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

The Netherlands

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Top 10 key takeaways

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49% of meat consumers in the Netherlands report having reduced their annual meat intake.

35% of Dutch respondents view themselves as flexitarians, 6% vegetarian, 3% pescatarian and 3% vegans.

The primary motives for reducing meat or dairy consumption are **health (45%), animal welfare (40%), and the environment (34%).**

Respondents in the Netherlands plan to substitute animal-based foods with legumes (35%), legume-based foods (32%), plant-based meat alternatives (35%), and plant-based dairy alternatives (31%).

Price (37%) and taste (31%) remain the key barriers to choosing plant-based alternatives.

59% of consumers in the Netherlands intend on purchasing plant-based alternatives from **supermarkets**, while 37% plan to buy them from **discounters**.

The most requested plant-based alternatives are **plant-based meat** (29%), followed by **plant-based baked goods** (25%).

42% of Dutch respondents exhibit an increase in trust towards plant-based alternatives compared to three years ago.

Dutch respondents trust plant-based alternatives due to their **safety (57%), reliability (55%), and accurate labelling (55%).**

56% want policymakers to **enhance transparency standards in product certifications,** and 62% advocate for the removal of taxes on food supporting a healthier lifestyle.

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Introduction

The Netherlands' results of the Smart Protein consumer survey show **enormous potential for the country's plant-based sector** and suggest key opportunities for food companies to successfully expand their plant-based product range, in both retail and food service.

Previous research has shown that the Netherlands has the highest per capita consumption of plant-based meat alternatives of all European countries surveyed.[a] Plant-based dairy has also achieved significant market penetration with plant-based milk, yoghurt, ice cream, and cheese available at most major supermarket chains. Moreover, exciting **new developments in both government and corporate policy** suggest a very promising future for plant-based products. The Health Council of the Netherlands (*Gezondheidsraad*) recently gave the green light for a transition from the current average dietary pattern of 43% plant protein and 57% animal protein to a diet consisting of 60% plant-protein and 40% animal protein. All major supermarkets have set goals for a 50/50 or 60/40 protein balance and have embraced the Eiweet's Protein Tracker developed by the Green Protein Alliance (GPA) and ProVeg. A growing number of leading catering companies are also setting ambitious goals for a protein balance of 60/40 or even up to 80/20. These combined efforts will likely result in a substantial increase of the consumption of plant-based food in the Netherlands.

With its rich landscape of plant-based manufacturers, ingredients suppliers, and initiatives to grow and promote local protein crops, **the Netherlands is well positioned to respond to growing consumer demand and expand its alternative-protein sector**. The detailed consumer insights presented in this report will, we hope, contribute to this success.

a) Good Food Institute, 2023: Europe plant-based food retail market insights 2020-2022, p. 10

Survey methodology

The Netherlands

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, Italy, the United Kingdom, Denmark, Poland, Romania, the Netherlands.

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
- 49,7% men, 50% women and 0,27% other.
- Only consumers who are responsible for household grocery shopping participated.

4 key changes compared to 2021

The Netherlands

In comparison to the results of the 2021 report,[1] four key developments in the Netherlands are evident:

No 1. In 2021, 48% of consumers reported a decrease in their yearly meat intake.[2] In 2023, the figure was roughly the same, at 49%.

No 2. In 2021, 53% of respondents said that they followed a flexitarian, pescatarian, vegetarian, or vegan diet.[3] In 2023, this decreased to 47%. The most significant decline was among flexitarians,[4] which dropped from 42% to 35%.

No 3. Concerns about the affordability and health benefits of plant-based alternatives[5] are more prominent in 2023 than they were two years earlier. These factors now rank as the second and fourth most significant barriers to following a plant-based diet.

No 4. 41% of respondents in the Netherlands 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

The Netherlands

Meat consumption: behaviours and attitudes

Meat consumers in the Netherlands have shown notable shifts in their meat- and dairy-consumption habits,[5] with **49% saying that they reduced their meat intake in the previous year**. Of these respondents, 13% have significantly decreased their meat consumption by 50% or more, while 36% have made slight reductions, falling below the 50% threshold. Conversely, 43% report no change in their meat consumption, while 8% say that have increased their meat intake. Beef and pork have seen the most substantial reductions, accounting for 28% and 36%, respectively, of the overall decrease in meat consumption. Changes in consumption of other animal-based products such as milks, cheese, and eggs, remain marginal, with less than 7% of meat or dairy consumers reporting notable changes.

The most important motivation for eating less meat and dairy is health,[6] with 45% of respondents citing it as a key reason. Following closely behind, 40% of people are concerned about animal welfare and 34% about environmental impact.

While a smaller proportion of Netherlands' consumers, compared to European consumers as a whole, are reducing their levels of meat consumption (49% vs 51%), respondents in the Netherlands are more inclined to reduce their meat or dairy intake for reasons related to animal welfare (+11%) or environmental reasons (+10%).

Dietary lifestyles in The Netherlands

Despite Netherlands' consumers reducing their meat intake, there has been a notable shift in the number of individuals identifying as flexitarians and omnivores in the Netherlands, compared to 2021. **Currently, 35% of respondents view themselves as flexitarian (5% less than in 2021)**, 3% as pescatarian, 6% as vegetarian, and 3% as vegan.

When asked about the duration of their selected dietary lifestyle[7], **more than half of Netherlands' consumers say that they have been following a flexitarian, pescatarian, vegetarian, or vegan diet for more than two years.** 46% have been flexitarians for more than two years, while 52% of pescatarians, 57% of vegetarians, and 14% of vegans have similarly been following their diets for two years or more.

	2021	2023	% change
Omnivore	48	53	+5
Flexitarian	42	35	-7
Pescatarian	4	3	-1
Vegetarian	5	6	+1
Vegan	2	3	+1

Q3: Which category best describes your current dietary lifestyle? (NL 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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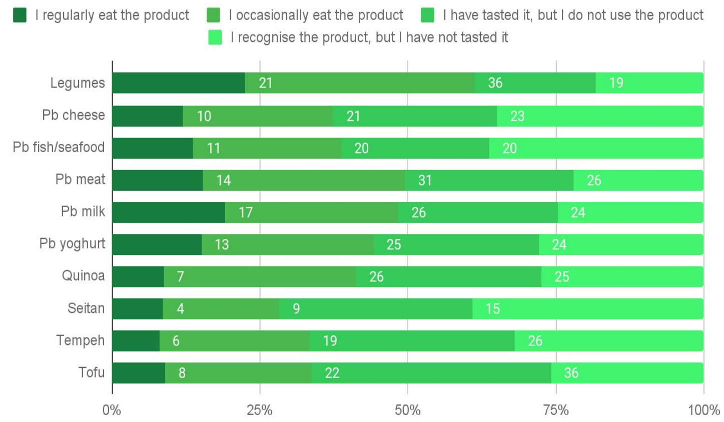
Familiarity of plant-based foods



Q6 How familiar are you with the following food products? (NL n=750)

Legumes rank as the most-familiar plant-based food in the Netherlands, with 57% of respondents reporting at least occasional consumption, followed by plant-based meat (45%), milk (43%), and yogurt (39%).

When asked about their likely future behaviours, **35% of Dutch respondents said that they were open to substituting animal-based foods with legumes or plant-based meat alternatives,** followed by 32% opting for legume-based foods and plant-based dairy alternatives.

Market opportunities for plant-based alternatives

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

1. Taste (59%)
2. Affordability (51%)
3. Health (43%)
4. Freshness (31%)
5. Texture (21%)

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

1. Too expensive (37%)
2. Not tasty enough (31%)
3. Don't want to change routine (26%)
4. Worried about health (24%)
5. Lack of support from friends/family (21%)

Compared to the 2021 results, taste remains the main motivator for Netherlands consumers when choosing plant-based alternatives, while **affordability increased in significance**. Concern about limited variety declined, while there was an increase in **health-related concerns about plant-based products**.

When it comes to point of purchase,[10] 59% of consumers are most likely to buy plant-based alternatives at supermarkets, followed by discounters (37%). In terms of point of consumption,[10] **67% of respondents are the most likely to consume such products at home**. Furthermore, 18% prefer to consume them at conventional restaurants, while 15% choose plant-based restaurants, 13% rely in online orders or takeaways, and 7% opt for school or work canteens.

In terms of the variety of plant-based products available,[11] **29% want to see more meats such as burgers and sausages**, followed by baked foods (25%), and sweets and snacks (24%).

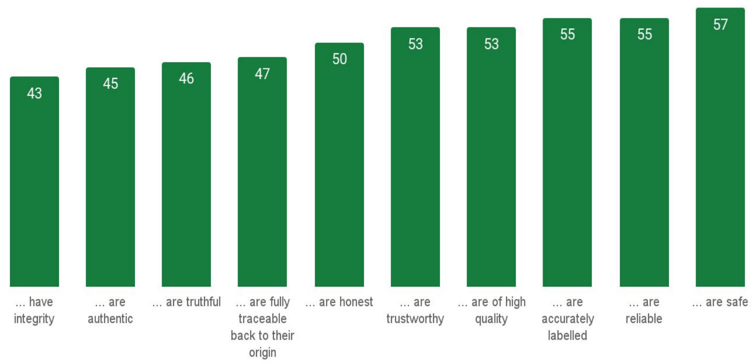
8) What are the most important factors when choosing plant-based food alternatives? It is important to me that the plant-based food alternatives I choose… | Multiple choice (max 5).
9) Which of the following do you encounter as barriers when choosing plant-based food alternatives?| Multiple choice (max 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.)? | Mc.
*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)

Consumer attitudes & behaviours towards plant-based foods

The Netherlands

Trust levels towards alternative proteins

Netherlands' consumers express the highest levels of trust in plant-based protein sources such as cereals and pulses, followed by cultivated protein (e.g. cultivated meat and dairy) and fungi (e.g. mushrooms, mycelium, and yeast). The protein sources that they trust the least are insect-based protein, followed by algae-based protein.[12] Compared to 2021, plant-based proteins have shown the biggest increase in terms of trust. In general, **41% of consumers trust plant-based alternatives more than they did three year ago**,[13] while 37% express the same level of trust. About 15% said that they trusted plant-based alternatives less now, and 6% were uncertain.



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

Plant-based proteins are trusted for their safety (57%); reliability, high quality, and accurate product labeling (55%); and trustworthiness (53%). However, aspects related to traceability, integrity, truthfulness, and authenticity garnered less than 50% agreement and represent areas where consumer confidence could be strengthened, promoting increased levels of trust and perceived reliability.

The media and online influencers

In terms of the perceived quality of information that Netherlands respondents receive in mainstream online media, there are significant opportunities for leverage. While social media ranks low on the list in terms of providing trustworthy information, it remains a potent tool for engaging consumers. Our findings reveal that 53% of people look for food-related information on social media (particularly for promotion and discounts), while **38% say that food content on social platforms stimulates their appetite**. Additionally, 31% expressed interest in food and dishes shared by influencers.[14]

Ranking of online media, by trustworthiness[15]

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

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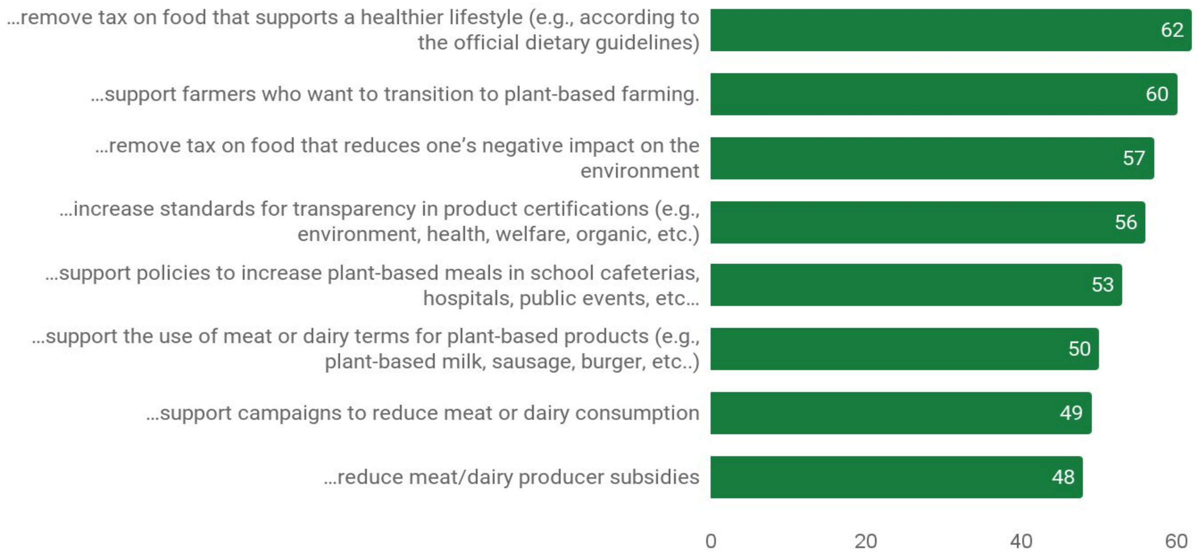
Consumer attitudes & behaviours towards plant-based foods

The Netherlands

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) (NL n=750)

Netherlands' respondents are generally in favor of the removal of taxes to support a healthy lifestyle (62%), while 60% approve of initiatives to support farmers wanting to transition to plant-based farming. Over 50% of consumers support enhanced standards for transparent product certifications and policies aimed at introducing more plant-based meals in school cafeterias, hospitals, and public events, as opposed to campaigns to reduce meat or dairy consumption and meat/dairy producer subsidies, which garnered less than 50% agreement. In conclusion, this suggests **a significant consensus among Netherlands' consumers in favour of initiatives that promote healthier and more environmentally friendly food choices**.

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

*"The Dutch plant-based market has recently seen some very exciting new developments. Supermarkets and caterers are taking the lead, setting goals, and taking concrete steps to entice their customers to choose more plant-based options and decrease their meat consumption. ProVeg Netherlands expects the next big changes to come from **a 'silent transition'**, meaning that products like sauces, ready meals and bakery goods will be made plant-based without bold communication or labelling".*

Martine van Haperen
Expert food-industry and food-service, ProVeg Netherlands

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Conclusions & recommendations

The Netherlands

Conclusions:

1. **Dietary shifts and motivations:** The consumer landscape in The Netherlands shows a noticeable shift away from meat and dairy consumption, driven largely by health concerns (45%), animal welfare (40%), and environmental awareness (34%).
2. **Dietary lifestyles are evolving:** While fewer people identify as flexitarian (35%, compared to 42% in 2021), the sustained commitment to reduced meat consumption by more than half of respondents suggests a robust and sustainable shift towards eating patterns that are better for human and planetary health.
3. **Consumer preferences and challenges:** Taste remains a pivotal factor in opting for plant-based alternatives, while rising concerns about affordability pose a significant challenge. Consumer concerns about product variety and health implications also remain prominent.
4. **Consumer trust:** While Dutch consumers express trust in plant-based protein sources, they would like to see improved traceability and greater authenticity in these products.
5. **Social influencers:** Social media significantly influences consumer behavior, and Dutch consumers strongly support government initiatives promoting healthier and more environmentally friendly food choices.

Recommendations:

1. **Promote health benefits:** Educate consumers on the health advantages of plant-based diets through collaborations with educational institutions and community organizations.
2. **Implement a transparent labeling strategy:** Ensure clear and accurate product labeling, including third-party certifications, to establish trust in plant-based offerings. Seek third-party certifications from reputable organizations that verify the authenticity and quality of plant-based products.
3. **Address affordability concerns:** Explore strategies to make plant-based alternatives more affordable. Partner with local food producers and manufacturers to develop cost-efficient plant-based products that cater to local tastes and preferences.
4. **Expand the targeting of plant-based products:** Expand the variety of plant-based alternatives to appeal to different demographics and occasions, broadening accessibility.
5. **Improve social media data quality:** Improve the quality and reliability of information shared on social media while maintaining engaging content. Share success stories, recipes, and tips on making sustainable food choices.

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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This study was conducted by ProVeg International in partnership with Innova Market Insights, the University of Copenhagen, and Ghent University.

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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