

CFIA 2024: Our on trend prototypes

At CFIA 2024, we presented our different plant-based meat alternative solutions, our label-friendly proposals for dairy, and our latest developments to enable you to improve the Nutri-Score of your products.

Haven't been able to visit us? Here's our full set of prototype sheets!



Mouthwatering
mimicked meatballs



No added
sugars fruity
yogurt



A label-friendly
brioche



Label-friendly



Sustainably sourced ingredients

No added sugars fruity yogurt



There's growing demand for products that are lower in sugars and higher in fruit content. But bringing a high amount of fruits, while at the same time optimally managing the visual aspect, texture consistency, and pleasant mouthfeel, is a difficult balancing act.

Our experts have succeeded in creating a smooth fruit preparation, to be used in yogurt, with a nice sweet and round taste, without the addition of sugars. This is achieved by relying on two great ingredients.

The fruit prep is sweetened with EverSweet[®], the sustainably produced^{**} next-generation stevia sweetener, which is coming to Europe and the UK later this year. EverSweet[®] brings to life the sweetest components of the stevia leaf (steviol glycosides Reb M and Reb D). It allows for a significant reduction in sugars, while maintaining a high-quality sweet taste for reduced and zero calorie food and beverages.

The product is texturized using the label-friendly corn starch SimPure[®] 99405. Simply labelled as "starch," SimPure[®] starches help to address consumers' desire for simple ingredients and familiar labels that still indulge the senses.

SimPure[®] 99405 provides good stability to the fruit preparation while using EverSweet[®] results in a nice, sweet taste with minimal offnotes. For this prototype, our experts used a blend of 20% fruit preparation and 80% white dairy mass.



Key ingredients

EverSweet[®]

- Optimal, zero-calorie sweetness
- Higher levels of sugar reduction
- Sustainably produced
- Cost-effective

SimPure[®] 99405

- Neutral flavor profile and great cold storage stability
- Easily pumpable texture, non-gelling, and a great cold-storage stability in fruit preps

Prototype contains:

Strawberries

Water

Waxy maize starch
(SimPure[®] 99405)

Strawberry flavor

Steviol glycosides from fermentation
(EverSweet[®])

*EverSweet[®] is a product of Avansya, a joint venture of dsm-firmenich and Cargill. Prototype not for sale. For R&D use only – to be approved in the course of 2024.

** Results have undergone a ISO14040/44 panel review, underlying report available upon request.



A tasty cookie with certification



Today's well-informed consumer is more likely to choose products that support sustainability and fair working conditions throughout the supply chain. Cargill prioritizes sustainability and offers a wide range of certified sustainable ingredients. To show what's possible, our applications team set out to create a chocolate chip cookie that features several sustainable ingredients from our portfolio, including chocolate, glucose syrup, lecithin, fats, and are topped off with a hint of sustainably sourced sea salt.

Key ingredients

Our solutions for ingredient sustainability:

Chocolate chunks (made with Rainforest Alliance certified cocoa)

- Cargill Promise Cocoa/ Rainforest Alliance/Fairtrade certified

Cargill vegetable baking oil

- Roundtable on Sustainable Palm Oil (RSPO) SG certified palm

Glucose syrup (C*Sweet® 01210):

- FSA* Silver level verified

Cargill sea salt

- Sourced following sustainability standards; harvested from evaporation ponds that provide critical habitat for more than 70 species of birds, microorganisms that thrive in saline ponds, and a variety of endangered species

Prototype contains:

Chocolate chunks

Wheat flour

Brown sugar

Cargill vegetable baking oil (RSPO SG certified palm)

Glucose syrup (C*Sweet® 01210)

Whole eggs

Cane sugar

Water

Baking soda

Cargill sea salt

Vanilla flavoring

* Externally verified and benchmarked at Silver level according to the Farm Sustainability Assessment in areas such as biodiversity, soil quality, water quality and water use.



A label-friendly brioche

Today's consumers are seeking out more label-friendly bakery options. That's why our bakery applications experts have created a more label-friendly brioche option by replacing emulsifier E471 with Lecimulthin® RS (de-oiled rapeseed lecithin).

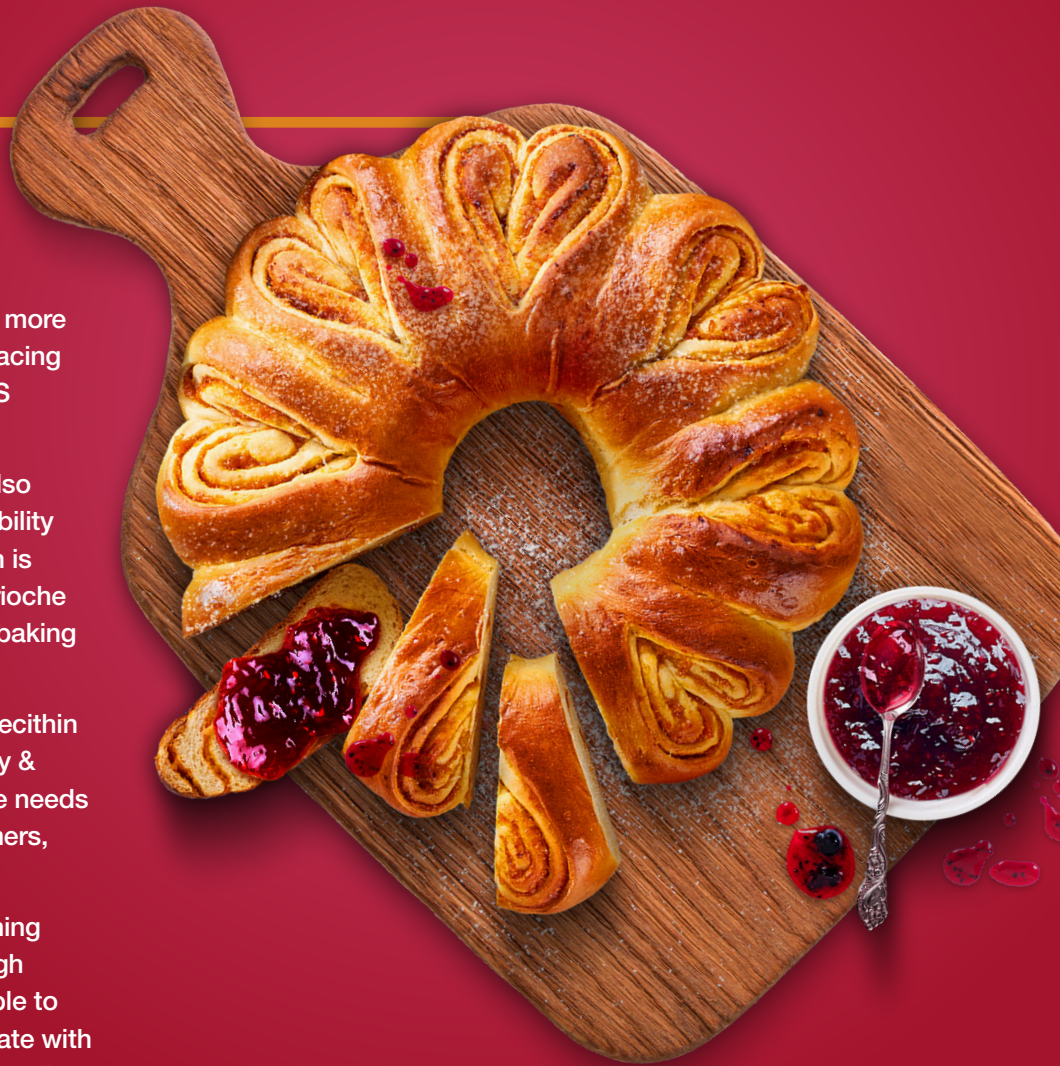
Beyond label-friendliness, lecithin also gives an improved dough machineability when compared to E471. The dough is softer and better to form, and the brioche has a nicer visual appearance after baking and a more open structure.

The Lecimulthin® range of de-oiled lecithin solutions offers impressive versatility & functionality and addresses both the needs of today's health-conscious consumers, and your product performance.

Lecimulthin® emulsifiers offer a winning combination of label-friendly and high functionality. In this way, you'll be able to develop bakery products that resonate with today's health-conscious consumers, all without compromising on quality or taste.

At the same time, our stable, safe, and compliant supply chain will help ensure that your operations continue to run smoothly. Our global scale ensures minimal disruptions, safeguarding your production timelines and peace of mind.

So, whether you're looking to transition from artificial emulsifiers to label-friendly options or simply seeking a reliable partner for your supply needs, we're here to support you every step of the way!



Key ingredient

Lecimulthin® RS

- Versatile & functional
- Non-GMO
- Sunflower and rapeseed-based options
- Does not require allergen declaration

Prototype contains:

Wheat flour _____
Water _____
Eggs _____
Cargill rapeseed oil _____
Sugar _____
Yeast _____
Whole milk powder _____
Emulsifier
(rapeseed lecithin (Lecimulthin® RS)) _____
Salt _____

* There is no single definition of "non-GMO." Contact Cargill for sourcing and processing information.
Allergens: Milk



Honeycomb Caramel white chocolate coated praline



Driven by the rising popularity of caramel and the diverse consumers expectation on its flavor, Cargill chocolate experts have been searching for the perfect blends for a premium indulgence experience. To answer this, we present you with The Cargill Caramel Selection.

These four types of caramel sensorials (white chocolate combined with caramelized ingredients) appeal to a broad range of consumer preferences and can be tailored to perfectly suit a variety of product categories or applications and go beyond what is currently available on the market.

At CFIA 2024, we're presenting one of these sensorials in the form of an ingredient application: the coating of a filled praline. The coating is based on white chocolate combined with caramelized ingredients. The indulgent praline has a Nordic style filling.

Key ingredients

Honeycomb Caramel

- A medium golden caramel option that has a balanced profile of rich caramel and roasted notes
- It appeals to "round & honey caramel" lovers

CremaFLEX® F4501

- Sustainable palm (RSPO)
- Label-friendly (non-hydrogenated fats)
- Easy processing (no tempering required)
- Blendable with cocoa butter
- Strong anti-bloom properties

Prototype contains:

White Chocolate HB3137CD00
(Cocoa butter, sugar, caramel powder [skimmed milk, sugar, sweet whey, butter, natural flavoring], whole milk powder, skimmed milk powder, soy lecithin, salt, natural vanilla flavoring)

Vegetable fat (palm kernel, palm (CremaFLEX® F4501))

Sugar

Vegetable oil (palm olein)

Skimmed milk powder

Flavoring

Sunflower lecithin

Sea salt



Mouthwatering meat mimicking milestones



Looking to achieve a better Nutri-Score for your plant-based meat alternative without sacrificing taste and texture? Whether you're creating an alternative to a burger, a plant-based meatball, -sausage, or even looking into hybrid products, consumers expect you to deliver in terms of taste, texture, affordability, nutrition, and sustainability. Cargill's building block approach can help you create mouthwatering meat mimicking solutions.

With our collective energy and expertise, we deliver a comprehensive, fully integrated portfolio of ingredients and solutions that consistently meet your needs. From solutions to build texture and firmness, to improving the nutritional aspect of your product and more, we offer solutions for winning plant-based meat alternatives.

A sensational plant-based burger

We combined plant protein, fats and a binding system to create this tasty meat-like burger concept. It is developed to meet consumer expectations for taste and texture, while delivering to the cooking experience that consumers expect.

Prototype contains:

Water
Textured plant protein (pea and wheat protein-based (Cargill™ plant protein TEX PW80 M))
Go!Drop®* smart fat solution
Protein blend (pea and wheat protein (Trilisse® MVP 1201))
Texturized blend (Flanogen® REM 2461 (methylcellulose, starch, carrageenan, citrus fiber, dextrose))
Grilled meat flavor
Beetroot color
Malt color
Coconut fat chips
Malt extract
Dried vegetables (onion, garlic)
Table salt
White pepper



Mouthwatering mimicked meatballs

A plant-based meat alternative concept that delivers on taste, texture, and cooking experience. It brings convenience for oven preparation or grilling occasions – exactly what consumers are looking for.

Prototype contains:

Water
Textured plant protein (pea and wheat protein-based (Cargill™ plant protein TEX PW80 M))
Rapeseed oil
Protein blend (pea and wheat protein (Trilisse® MVP 1201))
Texturized blend (Flanogen® REM 2560 (methylcellulose, carrageenan, starch, citrus fiber, dextrose))
Cargill coconut oil (Rainforest Alliance certified)
Dried vegetables (onion, garlic)
Natural flavoring
Herbs (parsley, oregano)
Spices (nutmeg, paprika, white pepper)
Salt
Sugar
Coloring foodstuff (red beet juice, caramelized pear juice concentrate, black carrot concentrate, spirulina extract)

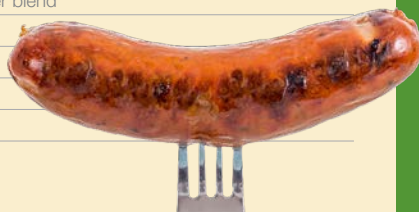


A sizzling plant-based grilling star

This great-tasting plant-based BBQ sausage alternative has an improved nutritional profile versus most market references. It meets consumer and manufacturer expectations from raw product to cooking.

Prototype contains:

Water
Go!Drop®* smart fat solution
Textured plant protein (pea and wheat protein-based (Cargill™ plant protein TEX PW80 M))
Protein blend (pea and wheat protein (Trilisse® MVP 1201))
German bratwurst flavor
Coconut fat
Maltodextrin (C*Dry Light® 01970)
Methylcellulose
Texturized blend (Flanogen® REM 1581 (methylcellulose, carrageenan, dextrose, konjac gum))
Tapioca starch (SimPure®)
Dried vegetables (onion, garlic)
Beetroot color
Salt
Body giver bouillon powder blend
Citrus fiber (CitriPure®)
Veggie color
White pepper
Nutmeg

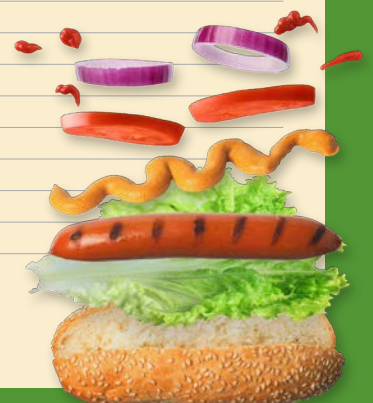


A top veggie dog

When it comes to plant-based meat alternatives, there's only room for the top dog. By carefully blending pea protein, carrageenan, gums, and starch, this "top veggie dog" truly delivers on taste and texture.

Prototype contains:

Water
Rapeseed oil
Pea protein (RadiPure® S 8001 B)
Texturized blends: <ul style="list-style-type: none"> • Flanogen® Solution 1 (methylcellulose, waxy maize starch) • Flanogen® Solution 2 (carrageenan, konjac gum)
Frankfurter & umami flavor
Salt
Modified starch (C*Tex® 06209)
Vinegar
Sugar
Fat (fresh) mouthfeel flavor
Dried vegetables (onion, garlic)
White pepper
Smoked paprika
Nutmeg
Iron oxide
Paprika extract



*Go!Drop® licensed trademark of Cubiq Foods S.L.



Plant-based



Label-friendly



A plant-based fermented alternative to yogurt

The plant-based trend has truly mainstreamed in recent years. No longer the sole domain of strict vegans and vegetarians, a whole new and large consumer group of “flexitarians” has come to the fore. These consumers expect plant-based dairy alternatives that truly deliver in terms of taste and texture.

This plant-based, label-friendly fermented alternative to yogurt meets this demand. The concept, which features RadiPure® pea protein, SimPure® label-friendly starch and WavePure® seaweed powder, benefits from the combination of these ingredients:

- A shiny and smooth visual appeal
- A creamy texture
- Low saturated fat level
- A protein and calcium content that is close to a traditional cow’s milk-based yogurt

Key ingredients

- RadiPure® E8001G
- Cargill IY 45 RS
- SimPure® 99408
- WavePure® ADF 8360

Prototype contains:

Water
Specialty blend of cocoa butter and rapeseed oil (Cargill IY 45 RS)
Pea protein (RadiPure® E8001G)
Sucrose
Starch (SimPure® 99408)
Gracilaria seaweed powder (WavePure® ADF 8360)
Tricalcium phosphate (E341iii)
Plant-based culture





A plant-based alternative to cream cheese

Amid the overarching plant-based drive and fueled by a growing consumer passion for balanced nutrition, sustainability and animal welfare, the market for plant-based alternatives to dairy is expanding rapidly. Gone are the days when these products were relegated to the niche consumer domains, warranting little shelf space on grocery aisles. Today, companies are racing to create new products that appeal to a broader, more mindful consumer.

Responding to consumers' growing appetite for plant-based products that deliver a "dairy-like" experience, Cargill is helping our customers offer a new generation of plant-based alternatives to dairy that truly mirror the sensory experiences of traditional animal-based counterparts. We are enabling plant-based alternatives that exceed consumer expectations and enrich consumer diets with responsible, sustainable, and affordable options.

A prime example of how we are achieving this, is this concept for a plant-based alternative to a cream cheese. Thanks to the combination of our ingredient solutions and expertise, our applications experts have been able to create a delicious plant-based alternative with a shiny appearance and a smooth mouthfeel, with a spreadable texture.



Key ingredient

- **RadiPure® S8001B (pea protein)**
Allows you to reach a protein percentage that is close to cow's milk-based cream cheese with limited plant-based off-notes

Prototype contains:

Water
Cargill coconut oil (CN-25)
Pea protein (RadiPure® S8001B)
Salt
Sucrose
Dextrose (C*Dex® 02001)
Guar gum (Viscogum™ MP 41230)
Plant-based culture



A label-friendly cream cheese

Today's dairy consumers want label-friendly options but are unwilling to compromise on taste and texture.

That's why our applications specialists have created a smooth, slightly gelled cream cheese with great spreadability and a rich, creamy mouthfeel. The concept delivers by benefiting from the role of pectin as a great solution for cream cheese applications.

Sourced from citrus peels and apple pomace, nature-derived pectin offers plenty of label-friendly appeal. The unique, water-soluble texturizer is also highly functional, with great gelling, stabilizing and thickening properties. For this label-friendly cream cheese we have used UniPECTINE® OF 959 C SB to meet the consumer demand for cleaner labels.

Key ingredients

UniPECTINE® OF 959 C SB

- Nature-derived, label-friendly ingredient
- Water-soluble texturizer
- Offering great gelling, stabilizing, and thickening properties

Prototype contains:

Water

Cream (35% fat)

Ultrafiltered milk

Skimmed milk powder

Pectin (UniPECTINE® OF 959 C SB)

Salt





Sustainably sourced ingredients



Indulgence

A sensational sorbet with a sustainable edge

Today's consumers are looking for indulgent sensorial experiences, but also expect brands to deliver on sustainability. With these trends in mind, we're presenting cocoa pulp solutions combined with sustainable chocolate at CFIA 2024.

To show what's possible, our experts have developed a bitesize chocolate coated frozen sorbet on a stick. The sorbet center contains cocoa pulp and cocoa concentrated pulp juice. The sorbet is topped off with a layer of caramel sauce containing cocoa pulp. The whole concept is coated with a milk chocolate with cocoa pulp flakes, which are blended into the chocolate to bring crunchy appeal.



Key ingredients

- Cocoa butter
- Cocoa mass
- **Emulfluid® NGM** (Soy lecithin)
- **C*Dry® Light 01970** (Starch)
- **C*Sweet® F 01705** (Glucose-fructose syrup)
- **UniPECTINE® AYS 700 C SB** (Pectin)

Prototype contains:

Rainforest Alliance milk chocolate with cocoa pulp flakes

Sugar

Cocoa butter

Whole milk powder

Cocoa mass

Cocoa (Theobroma cacao L) dried pulp

Soy lecithin (Emulfluid® NGM)

Natural vanilla flavoring

Cocoa pulp caramel sauce

Fresh cream

Sugar

Maltodextrin (C*Dry® Light 01970)

Glucose-fructose syrup (C*Sweet® F 01705)

Cocoa (Theobroma cacao L) concentrated pulp juice

Rainforest Alliance cocoa butter

Salt

Pectin (UniPECTINE® AYS 700 C SB)

Natural vanilla flavoring

Sorbet

Water

Cocoa (Theobroma cacao L) pulp juice

Dextrin (soluble corn fiber (Cargill™ soluble fiber CSF L 80))

Sugar

Skimmed milk powder
