

Entomophagy: Young Consumers' Beliefs and Potential Attitude Towards Alternative Protein Sources - Abstract

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Summary

Entomophagy can be considered as an alternative protein source substituting traditional animal-based proteins. Benefits related to this are minimal requirements in water and land and lower greenhouse gas emissions. Although insects have been part of Asian, African and Latin American people's diets, in Western societies consumption of whole or processed insects is viewed with distrust and doubt, usually causing negative emotions. The present survey attempts to identify and analyze the factors affecting the final choice and preference of young consumers for insect eating. Thus, based on the Health Belief Model and the Theory of Planned Behavior, a questionnaire was created and distributed to 343 consumers aged 18-45. Principal Component Analysis results verified that young consumers recognize the benefits derived from entomophagy (high nutritional value, environmental protection, their contribution to food insecurity). More specifically, participants believe that they would adopt entomophagy mainly due to low environmental footprint, nutritional value and taste. The nutritional value seems to be a priority over the above reasons, while they seem to be less concerned about the low cost (only 4% of the respondents). Moreover, they recognize potential hazards relevant to insects' consumption, including microbiological and chemical risks as well as the possibility of an allergic reaction. Another interesting finding is that the higher the percentage of plant proteins consumed by the respondents, the less they identify risks arising from insects' consumption. In contrast, there is a high correlation (p -value < 0.01) between animal protein intake and confidence in insect eating. From the analysis of the respondents' socio-economic characteristics, consumers of lower educational level believe on a higher level that purchasing costs of buying insects or insect-based food products are high. Greater willingness to purchase insect-based foods was observed in male respondents compared to female ones. It is also noteworthy that the majority of respondents had limited knowledge about entomophagy and were not fully informed about the positive health benefits of this type of foodstuff. Regarding the form of insect-based foods and products that were most likely to be selected, whole insects, as well as desserts with whole insects, would be less preferred. On the contrary, processed foodstuff such as spaghetti, cookies, flour, bars or burgers, are more acceptable as they are more familiar to consumers. In conclusion, although food neophobia is the most important limiting factor to insect consumption, consumers are gradually adopting more sustainable food choices and protein alternatives, aiming to reduce animal protein intake.

Keywords

Entomophagy, Insects, Neophobia, Consumer Behavior, Health Belief Model, Alternative proteins

Proceedings of HAICTA 2022, September 22–25, 2022, Athens, Greece

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