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Environnements - Santé  
Bourgogne | Franche-Comté

# What social representations do French consumers have of sustainable diets? Segmentation by level of education

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*Forum des Jeunes Chercheurs (FJC) June 6, 2024*

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Thesis funding: INRAE Human Nutrition Department and the Bourgogne Franche-Comté Region



Centre des Sciences  
du Goût et de  
l'Alimentation



INRAE

L'INSTITUT  
agro Dijon



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# Sustainable diets: a necessity



While we produce enough food for the entire population, the current food system is unsustainable and contributes to:



30% of GHG emissions



Air and water pollution



Biodiversity loss



1.9 billion people overweight and obese



Stunting of 159 million children under 5 years of age



Nearly a third of food produced is wasted

*Adapted figure (OECD, 2020)*

# Sustainable diets: ‘the established definition’

“Sustainable diets are those diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations.

Sustainable diets are **protective and respectful of biodiversity and ecosystems**, **culturally acceptable**, **accessible, economically fair and affordable**; **nutritionally adequate, safe and healthy**; while optimizing natural and human resources.”

(FAO, 2010)

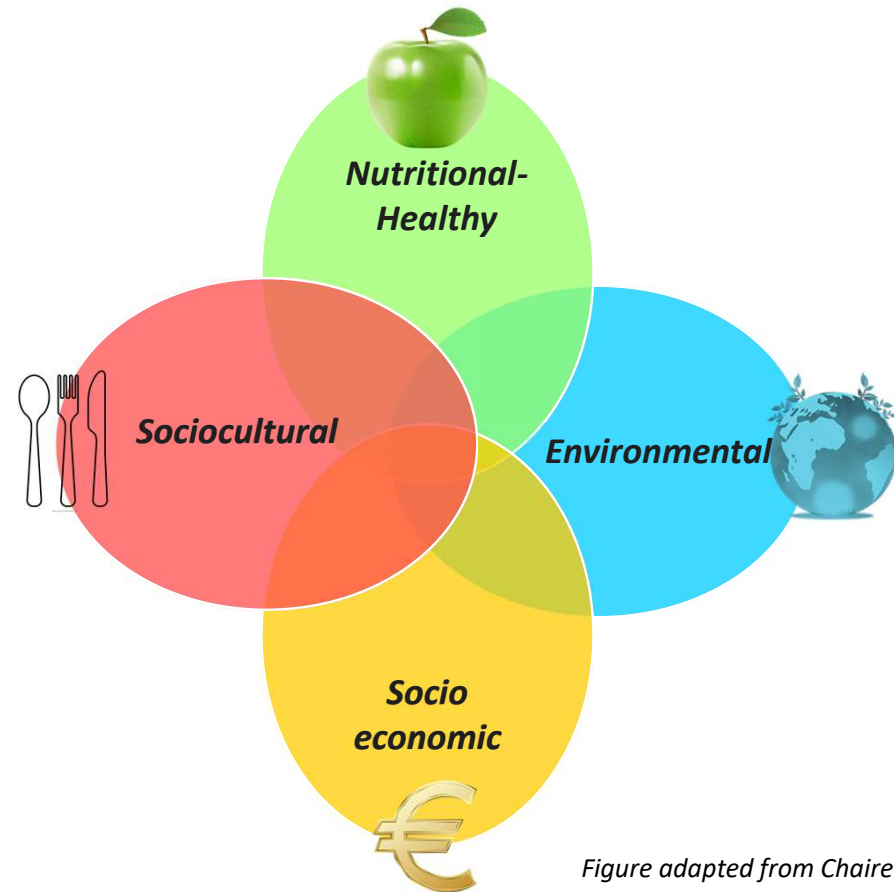


Figure adapted from Chaire ANCA

# Research goal

Consumers may not be aware of this definition

If this expression evokes a different concept for each consumer, following recommendations that urge consumers to adopt a more sustainable diet (European Commission, 2023, French Ministry of Health and Prevention, 2019) may be complicated.

**Aim: Investigate how consumers understand this concept**

## Interviews on the subject in France:

Rémésy et al., 2008

Hugol-Gential, 2023

Mathe, 2009

Verdeau & Monnery-Patris, 2024



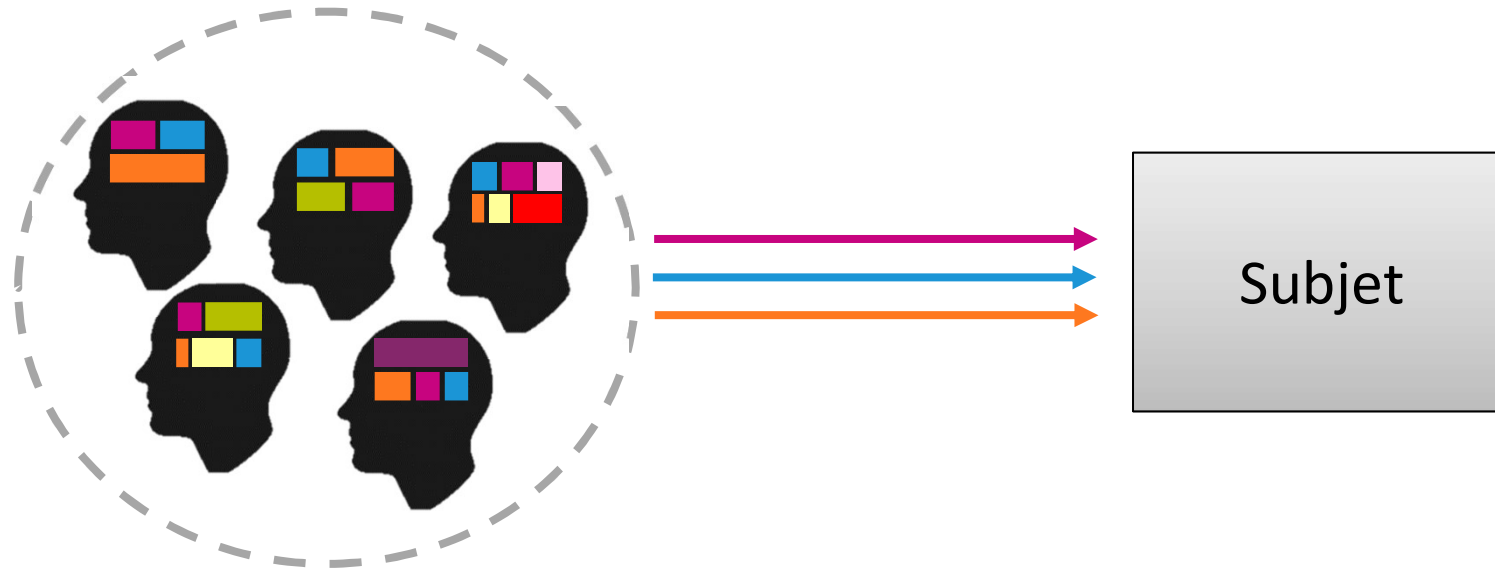
**A study with a larger number of participants is needed**



## Method: Study of social representations

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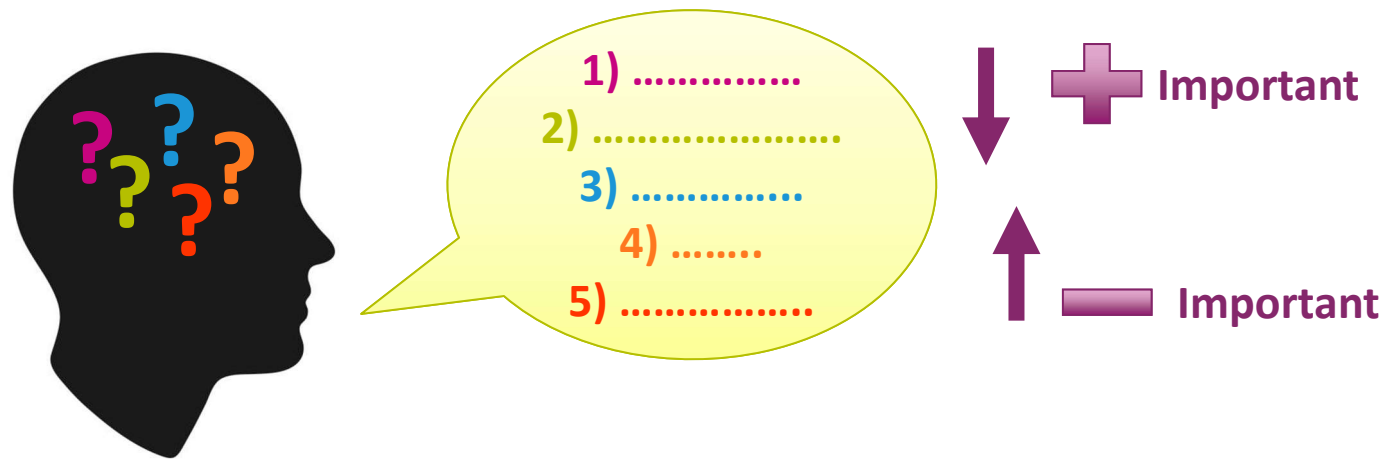
Social representations are the set of beliefs, opinions, attitudes, and information **shared** by a **group** about a given **subject** (Abric, 1994)



## Method: Free word association task

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*What five words, expressions, or adjectives come spontaneously to your mind when I say 'sustainable diet'?*



Once they had listed five evocations, participants were asked to **rank them** from 1 to 5: 1 for their **most important** evocation and 5 for the **least important** one.

# Objectives

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1) Determine whether 'sustainable diet' had a **common meaning** for French consumers

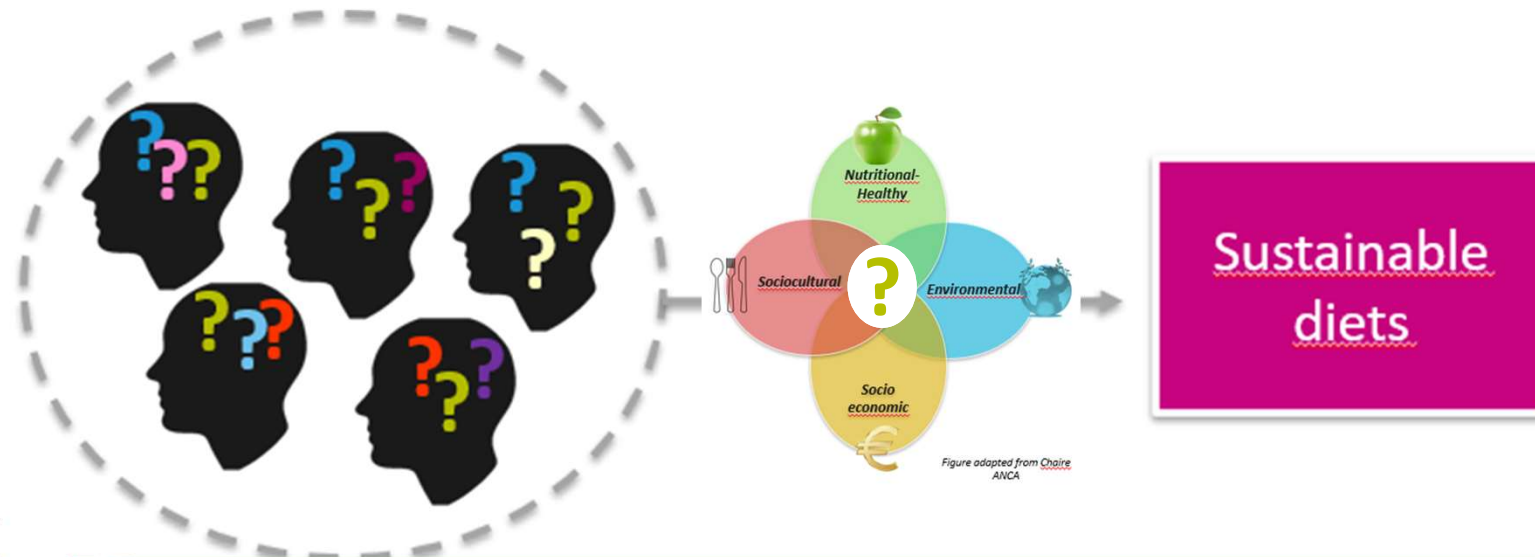




# Objectives

- 1) Determine whether ‘sustainable diet’ had a **common meaning** for French consumers
- 2) Confirm that French consumers’ social representations of sustainable diets **differed from the FAO definition of 2010**

Association with **Environmental dimension**, negligence of the **Sociocultural and Socioeconomic dimensions**  
(Barone et al., 2019, László, 2021, Mesías et al., 2023, Simpson and Radford, 2012, Techio et al., 2016)



# Objectives

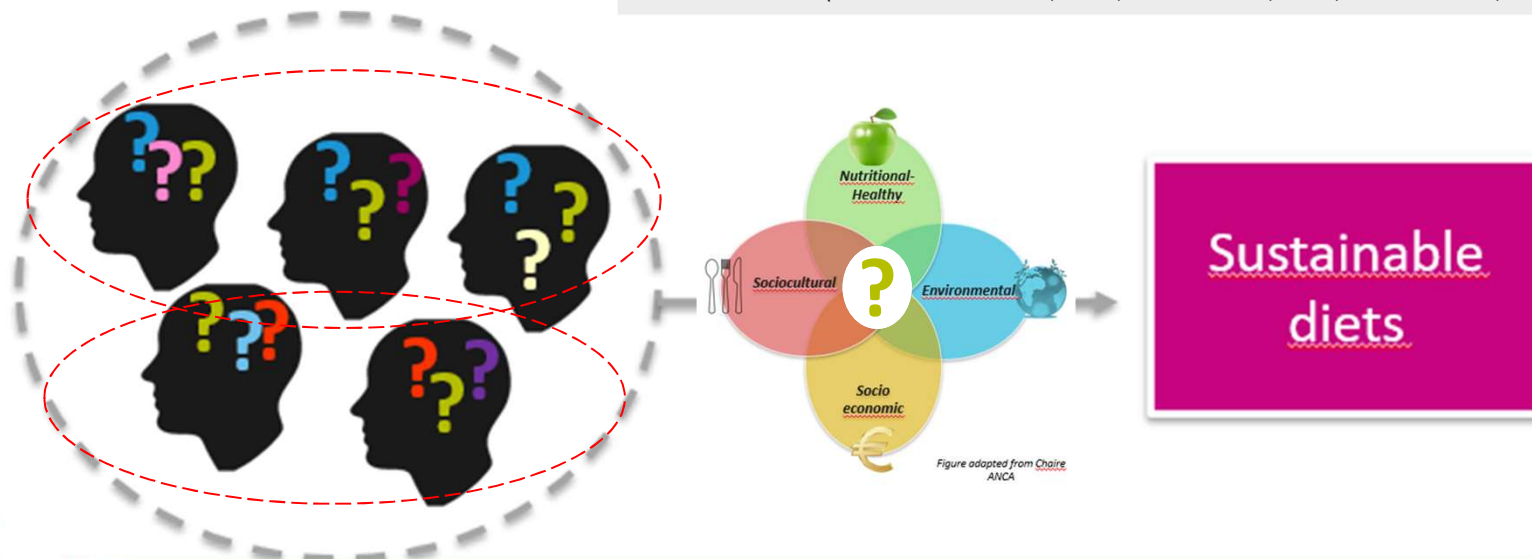
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(Barone et al., 2019, László, 2021, Mesías et al., 2023, Simpson and Radford, 2012, Techio et al., 2016)

3) Identify potential **differences** in French consumers’ social representations in relation to their **level of education**

Highest knowledge and interest of people with higher education  
(Sánchez-Bravo et al., 2020; Barone et al., 2019; Van Loo et al., 2017)

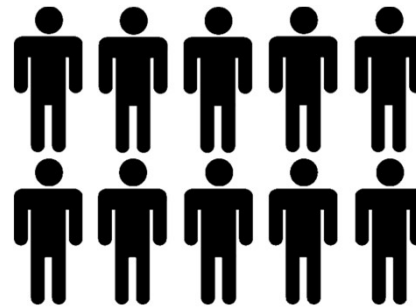


# Socio-demographic characterization of participants

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The experiment was performed at the CSGA in Dijon

**273 participants**



**People with higher education: 58.9%**  
**People without higher education: 41.1%**

**Balanced in terms of age and gender**

**Female: 52 %**

**male: 48 %**

**Aged 20 to 60: Between 23.8% and 26.4% per age group**

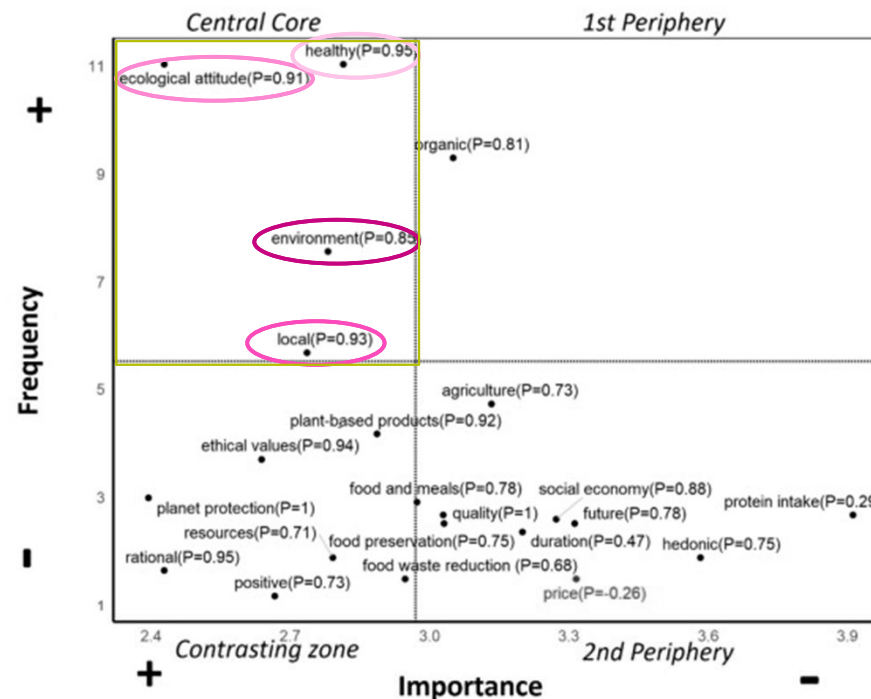


# Result 1: Structural analysis of social representations for all participants

Objective 1: Determine whether 'sustainable diet' had a **common meaning** for French consumers

Structural analysis: 1) **Categorization of evocations according to meaning:**  
(Abric, 2001) **1269 evocations → 36 categories**

2) Determining **the central core**: categories that are most frequently cited and most important



Frequency threshold = total frequency of occurrence of the category with the highest score/2

Importance threshold = average of importance scores for all categories



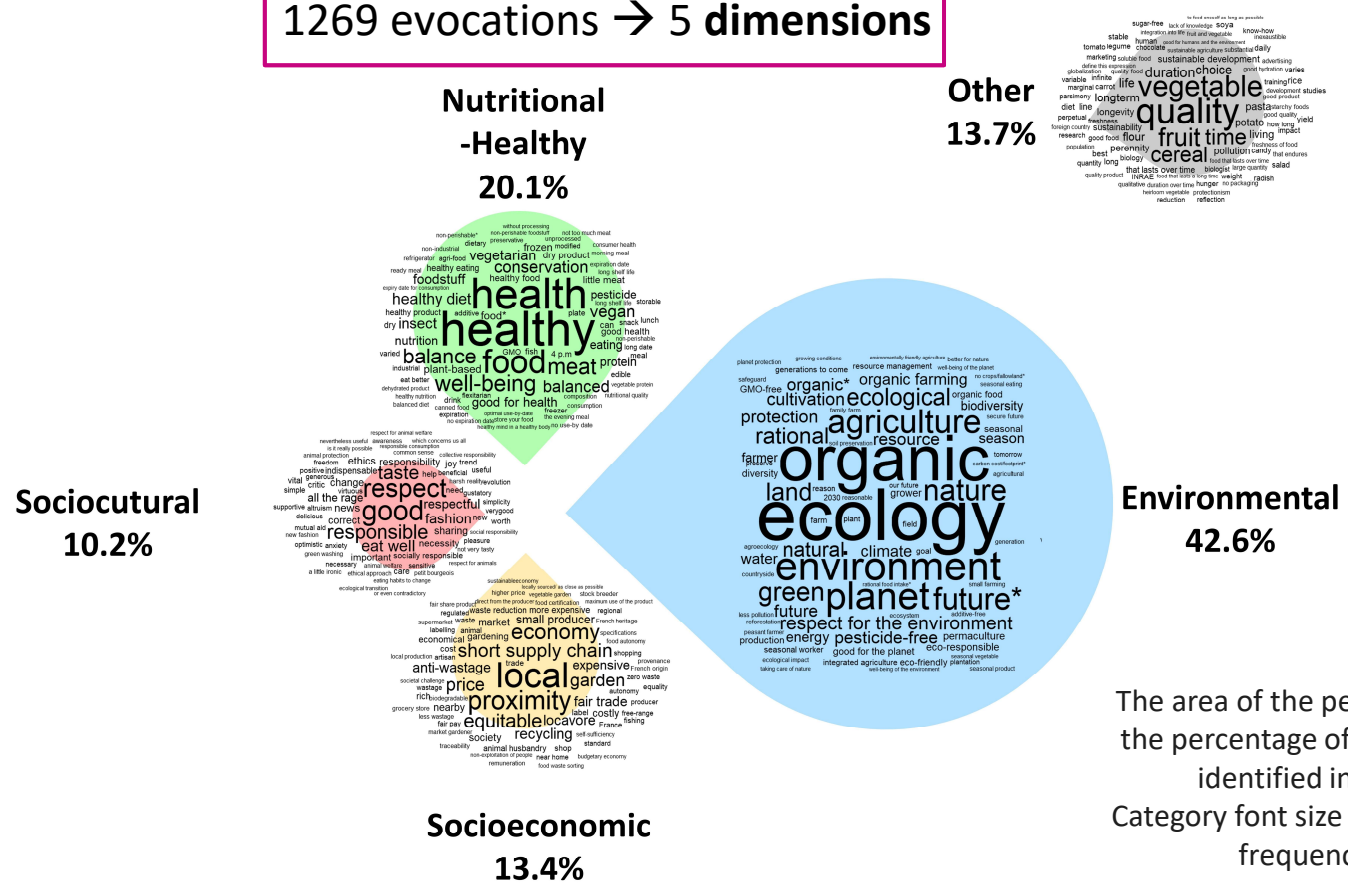
→ *Ecological attitude, health, environment, and local* were the four pillars of the shared foundation of the 'sustainable diet' concept among the 273 participants

# Result 2: Comparison between the social representations of sustainable diets and the established definition

Objective 2: Confirm that French consumers' social representations of sustainable diets differed from the FAO definition

**Categorization of evocations in dimensions:**

1269 evocations → 5 dimensions



The area of the petals represents the percentage of the dimension identified in all evocations. Category font size corresponds to frequency of evocation.

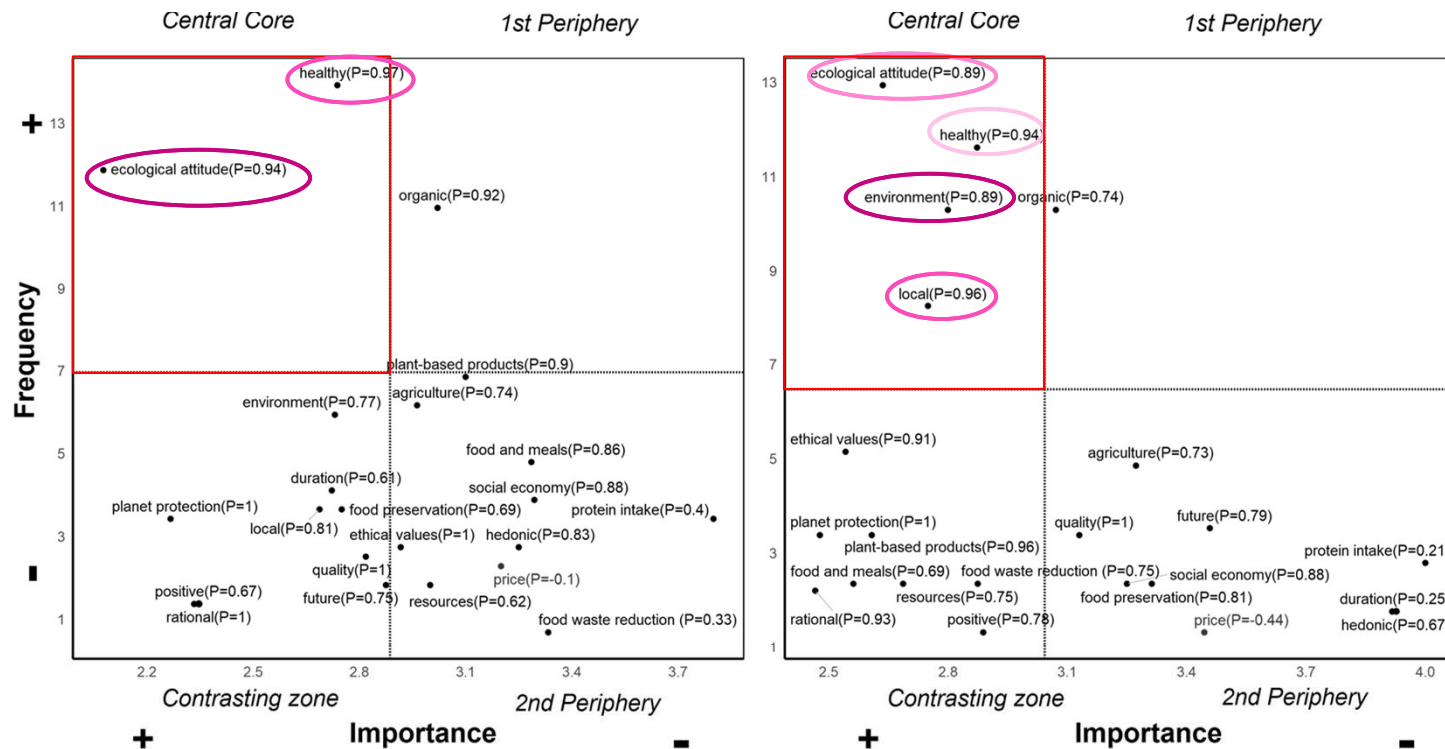


→ Consumers mainly associated the *Environmental* dimension with sustainable diets and tend to neglect the *Sociocultural* and *Socioeconomic* dimensions.

# Result 3: Structural analysis of social representations by education level

Objective 3: Identify potential **differences** in French consumers' social representations in relation to their **level of education**

Group without higher education    Group with higher education



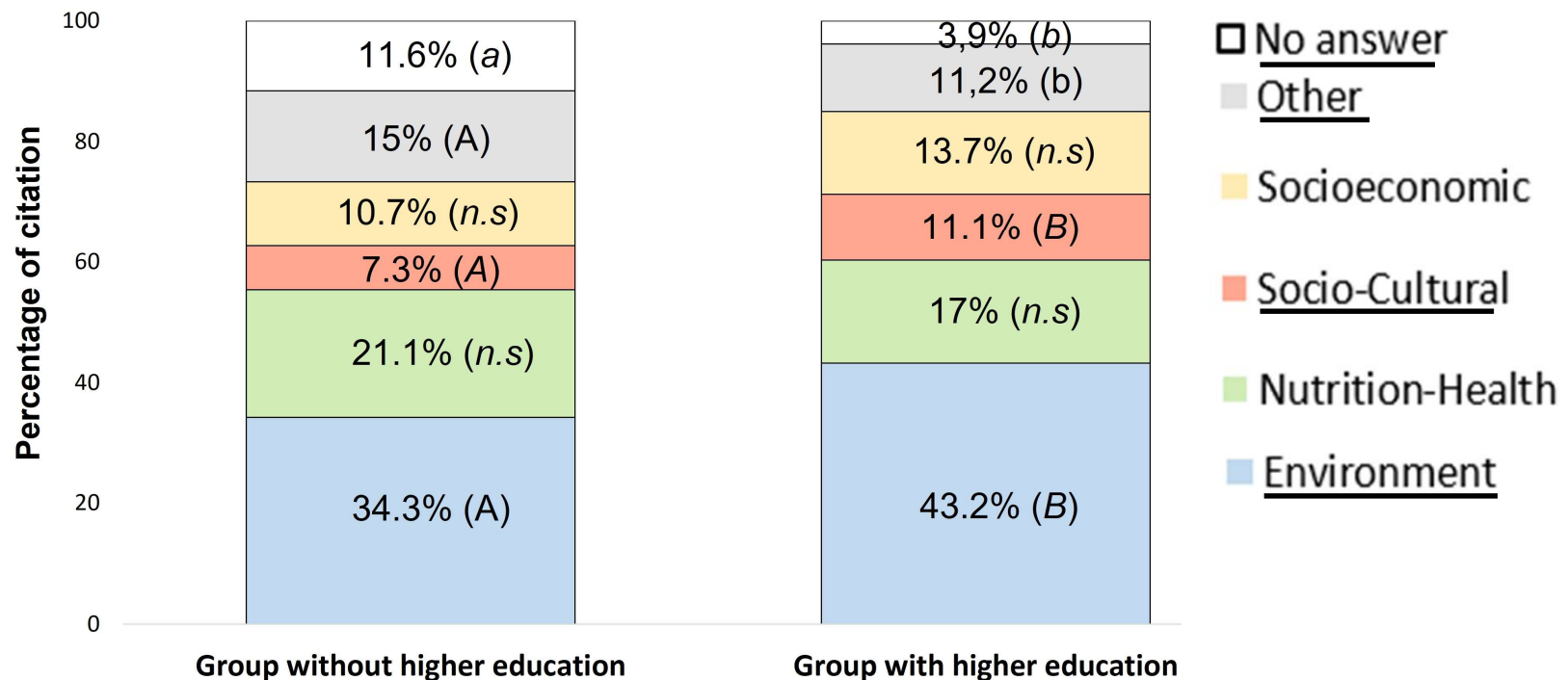
The group with higher education was composed of participants who had completed at least one year of higher education.



→ The group with higher education level had more shared elements in their social representations

## Result 4: Comparison of social representations, by dimension and by level of education

Objective 3: Identify potential **differences** in French consumers' social representations in relation to their **level of education**



The frequency of quotation by dimension is indicated. Letters in brackets represent the results of the Chi2 Test: different letters indicate that the number of evocations for the dimension was significantly different between the two groups; n.s indicates that there was no significant difference between the two groups.



→ The group with a higher level of education had more developed social representations and in relation to the 4 dimensions of sustainable diets

## Take home message

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- ✓ **“Ecology” and “organic” were the words most often cited to describe sustainable diets.**
- ✓ **Consumers mainly associated the *Environmental* dimension with sustainable diets.**
- ✓ **Consumers tend to neglect the Sociocultural and Socioeconomic dimensions.**
- ✓ **The group with higher education had more multidimensional social representations.**



Thank you for your attention

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Food Quality and Preference

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In Press, Journal Pre-proof [?](#) [What's this?](#)



## “If I say sustainable diet”: What are French consumers’ social representations?

[Oriane Chene](#)<sup>a</sup>  , [Gaëlle Arvisenet](#)<sup>a</sup>, [Laurence Dujourdy](#)<sup>b</sup>, [Stéphanie Chambaron](#)<sup>a</sup>

