

INSIGHTS REPORT:

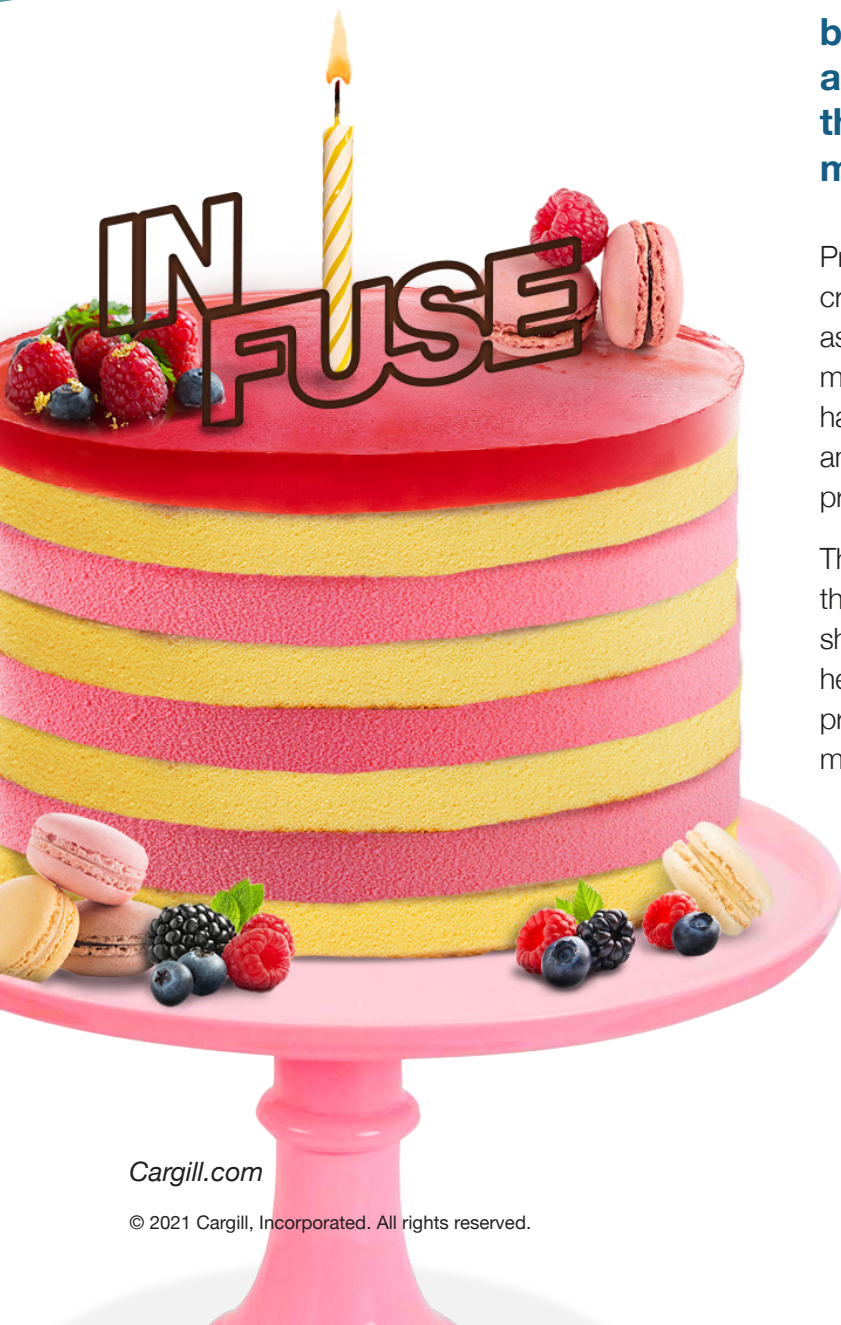
# Plant-baked perfection



**Plant-based foods & beverages are becoming increasingly mainstream as vegan options move beyond the established categories of meat and dairy alternatives alone.**

Product developers are now being challenged to create vegan options in sweet categories such as confectionery and sweet bakery too. But manufacturers be warned; today's consumers have high expectations around the texture, taste and appearance of their vegan sweet bakery products like muffins or sponge cakes.

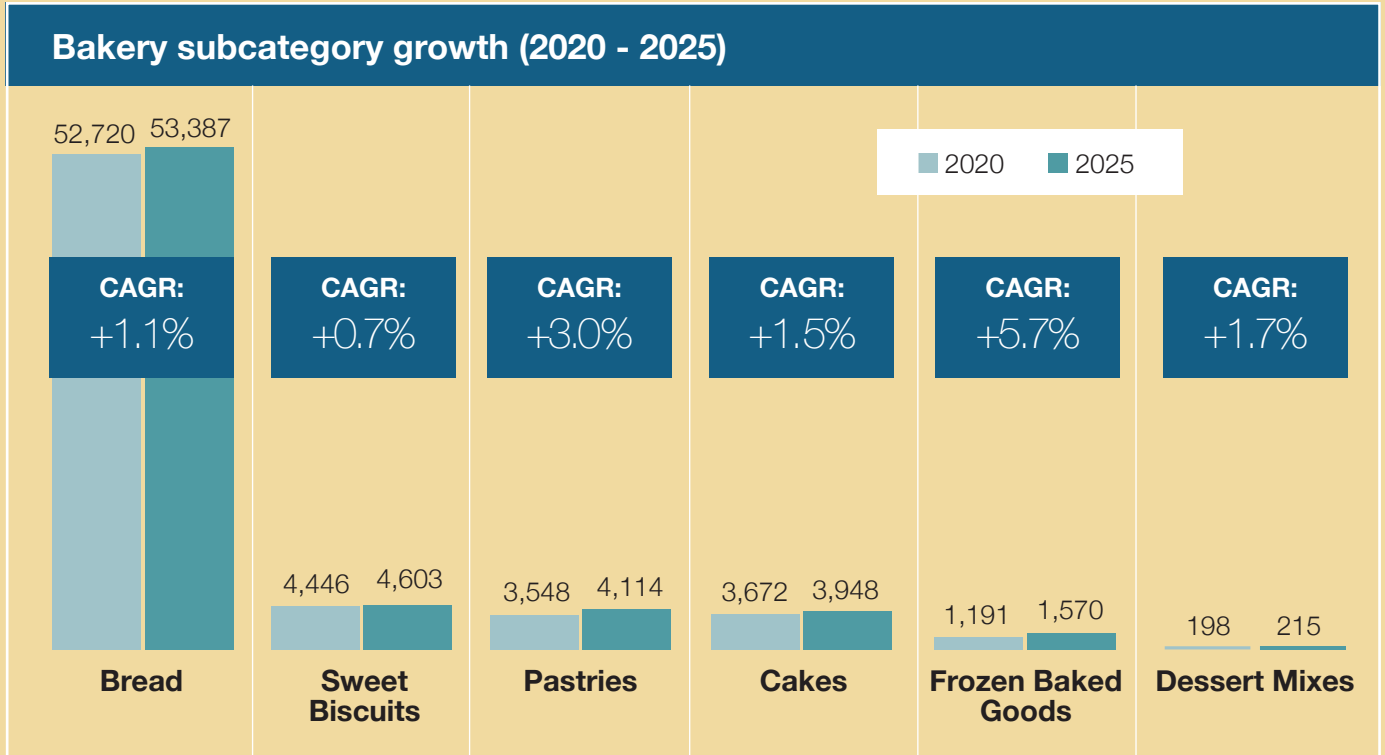
There's an increasing array of options out there that are all competing for a place in the shoppers' grocery cart. INFUSE by Cargill™ can help you create the high-quality vegan bakery products that your customers can enjoy without making any sacrifices.



## THE BAKERY MARKET IS INCREASINGLY TURNING VEGAN

**In Europe, the baked goods\* market accounted for 59,140 thousand tonnes in 2020.**

However, the category has been experiencing negative growth from 2015 to 2020 (-1.1%). This negative trend has also been accelerated due to COVID-19. The outlook for the coming years is positive, with predictions of steady growth between 2020 and 2025 (+1.3%). Bread is by far the largest subcategory, making up around 75% of the category volume. Regarding sweet bakery\*\*, the past 5 years only showed small growth (<1%). However, the outlook is positive with predictions of 1.7% in the coming 5 years.



Source: Euromonitor, Bakery, 2020-2025

**55%**

of global consumers state that their diet now includes meals that do not contain meat or fish, even though they're not vegetarian or vegan.

Source: HealthFocus International, 2020

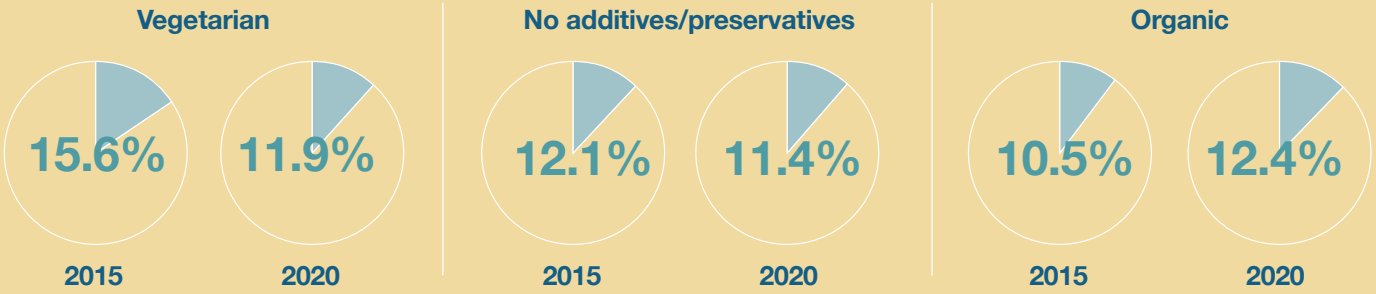
Innova data shows that in 2020 there were 16,443 new product launches in the bakery category, with most launches coming from sweet bakery (53%). The category with the highest NPD being **sweet biscuits/cookies** (29% of NPD), followed by cakes – pastries & sweet goods (24%).

**“Plant popularity” is a prominent trend among Cargill’s TrendTracker™ 2020 – our proprietary perspective on food & beverage trends impacting our manufacturing customers.** Consumers are more interested in plant-based foods & beverages. As plant-based eating moves into the mainstream, the sweet bakery category is no exception. In fact, consumers expect the increased availability of plant-based indulgent treats.

\* Includes bread, cakes, dessert mixes, frozen baked goods, pastries.

\*\* Includes cakes, pastries and sweet biscuits.

**Top claims: 2015 vs 2020: as % of category launches**



Source: Innova, 2015-2020

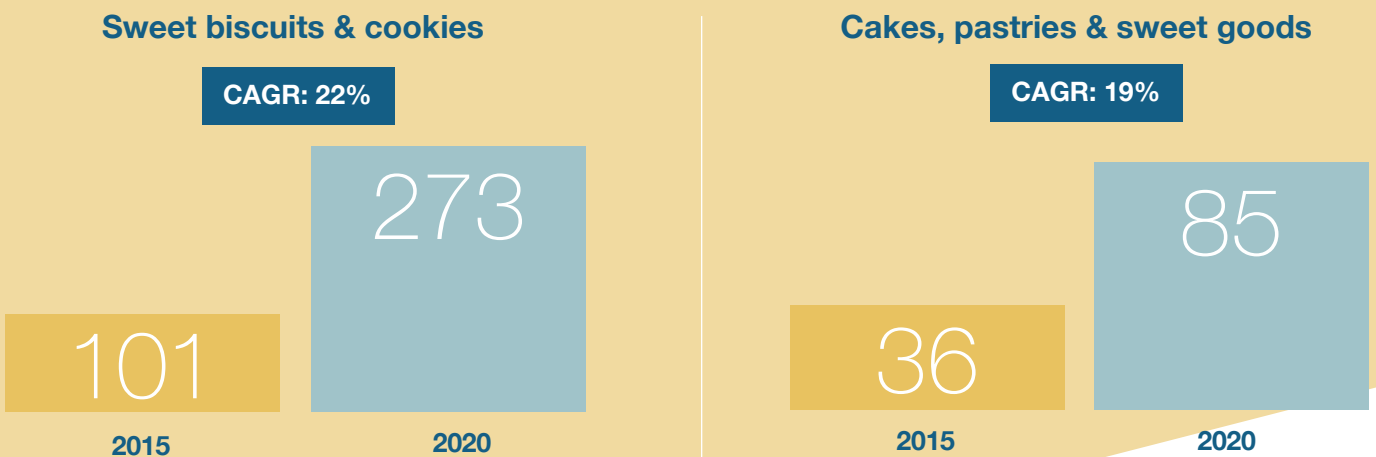
**+19%**

**Veganism is one of the fastest growing positionings in bakery, with a CAGR of 19%.**

According to the data, the three top claims used in the category were vegetarian, no additives/preservatives, and organic. Although still a top claim, vegetarian has a declining usage. On the contrary, vegan incidence has increased. In 2015, 4% of all bakery launches had a vegan claim, and in 2020 this number increased to 9%. Data from Innova also reiterates that **veganism is one of the fastest growing positionings in bakery**, with a CAGR ('15-'20) of 19%. In sweet bakery specifically, the growth rate even reached 21%.

The strong growth is reiterated when delving deeper into the vegan launches within the sweet bakery subcategories. This is especially true for sweet biscuits & cookies with a CAGR (2015-2020) of 22%, and cakes, pastries & sweet goods (+19%). Both these categories have more than doubled in terms of absolute launches.

**Increase in number of vegan launches for the different sweet bakery subcategories (2015 vs 2020)**



Source: Innova, 2015-2020

## WHAT'S NEXT?



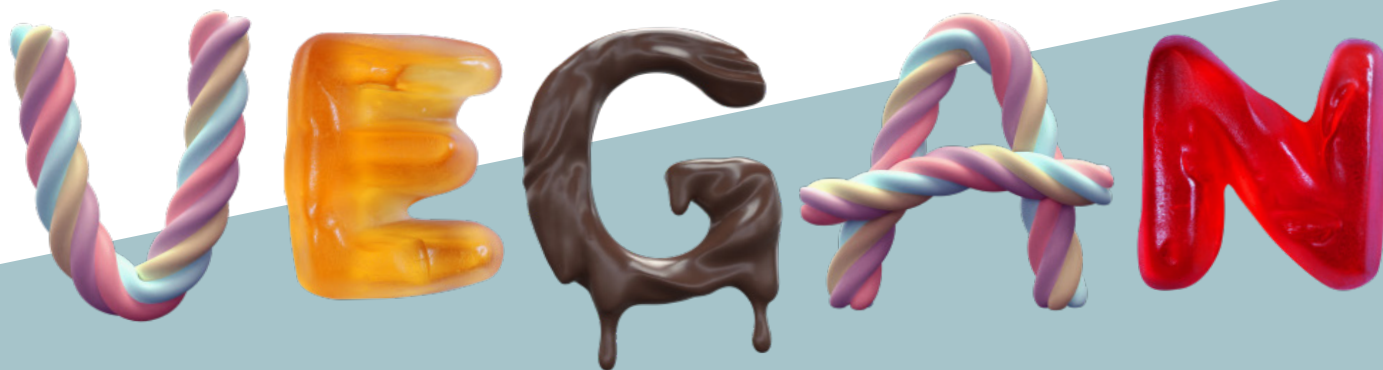
**Replacing egg in bakery is a major challenge as it is such a multi-functional ingredient. “Egg has different functionalities, by providing a matrix to your food system.”**

*Martine Van-havere  
Application Specialist,  
Shared Capabilities*

**Vegan is the next big thing with egg-free recipes coming into ever greater demand. But formulating out all animal-based ingredients isn't that easy and comes with challenges.**

An egg may appear to be a very simple ingredient, but in bakery applications it performs quite a unique role. Egg yolk has emulsifying properties, while egg white brings aeration and stabilization functionality during the baking process. So you have very indulgent sweet cake formulations with a very high egg yolk content, and others (e.g. meringue) that are solely made with egg white. It all means that to successfully replace egg, you need a combination of various ingredients, depending on the specific recipe.

**That's where INFUSE by Cargill™ can support you.** We've got an extensive toolbox of solutions available to help you create plant-based sweet treats that meet consumers' expectations.



## MEET



**Meeting consumers' texture and overall eating expectations for healthier and tasty plant-based sweet bakery is a major challenge.**

By employing a multi-ingredient blending approach and through effective formulation finetuning, INFUSE by Cargill™ can help you create those high quality vegan sweet bakery products that your customers can enjoy, without having to sacrifice on texture or taste.

As just one example of our competencies in vegan bakery applications, INFUSE by Cargill™ has created an **ingredient blend of wheat proteins, native starch and citrus fiber** optimized for use in plant-based sponge cakes. Other plant-based solutions are also available for the reformulation of cupcakes, loaf cakes, brownies, muffins and many more.



## 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 SOLUTION



**Trilisse® GPB 1001 is a plant-based ingredient blend, designed to mimic the eating experience of an egg-based recipe by ensuring similar texture and crumb structure, suitable for moist plant-based vegan cake applications.**

### Ingredient blend solution:

- A robust blend of wheat proteins, native starch and citrus fiber
- Plant-based ingredient blend that meets requirements for vegan and vegetarian claims
- The ingredients are all well-perceived and offer a label-friendly solution

This blend provides the water-binding properties that you require when replacing egg. When water is added to the blend it replicates the moisture properties of the egg by binding the water. Additionally, the whipping process brings more air into the mixture, with the elastic properties of the blend allowing for the creation of cells in the batter after water evaporation. These small cells result in cakes having the moistness and good chewability we all love. On top of that, the blended solution is fully optimized for use in a variety of recipes and is freeze-thaw stable.

Ultimately, it's all about delivering mindful bakery solutions that meet today's demands for healthier, label-friendly appeal and plant-based composition, but without ever compromising on taste and texture. Solutions from INFUSE by Cargill™ will help our customers bake up wonderful new products on their exciting reformulation journey.

Whether you are creating a vegan muffin, a sugar-reduced brownie, or a protein-fortified cereal bar, let **INFUSE by Cargill™** blends take you there.



**SPOTLIGHT ON:**



**Unipectine® OF 605 C**

This particular LM pectin has optimum reactivity & speed of gelation tailored for this recipe, helping to ensure the right reactivity to provide maximum gel strength and avoids pre-gelation issues.

**Topcithin® SF**

A label friendly sunflower lecithin used in fillings to “coat” the solid particles and bring enhanced contact between the particles and the fat continuous phase. The addition of lecithin in a filling results in smoother and better flowability of the filling.

**CremaFLEX® L1904**

This gives a smooth and soft texture to the filling, which provides a great mouthfeel when layered between sponge cake.

**RECIPE & NUTRITIONALS: BIRTHDAY CAKE**

Ingredients (in g)	Sponge Cake
Flour	286.55
Granulated sugar	270.00
Water	252.95
Rapeseed oil	100.00
Glycerine	35.00
<b>TRILISSE® GPB 1001</b>	<b>35.00</b>
Emulsifier paste	10.00
Baking powder	10.00
Citric acid	0.50

Nutritionals	INFUSE recipe
<b>Energy (kcal/100g)</b>	<b>414</b>
Fats	15
<i>of which saturated</i>	3
Carbohydrates	63
<i>of which sugars</i>	38.21
Dietary fibers	1.16
Proteins	5.2
Salt	0.44



# IN FUSE

by Cargill™



Let's discuss how  
INFUSE by Cargill™  
can help you bake  
to perfection.

Time to get INFUSED

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