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Abstract

Acceptance of Alternative Meats in a Multiethnic Asian Cohort: A Comparison of Plant-Based Meat Alternatives, Cultured Meat, and Insect-Based Products †

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Abstract: Background: Research on the consumer acceptance of alternative meats will aid our understanding of how to increase their consumption and demand. There are limited data on this in the Asian context, particularly comparing various alternative meat products within a singular study. Objective: In a multi-ethnic Asian population, the demographics and attitudes of individuals towards consuming plant-based meat alternatives, cultured meat, and insect-based products were examined. Methods: Adult Singapore residents (n = 1224) were recruited from the Multi-Ethnic Cohort Phase 2 study to participate in an online survey. Demographic information, dietary habits, and attitudes towards livestock products and alternative meats were obtained. Key demographic and attitudinal factors of consumption intent and participants' willingness to pay were identified using hierarchical ordinal regression. Results: Consumption intent for plant-based meat alternatives was the highest, followed by cultured meat, and then insect-based products. The strongest barrier to consumption intent was the perception of un-naturalness, found mostly towards cultured meat, followed by insect-based products, and then plant-based meat. Familiarity with the products and being male were associated with greater willingness to consume all three types of alternative meats. Attitudinal factors such as environmental sustainability, distrust in biotechnology, food neophobia, and animal welfare influenced the consumption intent of plant-based meat, cultured meat, and insect-based products, respectively. Participants were more willing to pay a higher price for alternative meats if they were concerned about the use of chemicals in animal products. Conclusion: Common and unique factors towards consuming the various alternative meats were identified. Our findings suggest that different communication strategies may be needed to promote the consumption and acceptance of different types of alternative meats.

Keywords: attitude; protein alternatives; clean meat

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