Insects as a Culinary Ingredient
– Consumer Acceptance and Neophobia

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Introduction
The world’s population is increasing and thus the pressure on the earth’s resources. To ensure food supply and sustainability, food habits in western societies have to change. A significant contribution to global sustainability can be achieved by, for example, decreasing meat consumption1. Advantages concerning nutrition and sustainability have been found by inclusion of insects in the diet2. Insects as food has a large potential, and the “culinary way” seems to be an effective way to reach consumer acceptance for insect-based foods3.

Aim
The aim was to examine consumer acceptance and neophobia related to the use of insects as ingredients in food.

Methods
Food neophobia4, attitudes and acceptance were surveyed by a web-based questionnaire answered by 150 respondents.

Results
Significantly higher acceptance was shown for insect protein added to foods as a “powder”, with invisible insects, than for added visible insects (Fig 1). The interest of buying insect protein as a powder was higher than the interest of buying whole insects. Further, 24 of the respondents (16%) were considered neophobic.

Discussion
To reach acceptance of insect protein, culinary food could include “non-visible” insects. This is in line with the fact that food neophobia and acceptance are influenced by the sensory attributes and benefits of the actual food. Further, neophobia varies over the life course5.

Conclusions
The use of insect protein in food as a powder has a higher acceptance than the use of whole insects. 16% of the respondent were neophobic.

References
1WWF. Living Planet Report 2016.
3Astrup Pedersen. Disgusting or delicious, MSc Thesis, Copenhagen University 2014.