

The Effect of Edamame Flour Filler Substitution on Organoleptic Quality of Unproductive Duck Meatballs

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ABSTRACT

This research conducted to determine the effect of edamame flour *filler* substitution on organoleptic quality of unproductive duck meatballs. The research material consisted of unproductive duck meatballs , tapioca flour, edamame flour, egg whites, garlic, onions, salt, pepper, monosodium glutamate, sodium tripolyphosphate, and ice. The treatments substitution *filler* of edamame flour were P0 (0%), P1 (5%), P2 (10%), P3 (15%), and P4 (20%) from total *filler*. The parameters tested were color, aroma, taste, texture, tenderness, and overall meatball preference. The organoleptic quality of meatballs was tested using a scoring method by 40 untrained panelists. Data on the organoleptic quality of meatballs were analyzed with non parametric analysis through the *Kruskal Wallis Hedonic test*. Mean differences were tested with the *Duncan's New Multiple Range Test*. The results showed that the substitution of edamame flour *filler* to the level of 20% had a very significant effect ($P < 0.01$) on the overall aroma, taste, texture, tenderness, and liking of the meatballs, but did not significantly affect the color of the meatballs. The substitution of edamame flour *filler* up to the level of 15% is still preferred by panelists with organoleptic quality that is almost the same as the control, while edamame flour filler substitution of more than 15% can reduce the organoleptic quality of unproductive duck meatball.

Keywords: *Meatballs, Unproductive Duck Meat, Filler, Organoleptic Quality, Edamame Flour*