

**PENGARUH PENAMBAHAN TEPUNG JAMUR TIRAM PUTIH
(*Pleurotus ostreatus*) TERHADAP KARAKTERISTIK
FISIK, ASAM GLUTAMAT, DAN SENSORIS
BAKSO DAGING KAMBING**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung jamur tiram putih (*Pleurotus ostreatus*) terhadap karakteristik fisik, asam glutamat, dan kualitas sensoris bakso kambing. Bahan yang digunakan adalah daging kambing, tepung tapioka, tepung jamur tiram putih, garam, merica, bawang putih, STPP, putih telur, dan air es. Penelitian ini menggunakan penambahan tepung jamur tiram putih dengan konsentrasi 0%, 1%, 2%, dan 3% dari berat adonan. Masing-masing perlakuan dilakukan pengulangan sebanyak lima kali. Variabel yang diuji pada penelitian ini yaitu uji karakteristik fisik yang meliputi nilai pH, daya ikat air (DIA), keempukan serta warna (*chromameter*), uji asam glutamat, dan uji kualitas sensoris bakso yang meliputi warna, aroma, rasa, tekstur dan daya terima. Penelitian ini menggunakan Rancangan Acak Lengkap Pola searah. Data karakteristik fisik dan asam glutamat dianalisis menggunakan *One Way Anova* dan dilakukan uji lanjut menggunakan *Duncans New Multiple Range Test* (DMRT). Data kualitas sensoris dianalisis menggunakan *Kruskal and Wallis Test* dan dilakukan uji lanjut menggunakan *Mann-Whitney*. Penambahan tepung jamur tiram putih pada bakso kambing memberikan pengaruh signifikan ($P < 0,05$) pada nilai pH, daya ikat air, *lightness*, asam glutamat, serta nilai sensoris warna dan rasa. Nilai pH pada kisaran 6,48–6,83. Daya ikat air pada kisaran 56,18–62,03%. *Lightness* pada kisaran 60,39–57,58. Asam glutamat pada kisaran 0,58–0,93 g. Nilai sensoris warna pada kisaran 4,27–3,40. Nilai sensoris rasa pada kisaran 3,20–4,07. Hasil penelitian adalah penambahan tepung jamur tiram putih pada bakso kambing meningkatkan nilai pH, DIA, asam glutamat, dan nilai sensoris rasa, serta menurunkan *lightness* dan nilai sensoris warna. Penambahan jamur tiram putih pada bakso daging kambing yang paling optimal ada pada level penambahan 1%.

Kata Kunci: Bakso, Daging kambing, Tepung jamur tiram putih, Karakteristik fisik, Asam glutamat, Kualitas sensoris.

THE EFFECT OF WHITE OYSTER MUSHROOM (*Pleurotus ostreatus*) ADDITION ON PHYSICAL CHARACTERISTICS, GLUTAMIC ACID, AND SENSORIAL OF GOAT MEATBALL

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ABSTRACT

This study aims to find out the effect of adding white oyster mushroom flour (*Pleurotus ostreatus*) in the physical characteristics, glutamic acid, and sensory qualities of goat meatballs. The ingredients used in this study were goat meat, tapioca flour, white oyster mushroom flour, salt, pepper, garlic, STPP, egg whites, and cold water. This study used the addition of white oyster flour with a concentration of 0%, 1%, 2%, 3% of the dough weight. Each of the treatments was repeated for 5 times. The variables tested in this study were physical characteristics that included pH, water holding capacity (WHC), firmness, and colour, and then glutamic acid test, and sensory quality that included colour, odour, taste, texture and acceptance. This study used a completely randomized design unidirectional pattern. Physical characteristics and glutamic acid were analyzed by One Way Anova and the Duncans New Multiple Range Test (DMRT). Sensory qualities were analyzed by the Kruskal and Wallis Test, and continued by the Mann-Whitney Test. The addition of white oyster mushroom flour in goat meatballs had significant effect ($P < 0.05$) on pH, WHC, lightness, glutamic acid, sensory colour and taste. The results for pH ranged from 6.48 to 6.83. The results for WHC ranged from 56.18 to 62.03%. The results for lightness ranged from 60.39 to 57.58. The results for glutamic acid ranged from 0.58 to 0.93 g. The results for the colour ranged from 4.27 to 3.40. The results for taste ranged from 3.20 to 4.07. The results for this study showed that the addition of white oyster mushrooms flour in goat meatballs increased pH, WHC, glutamic acid and taste, yet it decreased L lightness and the sensory score for colour. The optimal addition of white oyster mushroom flour in goat meatball is at the level of 1% addition.

Keywords: Meatballs, Goat meat, White oyster mushroom, Physical characteristics, Glutamic acid, Sensory quality.