

Opportunities for plant-based diets as a sustainable and healthy food choice

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Objectives

- **Meaning** of sustainability to consumers?
- **Perceptions** of a sustainable, a healthy, and a plant-based diet?
- **Match/mismatch** between these three concepts as perceived?

Study method

- Web-based consumer **survey**
- Field work data collection in **June 2014**
- **4 EU countries**: Belgium, The Netherlands, UK, Germany
- n=**700** per country, samples representative for age, gender, region

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Composition of the study sample (n=2783)



		Sample (%)			Sample (%)
Gender	Male	49.9	Education	Low	30.3
	Female	50.1		Medium	25.4
Age	18-24 years	13.0		High	44.4
	25-34 years	20.3	Occupational status	Working full-time	47.0
	35-44 years	20.9		Working part-time	15.6
	45-54 years	24.3		Unemployed (seeking work)	7.9
	55-65 years	21.5		Retired	7.9
Urbanisation degree	Rural	16.4		Student	8.7
	Rather rural	16.7	Not working for other reason	12.9	
	Either	17.2	Social class	Elite	14.2
	Rather urban	23.0		Upper Class	35.1
	Urban	26.8		Upper Middle Class	17.7
Living situation	Living alone	22.1		Lower Middle Class	20.8
	Co-habiting without children (< 15y)	51.9		Lower Class	12.1
	Co-habiting with children (< 15y)	25.9			

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Topics covered by the survey



1. Meaning of sustainability
2. Plant-based foods & diets: attitudes, consumption, perceived benefits and barriers
3. Perception of healthy, sustainable and/vs. plant-based diets
4. Consumer segmentation based on involvement with healthy and sustainable eating

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1. Meaning of sustainability

To what extent do you think the following issues have something to do with sustainability?

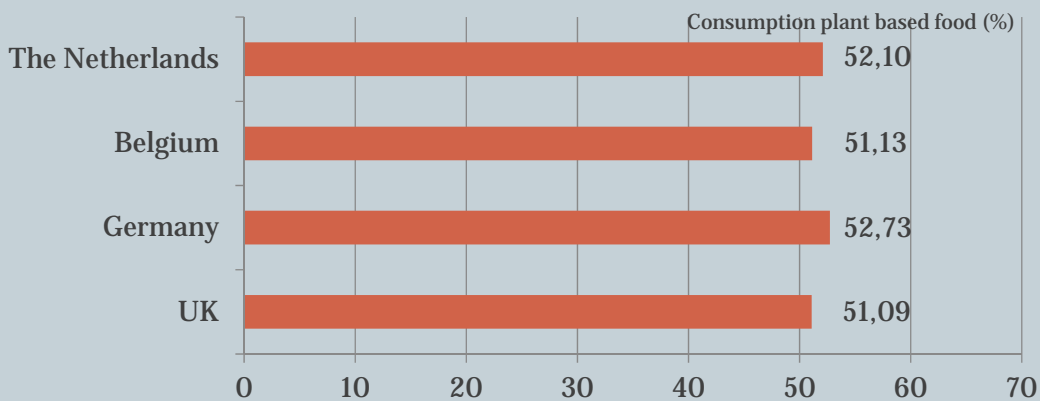
	Mean	SD
Deforestation	3.89	1.07
The environmental impact of human use of land and water	3.89	1.00
Recyclable packaging	3.83	1.00
The environmental impact of food production	3.78	1.01
The amount of packaging used on products	3.76	1.01
Food waste	3.74	1.06
Carbon emissions caused by food production	3.69	1.04
Energy use when transporting food products	3.68	1.02
The use of pesticides in food production	3.66	1.08
World food supply	3.63	1.04
The treatment of animals in food production	3.51	1.08
The amount of energy used when cooking food products	3.45	1.01
Prices paid by consumers for food products	3.35	1.02
The healthiness of food and drinks	3.35	1.07
Food and drink safety	3.33	1.05
Working conditions and wages for food producers	3.28	1.03
The quality of public health services	3.21	1.05
Using child labour in food production	3.16	1.18
Levels of unemployment	2.94	1.10

Factors (PCA): **Environmental** + **societal** + **animal welfare**

2. Plant-based food consumption



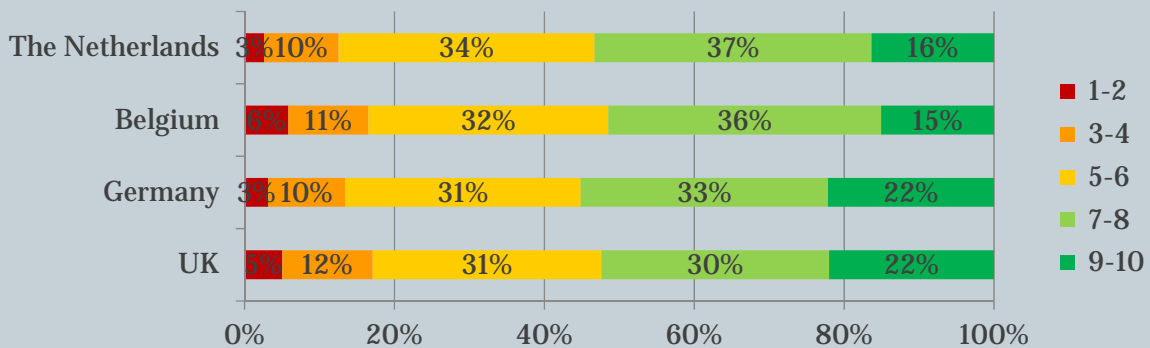
Information: Plant-based foods include fruit, vegetables, meat substitutes, nuts and seeds, grains, legumes and soy-based as well as plant-based alternatives to dairy products



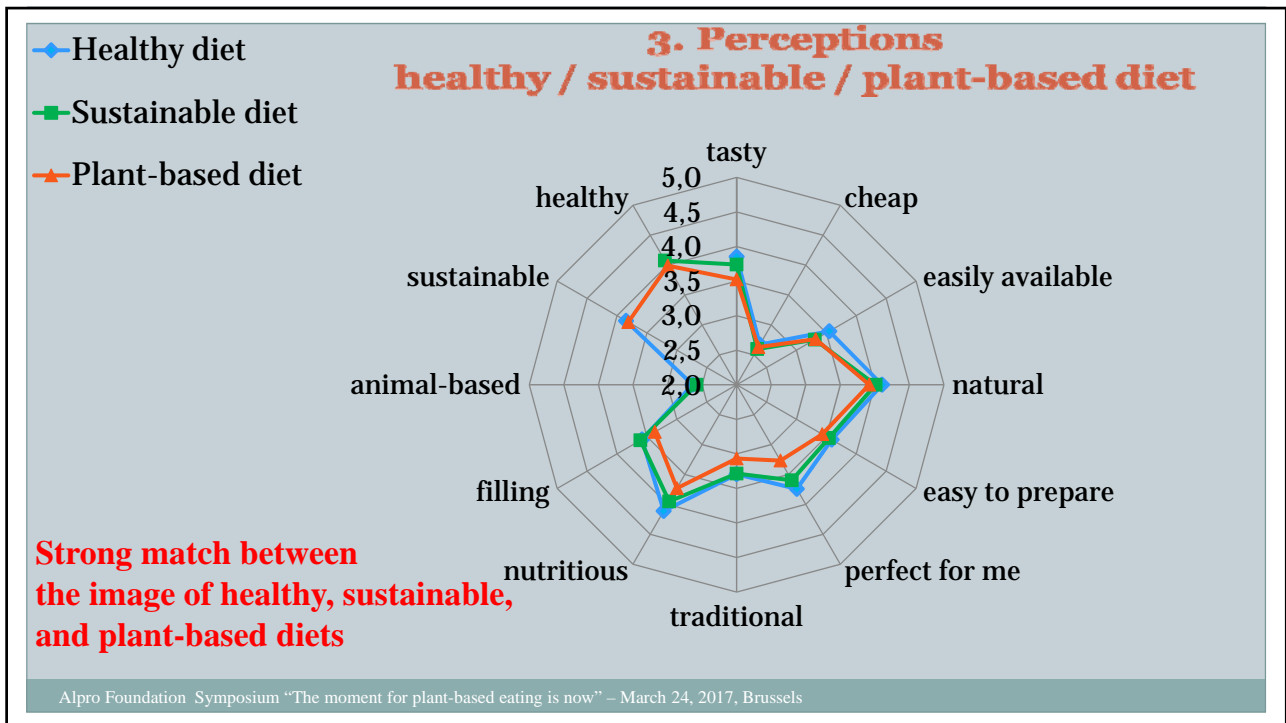
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Attitude towards a plant-based diet

- How would you describe your attitude towards a plant-based diet?
 - 10 point scale from extremely negative to extremely positive



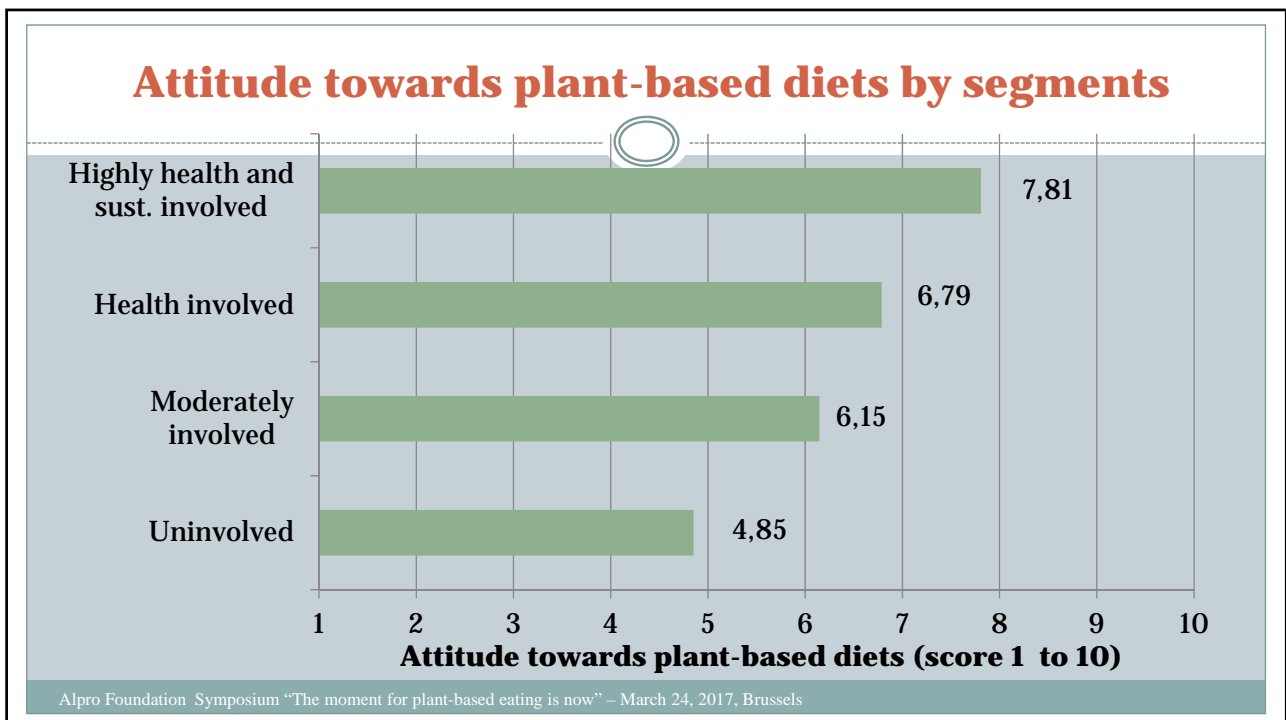
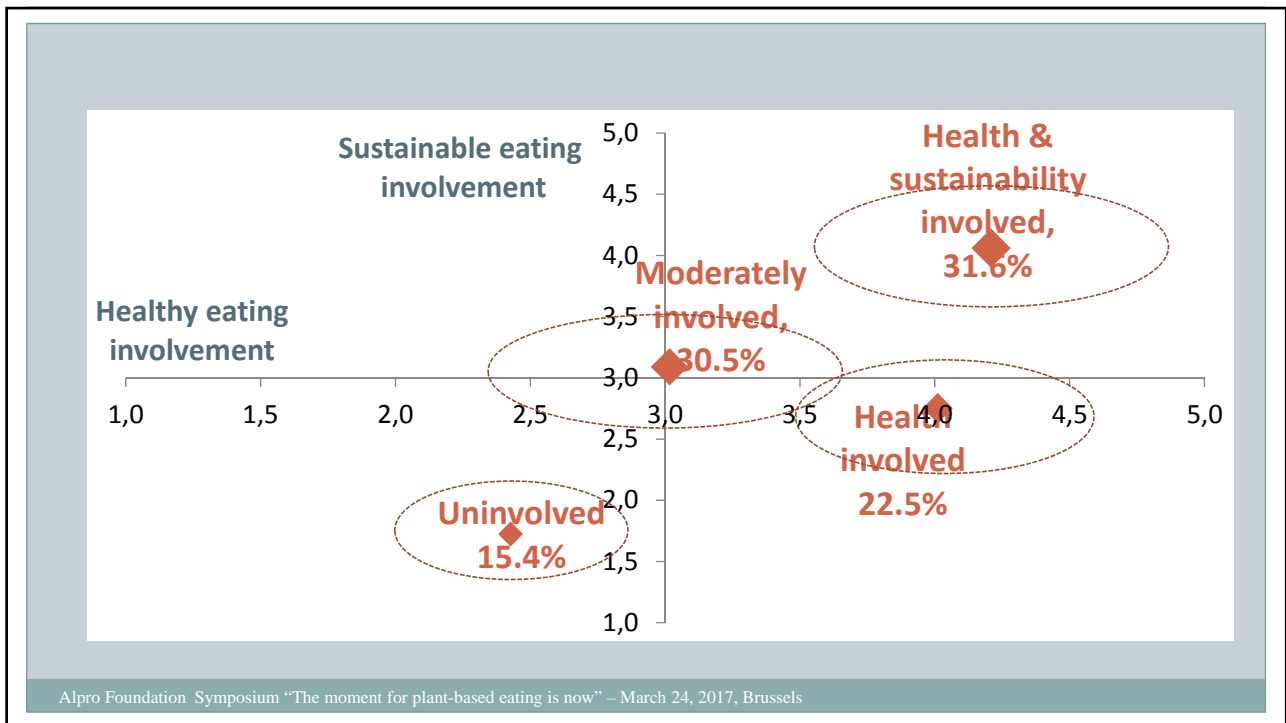
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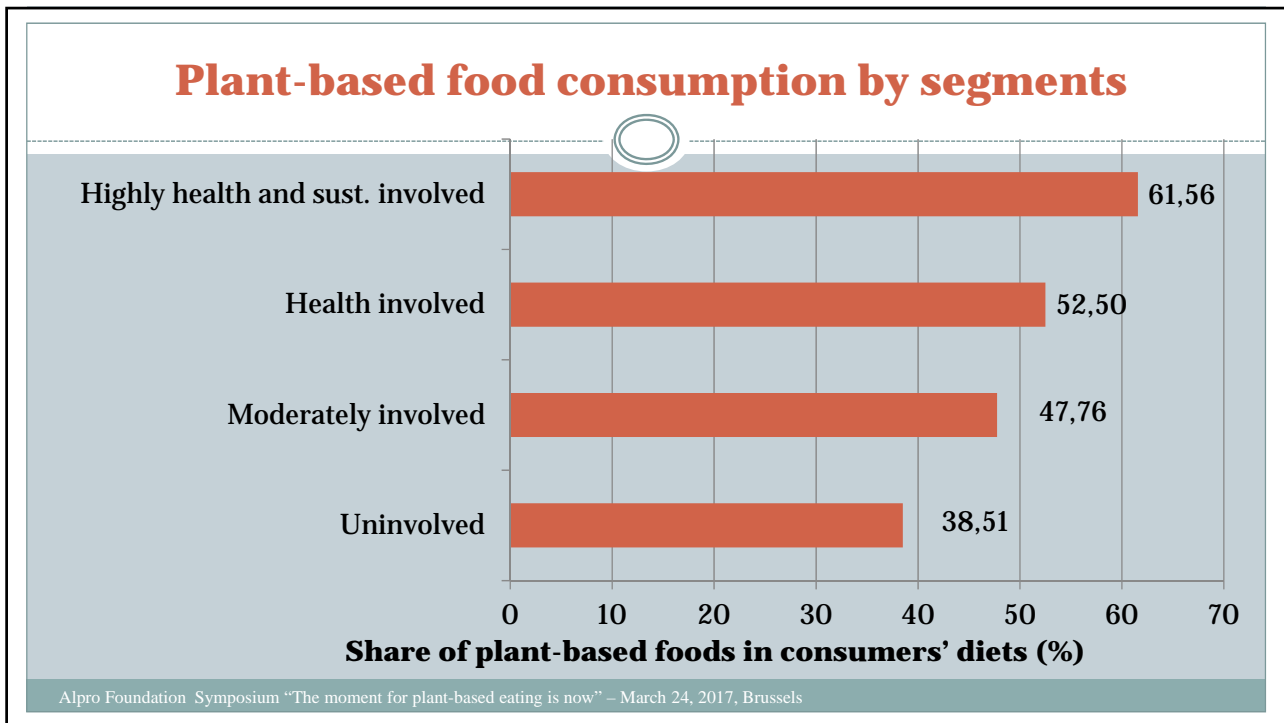


4. Four consumer segments identified


	Un-involved	Moderately involved	Health involved	Highly health and sustainability involved	p-value
n	428 (15.4%)	850 (30.5%)	626 (22.5%)	879 (31.6%)	
Health_involv	2.43	3.02	4.01	4.21	<0.001
Sust_involv	1.72	3.09	2.75	4.06	<0.001

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Conclusions



- A close match between the image of a healthy, a sustainable and a plant-based diet
- Four distinct consumer segments are identified and profiled
- The segments that are involved in sustainable eating are also involved in healthy eating, while the opposite is not necessarily true.
- Policies combining health, sustainability and plant-based stand a good chance to be effective: the moment is now!

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Healthy, sustainable and plant-based eating: Perceived (mis)match and involvement-based consumer segments as targets for future policy

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ABSTRACT

Given the inseparable environmental and health impact of dietary habits, integrating health and sustainability goals has become a highly topical issue in policy development and communication to encourage consumers to adopt healthier and more sustainable diets. Increasing evidence indicates that it is possible to develop diets that are both environmentally sustainable and healthy, but their potential success largely depends on consumers' willingness and ability to change their behavior. This study investigates consumer perceptions of the match, or mismatch, between healthy and sustainable diets, and gives insight into consumers' motivation to eat healthily and sustainably, as measured by involvement. Data were collected in Spring 2014 through a cross-sectional quantitative online survey with samples representative for age, gender and region in four European Union (EU) countries (United Kingdom, Germany, Belgium, and the Netherlands) (n = 2783). The images of a healthy diet, a sustainable diet and a plant-based diet were found to be highly compatible based on a strongly observed match between European consumers' perceptions of these concepts. Half of the participants were highly involved in healthy eating and one third in both healthy and sustainable eating. Informational food policy actions targeting both healthy and sustainable food consumption behavior are recommended to address issues relevant to the target segments, taking into account their levels of involvement. Increasing consumers' motivation and involvement in health and sustainability emerges as a key trigger for increasing healthy and sustainable eating.

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Thanks for your attention

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