# THE ROLE OF CONSUMER KNOWLEDGE AND ATTITUDES IN THE ADOPTION OF INSECT-FED POULTRY

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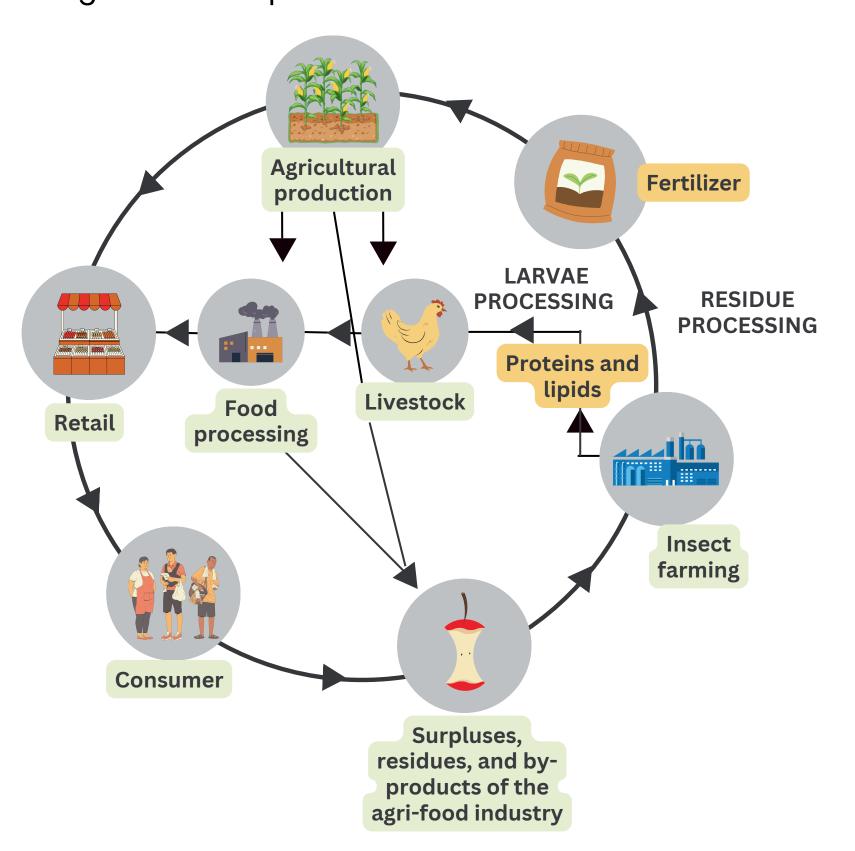
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## INTRODUCTION

The growing global population and food security challenges drive the search for alternatives to traditional feeds like soybean meal and fishmeal. Insects, particularly black soldier flies (Hermetia illucens), offer a sustainable solution by converting organic waste into high-quality proteins and lipids. Despite their environmental and nutritional benefits, the adoption of insect-based feed faces barriers, including consumer acceptance. This study examines Slovenian consumers' perceptions of insect-based feed and factors influencing their acceptance.



## SAMPLE & METHODS

- Online survey in 1ka platform.
- The questionnaire developed based on insights from existing literature and pretested with a small pilot group to ensure clarity and reliability.
- Participants were recruited through online channels, targeting Slovenian consumers aged 18 and older.
- 773 fully completed surveys were collected, providing a substantial dataset, although the sample may not fully represent the broader population.

#### **GENDER AGE GROUP** • 60 % male • 31 % (ages 18-25) • 40 % female • 39 % (ages 26-44) • 22 % (ages 45-59) • 8 % (ages 60-84) **FINANCIAL SITUATION** COMMUNITY • 10 % (below average) • 48 % (large city) • 45 % (average) • 19 % (small city) • 42 % (above average) • 34 % (rural settlement) **LEVEL OF EDUCATION** • 3% (Primary Education) • 24% (Secondary Education)

• 73% (Tertiary Education)

Descriptive analysis, frequency distributions, and inferential statistics were performed using SPSS.



## CONCLUSION

To enhance consumer acceptance of insect-based poultry feed, it's crucial to focus on:

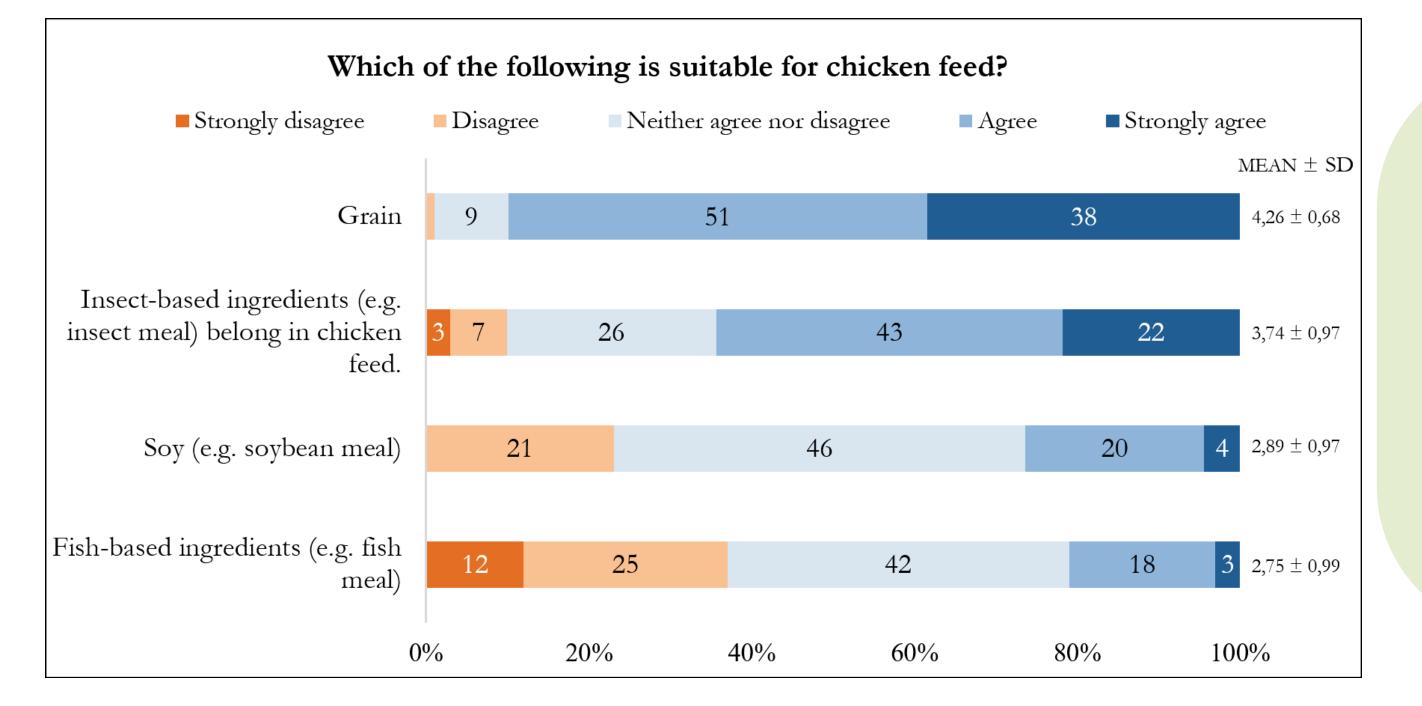
- Addressing Safety Concerns: Build trust with clear safety standards and risk management.
- Raising Awareness and Knowledge: Educate consumers on the feed practices and benefits of insect-based feed.
- Targeting Messaging: Focus on younger, more educated consumers.

Implementing these strategies can drive positive change and increase acceptance of sustainable feed solutions like insects.

## RESULTS & DISCUSSION



**A.** Respondents' level of agreement on the inclusion of various ingredients in chicken feed, based on Likert scale responses



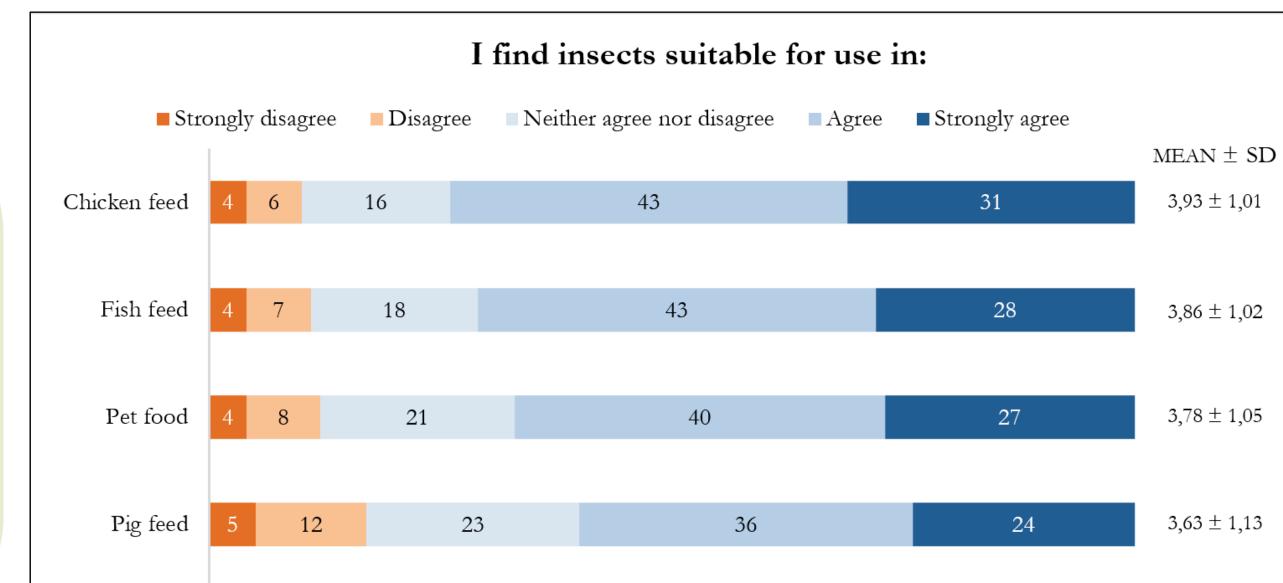
# High approval for insects, low for soy

Only 21% viewed soy as appropriate, which may reflect health concerns, environmental impact worries, or a lack of knowledge about its widespread use in animal feed.

**B.** Respondents' opinions on the use of insects in animal feed, pet food, and the human diet, based on Likert scale responses

# Positive Perception of Insects for Animal Feed

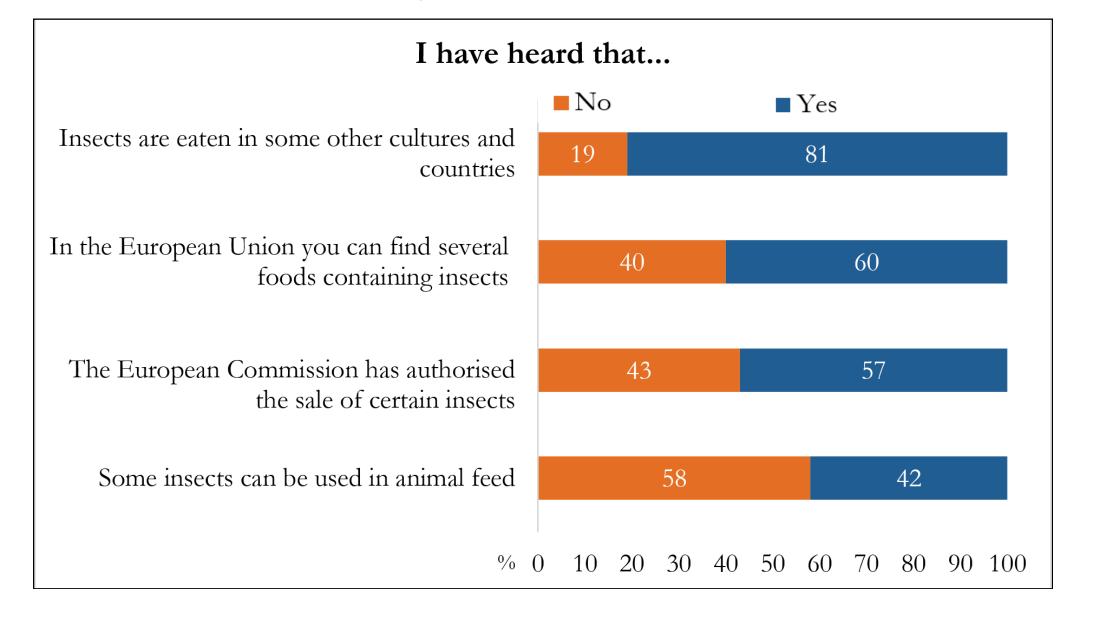
- A majority of participants
  (60-74%) see insects as
  suitable for feeding
  chickens, fish, pets,
  and pigs.
- 45% also consider insects appropriate for human consumption.



50%

60%

C. Respondents' knowledge of edible insects.



Human diet

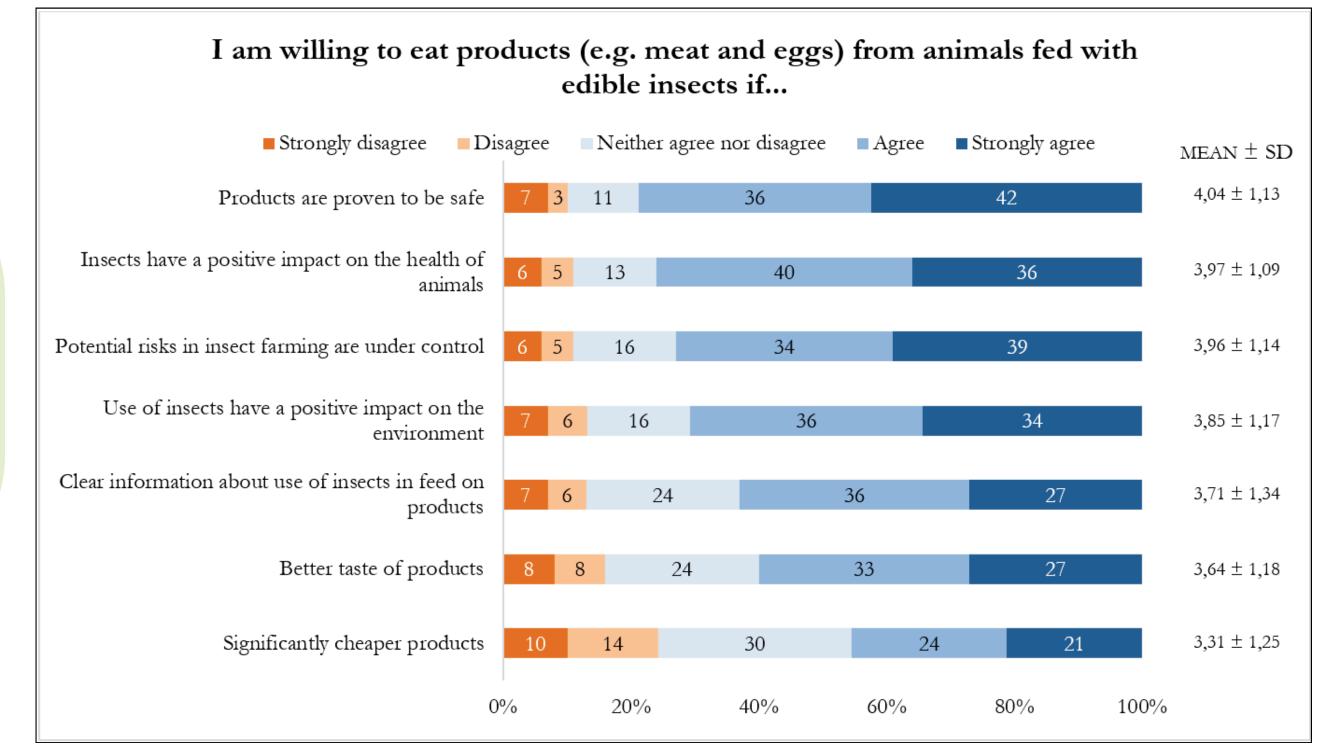
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#### **Knowledge Gap**

 $3,17 \pm 1,26$ 

• 60% know about the EU's authorization of edible insects, only 42% are aware they can be used in animal feed.

**D.** Respondents' willingness to consume products from animals fed with insects under various conditions, based on Likert scale responses.



#### Key concern

- 65% believe insectbased feed poses no health risks to humans.
- Safety emerged as the most critical factor for consumer acceptance.

### Awareness and Familiarity

- 92% of respondents are familiar with edible insects, 24% have tried them before.
- Male, younger and more educated participants showed significantly stronger support for using insects in chicken feed.





