Danish Center for a Plant-Based & Organic Future

Demand for organic plant-based foods among flexitarian, vegetarian and vegan consumers in Germany

Contents

Introduction

The purpose of this inspirational paper is to present the preferences of German flexitarian, vegetarian and vegan consumers in organic and organic plant-based foods (in the following, the term 'green consumer segments' is used when these three consumer groups are mentioned collectively).

The inspirational paper will be used as a basis for a dialogue with buyers in Germany and to equip Danish organic plant-based producers for exports to the German market.

The inspirational paper thus has a dual purpose and will also contribute to increasing the level of knowledge about the green consumer segments in Germany in general.

The inspirational paper is based on 393 responses among the green consumer segments, distributed on 14% respondents who eat vegan, 30% respondents who eat vegetarian and 56% respondents who eat flexitarian[1]. The gender distribution for the green consumer segments is 48% women, 50% men and 2% binary, while the age distribution is 82% for 13-34-year-olds, 16% for 35-55-year-olds and 2% for respondents aged over 55.

In the EU project 'Smart Protein', 30%[2] of the consumers state that they eat flexitarian (defined as 'I sometimes eat meat, but I am trying to reduce my meat consumption and often choose plant-based foods instead'), while the figure in our survey is 46%. However, this can probably be attributed to the use of a broad definition of flexitarians in the Smart Protein project as opposed to our survey, in which we ask more directly about how many meals they eat weekly that contain meat.

In the Smart Protein project, the share of vegetarians and vegans is 10%,[3], whereas they make up 25% (vegetarians) and 12% (vegans), respectively, in our survey.

[1] The flexitarian consumer segment consists of persons who have stated that they eat vegetarian supplemented with fish as well as persons who eat meat and/or fish up to 2-3 days a week.

[2] https://proveg.com/wp-content/uploads/2021/11/FINAL_Pan-EU-consumer-survey_Country-Specific-Insights-2.pdf

[3] https://proveg.com/wp-content/uploads/2021/11/FINAL_Pan-EU-consumer-survey_Country-Specific-Insights-2.pdf

Results and conclusions

In Germany, 89% of the green consumer segments have a total organic share of at least 20%. The fact that the figure is so high in Germany shows that organics plays an important role when the green consumer segments make their food purchases. It is thus an important point that organics should be available in all food categories and products.

For the highest organics share of 80-100%, the share is 3-11% among the green consumer segments. For the second highest organics share of 60-79%, persons who eat vegetarian have the highest share of 28%. The largest organics share across the green consumer segments is in the range of 40-59% with 34-44%. In the range of 20-39%, the level among the green consumer segments is 8-11%.

As an overall group, 28% and 24% of the green consumer segments are willing to pay up to 21-30% or 31-40% extra for organics, respectively, while only 1% are not willing to pay more for organics. Among the green consumer segments, 98% are thus willing to pay more for organics, which indicates that the green consumer segments in Germany are willing to pay for organics.

Across the various statements, green consumer segments express medium support for these (34-64%). The use of these statements thus cannot be regarded as unambiguously usable in promotion of organic (plant-based) products to the green consumer segments in Germany. The statements presented to the green consumer segments are the following:

Securing clean groundwater
Avoiding pesticides
Looking after nature and the environment.
Safeguarding biodiversity
Food safety
Animal welfare
Fewer additives
Local products

The green consumer segments' attitude to the listed reasons for buying organic products shows a certain diversity as to which reasons they weight highest. For respondents who eat vegan, 'You avoid pesticides when buying organic foods' is the reason chosen by the largest number (63%), while, for respondents who eat flexitarian, it is 'Organic food is healthier' (50%) and, for respondents who eat vegetarian, it is 'Organic foods are more climate friendly' (46%). Also for the green consumer segments in Germany, it may be surprising that the percentage is not higher for the various statements, although it may be because the question has been optional or the statements have not been able to capture the green consumer segments' reasons for buying organic products.

'Climate/environment/sustainability' (71%) is the most important reason for persons who eat vegan, followed by 'animal ethics' (59%) and 'health' (41%). For respondents who eat vegetarian, the reasons are distributed on first 'health' (51%), then 'my family's eating habits' (42%), followed by 'prevention and cure of illness' (39%). Persons who eat flexitarian rank 'climate/environment/sustainability' highest, followed by 'my family's eating habits' (39%) and then 'prevention and cure of illness' (35%). Relative to both the Netherlands and France, the respondents' family's eating habits affect their dietary preferences. More organic and green meals may thus be linked to an influence on the family's dietary preferences as a whole or it may be due to the respondents still living at home. As the reasons have a certain diversity among the green consumer segments, it is not clear which reasons can be used for marketing purposes, as this will depend on the target group in question.

Across the different types of labelling scheme, just under 50% of the green consumer segments state that this is something they find 'Important' or 'Very important'.

Especially for persons who eat vegetarian and vegan, there is a stronger demand for veg labelling (vegetarian or vegan) than for organic labelling. Export companies should be aware of this nuance, although it it can probably create added value for them to have both veg labelling and organic labelling.

Satisfaction with the product categories presented varies across the green consumer segments, although it is particularly low among persons who eat flexitarian and vegan when it comes to 'Organic processed products as alternatives to meat', 'Organic plant-based toppings and 'Organic plant-based ready meals'. For persons who eat vegetarian, the satisfaction is lowest for 'Organic plant-based toppings'.

In relation to increasing the satisfaction among German consumers within these categories, it might be relevant in an export context to look in the direction of Germany. In addition, some of the green consumer segments also have a neutral attitude to the presented product categories, which can be seen as an opening in an export context, although it will be relevant to examine this hypothesis in further detail.

As an overall group, 44% in the green consumer segment find it 'Very important or 'Important' that plant-based foods are as natural and as little processed as possible. In the green consumer segment, between 39 and 58% find it 'Very important' or 'Important' that plant-based foods are as natural and as little processed as possible, although 16-33% of the green consumer segments also stage 'Neither nor'. However, it can predominantly be said that the green consumer segments find it important that plant-based foods are as natural and as little processed as possible, which is also in line with organic foods often being less processed.

Between 43-67% of the green consumer segments state that they shop in discount supermarkets weekly, while around half of the green consumer segments state that they shop in supermarkets weekly (46-55%). Daily shopping applies to a lesser extent across the green consumer segments (7-21%). When we look at specialty stores and online stores, 40-45% of the respondents who eat vegetarian state that they shop in these stores weekly. For respondents who eat flexitarian, the highest number (48%) state that they shop in supermarkets weekly and for respondents who eat vegan, the highest number (67%) state that they shop in discount supermarkets weekly.

The majority of the green consumer segments shop weekly, distributed on discount supermarkets, supermarkets, specialty stores and online. The green consumer segments in Germany thus shop in many different shopping places, making it more difficult to target a specific shopping place category.

Recommendations

Based on this consumer survey among the flexitarian, vegetarian and vegan consumer segments in Germany, clear organic preferences are seen, including a high willingness to pay for organic products. In addition, respondents who eat flexitarian and vegan in Germany are dissatisfied with the range of organic plant-based ready meals. The dissatisfaction with the range of these foods thus gives Danish organic plant-based companies that produce these foods a good angle of approach to exploring and looking towards the German market. A significant part of the green consumer segments also want their plant-based foods to be as little processed as possible. This is positive for organics, as organic plant-based foods will largely be less processed, so that the degree of processing can itself also be seen as a competitive parameter for companies offering organic plant-based foods.

Communicative means

The green consumer segments in Germany only express medium support for statements connected with organic production, for example 'animal welfare' and 'looking after nature and the environment'. The use of these values/statements in connection with the marketing of organic plant-based foods will thus be something that should be examined further in relation to whether they could have a positive effect on sales. If all three segments of flexitarian, vegetarian and vegan consumers are to be catered for, the use of labelling for both organic and vegetarian/vegan on organic plant-based foods will be a competitive parameter and constitute useful information for the green consumer segments.

Knowledge about the motives of the green consumer segments can contribute to sharpening organic plant-based companies' marketing to these groups. The green consumer segments' reasons for buying organic products in Germany show a certain diversity as to which reasons they weight highest. This means that it will depend on the consumer segment which reasons it will make sense to communicate in the marketing of organic plant-based foods when they are to establish a foothold on the German market.

Strengthening and increasing Danish organic plant-based exports also require that food producers have knowledge of the different countries' rules for these foods, including the requirements from the retail chains that the producers want to access. This can be a big task, and different stakeholders, including the Danish Ministry of Foreign Affairs and Organic Denmark, are therefore trying to help producers with this knowledge and support companies' access to different export markets.

The marketing of organics is something that must be continuously explored and strengthened, as the benefits of organics are not necessarily known to all consumer segments or consumers need to be reminded of what organics entails. How and in what way the producers can best market their products and messages on, for example, the packaging are thus elements that it will be advantageous to develop – including whether some information can advantageously be provided via a QR code and not necessarily on the packaging.

In addition, many consumers will probably continue to associate organics with a high price, and pricing is therefore also a central factor and that organic plant-based foods can compete on price. The location of organic plant-based products in supermarkets and online is also a key element, as many consumers make their purchase decisions while they are shopping.

A highlighting of organics, such as organic plant-based products, as a premium product that offers consumers a lot on the sustainability barometer and that can therefore also warrant a (slightly) higher price is thus a communicative tool that producers and export delegations should keep in mind.

Organic purchases among green consumer segments

Figure 1 – Organic share of food purchases among green consumer segments

How large a share of your purchases are organic? (certified organic)	Numb er	Percentage distribution
Approx. 80-100%	19	5%
Approx. 60-79%	81	21%
Approx. 40-59%	159	41%
Approx. 20-39%	87	22%
Less than 20%	36	9%
Do not buy organic products	5	1%
Don’t know	4	1%
Total	**391**	**100%**

Approx. 1/4 of the green consumer segments state that they have an organics share of between 60-100%, while approx. 40% have an organics share of between 40-59%. Approx. 1/5 of the green consumer segments have an organics share of between 20-39%.

In Germany, 89% of the green consumer segments have a total organics share of above 20%. This figure is 94% in Denmark[4]. The fact that the figure is so high in Germany shows that organics plays an important role when the green consumer segments make their food purchases. It is thus an important point that organics should be available in all food categories and products.

[4] Dansk Vegetarisk Forening 2021: Den plantebaserede forbrugeranalyse (The Vegetarian Society of Denmark 2021: Plant-based Consumer Analysis) – see link

If we look at the green consumer segments divided into whether they eat flexitarian, vegetarian or vegan, they are distributed as follows in the figure below.

Figure 2 – Organic food purchases among green consumer segments, broken down by dietary preferences

Dietary preferences and organics purchases	Approx. 80-100%	Approx. 60-79%	Approx. 40-59%	Approx. 20-39%	Less than 20%	Do not buy organic products	Don't know	Total
Vegan	11% (N=6)	16% (N=9)	34% (N=19)	23% (N=13)	11% (N=6)	2% (N=1)	4% (N=2)	100% (N=56)
Vegetarian	6% (N=7)	28% (N=33)	38% (N=44)	16% (N=18)	11% (N=13)	1% (N=1)	0% (N=)	100% (N=116)
Flexitarian	3% (N=6)	18% (N=39)	44% (N=96)	26% (N=56)	8% (N=17)	1% (N=3)	1% (N=2)	100% (N=219)

For the highest organics share of 80-100%, the share is 3-11% among the green consumer segments.

For the second highest organics share of 60-79%, persons who eat vegetarian have the highest share of 28%. The largest organics share across the green consumer segments is in the range of 40-59% with 34-44%. In the range of 20-39%, the level among the green consumer segments is 8-11%.

The figure shows some variations among the green consumer segments in relation to organics shares. The highest organics share of 80-100% is seen among persons who eat vegan (11%), while persons who eat vegetarian (28%) have the highest organics share for the range 60-79% and persons who eat flexitarian have the highest organics share (44%) for the range 40-59%. Although persons who eat flexitarian have a lower organics share than persons who eat vegetarian and vegan, these constitute a larger consumer group and are therefore relevant to influence to an even higher organics share.

Willingness to pay for organics

One thing is how large an organics share the green consumer segments state that they buy, another is how much they are willing to pay for organics. This is important information when introducing organic products in the market.

As an overall group, 28% and 24% of the green consumer segments are willing to pay up to 21-30% or 31-40% extra for organics, respectively, while only 1% are not willing to pay more for organics. Among the green consumer segments, 98% are thus willing to pay more for organics, which indicates that the green consumer segments are willing to pay for organics. Below, the willingness to pay is presented for each of the three consumer segments.

Figure 3 – Willingness to pay for organics among green consumer segments

Dietary preferences	No	10% extra	11-20% extra	21-30% extra	31-40% extra	41-50% extra	+ 50% extra	Don't know	Total
Vegan	4% (N=2)	12% (N=6)	25% (N=13)	21% (N=11)	17% (N=9)	13% (N=7)	4% (N=2)	4% (N=2)	100% (N=52)
Vegetarian	0% (N=0)	5% (N=6)	30% (N=34)	25% (N=28)	18% (N=21)	18% (N=20)	4% (N=5)	0% (N=0)	100% (N=114)
Flexitarian	0% (N=0)	6% (N=12)	18% (N=38)	31% (N=66)	29% (N=61)	13% (N=28)	4% (N=0)	0% (N=0)	100% (N=213)

Virtually no one in the green consumer segments state that they do *not* want to pay more for organics (4%), and there are also only few respondents who want to pay more than +50% extra for organics (4%).

Among respondents who eat flexitarian, 31% and 29% are willing to pay up to 21-30% and 31-40% extra for organics, respectively, while the figure for persons who eat vegetarian is 25% and 18%, respectively, and the figure for people who eat vegan is 21% and 17%, respectively. Among the respondents who eat vegetarian and vegan, the largest shares are willing to pay 11-20% extra with 25% and 30%, respectively

Among the green consumer segments in Germany, there is a very high willingness to pay (11-40%) for organic products. The willingness to pay among the green consumer segments is significantly higher than for the green consumer segments in the Netherlands and France, and Germany must therefore be seen as an interesting market for organic (plant-based) foods in relation to pricing.

Attitudes to organics among green consumer segments

The four organic principles that form the basis of Organic Denmark's work are: The Health principle, the Ecology principle, the Fairness principle and the Care principle[5]. In this survey, we have tried to approach the green consumer segments' attitudes to a number of values that organics

[5] https://okologi.dk/vi-arbejder-for/vaerdigrundlag/

embraces. We have also asked about a number of other statements that may be of importance when the green consumer segments make their food purchases, for example local products.

The purpose of this question has been to establish the green consumer segments' attitude to the various statements without mentioning organics explicitly. Also with a view to such statements being used by producers to market their organic products, and the same applies to retail chains.

The statements included in the survey are the following:

Figure 4 – Statements

Securing clean groundwater
Avoiding pesticides
Looking after nature and the environment.
Safeguarding biodiversity
Food safety
Animal welfare
Fewer additives
Local products

For each statement, the green consumer segments could mark on a scale from 1 to 5 how important/not important this statement is to them.

The percentage distribution for each statement among the green consumer segments that have responded 'Very important' or 'Important' is shown in Figure 5 below.

Figure 5 – Distribution of statements among green consumer segments

Statements	Percentage distribution	
Securing clean groundwater	Vegan (N=28)	50%
	Vegetarian (N=74)	63%
	Flexitarian (N=129)	58%
Avoiding pesticides	Vegan (N=35)	64%
	Vegetarian (N=69)	59%
	Flexitarian (N=111)	56%

Looking after nature and the environment	Vegan (N=32)	57%
	Vegetarian (N=52)	44%
	Flexitarian (N=99)	45%
Safeguarding biodiversity	Vegan (N=31)	56%
	Vegetarian (N=48)	41%
	Flexitarian (N=100)	46%
Food safety	Vegan (N=34)	61%
	Vegetarian (N=57)	50%
	Flexitarian (N=112)	53%
Animal welfare	Vegan (N=35)	64%
	Vegetarian (N=53)	46%
	Flexitarian (N=90)	42%
Fewer additives	Vegan (N=21)	37%
	Vegetarian (N=58)	51%
	Flexitarian (N=91)	41%
Local products	Vegan (N=24)	44%
	Vegetarian (N=60)	52%
	Flexitarian (N=93)	43%

Across the various statements, green consumer segments express medium support for these (34-64%). The use of these statements thus cannot be regarded as unambiguously usable in promotion of organic (plant-based) products to the green consumer segments in Germany.

The greatest support among persons who eat flexitarian is for the statements 'Securing clean groundwater' (58%), followed by 'Avoiding pesticides' (56%) and 'Food safety' (53%).

The greatest support among persons who eat vegetarian is for the statements 'Securing clean groundwater' (63%), 'Avoiding pesticides' (59%) and 'Food safety' (52%).

The greatest support among persons who eat vegan is for the statements 'Animal welfare' (64%), 'Avoiding pesticides' (64%) and 'Food safety' (61%).

The statement that has the least support overall across the green consumer segments is 'Fewer additives'. The green consumer segments thus have a certain diversity in relation to the statements they endorse, which indicates that the green consumer segments have different priorities when they buy foods, and it will therefore be advantageous to tailor the communication at the green consumer segment in question.

Reasons for buying organic products among green consumer segments

We have also listed a number of reasons for buying organic products and asked the green consumer segments to indicate which of these reasons they think are relevant to them. The green consumer segments have thus been free to choose how many reasons they found relevant to them. The figure below shows the breakdown on the various reasons. The extent of support for the various reasons can serve as a benchmark for producers in relation to their communication to the green consumer segments.

Figure 6 – Green consumer segments' reasons for buying organic products

Reasons	Dietary preferences
Organic production protects nature, the environment and groundwater	Vegan (N=27) 48%
	Vegetarian (N=35) 30%
	Flexitarian (N=60) 27%
Organic foods are produced with more care	Vegan (N=17) 30%
	Vegetarian (N=43) 37%
	Flexitarian (N=87) 40%
You avoid pesticides when buying organic foods	Vegan (N=35) 63%
	Vegetarian (N=40) 34%
	Flexitarian (N=76) 35%
	Vegan (N=22) 39%

Organic foods are more climate friendly	Vegetarian (N=54) 46%
	Flexitarian (N=95) 43%
Organic foods are healthier	Vegan (N=17) 30%
	Vegetarian (N=48) 41%
	Flexitarian (N=109) 50%
You contribute to better animal welfare when buying organic foods	Vegan (N=13) 23%
	Vegetarian (N=36) 31%
	Flexitarian (N=54) 26%
Organic products taste better	Vegan (N=7) 13%
	Vegetarian (N=2) 2%
	Flexitarian (N=18) 8%

The green consumer segments' attitude to the listed reasons for buying organic products shows a certain diversity as to which reasons they weight highest. For respondents who eat vegan, 'You avoid pesticides when buying organic foods' is the reason chosen by the largest number (63%), while, for respondents who eat flexitarian, it is 'Organic food is healthier' (50%) and, for respondents who eat vegetarian, it is 'Organic foods are more climate friendly' (46%). Also for the green consumer segments in Germany, it may be surprising that the percentage is not higher for the various statements, although it may be because the question has been optional or the statements have not been able to capture the green consumer segments' reasons for buying organic products.

As only a very small minority of the respondents in the green consumer segments *do not* buy organic products (7 persons), we have chosen not to look further at the reasons for this, as the analysis will be based on too small a data base.

Why do the green consumer segments eat the way they do?

To obtain a signpost for why the green consumer segments eat the way they do, we have given them an option to state up to three reasons for this. The purpose of this signpost is that it may be important when new products are to be developed and/or introduced in a new market that you as a producer have knowledge of the consumers' reasons for eating the way they do to be able to target the communication or support communication handled by retailers, wholesalers, etc.

The figure below shows the green consumer segments' reasons for eating the way they do.

Figure 7 – Green consumer segments' reasons for eating the way they do.

Reasons	Dietary preferences
Health	Vegan (N=23) 41%
	Vegetarian (N=60) 51%
	Flexitarian (N=74) 34%
Prevention and cure of illness	Vegan (N=15) 27%
	Vegetarian (N=46) 39%
	Flexitarian (N=76) 35%
Animal ethics	Vegan (N=33) 59%
	Vegetarian (N=44) 38%
	Flexitarian (N=74) 34%
Climate/environment/sustainability	Vegan (N=40) 71%
	Vegetarian (N=40) 34%
	Flexitarian (N=85) 39%
My family's eating habits	Vegan (N=14) 25%
	Vegetarian (N=49) 42%
	Flexitarian (N=85) 39%
Religion	Vegan (N=8) 14%
	Vegetarian (N=17) 15%
	Flexitarian (N=54) 25%
I have always eaten like this	Vegan (N=3) 5%
	Vegetarian (N=23) 20%
	Flexitarian (N=66) 30%

As the figure shows, climate/environment/sustainability (71%) is the most important reason for persons who eat vegan, followed by 'animal ethics' (59%) and 'health' (41%). For respondents who eat vegetarian, the reasons are distributed on first 'health' (51%), then 'my family's eating habits' (42%), followed by 'prevention and cure of illness' (39%). Persons who eat flexitarian rank 'climate/environment/sustainability' highest, followed by 'my family's eating habits' (39%) and then 'prevention and cure of illness' (35%). Relative to both the Netherlands and France, the respondents' family's eating habits affect their dietary preferences. More organic and green meals may thus be linked to an influence on the family's dietary preferences as a whole or it may be due to the respondents still living at home. As the reasons have a certain diversity among the green consumer segments, it is not clear which reasons can be used for marketing purposes, as this will depend on the target group in question.

Labelling schemes

In the survey, we have also asked about the green consumer segments' attitudes towards different types of labelling schemes for vegetarian, vegan and organic foods.

The green consumer segments' attitudes, broken down by dietary preferences, are distributed as follows.

Figure 8 – Official vegetarian labelling scheme

Official vegetarian labelling	Very important	Important	Neither nor	Less important	Not important	Don't know	Total
Vegan	11% (N=6)	27% (N=15)	16% (N=9)	23% (N=13)	21% (N=12)	2% (N=1)	100% (N=56)
Vegetarian	23% (N=27)	39% (N=46)	26% (N=30)	9% (N=11)	2% (N=2)	1% (N=1)	100% (N=117)
Flexitarian	18% (N=57)	36% (N=113)	19% (N=61)	12% (N=39)	13% (N=40)	2% (N=5)	100% (N=217)

Across the green consumer segments, the figure is between 28% and 62% in terms of whether the respondents think an official vegetarian labelling scheme is 'Very important' or 'Important'. For persons who eat vegetarian, the figure is not surprisingly highest (62%). For persons who eat vegan, 44% state that such a labelling scheme is 'Less important' or 'Not important', while this only applies to 25% of the flexitarians and 11% of the vegetarians. The reason why persons who eat vegan do not find that an official vegetarian labelling scheme is important must be that this information is not useful to them.

Regarding an official vegan labelling scheme, the green consumer segments' views are shown in the figure below.

Figure 9 – Official vegan labelling scheme

Official vegan labelling	Very important	Important	Neither nor	Less important	Not important	Don't know	Total
Vegan	25% (N=14)	30% (N=17)	20% (N=11)	20% (N=11)	5% (N=3)	0% (N=0)	100% (N=56)
Vegetarian	27% (N=32)	32% (N=38)	19% (N=22)	15% (N=17)	6% (N=7)	1% (N=1)	100% (N=117)
Flexitarian	13% (N=29)	33% (N=72)	24% (N=53)	19% (N=41)	9% (N=20)	1% (N=3)	100% (N=218)

55% of the vegan respondents state that an official vegan label is 'Very important' or 'Important' to them. For flexitarians and vegetarians, this figure is 46% and 59%, respectively. Across the green consumer segments, the figure for the respondents who think it is 'Less important' or 'Not important' is between 21-18%.

For a national organic labelling scheme, the green consumer segments' views are shown in the figure below.

Figure 10 – National organic labelling scheme

National organic labelling scheme	Very import ant	Import ant	Neither nor	Less import ant	Not import ant	Don't know	Total
Vegan	18% (N=10)	29% (N=16)	30% (N=17)	20% (N=11)	4% (N=2)	0% (N=0)	100% (N=56)
Vegetarian	13% (N=15)	31% (N=36)	25% (N=29)	24% (N=28)	6% (N=7)	1% (N=1)	100% (N=116)
Flexitarian	11% (N=20)	36% (N=65)	42% (N=76)	20% (N=36)	10% (N=18)	2% (N=4)	100% (N=183)

Regarrding a national organic labelling scheme, between 44 and 47% of the respondents across the green consumer segments think this is 'Very important' or 'Important'. Across the green consumer segments, 24-30% find it 'Less important' or 'Not important'.

If we look at a European organic labelling scheme, the green consumer segments' views are shown in the figure below.

Figure 11 – European organic labelling scheme

European organic labelling scheme	Very import ant	Import ant	Neither nor	Less import ant	Not import ant	Don't know	Total
Vegan	13% (N=7)	25% (N=14)	32% (N=18)	21% (N=12)	9% (N=5)	0% (N=0)	100% (N=56)
Vegetarian	7% (N=8)	41% (N=48)	36% (N=42)	11% (N=13)	3% (N=4)	2% (N=2)	100% (N=117)
Flexitarian	8% (N=18)	28% (N=60)	38% (N=81)	23% (N=49)	3% (N=7)	0% (N=1)	100% (N=216)

For respondents who eat flexitarian and vegan, a share of 36% and 37%, respectively, think that a European organic labelling scheme is 'Very important' or 'Important', while the figure for respondents who eat vegetarian is 48%, respectively. Across the green consumer segments, 14-26% find that such a scheme is 'Less important' or 'Not important'. The share is highest among persons who eat vegan and flexitarian.

Across the different types of labelling scheme, 28-62% of the green consumer segments state that this is something they find 'Important' or 'Very important'. There is thus a fairly wide span in Germany.

Especially for persons who eat vegetarian and vegan, there is a stronger demand for veg labelling (vegetarian or vegan) than for organic labelling. Export companies should be aware of this nuance, although it it can probably create added value for them to have both veg labelling and organic labelling.

Satisfaction with the range of organic and organic plant-based products

To obtain an insight into the green consumer segments' satisfaction or lack thereof with the range of organic foods and organic plant-based foods, we have asked the respondents about a wide range of product categories.

The results are presented below.

Figure 12 – Organic and plant-based grain, flour and breakfast cereals

Product category grain, flour and breakfast cereals	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	21% (N=11)	42% (N=22)	25% (N=13)	6% (N=3)	0% (N=0)	4% (N=2)	2% (N=1)	100% (N=52)
Vegetarian	16% (N=18)	57% (N=64)	19% (N=22)	7% (N=8)	1% (N=1)	0% (N=0)	0% (N=0)	100% (N=113)
Flexitarian	14% (N=30)	49% (N=103)	27% (N=56)	8% (N=16)	2% (N=5)	0% (N=0)	0% (N=1)	100% (N=211)

Figure 13 – Organic fruit

Product category Fruit	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	18% (N=9)	37% (N=19)	25% (N=13)	16% (N=8)	2% (N=1)	0% (N=0)	2% (N=1)	100% (N=51)
Vegetarian	18% (N=20)	43% (N=48)	22% (N=25)	13% (N=15)	2% (N=2)	0% (N=0)	1% (N=1)	100% (N=112)
Flexitarian	14% (N=30)	42% (N=89)	24% (N=50)	15% (N=32)	3% (N=7)	0% (N=0)	1% (N=2)	100% (N=210)

Figure 14 – Organic vegetables

Product category vegetables	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	10% (N=5)	38% (N=20)	39% (N=19)	10% (N=5)	6% (N=3)	0% (N=0)	0% (N=0)	100% (N=52)
Vegetarian	13% (N=15)	48% (N=54)	24% (N=27)	13% (N=14)	2% (N=2)	0% (N=0)	0% (N=0)	100% (N=112)
Flexitarian	10% (N=21)	38% (N=79)	31% (N=65)	15% (N=31)	4% (N=8)	0% (N=0)	1% (N=3)	100% (N=207)

Figure 15 – Organic plant-based breads and cakes

Plant-based breads and cakes	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	8% (N=4)	33% (N=16)	39% (N=19)	14% (N=7)	2% (N=1)	0% (N=0)	4% (N=2)	100% (N=49)
Vegetarian	12% (N=13)	45% (N=50)	25% (N=28)	15% (N=17)	3% (N=3)	0% (N=0)	0% (N=0)	100% (N=111)
Flexitarian	9% (N=18)	37% (N=76)	31% (N=65)	18% (N=38)	5% (N=11)	0% (N=0)	0% (N=0)	100% (N=208)

Figure 16 – Organic plant-based beverages and alternatives to dairy products

Plant-based beverages and alternatives to dairy products	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	8% (N=4)	31% (N=16)	35% (N=18)	19% (N=10)	4% (N=2)	2% (N=1)	2% (N=25)	100% (N=52)
Vegetarian	15% (N=17)	45% (N=50)	24% (N=27)	16% (N=18)	0% (N=0)	0% (N=0)	0% (N=0)	100% (N=112)
Flexitarian	9% (N=19)	36% (N=76)	32% (N=67)	17% (N=35)	5% (N=10)	0% (N=0)	1% (N=3)	100% (N=210)

Figure 17 – Organic beans and lentils

Beans and lentils	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	13% (N=7)	27% (N=14)	37% (N=19)	13% (N=7)	8% (N=4)	0% (N=0)	2% (N=1)	100% (N=52)
Vegetarian	14% (N=15)	50% (N=55)	24% (N=27)	11% (N=12)	2% (N=2)	0% (N=0)	0% (N=0)	100% (N=111)
Flexitarian	10% (N=22)	33% (N=69)	29% (N=62)	22% (N=47)	5% (N=10)	0% (N=1)	0% (N=1)	100% (N=212)

Figure 18 – Organically processed products as alternatives to meat

Plant-based alternatives to meat	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	10% (N=5)	31% (N=16)	35% (N=18)	18% (N=9)	4% (N=2)	0% (N=0)	0% (N=0)	100% (N=51)
Vegetarian	15% (N=17)	43% (N=48)	21% (N=23)	20% (N=22)	1% (N=1)	0% (N=0)	1% (N=1)	100% (N=112)
Flexitarian	10% (N=20)	33% (N=70)	30% (N=63)	19% (N=40)	7% (N=15)	0% (N=1)	0% (N=1)	100% (N=209)

Figure 19 – Organic plant-based toppings

Plant-based toppings	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	8% (N=4)	19% (N=10)	52% (N=27)	12% (N=6)	4% (N=2)	4% (N=2)	2% (N=1)	100% (N=52)
Vegetarian	8% (N=9)	42% (N=47)	36% (N=39)	10% (N=11)	4% (N=4)	0% (N=0)	1% (N=1)	100% (N=111)
Flexitarian	9% (N=18)	33% (N=69)	28% (N=59)	23% (N=47)	7% (N=15)	0% (N=0)	0% (N=1)	100% (N=208)

Figure 20 – Organic tofu, seitan and tempeh

Tofu, seitan, tempeh	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	I do not buy these products	Don't know	Total
Vegan	16% (N=7)	38% (N=17)	42% (N=19)	16% (N=7)	2% (N=1)	2% (N=1)	0% (N=0)	100% (N=45)
Vegetarian	13% (N=14)	45% (N=50)	27% (N=30)	10% (N=11)	5% (N=5)	% (N=0)	0% (N=0)	100% (N=110)
Flexitarian	15% (N=32)	35% (N=73)	25% (N=53)	18% (N=38)	5% (N=11)	1% (N=3)	0% (N=1)	100% (N=211)

Figure 21 – Organic plant-based ready meals

Product category Ready meals	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Don't know	I do not buy these products	Total
Vegan	8% (N=4)	19% (N=10)	37% (N=19)	21% (N=11)	4% (N=2)	4% (N=2)	8% (N=4)	100% (N=52)
Vegetarian	6% (N=7)	50% (N=56)	24% (N=27)	17% (N=19)	2% (N=2)	0% (N=0)	1% (N=1)	100% (N=112)
Flexitarian	9% (N=19)	35% (N=73)	30% (N=62)	19% (N=40)	6% (N=12)	0% (N=1)	2% (N=4)	100% (N=207)

Satisfaction with the product categories presented varies across the green consumer segments, although it is particularly low among persons who eat flexitarian and vegan when it comes to 'Organic processed products as alternatives to meat', 'Organic plant-based toppings and 'Organic plant-based ready meals'. For persons who eat vegetarian, the satisfaction is lowest for 'Organic plant-based toppings'.

In relation to increasing satisfaction among German consumers in the above categories, it may be relevant in an export context for Danish companies with an organic plant-based range in these product categories to look towards Germany.

The fact that some respondents in the green consumer segments also remain neutral towards the presented product categories can also be seen as an opening in an export context, although it may also mean that the respondents do not feel they have sufficient knowledge about the range in the places where they shop. It will thus be relevant to shed more light on this hypothesis, and it will also be relevant to gain greater insight into the range of organic plant-based foods in German supermarkets in the product categories where satisfaction is lowest.

Quality of processed plant-based foods

Our hypothesis is that the more widespread plant-based products become, the more consumers will demand a higher quality, which may concern, among other aspects, the degree of processing of the products. We therefore asked the green consumer segments about the following:

'How important is it for you that processed plant-based foods are as natural and as little processed as possible?'

Figure 22 – Attitudes to degree of processing of plant-based foods

How important is it that plant-based foods are as natural and gently processed as possible?	Very important	Important	Neither nor	Less important	Not important	Total
Vegan	31% (N=17)	27% (N=15)	16% (N=9)	18% (N=10)	7% (N=4)	100% (N=55)
Vegetarian	13% (N=13)	31% (N=31)	33% (N=33)	14% (N=14)	8% (N=8)	100% (N=99)
Flexitarian	11% (N=20)	28% (N=50)	24% (N=43)	25% (N=44)	12% (N=21)	100% (N=178)

As an overall group, 44% in the green consumer segment find it 'Very important or 'Important' that plant-based foods are as natural and as little processed as possible. In the green consumer segment, between 39 and 58% find it 'Very important' or 'Important' that plant-based foods are as natural and as little processed as possible, although 16-33% of the green consumer segments also stage 'Neither nor'. However, it can predominantly be said that the green consumer segments find it important that plant-based foods are as natural and as little processed as possible, which is also in line with organic foods often being less processed. It may be useful information for food producers in relation to marketing of their organic plant-based products that this is also an important parameter for the green consumer segments when they buy foods.

Green consumer segments' shopping places

When we want to export more organic plant-based products to the green consumer segments in Germany, it is relevant to look at where these consumer segments make their purchases and at what frequency. This is shown in the figure below.

Figure 23 – Green consumer segments' shopping places

Discount supermarkets	**Daily**	**Weekly**	**Monthly**	**Almost never**	**Never**	**Total**
Vegan	9% (N=4)	67% (N=29)	28% (N=12)	19% (N=8)	5% (N=2)	100% (N=43)
Vegetarian	11% (N=13)	58% (N=66)	27% (N=31)	3% (N=3)	1% (N=1)	100% (N=114)
Flexitarian	14% (N=28)	43% (N=85)	34% (N=66)	9% (N=17)	0% (N=0)	100% (N=196)
Supermarkets	**Daily**	**Weekly**	**Monthly**	**Almost never**	**Never**	**Total**
Vegan	13% (N=7)	55% (N=30)	24% (N=13)	9% (N=5)	0%	100% (N=55)
Vegetarian	21% (N=23)	46% (N=52)	22% (N=25)	9% (N=10)	2% (N=2)	100% (N=112)
Flexitarian	9% (N=20)	48% (N=103)	32% (N=70)	9% (N=19)	2% (N=4)	100% (N=216)
Specialty stores	**Daily**	**Weekly**	**Monthly**	**Almost never**	**Never**	**Total**
Vegan	11% (N=6)	24% (N=13)	45% (N=25)	15% (N=8)	5% (N=3)	100% (N=55)
Vegetarian	7% (N=8)	45% (N=51)	35% (N=40)	12% (N=14)	1% (N=)	100% (N=114)
Flexitarian	9% (N=19)	39% (N=85)	36% (N=78)	15% (N=33)	1% (N=2)	100% (N=217)
Online	**Daily**	**Weekly**	**Monthly**	**Almost never**	**Never**	**Total**

Vegan	7% (N=4)	18% (N=10)	49% (N=27)	25% (N=14)	0% (N=0)	100% (N=55)
Vegetarian	9% (N=10)	40% (N=45)	41% (N=46)	10% (N=11)	0% (N=0)	100% (N=112)
Flexitarian	7% (N=16)	36% (N=78)	44% (N=96)	11% (N=23)	2% (N=4)	100% (N=217)

Between 43-67% of the green consumer segments state that they shop in discount supermarkets weekly, while around half of the green consumer segments state that they shop in supermarkets weekly (46-55%). Daily shopping applies to a lesser extent across the green consumer segments (7-21%). When we look at specialty stores and online stores, 40-45% of the respondents who eat vegetarian state that they shop in these stores weekly. For respondents who eat flexitarian, the highest number (48%) state that they shop in supermarkets weekly and for respondents who eat vegan, the highest number (67%) state that they shop in discount supermarkets weekly.

The majority of the green consumer segments shop weekly, distributed on discount supermarkets, supermarkets, specialty stores and online. The green consumer segments in Germany thus shop in many different shopping places, making it more difficult to target a specific shopping place category.

Methodology and reflections

Collection of data was done by referencing German Facebook groups and with the help of our partner V-label. Data was collected in the period between 12 May and 22 August and the questionnaire was shared in German on 7 July (the questionnaire was first shared in English). A total of 475 responses were collected.

AS the questionnaire survey was shared via Facebook groups, it is of course important that the respondents will be consumers who are on Facebook and that they feel sufficiently engaged to want to take the questionnaire survey.

Below, it is shown how the demographic factors are distributed on dietary preferences as well as dietary preferences crossed with gender and age.

Figure 24 – Dietary preferences

Dietary preferences	Number	Percentage distribution
I eat vegan[6]	56	12%
I eat vegetarian[7]	117	25%
I eat vegetarian supplemented with fish[8]	116	24%
I eat meat and/or fish up to 2-3 days a week[9]	104	22%
I eat meat and/or fish 4-5 days a week[10]	59	12%
I eat meat and/or fish 6-7 days a week[11]	23	5%
Total	**475**	**100%**

In the analysis, we have divided the respondents into the following groups:

Persons who eat vegan
Persons who eat vegetarian
Persons who eat flexitarian (this category includes the persons who have responded that they eat vegetarian supplemented with fish as well as persons who eat meat and/or fish up to 2-3 days a week.)

[6] Wording in the questionnaire: Ich ernähre mich vegan - ich esse keine tierischen Produkte oder Nebenprodukte
[7] Wording in the questionnaire: Ich ernähre mich vegetarisch - ich esse kein Fleisch (auch nicht Fisch)
[8] Wording in the questionnaire: Ich ernähre mich vegetarisch und esse Fisch
[9] Wording in the questionnaire: Ich esse bis zu 2-3 Tage die Woche Fleisch und/oder Fisch
[10] Wording in the questionnaire: Ich esse bis zu 4-5 Tage die Woche Fleisch und/oder Fisch
[11] Wording in the questionnaire: Ich esse bis zu 6-7 Tage die Woche Fleisch und/oder Fisch

Persons who eat meat (the persons who have responded that they eat meat and/or fish up to 4-5 days or 6-7 days a week), constituting a total of 82 persons, have been excluded from the analysis, as, in our analysis, we want to focus solely on the persons who eat vegan, vegetarian and flexitarian.

In the analysis, the collective term 'green consumer segments' is used to refer to the respondents who eat flexitarian, vegetarian or vegan, respectively. In total, this group consists of 393 respondents.

As the respondents have not answered all the questions in the survey (we have chosen to make some of the questions optional), the total number of respondents who have answered each question will vary. However, the number will be shown in each figure.

Only the green consumer segments will be included in Figures 17 and 18 – see below.

Figure 25 – Dietary preferences and gender

Dietary preferences	Woman	Man	Non-binary	Total
Vegan	57% (N=32)	41% (N=23)	2% (N=1)	100% (N=56)
Vegetarian	42% (N=49)	58% (N=68)	0% (N=0)	100% (N=117)
Flexitarian	49% (N=108)	48% (N=106)	3% (N=6)	100% (N=220)
Total	**48% (N=189)**	**50% (N=197)**	**2% (N=7)**	**100% (N=393)**

Figure 26 – Dietary preferences and age[12]

Dietary preferences	13-34 years	35-55 years	Over 55 years	Total
Vegan	84% (N=47)	13% (N=7)	4% (N=2)	100% (N=56)
Vegetarian	81% (N=95)	17% (N=20)	2% (N=2)	100% (N=117)
Flexitarian	82% (N=181)	16% (N=36)	1% (N=3)	100% (N=220)
Grand total	**82% (N=323)**	**16% (N=63)**	**2% (N=7)**	**100% (N=393)**

If we compare the size of the group of flexitarians in our survey with the number of flexitarians in the representative EU project 'Smart Protein',

[12] The youngest respondent is 16 years old.

where 30%[13] of consumers state that they eat flexitarian (defined as 'I sometimes eat meat, but I am trying to reduce my meat consumption and often choose plant-based foods instead'), the figure in our survey is somewhat higher, i.e. 46%. This consumer segment is thus overrepresented in this survey relative to Germany as a whole, and we will expect this consumer segment to increase over the coming years, making it particularly interesting from an export perspective.

In the Smart Protein project, the share of vegetarians and vegans is 10%,[14], whereas they make up 25% (vegetarians) and 12% (vegans), respectively, in our survey. In the current survey, however, we have been interested in obtaining the green consumer segments' attitudes towards organic plant-based products and especially vegans and vegetarians, as these are often among the first to try and buy new plant-based products and they often work actively to get more plant-based products on the shelves. Of the total volume, they still buy a significant quantity of these products.

[13] https://proveg.com/wp-content/uploads/2021/11/FINAL_Pan-EU-consumer-survey_Country-Specific-Insights-2.pdf
[14] https://proveg.com/wp-content/uploads/2021/11/FINAL_Pan-EU-consumer-survey_Country-Specific-Insights-2.pdf