

Abstract

Food Neophobia Is Associated with Food Texture Pickiness and Lower Liking of Foods with Spongy Texture among Finnish Consumers [†]

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Abstract: Food texture is an important factor in the liking and choice of food. Food neophobia, the avoidance of unfamiliar foods, has been linked with sensitivity to textural properties of food. The objective of this study was to investigate the associations between food neophobia, pickiness to food textures and the liking of food items with diverse textural properties among Finnish consumers. Finnish adults aged 18–45 years were recruited. The level of food neophobia was assessed with Food Neophobia Scale (FNS). Participant's agreement to a statement "I'm very picky regarding food textures" was measured by a 7-point Likert scale, and the degree of liking of various food items, including vegetables, fruits and berries (e.g., mushroom, cloudberry), grain products (e.g., rye bread, oatmeal), dairy (e.g., 'squeaky cheese', smoothie) and other foods (e.g., tofu, other plant-based proteins, shrimp) by using a 9-point hedonic liking scale. Participants were divided into three groups based on the mean (M) and standard deviation (SD) of the FNS scores: individuals with FNS scores $< M - 0.5 \times SD$ were considered 'neophilic', those with scores between $M \pm 0.5 \times SD$ were 'neutral' and those with scores $> M + 0.5 \times SD$ were 'neophobic'. Results: Consumers (N = 135, of which 88% were females) responded to the questionnaires. Of the respondents, 32% were neophobic, 34% neutral and 34% neophilic. Neophobia was associated with self-reported pickiness to food texture; neophobics were pickier compared to neophilics and neutrals ($p < 0.001$). Neophobics showed lower liking of tofu ($p = 0.015$), other plant-based proteins ($p = 0.008$), 'squeaky cheese' ($p = 0.024$) and shrimps ($p = 0.004$) compared to neophilics. Furthermore, the neutral group had a lower liking of smoothies ($p = 0.046$) and tofu ($p = 0.004$) compared to neophilics. No other differences in food liking were shown between the groups. Neophobics were less likely to have a university-level education than neutrals and neophilics ($p = 0.003$); age and sex did not differ between the groups. Adult consumers with food neophobia showed pickiness to food textures and lower liking of several food items with textural properties that are known to be challenging and can be described as spongy. The textural properties of foods should be considered more frequently when developing new foods to ensure more enjoyable food experiences for consumers.



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