What we know about UK plant-based meat consumers

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With thanks to **Plant Futures**, a strategic consultancy focused on unlocking growth across the UK plant-based sector and helping businesses grow sustainably, for their input on the design and analysis of this study.

Summary

After several years of exponential growth in the plant-based meat (PBM) market, this report takes stock of how consumers view PBM today, and what producers can do to increase market growth. To this end, we surveyed 1,000 people in the UK about their views on PBMs.

Our major conclusions:

1. We identified 39% of our sample as regular PBM consumers; 34% were 'lapsed' consumers, who had cut down or stopped their PBM consumption; 27% had never tried PBM.
2. The major drivers of consumer lapsing are poor taste experience and a high price relative to animal products.
3. Views are divided on the healthiness of PBMs, with some viewing them as processed/unnatural, but many consumers citing health benefits.
4. Many people still see no compelling reason to replace meat from animals.

Our major recommendations:

1. Demonstrate improvements in product taste and ensure that PBM offers value for money relative to animal products. These improvements will address the two major consumer concerns.
2. Win the argument on health. Push back on the notion that 'processed' foods are necessarily unhealthy, and highlight the many health benefits of choosing meat alternatives over conventional meat.
3. Increase awareness of the need to change. Continue to promote the animal, environmental, and health arguments to eat less meat in media and formats which are hard to ignore or avoid.

Contents

1. Background

After several years of exponential growth, the market for plant-based meats (PBMs) has experienced a slowdown. While the market is still growing in many areas, and has more than doubled globally since 2017, volume and value sales of PBMs have faltered in some key markets.

There appears to be several possible explanations for this trend, including inflation and the cost-of-living crisis affecting demand for more expensive options, a post-COVID return to old habits and surge in food service over retail, and a rising narrative about the negative health impact of so-called 'ultra-processed' foods.

In this research, we set out to explore the attitudes and opinions of the British public towards PBMs, with a particular focus on what they liked about these products, what they did not like, and, if they had reduced their consumption of PBMs, why they had cut back.

2. Methodology

We recruited a representative sample of 1,000 people in the UK through the online survey platform Attest in July 2023.

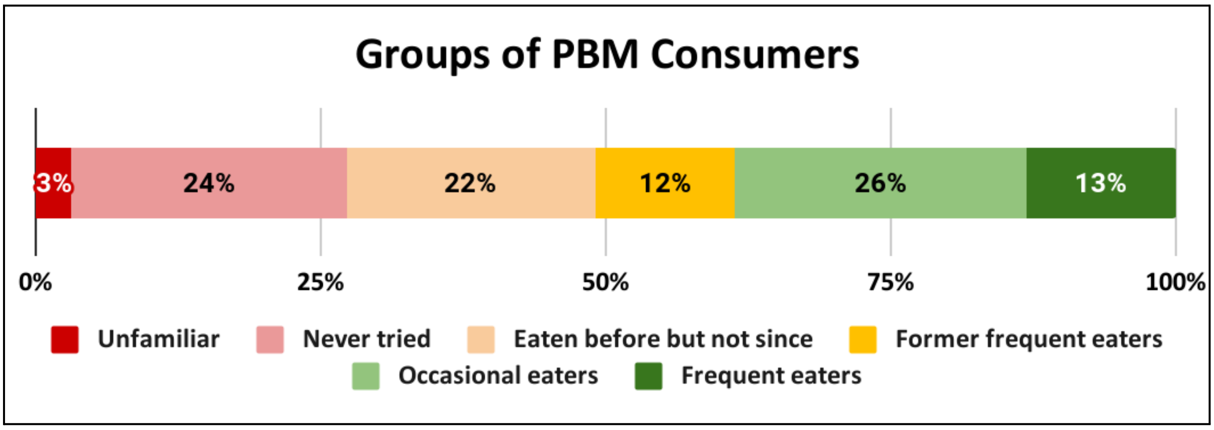
The participants were representative of the UK in terms of age groups, gender, and region, and were compensated for their participation through Attest. Full demographic details are in Appendix 1.

Participants answered closed and open-text questions about their diet, how and whether they purchase(d) PBMs, and their opinions about different aspects of PBMs. The full survey questionnaire is in Appendix 2.

3. Findings

3.1. Types of PBM consumers

Consumers indicated which of six groups they belonged to with respect to PBM consumption.



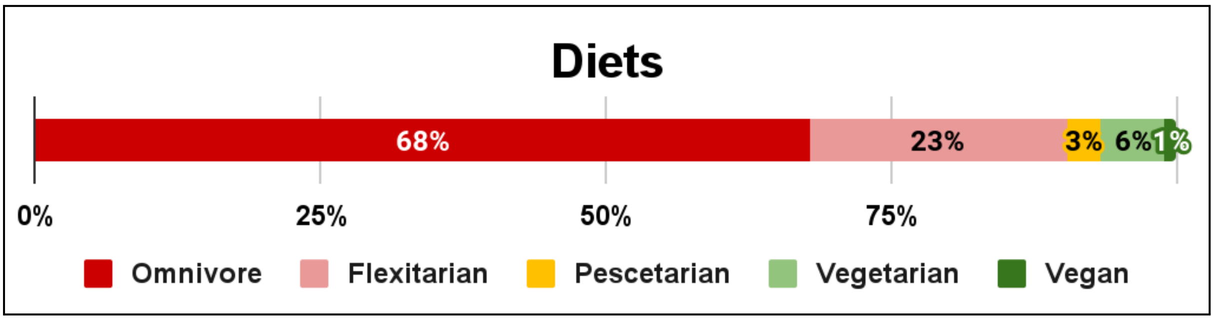
Participants were asked to indicate which of 6 statements best applied to them, and were subsequently categorised as:

Group	Exact answer wording
Unfamiliar	I don't know what they are / have never heard of them or tried them
Never tried	I know what they are but haven't tried them
Eaten before but not since	**I've eaten them in the past but haven't bought or eaten them again**
Former frequent eaters	**I used to eat them regularly (more than a few times / month) but am eating them less nowadays**
Occasional eaters	I eat them occasionally (2- 3x / month)
Frequent eaters	I eat them frequently (more than once / week)

The group which could broadly be considered 'lapsed consumers' includes those who had eaten PBM before but not since, and those who are former frequent PBM eaters, were 34% of the total sample.

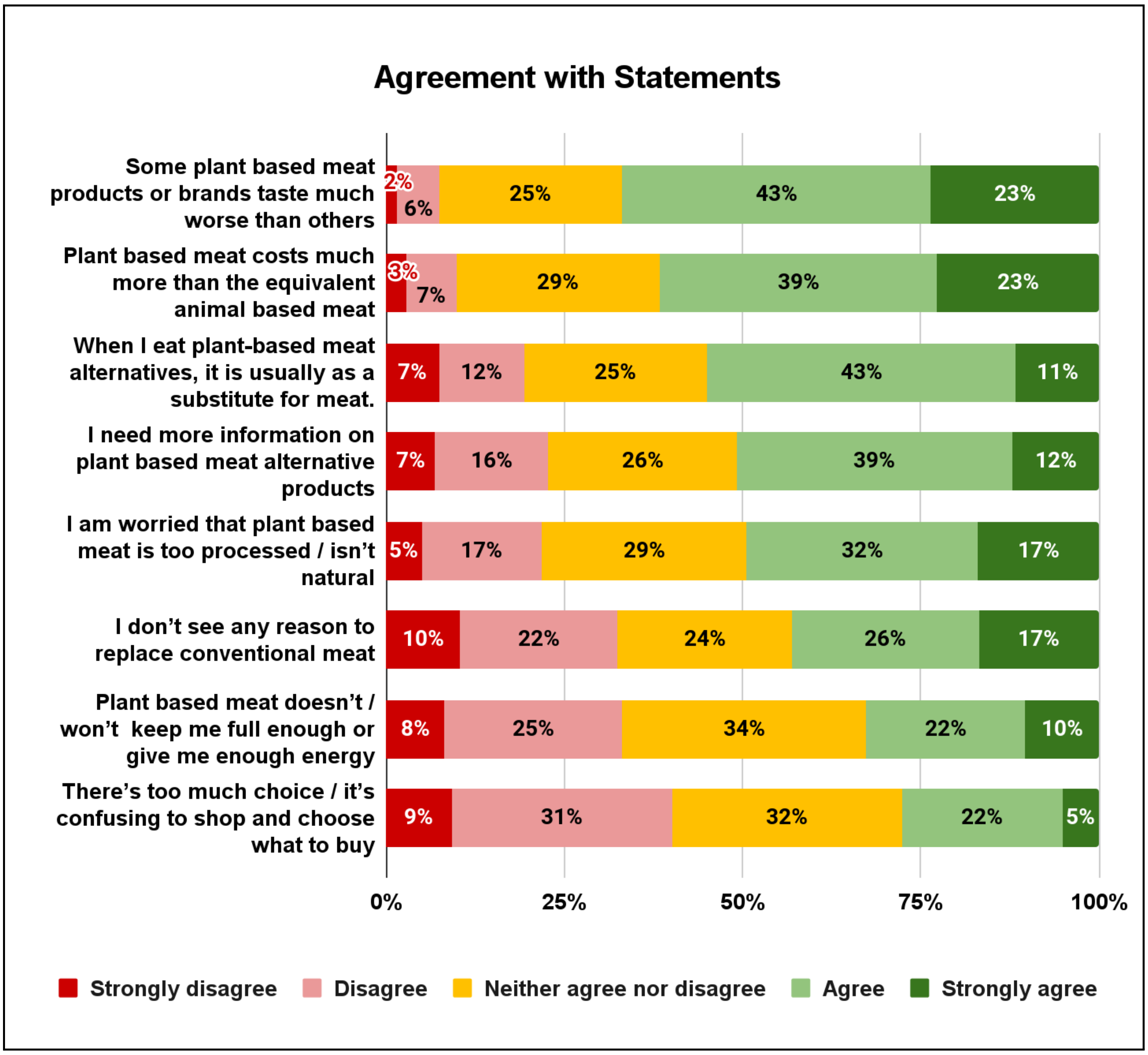
3.2. Overall attitudes

3.2.1. Diets



In line with [existing estimates of UK diets](), our sample included 10% pescetarians, vegetarians, or vegans, a further 23% flexitarians, and omnivores making up 68%.

3.2.2. General attitudes towards PBMs



Participants also gave their views on a series of statements about plant-based meat (see above).

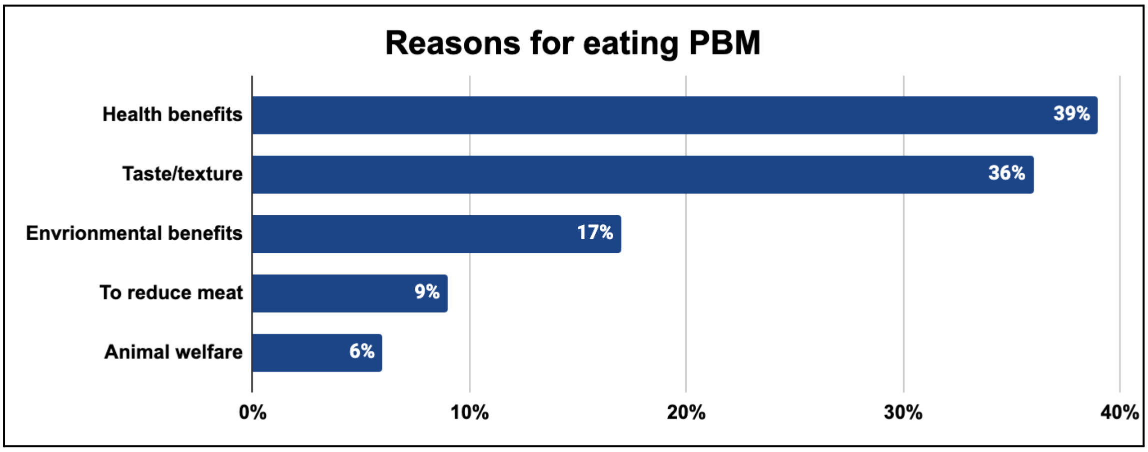
1. The majority (54%) agreed that when they eat PBMs, it is usually as a **substitute** for meat. This supports the view that [alternative proteins do, indeed, displace demand for meat]. This helps frame how consumers are judging their experience of the category both in taste and price terms.
2. **The most agreed-upon statements related to the most important factors: taste and price.**
    a. Two thirds of respondents (66%) agreed that some PBMs **taste** much worse than others, indicating that there is inconsistent quality in PBMs. This is a particularly important point, as innovation in the PBM sector is continuous and ongoing, with [rapid improvements in product quality in recent years]. Continually reviewing and refreshing product ranges in this category is recommended, and indeed, is practised by many retailers.
    b. A majority (62%) agreed that plant-based meat **costs** much more than the equivalent animal meat. Retailers should consider how to make PBMs accessible to all, including continuing to invest in their own products, which are often cheaper than PBM brands, and offering price promotions. One strategy that has been observed is to target price parity for products where the animal product is relatively expensive, thus providing a higher price point for PBMs to compete with.
3. Nearly half (49%) were worried that plant-based meat is too **processed** or **unnatural**. This suggests that the idea of 'ultra-processed' food has had some traction in affecting plant-based meat demand. That said, it is worth noting that being processed/unnatural was mentioned by just 7% of respondents in open text questions, which could suggest this concern is not top-of-mind.
4. A large portion of respondents (51%) said they wanted more information about plant-based meat. More information is given in Sections 3.2.4. And 3.3.4.
5. Nearly half (43%) said they saw **no reason to replace** conventional meat. This suggests there is room for far more public information

and education about the benefits of meat reduction, especially for those who consume meat in higher-than-recommended volumes[1].

6. Low hunger **satiation** and having too much **choice** were a concern for a minority of respondents: just 32% and 27% agreed with these statements, respectively. Notably, 'too much choice' was the most disagreed-with statement, indicating that consumers are not opposed to retailers exploring different brands in the category, as many have done.

3.2.3. What PBM consumers say they like about plant-based meat

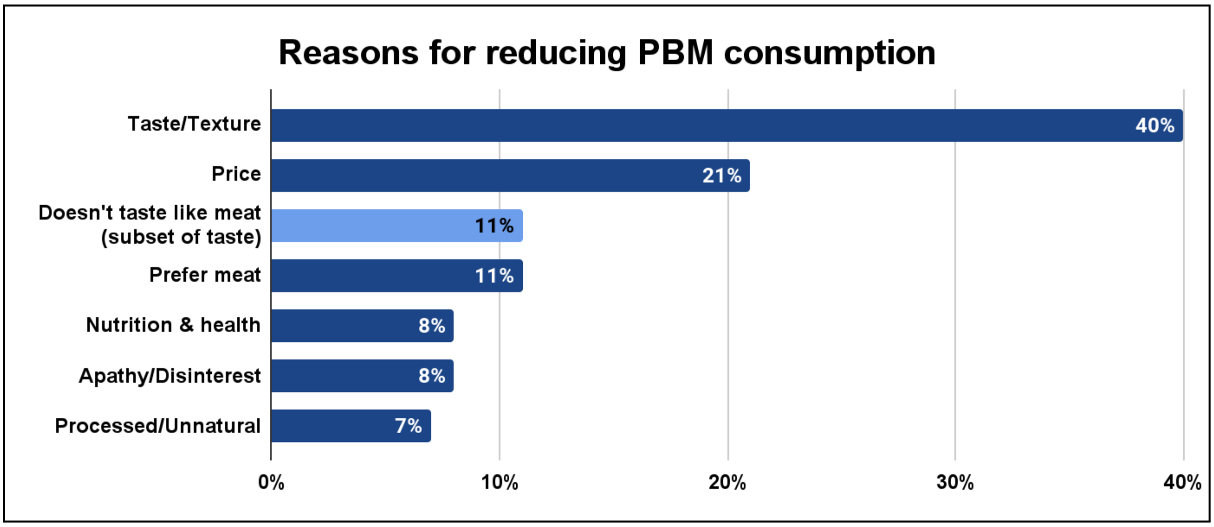
When asked open-text questions about why they bought plant-based meat and what they liked about it, among the most commonly mentioned words were 'taste', 'better', 'healthy', 'healthier', and 'good'. Respondents often mentioned both health and taste reasons together. This is an indication that some consumers do like the tastes of products on offer currently, and largely view them as healthier options.



3.2.4. What lapsed consumers say they dislike about plant-based meat

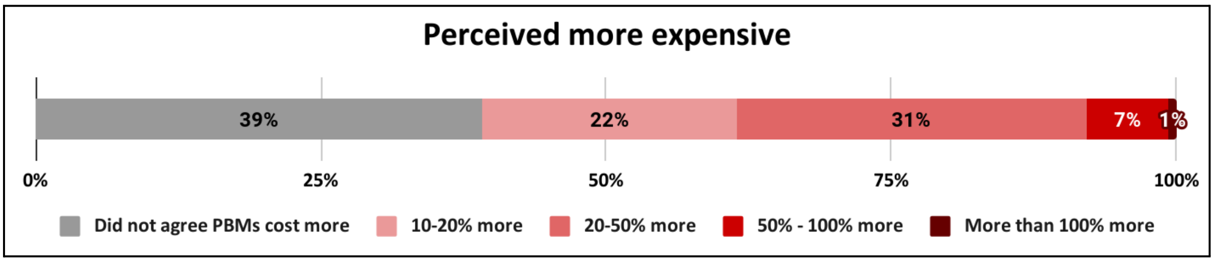
When asked open-text questions about why they reduced their consumption of plant-based meat, if they had, the most commonly-mentioned themes were taste and price, reiterating the importance of these two main drivers of adoption. PBM producers and retailers must continue their efforts to drive down production and sale prices, and to improve product taste and texture profiles. Consumers tended to discuss price especially as relative to animal products – i.e. plant-based products are more expensive than meat.

[1] The NHS recommends that anybody consuming more than 90g per day of red and processed meat reduces this to less than 70g per day. See https://www.nhs.uk/live-well/eat-well/food-types/meat-nutrition/



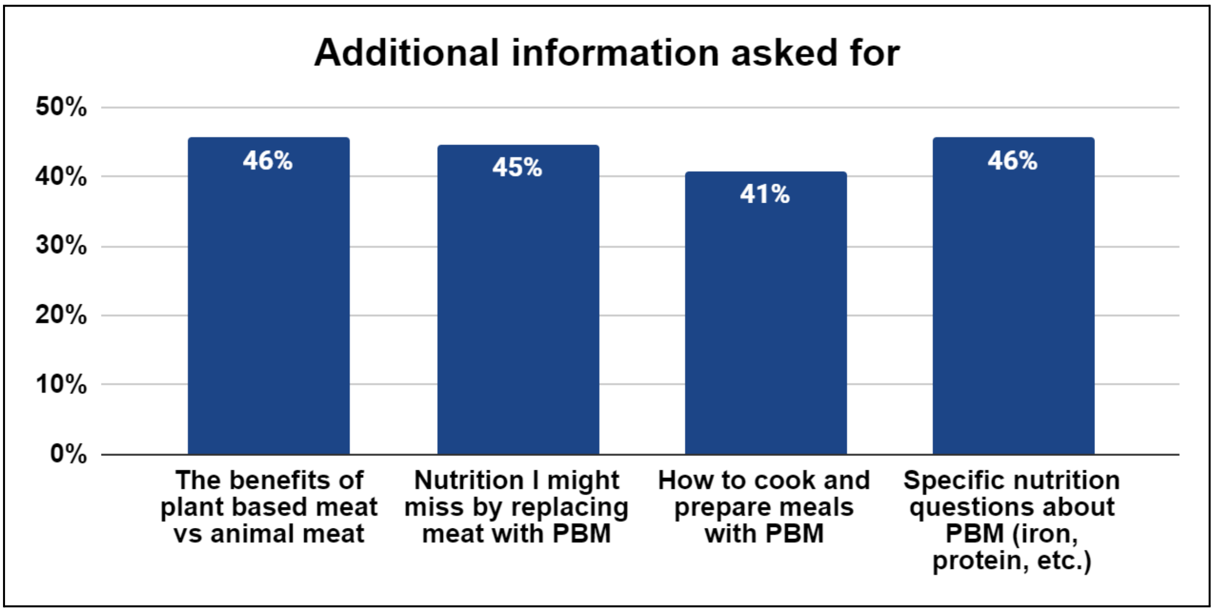
We also asked participants which brands they thought were worse and why. In general, this analysis revealed very low brand recognition – most respondents did not mention specific brands, and many said they could not remember brands. The reasons given were generally related to taste, and included words like 'taste', 'texture', and 'bland'.

3.2.5. Perceived price gap



Of those respondents who indicated that plant-based meat alternatives cost more than animal-derived meat, the **most common estimated price gap was 20–50%**, followed by 10-20%. Very few people indicated that the price gap was above 50%. This represents a fairly accurate estimate, and highlights the need for producers and retailers to further drive down the price of PBMs.

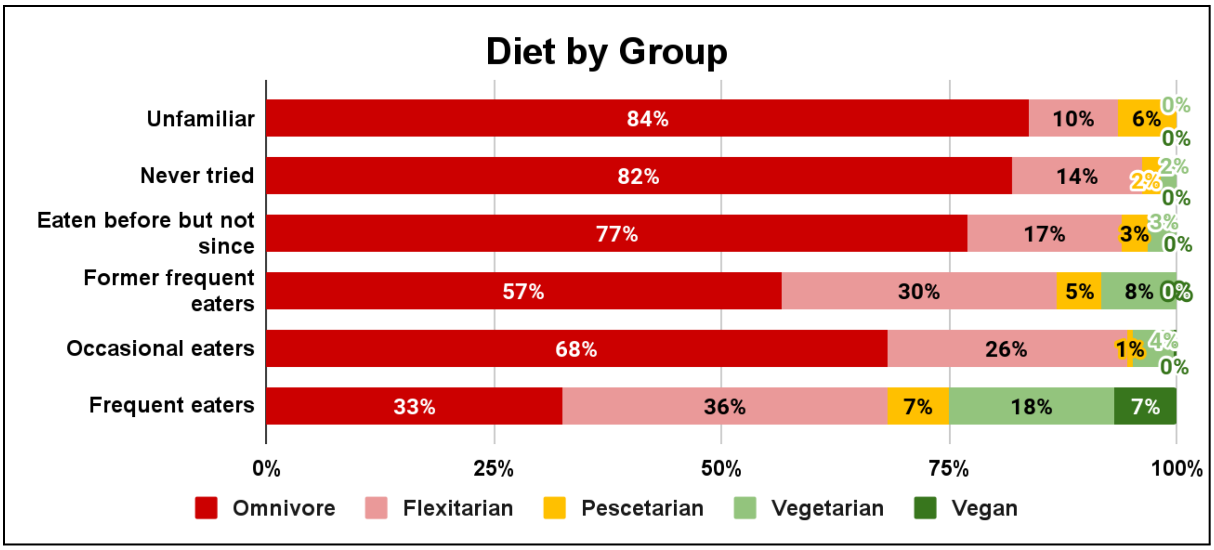
3.2.6. Additional information



For the 51% who said they needed more information, there was quite a **range of different types of information they wanted**. Approximately 41–46% of people said that they wanted more information about the benefits of PBM over conventional meat, the nutrition they might miss if they replaced meat with PBM, how to cook and prepare meals with PBM, and specific nutrition questions such as iron and protein. Although we allowed an ‘Other’ text entry option here, fewer than 1% of participants wrote in, and the majority of those responses were covered by other topics. The topic of what further information consumers want about plant-based meat is worthy of further research.

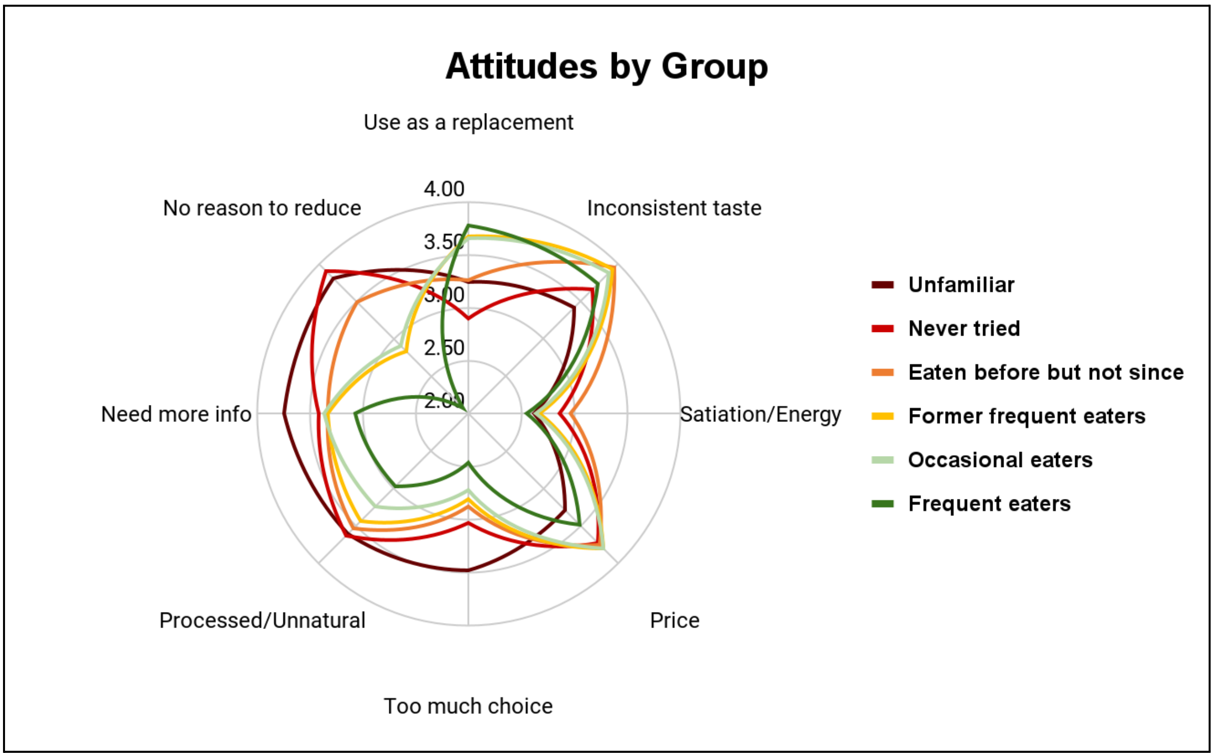
3.3. Analyses by segments

3.3.1. Diet by Group



As shown, the only group where omnivores are a minority is the Frequent PBM Eaters. This group was approximately evenly split between omnivores, flexitarians, and non-meat-eaters (pescetarians, vegetarians, and vegans). The Occasional PBM Eaters were about two-thirds omnivores, while the Former Frequent PBM Eaters were about 60% omnivores. Omnivores were upwards up 80% of the three least engaged groups: Eaten PBM Before, Never Tried PBM, and Unfamiliar with PBM (N.B. This last group was only 3%).

3.3.2. Attitudes towards specific aspects by group



On the graph above, the average agreement with each statement is represented for each group. The scale was from 'Strongly disagree' (1) to 'Strongly agree' (5), with a mid-point of 'Neither agree nor disagree' (3). Values above 3.00 indicate a tendency to agree, while values below 3.00 indicate a tendency to disagree. All of the observed mean values fell in the range of 2.00 – 4.00, so we have zoomed in on the axis to highlight the differences. This data is also given in percentages in Appendix 3.

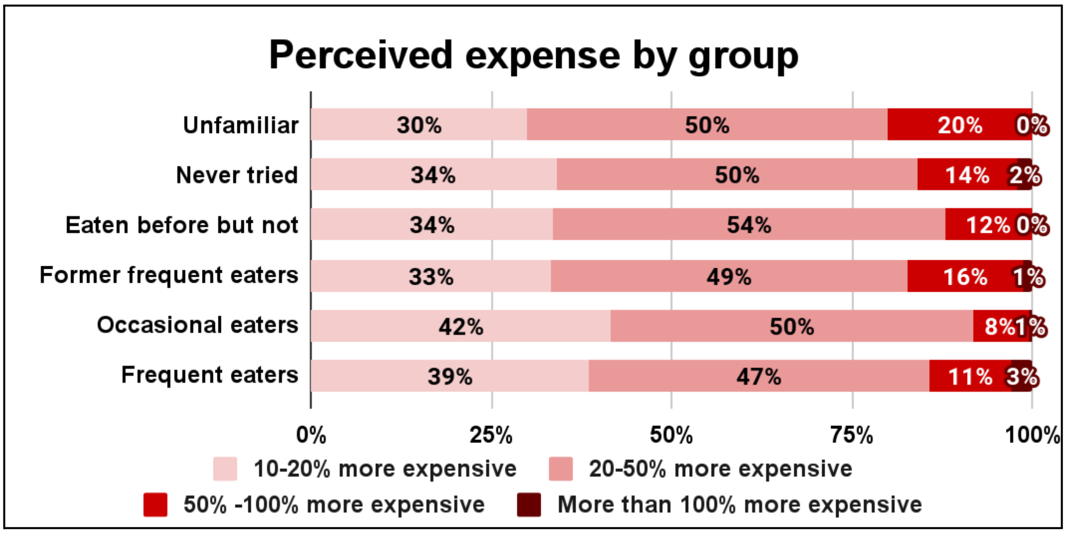
Some of the most striking observations:

1. **The Frequent PBM Eaters** are the most likely group to say they use PBMs as a substitute for meat, though all groups tended to agree with this, except for those who have never tried PBMs. This group was also the least likely to agree that there are no good reasons to reduce meat consumption, as well with a range of concerns about PBMs.
2. All groups tended to agree that PBMs were more **expensive** than conventional meat, and that some products **taste** worse than others. Interestingly, **the groups most likely to cite these concerns were the Occasional PBM Eaters and the lapsed consumer groups**. This

supports the view that **price and taste are major barriers, especially for consumers who are open to PBMs in principle.**

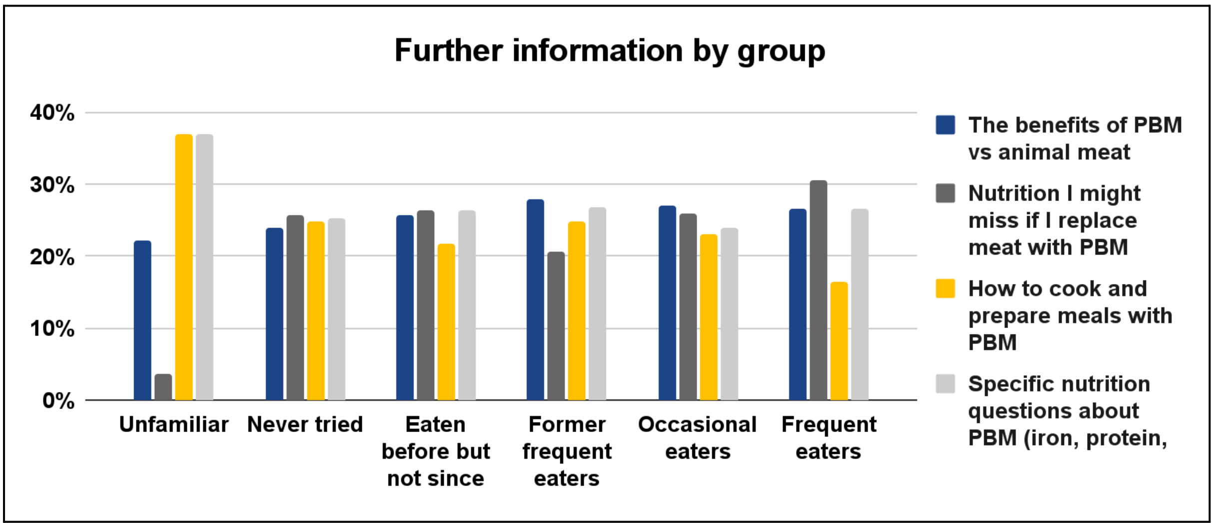
3. **The less familiar consumers** were more likely to agree that PBMs are processed/unnatural, that there is no good reason to reduce meat consumption, that PBMs would fail to give them enough energy/satiation, that there is too much choice of PBMs, and that they need more information about PBMs. This reflects the general disengagement with the category of these groups, and reflects the **need for more persuasive information on reasons to shift.**
4. The statements on which there is general agreement/disagreement is reflected in the graph in Section 3.2.

3.3.3. Perceived expense by group



It is worth noting here that, in terms of their price estimates for PBMs, the Former Frequent PBM Eaters more closely resemble the Never Tried and Eaten Before groups than the Occasional and Frequent PBM Eaters. This could indicate that price is a particular concern for the Former Frequent PBM Eaters.

3.3.4. Additional information by group



In terms of additional information, the Former Frequent PBM Eaters and the Occasional PBM Eaters were most likely to say they wanted more information about the benefits of PBM over conventional meat. Nutrition was the key concern for the Never Tried, Eaten Before, and Frequent PBM Eaters.

4. Conclusion & Recommendations

The major conclusions from this project are:

1. **The major consumer barriers continue to be not liking the taste and a relatively high price**
    a. Most people agree (66%) that some PBMs are much worse than others.
    b. Most people agree (62%) that PBMs cost much more than the equivalent animal products.
    c. The major complaints of PBM cited were, by far, relating to taste and price.
    d. The majority of those who said PBMs were more expensive correctly identified the current price premium of 20–50%.
    e. The most common responses about why participants had reduced PBM consumption related to taste/texture (40%) and price (21%).
2. **Views are divided on the healthiness of PBMs**
    a. Almost half (49%) of respondents said that they were concerned that PBM is too processed or unnatural, indicating that this narrative is getting some traction.

   b. That said, just 8% cited nutrition/health concerns in open text questions, and just 7% cited concerns about PBMs being processed/unnatural, so this concern may not be top-of-mind.
   c. The major benefits of PBM cited were health benefits (39%) and taste/texture (36%). This indicates that PBMs are still perceived as a healthier choice and a satisfying eating experience by many.
3. **There is a need for information campaigns on why to eat less meat**
   a. Almost half (43%) of respondents said that they saw no good reason to replace conventional meat.
   b. Participants said they wanted more information on a range of topics, including the benefits of PBMs, nutritional questions, and how to cook/prepare PBMs.
4. **Almost 40% of consumers are occasional or frequent PBM eaters**
   a. Those who eat PBMs frequently were 13% of our sample, and those who eat PBMs occasionally were 26% – a total of 39%.
   b. These groups are the most likely to use PBM as a replacement for meat, and the least likely to have concerns about PBMs being processed or unnatural.
5. **Lapsed consumers are about one third of consumers**
   a. Those who have eaten PBMs before but not since were 22% of our sample, and those who used to eat PBMs regularly were 12% of our sample – a total of 34%.
   b. These groups agreed most strongly with the statements about taste and price, indicating that these are major concerns for lapsed consumers.
6. **About one quarter of consumers had never tried PBMs**
   a. Those who had never heard of PBMs were just 3% of the sample, and those who had never tried them were a further 24% – a total of 27%.
   b. These groups were the least likely to reduce their meat consumption, were the most likely to say they saw no reason to reduce their meat consumption, and had the strongest agreement with a range of other concerns about PBMs.

From these conclusions, we can make the following recommendations:

1. **Demonstrate improvements in taste and price.** As PBM continues to mature, it is likely that the price will continue to fall relative to animal products and retailers will reduce their retail sales price as

volume demand grows. In the short term, it is likely that price promotions could entice a lot of consumers to the category. When substantial improvements are made to product quality, these should be widely shared and, where possible, demonstrated through free in-store samples of the best products.

2. **Win the argument on health.** While nutritional concerns, and related concerns about the healthiness of processed foods, are held by some, healthiness is also regarded as a benefit of PBMs by those who consume them. Continue to deconstruct the narrative that processed foods are necessarily unhealthy, and continue to promote the benefits of PBMs in terms of reduced calorie density, reduced saturated fat, reduced cholesterol, and increased fibre.
3. **Increase awareness of the need to change.** Many people still say they see no need to replace animal products, and this view is especially strong amongst those who have never tried PBMs. The PBM industry needs to continue to highlight the compelling environmental, health, and moral arguments to 'push' people away from animal products, while PBMs continue to improve in terms of price and taste 'pull' factors.

Appendices

Appendix 1: Sample demographics

Gender		**Income**	
Female	51%	Less than £15,000	22.4%
Male	49%	£15,000 to £19,999	12.7%
Age		£20,000 to £24,999	13.5%
18-24	15.2%	£25,000 to £29,999	10.2%
25-34	19.0%	£30,000 to £34,999	8.4%
35-44	24.3%	£35,000 to £39,999	5.7%
45-54	22.3%	£40,000 to £44,999	4.5%
55-65	19.2%	£45,000 to £49,999	5.3%
Region		£50,000 to £59,999	6.0%
East Midlands	7.3%	£60,000 to £74,999	6.4%
East of England	9.3%	£75,000 to £99,999	2.8%
London	13.4%	£100,000 and above	2.1%
North East	4.0%	**Education**	
North West	11.0%	None of the above	2.2%
Northern Ireland	2.7%	Below O Level or GCSE	6.5%
Scotland	8.3%	O Levels, GCSEs or equivalent	23.0%
South East	13.6%	A Levels or equivalent	16.1%
South West	8.6%	Further qualifications between school and university	15.4%
Wales	4.8%	Completed some university, but no degree	4.2%
West Midlands	8.8%	University degree	21.1%
Yorkshire & Humber	8.2%	Masters or professional degree	10.4%
		Post-graduate or PhD	1.2%

Appendix 2: Survey questions

1. **Which category best describes your current dietary lifestyle?**
    a. Omnivore (I frequently eat meat, such as beef, pork, chicken, turkey, fish and/or shellfish)
    b. Flexitarian (I sometimes eat meat, but I try to reduce my meat consumption and often avoid meat)
    c. Vegetarian (I don't eat meat and fish of any kind, but I do eat eggs and/or dairy products)
    d. Pescatarian (I eat fish and/or shellfish, but no other types of meat)
    e. Vegan (I don't eat meat, fish, eggs, dairy products, or any other animal-based ingredients

2. **How would you describe your current consumption of plant-based meat alternatives or substitute products?**
    a. I've eaten them in the past but haven't bought or eaten them again
    b. I know what they are but haven't tried them
    c. I eat them occasionally (2- 3x / month)
    d. I eat them frequently (more than once / week)
    e. I used to eat them regularly (more than a few times / month) but am eating them less nowadays
    f. I don't know what they are / have never heard of them or tried them

3. **Why have you reduced your consumption of plant-based meat alternatives? In your own words, please give as much detail as possible.**
    a. ______________________________

4. **Why do you eat plant based meat alternative products? What do you like about eating these products? In your own words, please give as much detail as possible.**
    a. ______________________________

5. **What is preventing you from buying / eating more of these products? What do you not like about eating these products? In your own words, please give as much detail as possible.**
    a. ______________________________

6. **To what extent do you agree or disagree with each of these statements?**

(Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree, None)

a. Some plant based meat products or brands taste much worse than others
b. Plant based meat costs much more than the equivalent animal based meat
c. When I eat plant-based meat alternatives, it is usually as a substitute for meat.
d. I need more information on plant based meat alternative products
e. I am worried that plant based meat is too processed / isn't natural
f. I don't see any reason to replace conventional meat
g. Plant based meat doesn't / won't keep me full enough or give me enough energy
h. There's too much choice / it's confusing to shop and choose what to buy

7. Which products or brands do you think are worse? Why?

a. ____

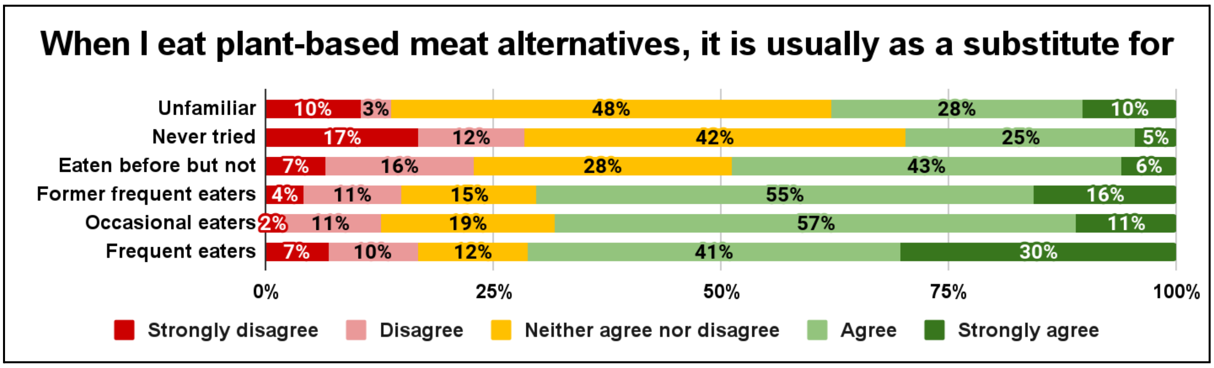
8. How much more expensive do you think plant-based meats are compared to conventional meat? (100% increase = double the price)

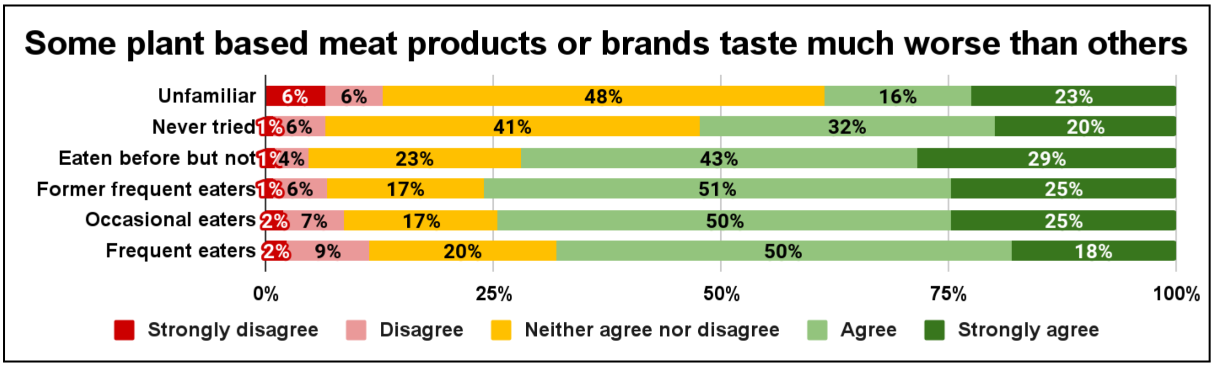
a. 20-50% more expensive
b. 10-20% more expensive
c. 50% -100% more expensive
d. More than 100% more expensive
e. None

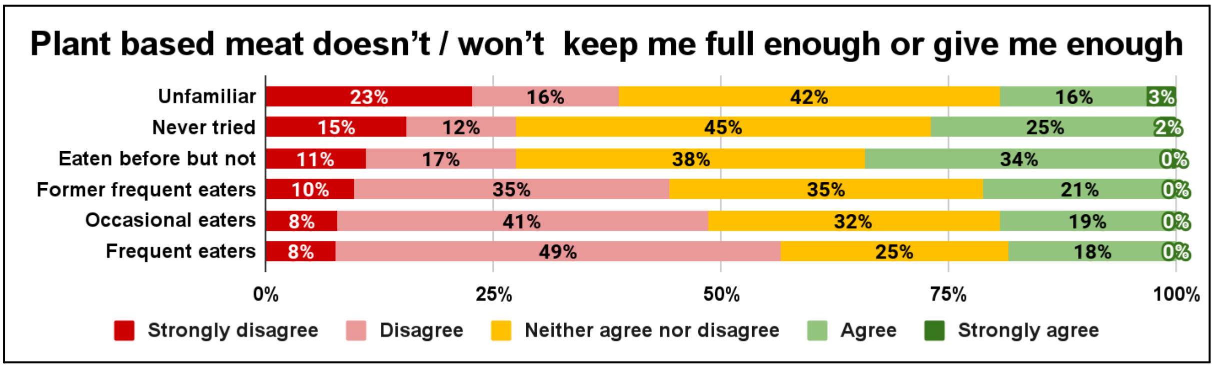
9. What sort of additional / more information would be helpful to have around plant based meat alternatives?

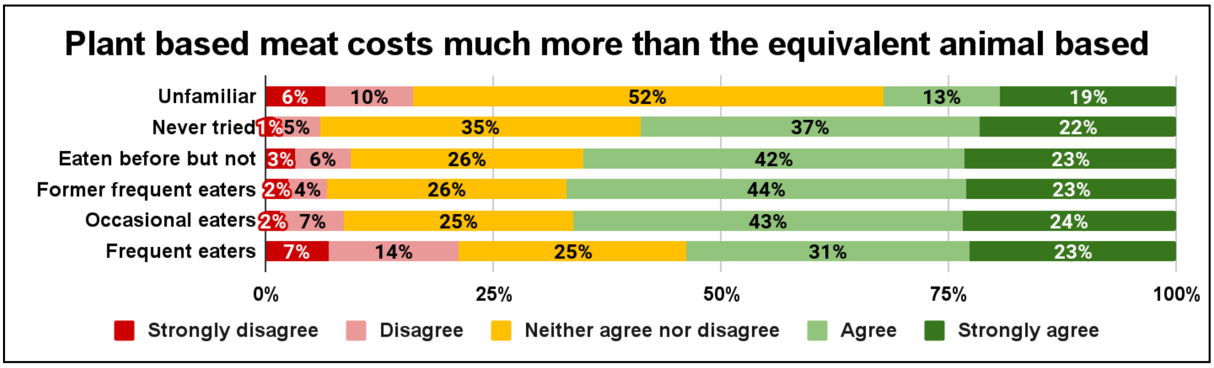
a. What nutrition I might be missing out on if I replace animal meat with plant based meat
b. The benefits of plant based meat vs animal meat
c. How to cook and prepare meals with plant based meat
d. Specific health or nutrition questions about plant-based meat (e.g. iron, protein, etc.)
e. Other
f. None
g. N/A

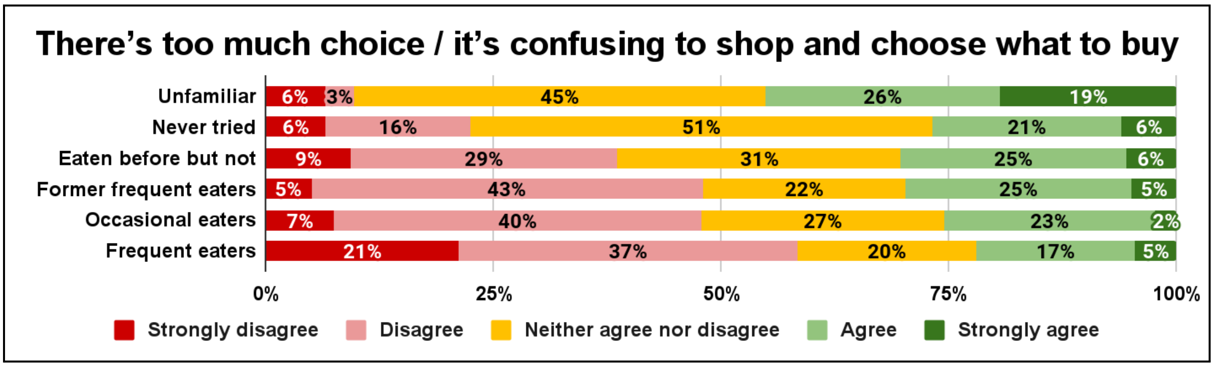
Appendix 3: Attitudes towards specific aspects by group

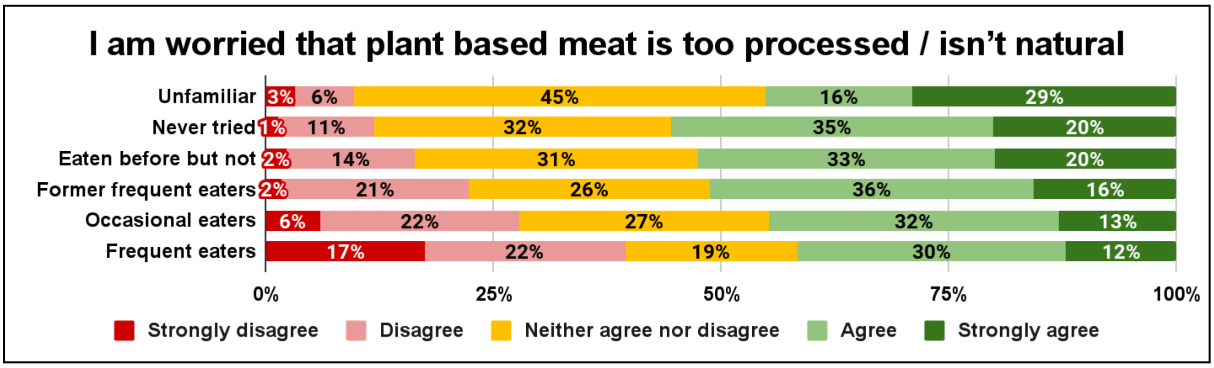


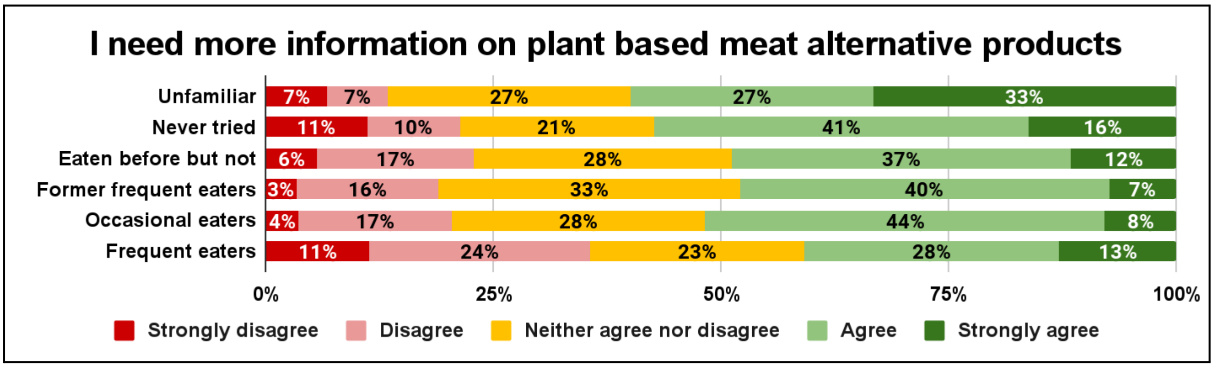


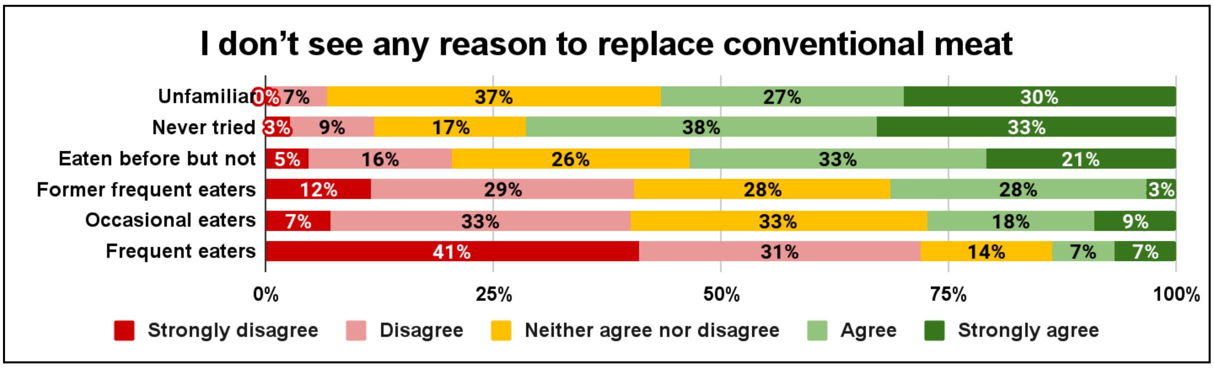





There's too much choice / it's confusing to shop and choose what to buy
Unfamiliar 6% 3% 45% 26% 19%
Never tried 6% 16% 51% 21% 6%
Eaten before but not 9% 29% 31% 25% 6%
Former frequent eaters 5% 43% 22% 25% 5%
Occasional eaters 7% 40% 27% 23% 2%
Frequent eaters 21% 37% 20% 17% 5%
0% 25% 50% 75% 100%
Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree


I am worried that plant based meat is too processed / isn't natural
Unfamiliar 3% 6% 45% 16% 29%
Never tried 1% 11% 32% 35% 20%
Eaten before but not 2% 14% 31% 33% 20%
Former frequent eaters 2% 21% 26% 36% 16%
Occasional eaters 6% 22% 27% 32% 13%
Frequent eaters 17% 22% 19% 30% 12%
0% 25% 50% 75% 100%
Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree


I need more information on plant based meat alternative products
Unfamiliar 7% 7% 27% 27% 33%
Never tried 11% 10% 21% 41% 16%
Eaten before but not 6% 17% 28% 37% 12%
Former frequent eaters 3% 16% 33% 40% 7%
Occasional eaters 4% 17% 28% 44% 8%
Frequent eaters 11% 24% 23% 28% 13%
0% 25% 50% 75% 100%
Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree


I don't see any reason to replace conventional meat
Unfamiliar 0% 7% 37% 27% 30%
Never tried 3% 9% 17% 38% 33%
Eaten before but not 5% 16% 26% 33% 21%
Former frequent eaters 12% 29% 28% 28% 3%
Occasional eaters 7% 33% 33% 18% 9%
Frequent eaters 41% 31% 14% 7% 7%
0% 25% 50% 75% 100%
Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree