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Preference for meat substitute with plant-based proteins (PBP): An experiment with real product consumption

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1. CONTEXT

People are interested by meat reduction or meat substitution for many arguments: health, environment, animal welfare.
Firms explore new models and new supply (better meat or meat substitutes) to take, to keep or to increase market shares.

What consumers really prefer and choose? In choice experiments...

2. LITERATURE

Some hypothetical DCE examine consumers preferences for meat substitutes that are close to meat attributes, as burgers (Slade, 2018, *App*; Apostolidis and McLeay, 2019, *FQP*; Van Loo et al., 2020, *FPO*; Carlsson et al., 2022, *EcolE*).

- People prefer beef burger rather than substitutes.
- Information about health or environmental arguments have a positive impact on substitution.
- Vegetarians, younger individuals, and those with higher education levels prefer substitutes.

Some studies include real tasting sessions with sensory evaluation and some monetary valuation of products and information (Bazoche et al., 2023, *FPO*; Martin et al., 2021, *FQP*; Grasso et al., 2022, *FQP*).

- Tackle similar issues but provide additional insights into the impact of taste on consumer preferences.
- If people prefer the meat product, there is potential for acceptance of hybrid products or plant-based alternatives if accompanied by positive argument about health and environment.

3. RESEARCH QUESTION

- Are consumers ready to substitute? (do PBP taste good?)
- Which attributes could change the choice?

➔ **Consumption in a real context and real choice between new product and usual product**

4. EXPERIMENTAL DESIGN

In-home tasting in real meal context with real consumers.

Product: sliced plant-based product (2 aromas)

Week 1.

Participants received slices of the PBP based on their week habit consumption → consume it as they do for their usual one.

They follow the online instructions for questions :

- Description of the meal (photo) + nb of people
- General liking + appearance, smell, meal
- What product they prefer for week 2? (PBP / usual P)
- What could change their choice? (hypothetical)

Week 2. Received their real choice (+ fee)

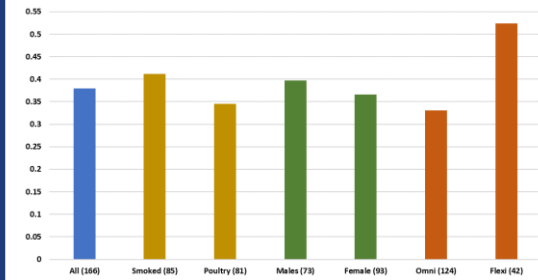
5. PARTICIPANTS

166 subjects from Dijon area (Fr), December 2020
55% women, 42 years (from 18 to 65)

74.7% declare to have omnivore diet (51% females)
25.3% declare to have flexitarian diet (71% females)

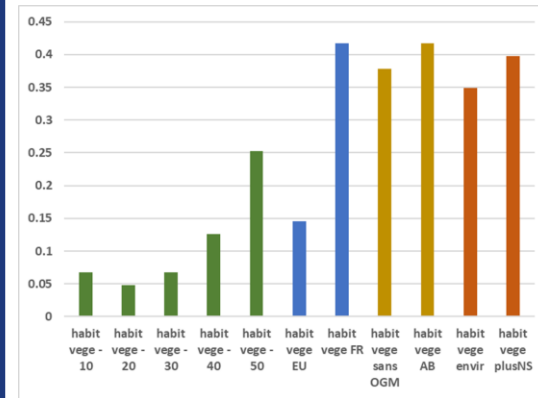
6. RESULTS

Fig.1. Preference for PBP in week 2.



38% keep PBP, only diet effect (and Liking effect)

Fig. 2. Arguments that could change the choice from usual P to PBP in week 2 (N = 103)



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