

Cricket Flour Consumer Research: Understanding Consumer Behavior and Messaging Effectiveness in Alternative Protein Markets.

Project overview:

Two-stage research study examined consumer attitudes, preferences, and messaging effectiveness for cricket flour products across European markets. Through systematic analysis of 1,200 participants, we identified key demographic segments and optimal messaging strategies for alternative protein market penetration.

Stage 1: Consumer Profiling

Objetive

To identify a target audience and relevant criteria when evaluating the product with a survey

Method – sample

Select a 200 sample from Prolific across all Europe from people 18 years old and onwards.



Research question: What are the consumer characteristics more strongly associated with wanting to try cricket flour?

Procedure: Survey based Variables:

Demographics

What is your age group?

18–24

25–34

35–44

44–above

Willingness to try

How willing are you to try a food made with cricket flour?

1–5 scale: not at all to very willing

Food values

When choosing food, how important are the following?

Health

Price

Sustainability

Taste

Dietary Habits

Which best describes your diet?

Omnivore
Vegetarian
Vegan
Carnivore

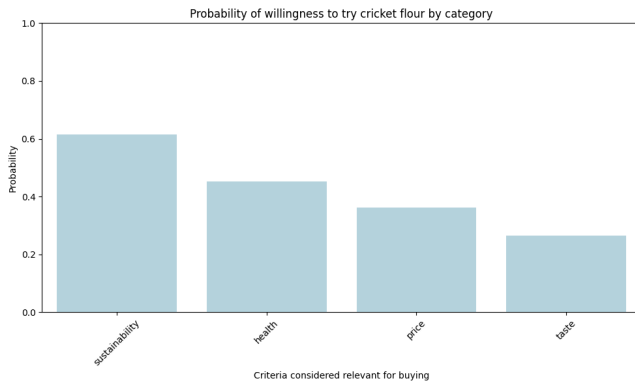
Attitudes toward Novel foods

How open are you to trying new or unfamiliar foods?

1–5 scale: not at all to very open

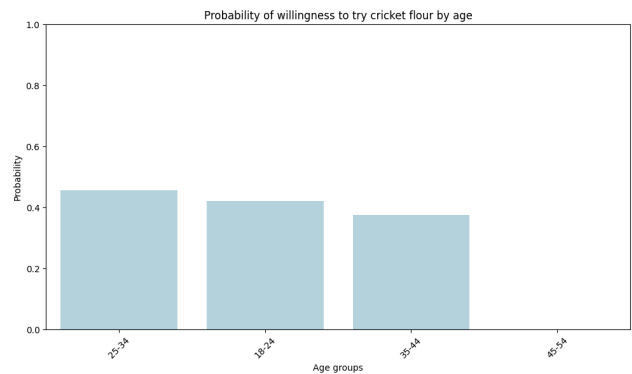
Have you ever tried insect based foods (e.g., cricket flour, protein bars)? (Yes/No/Not sure)

Results: Descriptive & inferential statistics



People between 18 and 34 have a higher likelihood of consuming the product.

Among respondents who considered sustainability the most important purchase criterion, **61% also reported high intentions to try cricket products**, from those that considered health to be most relevant 45% have high intentions of trying cricket flour, compared to only 26% and 36% on people who consider taste and price as most relevant.



Key conclusions :

1. Sustainability was the most important purchase criterion associated with interest in cricket products. 61% of those who reported having sustainability as a relevant criteria when buying also reported high interest in consuming the product.
2. Diet does not affect interest in the product.
3. People between 18 and 34 report more interest in cricket products compared to other age groups.
4. Having tried insect products is associated with higher intention to consume them in the future.

Stage 2: Messaging effectiveness

What keypoints do we know already?

- A. Sustainability and willingness to consume insects normally go hand in hand.
- B. Those people who had tried insects before are more likely to consume them.
- D. People are generally disgusted by the idea of eating insects (there's a negative bias towards these products-except for some locations)

Objective

To identifying which framing /wording will increase cricket flour buying intention, across all costumers, and across costumers with health consciousness and high sustainability interests.

Method- sample

Experimental (A/B) test scenarios

1000 Prolific participants were exposed to one of four prompts available, or a control group describing the cricket.

Research questions:

1. What advertisement message drives higher interest in consumers?
2. Which variables increase the chances of someone wanting to buy the product or know more about it?
3. Are there any relevant variables to pay attention when targetting the product, such as how frequently the person cooks or their age?
4. Are there any impacts on buying intention if the person has tried insect-based food in the past?

Messages presented to costumers:

Control: *Cricket flour is made from finely ground crickets. It can be used in baking, cooking, or as an ingredient in protein bars and snacks.*

	Social norms	Regular-no social related
Sustainability	<i>Be part of the movement reducing food's footprint. Cricket flour saves land and water with every meal.</i>	<i>Every choice count: switch to cricket flour and cut your environmental impact without giving up nutrition.</i>
Health	<i>Upgrade your meals with the natural protein source athletes are turning to.</i>	<i>Fuel your body with clean, high-quality protein. Cricket flour makes every meal a performance boost.</i>

WHY SOCIAL RELATED MESSAGES?

One of the strongest psychological drivers of action is what others are doing.

WHY HEALTH & SUSTAINABILITY?

These were the topics more strongly associated with costumers interested in the product.

Procedure: Survey+behavioral based

Variables:

Click

(Behavioral) Did people click in the “want to receive more information about this product” link (Yes/no)

Buying intention

How likely is that you buy the product?
1–5 scale: not at all to very much

Health conscious

From 1 to 5 how relevant is health-nutrition for you when deciding to buy a product?

Age

18–24
25–34
35–44
44–above

Cooking Frequency

How often do you cook at home?
0–7 days/week

Sustainability conscious

From 1 to 5 how relevant is sustainability for you when deciding to buy a product?

Gender

Male
Female
Non-binary

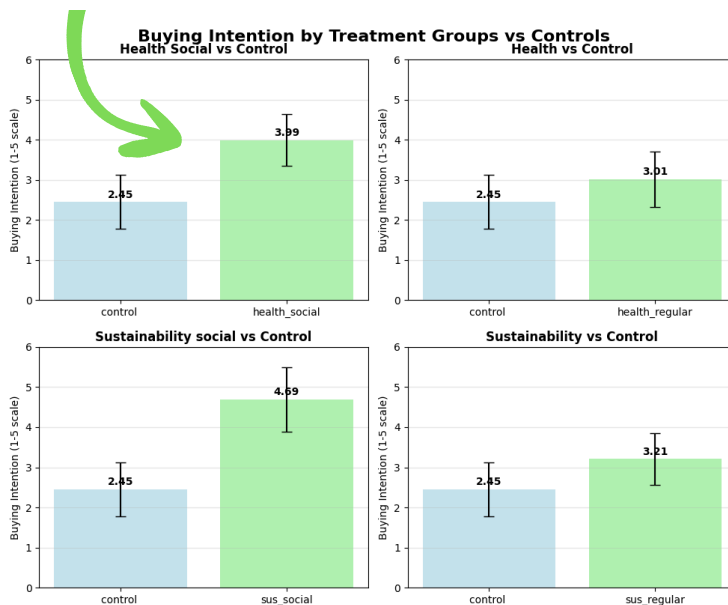
Location

Country of residence

Prior Exposure

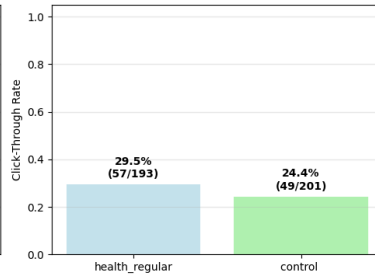
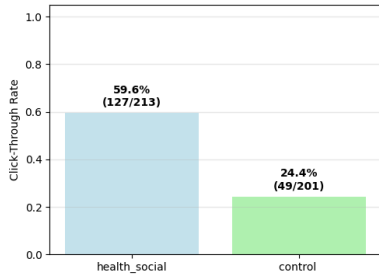
Have you eaten crickets or insect-based food before? (yes/no)

Results: Descriptive and Inferencial Statistics

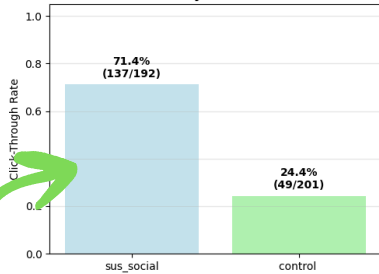


The graph shows that the prompt that drove **higher buying intention** was “Be part of the movement reducing food’s footprint. Cricket flour saves land and water with every meal”

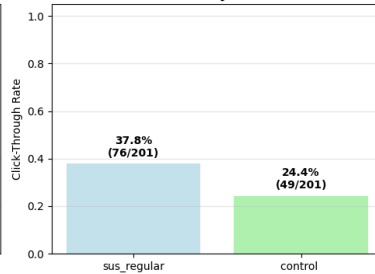
Click-Through Rate by Treatment Groups vs Controls
Health Social vs Control



Sustainability Social vs Control

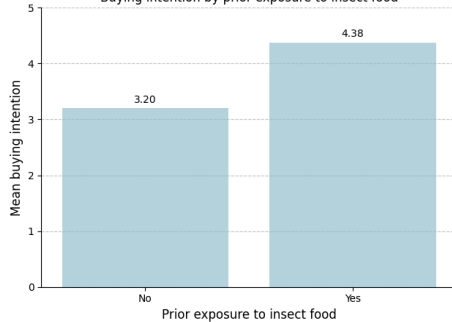


Sustainability vs Control

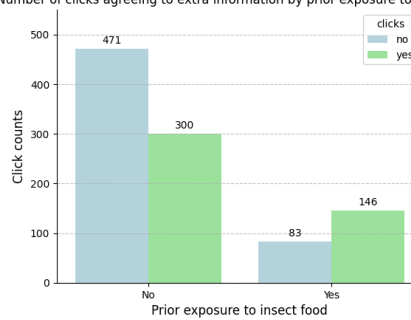


The graph shows that the prompt that drove **higher click rates (74%)** in the link to receive more information about the product was "Be part of the movement reducing food's footprint. Cricket flour saves land and water with every meal"

Buying intention by prior exposure to insect food

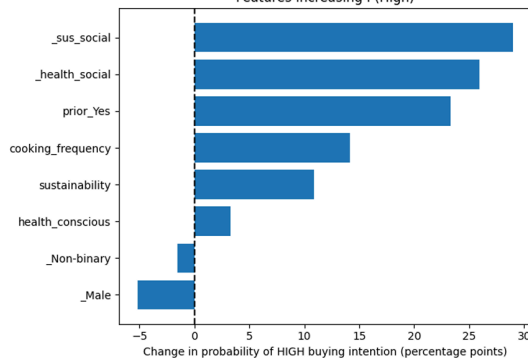


Number of clicks agreeing to extra information by prior exposure to insect food



These graphs show that **people who have tried insect products in the past show more interest** in the product than those who haven't tried them.

Features increasing P(High)



The probability of being in the high buying intention group when presented with the control prompt was 69%, and **when presented with the sustainability and social prompt was 98%.**

This means prompting consumers with the message "Be part of the movement reducing food's footprint. Cricket flour saves land and water with every meal" makes it more likely for them to want to buy the product than any other message presented.

Conclusions:

Who to target



- Tends to cook at home
- Is aged 25-34
- Has tried insect products or is open to new food experiences.
- Cares about health and sustainability when making purchasing choices.

How to target:



- Advertising messages should include sustainability impacts.
- Advertising should include a sense of shared social movement.
- Promote free tastings of product to costumers in stores.