

## Vegan trend in Europe: In Germany, milk substitutes from plants are most popular alternative

**Germany has the most active market, Southern Europe wants more variety, and people in Poland find dairy substitutes too expensive, according to a recent study by the University of Hohenheim.**

Plant-based alternatives to dairy products do not have to copy the original – but in addition to tasting good, they should also have a pleasant mouthfeel and a varied product range, according to the results of a recent acceptance study. To obtain the results, the University of Hohenheim in Stuttgart surveyed consumers in a total of six European countries. This revealed major cultural differences – but also commonalities that providers should pay attention to.

Of all the countries studied, Germany has the highest sales and the greatest market potential for these plant-based alternatives. “The strong innovative power in this area is evident in many small startup companies,” stated Dr. Beate Gebhardt, head of AK BEST at the University of Hohenheim. “For example, of all the countries studied, Germany has the most new plant-based alternative dairy products coming to market.”

However, milk and dairy substitutes derived from plants are also becoming increasingly popular throughout the European market. Their sales in Europe increased by 49 percent between 2020 and 2022. However, according to an EU regulation, only products derived from the milking process of animals may bear designations such as “milk” or “dairy.”

The plant-based alternatives to cream, quark, cheese, or yogurt are made from grains, oilseeds, or legumes, among other things. Because their carbon footprint is significantly better than that of their animal-based counterparts, they are seen as having the potential to promote change towards a more sustainable food system.

### Acceptance study in six European countries

Within the European market, however, the acceptance of the new products is distributed differently, knows Rebecca Hansen from the Department of Agricultural Markets at the University of Hohenheim, who investigated this question as part of her dissertation. To do this, she evaluated 3,086 responses collected as part of the project “The V-PLACE – Enabling consumer choice in vegan or vegetarian food products,” funded by EIT Food, the food innovation community of the European Institute of Innovation and Technology (EIT).

She looked for differences and similarities in the willingness of people in Denmark, Germany, France, Italy, Poland, and Spain to turn more to plant-based “dairy products.” The six countries were selected so that at least one country was represented in Northern, Southern, Eastern, and Western Europe, reflecting the different market situations in Europe for plant-based foods.

“However, the sample can only be considered representative to a limited extent,” Hansen said, “since only people who either already consumed plant-based ‘dairy products’ or were toying with the idea were included in the study. People who were not interested in it at all were not considered.”

### Germany: Health, animal welfare, and the environment play a major role

In the scientists’ view, the Germans are unique in their particularly critical attitude when it comes to animal welfare. This, together with aspects such as health and the environment, plays a major role in deciding how often people consume plant-based “dairy” products. In particular, those who chose a vegetarian or vegan lifestyle were 34 percent more likely to consume the plant-based alternatives more often.

“This confirms our assumption that the decision to consume plant-based ‘dairy’ products is largely determined by dietary habits,” Dr. Gebhardt said. “In addition, social norms and cultural traditions influence Germans less than people in other countries in this regard.”

## Nutrition habits rooted in the culture of different countries

This is demonstrated by the example of Poland as a kind of counterpart to Germany: There, animal dairy products are touted as healthy and beneficial overall. In the researchers' view, this may explain the aversion to plant-based "dairy" products, especially among people who care about health issues. However, there is also a financial factor: If the price of these foods increases, the willingness to consume them decreases. In addition, respondents in Poland often criticized the taste experience as being too sweet or too greasy.

"Dietary behavior is complex," Dr. Gebhardt stated. "It is shaped not only by the individual beliefs of consumers in conjunction with socio-demographic factors and the cultural environment, but is also influenced by political programs and environmental issues."

## Taste, texture, and variety need to be improved

French consumers are also difficult to convince of the benefits of plant-based dairy alternatives. Against the background that the consumption of cheese made from animal milk has a long tradition there, they seem to attach great importance to the sensory enjoyment of this food.

A similar picture was seen in Italy and Spain: Sensory and taste concerns prevented prospective buyers from consuming the plant-based alternatives to dairy products. If, on the other hand, the product characteristics such as price, taste, variety, and also availability met the requirements of the respondents, the probability of consuming these foods on a daily basis also increased.

"As our results show, prospective consumers who are only beginning to consider consuming plant-based 'dairy' products in particular are put off by the unsatisfactory product attributes. They want more varieties and a better taste or mouthfeel," summarized Hansen.

## Substitute products must taste good – not necessarily copy the original

"To reach more consumers, manufacturers therefore need to develop products with improved formulations or more product variants. This is especially important in Italy or France, where the importance of sensory enjoyment is culturally ingrained."

In Dr. Gebhardt's experience, consumers do not necessarily expect a copy of the animal-based original: "However, the taste, i.e., the culinary quality of the food, must be good. This might mean that the product offers a new, distinct taste experience."

## More knowledge increases willingness to buy – in all educational strata

"In addition, curiosity motivates consumers to try new food products," she said. Individuals who are fundamentally open to plant-based alternatives are more likely to maintain or even intensify their consumption of plant-based dairy products, according to their assessment.

Something common to all people who consume plant-based "dairy" products or are open to it is that they want information about it. Consumers who value high-quality food also actively search for it.

"Questions arise like: What is the product made of? What does the production process look like? Is it healthier? Is it more sustainable? How can I prepare it? – and answers to all of these should be easy to find," the two scientists agreed. In their view, easily accessible information on the packaging or at the point of sale would be best. Recommendations in dietary guidelines to consume fewer animal dairy products or evidence from the scientific community to choose more plant-based "dairy" products could also be an important signal to consumers.

The researchers were surprised by another result of the study: "Contrary to our expectations, education level and other sociodemographic factors do not have a statistically validated influence on the frequency of consumption of plant-based 'dairy' products," said Dr. Gebhardt.

## Background: Working group BEST at the Department of Agricultural Markets

The working group on Business Excellence and Sustainability Transformation (AK BEST) at the Department of Agricultural Markets deals in a practice-oriented manner with the excellence of companies and the appropriate assessment and communication tools that can contribute to sustainable development. In addition, communication and labelling for high-quality food, specificities and sustainability of agricultural and food markets as well as expectations and behavior of stakeholders in the food sector are analyzed. In order to give more visibility to stakeholder orientation or outstanding approaches, opportunities are explored and new approaches developed in a dialogue and continual exchange between science and practice.

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