Germany plant-based food retail market insights

2021 to 2023 with initial insights into the 2024 market

Executive Summary

This report shows the trends in retail sales of eight plant-based product categories (meat, seafood, ready meals, milk and drinks, cheese, yoghurt, dessert and pudding, and cream) in Germany between 2021 and 2023 and presents initial insights into how the 2024 market is developing, based on data from Circana. It also draws on household panel data from the German CPS GfK/YouGov Consumer Panel CP+ 2.0 FMCG to provide insights into purchase patterns.

The German plant-based market is the largest in Europe and continues to perform well. Sales across eight plant-based categories totalled €2.2 billion in 2023 – an increase of 8% compared with 2022 and 20.7% compared with 2021. This reflects an 11% increase in the volume (in kg) of plant-based food sold between 2022 and 2023, meaning that the increase in sales value is due to rising demand and is not caused only by food price inflation.

Sales volume grew in six out of eight plant-based product categories between 2022 and 2023, and in seven out of eight between 2021 and 2023. Sales value grew in seven categories between 2022 and 2023.

While this report shows that plant-based foods tend to be more expensive than their animal-based equivalents, plant-based cream stands out as an example of a product that is now cheaper than its animal-based counterpart.

The German retail market for plant-based food was **valued at €2.2 billion** in 2023.

The total annual sales value of plant-based foods in Germany **grew by 8%** between 2022 and 2023.

37.4% of households in Germany bought plant-based meat alternatives at least once during 2023.

36.5% of households in Germany bought plant-based milk at least once during 2023.

The CPS-GfK Consumer Panel data shows that a rising percentage of German households are buying plant-based meat[1], while increased sales of plant-based milk

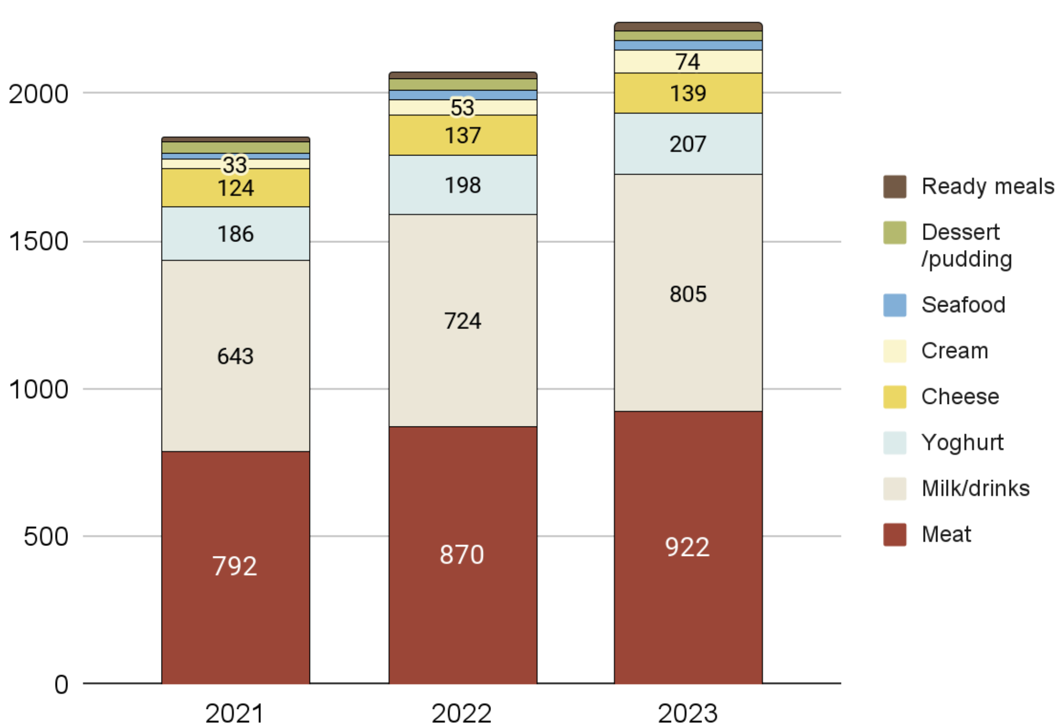
[1] This report uses the term “plant-based meat alternatives” when referring to data on plant-based meat (meat analogues) including the frozen category of the German CPS GfK/YouGov Consumer Panel CP+ 2.0 FMCG. As with the retail sales data from Circana, this refers to plant-based products that intend to mimic the taste and texture of meat. Since the retail sales data and household panel data come from two different data providers, Circana and CPS GfK may not be referring to exactly the same set of products.

appear to be driven by more frequent purchases by existing consumers rather than higher numbers of customers.

Overview of plant-based food sales by category, 2021-2023

	Sales value			Unit sales			Sales volume		
	2023, € million	2022-23 change	2021-23 change	2023, million units	2022-23 change	2021-23 change	2023, million kg	2022-23 change	2021-23 change
Meat	922.0	6.0%	16.5%	425.0	3.7%	13.5%	67.8	0.8%	9.3%
Seafood	35.9	9.8%	49.1%	14.0	6.7%	38.0%	2.8	0.5%	18.7%
Ready meals	19.5	0.8%	14.8%	6.6	3.9%	20.0%	2.6	2.6%	24.2%
Milk and drinks	804.9	11.1%	25.2%	579.2	13.8%	27.1%	570.3	14.0%	27.1%
Cheese	139.0	1.6%	12.2%	68.5	7.9%	25.7%	10.5	6.6%	23.5%
Yoghurt	206.8	4.5%	11.0%	133.6	5.5%	12.1%	55.8	-2.6%	2.4%
Dessert and pudding	34.5	-6.6%	1.1%	25.1	-15.6%	0.5%	7.0	-17.5%	-22.5%
Cream	73.6	38.0%	125.1%	72.4	36.6%	115.1%	15.9	37.4%	117.9%
Total	**2236.2**	**8.0%**	**20.7%**	**1324.4**	**9.4%**	**22.9%**	**732.7**	**11.0%**	**23.2%**

Plant-based food sales value by category in Germany, 2021-2023 (€ millions)



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About the data

This report is based on sales data gathered by Circana from retailers in Germany. The data has been analysed by the Good Food Institute Europe.

The data for Germany covers retail sales in supermarkets[2] and hard discounter stores[3]. It covers both branded and private label (i.e. supermarket own-brand) products. It does not include food service sales, such as restaurants.

Data for 2021, 2022 and 2023 covers the whole year. Data for 2024 covers 1 January until 28 April. To make a fair comparison between partial-year data for 2024 and full-year data for other years, data for 2024 is presented on the basis of weekly averages and compared to weekly averages for other years. Since sales of each product are not necessarily spread evenly throughout the year, the comparison of weekly data should be interpreted with caution.

Sales value figures include taxes.

Note that since a different data provider has been used, with different product category definitions and coverage, the numbers in this report are not directly comparable to those in GFI Europe's previous publication, Market insights on European plant-based sales 2020-2022.

This report's findings about household purchase patterns are based on household panel data from the German CPS GfK/YouGov Consumer Panel CP+ 2.0 FMCG, which measures penetration and repeat rate for plant-based meat (meat analogues including the frozen category) and plant-based milk.

[2] Excluding supermarkets under 200 square metres in area.
[3] "Hard discounter" refers to stores that generally offer lower prices than supermarkets, for example Aldi, Lidl and Norma.

Key terms

Plant-based: foods that are made from plants. Where data permits, we have focused specifically on plant-based products that aim to mimic the taste and texture of animal products. In some categories, non-analogue products such as those based on beans or lentils are also included because the data does not permit further subcategorisation.

Animal-based: food items derived from farmed animals, such as meat from chickens or milk from cows.

Sales value: the total value of sales measured in euros (€).

Unit sales: the total number of units of a product sold. A unit can refer to a pack, carton or tub, for instance.

Volume sales: the total quantity of products sold measured in kilograms (kg).

PY 2024: partial year data for 2024 covering 1 January until 28 April

Market share: the proportion of all sales in a wider product category (comprising both plant-based and animal-based versions) that is plant-based. This fraction is calculated by dividing plant-based sales by the sum of plant-based and animal-based sales. In this report, market share has mostly been calculated on the basis of sales volume, but it can also be calculated on the basis of sales value. Note that in this report, market share is calculated based only on retail sales of pre-packaged products. It does not account for sales in restaurants or products that are not pre-packaged, such as meat from a butcher’s counter.

Penetration: The percentage of a population that has purchased a category, brand or product at least once over a specific period of time. For example, if 1 million households purchase plant-based milk in a country with a population of 10 million households, the penetration is 10%.

Repeat rate: The percentage of consumers that purchase a category/brand/product and go on to repurchase again within the same time period. For example, if 10,000 households purchased plant-based milk in a year, but only 1,000 of those households went on to purchase it at least one more time in the year, then the repeat rate for plant-based milk would be 10%.

Overall plant-based food market

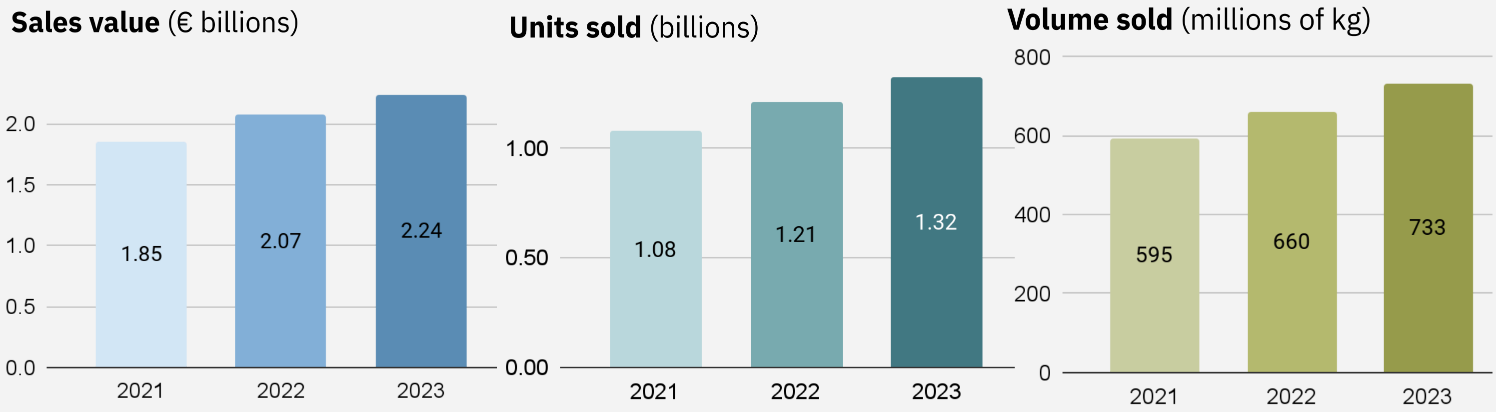
Total German plant-based market

Germany's plant-based market, already the largest in Europe, is growing strongly.

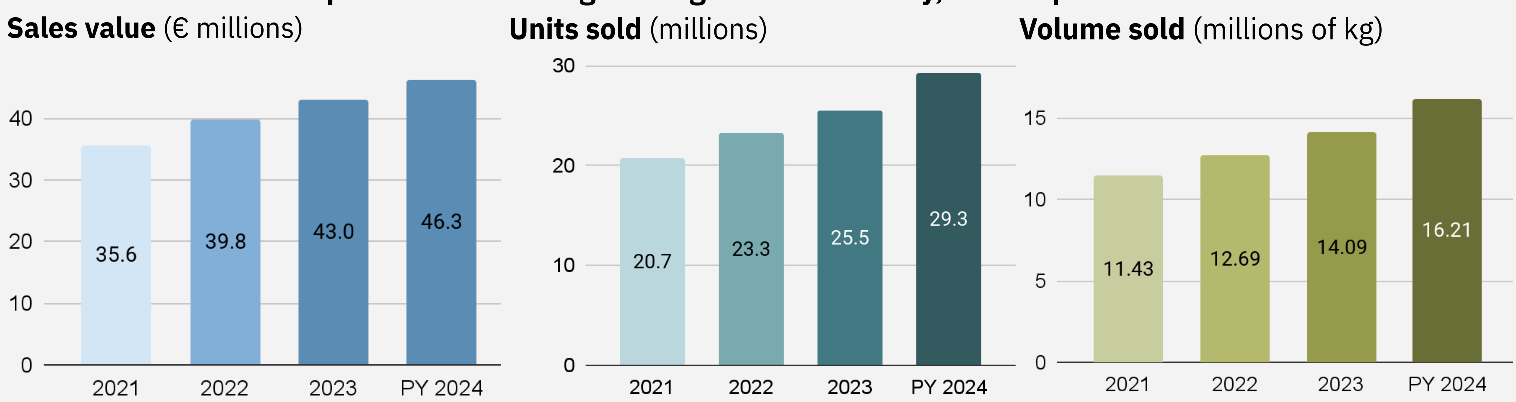
In 2023, the market for plant-based foods reached €2.2 billion, 1.3 billion units and 737 million kg across eight categories (meat, seafood, ready meals, milk and drinks, cheese, yoghurt, dessert and pudding, and cream). This is an increase of 8% in sales value, 9% in unit sales and 11% in sales volume relative to 2022.

Partial year data from 1 January to 28 April 2024 suggests that average weekly sales totalled across these eight categories are continuing to rise. These figures should be treated with caution because they are not directly comparable to full-year data for 2023. This matters because product sales can fluctuate throughout the year.

Plant-based food sales across eight categories in Germany, 2021-2023



Plant-based food sales per week across eight categories in Germany, 2021-April 2024

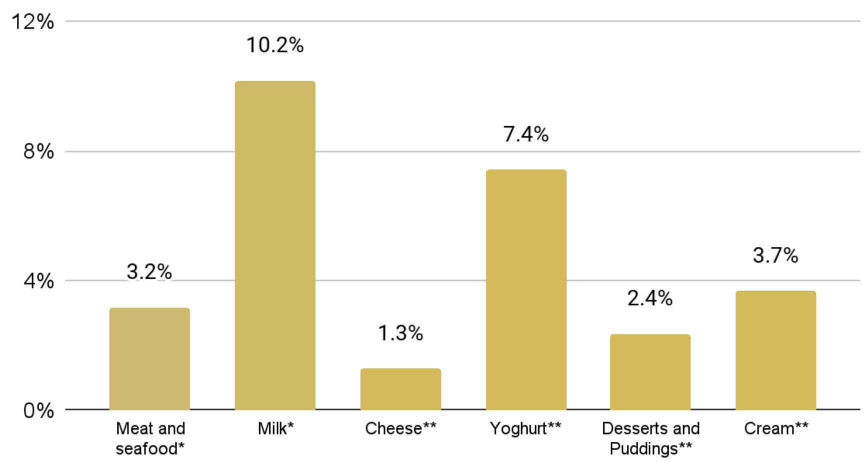


Categories

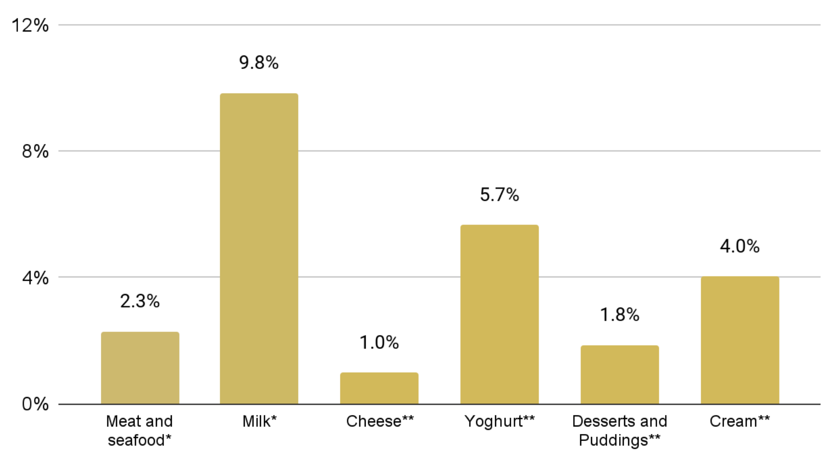
The largest plant-based categories in Germany are meat, and milk drinks, accounting for 41% and 36% of overall sales, respectively, across eight plant-based categories in 2023. Plant-based milk and drinks have become mainstream in Germany, with a 10.2% market share of all retail sales value of plant- and animal-based milk and milk drinks in 2023.

On the basis of sales volume, the market shares mostly appear lower than on a sales value basis, because plant-based products tend to be more expensive per kg than their animal-based counterparts. The exception is plant-based cream, which in 2023 was 3% cheaper than animal-based cream. Meanwhile, plant-based milk and drinks are approaching price parity - they were only 3% more expensive per litre than animal-based milk in 2023.

Plant-based food: share of Germany's total pre-packaged (plant- and animal-based) sales value for each category, 2023 (% of sales value)



Plant-based food: share of Germany's total pre-packaged (plant- and animal-based) sales for each category, 2023 (% of sales volume)



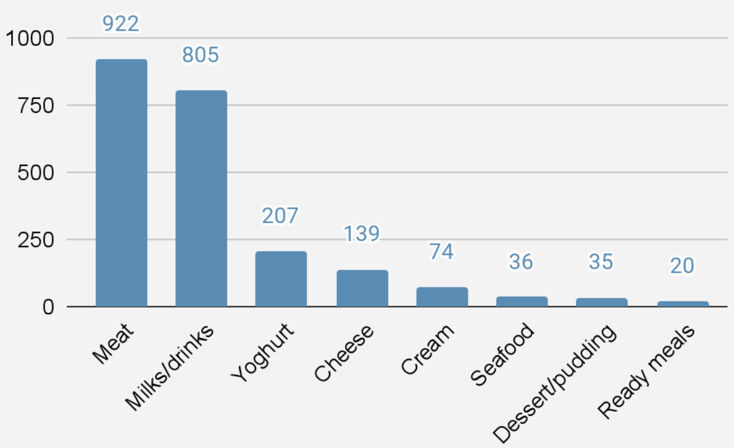
*Private label and branded products combined **Branded products only

Although the plant-based milk and drinks category is well established in the German market, it continues to grow, with an 11.1% increase in sales value between 2022 and 2023.

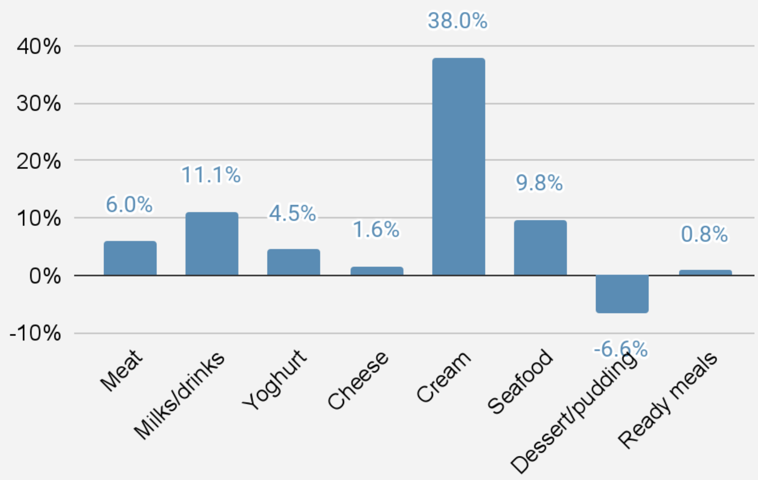
The highest annual rate of sales growth is seen in the plant-based cream category, at 38%. As discussed in the plant-based cream section below, it is now cheaper per kg than dairy cream, which may be contributing to its strong sales growth.

The plant-based dessert and pudding category is the only one to show a decline in sales value between 2022 and 2023, with a 6.6% decrease. While this dataset cannot determine the reason for the decline, it is possible that desserts and puddings, as non-essential items, have suffered from the broader pressures on consumer spending caused by food inflation.

Plant-based food sales value by category in Germany, 2023 (€ millions)



Change in the sales value of plant-based foods between 2022 and 2023 in Germany (% change in sales value)



Branded versus private label

Private-label products – i.e. supermarket or discount store own-label products – are becoming increasingly important players in the German plant-based market. Their growth rate has outpaced that of branded products, with total sales volume across the eight product categories in this report rising by 45% between 2021 and 2023, compared to an increase of 15% for branded products.

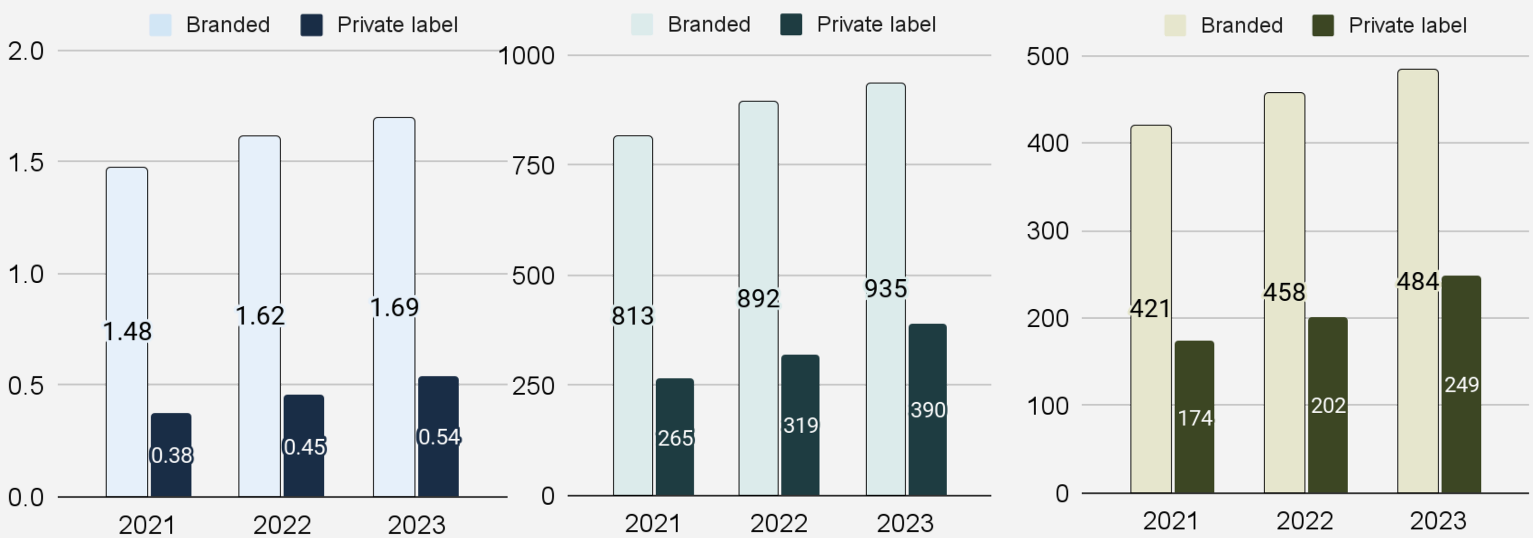
As shown in each product category section, the average price per kg of private label products tends to be lower than for branded products. This relative affordability could be encouraging the strong sales performance of private-label plant-based foods, particularly in the context of inflation across the wider food sector.

Plant-based sales and growth rates across eight product categories, branded versus private label, Germany

	Sales value			Unit sales			Sales volume		
	2023, € billion	2022-23 change	2021-23 change	2023, million units	2022-23 change	2021-23 change	2023, million kg	2022-23 change	2021-23 change
Branded	1.69	4.7%	14.7%	935	4.7%	14.9%	484	5.5%	14.9%
Private label	0.54	19.5%	44.5%	390	22.3%	47.3%	249	23.4%	43.5%

Plant-based food sales across eight categories in Germany, branded versus private label, 2021-2023

Sales value (€ billions) **Units sold** (millions) **Volume sold** (million kg)

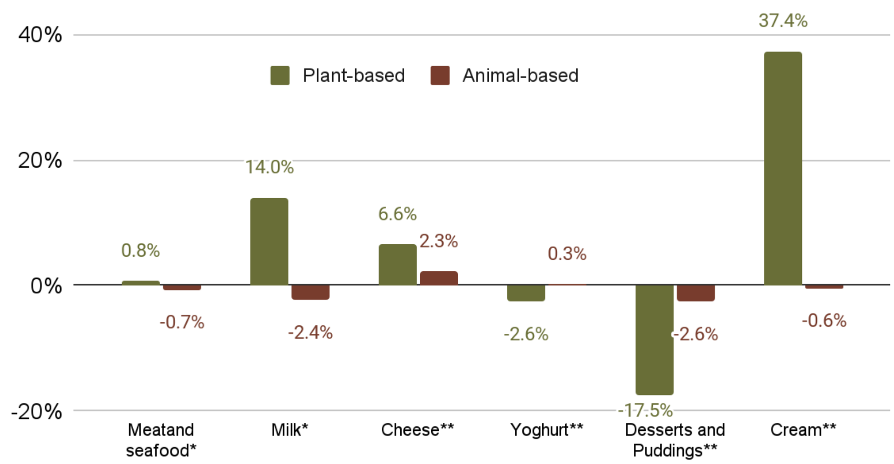


Comparison to animal-based foods

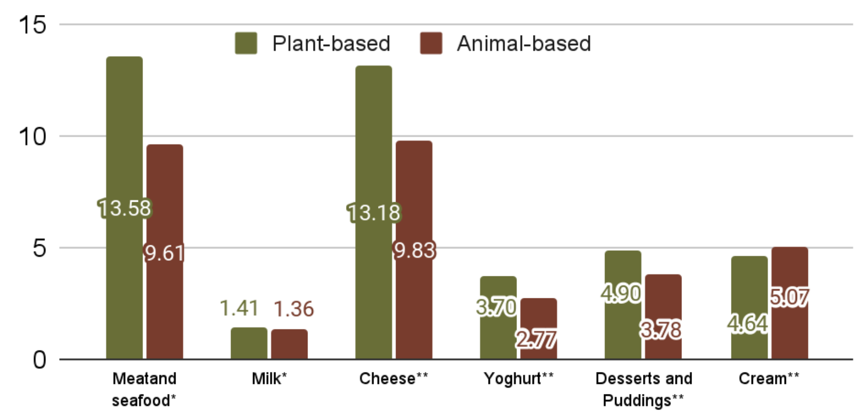
Plant-based products have increased in sales volume between 2022 and 2023 significantly more than their animal-based equivalents for three categories: milk and drinks, cheese, and cream. For yoghurt and dessert and pudding, animal-based products have outperformed plant-based products in sales volume. In the combined category of meat, fish and seafood, sales of plant-based versions have increased marginally while sales of animal-based equivalents have decreased marginally.

The strongest annual growth in sales value is seen in the plant-based cream category. Notably, plant-based cream is also the only plant-based category to have become cheaper than its animal-based equivalent, although milk and drinks are close to price parity.

Change in the sales volume of pre-packaged plant- and animal-based foods between 2022 and 2023 in Germany (%)



Average price per kg of plant- and animal-based foods in Germany, 2023 (€ per kg)



*Private label and branded products combined **Branded products only

Household purchase patterns

The Circana retail sales data in this report measures sales of products using data from supermarkets and discounter stores. However, it does not give any information about who is buying those products.

For an alternative view, GFI Europe also obtained household panel data from CPS-GfK. This measures the food purchases made by a representative sample of households in Germany. It can indicate whether sales of a certain product are influenced more by reaching new consumers, or by increasing sales among existing consumers.

In 2023, the penetration for plant-based meat alternatives[4] was 37.4%, meaning that 37.4% of German households purchased plant-based meat alternatives on at least one occasion during that year. The repeat rate was 69.1%, meaning that 69.1% of households that bought plant-based meat alternatives did so on *more than one* occasion that year.

The penetration rose between 2021 and 2023, while the repeat rate remained roughly constant. This suggests that a greater proportion of German households bought plant-based meat alternatives more than once in 2023, compared to 2021.

For plant-based milk, in 2023 the penetration was 36.5% and the repeat rate was 75.3%.

The penetration remained approximately constant between 2021 and 2023, while the repeat rate increased. This suggests that the increase in plant-based milk sales shown by the retail sales data has come from a higher average number of purchases among households that did buy plant-based milk rather than from reaching new customers.

Penetration and repeat rate for plant-based meat alternatives and plant-based milk are shown in the table below. For visualisations of how many households bought plant-based meat alternatives once, multiple times or not at all, see the relevant graphs in the “Plant-based meat” and “Plant-based milk and drinks” sections of this report.

[4] Plant-based meat (meat analogues) including the frozen category of the German CPS GfK/YouGov Consumer Panel CP+ 2.0 FMCG.

Germany household purchase patterns, penetration and repeat rate for plant-based food, 2021-2023

Germany	Penetration			Repeat Rate		
	2021	2022	2023	2021	2022	2023
Plant-based meat alternatives	33.8%	36.6%	37.4%	69.0%	71.0%	69.1%
Plant-based milk	36.3%	36.3%	36.5%	73.8%	74.7%	75.3%

Data source: CPS-GfK Consumer Panel FMCG, gross sample 30,000 households, years 2021, 2022, 2023, penetration %, repeat rate % for meat analogues and plant-based milk. The panel is representative of all households in Germany with household members aged 16 and over, and continuously and electronically records purchases for private consumption and shows them weighted and extrapolated.

Plant-based meat

Total market

Between 2022 and 2023, the annual sales value of plant-based meat in Germany increased by 6% to €922 million. Over the same time period, unit sales increased by 3.7% to 425 million units and sales volume increased by 0.8% to 67.8 million kg.

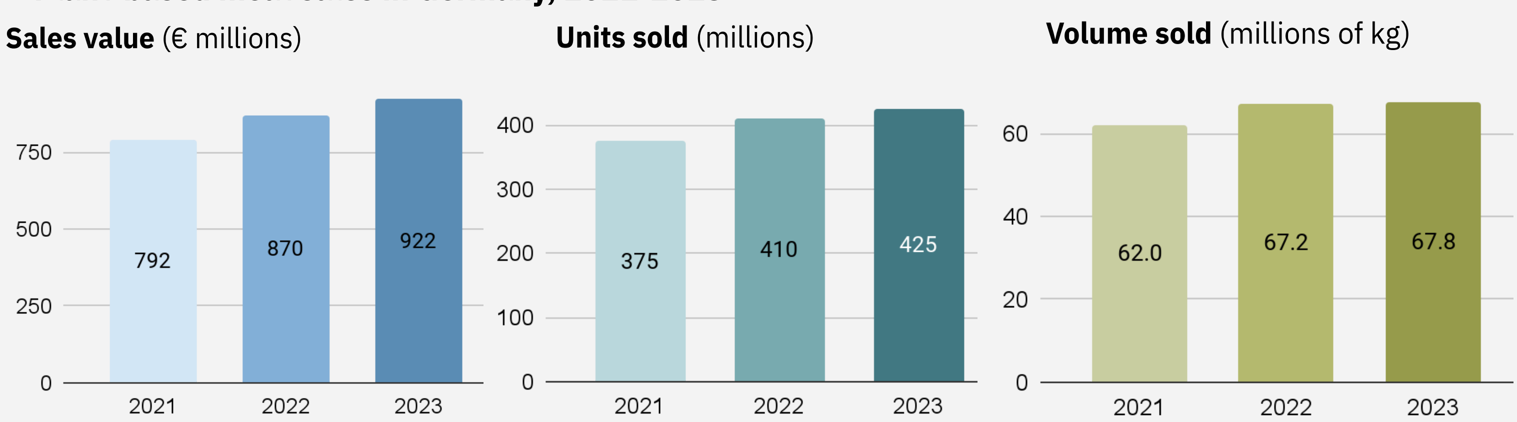
Between 2021 and 2023, there was a 16.5% increase in sales value, a 13.5% increase in unit sales and a 9.3% increase in sales volume.

Partial year data for 2024 (from 1 January until 28 April) shows that the weekly average value of plant-based meat sales was up 9.4% relative to the full year 2023, while unit sales were up 15.4% and sales volume was up 16.3%.

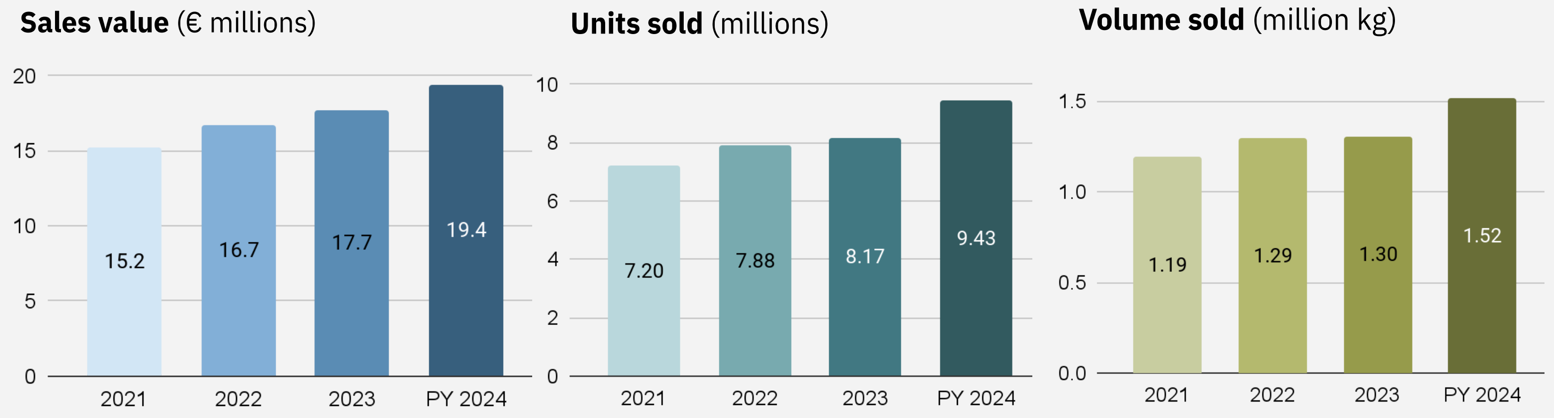
The plant-based meat category in Germany includes products in a range of formats designed to mimic meat, such as burgers and sausages. It does not include tofu, tempeh and seitan – however, those categories are also presented in this report for the sake of completeness.

For comparison, the combined sales volume of tofu, tempeh and seitan rose by 6.3% between 2022 and 2023, reaching 9.1 million kg in 2023. The relatively strong performance of tofu, tempeh and seitan could be explained by their average price, which at €6.98 per kg in 2023 was roughly half of the average price of plant-based meat (€13.58 per kg). However, the market for tofu, tempeh and seitan remains relatively small compared to that of plant-based meat.

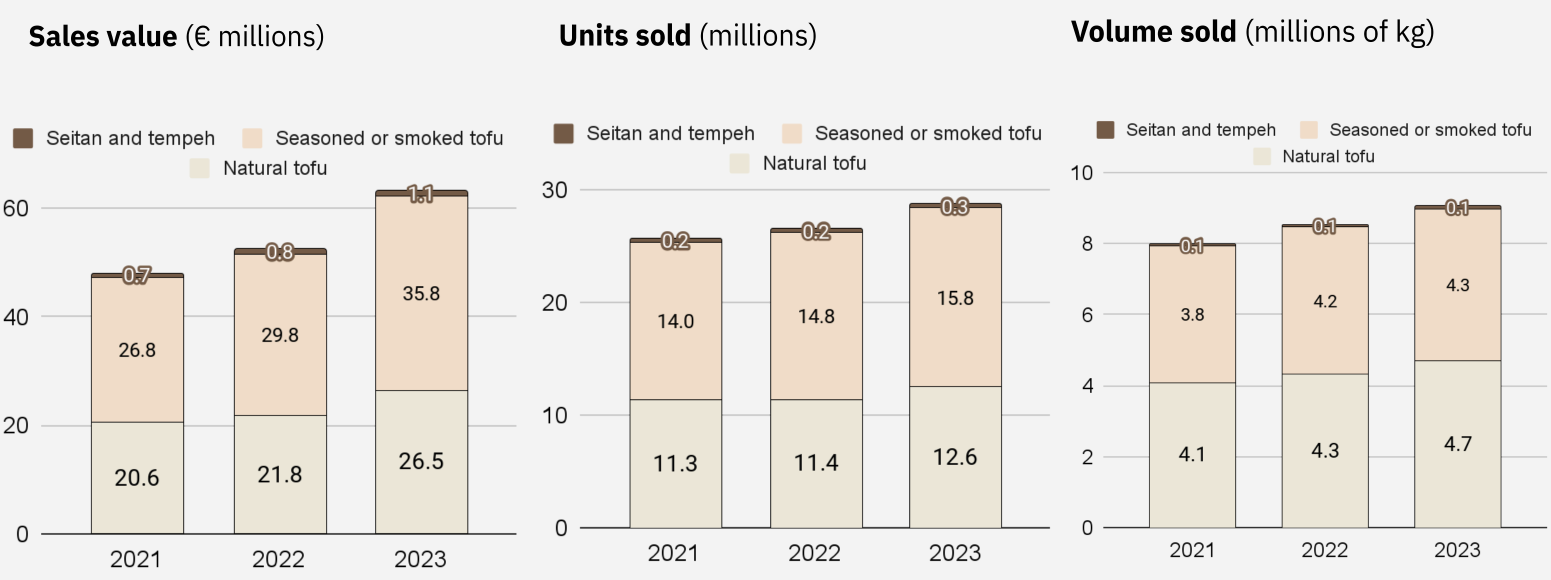
Plant-based meat sales in Germany, 2021-2023



Plant-based meat sales per week in Germany, 2021-April 2024



Tofu, seitan and tempeh sales in Germany, 2021-2023

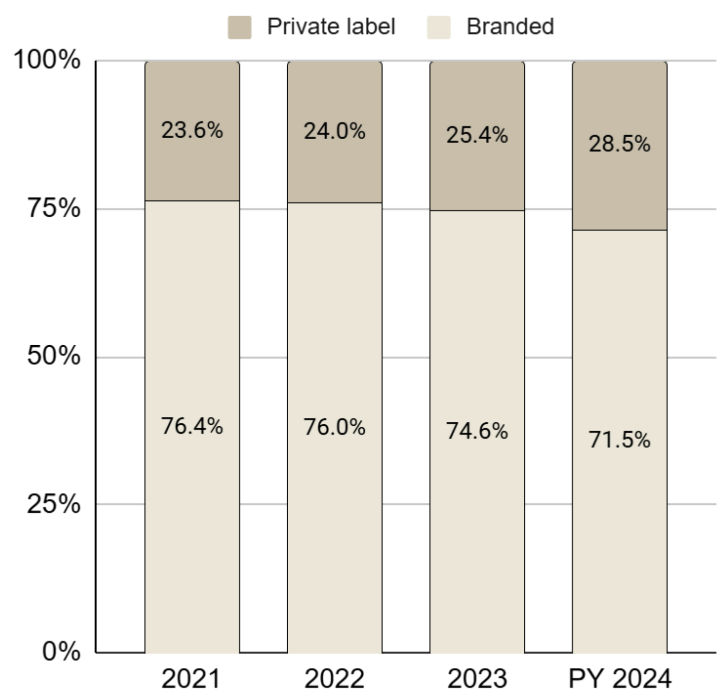


Branded versus private label

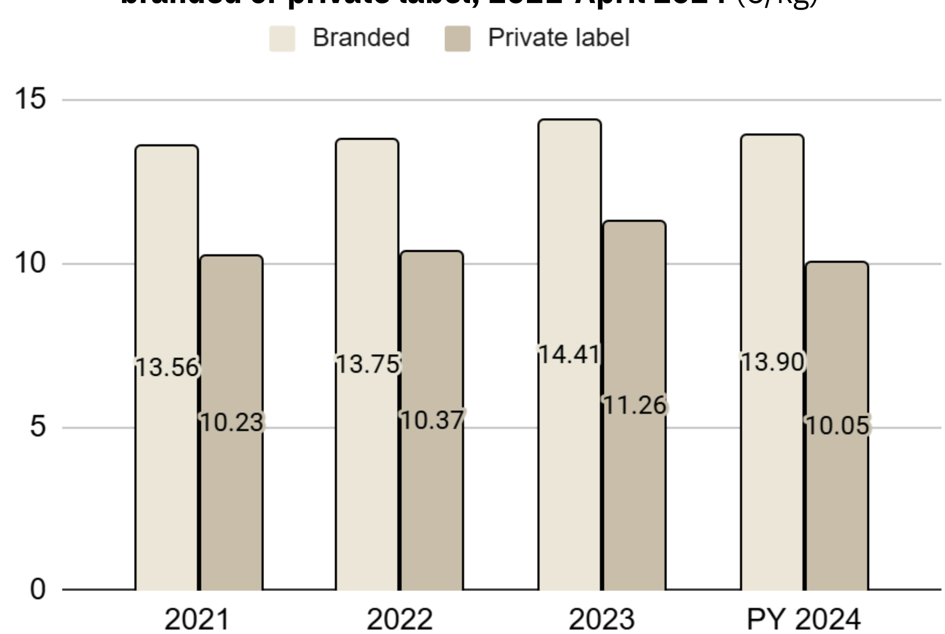
Between 2022 and 2023, the sales volume of private label plant-based meat products (i.e. supermarket and discount store own-brand products) increased by 6.7%, while the sales value of branded plant-based meat products fell by 1.1%.

The percentage of plant-based meat sales that are private label increased from 23.6% in 2021 to 28.5% in early 2024. The lower price of private-label products relative to branded items may have contributed to their strong performance.

Germany plant-based meat sales by branded or private label, 2021-April 2024 (% of volume sales)



Average price per kg of plant-based meat in Germany, by branded or private label, 2021-April 2024 (€/kg)



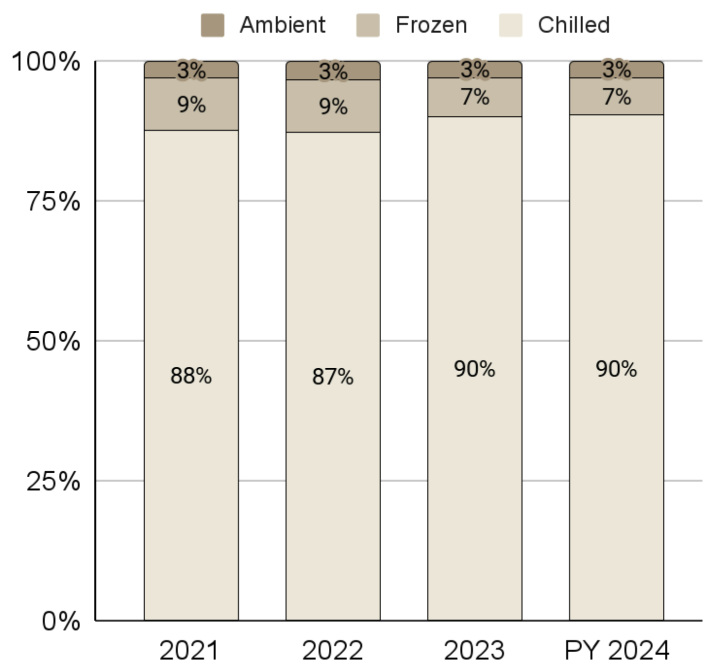
Product format breakdown

A further breakdown of product formats is only available for branded products, so the percentages in this section do not account for private-label products.

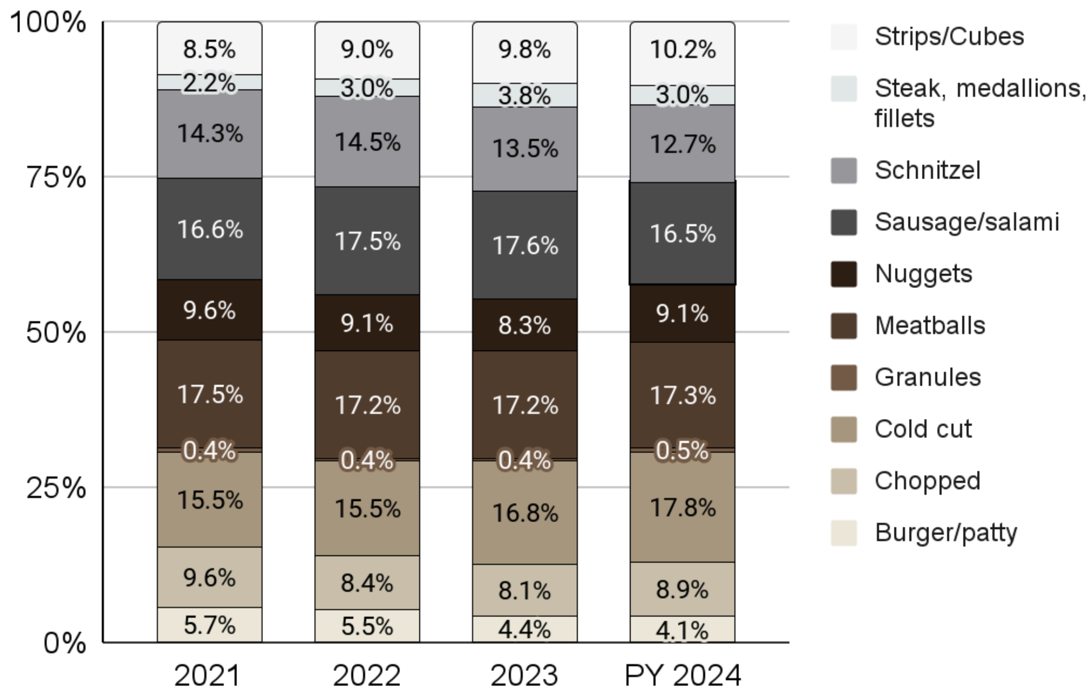
The vast majority of plant-based meat sales in Germany for which data is available are chilled (90% of sales volume in 2023), followed by frozen (7%) and ambient (3%).

A wide range of product formats are available, with sausage/salami leading in 2023 at 17.6% of sales volume, followed by meatballs at 17.2% and cold cuts at 16.8%.

Germany branded plant-based meat sales by temperature, 2021-April 2024 (% of sales volume)



Germany branded plant-based meat sales by format, 2021-April 2024 (% of volume sales)

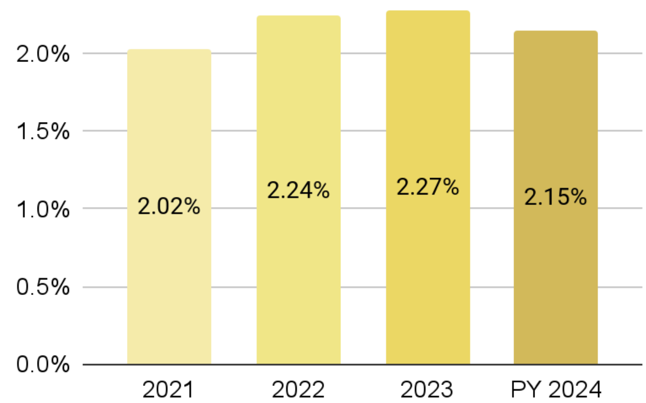


Market share

The animal-based data for Germany does not separate fish/seafood and meat. Therefore, the market share for pre-packaged plant-based fish/seafood and meat has been calculated as a single figure (including both branded and private label products). See the next section for further details on plant-based seafood sales.

The plant-based market share for meat, fish and seafood rose from 2.02% in 2021 to 2.27% in 2023, as a percentage of overall pre-packaged meat, fish and seafood sales volume, before falling again to 2.15% in early 2024.

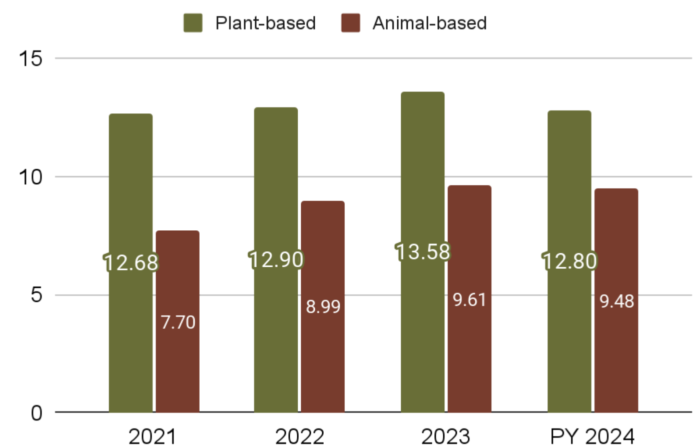
Plant-based meat, fish and seafood: share of Germany's total (plant- and animal-based) pre-packaged meat, fish and seafood market, 2021-April 2024 (% of sales volume)



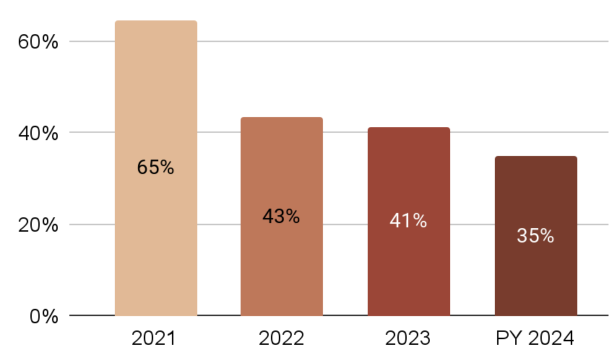
Price trends relative to animal equivalent

Similarly, price trends relative to animal-based equivalents have been calculated on the basis of the combined category of meat and fish/seafood. Plant-based meat, fish and seafood products are consistently more expensive, on average, than their animal-based equivalents. However, the price gap has decreased over time, from 65% more expensive in 2021 to 35% more expensive in early 2024.

Germany: Average price per kg for plant-based and animal-based meat, fish and seafood 2021-April 2024 (€/kg)



Germany: price difference for plant-based meat, fish and seafood compared to animal-based meat, 2021-April 2024 (%)

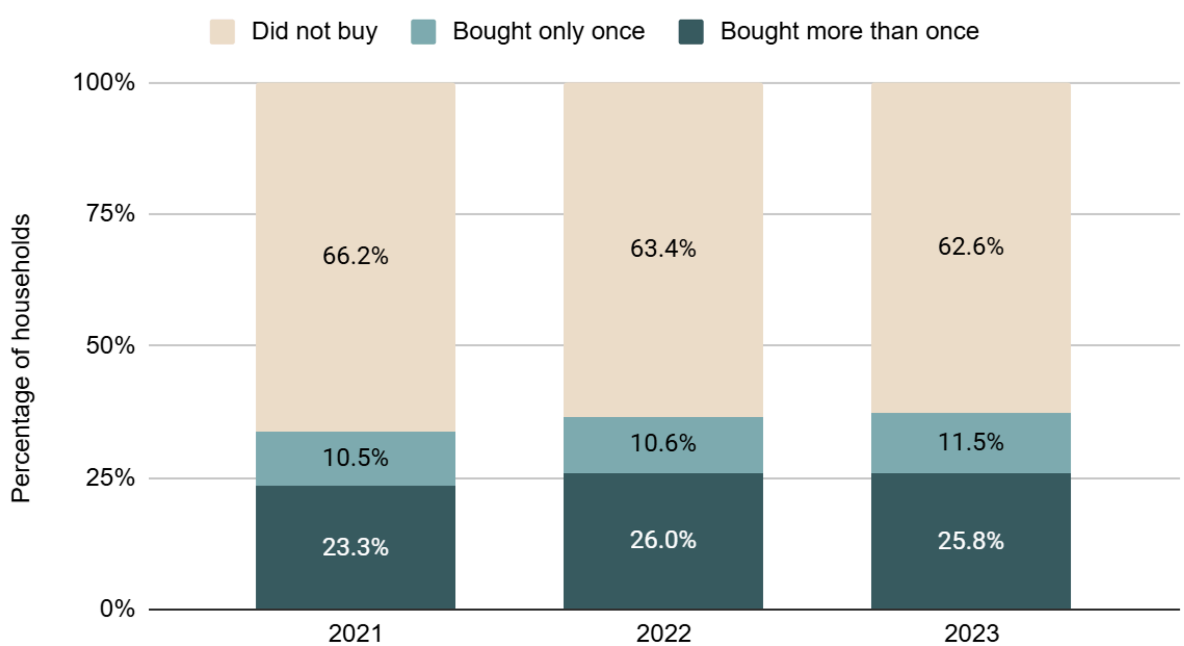


Household panel data

Between 2021 and 2023, the proportion of all households in Germany that bought plant-based meat alternatives[5] at least once during a year rose from 33.8% to 37.4%, while the repeat rate stayed roughly constant (69% in 2021 and 69.1% in 2023). This means that the proportion of all households[6] that bought plant-based meat alternatives more than once during a year has risen, from 23.3% to 25.8%.

So the increase in sales of plant-based meat alternatives seen in Germany between 2021 and 2023 is partly caused by more households buying plant-based meat alternatives, and partly caused by more of those households buying more often.

Germany household purchase patterns for plant-based meat alternatives, 2021-2023



Data source: CPS-GfK Consumer Panel FMCG, gross sample 30,000 households, years 2021, 2022, 2023, penetration %, repeat rate % for meat analogues and plant based milk. The panel is representative of all households in Germany with household members aged 16 and over, and continuously and electronically records purchases for private consumption and shows them weighted and extrapolated.

[5] Plant-based meat (meat analogues) including the frozen category of the German CPS GfK/YouGov Consumer Panel CP+ 2.0 FMCG.
[6] Calculated by multiplying penetration (percentage of all households buying plant-based meat at least once during one year) by the repeat rate (households buying on more than one occasion during a year, as a percentage of households that bought at least once).

Plant-based seafood

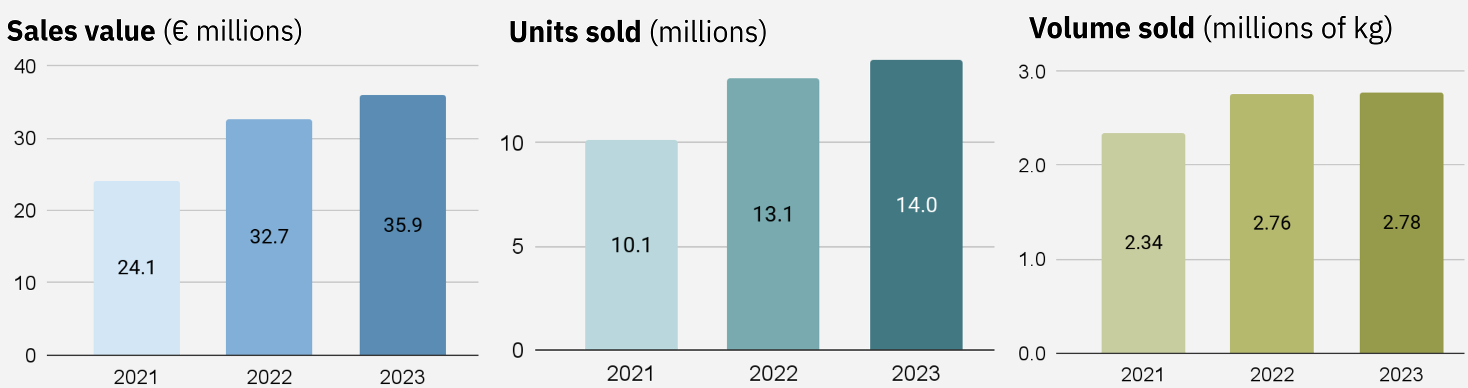
Total market

Between 2022 and 2023, the total annual sales of plant-based seafood (including plant-based fish) in Germany increased by 9.8% to reach €36 million. Over the same time period, unit sales increased by 6.7% to 14 million units and sales volume increased by 0.5% to 2.78 million kg.

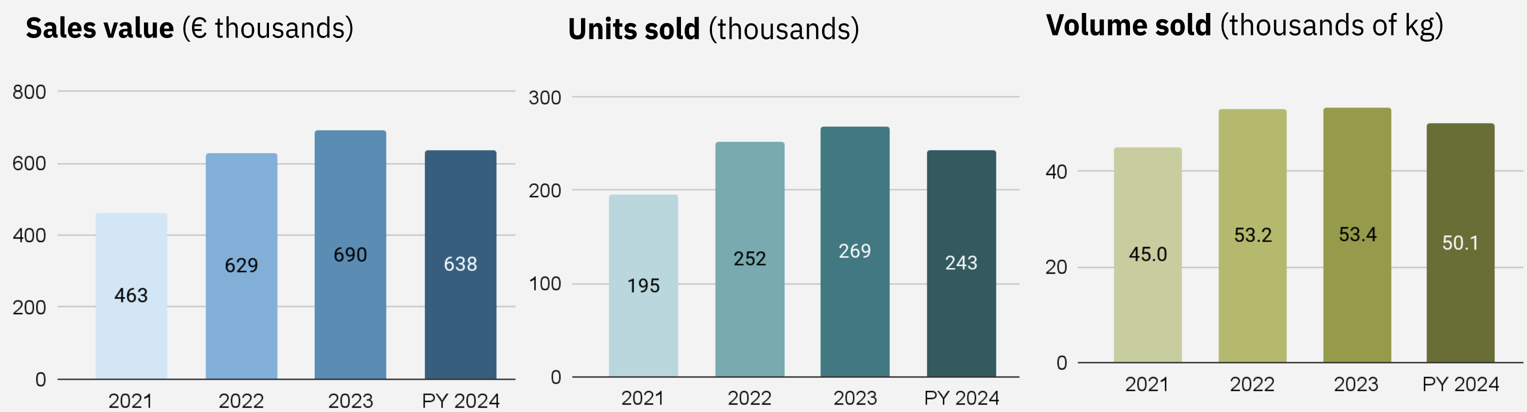
The increase between 2021 and 2023 was larger, with sales value up 49.1%, unit sales up 38% and sales volume up 18.7%.

Partial year data for 2024 (from 1 January until 28 April) shows that the weekly average value of plant-based seafood sales was down 7.6% relative to the full year 2023, while unit sales were down 9.5% and sales volume was down 5.8%.

Plant-based seafood sales in Germany, 2021-2023



Plant-based seafood sales per week in Germany, 2021-April 2024

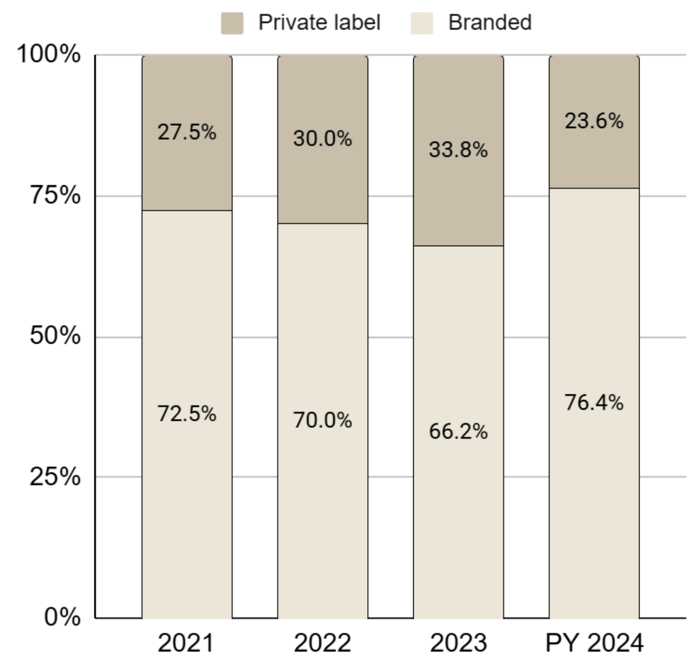


Branded versus private label

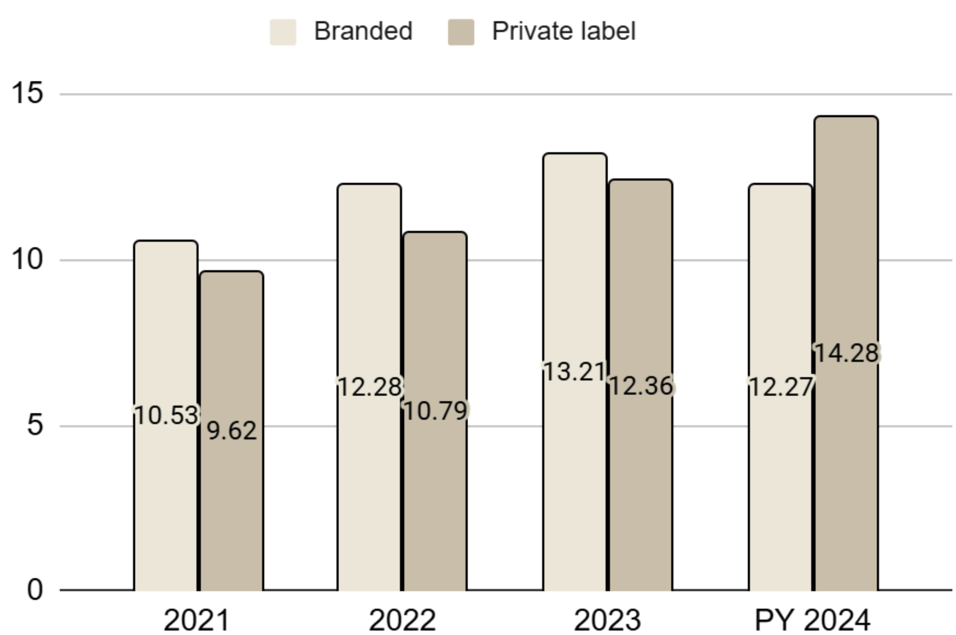
Between 2022 and 2023, the sales volume of private label plant-based seafood products (i.e. supermarket and discount store own-brand products) increased by 13.1%, while the sales value of branded plant-based seafood products fell by 4.9%.

The percentage of plant-based seafood sales that are private label has increased from 27.5% in 2021 to 33.8% in 2023. There was a fall to 23.6% in early 2024, possibly caused by the average price per kg of private-label products overtaking that of branded products.

Germany plant-based seafood sales by branded or private label, 2021-April 2024 (% of sales volume)



Average price per kg of plant-based seafood, by branded or private label, 2021-April 2024 (€/kg)



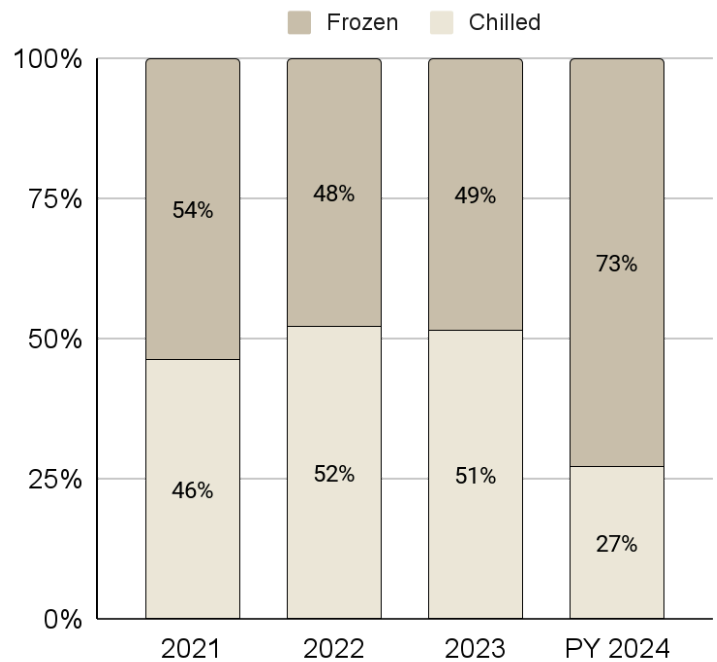
Product format breakdown

A further breakdown of product formats is only available for branded products, so the percentages in this section do not account for private-label products.

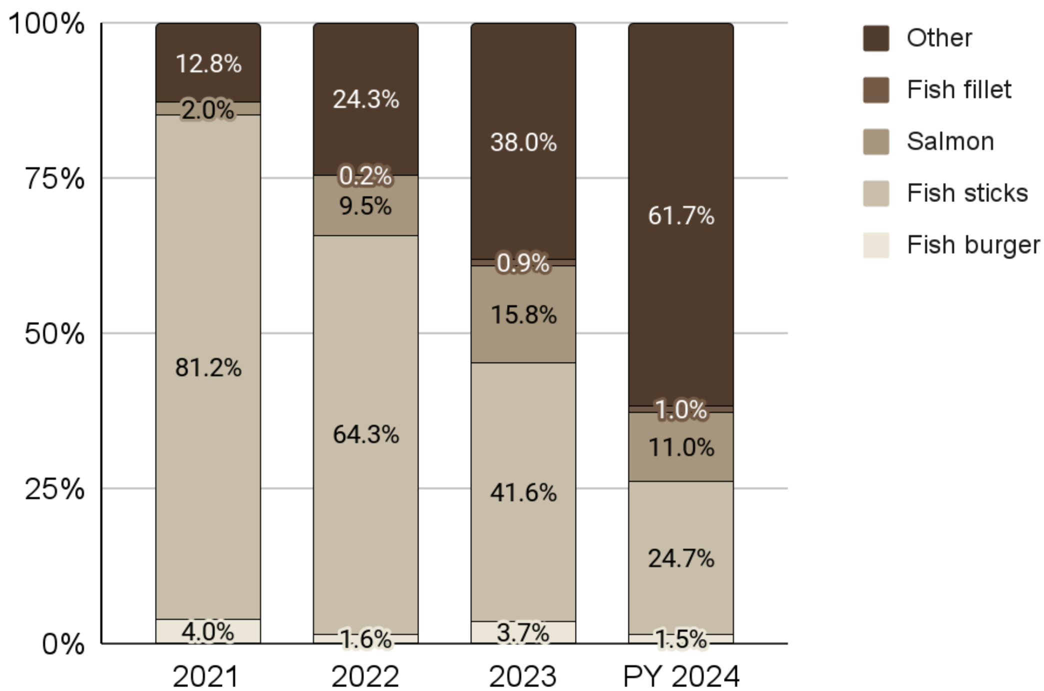
In 2023, around half (51%) of branded plant-based seafood sales in Germany were chilled and 49% were frozen. Partial year data for 2024 suggests that the proportion of plant-based seafood that is frozen has risen.

While plant-based fish sticks were by far the most popular format in 2021, this share has rapidly shrunk as other formats have grown. While the data does not show the formats covered by the "other" category, plant-based fish fillets and salmon have increased their market share since 2021.

Germany branded plant-based seafood sales by temperature, 2021-April 2024 (% of sales volume)



Germany branded plant-based seafood sales by format, 2021-April 2024 (% of sales volume)

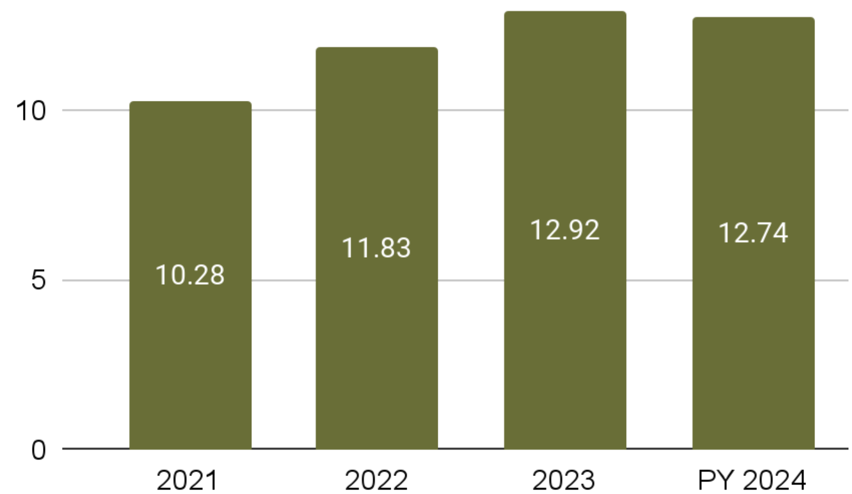


Price trends

The average price per kg of plant-based seafood increased from €10.28 in 2021 to €12.92 in 2023. It is possible that this price increase could have contributed to the levelling off in sales volume between 2022 and 2023. However, partial year data for 2024 suggests that the price is falling slightly.

See the combined meat and seafood data in the "Price trends" paragraph of the "Plant-based meat" section above for a comparison with animal-based meat and seafood prices.

Germany: Average price per kg for plant-based seafood, 2021-April 2024 (€/kg)



Plant-based ready meals

Total market

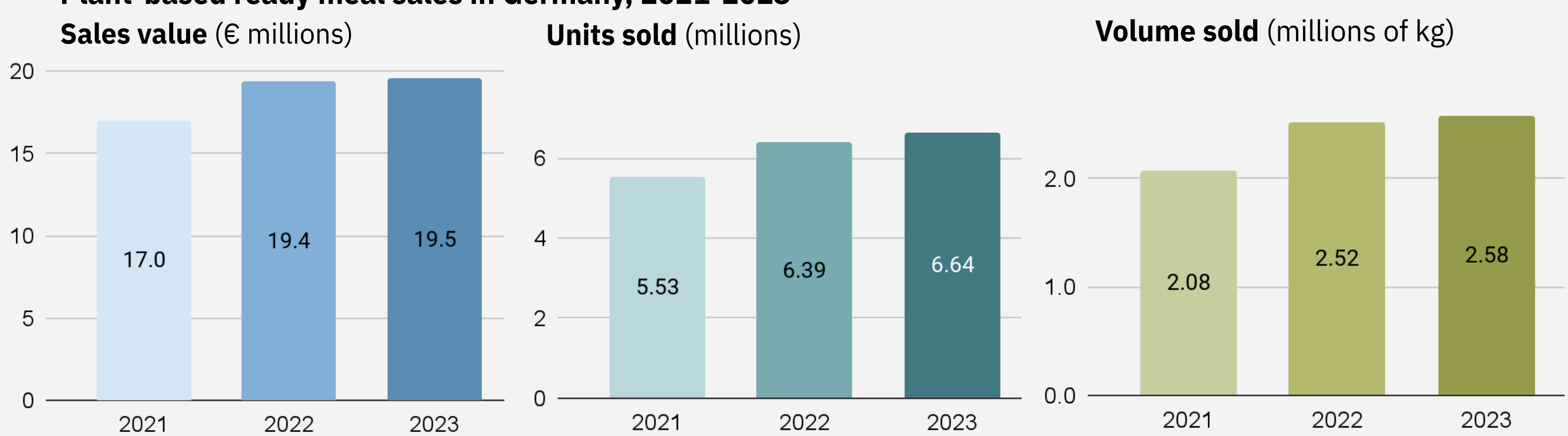
Between 2022 and 2023, the total annual sales value of plant-based ready meals[7] in Germany rose by 0.8% to €19.5 million. Over the same time period, unit sales increased by 3.9% to 6.6 million units and sales volume rose by 2.6% to 2.6 million kg.

Between 2021 and 2023, there was a 14.8% increase in sales value, a 20% increase in unit sales and a 24.2% increase in sales volume.

Partial year data for 2024 (from 1 January until 28 April) shows that the weekly average value of plant-based ready meal sales was up 28.1% relative to the full year 2023, while unit sales were up 23.8% and sales volume was up 21.8%.

The plant-based ready meal data for Germany does not distinguish between items that do and do not contain plant-based meat analogues. The ready meal category may therefore include dishes based primarily on vegetables or legumes, for example. Side salads, ready-made sauces and sandwiches are excluded from the ready meal category.

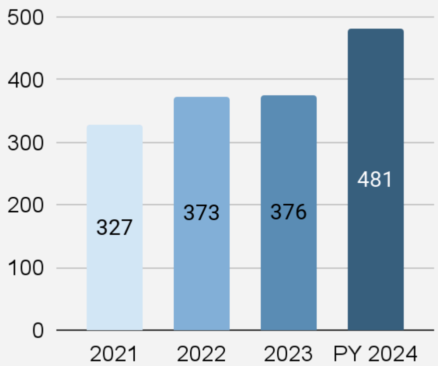
Plant-based ready meal sales in Germany, 2021-2023



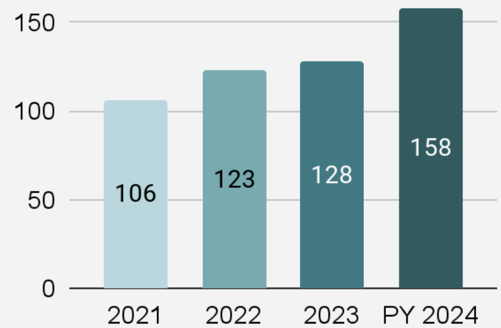
[7] The total sales of plant-based ready meals in Germany are significantly lower than reported in GFI Europe's previous publication, Germany: Plant-Based Foods Retail Market Report (2020-2022). This is likely due to different category definitions. In the previous report, the ready meals category covered prepared meals including sandwiches, lasagnas, and vegetable dishes. In the current report, the category covers complete meals excluding sandwiches, ready-made sauces and side salads.

Plant-based ready meal sales per week in Germany, 2021-April 2024

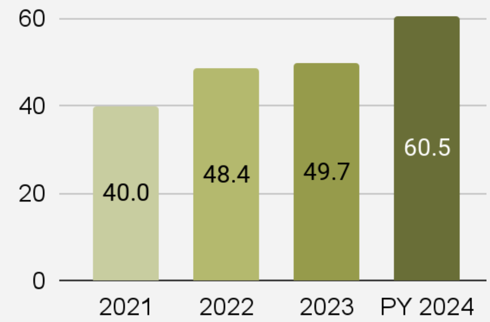
Sales value (€ thousands)



Units sold (thousands)



Volume sold (thousands of kg)

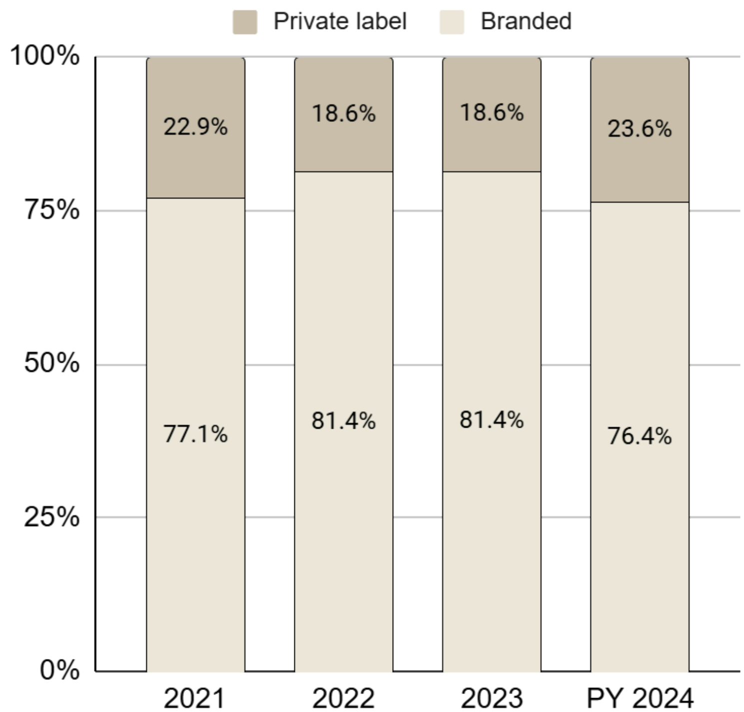


Branded versus private label

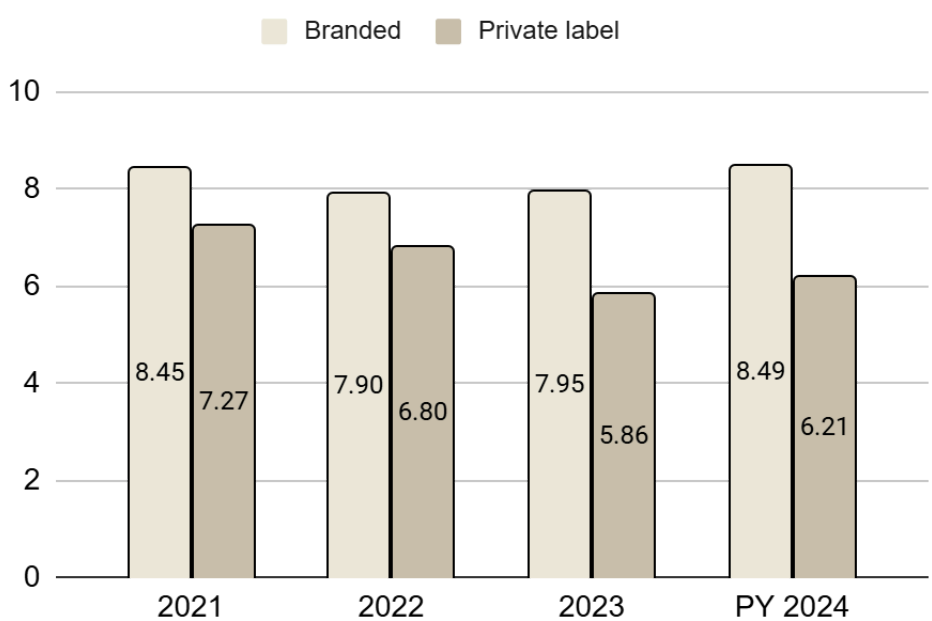
Between 2022 and 2023, the sales volume of private-label plant-based ready meals (i.e. supermarket and discount store own-brand products) increased by 2.2%, while the sales volume of branded products increased by 2.7%.

The percentage of plant-based ready meal sales that are private-label has fallen from 22.9% in 2021 to 18.6% in 2022 and 2023. There was a rebound to 23.6% in early 2024, perhaps influenced by the rising price premium of branded products relative to private label.

Germany plant-based ready meal sales by branded or private label, 2021-April 2024 (% of sales volume)



Average price per kg of plant-based ready meals, by branded or private label, 2021-April 2024 (€/kg)

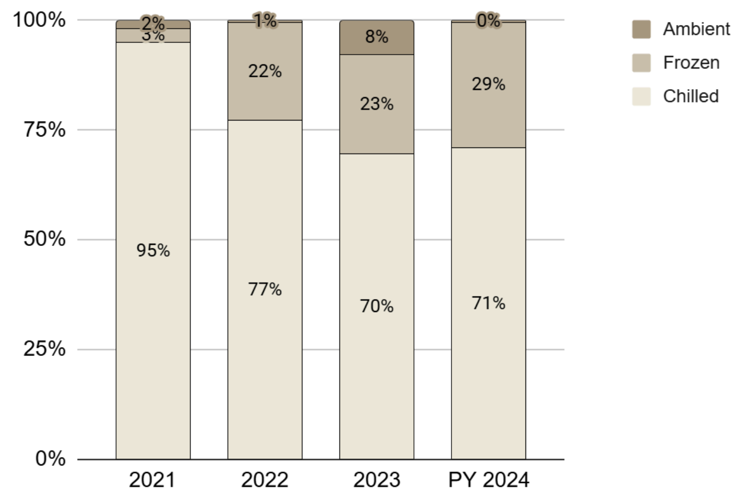


Product format breakdown

A further breakdown of product formats is only available for branded products, so the percentages in this section do not account for private-label products.

The majority of branded plant-based ready meals for which temperature data is available were chilled (70% of volume sales in 2023). However, the proportion of chilled ready meals has fallen since 2021, while the proportions of both frozen and ambient have grown.

Germany branded plant-based ready meals by temperature, 2021-April 2024 (% of sales volume)

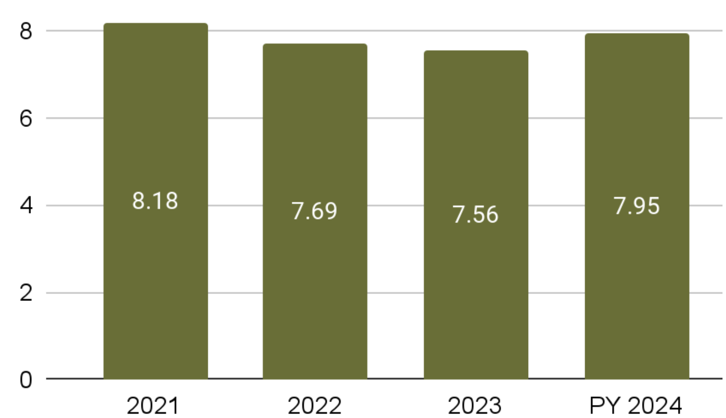


The data does not permit a detailed breakdown of the type of ready meal, with most ready meals falling into the "other" segment (86% of volume sales in 2023).

Price trends

The average price per kg of plant-based ready meals in Germany follows a U-shaped trend, dipping to a low of €7.56/kg in 2023 before climbing again to €7.95/kg in early 2024.

Germany: Average price per kg for plant-based ready meals, 2021-April 2024 (€/kg)



Plant-based milk and drinks

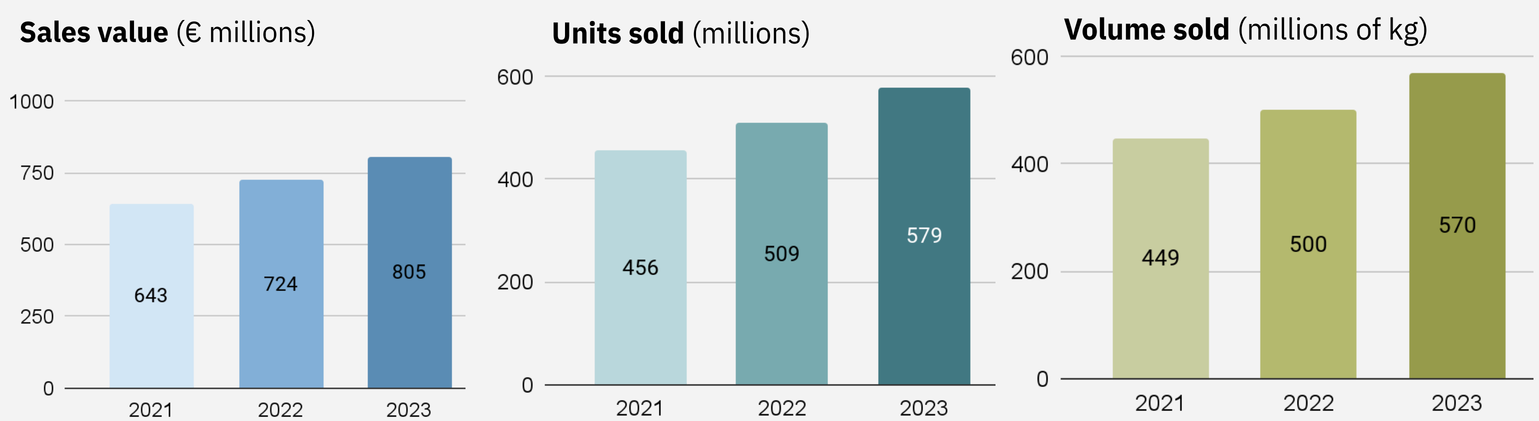
Total market

The plant-based milk and drinks category includes both milk alternatives and dairy-flavoured plant-based drinks such as coffee drinks.

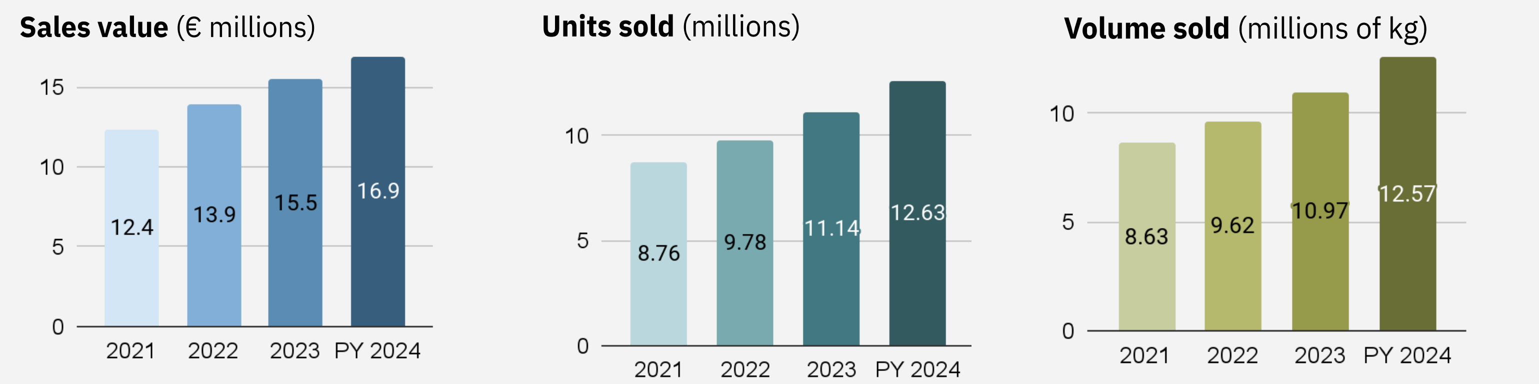
Between 2022 and 2023, the total annual sales value of plant-based milk and drinks in Germany increased by 11.1% to reach €805 million. Over the same time period, unit sales increased by 13.8% to 579 million units and sales volume increased by 14% to 570 million kg. The change between 2021 and 2023 was a 25.2% increase in sales value, a 27.1% increase in unit sales and a 27.1% increase in sales volume.

Partial year data for 2024 (from 1 January until 28 April) shows that the weekly average value of plant-based milk and drinks sales was up 9.4% relative to the full year 2023, while unit sales were up 13.4% and sales volume was up 14.6%.

Plant-based milk and drinks sales in Germany, 2021-2023



Plant-based milk and drinks sales per week in Germany, 2021-April 2024

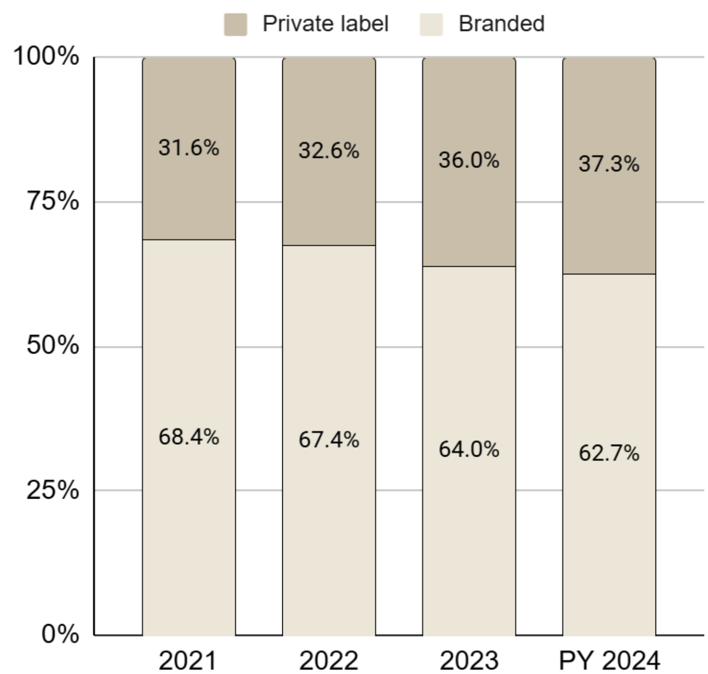


Branded versus private label

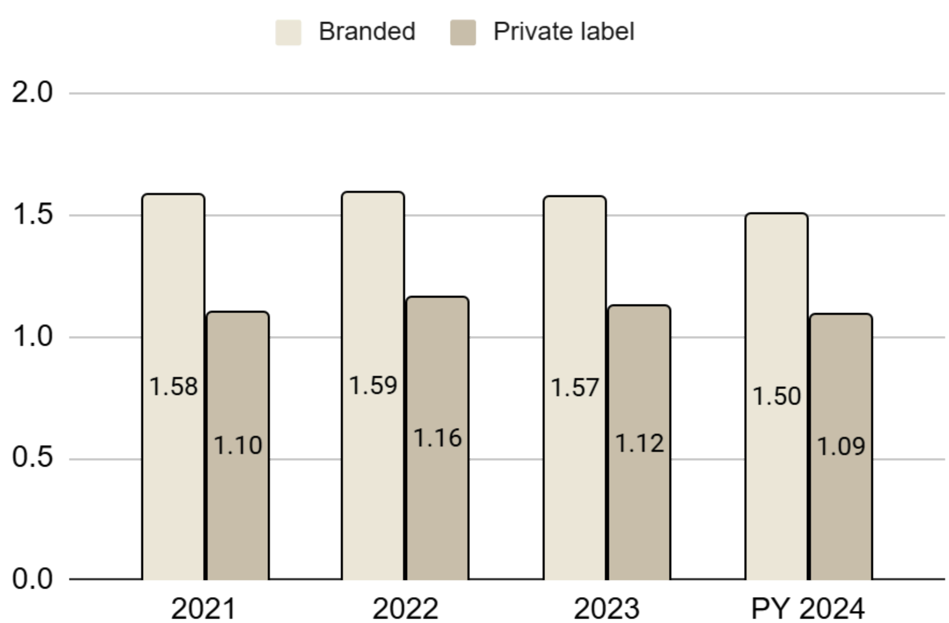
Between 2022 and 2023, the sales volume of private-label plant-based milk and drinks (i.e. supermarket and discount store own-brand products) increased by 25.9%, while the sales volume of branded products increased by 8.3%.

The proportion of plant-based milk and drinks that are private-label rose from 31.6% in 2021 to 37.3% in early 2024, possibly due to the significantly lower cost per kg of private-label products.

Germany plant-based milk and drinks sales by branded or private label, 2021-April 2024 (% of volume sales)



Average price per kg of plant-based milk and drinks, by branded or private label, 2021-April 2024 (€/kg)



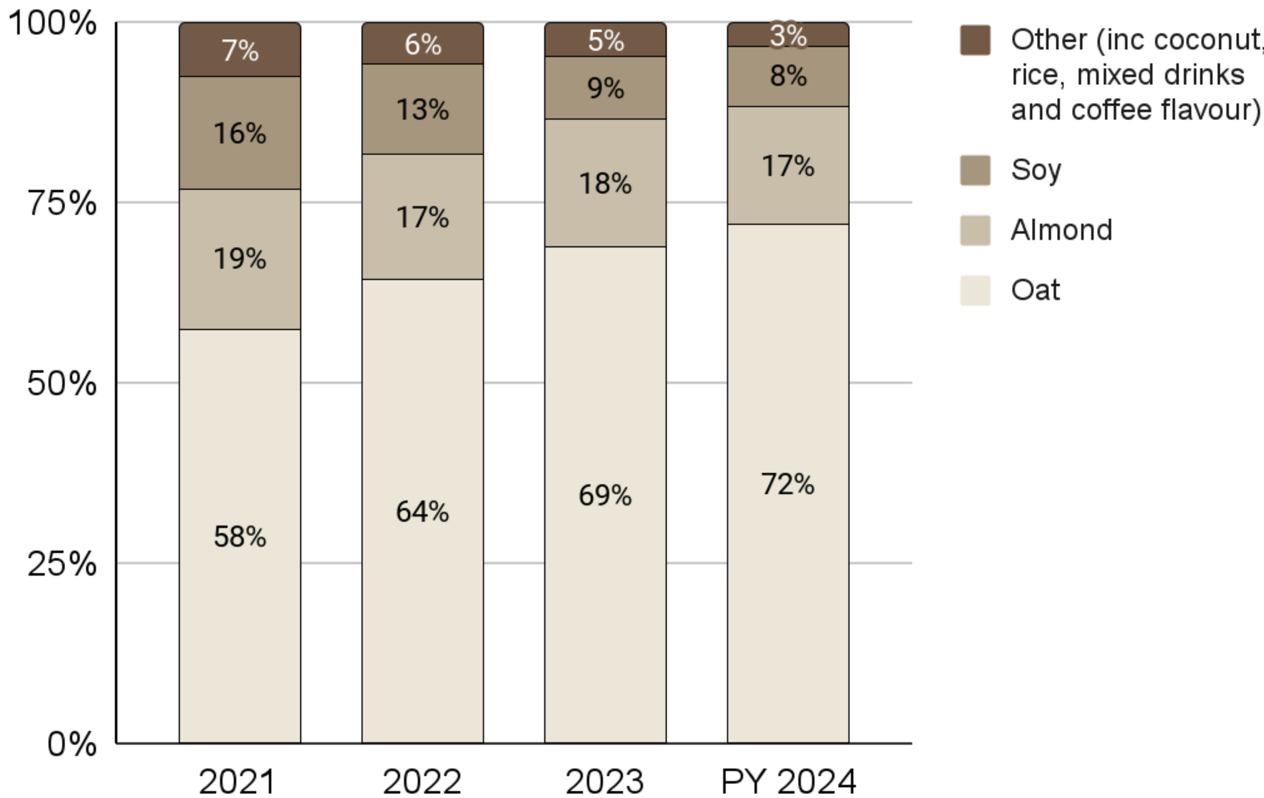
Product format breakdown

A further breakdown of product formats is only available for branded products, so the percentages in this section do not account for private-label products.

The vast majority of branded plant-based milk and drinks for which data is available in Germany are ambient, at over 98% of volume sales in 2023.

The most popular base ingredient is oat, which grew to 69% of volume sales in 2023, followed by almond (18%). The proportion of soy-based milk and drinks is falling, from 16% in 2021 to 8% in early 2024.

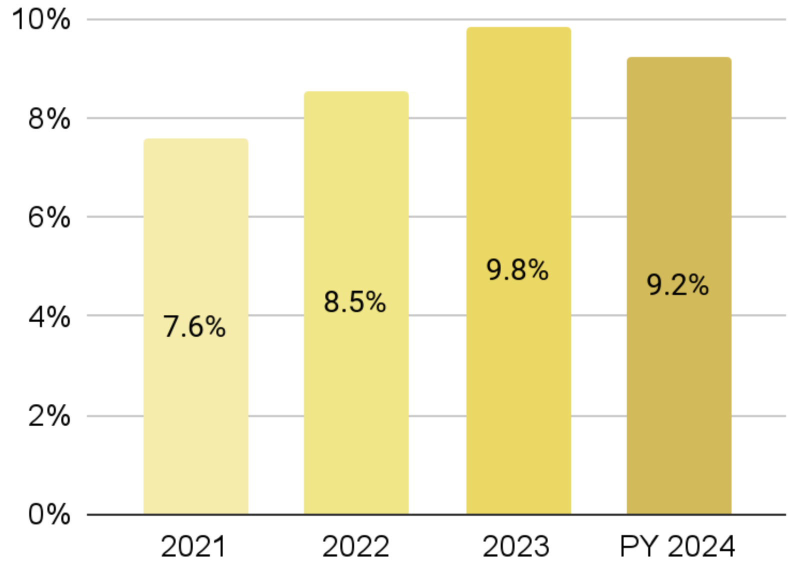
Germany branded plant-based milk and drinks sales by ingredient base, 2021-April 2024 (% of sales volume)



Market share

The market share of plant-based milk and drinks (including both branded and private label products)[8], measured by sales volume, increased from 7.6% in 2021 to 9.8% in 2023. There was a dip to 9.2% in early 2024.

Plant-based milk and drinks: share of Germany's total (plant- and animal-based) milk and dairy drinks market, 2021-April 2024 (% of sales volume)



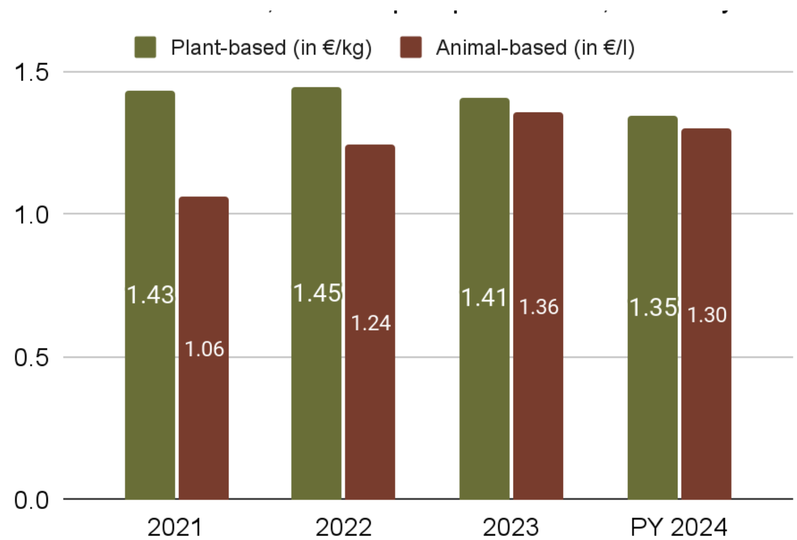
[8] The animal-based component of this calculation includes fresh milk, milk mixed drinks and UHT (long-life) milk.

Price trends relative to animal equivalent

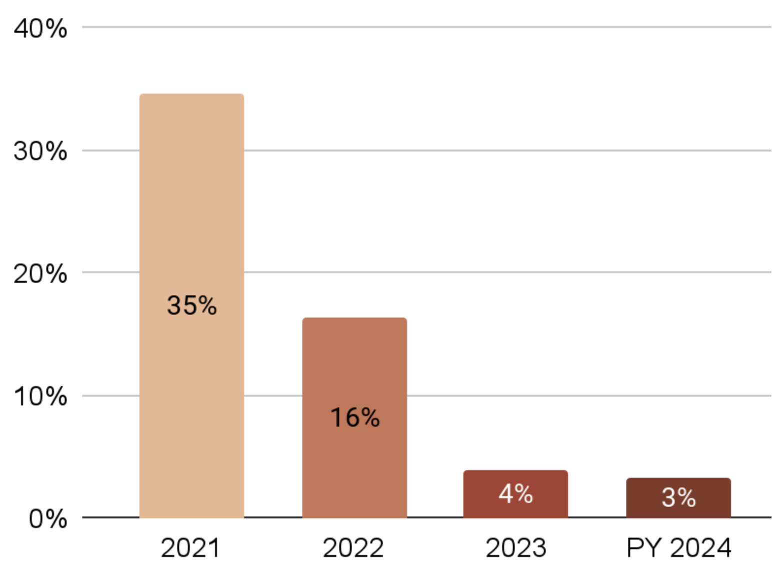
Plant-based milk and drinks remain more expensive[9], on average, than animal-based milk, but the gap has narrowed significantly over time. While plant-based milk and drinks were 35% more expensive in 2021, they were only 3% more expensive in early 2024. This decline in price premium could be contributing to the upward trend in plant-based sales volume.

In Germany, plant-based milk is disadvantaged by the design of the VAT (value added tax), because the reduced rate of 7% is applied to cow's milk, while the full rate of 19% is applied to plant-based milk. Without this fiscal disadvantage, the plant-based milk category would have already achieved price parity, which could lead to significantly higher sales volumes.

Germany: Average price per kg or litre for plant-based and animal-based milk and dairy drinks, 2021-April 2024 (€/kg or €/litre)



Germany: price difference for plant-based milk and drinks compared to animal-based milk and drinks, 2021-April 2024 (€/l)



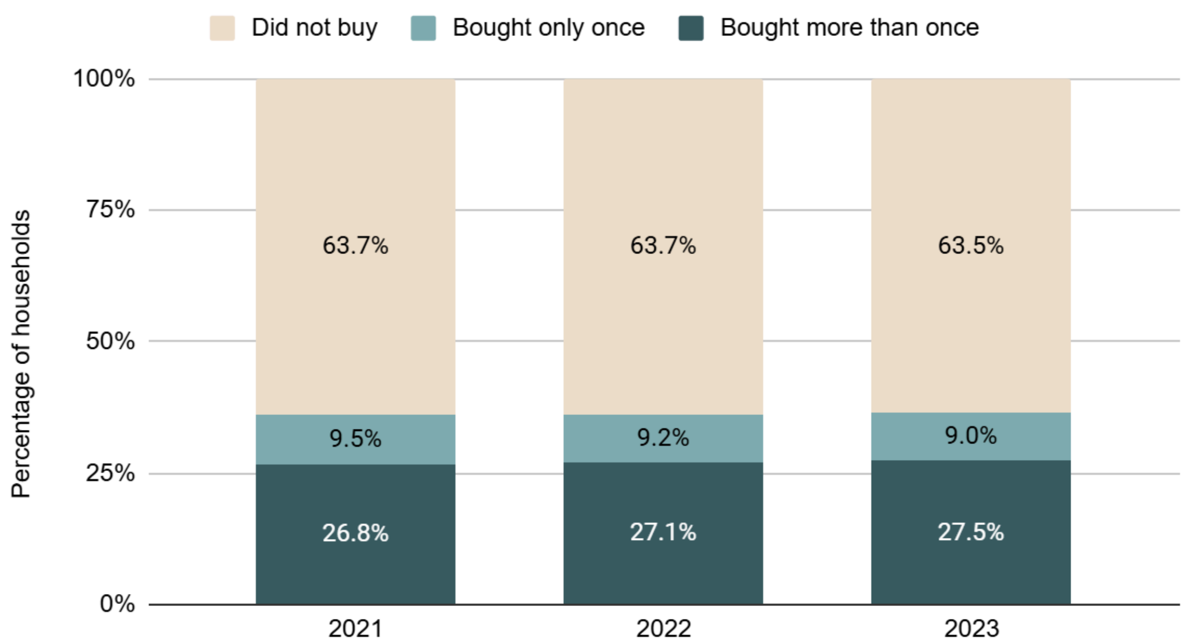
[9] Note that in Germany, sales volume was given in kg for plant-based milk and drinks but in litres for animal-based milk. The price premium calculations assume that 1 kg is roughly equal to 1 litre. The animal-based milk data covers both branded and private label products.

Household panel data

Between 2021 and 2023, the proportion of all households buying plant-based milk at least once during a year remained steady at around 36%. The proportion of all households[10] buying plant-based milk *more than once* during a year has increased slightly, from 26.8% to 27.5%.

The increase in sales shown by the retail data therefore appears to be caused by more frequent purchases, rather than by more consumers buying plant-based milk.

Germany household purchase patterns for plant-based milk, 2021-2023



Data source: CPS-GfK Consumer Panel FMCG, gross sample 30,000 households, years 2021, 2022, 2023, penetration %, repeat rate % for meat analogues and plant based milk. The panel is representative of all households in Germany with household members aged 16 and over, and continuously and electronically records purchases for private consumption and shows them weighted and extrapolated.

[10] Calculated by multiplying penetration (percentage of all households buying plant-based milk at least once during one year) by the repeat rate (households buying on more than one occasion during a year, as a percentage of households that bought at least once).

Plant-based cheese

Total market

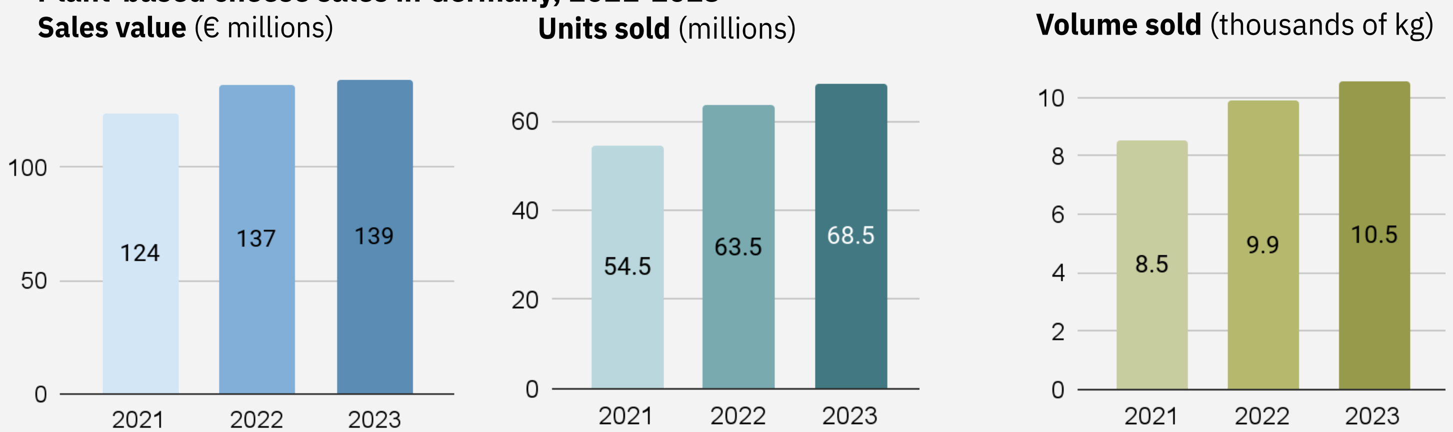
Between 2022 and 2023, the total annual sales value of plant-based cheese in Germany increased by 1.6% to €139 million. Over the same time period, unit sales increased by 7.9% to 68.5 million units and sales volume increased by 6.6% to 10.5 million kg.

Between 2021 and 2023, there was a 12.2% increase in sales value, a 25.7% increase in unit sales and a 23.5% increase in sales volume.

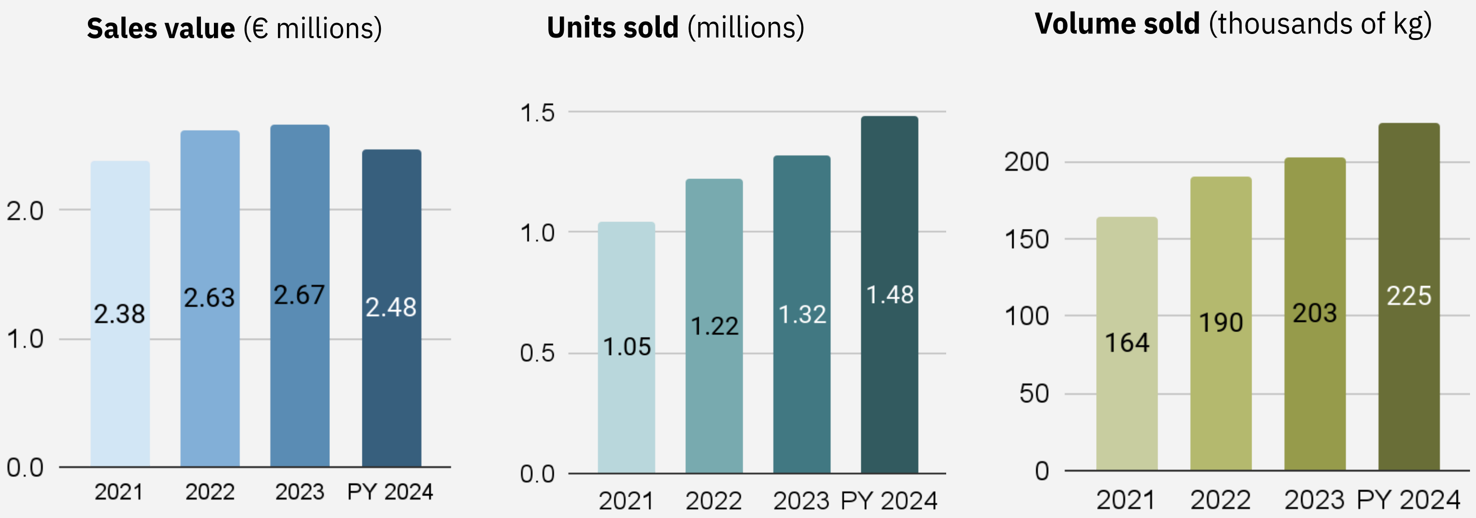
The relatively low increase in sales value appears to be due to a decrease in average price – see the section on price below. In other words, people are buying more plant-based cheese and it is getting cheaper.

Partial year data for 2024 (from 1 January until 28 April) shows that the weekly average sales value of plant-based cheese was down 7.2% relative to the full year 2023, while unit sales were up 12.4% and sales volume was up 10.8%. The divergence between sales value and sales volume implies that the average price per kg of plant-based cheese fell.

Plant-based cheese sales in Germany, 2021-2023



Plant-based cheese sales per week in Germany, 2021-April 2024

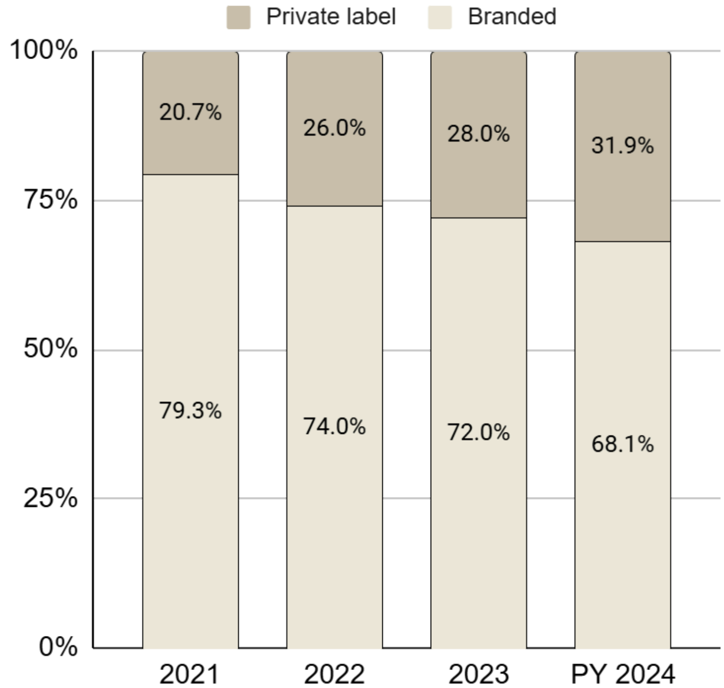


Branded versus private label

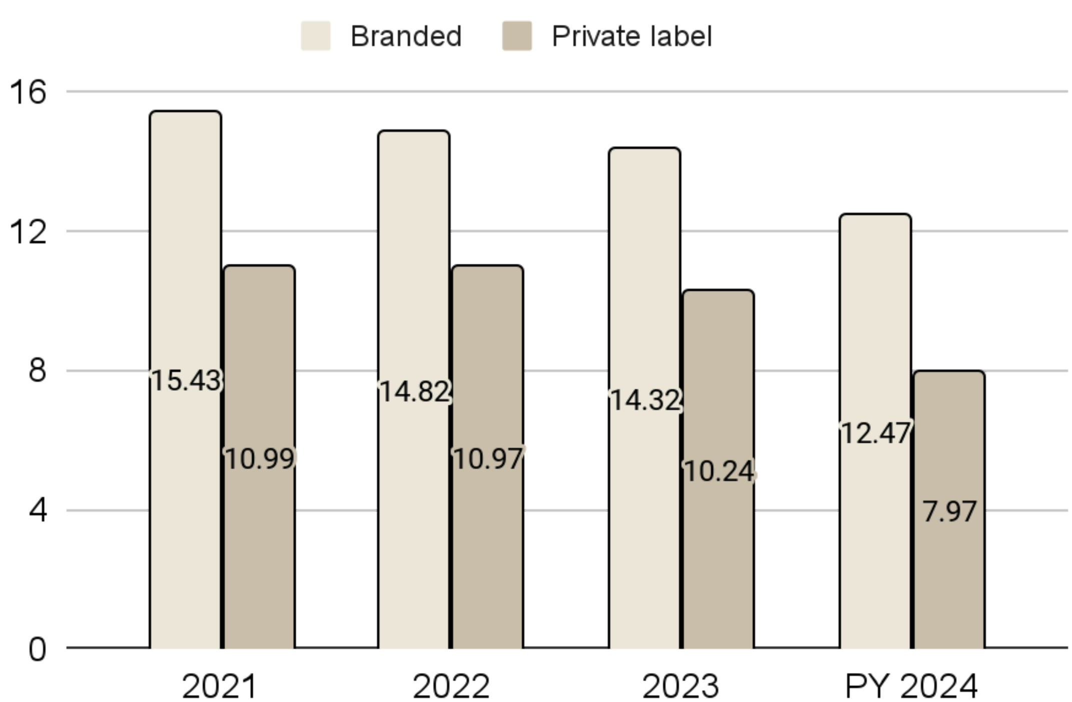
Between 2022 and 2023, the sales volume of private-label plant-based cheese (i.e. supermarket and discount store own-brand products) increased by 15.2%, while the sales volume of branded products increased by just 3.6%.

The proportion of plant-based cheese that is private label has risen from 20.7% in 2021 to 31.9% in early 2024, possibly due to the lower price per kg of private-label products.

Germany plant-based cheese sales by branded or private label, 2021-April 2024 (% of sales volume)



Average price per kg of plant-based cheese, by branded or private label, 2021-April 2024 (€/kg)



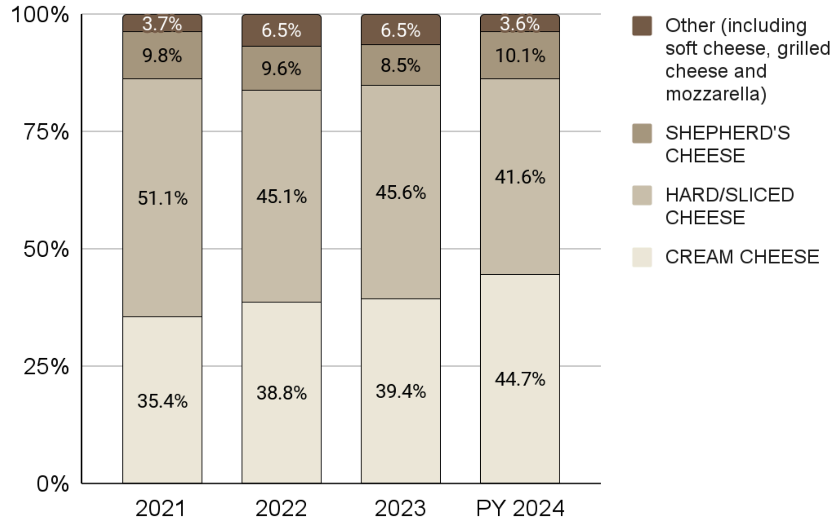
Product format breakdown

A further breakdown of product formats is only available for branded products, so the percentages in this section do not account for private-label products.

The majority of plant-based cheese for which data is available in Germany is chilled, accounting for over 99% of sales volume.

The most popular type of branded plant-based cheese in 2023 was hard/sliced cheese (46% of volume sales), followed by cream cheese (39%) and shepherd's cheese[11] (9%).

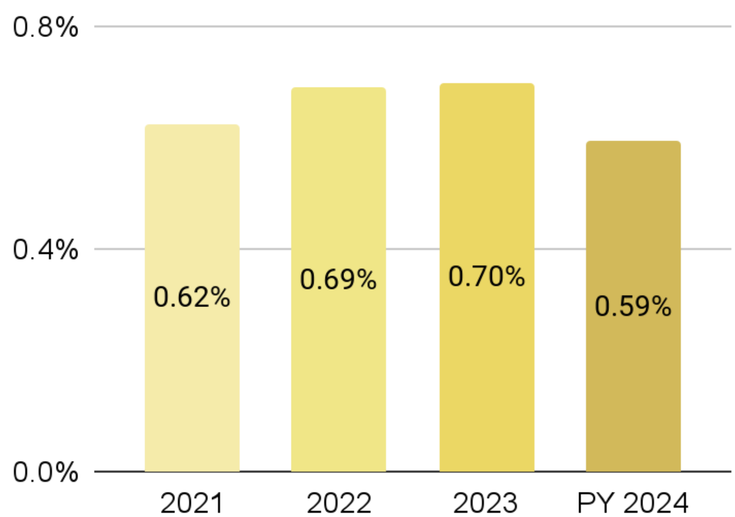
Germany branded plant-based cheese sales by type, 2021-April 2024 (% of sales volume)



Market share

The market share of plant-based cheese, as a percentage of the sales volume of both plant- and animal-based cheese, rose from 0.62% in 2021 to a peak of 0.7% in 2023, before dipping to 0.59% in early 2024.

Plant-based cheese: share of Germany's total (plant- and animal-based) branded cheese market, 2021-April 2024 (% of sales volume)

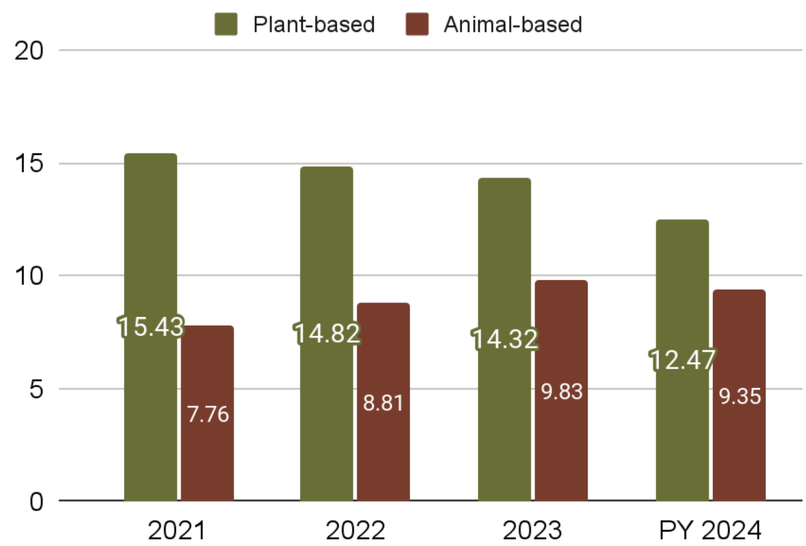


[11] *Hirtenkäse*, a German term used to describe a category of cheese in brine, such as feta.

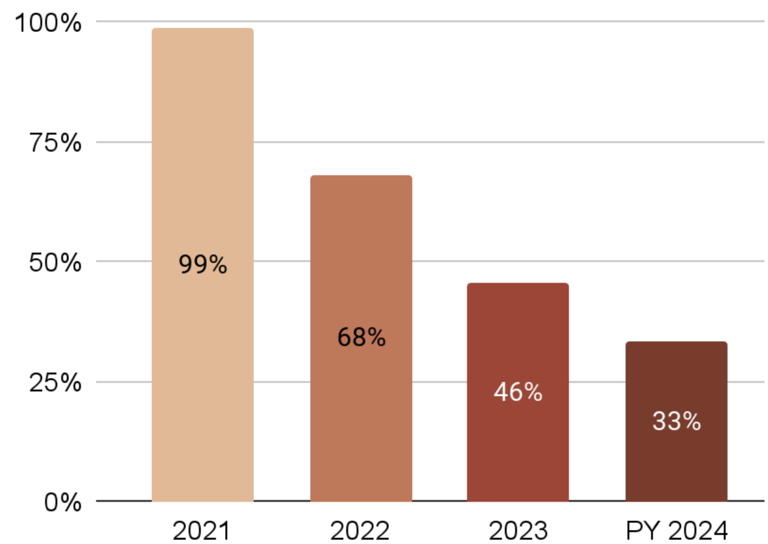
Price trends relative to animal equivalent

In 2021, branded plant-based cheese was 99% more expensive per kg than branded animal-based cheese, but by early 2024 it was only 33% more expensive. This narrowing price gap is partly due to the average price of plant-based cheese falling over time and partly due to animal-based cheese becoming more expensive.

Germany: Average price per kg for plant-based and animal-based branded cheese, 2021-April 2024 (€/kg)



Germany: price difference for plant-based cheese compared to animal-based cheese, branded products, 2021-April 2024 (%)



Plant-based yoghurt

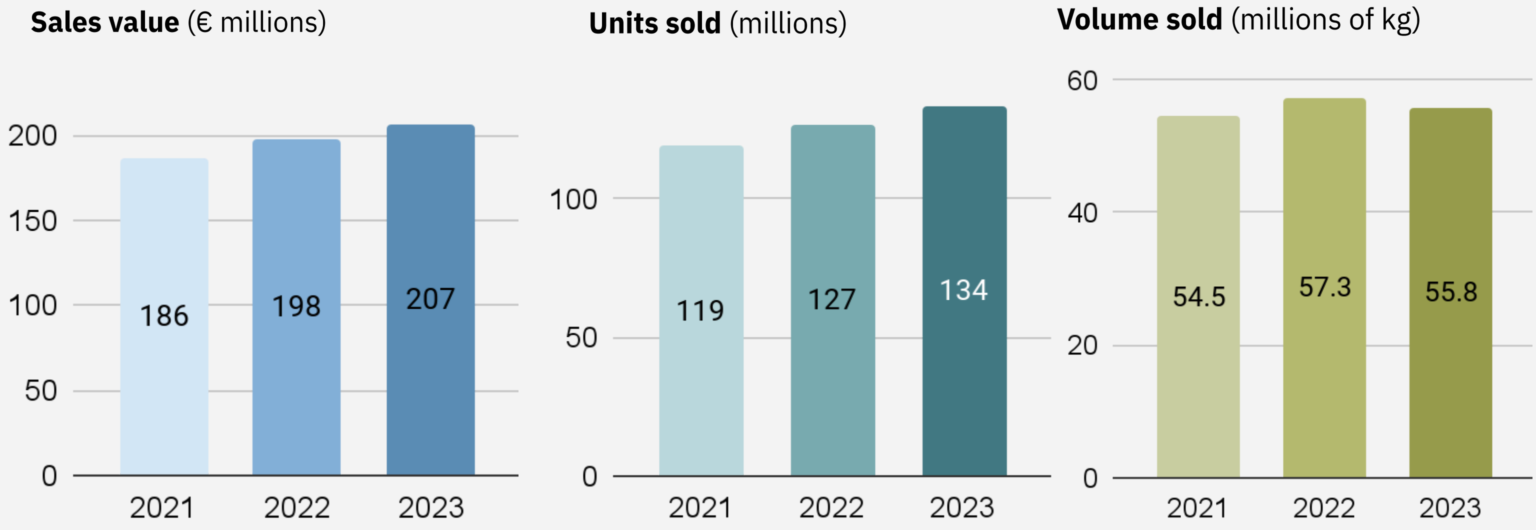
Total market

Between 2022 and 2023, the total annual sales value of plant-based yoghurt in Germany increased by 4.5% to reach €207 million. Over the same time period, unit sales increased by 5.5% to 134 million units and sales volume decreased by 2.6% to 56 million kg.

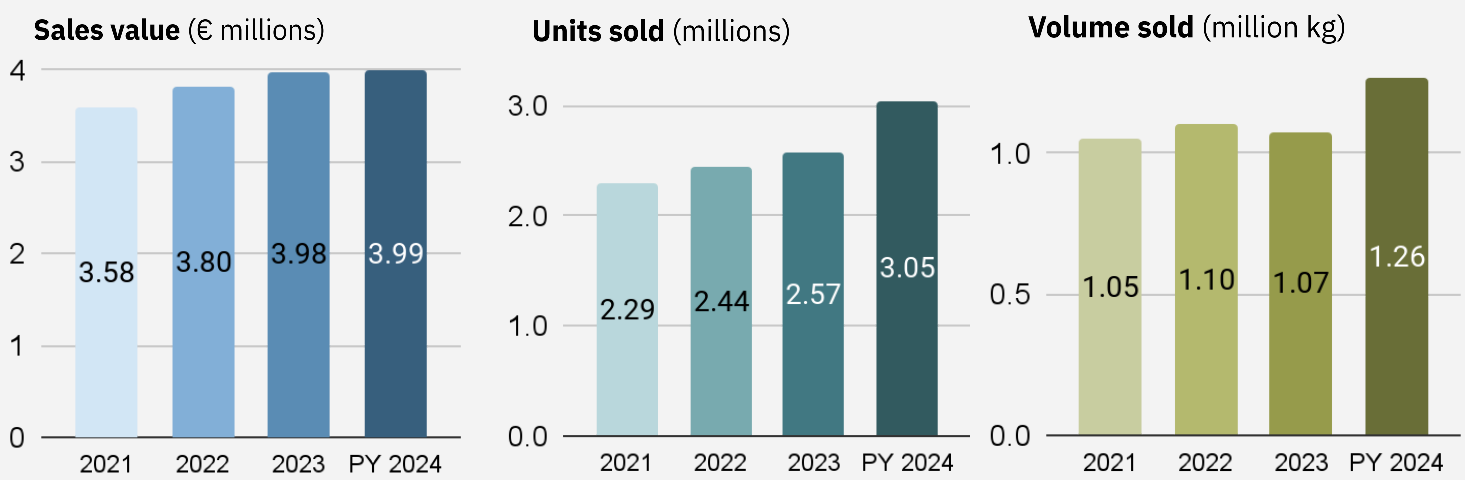
Between 2021 and 2023, there was an 11% increase in sales value, a 12.1% increase in unit sales and a 2.4% increase in sales volume.

Partial year data for 2024 (from 1 January until 28 April) shows that the weekly average value of plant-based yoghurt sales was up 0.2% relative to the full year 2023, while unit sales were up 18.7% and sales volume was up 17.8%.

Plant-based yoghurt sales in Germany, 2021-2023



Plant-based yoghurt sales per week in Germany, 2021-April 2024

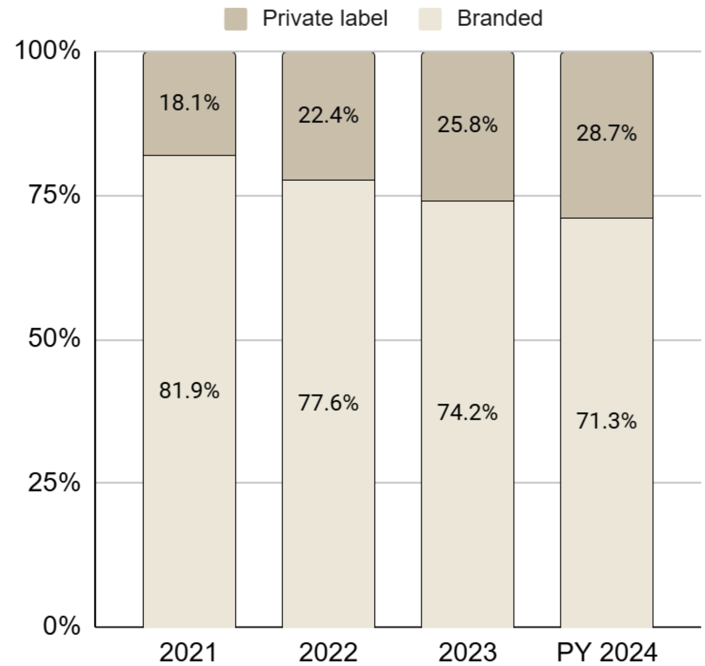


Branded versus private label

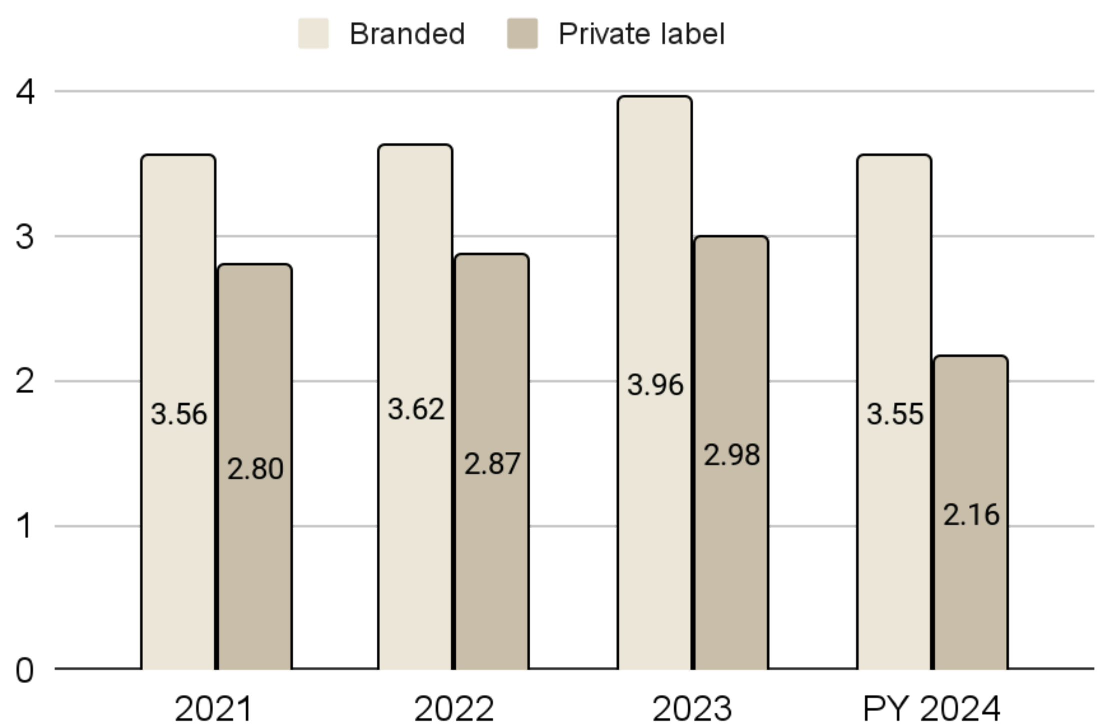
Between 2022 and 2023, the sales volume of private label plant-based yoghurt (i.e. supermarket and discount store own-brand products) increased by 12%, while the sales volume of branded products fell by 7%.

The proportion of plant-based yoghurt that is private label has risen from 18.1% in 2021 to 28.7% in early 2024, possibly due to the lower price per kg of private-label products and the increasing price gap relative to branded products.

Germany plant-based yoghurt sales by branded or private label, 2021-April 2024 (% of sales volume)



Average price per kg of plant-based yoghurt, by branded or private label, 2021-April 2024 (€/kg)

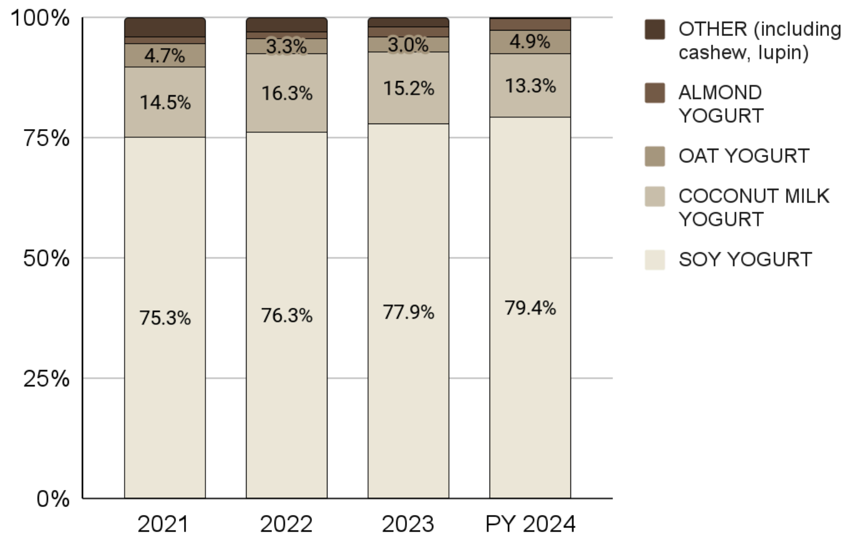


Product format breakdown

A further breakdown of product formats is only available for branded products, so the percentages in this section do not account for private-label products.

The vast majority of plant-based yoghurt for which data is available is chilled as opposed to ambient, at over 98% of sales volume across all time periods.

Germany branded plant-based yoghurt sales by ingredient base, 2021-April 2024 (% of sales volume)

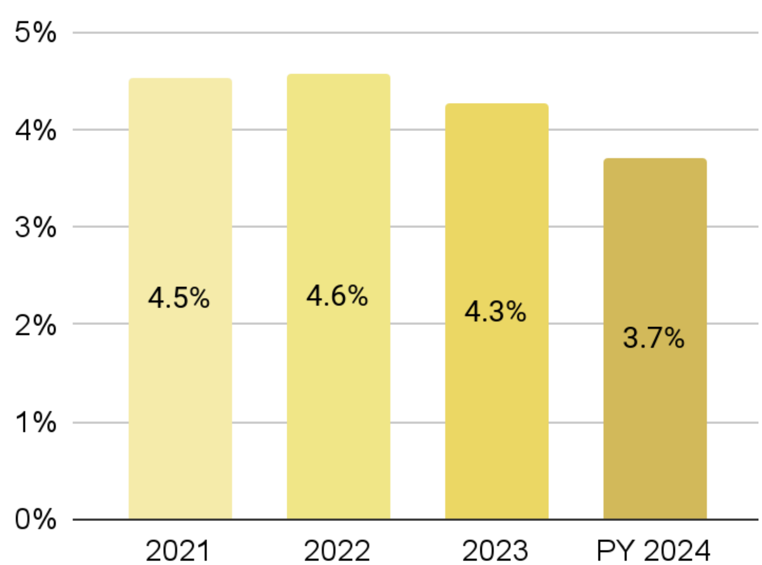


In terms of ingredients, soy yoghurt is the most popular (78% of sales volume in 2023), followed by coconut (15%) and oat (3%).

Market share

Plant-based yoghurt accounted for 4.5% of the sales volume of both plant-based and animal-based branded yoghurt retail sales in Germany in 2021. This market share reached a peak of 4.6% in 2022 before falling to 3.7% in early 2024.

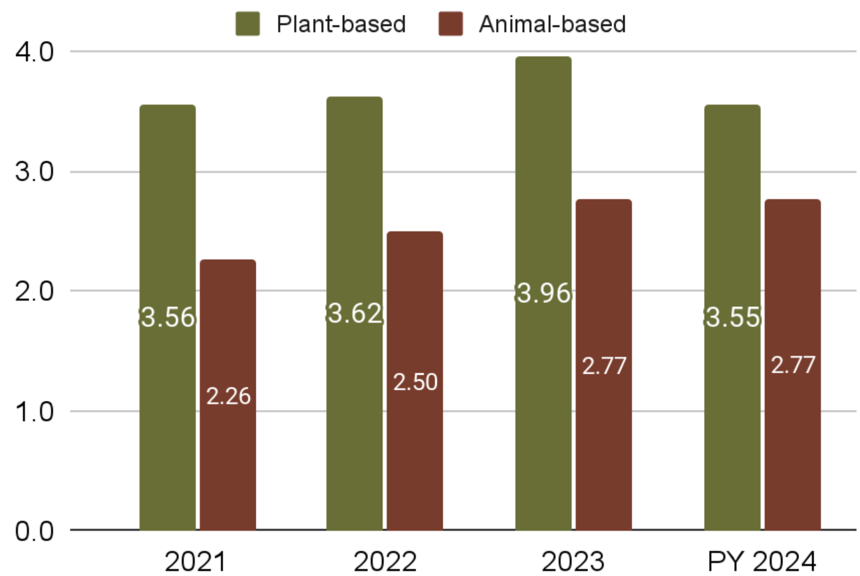
Plant-based yoghurt: share of Germany's total (plant- and animal-based) branded yoghurt market, 2021-April 2024 (% of sales volume)



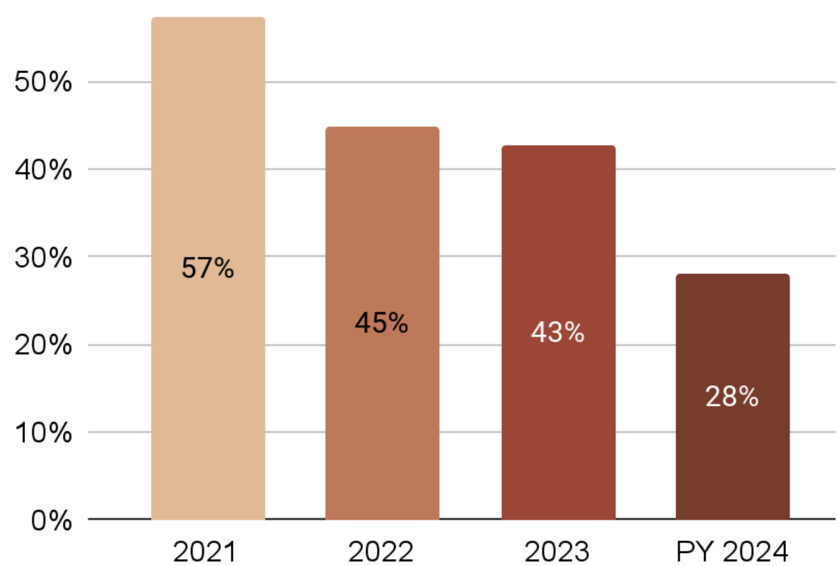
Price trends relative to animal equivalent

For branded products, plant-based yoghurt is consistently more expensive than animal-based yoghurt,. However, the gap is reducing over time. While plant-based yoghurt was 57% more expensive in 2021, it was only 28% more expensive in early 2024. This change can be attributed partly to the rise in animal-based yoghurt prices between 2021 and early 2024. The drop in price premium between 2023 and early 2024 can also be attributed partly to a decrease in plant-based yoghurt prices between 2023 and early 2024.

Germany: Average price per kg for plant-based and animal-based branded yoghurt, 2021-April 2024 (€/kg)



Germany: price difference for plant-based yoghurt compared to animal-based yoghurt, branded products, 2021-April 2024 (%)



Plant-based dessert and pudding

Total market

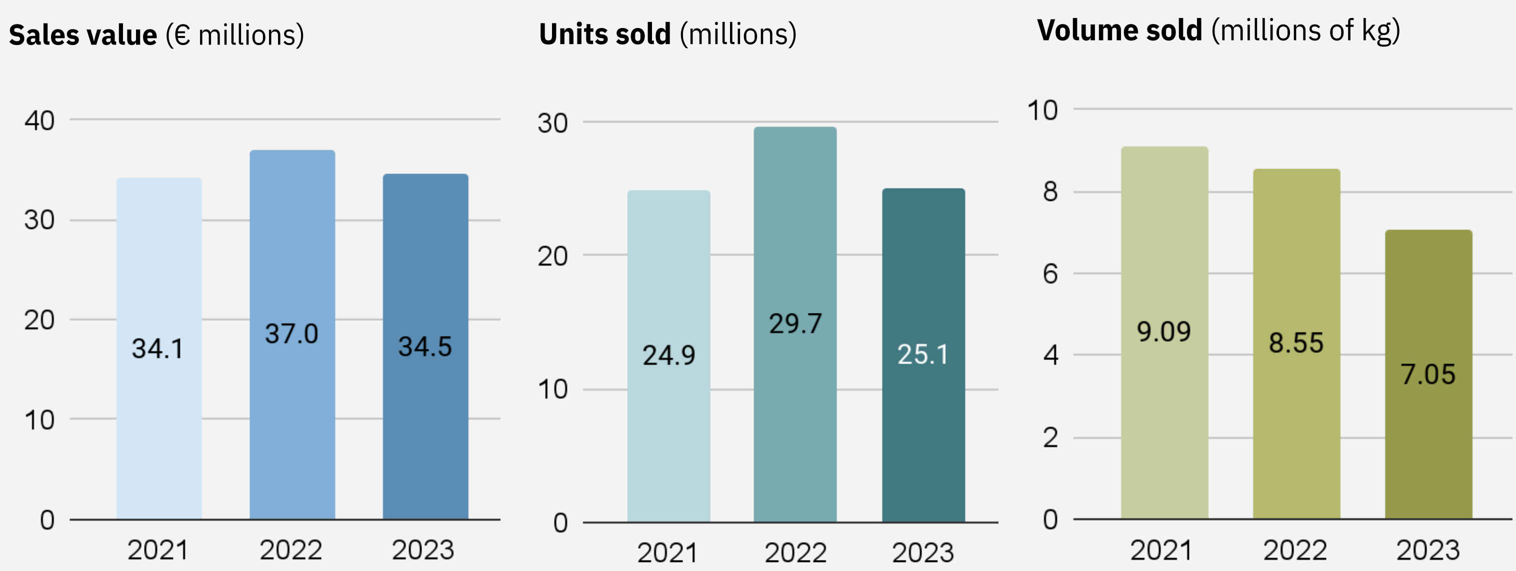
The plant-based dessert and pudding category includes desserts and puddings based on common ingredients used in milk alternatives, such as soy and rice. It excludes sales of vegan *grütze*, a fruit-based pudding that is not a dairy alternative.

Between 2021 and 2023, the total annual sales value of plant-based desserts and pudding in Germany decreased by 6.6% to €34.5 million, after a peak of €37 million in 2022. Similarly, unit sales peaked in 2022 at 29.7 million units before declining to 25.1 million units in 2023. Sales volume was highest in 2021 at 9.09 million kg and fell to 7.05 million kg in 2023.

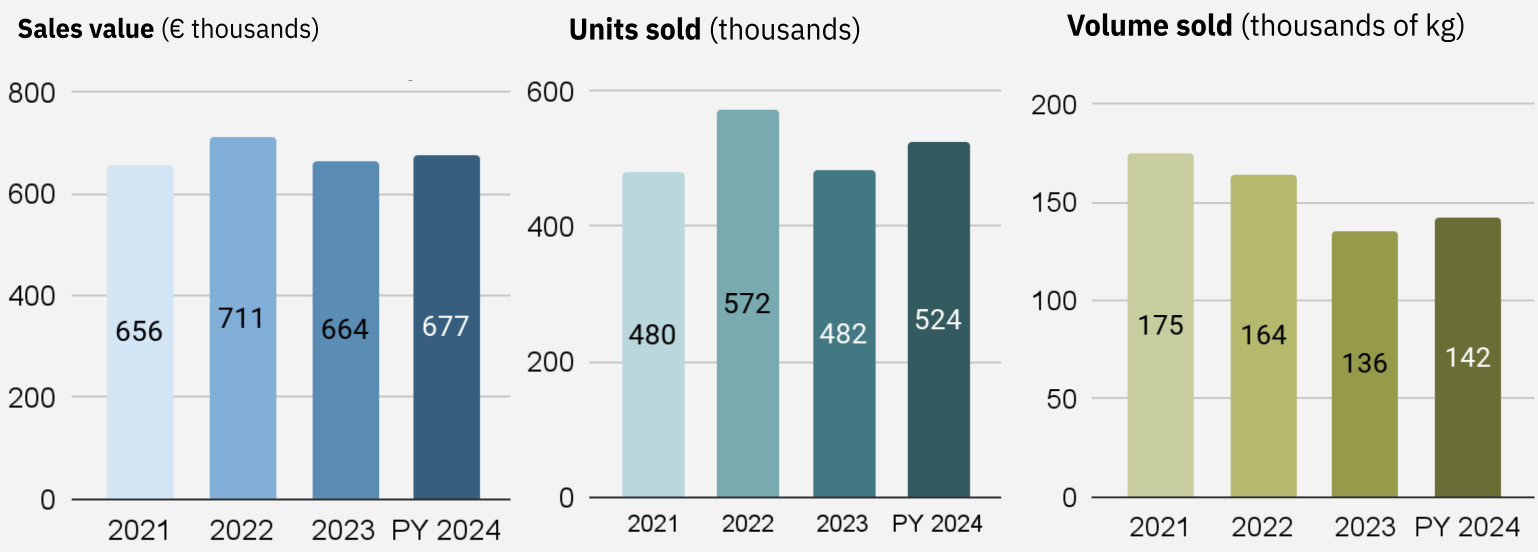
It is possible that sales of desserts and puddings have been affected by the broader pressures on consumers' budgets caused by inflation, as they are non-essential items.

Partial year data for 2024 (from 1 January until 28 April) shows that the weekly average value of plant-based dessert and pudding sales was up 2.1% relative to the full year 2023, while unit sales were up 8.7% and sales volume was up 4.7%.

Plant-based dessert and pudding sales in Germany, 2021-2023



Plant-based dessert and pudding sales per week in Germany, 2021-April 2024

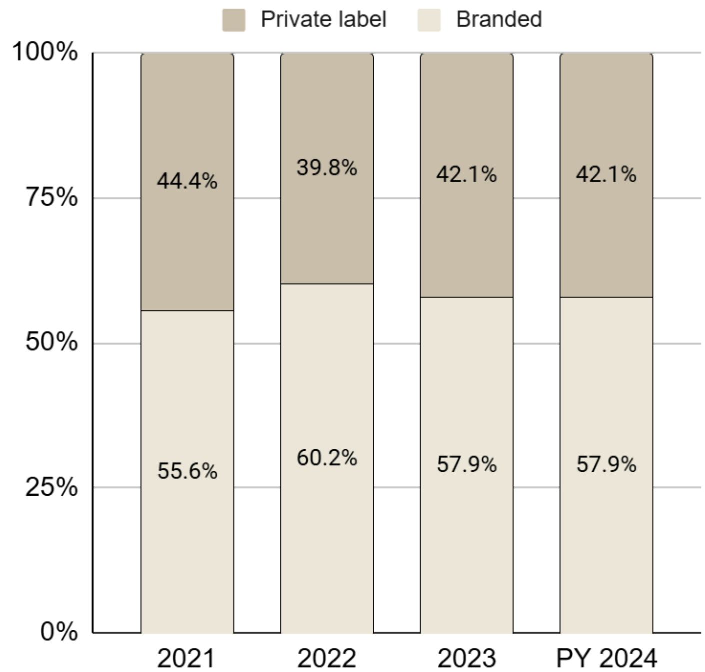


Branded versus private label

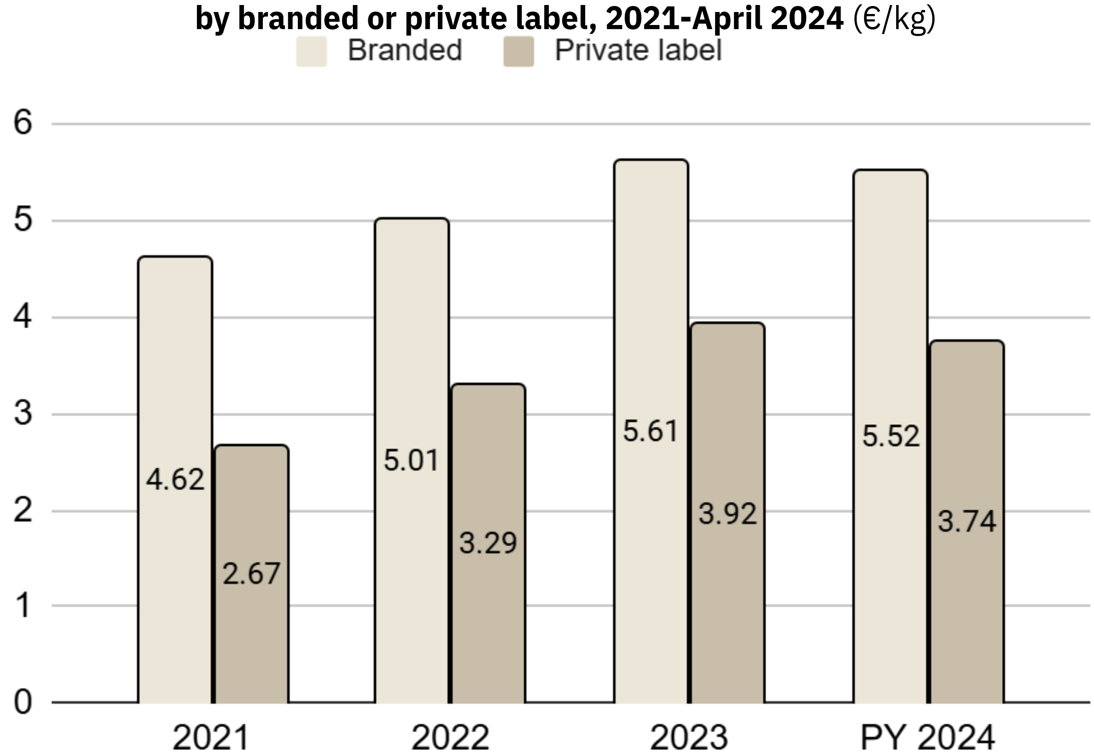
Between 2022 and 2023, the sales volume of private-label plant-based dessert and puddings (i.e. supermarket and discount store own-brand products) fell by 13%, while the sales volume of branded products fell by 21%.

The proportion of the plant-based dessert and puddings category that was private label fell from 44.4% in 2021 to 39.8% in 2022, before rebounding to 42.1% in 2023 and early 2024. The significant size of the private-label segment – which is higher than in many other product categories – might be influenced by the notably lower price per kg of private-label products.

Germany plant-based dessert and pudding sales by branded or private label, 2021-April 2024 (% of sales volume)



Average price per kg of plant-based dessert and pudding, by branded or private label, 2021-April 2024 (€/kg)



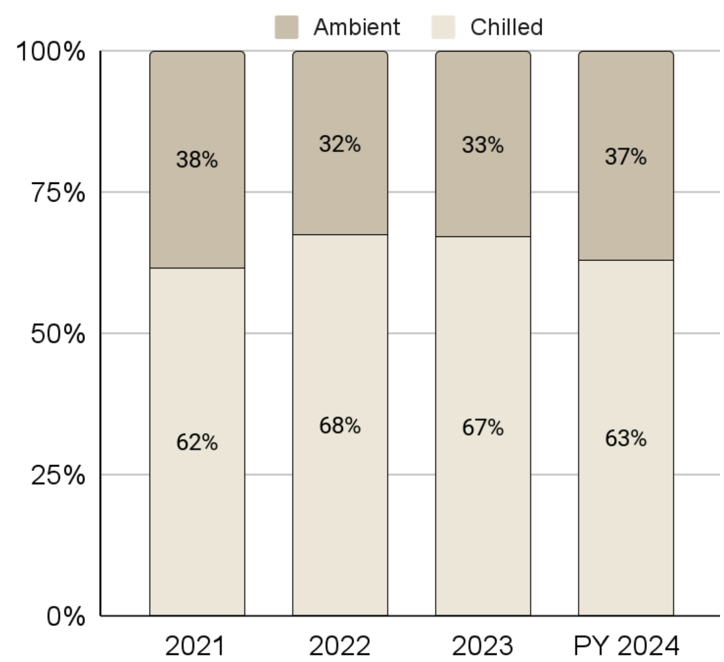
Product format breakdown

A further breakdown of product formats is only available for branded products, so the percentages in this section do not account for private-label products.

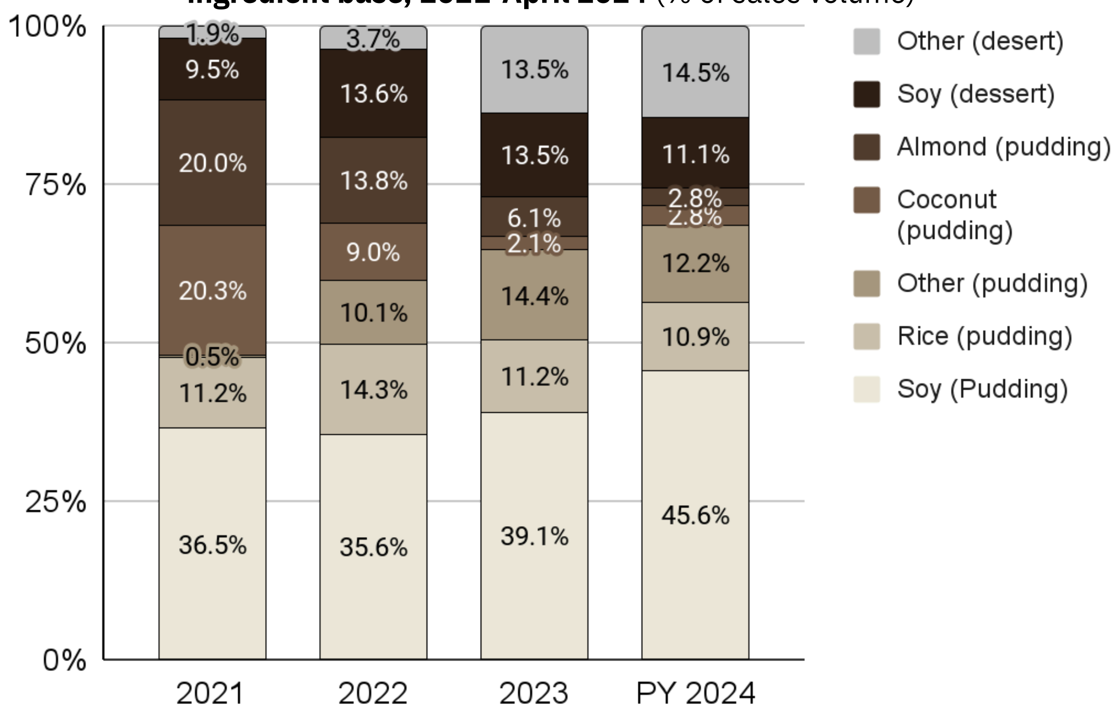
Chilled products accounted for two-thirds of plant-based dessert and pudding sales volume in 2023, with one-third of products being ambient.

In 2023, the most common type of product was soy pudding (39% of sales volume), with that share tending to increase over time. Coconut and almond pudding have seen steep declines in their market share since 2021, while "other" desserts and puddings have grown.

Germany branded plant-based dessert and pudding sales by temperature, 2021-April 2024 (% of sales volume)



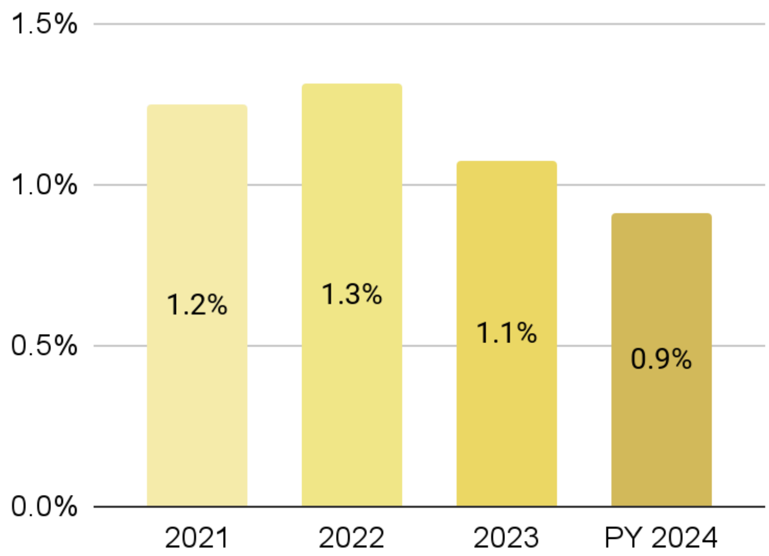
Germany branded plant-based dessert and pudding sales by ingredient base, 2021-April 2024 (% of sales volume)



Market share

Plant-based dessert and pudding's market share fell from 1.3% in 2022 to 0.9% in early 2024.

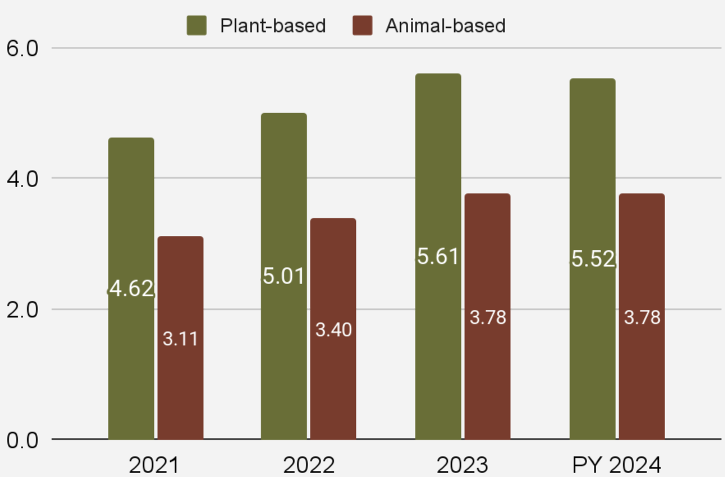
Plant-based dessert and pudding: share of Germany's total (plant- and animal-based) branded dessert and pudding market, 2021-April 2024 (% of sales volume)



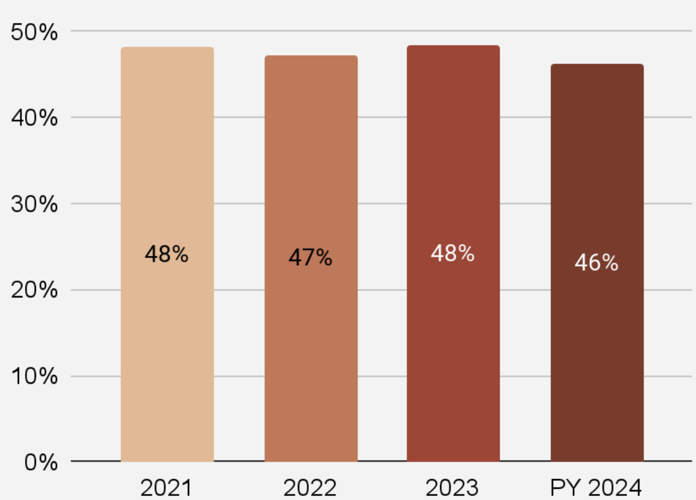
Price trends relative to animal equivalent

Both plant-based and animal-based branded dessert and pudding have become more expensive between 2021 and early 2024. The price premium has remained roughly level over time.

Germany: Average price per kg for plant-based and animal-based branded dessert and pudding, 2021-April 2024 (€/kg)



Germany: price difference between plant-based and compared to animal-based dessert and pudding, branded products, 2021-April 2024 (%)



Plant-based cream

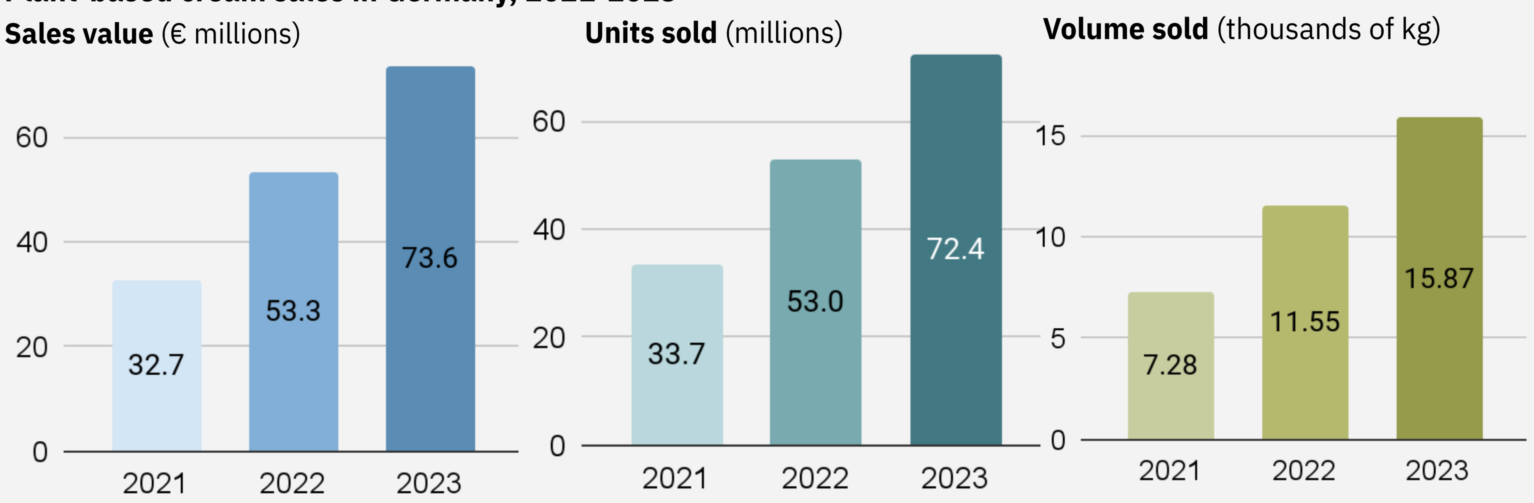
Total market

Between 2022 and 2023, the total annual sales value of plant-based cream in Germany rose by 38% to reach €74 million in 2023. This strong growth was also mirrored in unit sales, which rose by 37% to 72 million units, and sales volume, which rose by 37% to 16 million kg.

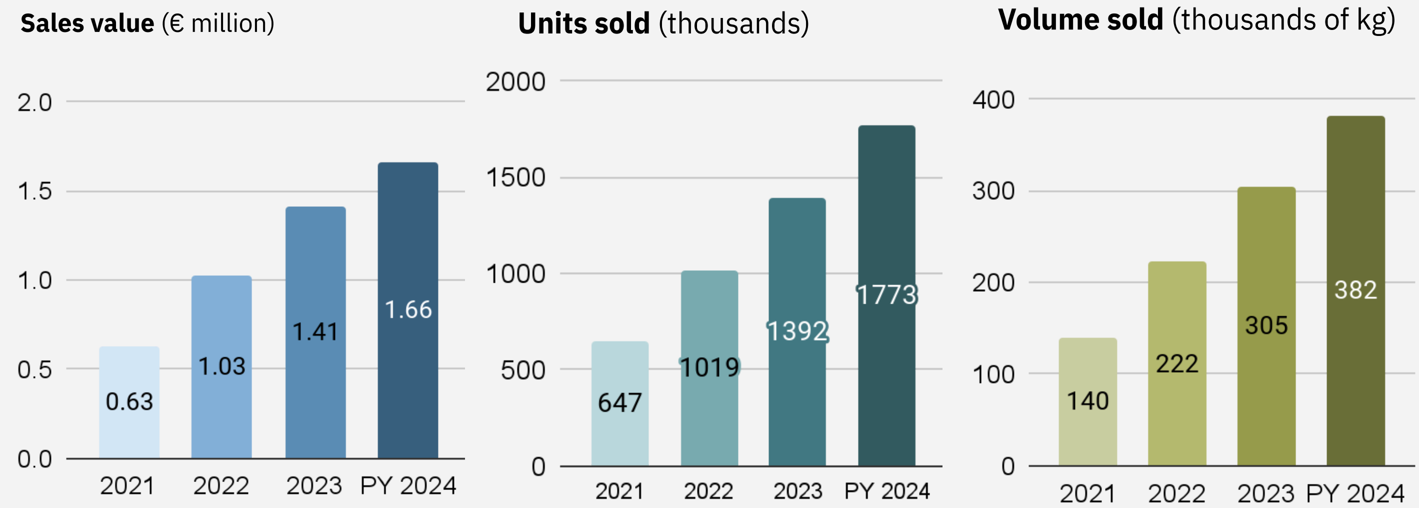
Between 2021 and 2023, there was a 125% increase in sales value, a 115% increase in unit sales and a 118% increase in sales volume. In other words, all three sales metrics more than doubled over two years.

Partial year data for 2024 (from 1 January until 28 April) shows that the weekly average value of plant-based cream sales was up 18% relative to the full year 2023, while unit sales were up 27% and sales volume was up 25%.

Plant-based cream sales in Germany, 2021-2023



Plant-based cream sales per week in Germany, 2021-April 2024

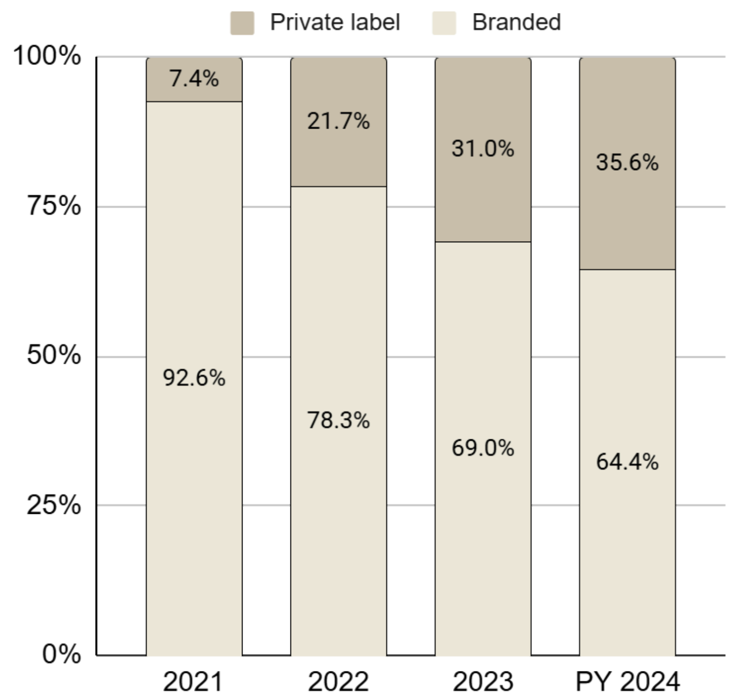


Branded versus private label

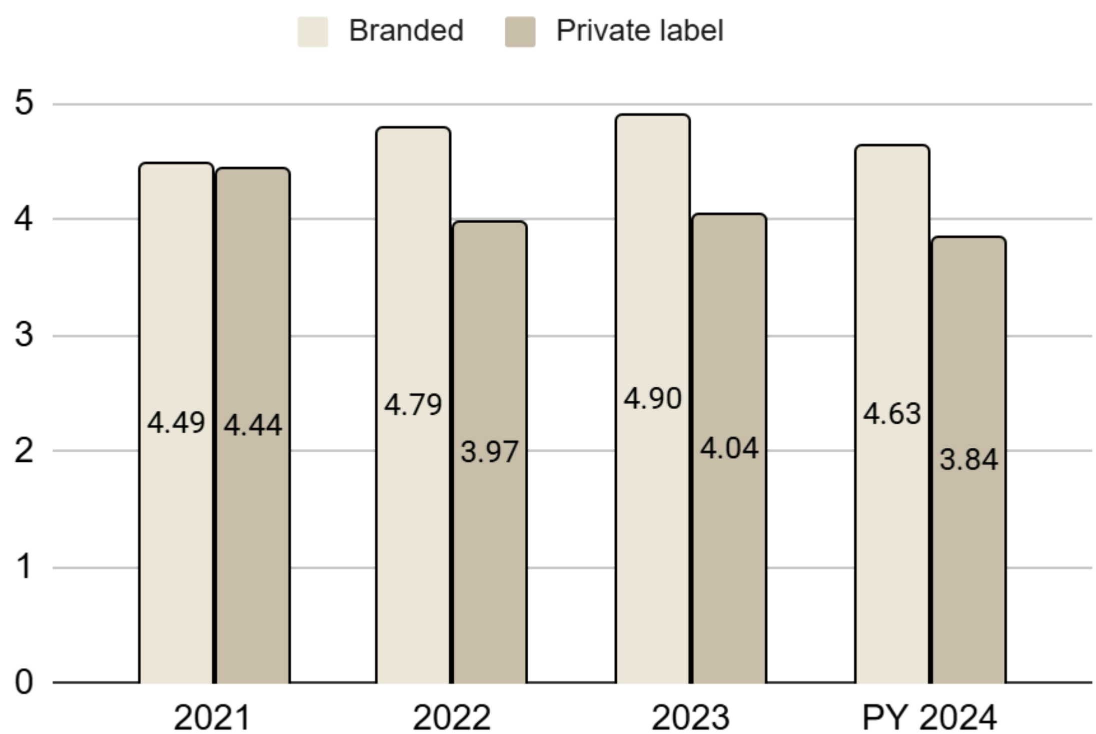
Between 2022 and 2023, the sales volume of private label plant-based cream (i.e. supermarket and discount store own-brand products) increased by 95%, while the sales volume of branded products increased by 21%.

The proportion of plant-based cream that is private label has risen from just 7.4% in 2021 to 35.6% in early 2024, possibly due to private-label products becoming cheaper per kg than branded products.

Germany plant-based cream sales by branded or private label, 2021-April 2024 (% of sales volume)



Average price per kg of plant-based cream, by branded or private label, 2021-April 2024 (€/kg)



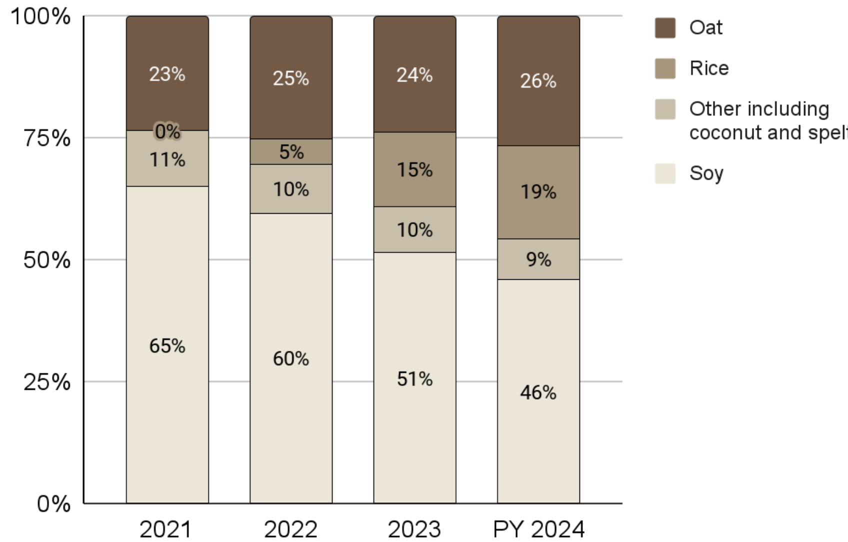
Product format breakdown

A further breakdown of product formats is only available for branded products, so the percentages in this section do not account for private-label products.

In 2023, most plant-based cream sales were of ambient products (56% of volume sales). The proportion of products that are chillled has been increasing over time.

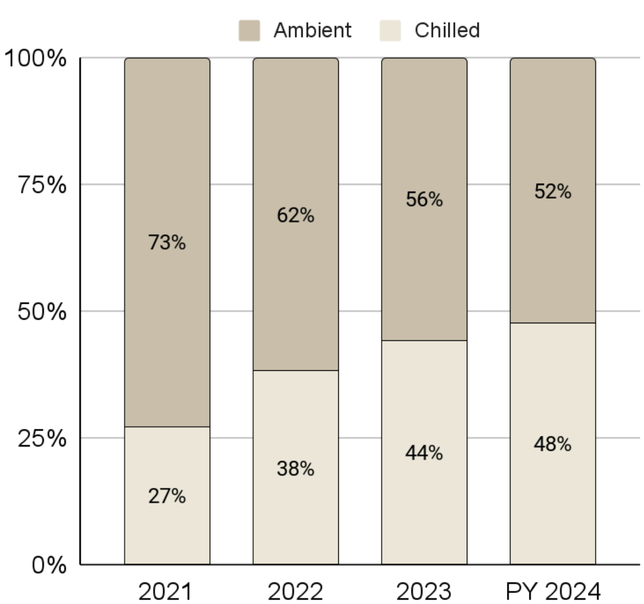
Plant-based cream based on oats accounted for around a quarter of sales volume, a proportion that has remained steady over time. The proportion of cream based on soy fell from 65% in 2021 to 46% in early 2024. Cream made from rice leapt from 0% in 2021 to 19% in early 2024.

Germany branded plant-based cream sales by ingredient base, 2021-April 2024 (% of sales volume)

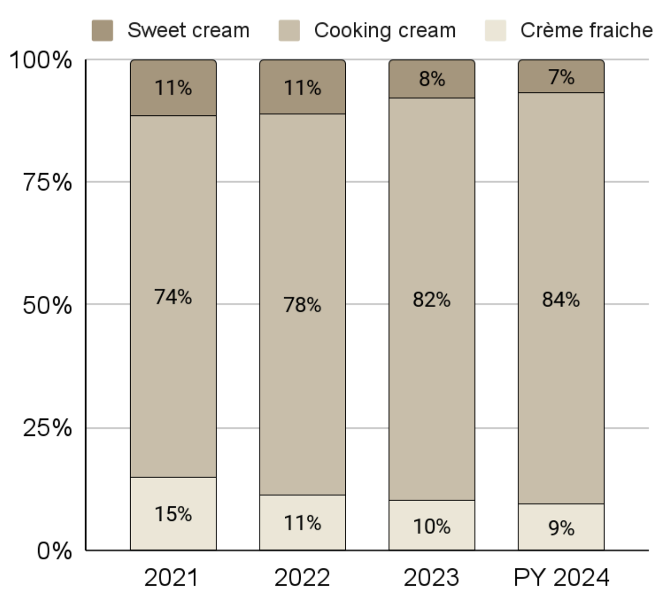


Cooking cream accounts for the majority of the market. Sweet cream and crème fraiche make up a small and declining contribution to sales volumes.

Germany branded plant-based cream sales by temperature, 2021-April 2024 (% of sales volume)



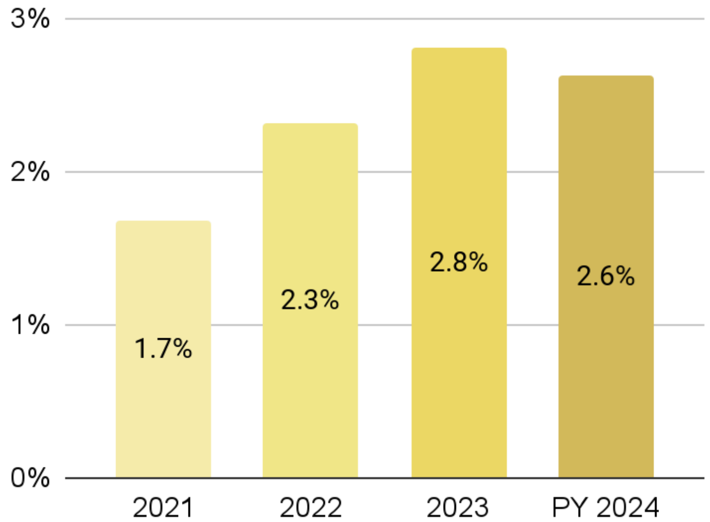
Germany branded plant-based cream sales by type, 2021-April 2024 (% of sales volume)



Market share

As a percentage of overall plant-based and animal-based branded product sales by volume, the market share of plant-based cream has risen from 1.7% in 2021 to 2.8% in 2023, possibly caused by the price of animal-based cream rising above that of plant-based cream.

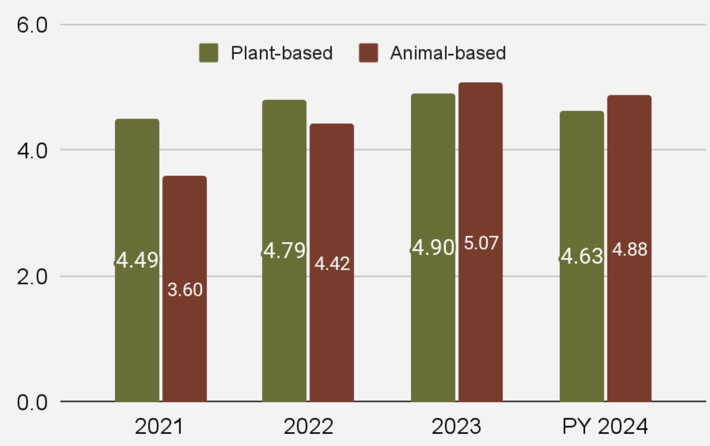
Plant-based cream: share of Germany's total (plant- and animal-based) branded cream market, 2021-April 2024 (% of sales volume)



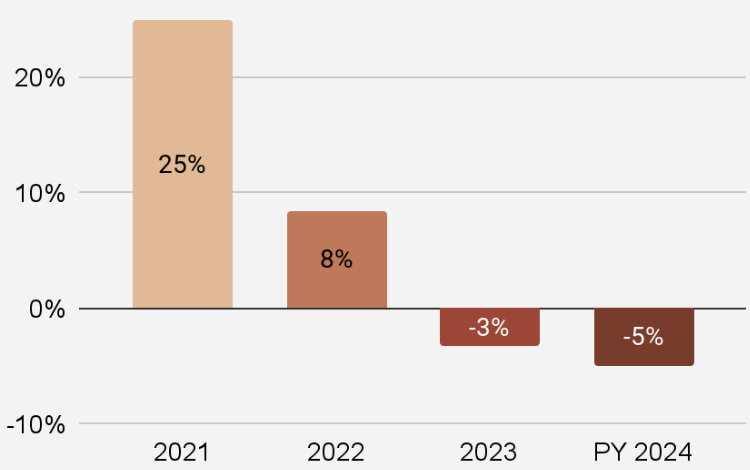
Price trends relative to animal equivalent

Plant-based cream is unique among plant-based product categories in Germany in that it has achieved price parity. Having been 25% more expensive per kg than animal-based cream in 2021, branded plant-based cream was 5% cheaper than branded dairy cream in early 2024. This is mostly because of rising dairy cream prices, but there was also a dip in plant-based cream prices between 2023 and early 2024.

Germany: Average price per kg for plant-based and animal-based branded cream, 2021-April 2024 (€/kg)



Germany: price difference for plant-based cream compared to animal-based cream, branded products, 2021-April 2024 (%)



Closing remarks

The German plant-based market is the largest in Europe, and it is still growing. It is encouraging to see that for seven of the eight product categories covered in this report, sales volumes increased between 2021 and 2023. This shows that plant-based foods remain relevant to German consumers, 46% of whom intend to reduce their meat consumption over the next two years.

Notably, plant-based cream is now cheaper than dairy cream. Its sales performance offers hope that if other plant-based product categories can also become more cost-competitive with their animal-based equivalents, there may be scope for further market growth.

Helen Breewood,
Research and Resource Manager at the Good Food Institute Europe

The market development in Germany shows once again how important competitive prices are for the success of protein diversification. The food industry and retailers have launched initiatives to make plant-based foods more affordable, and it is crucial that policymakers in Germany also set the right course.

On the one hand, this includes fair taxation, for example, by ending the disadvantage of plant-based milk in terms of VAT, which is currently taxed at a significantly higher rate than cow's milk. On the other hand, this includes public investment in research funding and building infrastructure.

Ivo Rzegotta,
Senior Public Affairs Manager, Germany at the Good Food Institute Europe

About the Good Food Institute Europe

The Good Food Institute Europe is a nonprofit and think tank helping to build a more sustainable, secure and just food system by diversifying protein production.

We work with scientists, businesses and policymakers to advance options like plant-based and cultivated meat – ensuring they are delicious, affordable and accessible across Europe.

By making meat from plants and cultivating it from cells, we can reduce the environmental impact of our food system and feed more people with fewer resources. GFI Europe is powered by philanthropy.

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