

ABSTRACT

This internship experience provides an overview of complete understanding of tasks carried out as a part of Product Innovation and Application team within a flavor company. Starting with basics of flavor chemistry, the internship covered key areas in learning different flavor notes and how to perceive them. Additionally, the internship project delved into processed cheese development with the promotion of yeast extract addition. Yeast extract is the source of glutamate which contributes to umami profile. Substances such as glutamate are beneficial in improving the overall flavor of food through the taste modulation. The incorporation of umami into food products is expected to increase overall acceptability and one of utilization is in processed cheese making. The scope of this project was to determine the best type of yeast extract in its effect on the sensory value of processed cheese. Two different types of yeast extract were utilized. A 9-point hedonic scale was applied using randomly assigned participants. All sample products of sample 459 (control), sample 158 (yeast extract type 1), and sample 612 (yeast extract type 2) were evaluated based on their creaminess, umaminess, cheesiness, saltiness, and overall liking. Results were analyzed using Shapiro-Wilk, Kruskal Wallis and followed by pairwise comparison test for post hoc. Observation on median, interquartile range and mean rank values showed the sample 158 has the highest preferences in terms of creaminess, umaminess, cheesiness and overall liking. It was concluded that a sample with yeast extract type 2 served as the most suitable prototype for processed cheese.

Keywords: *cheese, cheesiness, creaminess, processed cheese, sensory evaluation, umami , umaminess, yeast extract.*