



INSIGHTS REPORT:

The cream of plant-based solutions

INFUSE by Cargill™ solutions are delivering reliable and versatile plant-based creaminess.

Chefs (both professional and at home) are always on the lookout for high performance creams that make it possible to serve up delicious and visually attractive cakes, pastries, soups or pastas in the blink of eye.



Waves of continuous innovation within the food and beverage industry has elevated our expectations from a single product. For instance, we want a whipping cream that enables us to make excellent long lasting and delicious decorations for cakes, soups, or coffees. Also, we need the freedom to add several flavors and colors to the whipping cream; without losing the cream's volume or compromising on its taste and texture.

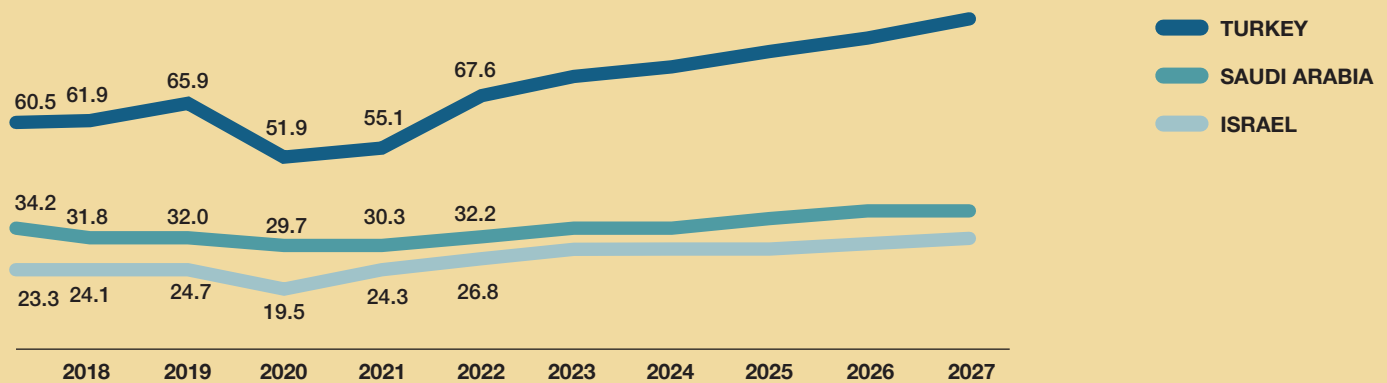
INFUSE by Cargill™ now provides blending solutions for whipping and cooking cream that deliver on ease-of-use, stability, and flexibility, but without compromising on texture or taste. Since these solutions are fully plant-based too, they are suitable for new vegetable and vegan recipes that meet consumers' growing health and sustainability needs. In addition to these emerging trends, being plant-based adds extra stability and performance to the creams. All in all, thanks to INFUSE by Cargill™ whipping and cooking blends' improved functionality, cost advantages, and long shelf-life, all expectations can be met with a single product.

THE MARKET FOR WHIPPING AND COOKING CREAM

Consumers are showing an ever greater interest in cooking up gourmet meals at home. Creams (cooking and whipping) are helping to make this possible, by providing creaminess, flavor and extra taste to their favorite dishes. People have started to show more interest in using both cooking and whipping creams in their dishes in the last 5 years, and this category is estimated to be growing even further. In fact, Euromonitor estimates that this category will enjoy CAGR of over 4% annually in the coming 5 years in the META (Middle East, Türkiye and Africa) region.* Within this broad and diverse region, Türkiye, Israel, and Saudi Arabia are the biggest markets for this category, with promising expected growth for the coming years.

CAGR growth for creams in selected META markets

Annual volume in 'K tons

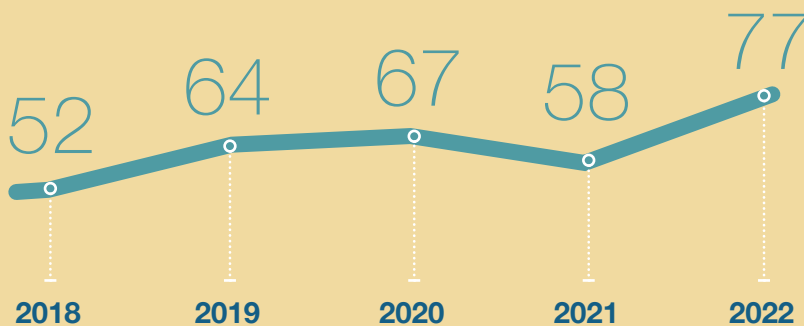


Source: Euromonitor

As consumers look to personalize their recipes with cooking and whipping creams, food and beverage manufacturers are stepping up to meet their needs. A broad number of FMCG manufacturers have initiated the development of cooking or whipping cream projects. These efforts are now bearing fruit in the form of new product launch activity within this space.

Tracked cream product launches in the META region

Number of new product launches in META ('18-'22)



Source: Innova Market Insights

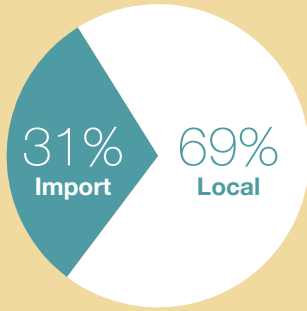
CAGR:

8.1%

Launches of creams in the META region have enjoyed a CAGR of 8.1% in the last five years.

Source: Innova Market Insights

* Cream sales from 2022 to 2027 in META region (Algeria, Egypt, Israel, Kenya, Morocco, Nigeria, Saudi Arabia, South Africa, United Arab Emirates, Turkey)



When we analyzed the new whipping cream launches in META in more detail, we see that 31% of them are imported due to their high quality and product performance, which brings additional load to the consumer shopping basket. But in effect this presents a new opportunity for whipping cream manufacturers. After all, if FMCG companies can procure the ingredients locally and produce the cooking or whipping cream locally, they can offer more affordable products to consumers who are struggling with food price inflation issues.

Creating a plant-based whipping and cooking cream that offers the organoleptic properties that consumers expect is easier said than done. This is because dairy proteins fulfill several functionalities within a product.



When you make a cream, you typically extract milk fat from milk — which is why the cream is a natural emulsion that is ready to whip. If you try to make a similar cream with plant-based raw materials, you need to create an emulsion with similar whipping properties. So, if you want to truly replicate dairy in a plant-based dairy alternatives, you really need to understand plant-based ingredients.

Çağatay Taşkın, Category and Solution Director



Within the field of plant-based dairy alternatives, Cargill is currently doing a lot of work in translating dairy applications into plant-based dairy alternative applications. This is achieved through the use of a mix of texturizing ingredients and broad technical knowledge.

This is where INFUSE by Cargill™ tailored ingredient blends come into their own. Let us help you design great-tasting whipping and cooking cream alternatives without having to compromise on taste, texture, or affordability.



SPOTLIGHT



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

It brings together Cargill's extensive ingredient acumen to rapidly create tailor-made ingredient blends that help customers speed up their innovation process and prepare for market launch.

Customers have been using Cargill's functional systems for more than 40 years in order to achieve customized texturizing ingredient blends. INFUSE by Cargill™ expands on that foundation, by 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:



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.



Addressing consumers' taste, texture and performance expectations for whipping & cooking cream is a major challenge.

However, by employing a multiple ingredient blending approach and through effective formulation finetuning, INFUSE by Cargill™ ingredient blend solutions can help you create high quality whipping and cooking cream recipes without any sacrifice on taste or performance. By blending the best in sweeteners, texturizers, fibers and proteins, as well as fats & oils, INFUSE by Cargill™ features a broad toolbox of ingredient solutions, that is optimized for use in cream applications.



Your challenges:

- Recipes and processes are complex.
- Process is sensitive.
- Upscaling is difficult.
- Long development times.
- Highest quality expectations:
 - Stability
 - Easy to use
 - High overrun (more than 200%)



Our solutions:

- Texturing, stabilizing, protecting, and foaming.
- Comprehensive support from product development to production upscaling.
- We simplify the process and the recipe.
- We guarantee standard quality:
 - Improve cream whipability and stability.
 - Keep product stable during shelf-life.
 - Avoid bubbles by stabilizing the air phase.
 - Water should be stabilized to limit drainage over time.



Ingredients:

- **Lygomme® TCW Series:** Maltodextrin, Sorbitol powder, Sodium stearoyl 2 lactylate (E481), DATEM (E472e), PGE, Sucrose Esters, SMS, Trisodium Citrate (E331iii), Polysorbate 60 (E435), Hydroxypropyl methylcellulose (E464), Carrageenan (E407)
- **Buffer Salts:** Lygomme® TPP Series: Sodium phosphates, Sodium carbonates
- **Fat:** Turyağ® TurCream CC70 (Full hydro palm kernel oil)

BENEFITS

Whipping Cream

- Stable
- Flexible
- Fat range options
- Suitable for chocolate and fruit applications
- Easy to mix with other ingredients
- Milk protein free (Vegan)

Cooking Cream

- Heat stable
- Suitable for acid application
- No burning
- Enrobing



SPOTLIGHT:

Why is fat so important in whipping creams?



Whipped creams are extremely complex systems that place specific demands on fat properties. Lauric fats have been used in high-quality whipping creams. Cargill developed Turyağ® TurCream CC 70 as a trans-fat free product with excellent functionality performance in whipping creams.

Advantages:

Plant-based dairy alternative whipping creams have many advantages over traditional dairy-based cream products.

Their enhanced functionality includes:

- Foam stability and smooth form.
- Overrun.
- Sensory aspects (mouthfeel & cooling effect etc.).
- Glossy.
- Simple shape and no cake cracks.

Properties:

Form and foam stability are critical for final products, and therefore require great consideration. Turyağ® TurCream CC 70 achieves excellent stability when compared to dairy cream, which loses stability when a whipped product is frozen and then thawed.

Another critical parameter for whipped creams is overrun. Overrun is the maximum amount of air that can be incorporated into cream when it is whipped. Turyağ® TurCream CC 70 provides a lot of air and does not churn as easily as dairy cream. That's why whipped cream with Turyağ® TurCream CC 70 is more stable and can withstand more mechanical treatment. In fact, it can incorporate up to 300% air, compared to dairy cream's maximum capacity of 170%.



SAMPLE RECIPE:

**Vegan Whipping Cream
with 26% Fat**

Ingredient	%
Water	Up to 100%
Cargill Vegetable Fat – Turyag® TurCream CC70	26%
Sugar	15%
Glycose Syrup – Cargill G58	0-3%
Stabilizer – Lygomme® TCW Series	3%
Buffer Salt – Lygomme® TPP Series	0.1%

- **Lygomme® TCW Series:** Lygomme® TCW series is a functional system designed to create high overrun and stabilize vegetable whipping cream.
- **Lygomme® TPP Series:** Lygomme® TPP series is a functional system designed to regulate pH.



IN FUSE

by Cargill™



Let's discuss how
INFUSE by Cargill™ can enable
the success of your next plant-based
cream launch through its' excellent
functionality, taste, and texture.

Time to get INFUSED

✉ Infusebycargill_solutions@Cargill.com

📍 www.cargill.com/infuse

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