Evolving appetites: An in-depth look at attitudes towards plant-based eating

Denmark

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Top 10 key takeaways

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48% of meat consumers in Denmark say that they have reduced their annual meat intake.

19% of Danish respondents view themselves as flexitarian, 4% as vegetarian, 6% as pescatarian, and 3% as vegan.

The primary motives for reducing meat or dairy consumption are **health** (39%), **environment** (37%), and **animal welfare** (25%).

Respondents in Denmark intend to substitute animal-based foods with legume-based alternatives (42%), plant-based dairy alternatives (42%), legumes (41%), and plant-based meat (39%).

Price (29%) **and taste** (29%) remain the key barriers to choosing plant-based alternatives.

55% of consumers in Denmark intend on purchasing plant-based alternatives from **supermarkets**, while 44% plan to buy them from **discounters**.

The most-requested plant-based alternatives are **plant-based meat** (e.g. burgers or sausages), at 35%, followed by **plant-based milk** (30%) and **sweets, snacks, and yoghurt** (27%).

49% of Danish respondents say that they **trust plant-based alternatives more than they did three years ago**.

Danish respondents trust plant-based alternatives mostly due to **safety** (56%), **accurate labeling** (54%), and **trustworthiness** (53%).

63% of respondents **agree with the removal of taxes on foods that support a healthier lifestyle**, while 62% would like policymakers to enhance transparency standards in product certification.

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Introduction

With the third-highest per-capita GDP in the EU in 2022[a], DKK 32 billion in sales of plant-based foods in 2021[b], and **the world's first national action plan for transitioning towards a more plant-based food system,**[b] Denmark is leading the global shift towards a greener food system.

Acknowledging the necessity for a 'green transition' in Denmark's agricultural sector, a multi-party coalition established the Danish Action Plan for Plant-based Foods.[c] The result is a first-of-its-kind government plan, including crop research and export strategies, focused on research, development, and engagement of stakeholders of each part of the value chain. As part of this action plan, **675 million Danish Kroner will be distributed between 2023 and 2030 for grants dedicated to plant breeding and cultivation, processing, sales promotion, education, and knowledge dissemination**. Funds have also been allocated to supporting the purchase of organic produce, as well as vocational education, innovation, and research.

Despite this significant progress, plant-based dietary lifestyles require greater social and cultural integration to spur acceptance and purchasing behaviours. In February 2024, a Danish court ruled that it was unlawful for a child to be denied a vegan meal and prevented from bringing her own meal to school[d]. Similarly, the Vegetarian Society of Denmark plans to pursue a case of a patient being denied a vegan meal at a hospital.

With increased funding paired with public skepticism and reluctance for adoption, there lies significant educational opportunities to engage organisations and consumers. This report aims to provide additional contextualisation of the country's alternative-protein ecosystem and highlight **opportunities for further consumer engagement in order to support these government initiatives and increase social acceptance.**

a) *Statistics explained*. Statistics Explained. (n.d.). https://ec.europa.eu/eurostat/
b) Ministry of Food, Agriculture, and Fisheries. (n.d.). *Action Plan on Plant-Based Foods*. En.fvm.dk. Morrison, O. (2023, October 23). *D plant-based foods*. foodnavigator.com.
c) Ministry of Food, Agriculture, and Fisheries of Denmark. *Danish Action Plan for Plant-based Foods.* ISBN 978-87-88363-32-6 (digita
d) Vegconomist. (2024, February 12) Veganism Recognised as a Protected Belief by Danish Court in "Milestone Win". veconomist.coı..

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Survey methodology

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Survey

- Conducted online by Innova Market Insights.
- 20-minute-long questionnaire.
- Conducted in June 2023, as a follow-up to the previous survey conducted in June 2021, the results of which are used in this report in order to compare changes in behaviours and attitudes over the last two years.
- Countries covered by the research: Austria, Germany, Spain, France, Denmark, the United Kingdom, Denmark, Poland, Romania, Denmark.

Participants

- 750, all over the age of 18.
- 20% of participants in each age group:
    - 18-24 years old
    - 25-34 years old
    - 35-44 years old
    - 45-54 years old
    - 55-70 years old
- 50% men, 49,6% women and 0,4% other.
- Only consumers who are responsible for household grocery shopping participated.

4 key changes compared to 2021

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Compared to the results of the 2021 report,[1] four key developments in Denmark are evident:

No 1. In 2021, 41% of consumers reported a decrease in their yearly meat intake.[2] In 2023, the figure increased to 48%.

No 2. In 2021, 38% of respondents said that they followed a flexitarian, pescatarian, vegetarian, or vegan diet.[3] In 2023, this decreased to 32%.

No 3. While concerns around affordability and lack of information about plant-based alternatives remained the top two concerns in 2023,[5] the difficulty of changing personal habits became less of an issue.

No 4. 49% of Danish respondents said that they trust plant-based alternatives more than they did three years ago.

1) 'What consumers want: A survey on European consumer attitudes towards plant-based foods.
2) Meat (e.g. beef, pork, chicken).
3) Flexitarian, vegetarian, pescatarian or vegan.
4) Flexitarian – I sometimes eat meat, but I am trying to reduce my meat consumption and often choose plant-based foods instead.
5) products made solely from plant-based ingredients and are developed to resemble conventional animal-based foods such as meat or dairy. (Examples include soya burgers and soya milk).

Consumer attitudes & behaviours towards plant-based foods

Denmark

Meat consumption: behaviours and attitudes

Meat consumers in Denmark have shown notable shifts in their meat- and dairy-consumption habits,[5] with **48% saying that they reduced their meat intake in the previous year.** Among these respondents, about 8% decreased their meat consumption by 50% or more, while 40% made slight reductions. At the same time, 39% reported no change in their meat consumption, **while 13% said that they were eating more meat, the largest increase of all the countries surveyed.** Beef and pork accounted for the biggest reductions, at 43% and 23%, respectively. However, changes in the consumption of other animal-based products such as eggs, fish, and yoghurt, remain marginal, with less than 4% of meat or dairy consumers reporting notable changes.

The **primary motivation for consuming less meat and dairy is health**,[6] with 39% of respondents it as a key reason, followed by environmental concerns at 37% and animal welfare at 25%. Unlike the other countries surveyed, Denmark places special significance on organic products as well as on recommendations from friends and family.

While the percentage of Danish consumers who are reducing their meat consumption is slightly lower than the average reduction across the countries surveyed (48% vs 52%), Danish consumers are most inclined to choose plant-based alternatives for safety reasons and are specifically concerned with major outbreaks of animal-to-human diseases (14% vs an average of 8%).

Dietary lifestyles in Denmark

While there was an overall reduction in meat and dairy consumption, at the same time, there was also a drop in the number of respondents who said that they follow flexitarian, pescatarian, vegetarian, or vegan diets (-6%), along with a roughly corresponding increase in the number of self-identified omnivores (5%).

When asked about the duration of their selected diets,[7] **more than half of Danish respondents reported having followed a flexitarian, pescatarian, vegetarian, or vegan diet for two years or more**. Specifically, 57% have been flexitarians for two or more years, while 48% of pescatarians, 63% of vegetarians, and 45% of vegans have similarly been following their diets for two years or more.

	2021	2023	% change
Omnivore	62	67	+5
Flexitarian	24	19	-5
Pescatarian	5	6	+1
Vegetarian	5	4	-1
Vegan	4	3	-1

Q3: Which category best describes your current dietary lifestyle? (DK n=750)

5) Compared to a year ago, how much meat (e.g. beef, pork, chicken) are you eating now? | Single choice.
6) Which of the following reasons best describe why you have chosen to decrease your consumption of meat or dairy products? | Multiple choice.
7) How long have you been following your current dietary lifestyle? | Single choice.

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Consumer attitudes & behaviours towards plant-based foods

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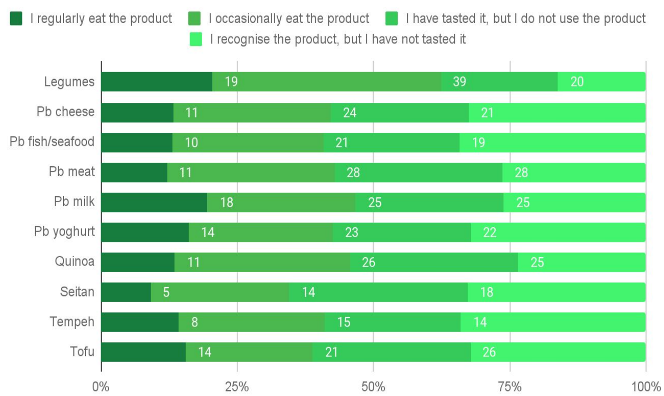
Familiarity of plant-based foods*



Legumes rank as the most-familiar plant-based food in Denmark, with 59% of respondents reporting at least occasional consumption, followed by plant-based milk at 47%. All other alternatives fell below the 40% threshold, with **plant-based fish/seafood and yoghurt exhibiting the highest lack of recognition of all countries surveyed.**

42% of Danish respondents said that they intend substituting **animal-based foods with plant-based dairy or legume-based alternatives**, followed by 41% opting for **legumes** and **plant-based meat alternatives**.

Market opportunities for plant-based alternatives

Top 5 drivers when purchasing plant-based alternatives[8]

1. Taste (52%)
2. Health (43%)
3. Affordability (41%)
4. Freshness (32%)
5. Environmental friendliness (23%)

Top 5 barriers when purchasing plant-based alternatives[9]

1. Too expensive (29%)
2. Not tasty enough (29%)
3. Not enough choice (26%)
4. Worried about health (23%)
5. Not enough information (23%)

Compared to the 2021 results, taste, health, and freshness are still the key considerations when purchasing plant-based alternatives, while texture has decreased in importance and the importance of products being organic has increased. Affordability remains the greatest barrier to purchase, while concern over the difficulty of changing habits has decreased, potentially signaling a greater openness to dietary change.

When it comes to purchase location,[10] 55% of consumers are most likely to buy plant-based alternatives at supermarkets, followed by discounters (44%). In terms of consumption location,[10] **62% of respondents are most likely to consume such products at home**, 24% at conventional restaurants, and 23% at exclusively plant-based restaurants.

In terms of the variety of plant-based products available,[11] **35% of respondents would like to see more meat products such as burgers and sausages**, followed by milk (30%) and sweets and snacks (28%).

8) What are the most important factors when choosing plant-based food alternatives? It is important to me that the plant-based food alternatives I choose… | Multiple choice (max 5).
9) Which of the following do you encounter as barriers when choosing plant-based food alternatives?| Multiple choice (max 5).
10) Where are you likely to purchase/consume plant-based food alternatives most frequently in the future? |Multiple choice.
11) What kind of plant-based food alternative(s) do you wish you could buy more often in the supermarket or at points of consumption (e.g. restaurants, cafes, etc.)? |Multiple choice.
*Pb= plant-based // Legumes (e.g. lentils, chickpeas) Pb cheese (e.g. sliced/grated cheese) Pb fish/seafood (e.g. fish sticks/tuna) Pb meat (e.g. burgers/sausages) Pb milk (e.g. soy/oat milk Pb yoghurt (e.g. soy/oat yoghurt)

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Consumer attitudes & behaviours towards plant-based foods

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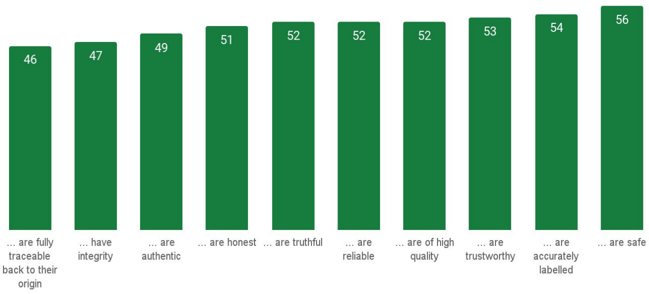
Trust levels towards alternative proteins

Danish consumers trust plant-based protein sources, such as cereals and pulses, the most, followed by fungi (e.g. mushrooms, mycelium, and yeast) and cultivated protein (e.g. cultivated meat and dairy). The protein sources that they trust the least are insect-based protein, followed by algae-based protein.[12] Compared to 2021, the trust ranking of the different types of protein remained about the same. In general, **49% of consumers said that trusted plant-based alternatives more than they did three year ago**,[13] while 36% express the same level of trust. About 11% said that they trust plant-based alternatives less now, and 4% were uncertain.



Plant-based proteins are trusted mostly for their safety (56%), accurate labeling (54%), trustworthiness (53%), high quality and reliability (52%), and honesty (51%). However, authenticity, traceability, and integrity fell below the 50% threshold, highlighting a need for increased transparency and improved communication.

I trust that plant-based food alternatives... |Single choice | Total agreement level (Strongly agree + Agree + Somewhat Agree) (DK n=750)

The media and online influencers

In general, Danish respondents trust governmental websites the most, followed by private organisation sites (e.g. food companies and health/nutrition societies). While social media ranked relatively low in terms of trustworthiness of information, it remains a potent tool for engaging consumers. Compared to the other countries surveyed, Denmark has **the highest number of respondents who frequently use social media to receive information about discounts and promotions** (32% vs a 27% average) **and to share photos of food** (29% vs 23%)[14] .

Ranking of online media, by trustworthiness[15]

1. Government websites
2. Health and/or nutrition society websites
3. Search engines (e.g. Google)
4. Food-company websites
5. News websites
6. NGO websites
7. Online collaborative websites (e.g. Wikipedia)
8. Online videos (e.g. YouTube)
9. Social networking sites (e.g. Facebook, Instagram, Pinterest)
10. Online blogs
11. Online forums (e.g. Reddit)

12) Which of the following alternative proteins do you trust the most? Rank them from 1 (trust the most) to 5 (trust the least). | Single choice
13) When thinking about your overall knowledge and experience with plant-based food alternatives, has your current trust increased or decreased in comparison to three years ago? |Single choice.
14) In general, how much do you trust information about plant-based food products from...| Single choice.
15) Please indicate how much you disagree or agree with each of the following statements concerning social media and food attitudes.| Single choice.

Consumer attitudes & behaviours towards plant-based foods

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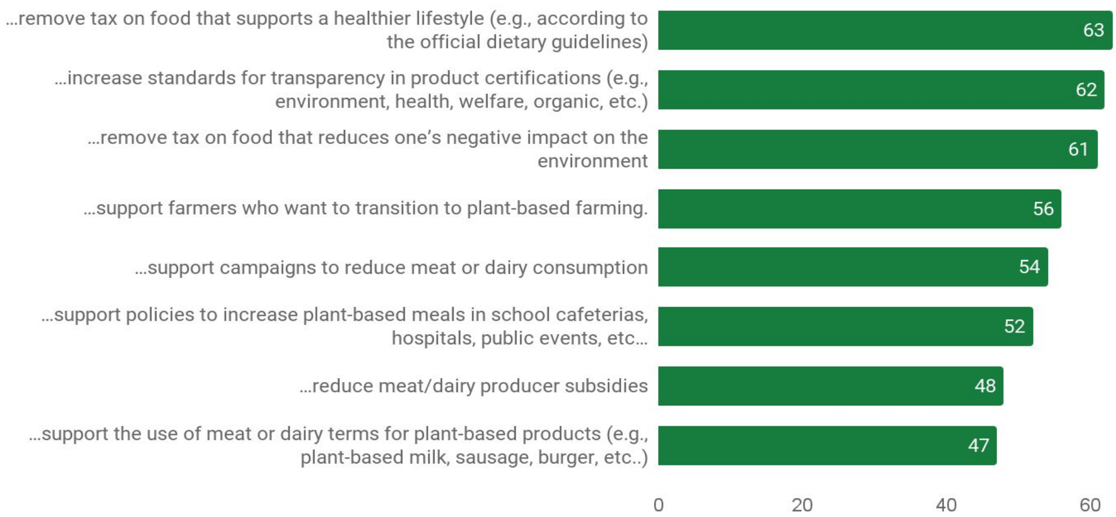
Opinion on policy



Q22: In your opinion, how much do you agree or disagree with the following statements regarding the actions that policymakers should take? I believe that my government should... | Single choice | Total agreement level (Strongly agree + Somewhat agree + Agree) (DK n=750)

Danish respondents expressed a strong preference for the removal of tax on foods that promote a healthier lifestyle (63%). Respondents also generally support the removal of tax on foods that have a less negative impact on the environment (62%) and an improvement of transparency standards for product certification (61%). Danish consumers are also in broad agreement with providing support for farmers who are transitioning toward plant-based farming (56%) and for campaigns that reduce meat or dairy consumption (54%). However, Danish respondents show relatively low support for meat/dairy subsidies and the use of meat/dairy terms for plant-based products, **indicating a need for better product positioning to encourage more purchases of these products.**

What trends are likely to shape the future of the plant-based market in the Denmark?

"The future here will be shaped by the quality of new products being developed - especially several startups producing fermented products appear promising – as well as the implementation of the best nudging practices, and the resources allocated to train chefs in preparing plant-based dishes."

Rune-Christoffer
Secretary-General at Vegetarian Society of Denmark & Deputy Chair at International Vegetarian Union

Conclusions & recommendations

Denmark

Conclusions:

1. **Dietary shifts and motivations:** The consumer landscape in Denmark reflects a notable reduction in meat consumption and an increasing institutional openness to a more plant-centric lifestyle. Health remains the primary concern for consumers, followed by environmental and animal-welfare considerations.
2. **Dietary lifestyles are evolving:** Although the proportion of respondents following an omnivore diet has increased by 5% since 2021, with a corresponding decrease in flexitarians (5%), the number of respondents following vegetarian, vegan, and pescatarian diets have remained relatively consistent.
3. **Consumer preferences and challenges:** Taste, health, and affordability continue to be the primary motivators for purchase. However, the importance attributed to recommendations from family and friends and to products being organic is unique to Denmark.
4. **Consumer trust:** While, in general, consumers say that they trust plant-based protein sources, there is a desire for improved traceability and greater integrity and authenticity.
5. **Social influencers:** Danish consumers are generally in support of government initiatives that promote healthier lifestyles and have a reduced environmental impact. Additionally, of all the countries surveyed, Danish consumers engage with social media the most, when sharing food related content and being informed of discounts and promotions.

Recommendations:

1. **Promote health benefits:** Collaborate with government initiatives to communicate the health benefits of plant-centric diets and offer simple and engaging ways to consistently reduce and maintain decreased meat consumption.
2. **Increase appeal of plant-based centric diets:** Promote plant-based dishes in food establishments by aligning them with relevant cultural and social occasions, normalizing and facilitating a long-term adoption of plant-based diets.
3. **Address affordability concerns:** Partner with local food producers, manufacturers, retailers, and government bodies to increase access to affordable plant-based food. Explore and support initiatives to remove tax on products that promote healthier lifestyles and have a reduced environmental impact.
4. **Cater to evolving consumer preferences:** Respond to the growing consumer demand for diversified product offerings, particularly when it comes to plant-based meat, milk, sweets, snacks, and yoghurt.
5. **Improve messaging:** Leverage social-media engagement by creating fun and informative social-media challenges and posts to share with family and friends.

THE FUTURE OF PLANT-BASED EATING IN EUROPE

Regional variations

%	AV.*	DK	DE	IT	RO	FR	NL	SP	UK	AT	PL
Meat consumers who say that they have reduced their annual meat intake	**52**	48	59	59	48	58	49	48	48	52	48
Consumers who say that they follow a flexitarian, vegan or vegetarian diet	**38**	33	55	31	35	35	47	31	38	52	26
Consumers who say that they eat plant-based foods regularly or occasionally	**36**	36	33	40	37	35	35	39	34	32	36
Consumers who are willing to increase their consumption of plant-based foods	**38**	41	36	45	40	34	33	43	37	31	37
Consumers who cite taste as a barrier	**30**	29	30	26	30	33	31	28	37	26	30
Consumers who cite price as a barrier	**38**	29	39	35	36	40	37	41	43	38	39
Consumers who trust plant-based alternatives more than they did three years ago	**46**	49	42	57	45	37	41	45	49	42	48
Consumers who support policies to increase consumption of plant-based meals	**57**	52	49	64	63	52	53	69	64	46	57
Consumers who support campaigns to reduce meat consumption	**54**	54	51	60	57	53	49	59	57	48	55

AV.: Survey Average
Green: % equal or above survey average
Yellow: % below survey average

*Average, Denmark, Germany, Italy, Romania, France, Netherlands, Spain, the United Kingdom, Austria, Poland

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Imprint

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The **Smart Protein project** is a €10-million, EU-funded project that seeks to develop a new generation of foods that are cost-effective, resource-efficient, and nutritious. Alternative-protein sources, such as legumes and side-streams from beer and pasta production, are used to generate plant-based ingredients as well as plant-based meat, seafood, dairy products, and baked goods.

ProVeg International is a food awareness organisation working to transform the global food system by replacing 50% of animal-based products with plant-based and cultured alternatives by 2040. ProVeg works with decision-making bodies, companies, investors, the media, and the general public to help the world transition to a society and economy that are less reliant on animal agriculture and more sustainable for all humans, animals, and our planet. ProVeg has offices in 12 countries across four continents and is active around the world. ProVeg has permanent observer status with the UNFCCC, special consultative status with ECOSOC, is accredited for UNEA, and has received the United Nations Momentum for Change Award.

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