



## Makery ScenoProt overview

## *What Makery has done*

- Qualitative study
  - Focus groups of Finnish consumers discussing attitudes towards nutrition in general, protein, and especially plant-based protein sources.
- Quantitative study
  - Online research in Finland, Sweden, Germany, and the UK with 500 consumers in each country. The respondents answered questions about familiarity of plant-based protein sources, their interest and attitudes towards vegetarian protein and nutrition in general.
- Market analysis
  - An analysis of alternative protein source markets in nine target countries. The analysis mapped the current market situation and the key trends affecting them.

## *Overview of the results*

- A majority of people in Finland and other studied nations are open to increasing plant-based protein intake in their diets. Very few are opposed to decreasing the amount of meat they eat.
- The market for meat substitutes (though they should not be called "substitutes" in marketing) is growing very fast across Europe, though countries are in very different stages of development.
- Soy, beans, peas and other legumes are well-known in all countries. Quorn, quinoa, seitan, chickpeas, buckwheat, nuts, and seeds differ in familiarity in different countries. Soy has started to raise some concerns related to sustainability, but generally all the familiar plant-based protein sources are well accepted.
- Plant-based protein products are usually seen as expensive and to some extent difficult to use and difficult to find in stores. Price, availability, and educating consumers on how to use the products are key factors in increasing demand.
- Insects are not well accepted as nutrition. More than half of the people are not willing to even try insect foods.

## *Focus group discussions*

## *Focus group discussions*

- Seven group discussions were held in two stages, three groups in March, and four groups in June.
- Three groups consisted of vegetarians, vegans, pescetarians, and lacto-ovo vegetarians. Four groups consisted of omnivores.
- The goal was to investigate the consumers' perceptions of current and alternative protein sources. This was the first phase of the project and the results were used to plan further stages.

## *Familiarity of protein sources*

- In omnivorous groups the familiar sources of protein were of course meat, fish, eggs, and dairy products. Soy products were also familiar. Vegetarians emphasized plant-based protein sources.
- In addition to soy and other legumes also spinach, broccoli, seitan, quorn, nuts, seeds, and mushrooms were mentioned. Chickpeas and hemp seeds are much used protein sources for vegetarians.
- Gold & Green Pulled Oats were familiar to all groups as a name, but only one participant had tasted it. Most were eager to try it. The groups were conducted before competitors such as Härkis and Mifu entered the market.
- Generally the knowledge of protein sources in nutrition is very high in Finland.

## *Domestic plant-based protein sources*

- The participants were asked to identify plant-based protein sources that can be grown in Finland.
- Generally speaking the knowledge of domestic plant-based protein sources is not very good. Vegetarians know more than omnivores.
  - **Peas.** Well-known by everyone.
  - **Broad beans.** Well-known by name, vegetarians use regularly, many omnivores have tried at least in lunch restaurants.
  - **Quinoa.** Name is well-known. Percieved to be expensive. Vegarians are regular users, many omnivores have tried it too.
  - **Buckwheat.** Everyone knows the name, but few non-vegarians use it. Perceptions are mostly positive, though it is not usually thought of as a protein source, it is more associated with gluten-free diets.
  - **Hemp.** Name is known by everyone, but it is used almost exclusively by vegetarians.
  - **Flax** and **canola** are not known as protein sources. **Blue lupin** is not known at all.

## Barriers

- The groups discussed what is keeping them from using more plant-based protein sources.
  - **Difficult preparation.** Vegetarian food is perceived as difficult, time-consuming, and laborious to prepare. The view is held particularly by non-vegetarians, but some vegetarians agree.
  - **Unfamiliarity.** Most consumers don't like to buy products they have not tried before. They want to first try them in restaurants, with friends, or get tasting samples.
  - **Lack of knowledge.** Many claim they don't know how to prepare new foods, and would try vegetarian options if they had recipes or other usage ideas.
  - **Price.** Vegetables are inexpensive, but processed plant-based protein products are considered expensive.
  - **Availability and visibility.** The perception is that plant-based protein products are only available in larger cities. Even when they are available their visibility in stores is considered poor making the products difficult to find.

## Drivers

- Discussion on what drives demand in plant-based protein products emphasized taste, but found also other drivers.
  - **Taste.** Most important factor in any food product is the taste. No other driver will do any good if the taste is not good.
  - **Familiarity.** Most people only buy products they are in some way familiar with. Tastings, usage in lunch restaurants, visibility in cooking shows and on social media will drive demand. Also recipes and usage ideas should be readily available.
  - **Healthiness.** Most people are interested in their own health, and truthfull claims of healthiness can drive demand.
  - **Ecological and ethical concerns.** Animal well-being and nature concervation are rising concerns among consumers and can steer demand toward sustainable products. It is important not to place blame on meat-eaters though, as no-one likes to be lectured to.
  - **Pricing.** Current prices are thought to be high. Prices should be lowered or current prices better communicated so that they don't seem so high.

## *Communication*

- Participants discussed what they would want to hear in advertising and other communication about plant-based protein sources, and what issues are better avoided.
  - **Taste and quality.** These are the most important aspects in any food product, and plant-based protein products do not make an exception.
  - **Healthiness.** Plant-based protein is seen as healthy and this should be strengthened by communication.
  - **Ecology, ethics, and environment.** As a rule, these are considered important issues worth mentioning in communication. However, some feel that a saturation point has been reached and there is already too much talk about these issues. At least lecturing or placing blame on meat-eaters should be avoided.
  - **Sturdiness and heartiness.** Vegetarian food is often pictured as salads or cream soups in public. This has led to non-vegetarians thinking that vegetarian food is not filling. Emphasis on sturdiness could change some minds.
  - **Origin.** Finns love to think that Finnish food is better and cleaner than others. Origin should be emphasized if the food is produced in Finland.

## *The future of alternative protein sources*

- All of the participants agree that the use of alternative protein sources will increase in the future.
- The number of vegetarians is not expected to increase significantly, but non-vegetarians are expected to eat more vegetarian food and less meat in the future.
- The selection of protein sources is expected to grow and diversify.
- Insects divide opinions strongly. Many are very strong in their opinion never to even try insects. Others are willing to consider, especially if the food is served in a way that the source is not recognizable. The ethics of eating insects is problematic for vegetarians. All participants need more knowledge about insects as a source of nutrition.
- Cultured meat seemed too far-fetched and distant for most to even consider, but ethically it would certainly be acceptable if the production did not cost more or use more resources than farming animals.

# *Online research in Finland, Sweden, Germany and the UK*

## *Online research*

- The research was conducted in September as an online survey in four countries simultaneously.
- In each of the countries - Finland, Sweden, Germany, and the UK - 500 responses were gathered. The respondents represented different demographic groups and places of residence.
- Only consumers who said their interest in nutrition was at least 5 on a 1-10 scale were accepted as respondents.
- The respondents answered questions about the familiarity of plant-based protein sources and their attitudes towards them. They were also asked about their diet and their willingness to change it.

## *Summary of results*

- Of all the respondents 88 % were omnivores and 10 % identified themselves as vegetarian (or pescetarian etc). The portion of vegetarians was largest in the UK and the smallest in Finland
- Most respondents cook daily or at least weekly, and usually they cook from scratch. The portion of ready-made meal users is largest in the UK.
- 43 % of the respondents plan to make changes in their diet during the next year. Finns are most happy with their current diets, whereas more than half of the British want to make changes. Mostly people want to eat "healthier" or eat more vegetables. Many want to decrease meat, fat, or calories in their diets.
- Fat is still the number one concern for people in their diets. Finns are more interested in following protein intake than other nationalities.
- The most important protein sources in the respondents' diets are white meat, red meat, and fish. There are differences between nationalities especially in the importance of dairy products and fish.
- When asked what plant-based protein sources the respondents can think of, the most common answers were beans, soy, and other legumes. Lentils and nuts were mentioned often. Almost a quarter of all respondents could not name even one plant-based source of protein.

## *Summary of results*

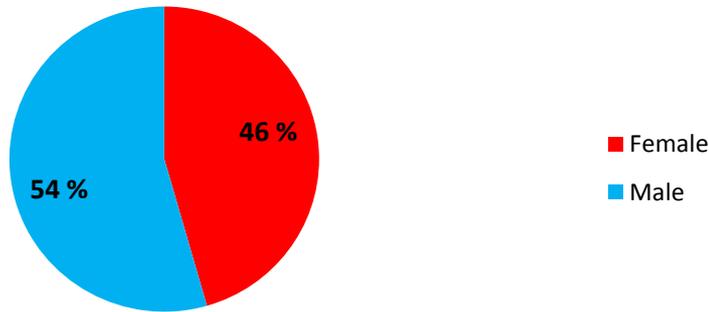
- There are no large differences between the usage of tofu, quorn, seitan and soy products. All of them are used regularly or occasionally by 20-25 % of the respondents. However, there is a significant difference in the familiarity of the products. A third of the respondents has not even heard of seitan, for example. There are also national differences in the familiarity. Finns and Swedes are familiar with tofu, whereas the British know quorn better.
- The most important basis for choosing plant-based protein products is taste. Also healthiness is important.
- The respondents were asked about barriers and drivers in using plant-based protein products.
  - Price was the greatest barrier. The perception is that the products are expensive. Special offers and lowering prices could increase demand
  - Inexperience and unfamiliarity were also barriers. Tastings and other methods of increasing familiarity would lower the threshold for trial.
  - Recipes and usage ideas would drive demand.
  - Visibility and attractive presentation in stores are important in increasing sales.

## *Summary of results*

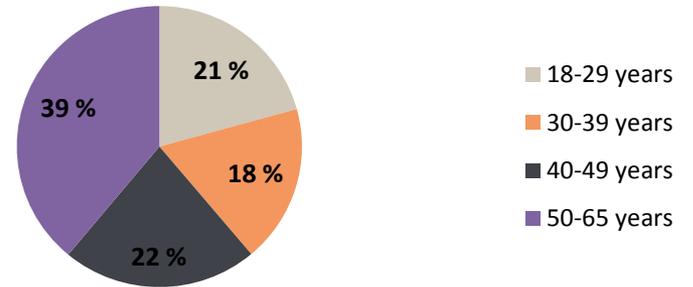
- The price perception for a 300 gram ready-made meal with plant-based protein is around 3 euro. Chilled meals are considered slightly more valuable than frozen ones.
- Taste is the most important issue to address when discussing plant-based protein products in advertisement or elsewhere. It is good to emphasize also the quality, healthiness, and the protein content.
- According to the results consumers are not interested in the opinions of famous people in marketing communication. It was considered the least important thing to communicate. It is also not important to emphasize that a product replaces meat, a product should be good on its own, not just as a substitute for something else.
- A third of the respondents have tried or are willing to try insects as food. Less than 7 % have tried and are willing to eat insects in the future too. More than half would probably or certainly refuse to even try insect food.

# Demographics (All respondents, n=2015)

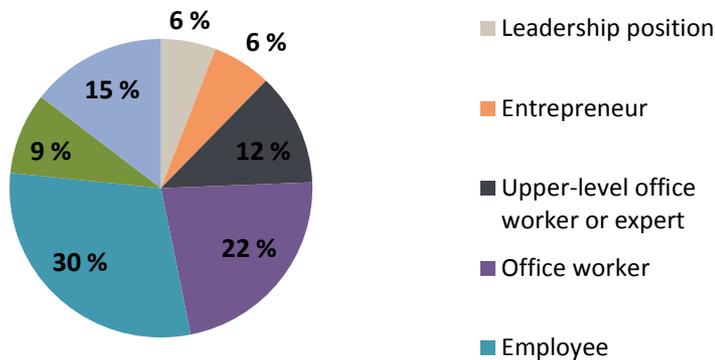
**Gender**



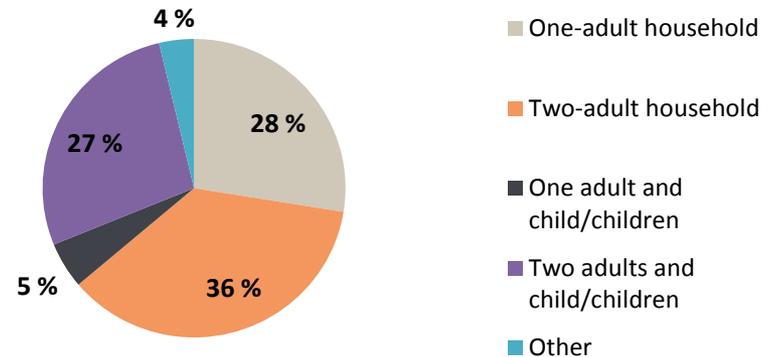
**Age**



**Occupation**



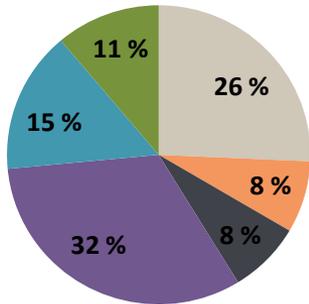
**Type of household**



# Demographics

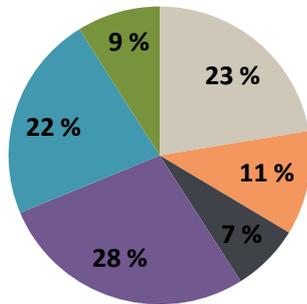
## Place of residence

-  Helsinki region
-  Tampere region
-  Turku region
-  Other city with a population over 50 000
-  Other smaller city/town
-  Countryside



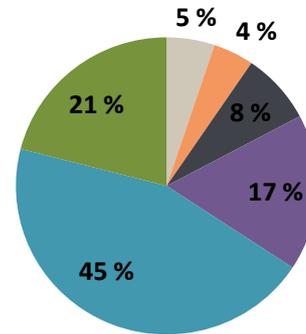
## Place of residence

-  Stockholm region
-  Gothenburg region
-  Malmö region
-  Other city with a population over 50 000
-  Smaller city/town
-  Countryside



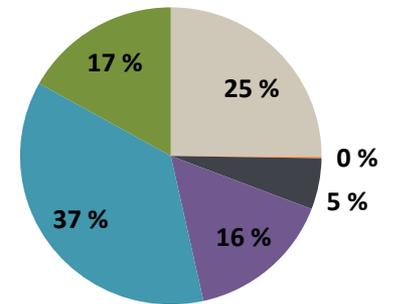
## Place of residence

-  Berlin region
-  Hamburg region
-  Munich region
-  Other city with a population over 500 000
-  Other smaller city/town
-  Countryside

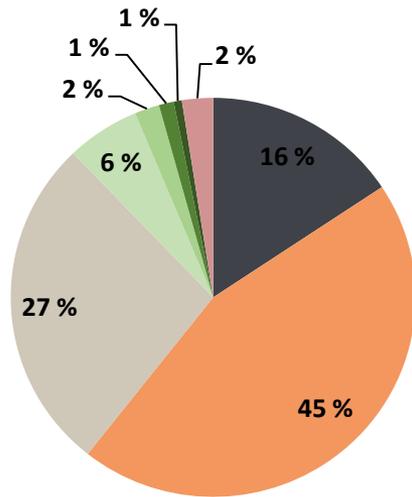


## Place of residence

-  London region
-  Birmingham region
-  Manchester region
-  Other city with a population over 500 000
-  Smaller city/town
-  Countryside



# The respondents' diets

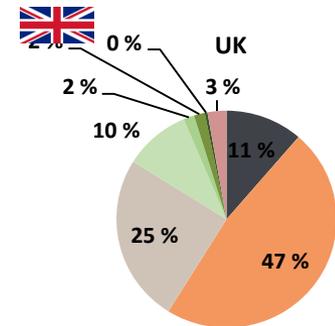
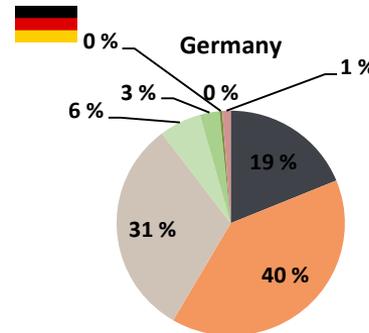
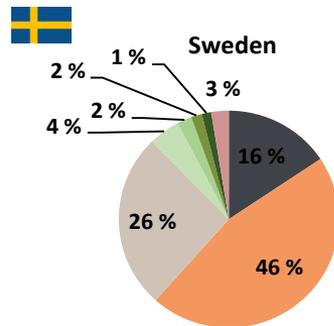
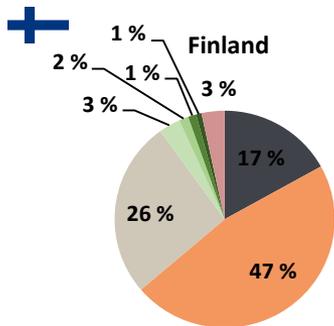


## Diet

- Omnivore, I am not very interested in even trying some vegetarian dishes except occasionally at the most
- Omnivore, I am happy to try some vegetarian dishes as well
- Omnivore, I also often eat vegetarian dishes or have vegetarian days at least weekly
- Pescetarian, I eat fish, dairy and eggs in addition to products derived from plants
- Ovo-lacto vegetarian, I eat dairy and eggs in addition to products derived from plants
- Lacto-vegetarian, I eat dairy in addition to products derived from plants
- Vegan, I only eat products derived from plants
- Other diet

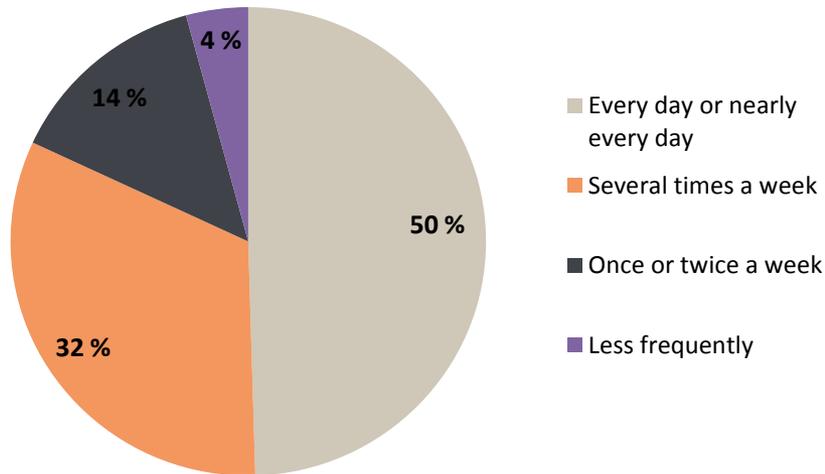
Almost half of all respondents are omnivores who are also happy to try vegetarian dishes. About one in six is not very interested in even trying vegetarian dishes. 10% identify themselves as some sort of vegetarian.

The UK has the most vegetarians. Germany has the most omnivores who are not interested in vegetarian dishes, but on the other hand also the most omnivores who often have vegetarian days.



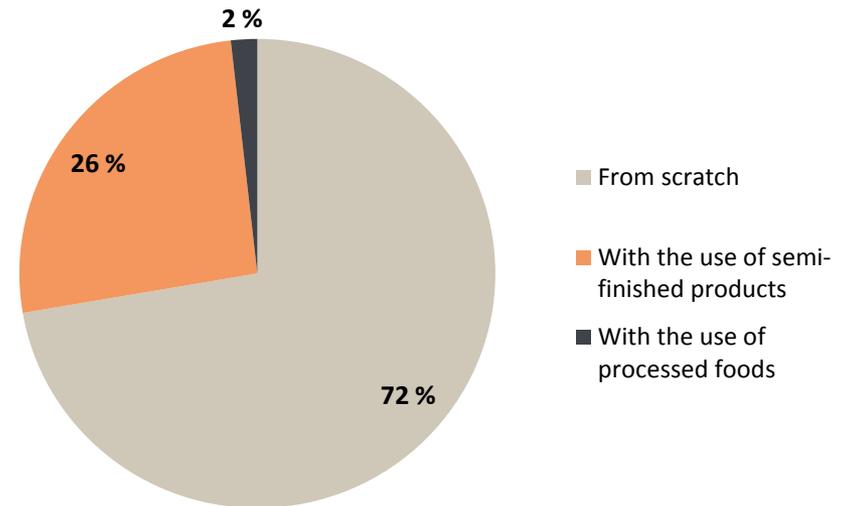
## The respondents' diets

**How often do you cook**  
All respondents



Half of all respondents cook daily or nearly daily. Finns cook slightly less often than other nationalities.

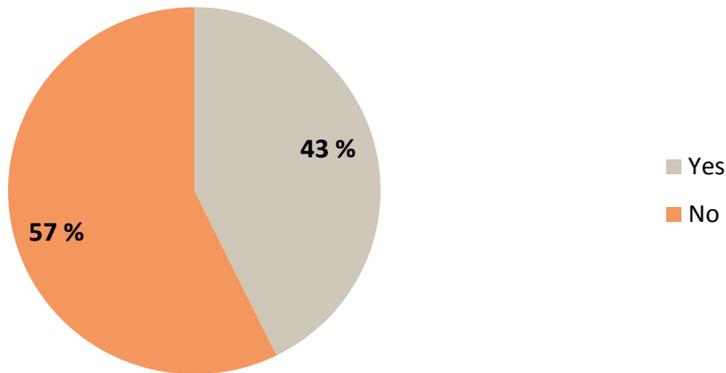
**How is food usually prepared in your household**  
All respondents



Over 70 % of all respondents usually cook from scratch. In the UK the portion who use semi-finished products and processed foods is slightly larger than in other countries.

## The respondents' diets

### Intention to change diet in the next 12 months

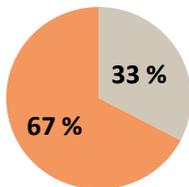


Of all the respondents 43 % are planning to make changes to their diet within the next year.

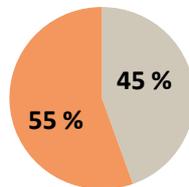
Intentions vary by country. Finns are most content with their current diets, and only a third plans to make changes. More than half of the British, however, plan to make changes.



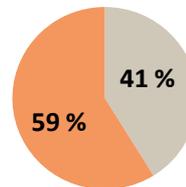
Finland



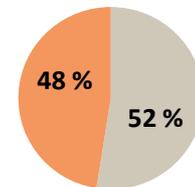
Sweden



Germany

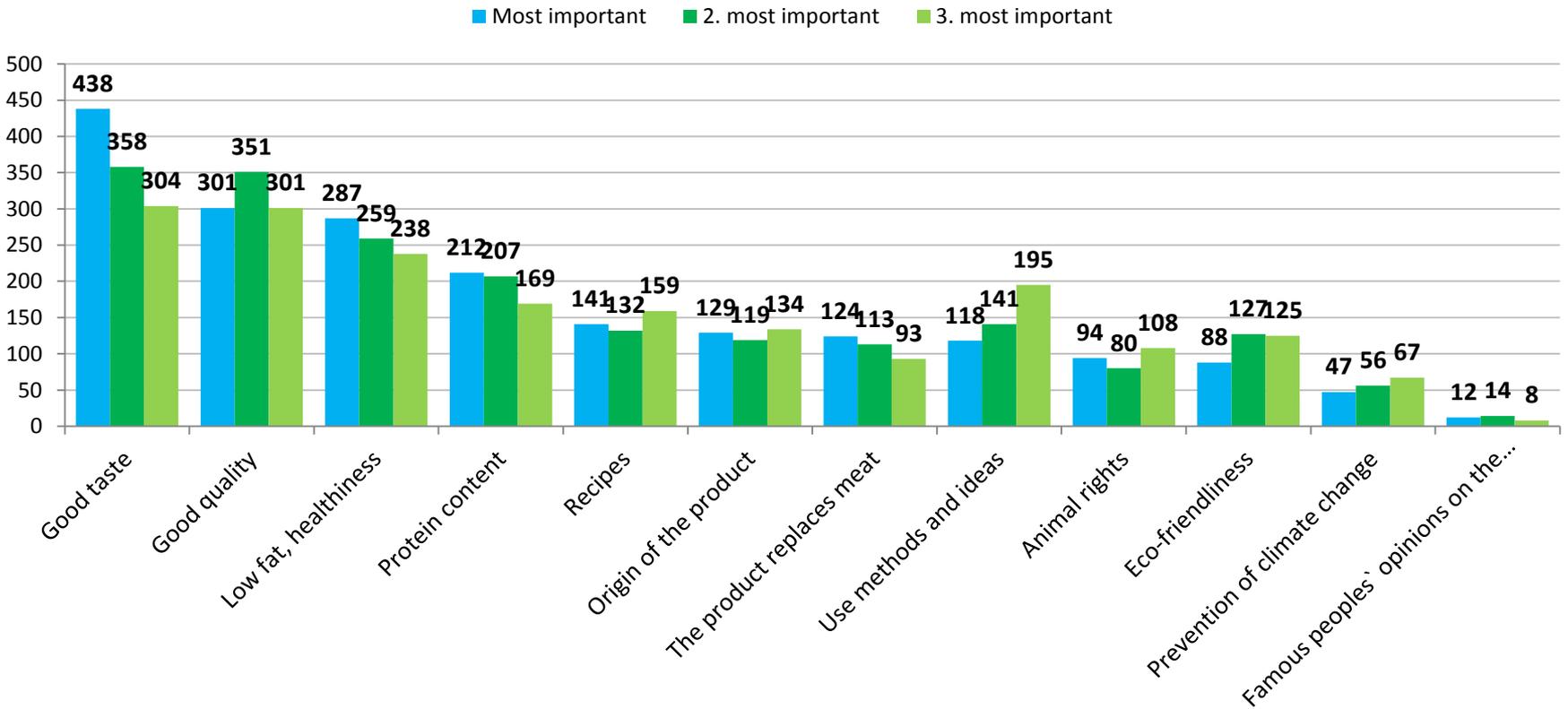


UK



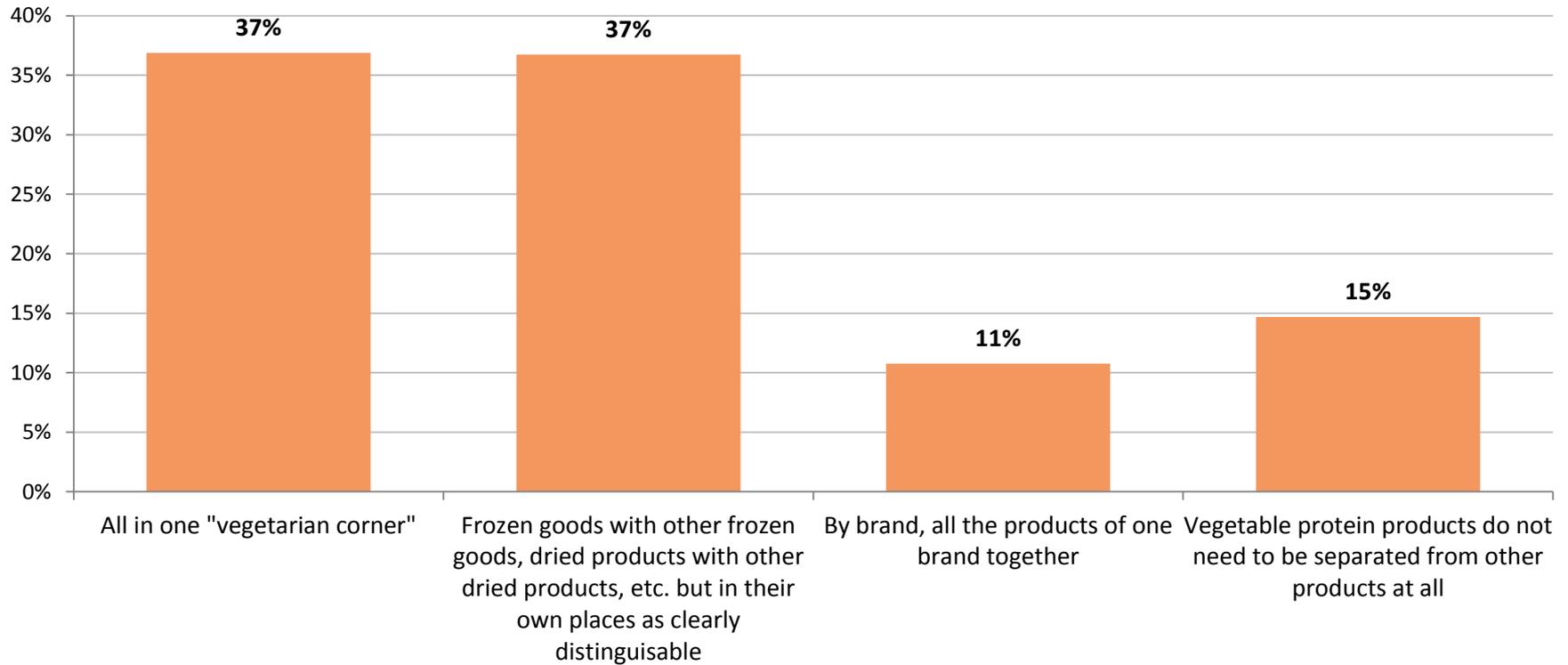
# Communication about plant-based protein

Most important issues to emphasize in communication about plant-based protein products



## Visibility in stores

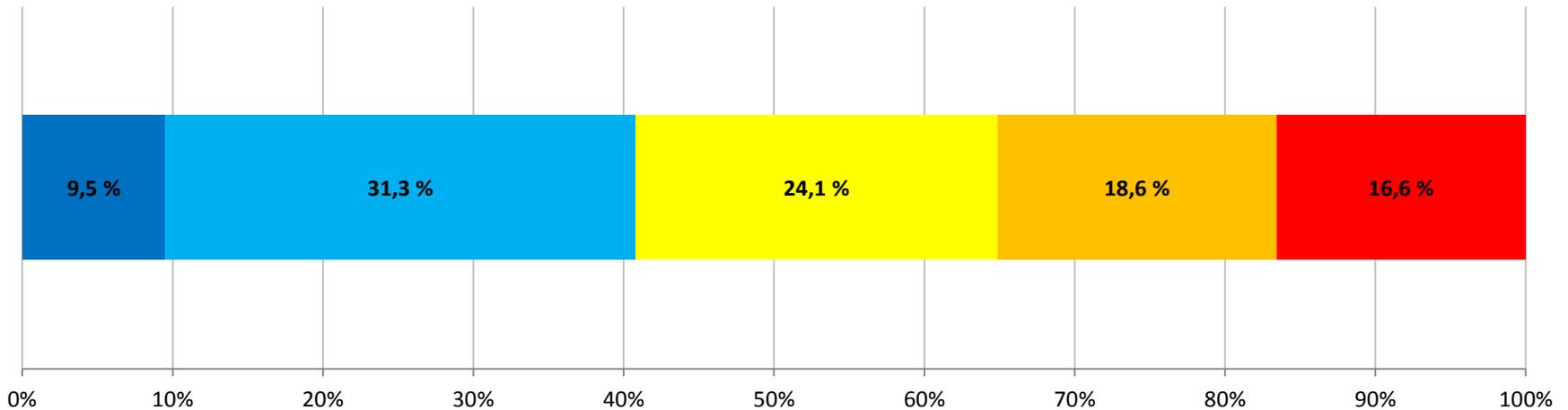
How should protein-rich vegetable products be presented in shops



# Imitating meat

## Opinion on imitating meat

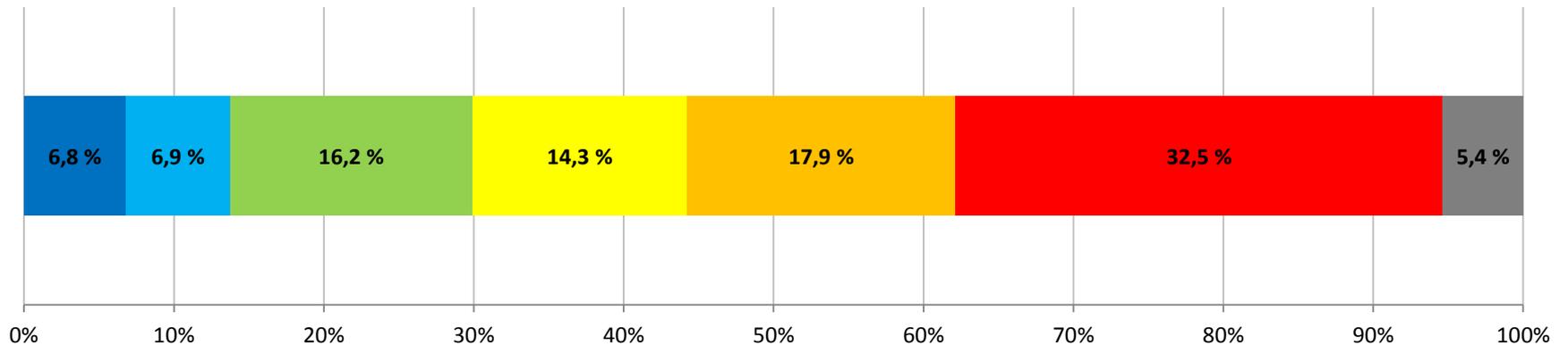
- It is important that the products resemble meat as closely as possible.
- It is good that there are vegetable-based products that resemble meat but the imitation of meat should not be an end in itself.
- It does not matter/I cannot say
- Imitating meat is unnecessary but it does not matter that there are some meat imitations in the market.
- Vegetable products should not imitate meat products at all.



# Insects as nutrition

## Insects as nutrition

- I have tasted/eaten insects and I am also interested in eating them in the future
- I have tasted/eaten insects but I am not interested in eating them in the future
- I have not eaten insects but I plan to at least taste them in the future
- I have not eaten insects and I do not believe I will eat them except maybe just to try them
- I have not eaten insects and I do not believe I even want to taste them
- I have not eaten insects and I absolutely will not even taste them
- I cannot say



## *Market analysis in nine European countries*

## *Market analysis*

- Makery conducted a study of markets of alternative protein sources in nine European countries to get an understanding of the markets and the trends affecting them.
- The study was done as a desk research using data from Euromonitor and public sources.
- The countries studied were Finland, Sweden, Denmark, Germany, Poland, Netherlands, France, Spain, and the UK.
- In the analysis all protein from plants or insects were considered alternative sources of protein.

## Summary

- Flexitarianism, or semi-vegetarianism, is clearly a rising trend. Especially in Germany and the UK, vegetarian eating is on the rise, and markets are developing fast, while in the Netherlands the market is already very well developed.
- In Spain, France, and Sweden the alternative protein market is less developed than in the Netherlands, UK, and Germany, but more developed than in Poland, Denmark, and Finland, where the market is still relatively undeveloped.
- Vegetarian eating is not on the rise only because of health reasons. Environmental and animal welfare concerns have increased consumers' interest towards plant-based products.
- Legumes and grains are familiar to most but recently new "superfoods", such as quinoa and chia seeds have emerged.
- Products made of soy beans were the most usual form of alternative protein in all markets. The second best-known was quinoa.

## Countries

- Denmark
  - Especially organic products are growing in popularity as the economy grows and the prices of organic products come down.
  - Meat and dairy are the most important sources of protein.
  - Vegetarianism and flexitarianism are on the rise. 5 % of Danes are vegetarians or vegans.
  - Attitudes, the popularity of the paleo diet, and high prices of alternative protein sources are challenges to be dealt with in Denmark.
  - There is some interest in insect eating in Denmark, but EU regulations are slowing the development of the sector.
- Finland
  - Economic recession is slowing the development of the market of alternative protein sources, but interest in natural and additive-free products is on the rise. There is also strong interest in eating local products.
  - Meat and dairy are the most important protein sources. The most popular alternative protein sources are soy, buckwheat, and quinoa.
  - The number of vegetarians has long been stable at 2-4 %. The sales of plant-based protein products is still marginal, though signs of growing interest are clear.
  - In the last two years many meat substitutes such as Quorn, Oumph, Pulled Oats, and Härkis have entered the market.

## Countries

- **France**
  - In France cooking at home from scratch is a rising trend. Awareness of overeating, diabetes, and heart disease has increased, and sparked interest in more healthy eating.
  - The protein intake is the highest among the studied countries, and more than half is from animal-based sources.
  - Scandals and mistreatment of animals have caused consumers to decrease meat eating. Vegetarianism and flexitarianism are on the rise.
  - Limited awareness of alternative protein sources and strong culinary tradition related to meat and cheese are the greatest challenges.
- **Germany**
  - The food market is relatively stagnating in Germany. Meat consumption is slowly decreasing due to ethical and environmental reasons, rising prices, and changes in demographic structure.
  - Germany is one of the leading countries in vegetarian eating in Europe. 10 % of the population identify themselves as vegetarian. Vegetarian options for drinks and foods are becoming very popular.
  - Germans are very price sensitive which can be a challenge for alternative products.
  - The most popular plant-based protein sources are chia seeds, quinoa, amaranth, and soy beans.
  - Germany is third largest market in the world for new "super foods".

## Countries

- Poland
  - The food market in Poland is in a state of stagnation or even decrease, as the population ages and shrinks. The demand for healthy products is expected to grow in the next few years though.
  - Dairy products are the largest source of protein in Poland. Vegetarian eating is not a trend yet.
  - Soy products are slowly coming from speciality stores to normal grocery stores.
  - Polish people are very price sensitive, and this is one reason why the market for alternative protein sources has not developed very well in Poland.
  - The most popular alternative products are soy, chia seeds, goji berries, quinoa and buckwheat. Sales volumes are very low though.
- Spain
  - With the recent economic crisis and aging population, the food market has not developed well in the last years in Spain.
  - Price is the most important factor in buying food, though origin and responsibility are becoming more important.
  - Pork and poultry are the most important sources of protein.
  - There is strong growth in alternative protein sources, but sales volumes are still very small. Large retail chains are launching new products into the segment and interest is on the rise.

## Countries

- **Sweden**

- Consumers are paying more and more attention to health and wellness, which feeds the demand for natural, clean, and functional foods.
- The most important protein sources are meat, and dairy.
- Attitudes towards meat substitutes are positive, and vegetarian foods are considered trendy.
- The most popular alternative protein sources are soy, quorn, algae, and buckwheat.
- The sales of meat substitutes is increasing fast, and private label options have emerged in the segment.

- **Netherlands**

- Scandals have increased distrust towards the food industry among consumers, and increased interest in healthy eating.
- Reducing meat consumption is a trend, though the intake of alternative protein sources is still small.
- The most important protein sources are dairy and meat.
- The Dutch are more skeptical towards "super foods" than others and market is very small.
- The Netherlands is one of the leading countries in research and development of meat substitutes.
- There is also a small dedicated community of insect eaters in the Netherlands.

## Countries

- UK
  - Generally speaking the British eat less healthy than most other Europeans. 62 % of the population is overweight.
  - New recommendations encourage people to use less meat and more plant-based foods.
  - Scandals and rising prices have increased interest in alternative protein sources. The most popular ones are quorn, soy, quinoa, chia seeds, amarant, and buckwheat.
  - Insects are available, but the average consumer is not yet very interested in insects as nutrition.
  - Frozen meat substitutes is category that is growing very fast.