

What's the best performing palm oil ALTERNATIVE?

Whether it's margarine, shortening or a filling agent, there's a special fat product for almost every application in the baking industry ... and many of these contain palm oil. Yet, despite being certified, consumers are increasingly critical of palm products. That's why Nutriswiss, a Swiss refiner of edible oils and fats, works with its customers to develop palm-free alternatives. Properly processed, hydrogenated or organic, restructured oils and even butter fractions work well in baked goods. Finding the best working alternative is not an easy task, however, as it depends on factors such as melting point, crystallisation behaviour, stability, shelf-life and organoleptics.

Fractionated butterfat as a palm oil replacement



One of the reasons why palm oil is so popular is that it is durable and heat stable, which unfortunately does not apply to butter. Nevertheless, there are good reasons to use butter: its genuine and much-loved taste enhances the value appeal of traditional products and gives them a

home-made character. Nutriswiss is able to fractionate butter using a purely physical process to improve its technological properties. For this purpose, anhydrous milk fat is melted and then cooled in a controlled manner under shear pressure to produce crystals with a defined structure. This is particularly important for the strict separation of olein and stearin. These have very different melting points (12 and 41 °C) and, depending on the application, these fractions can be recombined to provide a very functional and stable fat in butter pastries, short bread or puff pastry.

Modified vegetable oils: hydrated or organic certified

Another possible route to palm oil-free fat with the right texture is the use of fully hydrogenated seed oils such as rapeseed or sunflower. These are free from trans fatty acids and both oxidation- and temperature-stable. As the hydrogenation of oils does not conform to the specifications of organic certification however, a different production technology is required. A mixture of

different vegetable oils and fats is also used here. And, with the help of various process steps, it's possible to restructure the triglycerides and imbue them with new physical properties that ensure the fat-based filling mass provides a soft and creamy mouthfeel.

If palm oil is replaced by vegetable oils, this influences the taste as well as the consistency and the end-product's stability. Therefore, depending on the application, the Nutriswiss team develops individual alternative recipes that optimises the end product and also takes the manufacturing process into account.  

FOR MORE INFORMATION



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Only butter gives unsurpassed taste in croissants and puff pastry. Technological properties can be adjusted to suit industrial processing by fractionation.
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