

# BARRIERS AND OPPORTUNITIES FOR THE UPTAKE OF MORE PLANT-BASED DIETS

## INSIGHTS FROM THE PLANTPRO PROJECT\*

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\* based on research by Jessica Aschemann-Witzel and Martje Mulders

# AGENDA

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- ☐ **Status** – how large and widespread is interest in plant-rich diets so far?
- ☐ **Segments** – which different segments differing in views & actions are in Denmark?
- ☐ **Barriers & opportunities** – how to push the development?



Image: colourbox

# DATA FROM PLANTPRO PROJECT

**Funded by Innovation Fund Denmark**

grant nr 0224-00044B

8.4 mill DKK investment by IFD

Headed by professor Jessica Aschemann-Witzel

See more at <https://mgmt.au.dk/plantpro/>

**April 2021- March 2024**

**18 partners**

MAPP Centre / Aarhus University, Food Science / University of Copenhagen, Copenhagen Business School, Plantebranchen, Dansk Vegetarisk Forening, Simple Feast, Beyond Coffee, Thinktank OneThird, Circular Food Technology, Møllerup Brands, Food Innovation House, Orkla, Naturli, Planteslagterne, Upfield, Eachthing, Rema 1000, Fair Trees.



**Reduced food waste**



**Plant-Rich diets**



**Technology acceptance**

# PLANTPRO 'BENCHMARK' SURVEY

**Aim of Benchmark:** survey at the start, middle and end of the project to be able to *measure progress* in terms of the objectives of the project.

**Data of the Benchmark:** Representative Danish consumer sample - 1126 responses



# STATUS – HOW LARGE AND WIDESPREAD IS INTEREST IN PLANT-RICH DIETS SO FAR?

# DK COMPARED TO EUROPE

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According to the EU project SmartProtein:

- ❑ 30% of Europeans identify as 'flexitarians' and 7% as 'plant-based diet'

Share of flexitarians / following a plant-based diet per country:

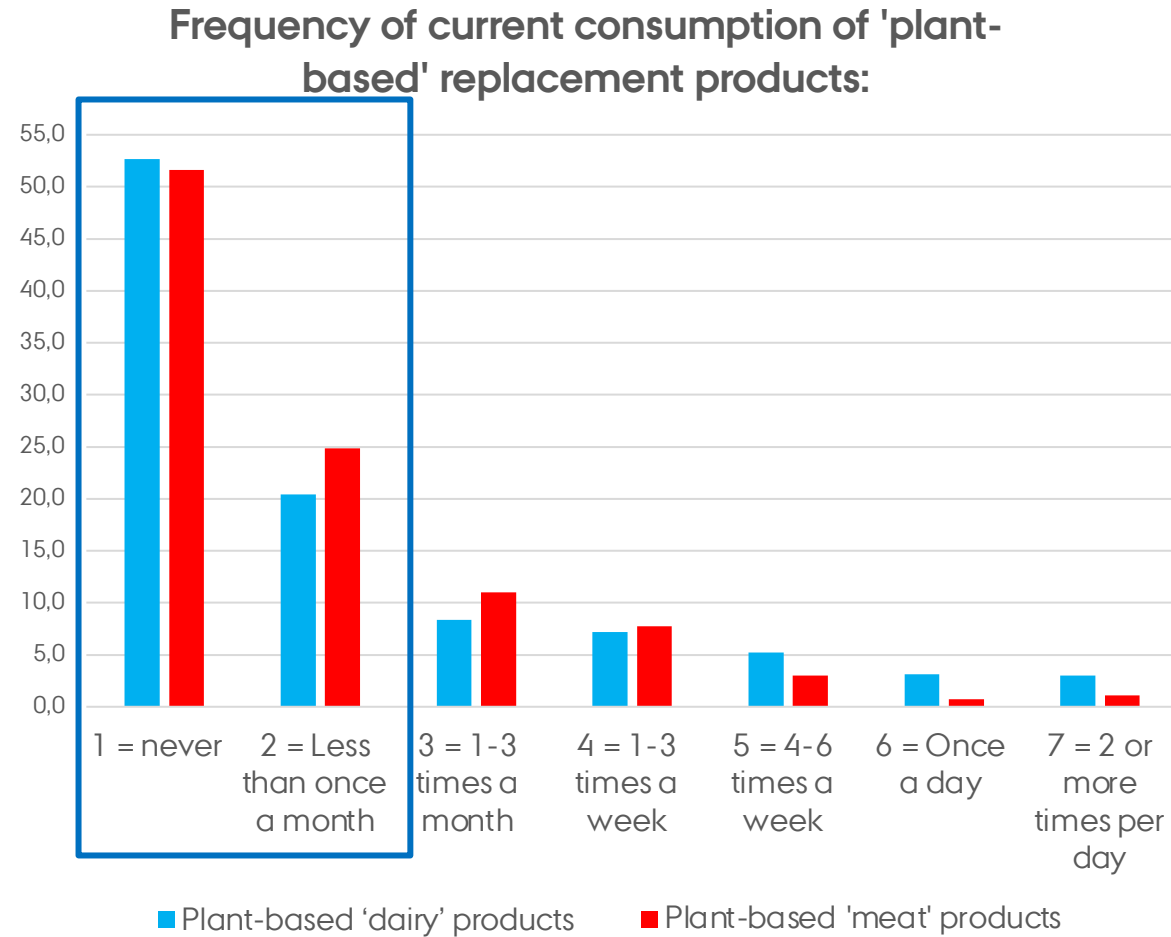
- ❑ Denmark 24% / 9%
- ❑ Germany 30% / 10%
- ❑ Netherlands 42% / 7%
- ❑ UK 23% / 9%



[www.smartproteinproject.eu](http://www.smartproteinproject.eu)

**What consumers want:**

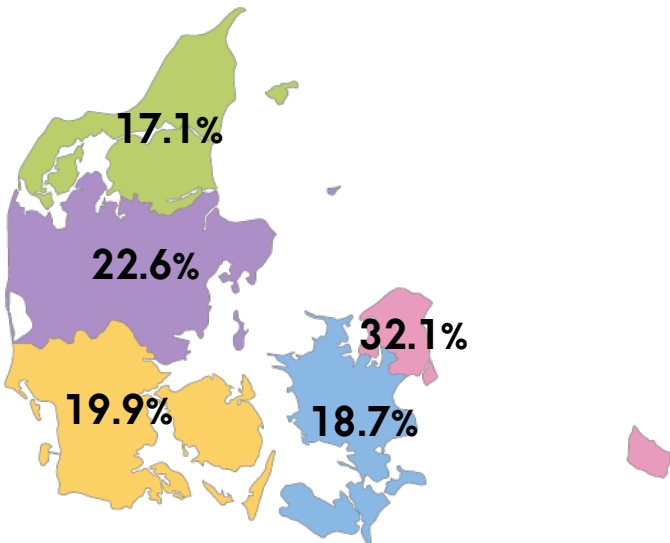
# SELF-PERCEPTION AND CONSUMPTION



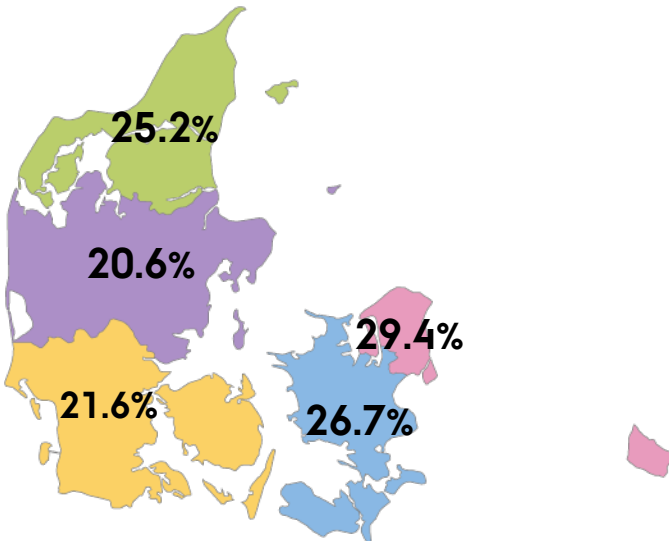


# SELF-PERCEPTION AND CONSUMPTION

## Non meat-eaters



Frequency of current consumption of 'plant-based' replacement products: **more than once a month**

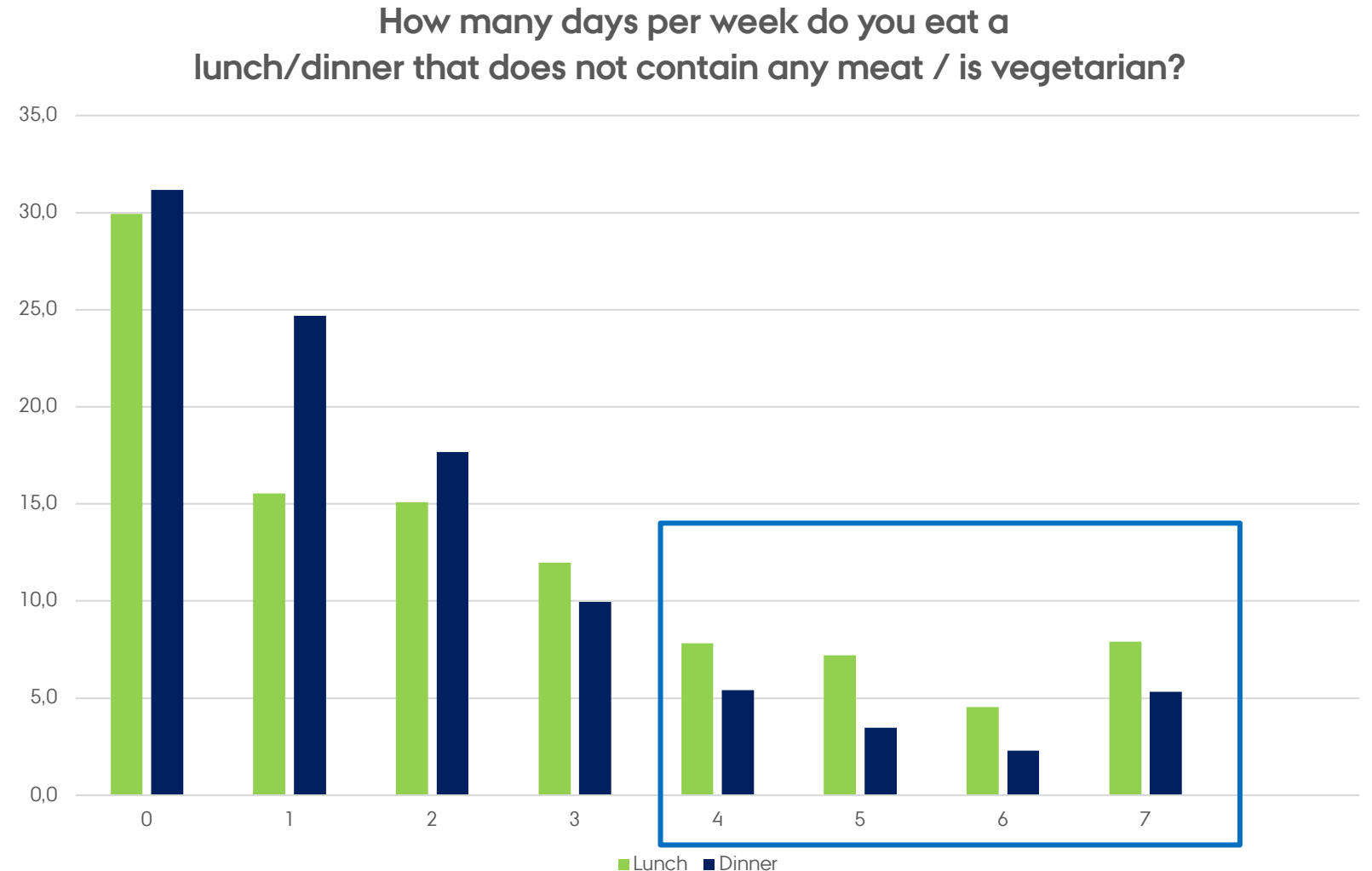




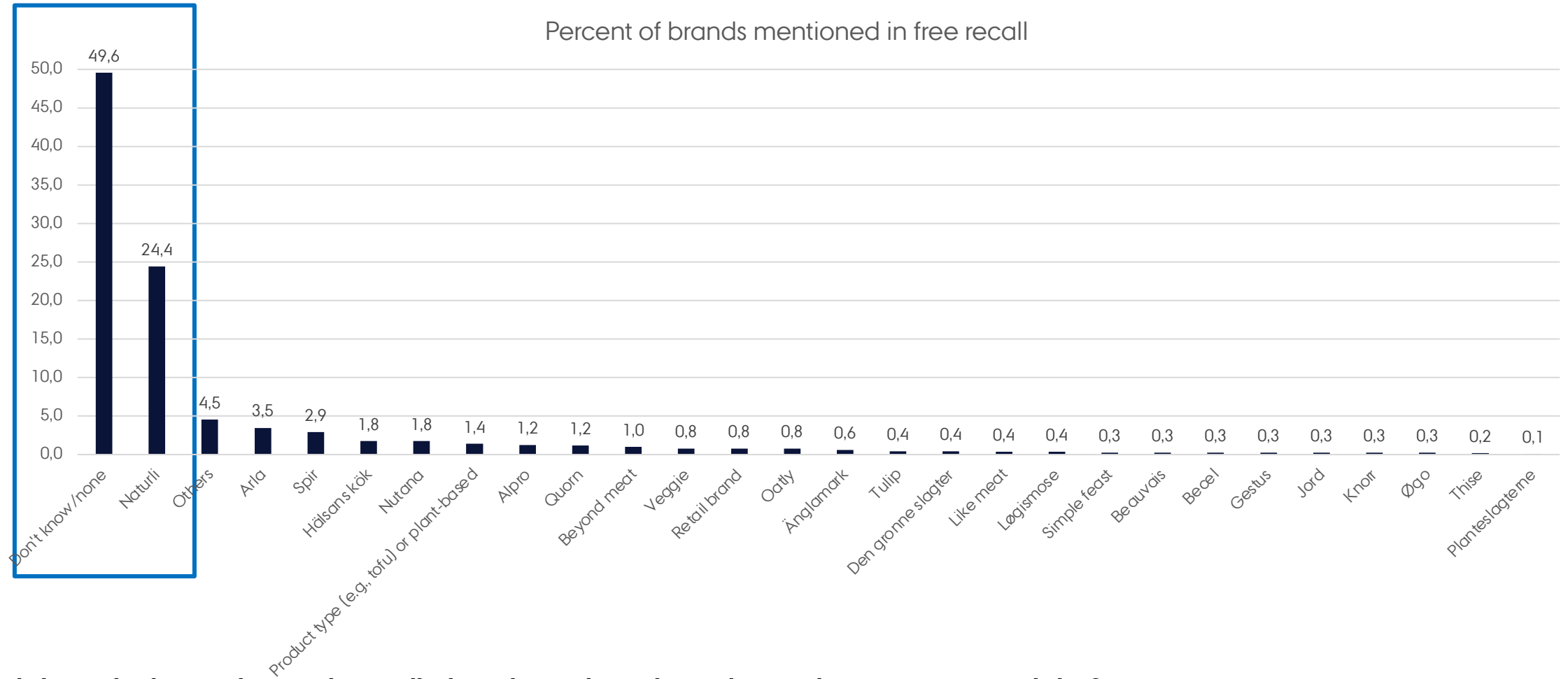
# LUNCH OR DINNER WITHOUT MEAT

**Lunch** 27.4% - 4 or more days out of the week

**Dinner** 16.5% - 4 or more days out of the week



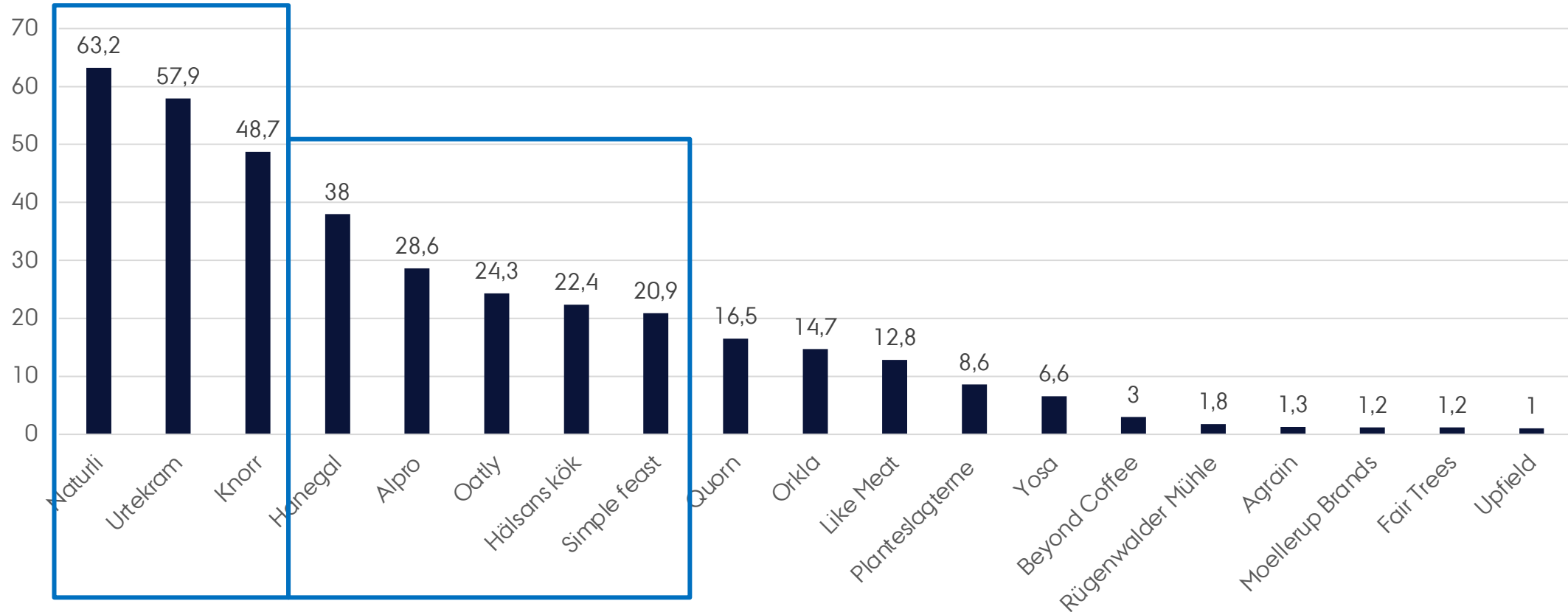
# BRAND AWARENESS (UNAIDED)



“Which brands do you know that sell plant-based product alternatives to meat or dairy?  
Please name as many as you can think of!”

# BRAND AWARENESS (AIDED)

Recognition of brand and corporate brands in %

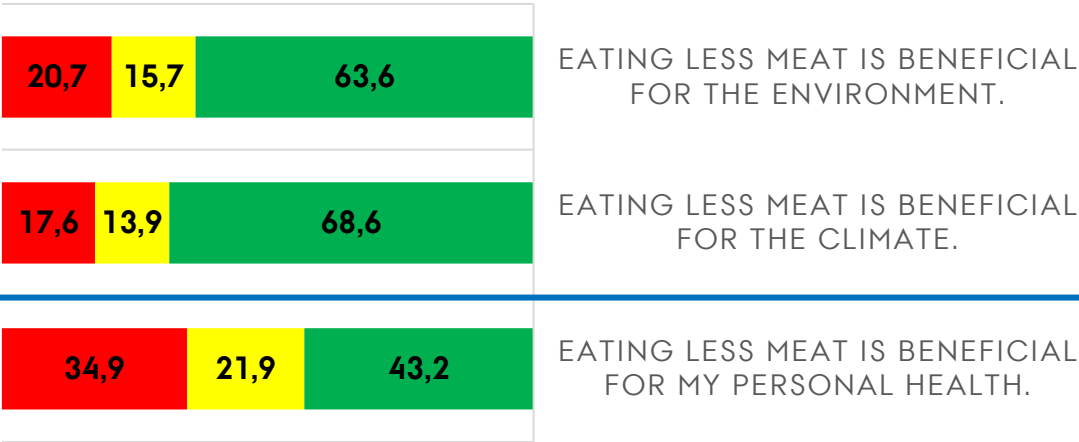


“Which of the following brands and producers that sell plant-based product alternatives to meat or dairy products do you recognize having seen or heard of?  
Please tick as many as you recognize!”

# BELIEFS ABOUT MEAT REDUCTION / MEAT

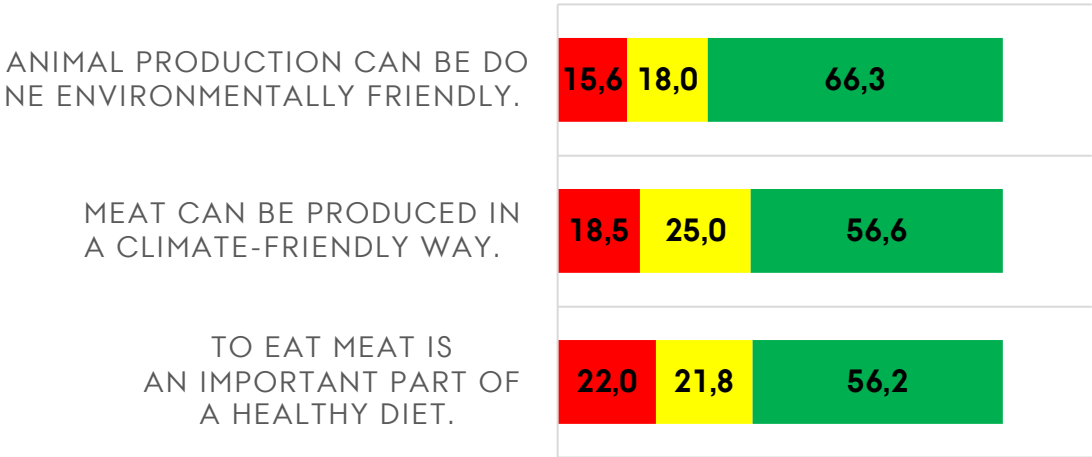
## NEGATIVE PERCEPTIONS OF MEAT CONSUMPTION

■ Negative ■ Neutral ■ Positive



## POSITIVE PERCEPTIONS OF MEAT CONSUMPTION

■ Negative ■ Neutral ■ Positive



# CONFLICT 'PLANT VS MEAT' ?

	Disagree (1/2/3)	Neutral (4)	Agree (5/6/7)
I perceive the public discussion around food as highly polarized.	12.8%	30.3%	56.9%
I would like people to be more tolerant towards different dietary choices.	11.9%	19.6%	68.4%
I feel judged for my food choices.	59.8%	17.7%	22.6%
I think food consumption is a matter of personal freedom.	11.4%	17.5%	71.1%
When someone appears to lecture me about which food to eat, I have found myself reacting with the opposite.	40.8%	25.6%	33.7%
I perceive there is a narrative based on 'us' versus 'them' when it comes to eating meat or plant-based foods.	18.0%	20.6%	61.4%

# STATUS – HOW LARGE AND WIDESPREAD IS INTEREST IN PLANT-RICH DIETS SO FAR?

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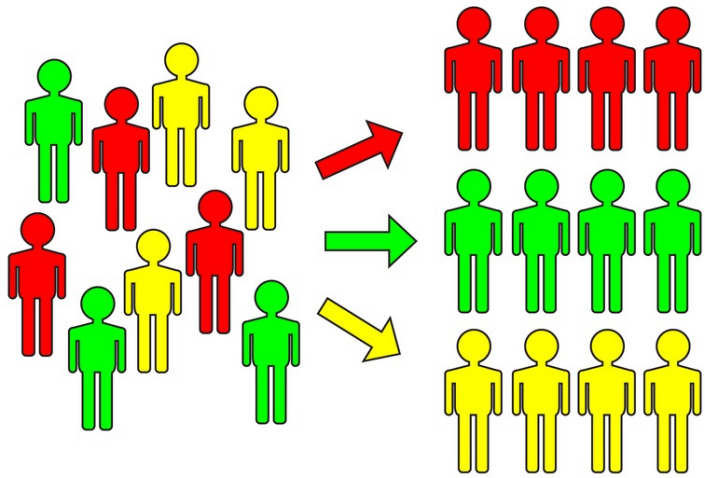
- Around one quarter of the Danish population perceive themselves as ‘flexitarian’
- Low top of mind awareness of meat or dairy replacement brands
- Effect of meat reduction on health potential barrier
- 2/3 perceive quite a conflict around the issue in society

# SEGMENTS – WHICH DIFFERENT SEGMENTS DIFFERING IN VIEWS & ACTIONS IN DK?



# CONSUMER SEGMENTATION APPROACH

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## 1) Segment identification based on mainly psychographic variables.

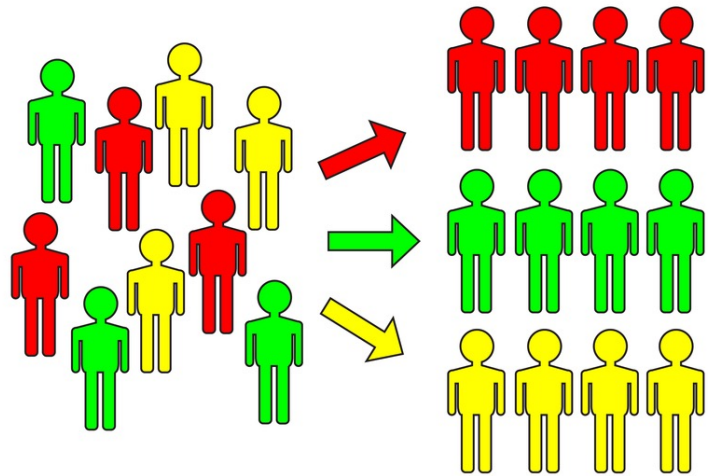
Perception of conflict, meat reduction benefits and sustainability of meat production, environmental concern, meat reduction behaviour of important peers

## 2) Segment characterization based on mainly sociodemographic variables.

Gender, age, region, education, dietary identification, cooking capability, etc.

# CONSUMER SEGMENTATION APPROACH

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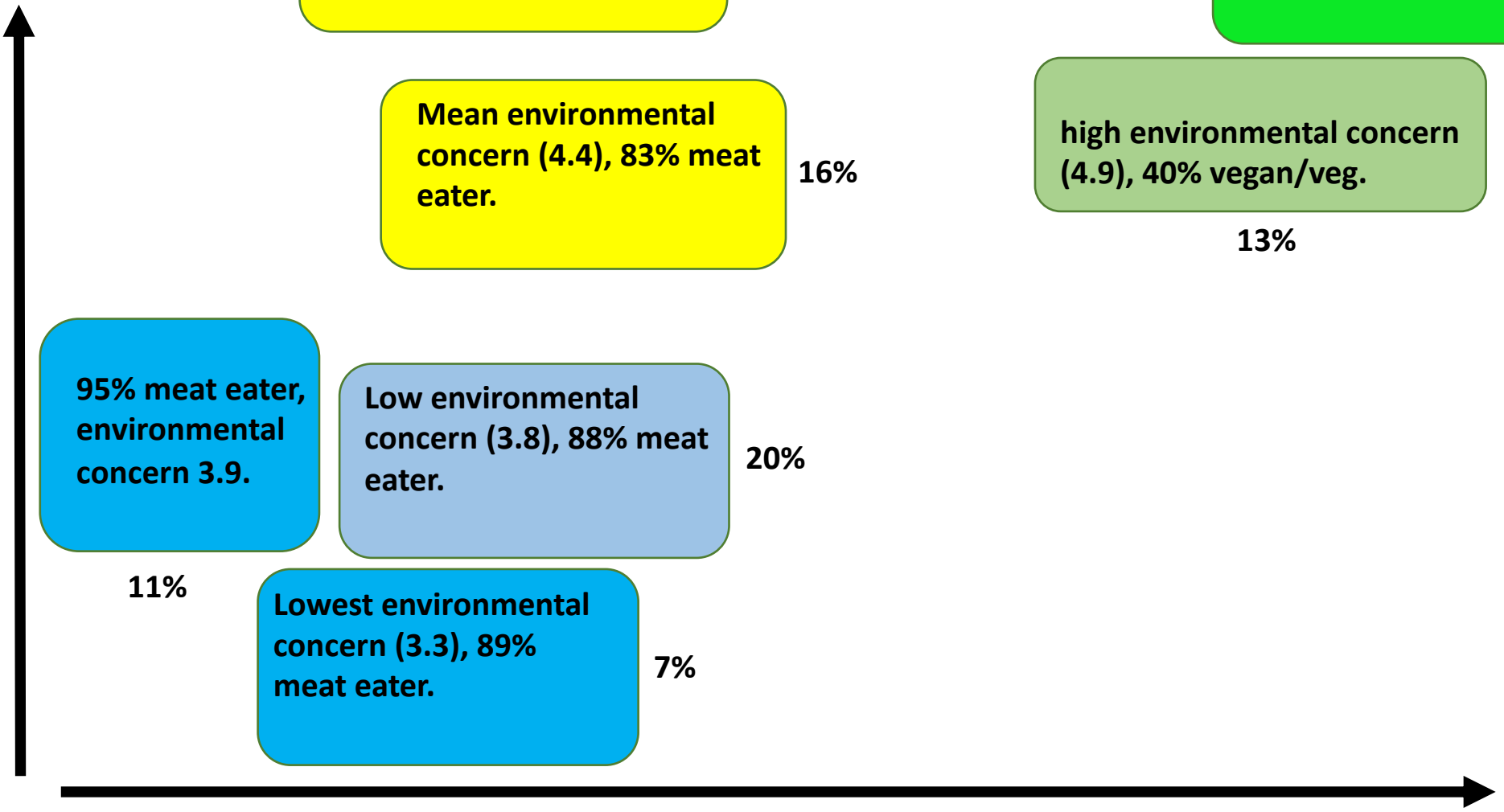


## 3) Segment names that help understanding.

Names that describe the most relevant distinctions, these might exaggerate and stereotype to carve out the differences.

Note: while helpful in applying the results, there is a danger of over-interpretation / insinuation of aspects not supported by data!

**Extent of  
environmental  
concern**



**Share of sample  
not understanding  
oneself as meat-  
eaters**

# BARRIERS AND OPPORTUNITIES FOR THE UPTAKE OF PLANT-BASED DIETS

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- ✓ Development towards more plant-based diets – headed by young, urban and female frontrunners
- ✓ Health benefits of reducing meat only perceived by a minority of consumers
- ✓ Clear distinction of segments ~ current, potential, and unlikely consumers
- ✓ Important differences in degree of environmental concern, believe in benefit of meat reduction, and knowing others who have reduced meat
- ✓ Targeted information and/or nudging interventions for different consumer groups?

# THANK YOU!

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PlantPro contributes to accelerating an **efficient green consumer behaviour transition** towards more plant-rich diets and reduced food waste.

We aim to fill a knowledge gap on factors that drive consumer behaviour change towards more sustainable plant-rich diets and upcycled foods and greater acceptance of sustainable food technologies.

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**MAPP CENTRE – RESEARCH ON VALUE  
CREATION IN THE FOOD SECTOR  
DEPARTMENT OF MANAGEMENT  
AARHUS UNIVERSITY**