor-made ingredient blends, helping customers speed up innovation and market launch.

Customers in Europe have been using Cargill's functional systems for more than 40 years to achieve custom texturizing ingredient blends. INFUSE by Cargill™ expands on that work, adding sweetness and other specialty ingredients such as proteins and fibers, to address a broader array of customer formulation challenges.

#### Three pillars serve as the foundation for Cargill's customer focus in Europe:



An unwavering attention to providing on-trend solutions.



A commitment to speed to market.



Access to deep technical expertise to help create tailored ingredient blends.



## OUR TOOLBOX OF SOLUTIONS



**Having the ingredients that can provide a solution is of course important, but equally so is having the lab and pilot capabilities to build tailor-made solutions, as well as the technical knowledge to come up with different formulation options.”**

*Zuzana Van Beveren, Senior Meat Technical Service Specialist*

### At Cargill, we truly understand plant-based meat alternative formulations and ingredient interactions.

The broadening market appeal of meat alternatives brings with it its' own challenges. Even if many consumers are receptive to switching to a vegan or vegetarian alternative, most are unwilling to compromise on flavor and other organoleptic characteristics. Furthermore, some consumers expect an almost exact match in terms of the whole experience, from preparation to eating.

Getting there is easier said than done, as replacing both the animal protein and animal fat present interesting formulation hurdles to overcome. “At the end of the day you are changing the type of protein that you are working with into something entirely different. You are also replacing the animal fats with plant-based oils and fats, which impacts texture, organoleptic properties, product stability, as well as overall product acceptance,” Zuzana explains.

The current market is further complicated as the demand for allergen-free products intensifies. This is leading manufacturers to seek out alternatives to soy, including the use of wheat protein and pea protein. This shift presents new challenges for formulators in terms of hydration ratio and speed.

Besides, there are several further processing challenges to be considered on the manufacturing front too, such as product stability during shelf-life. But there's no need to despair. We can get there by employing a multiple ingredient approach and through effective formulation fine-tuning, and this is where INFUSE by Cargill™ comes in.



## SPOTLIGHT: PEA PROTEINS



### Label-friendly:

- Produced from label-friendly yellow peas, which need no allergen declaration in Europe
- High quality protein content
- Rated as one of the most healthy plant proteins\*

\*Cargill IngredientTracker™ 2021



### Great sensory profile:

- Mild flavor, low off notes
- Suitable for various applications, incl meat alternatives and non-dairy applications

#PLANTPROTEIN



### Great functionality:

- Good visual appeal and outstanding solubility
- Provides firmness through water and fat binding function
- Combined with Cargill texturizers, it creates authentic meaty texture and improved mouthfeel



Pea Protein | Cargill Food Ingredients EMEA | Cargill

## OUR SOLUTION



**Flanogen® REM 2760 is a functional ingredient blend, designed to help deliver on core processing requirements and shelf life stability, while offering that meaty texture consumers are expecting.**

- **Hydrocolloids** boost the gelation of pea protein and sliceability
- **Fiber** delivers excellent water absorption and moisture holding capacity and improves shelf life
- **Functional label-friendly starch** improves cooking stability at higher temperatures and contributes to meaty texture

Suitable for vegans and vegetarians, and containing no soy, no gluten nor lactose, our solution blends the best functional ingredients to deliver mouth-watering plant-based cold cuts.

Our blends can be further optimized to the plant-based protein material used, and are designed to help withstand high processing tolerance. They can be used in a wide array of meat alternatives, from cold consumed products like sliced vegan ham sausage, salami or paté, to hot consumed vegan burgers, sausages and nuggets.



## RECIPE & NUTRITIONALS: PLANT-BASED COLD CUTS

Ingredients	%
Water	66.985
<b>PURIS® Pea protein 870</b>	<b>15.00</b>
Sunflower oil	7.00
<b>Flanogen® REM 2760</b>	<b>4.50</b>
<b>Cargill filling fat</b>	<b>3.00</b>
DSM juiciness mix	1.20
DSM flavor mix	0.95
Kitchen salt	0.90
Lactic acid	0.30
<b>C☆Dex® Dextrose</b>	<b>0.15</b>
Colorant red oxide	0.015

	Meat recipe*	INFUSE recipe
<b>Energy (kcal/100g)</b>	224	<b>156</b>
Fats	18.0	<b>10.1</b>
<i>of which saturated</i>	7.0	<b>2.1</b>
Carbohydrates	2.9	<b>2.3</b>
<i>of which sugars</i>	0.7	<b>1.1</b>
Dietary fibers	1.3	<b>2.8</b>
Proteins	11.0	<b>13.0</b>
Salt	1.9	<b>1.4</b>



# IN FUSE

by Cargill™



Let's discuss how  
INFUSE by Cargill™ can  
enable the success of your  
next meat alternative launch  
within the booming but  
increasingly crowded  
plant-based protein aisle.

Time to get INFUSED

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📍 [www.cargill.com/infuse](http://www.cargill.com/infuse)