

Understanding adoption of food innovations: The case of insect-based products in the Netherlands

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Abstract

Edible insects have been promoted in the Netherlands since the late 1990s. The current study aimed at gaining insight into the mechanisms driving insect-based food adoption, from consumer perspective. We performed a structured literature review based on the innovation of diffusion paradigm and Bass diffusion model, followed by system dynamics model development, which was used to study potential adoption of edible insect as foods. The diffusion process of insect-based food can proceed for many years before there are observable adopters, under currently reported practices in the Netherlands. To make everyone aware of this innovation, many decades are necessary, which can be quickened by increasing promotion activities and availability. Nevertheless, low likelihood to adopt such food remains a challenge towards full adoption, even with an improved sensory quality of products. The lack of appropriate quantitative data, clarity of radical innovation adoption mechanisms, and of unanimous use of terms represented a challenge in building a more extensive SD model of insect-based food adoption. Consequently, it could be an obstacle towards improving insect-based food adoption strategies. System dynamics models have potential in designing new edible insects product strategies, as they facilitate decision-making and uncover knowledge gaps and faulty assumptions.