Gender Differences in Gazing Behavior, Expectation, and Taste Perception of Unfamiliar and Colored Food

Srinual Jantathai\textsuperscript{a,b}, Klaus Dürrschmid\textsuperscript{a}\textsuperscript{*}

\textsuperscript{a}Department of Food Science and Technology, University of Natural Resources and Life Sciences, Muthgasse 18, 1190 Vienna, Austria
\textsuperscript{b}Department of Food Science and Nutrition, Faculty of Technology, Mahasarakham University, Mahasarakham 44150, Thailand

Abstract

Color cues have an impact on several human perception systems. Therefore we investigated whether there are gender differences in the impact of color on gazing behavior, expectation and taste perception when using two Thai desserts widely unknown in Austria (Kha-nom-shun and Khao-neow-gaew). The desserts were colored green, pink and yellow. Students and staff members of the Austrian University of BOKU assessed the samples.

In the first group of consumers (35 males, 37 females) the gazing behavior during exposition to pictures of these products were examined using a Tobii T60 Eye Tracker. We found that fixation duration for yellow Khao-neow-gaew is significantly different from fixation duration for the other products. The males’ fixation duration for yellow of Khao-neow-gaew was significantly higher than those of females.

The second consumer panel (60 males, 58 females) evaluated the expected liking and the expected intensity of several sensory attributes. There is a statistically significant difference between genders in the expected overall liking for pink Kha-nom-shun and also yellow Khao-neow-gaew. Females show high expected overall liking for pink Kha-nom-shun, whereas males expect high overall liking for yellow Khao-neow-gaew.

In the third test 120 consumers (60 males, 60 females) received six samples to rate the perceived hedonic acceptance after tasting the samples. We found no gender differences in hedonic evaluations of the colored desserts.
In conclusion, although genders differ in gazing behavior and sensory expectations when looking at colored unfamiliar Thai food products, there are no significant differences in genders’ hedonic acceptance after tasting the products.