

Next-gen bakery shortenings

Introduction

Over the past decade, palm oil (including its fractions), interesterified fats, fully hydrogenated oils, and high oleic oils have become the shortening components of choice for bakery manufacturers.

As we continue to learn more about human nutrition, bakery functionality and manufacturing needs, there are opportunities for new innovations to respond to trends in the bakery space.

How bakery shortenings factor in

Bakery shortenings deliver more than high functionality and a desired melt point where the solid fat becomes liquid.



Increased shelf-life of the end product

Better structure, texture and appearance

Improved mouthfeel and taste

Four key functional attributes

- 1 Melt point:** the temperature at which solid fat melts and becomes liquid
- 2 Plastic range:** the temperature at which a shortening will retain its plasticity and stay workable
- 3 Labeling:** certain terms may be more acceptable to consumers than others
- 4 Nutrition:** the fatty acid profile, especially the level of saturated and unsaturated fats

Characteristics shortenings provide to bakery applications

DONUT FRYING:

adjust mouthfeel and waxiness, minimize oil weeping.

FILLINGS

(cookies and snack cakes):

adjust mouthfeel, waxiness, aeration

ICINGS:

improve aeration

COOKIES:

control spread and lift

Consumer attitudes related to bakery shortenings

As consumers' attitudes related to health and taste evolve, ingredient manufacturers are adapting to create the next generation of structuring fats. It's critical that manufacturers provide fats and oils that function, while meeting desired nutritional needs, such as less saturated fat.



More than 50% of consumers closely **monitor fats and oils in foods**¹

Two baking trends on the horizon²

Healthy for me trend

Consumers seek health benefits in their foods, as well as avoid those they consider bad for their health. Plant-based protein, clean label and immunity concerns fit into this trend.

The role oils and shortenings play in this trend



Ingredient systems to create solutions for plant-based protein inclusions into bakery products



Blends and ingredient systems to reduce saturated fat levels or increase the nutritional value by adding fiber or antioxidants



New crop hybrids that bring new nutritional value to oils, such as higher omega-3 or lower saturated fat content

Conscious Consumption Trend

Consumers seek out brands that align with their values and may be willing to pay more for a product that has a compelling story. Moving forward, sustainable palm oil supply chains and a commitment to the betterment of the environment will be important drivers for the bakery industry.

The role oils and shortenings play in this trend



Enhancements in supply chain for palm and soil health programs provide avenues for storytelling about how your ingredients contribute to an improved environment



New oil blends that increase options for non-palm shortenings