Edible insects: marketing the impossible?

A. van Huis

Laboratory of Entomology, Wageningen University and Research Centre, P.O. Box 16, 6700 AA Wageningen, the Netherlands; editor-in-chief@insectsasfoodandfeed.com

Is it an impossible task to convince consumers to eat insects? This does not only apply to western consumers who are less familiar with this food habit than consumers in tropical countries. In the tropics too, many people do not consume insects, even though they are easier to collect as food than in temperate zones. Until recently in the western world, eating insects was considered a peculiar tropical food habit and the term ‘entomophagy’ was coined. How to motivate consumers to substitute meat with insects? One strategy is to stress the low environmental impact of insect products compared to meat, in particular beef. Or is this, considering our appetite for meat, an inconvenient truth? Is stressing environmental sustainability enough to raise consumers’ interest to consume insects? Probably not, as tastiness is valued high and crucial. However, even a positive sensory experience when consuming insects should be accompanied by external factors such as availability, convenient pricing and a conducive social environment.

In 2014, a white paper was published entitled ‘Commercialising edible insects: how to market the impossible’ (New Nutrition Business, 2014). However, upon reading the paper, it seems less impossible than the title suggests and several persuasion strategies are mentioned. Perhaps the impossibility only concerns western consumers? In the western world, insects have never been part of the menu, except for some historical cases such as the consumption of cockchafers in France and Germany (Bodenheimer, 1951, p. 66). Why are insects consumed more frequently in tropical countries? Very likely, this is because in the tropics edible insects are easier to harvest than in temperate zones: insects are larger and they are available in clumped populations throughout the year. However, even in tropical countries, there is a large variation in whether insects are eaten and which species. The word ‘entomophagy’ was invented in the western world to denote a peculiar eating habit from the tropics (Evans et al., 2015). A clear example is the title of the book by Bergier (1941) ‘Peuples entomophages et insectes comestibles’ (entomophagous people and edible insects). According to Looy and Wood (2006) the view of insects as dirty, disgusting, and dangerous is deeply embedded in the western psyche. Mid May 2017, Grace Tan will defend her PhD thesis ‘Eating insects: consumer acceptance of a culturally inappropriate food’ (Tan, 2017). Are we facing an impossible task of convincing consumers to eat insects?

What would motivate consumers to change from meat to alternative protein sources? Hartmann and Siegrist (2017a) found that in Europe consumer awareness of the environmental impact of meat production is low. The documentary ‘Cowspiracy’ (http://www.cowspiracy.com/) suggests that the environmental impact of meat often is ignored, even by the world’s leading environmental organisations. This is surprising considering that greenhouse gas emission from domestic food producing animals is estimated to vary from 8 to 18% of all global anthropogenic emissions (Herrero et al., 2015), most of it (64-78%) caused by cattle production systems (Herrero et al., 2016). Why is awareness so low while quite some publications point out the necessity to cut ruminant meat consumption (Davis et al., 2016; Hedenus et al., 2014; Herrero et al., 2016; Lamb et al., 2016; Schösler et al., 2012), even by proposing to impose taxes on meat (Chalmers et al., 2016; Nordgren, 2012)? Is reducing meat consumption an inconvenient truth?

Hartmann and Siegrist (2017b) recently carried out a review of 16 studies dealing with the extent to which people in Europe are willing to eat insects. They concluded that it is a promising option for consumer groups that value insects as a sustainable food choice. Would communicating the environmental benefits and safety of eating insects raise the interest enough to establish substantial consumption of insects? According to Deroy et al. (2015), this probably will not suffice. People who were informed about the environmental benefits and food safety of eating insects do seem to appreciate insect-based burgers more than people who did not receive this information (Schouteten et al., 2016). However, the low appreciation by people who were not informed (blind evaluation) indicates a low sensory quality of the product. Tastiness is crucial for consumers, in
particular when insects are presented as a meat alternative. In the end, will tastiness determine whether edible insect products will conquer the supermarket shelves? Tan et al. (2017) indicates that a negative taste experience will very likely quell good intentions, but the opposite, a positive taste experience, will not necessarily increase consumption intentions. She concluded that other barriers to buying and preparing insects for regular consumption should be studied, such as availability, pricing, knowledge and the social environment.

References


