

# MARGARINE & SPREADS

The global margarine market has developed to include low-fat and low-salt spreads and products with added omega-3 fatty acids, plant sterols and certified oils, with a growing appeal to vegans searching for an alternative to butter *OFI*

The global margarine/spread market is expected to grow with a single digit increase in CAGR between 2018 and 2028, according to a recent report by Persistence Market Research (PMR).

Growth will be driven by consumer demand for food products high in nutritional value and low in fat and calorie content, and higher consumption in under-developed countries where margarine offers greater value for money and multiple usages.

“The global market for margarine/spread is dominated by North America, which holds a significant market share, followed by Europe and Asia-Pacific,” PMR says.

“North America is the largest consumer, especially due to the high consumption in food processing. Europe is the second largest consumer. Developing regions, such as Asia-Pacific and South America, are constantly growing at a high consumption rate. China and India are the largest producers and consumers of margarine/spreads in the Asia-Pacific region.”

PMR says a growing number of vegan customers are also looking for butter alternatives, with margarine and spreads offering a plant-based alternative which has less saturated fats and cholesterol.

“Immense competition exists in the global margarine/spread market due to high market concentration. Only 18 major companies hold most of the market share.”

Some of the prominent players in the global margarine/spread market are Boulder Brands, Bunge, ConAgra Foods, Dairy Crest, Land O’Lakes, NMGK Group, Smart Balance, Unilever and Upfield Foods, PMR says.

## Development of margarine

Margarine has a history dating back some 150 years and is a non-dairy product used as a flavouring, for cooking and in baking to produce products such as pastries, doughnuts, cakes and cookies.

It comes as a soft and spreadable spread in tubs, as a liquid cooking blend in bottles and in hard blocks used in baking.

The first margarine was created by



## Butter's rival

Hippolyte Mège-Mouriès in 1869, who responded to a challenge by Emperor Napoleon III to create a butter substitute for the armed forces and lower classes. The recipe was a mix of skimmed milk, water and animal fat.

In 1871, Mège-Mouriès sold his patent to Dutch firm Jurgens. Jurgens realised that for the naturally white margarine to become a butter substitute, it needed to look like butter and began dyeing margarine yellow. Jurgens eventually became a world-renowned maker of margarines and soaps, becoming part of consumer goods giant Unilever.

Between 1900 and 1920, commercial oleomargarine was produced from a combination of animal fats and hardened and unhardened vegetable oils, according to Wikipedia. The depression of the 1930s and WWII led to a scarcity of butter and animal fats, leading to an almost complete switch to vegetable oils and fats.

Voluntary fortification of margarine with vitamins had been carried out by manufacturers since 1925 but in 1940, with the advent of WWII, certain governments made the addition of vitamins A and D compulsory to safeguard nutritional health.

During the 1950s and 1960s, competing producers vied to produce margarine that tasted more like butter.

In the mid-1960s, the introduction of two lower-fat blends of butter oil and vegetable oils in Scandinavia, called Lätt & Lagom and Bregott, began the debate on what should be called ‘margarine’ leading to the introduction of the term ‘spread’, Wikipedia says. In 1978, an 80% fat

product called krona, made by churning a blend of dairy cream and vegetable oils, was introduced in Europe and, in 1982, a blend of cream and vegetable oils called Clover was introduced in the UK by the Milk Marketing Board. The vegetable oil and cream spread ‘I Can’t Believe It’s Not Butter!’ was introduced into the USA in 1981 and in Canada and the UK in 1991.

Today, margarine and spreads are typically made from cottonseed, olive, palm, rapeseed, soyabean and sunflower oils. The product has gone through many developments to improve its health profile. Most brands have phased out the use of partially hydrogenated oils and are now also *trans* fat free. Many brands have launched refrigerator margarine spreads that contain only a third of the fat and calorie content of traditional spreads.

Other varieties include those with added omega-3 fatty acids, those with low or no salt, those with added plant sterols and stanols (claimed to reduce blood cholesterol) and some made from certified sustainable oils.

## Definitions

To be classified as margarine, the product must have a vegetable fat content of 80% or more, similar to butter, Wikipedia says.

Over the years, producers have reduced the fat and calorie content of margarines. These lower fat options are officially called ‘spreads’. The EU limits the terms ‘butter’ and ‘margarine’ to products with a fat content of not less than 80%. It defines spreadable fats as “a water-in-oil emulsion derived from vegetable/animal fats, with a fat content of at least 10% but less than

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90%, that remains solid at a temperature of 20°C and is suitable as spread”.

Margarines may not have a milk fat content of more than 3%. For blends and blended spreads, the milk fat may be between 10% and 80%.

Spreads that contain 60–62% of fat may be called ‘three-quarter-fat margarine’ or ‘reduced-fat margarine’. Spreads that contain 39–41% of fat may be called ‘half-fat margarine’, ‘low-fat margarine’, or ‘light margarine’. Spreads with any other percentage of fat are called ‘fat spread’ or ‘light spread’.

## Butter vs margarine

In the past, the popularity of margarine was of great concern to dairy farmers, who lobbied legislators to ban the yellow dyeing of margarine. Bans on adding colour became commonplace in Canada, Denmark and the USA.

By 1900, artificially coloured butter was contraband in 30 US states, *Mental Floss* writes. Some states even required margarine to be dyed pink. The Canadians banned all margarine from 1886 to 1948, except between 1917 and 1923 when WWI left butter in short supply. Even after the ban was relaxed, Quebec ensured that the ban on dyeing margarine remained in place in the province until 2008.

In Australia, it did not become legal to sell coloured margarine until the 1960s.

The harder spreadability of butter has also helped the growth of margarine.

Many popular table spreads sold today are blends of margarine and butter or other milk products, Wikipedia writes. In some European countries butter-based table spreads and margarine products are marketed as ‘butter mixtures’.

Butter mixtures now make up a significant portion of the table spread market. The brand ‘I Can’t Believe It’s Not Butter!’ spawned a variety of similarly named spreads including ‘Beautifully Butterfully’, ‘Butterlicious’, and ‘Utterly Butterly’. These butter mixtures imply a strong similarity to real butter and their names present the product to consumers differently from the required product labels that call margarine “partially hydrogenated vegetable oil”.

During the 1980s, butter consumption fell as fats of animal origin became a great health concern. However, butter has made a comeback due to its image as being a more natural and less processed product.

Nowadays, margarine, particularly polyunsaturated margarine, has become a major part of the Western diet, overtaking butter in popularity in the mid-20th century, according to Wikipedia.

In the USA in 1930, for example, the

average person ate over 8.2 kg/year of butter and just over 0.91 kg of margarine. By the end of the 20th century, an average American ate around 2.3 kg/year of butter and 3.6kg/year of margarine.

## Trans fatty acids

*Trans* fatty acids (TFAs) occur naturally in small amounts in meat and milk fat but also as a result of the partial hydrogenation of fats and oils to improve their texture and shelf-life for use in spreads, fast food, snack food and baked goods. *Trans* fats are used in shortenings for deep-frying in restaurants, as they can be used for longer than most conventional oils before becoming rancid. Partially hydrogenated oils (PHOs) have the right consistency to replace animal fats such as butter and lard at a lower cost. Many baked foods also require semi-solid fats to suspend solids at room temperature.

In the early 1990s, concerns over the negative health impact of TFAs grew, with industrial *trans* fat linked to an increased risk of heart disease.

In 2003, the World Health Organisation recommended that *trans* fats make up no more than 0.9% of a person’s diet and, in 2018, it introduced a six-step guide to eliminate industrially-produced TFAs from the global food supply.

Many countries have introduced TFA limits. In 2015, for example, the US Food and Drug Administration determined that PHOs are not ‘generally recognized as safe’ (GRAS), setting a deadline of 18 June 2018 as the date from which manufacturers could not add PHOs to foods. The compliance date for products produced before 18 June 2018 was extended to 1 January 2020.

A great deal of work has gone into developing suitable alternatives to PHOs including blends of liquid oils and hard stocks and interesterified oils with fully hydrogenated hard stocks.

## Palm oil controversy

Many food manufacturers turned to palm oil to replace PHOs because, unlike most vegetable oils, it is solid at room temperature.

However, oil palm cultivation has been criticised for its impact on the environment, including deforestation and the loss of natural habitats which has threatened critically endangered species, such as the orangutan and Sumatran tiger.

While some food manufacturers have decided to go palm oil free, many are choosing to use sustainable palm oil.

“Over the years, margarine manufacturers have improved the sustainable production of their products

considerably by increasing the sustainable sourcing of oils, reducing the emissions from transport and production, and limiting waste and water usage in their factories,” the International Margarine Association of the Countries of Europe (IMACE) says.

“Today, margarines are a smart environmental choice compared to animal-based spreads like butter. They use about half the land required for producing butter products, and the carbon footprint is less than one-third the size of butter’s.”

IMACE says its members also prioritise the sustainable sourcing of palm, coconut, soyabean, rapeseed and sunflower oils used in margarines and spreads.

## Going vegan

According to Global Market Insights, world plant-based product demand should register over 3.5% gains by 2025 owing to the growing adoption of vegetarianism and veganism.

“Switching to a plant-based diet is one of the most important moves to help the environment,” IMACE says. “By sustainably sourcing the oils used in margarines, we can protect the planet’s natural resources and, at the same time, ensure security of supply for the long term.”

Vegan butter is steadily carving a niche in the plant-based world.

Colorado-based Earth Balance started out in 1998 as a small company specialising in its non-genetically modified ‘Original Butter Spread’ made with a blend of vegetable oils. It now produces a range of plant-based spreads including Pressed Sunflower Oil, Pressed Extra Virgin Olive Oil and Pressed Avocado Oil spreads, as well as Soy Free, Organic Whipped Butter, Olive Oil Butter, Omega-3 Butter and Organic Coconut spreads.

In 2017, ‘I Can’t Believe It’s Not Butter’ launched a new ‘It’s Vegan’ product, made with a blend of soya and canola oils.

“This expansion into organic and vegan alternatives emphasises the brand’s commitment to innovation and inclusiveness for any diet or lifestyle,” Unilever said at the time. Since then, the brand, along with Unilever’s spreads business, was sold at the end of 2017 to private equity firm KKR.

Margarine and spreads have developed from being based on animal fats to vegetable oils. Their popularity has risen and fallen due to the scarcity of butter, competitive pricing, health concerns over animal and *trans* fats, and consumer focus on palm oil and veganism.

Throughout their history, margarine and spreads have been in competition with butter and this rivalry is likely to continue into the future. ●