

# ***The Effect of Commercial Collagen Substitution on the Quality of Patin Fish and Oyster Mushroom Odeng***

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## ***ABSTRACT***

*This study aims to analyze the effect of collagen concentration from fish on the physicochemical and sensory characteristics of odeng products based on catfish (*Pangasianodon hypophthalmus*) and oyster mushrooms (*Pleurotus ostreatus*). Collagen is used as a functional ingredient to improve texture quality, protein content, and consumer acceptance of odeng. The study used a one-factor Completely Randomized Design (CRD) with six collagen concentration treatments (0%, 5%, 10%, 15%, 20%, and 25%) and three replications. The parameters observed include water content, protein content, color (L, a, b), texture (hardness), as well as organoleptic tests (hedonics and hedonic quality). The analysis results showed that the addition of collagen significantly influenced water content ( $p < 0.01$ ), protein content ( $p < 0.01$ ), visual color, and sensory attributes (color, aroma, taste, and texture). F5 treatment (25% collagen) produces odeng with the highest protein content (18.79%), the lowest water content (55.36%), and the best hedonic value and hedonic quality, especially in the aspects of taste and texture. The addition of collagen from fish waste has been proven to improve the functional and sensory quality of odeng, as well as supporting the principle of sustainability through the use of fishery waste.*

*Keywords: Collagen, Odeng, Patin Fish, Oyster Mushrooms, Sensory Quality, Physicochemistry.*