

Thesis Title	Effect of Ingredients on Texture of Fishball
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Candidate	Mr. Santakit Niludomsak
Supervisor	Asst. Prof. Dr. Ampawan Tansakul
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Abstract

Fishballs are one of the most popular products in Thailand. The quality of fishballs relates to several factors, i.e., types of fish, freshness of fish, processing, moisture content and ingredients, etc. The objectives of this research were to study the influences of ingredients on texture properties of fishballs produced from Bigeye snapper base surimi. Modified tapioca starch (0, 4, 8 and 12 percent) and eggwhite powder (0, 1, 2 and 3 percent) were chosen as the two main ingredients in fishballs.

The texture properties, i.e., hardness, cohesiveness and springiness of 6 commercial fishballs (A, B, C, D, E and F) were found to be 11.80-22.87 N, 0.63-0.76 and 0.76-0.87, respectively. The sensory evaluation by scoring test showed that commercial sample C was the most acceptable one with the average values of hardness, cohesiveness and springiness 17.73 ± 0.76 N, 0.64 ± 0.05 and 0.83 ± 0.02 , respectively.

The results also revealed that the samples with modified tapioca starch only showed the decrease in the hardness value but the increase in springiness values and the increase in cohesiveness up to the 4% level and then leveled off. For the samples with added eggwhite powder only showed the increase in the hardness up to the 1 percent level and then leveled off but the increasing trend in cohesiveness and springiness. However, the fishballs with added eggwhite powder along with modified tapioca starch showed the decrease in the hardness value

but the increasing were compared to fishballs which added only modified tapioca starch. The similar increasing trend were found for the cohesiveness and the springiness values.

The experimental data were statistical analyzed and fitted by the regression equation. It were found that the samples with 8 percent modified tapioca starch and 3 percent eggwhite powder gave better texture than any other combination used in this research.

Keywords : Fishball / Modified Tapioca Starch / Eggwhite Powder / Texture