

## EDIBLE INSECTS AS A NEW CULINARY TREND IN GASTRONOMY: ATTITUDES OF GASTRONOMY AND CULINARY ARTS STUDENTS TOWARDS EDIBLE INSECTS

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### INTRODUCTION & AIM

Scientists predict that rapid increases in the world population will lead to difficulty accessing nutrients for humans in the future.

Based on this foresight, finding alternative food sources, such as edible insects, has become an important research subject.




Compared with farm animals and poultry, insects' positive contributions to the environment have made them an alternative for sustainable nutrition.

Despite its increasing popularity and its recognition as a nutritious and sustainable food source, the consumption of edible insects is still an unusual concept for many people.

### METHOD

Three bar recipes were developed for this study using the following ingredients:

 <p>1st bar: mashed dates, crushed raw almonds, raw almond flour, chocolate flavored protein powder, oat flour.</p>	 <p>2nd bar: mashed dates, crushed raw almonds, raw almond flour, locusta migratoria type cricket powder.</p>	 <p>3rd bar: mashed dates, crushed raw almonds, raw almond flour, locusta migratoria in powder form and as whole insects.</p>
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- All ingredients used in making the bars were ready for consumption.
- Ingredients were mixed separately and shaped into bars.
- Heat treatment was not applied.

A face-to-face interview technique was applied for a taste test. 33 participant took place in the experiment.



Of the participants:

- 63.6% (n=21) were female
- 36.4% (n=12) were male

Figure 1 (n=33)

### RESULTS & DISCUSSION

Do you try new foods or use new techniques when cooking?

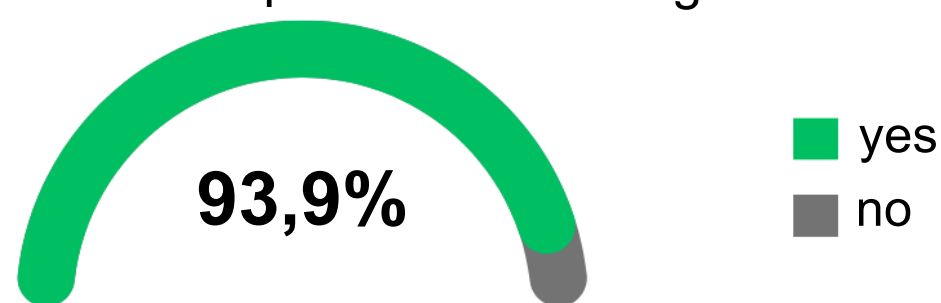


Figure 2 (n=33)

Have you tried foods/meals that you have never tried before in the past year?

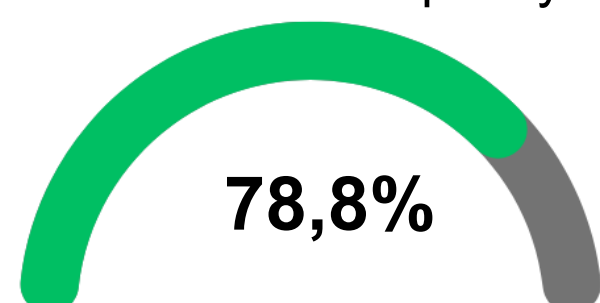


Figure 3 (n=33)

Measuring the consumption willingness of each protein bar based on the given facts:

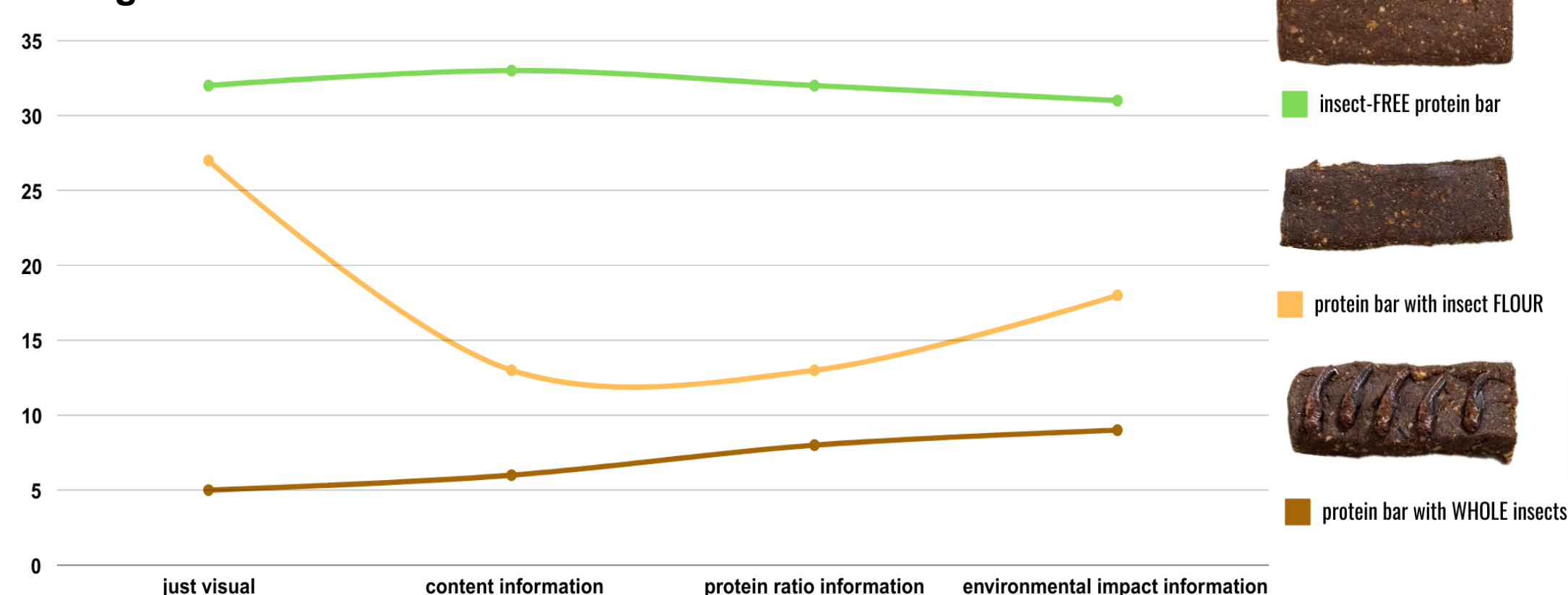


Figure 4 (n=33)

The reasons for not trying the bars with insects:

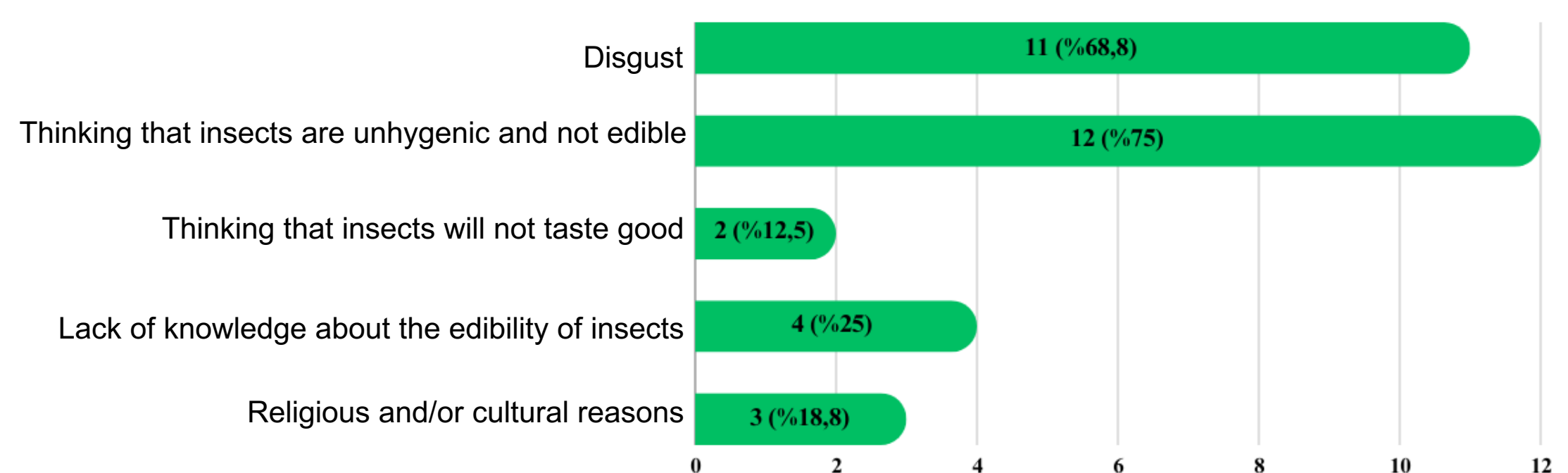


Figure 5 (n=17)

Tasting results based on four senses (taste, smell, touch, sight):

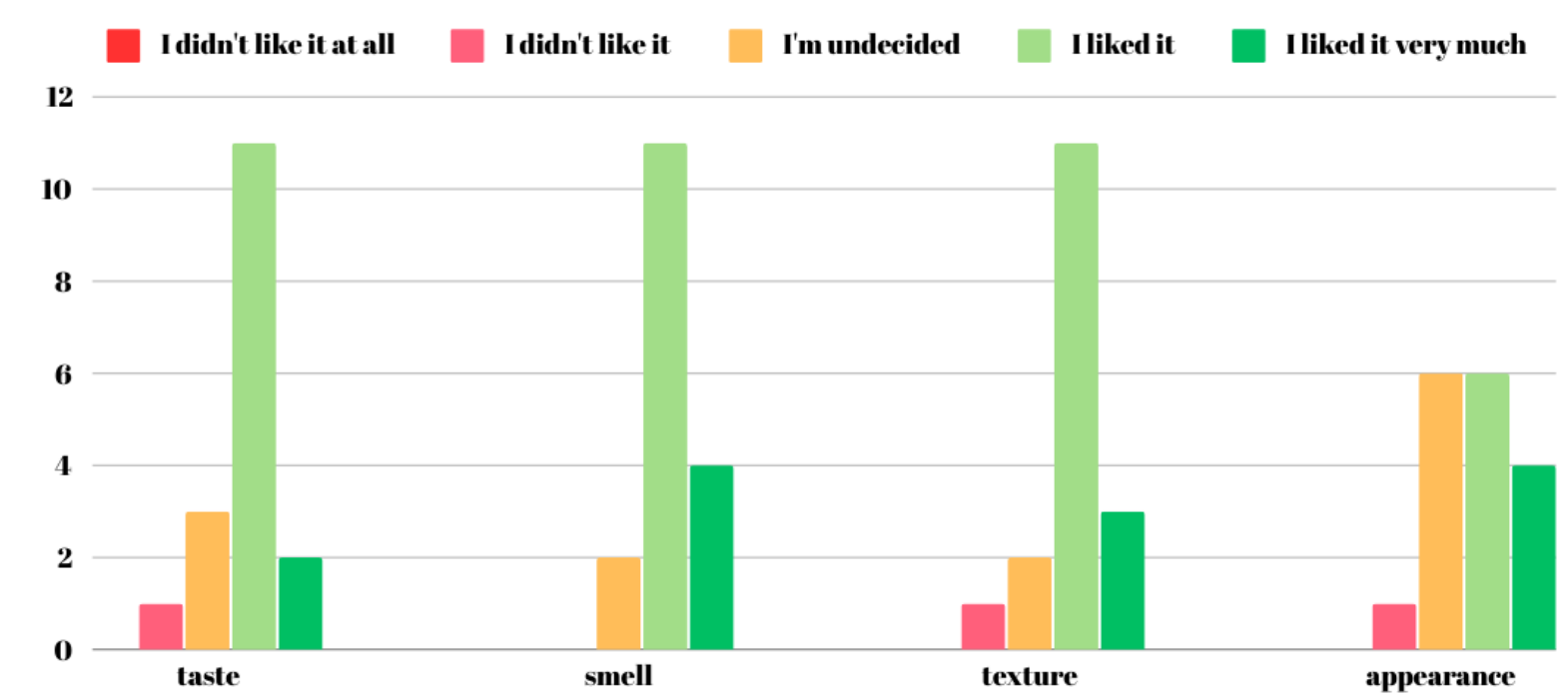


Figure 6 (Protein bar with insect flour (n=16))

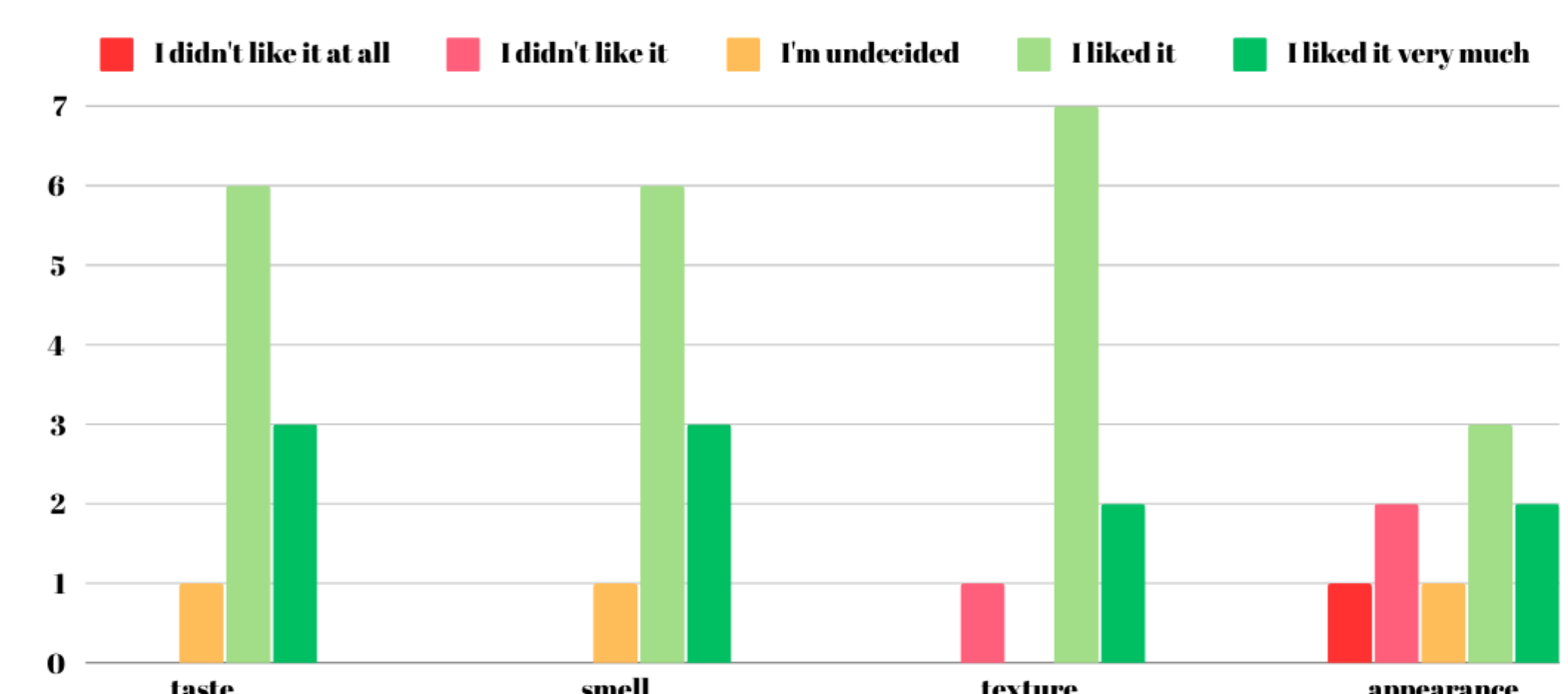


Figure 7 (Protein bar with whole insect (n=10))

### CONCLUSION

Participants were asked to predict about the future of insect consumption based on the information they received about their positive impact on the environment:

- Hopeful about the general acceptance of insect consumption → 33.3%
- Potential of integrating insect consumption to their regular diet → 18.2%

### FUTURE WORK

It was concluded that, if gastronomy and culinary arts students were educated about:

- The environmental benefits of edible insect consumption,
- Their nutritious values,
- The hygienic conditions in which these insects are bred and processed, may lead to an increase in the consumption of insects in the future.

This study can be further advanced by comparing the results of the same experiment obtained from two cultures where one culture is accustomed to eating insects and the other not, the results may provide valuable contribution to the literature.

### REFERENCES

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