# Variability in consumer perception of meat and meat substitutes

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#### > Perception of meat production & consumption

For centuries, the livestock industry has been well perceived due to major services and benefits related to:

- food production by converting inedible plants or waste into meat or milk
- economics (market, employment, etc.),
- social function (gastronomy, social cohesion, educational value, agrotourism, etc)
- interactions with the environment (landscape and biodiversity preservation, etc.)

However, today, the impacts of livestock are more controversial with emphasis on the negative impacts of livestock in terms of animal welfare, environmental footprint and human health.

Therefore, reducing meat consumption or consuming meat substitutes are perceived as good ways to reduce the negative impacts of meat production from livestock.



## > Aims of this study

Meat demand and consumption are dependent on sociodemographic, economic and cultural factors (Charles et al., 2018) which differ according to countries.

Therefore, consumer perceptions of livestock production and meat consumption are likely to differ between countries depending on sociodemographic, economic and cultural factors.

This study aimed to capture respondents' opinions on meat production and consumption within different cultural, economic and geographical contexts.



#### Materials & methods

A survey study was carried out by means of an international online questionnaire distributed worldwide.

The questionnaire was designed and organized into three sections:

- 1) sociodemographic information of the respondents, including country of origin, gender, age, income, area of work, education and level of meat consumption;
- 2) a multiple-choice question "What are the most important criteria when you do your food shopping?" was asked first;
- 3) then, participants were asked about their perception of the challenges (ethical and environmental issues) facing the livestock industry and meat production and their opinion on reducing their meat consumption.



#### > Materials & methods

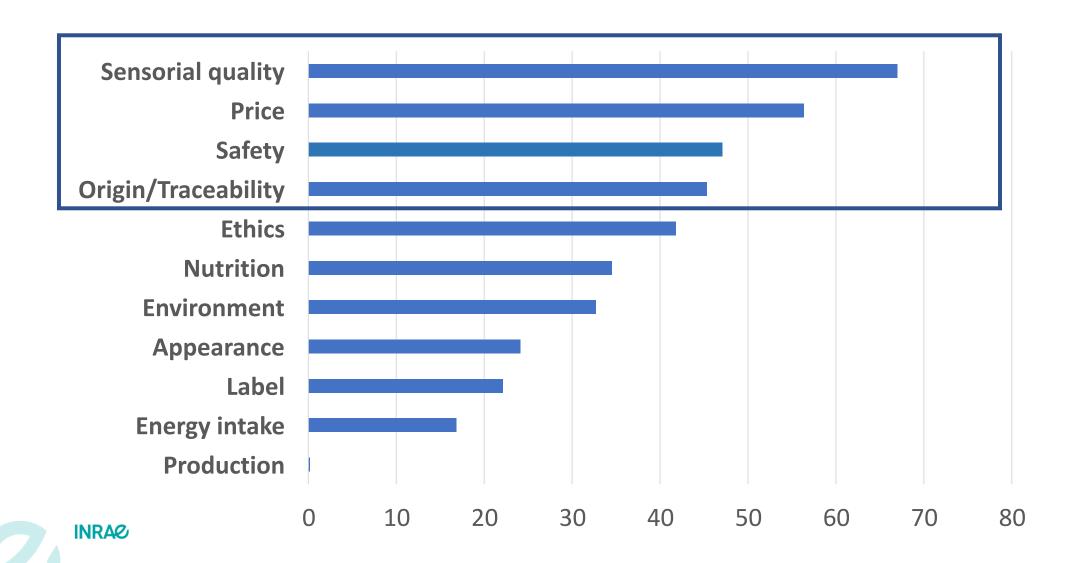
- The questionnaire was designed in English,
- It was translated into French, Chinese and Portuguese by native speakers,
- It was then converted into an online survey and disseminated in France,
  China, Brazil, South Africa and Cameroon from June 2020 to February 2022.
- A total of 16,803 responses were collected through a variety of means

#### Data were analysed using:

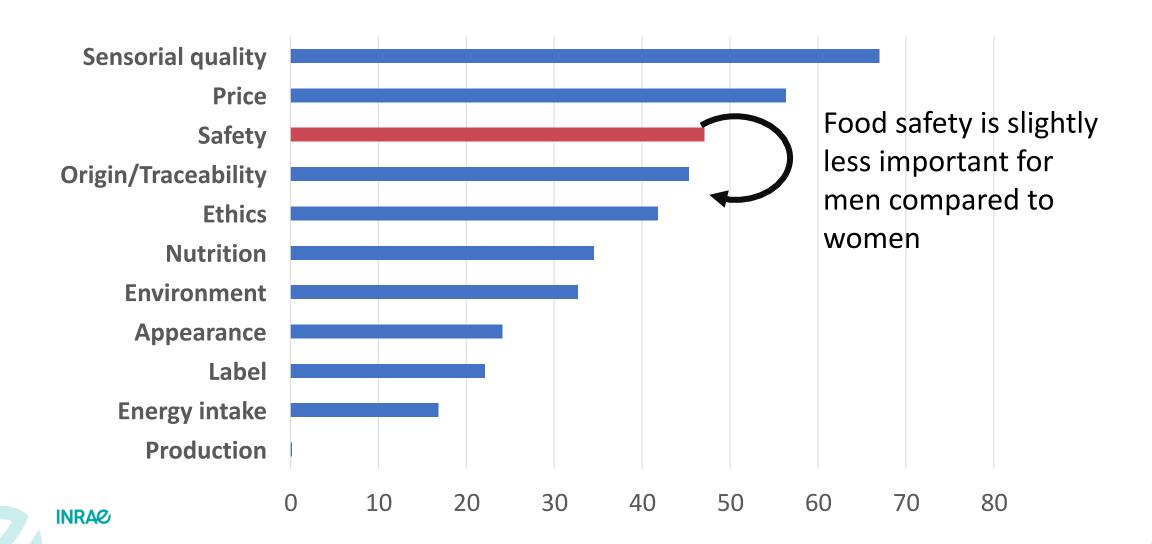
- the T test or by ANOVA
- the Chi-2 test
- multiple correspondence analysis (MCA) to highlight any relationships exist between variables.



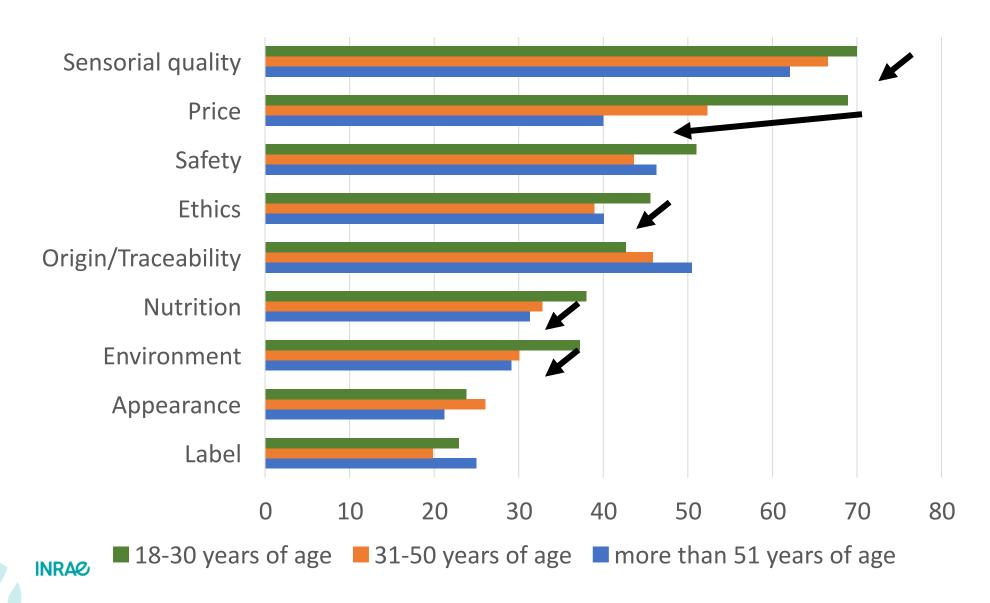
## > What are the most important criteria during food shopping?



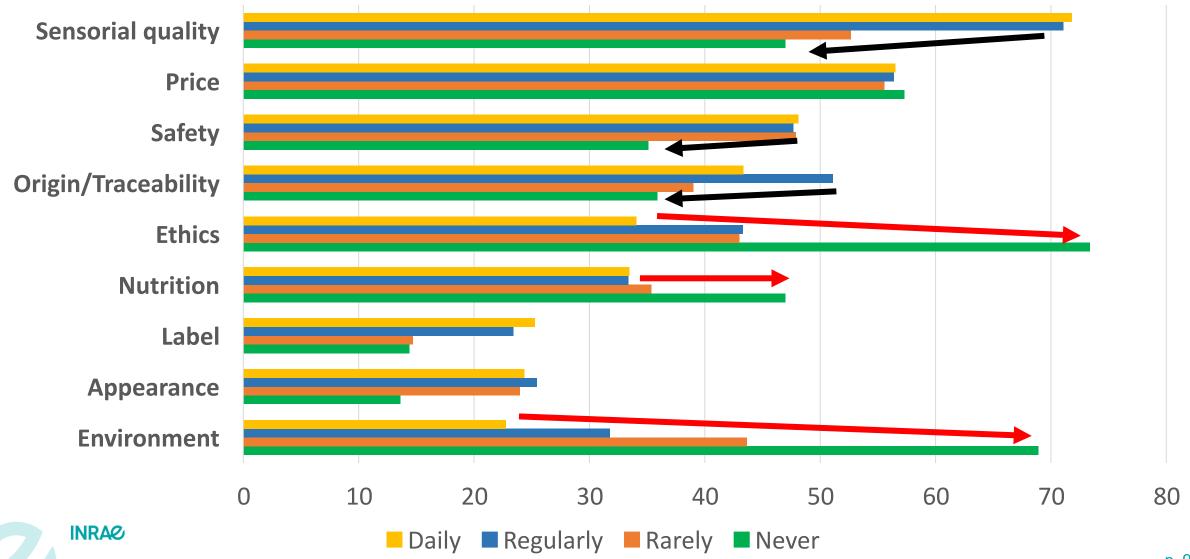
# > What are the most important criteria during food shopping? (sex effect)



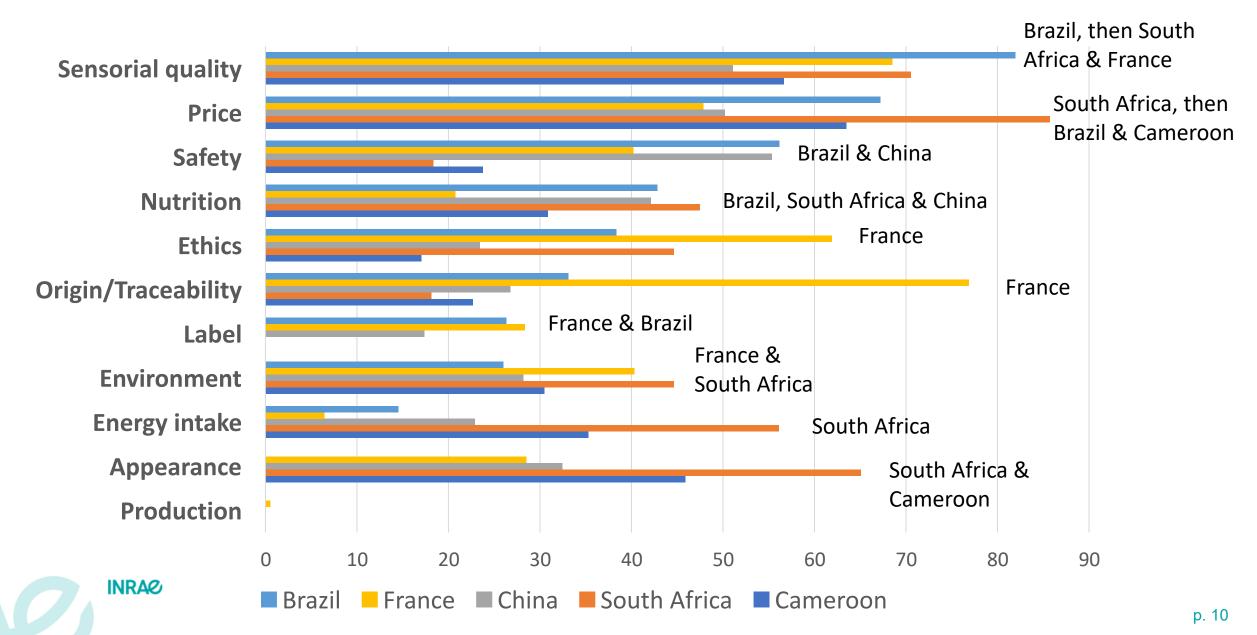
# > What are the most important criteria during food shopping? (age effect



#### What are the most important criteria during food shopping? (meat consumption effect)



# > What are the most important criteria during food shopping? (country effect



#### > Would you accept artificial meat as a viable alternative?

# On average 39.7%

- But 43.2% for women and 36.4% for men (P = 0.053)
- 46.4% for young people, 36.5% for middle-aged and 33.2% for elderly
- 36-37% among daily and regularly meat eaters, but 47-49% for respondents who eat rarely or never meat.
- 54.1% in Brazil, 53.0% in China, 46.2% in Cameroon, 39.4% in South Africa and 17.1% in France



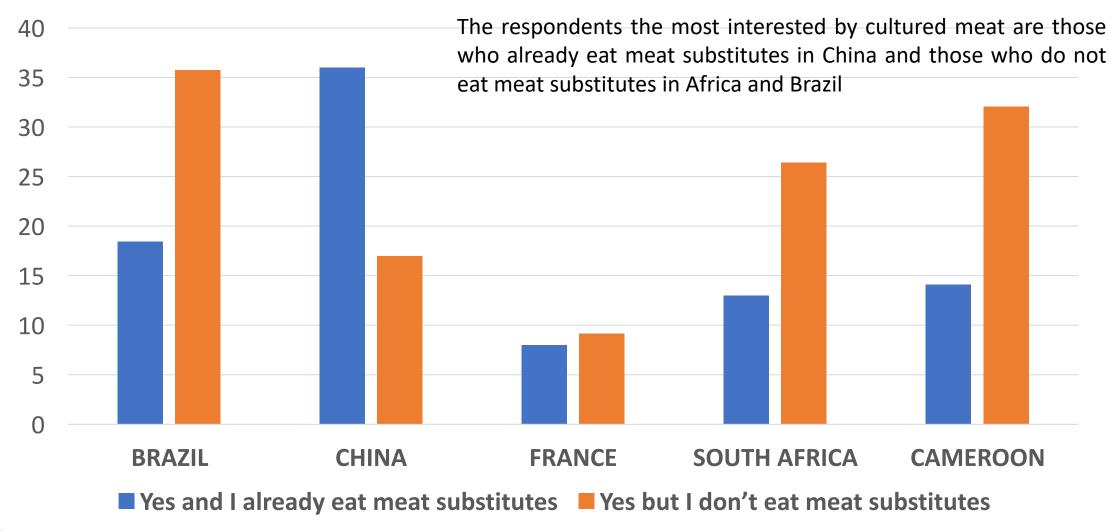
#### > How many respondents do eat meat substitutes?

# On average 44.7%

- But 49.8% for women and 39.1% for men (P = 0.053)
- 49.0% for young people, 41.7% for middle-aged and 42.2% for elderly
- 35-44% among daily and regularly meat eaters, but 59-69% for respondents who eat rarely or never meat.
- 29.1% in Brazil, 70.1% in China, 52.3% in Cameroon, 54.3% in South Africa and 34.7% in France

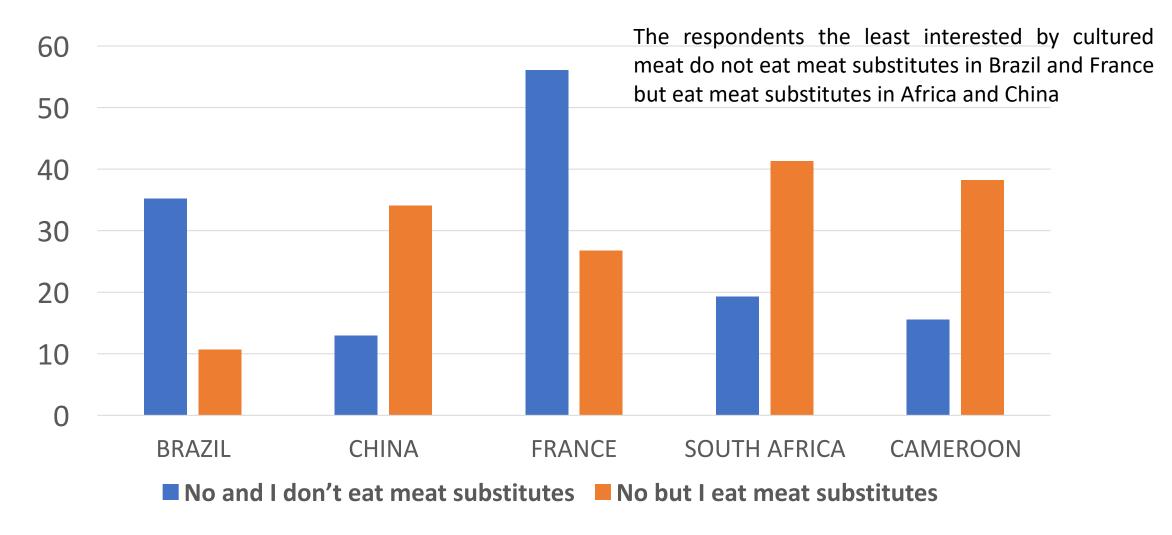


#### Do you accept artificial meat as a viable alternative? Do you already eat meat alternatives?



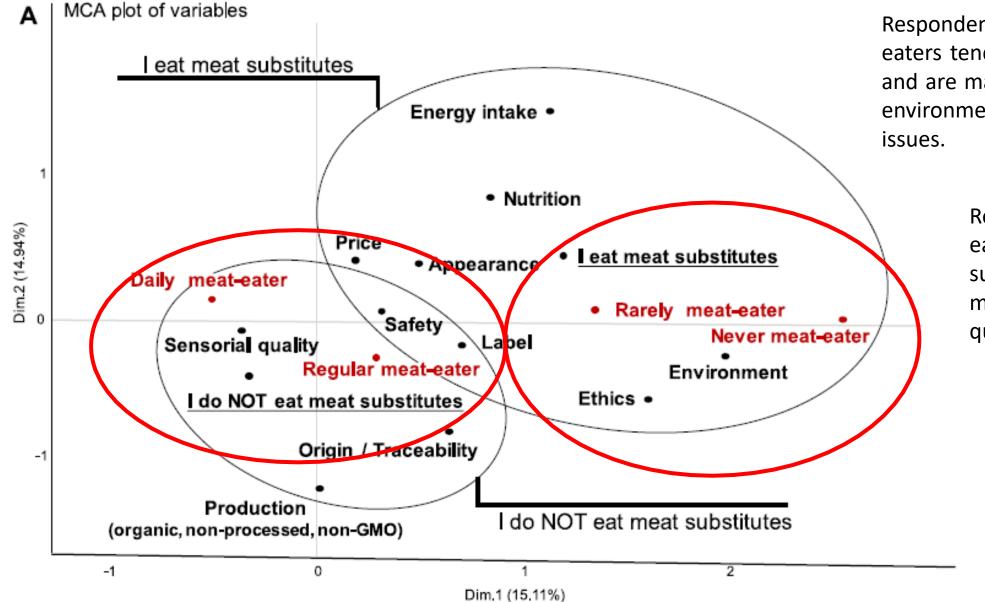


#### Do you accept artificial meat as a viable alternative? Do you already eat meat alternatives?





# **>** Conclusion: Final typology of respondents



Respondents who are not meat eaters tend to eat meat substitutes and are mainly motivated by ethics, environmental and nutritional issues.

Respondents who are meat eaters do not eat meat substitutes and are mainly motivated by sensorial quality, origin / traceability.

Price, safety, appearance and label are common values.



