

Loïc Detilleux¹, Antonin Le Luc², Ludovic Andres², Thomas Dogot¹, Frédéric Francis³, Rudy Caparros Megido³

1: Economics and Rural Development, Gembloux Agro-Bio Tech - University of Liège, Gembloux, Belgium

2: Research unit Agro-Development and Innovation in South (UR ADISuds), College of International Agro-Development (ISTOM), Angers, France

3: Functional and Evolutionary Entomology, Gembloux Agro-Bio Tech - University of Liège, Gembloux, Belgium

Contact : Loic.Detilleux@uliege.be

Introduction

In Belgium, insects are already available in market as food industry uses mealworm flour to produce pasta or cricket flour to produce granola. However, such products are not common in Belgian diets and insects are not yet introduced in food habits. To meet this goal, insect-based foods must reach a certain level of quality. A food is considered to be of good quality by consumer when it satisfies his needs and expectations. Food quality is divided into five dimensions (Figure 1) and the importance of each variable is depending on the consumer and the food.

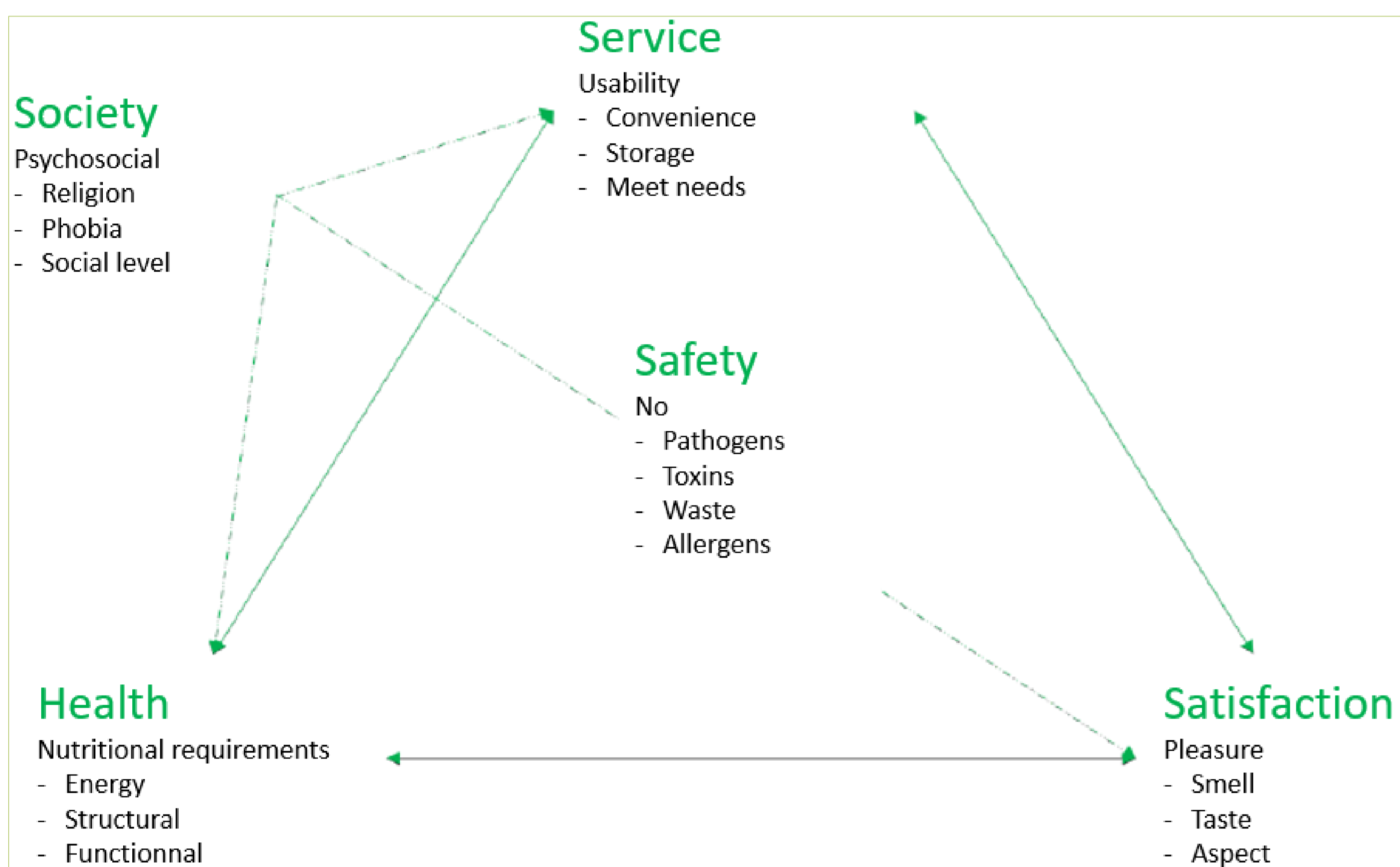


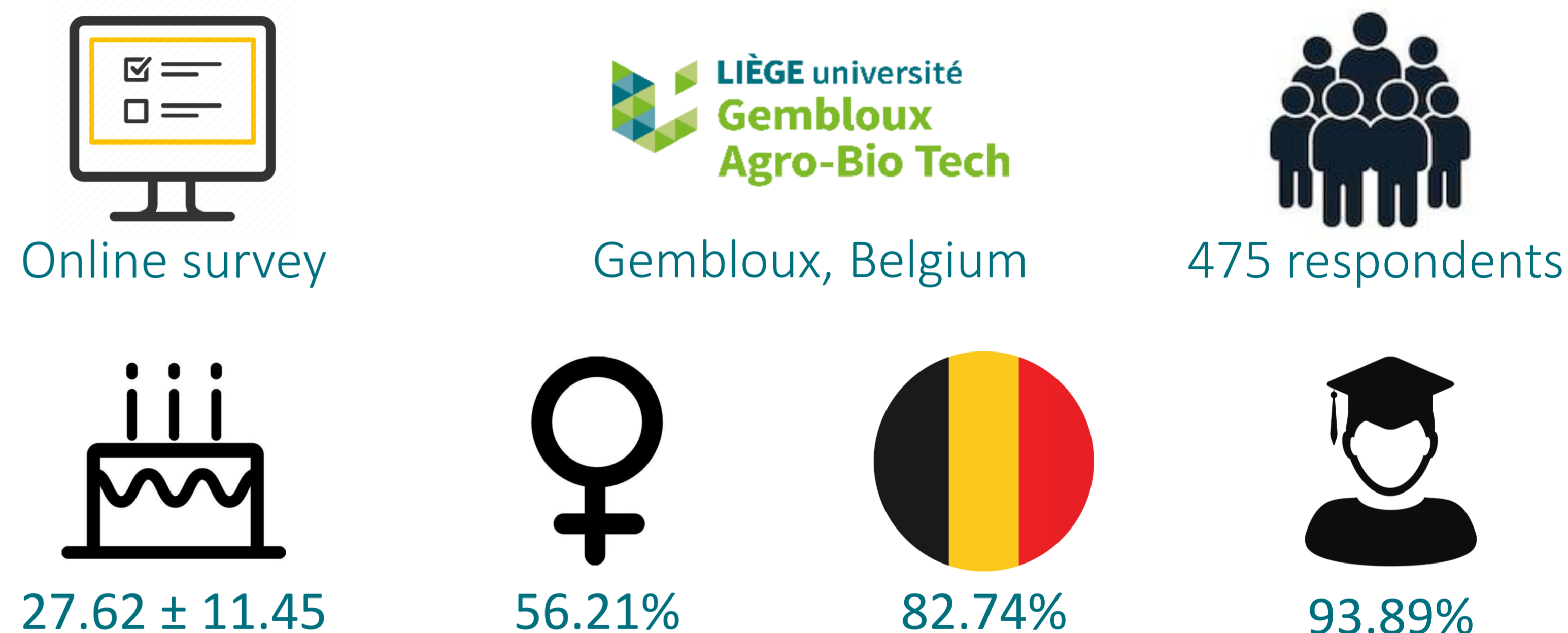
Figure 1. Dimensions of food quality.

Caparros 2017, Are edible insects ready for the European market? First insights into insect quality as food ingredient for human consumption.

Objectives

- Record trends about:
 - Entomophagy in Belgium.
 - Dimensions of food quality.
- Challenge questionnaire for further studies.

Methodology



Results

- 75.58% of respondents would accept to eat insects.
- 55.16% of respondents knew where to find edible insects.
- Internet sales were the most popular way to find insects (Figure 2).
- 65.47% of respondents had already experienced insect eating.
- Health was the most important dimension of food quality relative to insect eating (Figure 3).

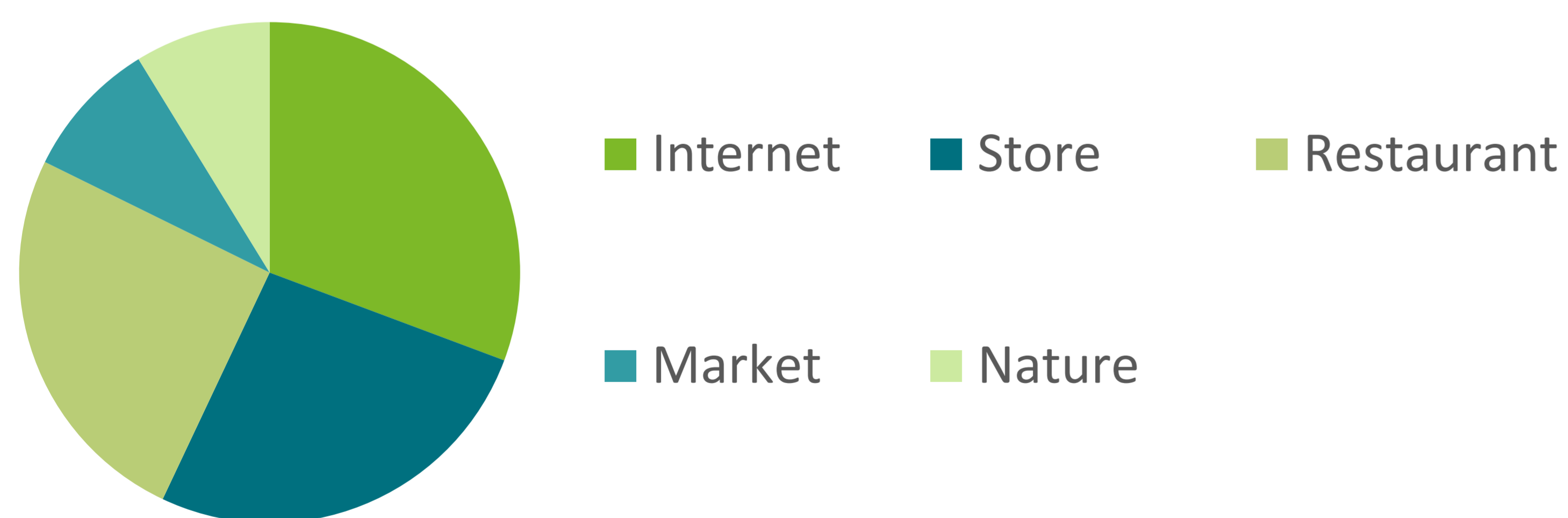


Figure 2. Answers to "Where can you find edible insects?".



Figure 3. Selection of the most important dimensions of food quality.

Conclusion

Belgian academics want to eat healthy when they eat edible insects. The most important for them is to find a balanced insect-based foods which provide essential nutrients as proteins. Promoting health benefits relative to entomophagy (e.g., on packaging) could consequently be an effective strategy to boost sales of insect-based food. At the same time, other aspects of food quality such as the society or satisfaction dimensions must not be overlooked by the insect industry.

