













# Consumer expectations for beef in the French region Auvergne-Rhône-Alpes (AURA)

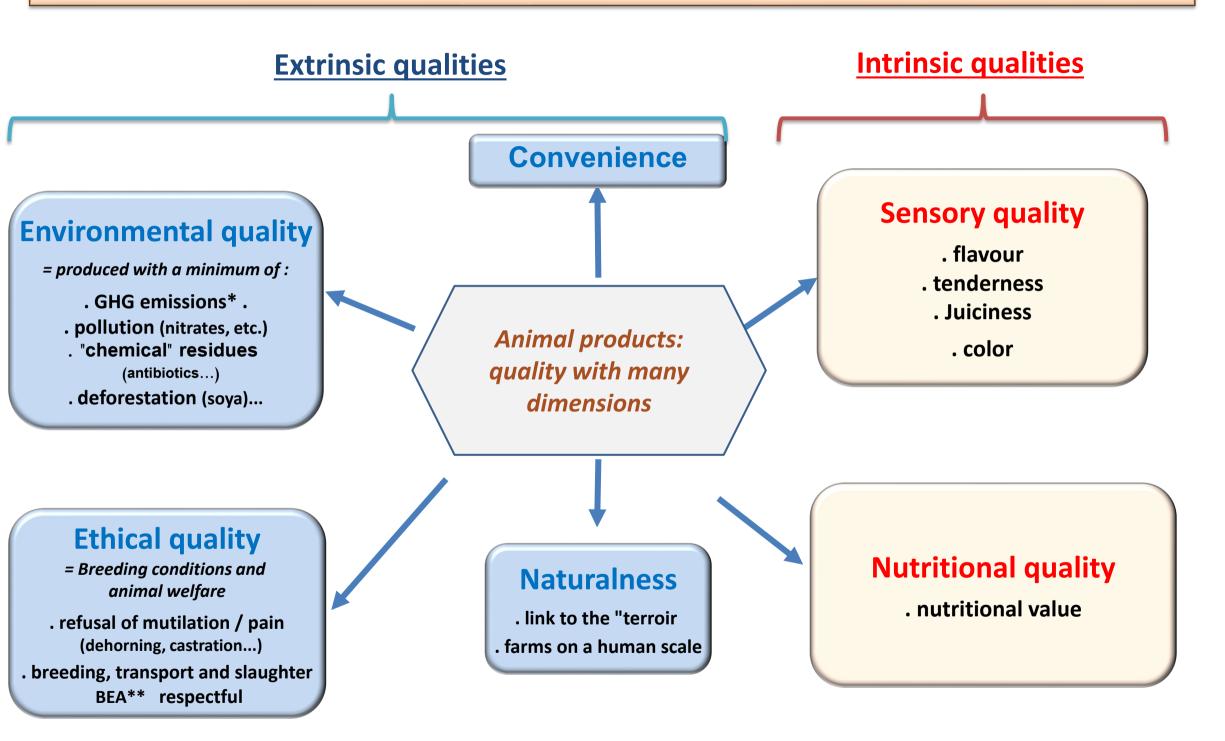
(OABov-AURA project)

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# The context of the OABov-AURA project 1/3



# The context of the OABov-AURA project 2/3

In France, beef consumption has been decreasing for many years
from 25.8 to 22.3 kg/capita/year between 2010 and 2023 (-1.1% per year)
(France Agriller, 2020)

- The reasons are multifactorial, associated to:
  - The controversial image of beef (its environmental impact, competition between feed and food, animal welfare issue),
  - the evolution of consumption patterns (decrease of daily time dedicated to cooking and eating),
  - > the high price of beef, and finally
  - its variable sensory quality... (CRÉDOC, 2018; Chriki et al, 2020)
- Finally, eating quality does not meet consumers' expectations:
  - high and uncontrolled variability (Chriki et al, 2013)
- If consumers are not satisfied, they will turn away from beef and switch to other products (meat alternatives) (Chriki et al, 2020; Normand et al, 2020)

# The context of the OABov-AURA project 3/3

→ It is essential to understand and satisfy consumer expectations regarding the intrinsic and extrinsic qualities of beef

(Prache et al. 2022; Ellies-Oury et al. 2021)

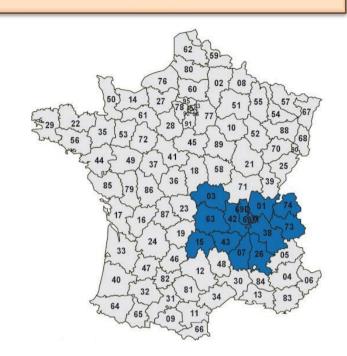


# **Consumers have two main expectations:**

- 1- They want a reliable indicator of beef quality (especially eating quality) (Verbeke et al. 2010; Bonny et al. 2017)
- 2- They are willing to pay more for high quality beef
  (Morales et al. 2013; Gouin, 2014; Ellies-Oury et al. 2018)

# **Background of the OABov-AURA project (2022-2025)**

 AURA (Auvergne Rhône-Alpes): a major beef-producing region (Idele, 2020)



- Special features of the AURA region:
  - ☐ **Historically**: consumption of *lean, light meat from young cattle (*"veau de Lyon" or "veau de Saint-Etienne").
  - □ A high proportion of this type of animal is produced and commercialized in the region (supermarkets, marketing of Label Rouge Limousin junior, etc.), but we don't know whether this is a specific expectation of current consumers for this product.
    - Hence, importance of understanding consumers' expectations to commercialize beef products that meet their expectations.

# Preliminary results Consumer survey

# Methodology

#### Creation of an online questionnaire:



- An online survey was carried out to study consumer expectations regarding the intrinsic and extrinsic qualities of beef, in the region Auvergne-Rhône-Alpes (AURA, the 2<sup>nd</sup> largest beef cattle breeding region in France)
- Distribution of questionnaire:
  - The survey was then disseminated to AURA residents
  - Between April 15, 2022, and December 11, 2023
- Data processing (R)



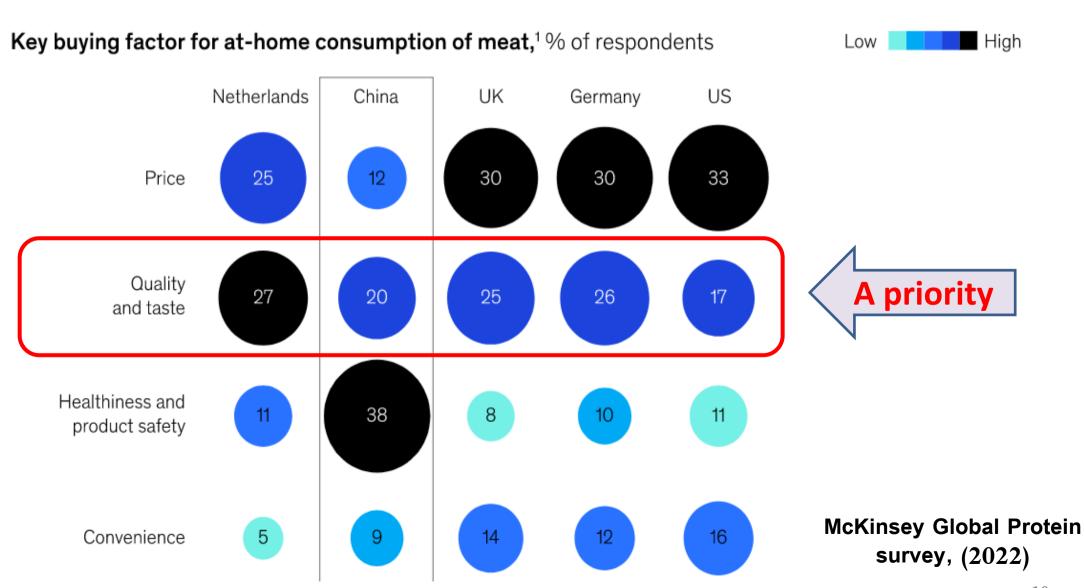
# Sample characteristics

- > Total number of answers: 712
- Sample structure:
  - Women (62%)
    - student population heavily represented by women
  - Young people
     (52% less than 35 years of age vs. 32% more than 45 years of age)
  - Students (25%) and executives (33%)
  - Good knowledge of farming (51%)
  - With a high preference to buy beef in butcher shops (27%)
    - Surprising!
    - Only 15% in France → misunderstanding of the "butcher's shop" option

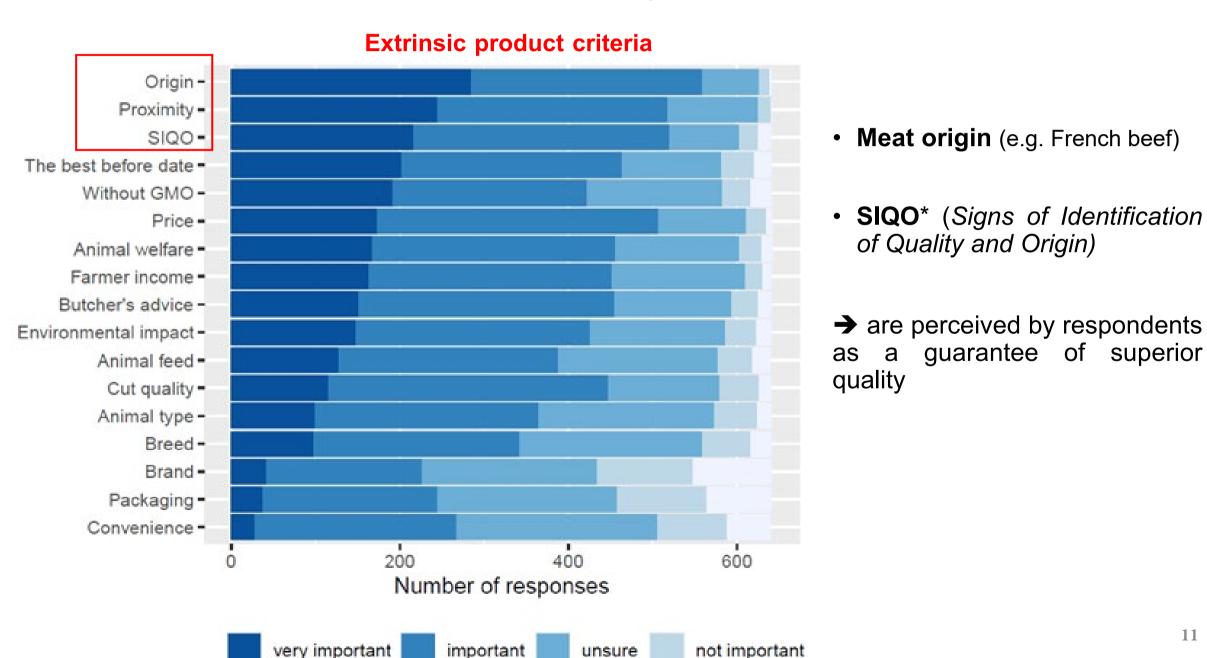
- □ 51% say that eating beef for pleasure is their primary motivation
- □ 48% reported having reduced their meat consumption in recent years
- ☐ The two main reasons for the decline in beef consumption are explained by health (52%) and ethical (44%) issues
- ☐ The majority of consumers are not disappointed with raw (83%) or cooked (54.5%) beef

#### **Discussion**

# Quality and taste are generally important for meat



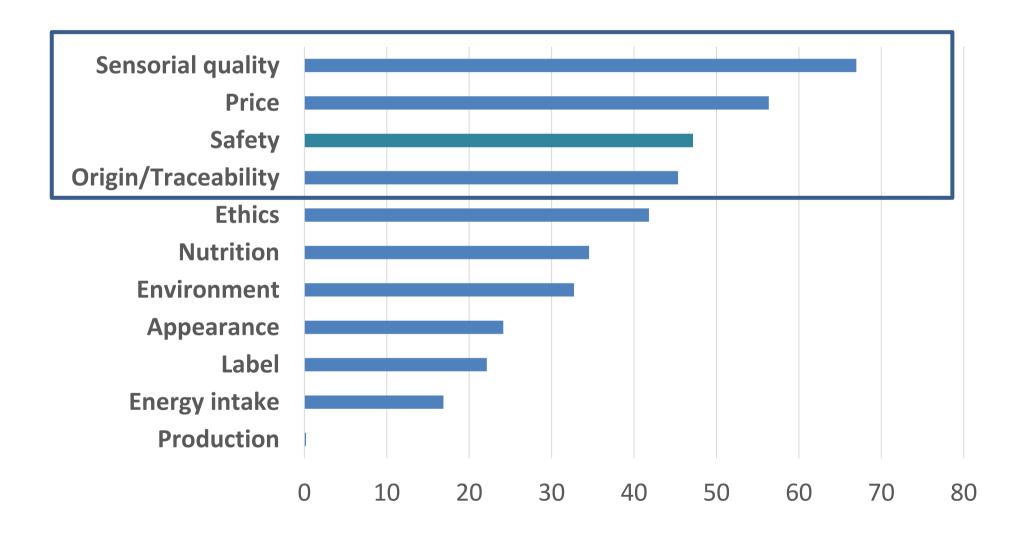
**Question:** When buying beef, how important are the following criteria for you?



#### Discussion

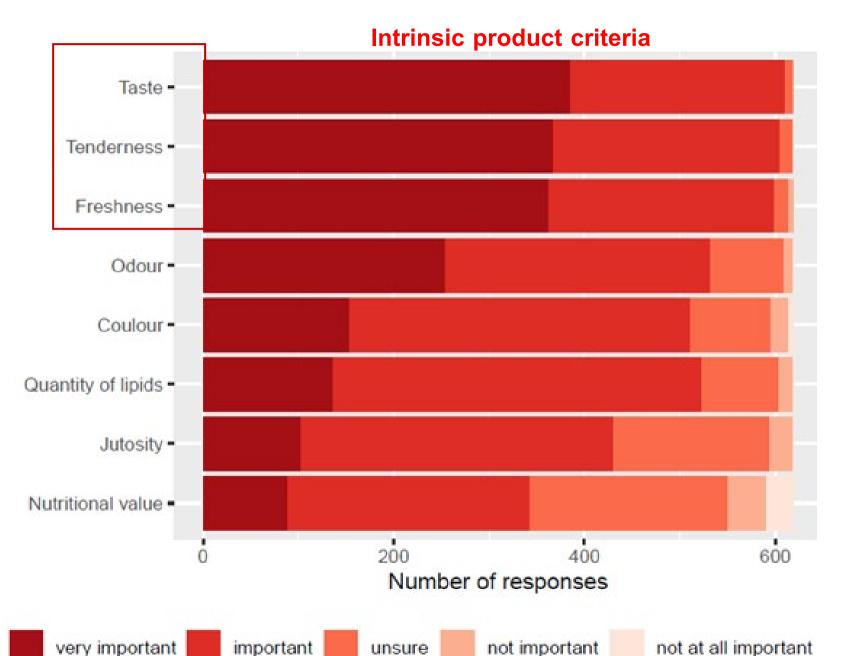
# Eating quality and origin are generally important criteria

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



Liu et al., Meat Sci. 200 (2023) 109144. More than 16,000 answers from 5 countries (China, Brazil, France, Cameroon, South Africa).

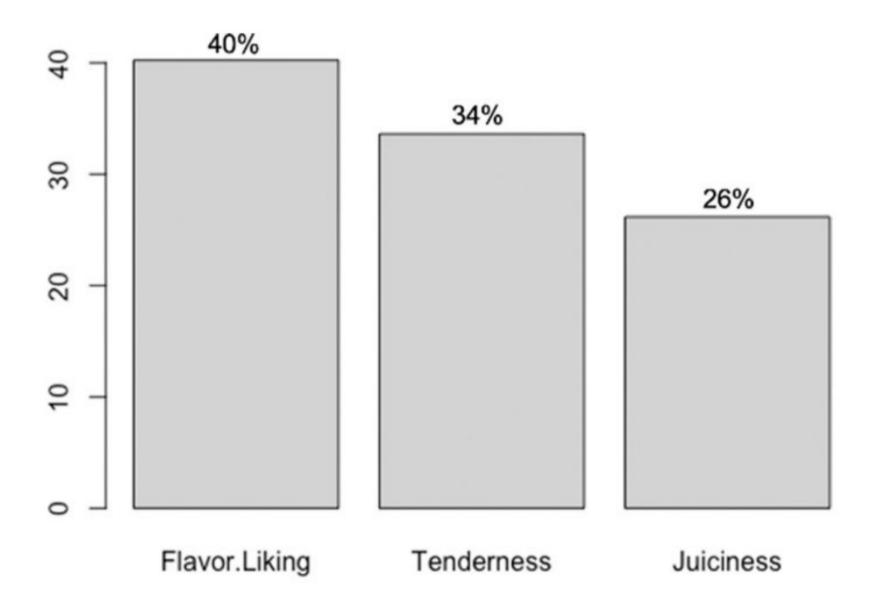
**Question:** When buying beef, how important are the following criteria for you?



- Taste: link with marbling?
- Tenderness: First reason of dissatisfaction with cooked beef
- Freshness: 1 ere reason for disappointment with raw meat (link with color?)

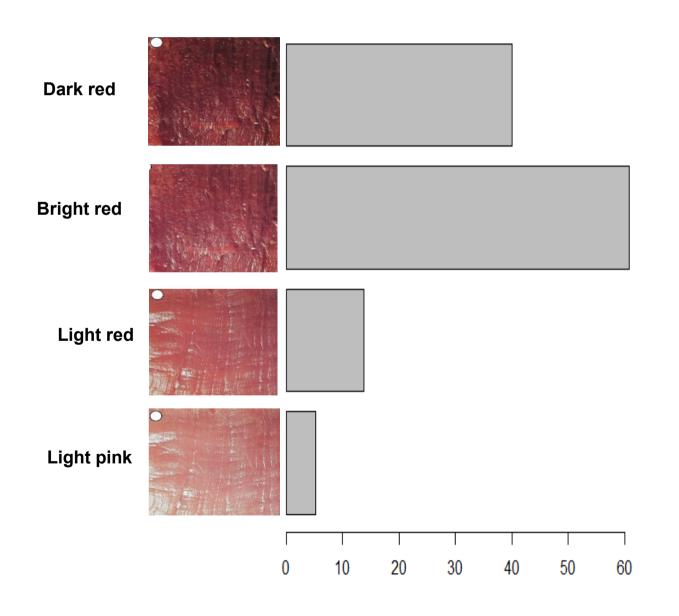
#### **Discussion**

# Contributions of flavour liking, tenderness and juiciness to overall liking



Liu et al. (2020) – study in Europe https://doi.org/10.1016/j.meatsci.2020.108190

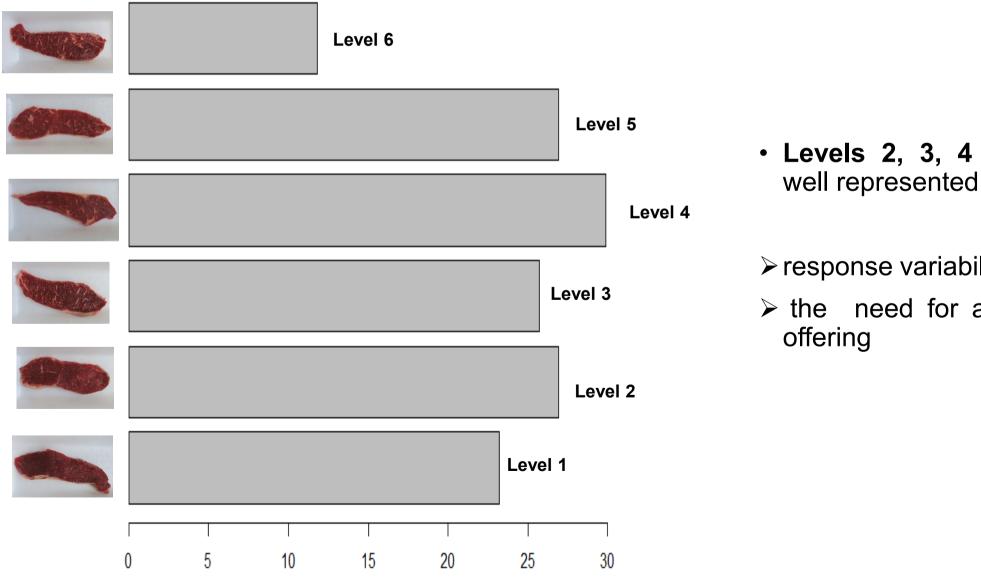
**Question:** In terms of colour, which of the photos below does the beef you would like to eat look like? Multiple choice



Respondents (n=509) prefer an intermediate, dark color (**bright red**).

synonymous of freshness or of good quality?

**Question**: In terms of the amount of fat (marbling), which of the photos below does the beef you would like to eat look like? Multiple choices



- Levels 2, 3, 4 and 5 are
- > response variability
- > the need for a diversified

### **Conclusion**

Sample (not representative):
☐ Mostly female, young and from the AURA region
☐ With a socio-professional category of the student and executive type
☐ Good knowledge of the farming and of the meat industry
☐ With a preference to buy beef in a butcher's shop
Results (consumer expectations) are in line with other studies:
☐ Extrinsic criteria: origin, proximity and SIQO
☐ Intrinsic criteria: taste, tenderness and freshness
☐ Bright red meat (intermediate color) (72%)
□ Rather marbled (64%)
→ In conclusion, it is important that consumers in the AURA region have access to various meat types in butcher shops, mainly of French origin and

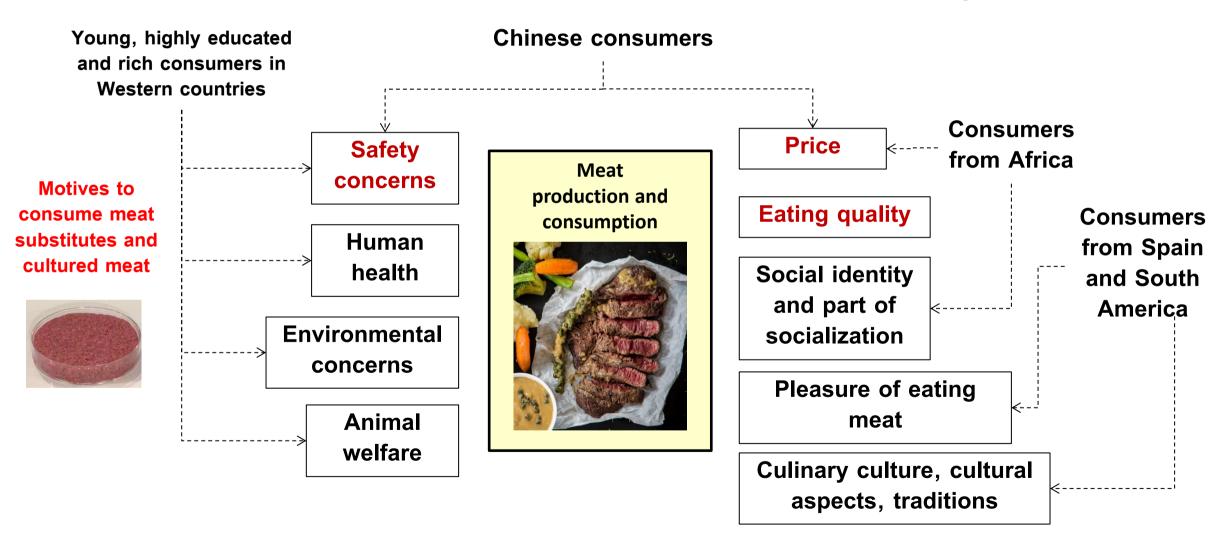
under quality signs to better meet their diverse expectations.

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#### **General discussion**

# The drivers of meat consumption are diverse and complex

# Motives and barriers of meat consumption



Interaction with affective factors, personal compromise between barriers and motives, meat origin, livestock systems, etc















