

**VARIATION OF WHITE OYSTER MUSHROOM MIX IN MACKEREL
FISH SAUSAGES REVIEWED FROM PHYSICAL PROPERTIES,
ORGANOLEPTIC PROPERTIES, PROTEIN CONTENT, AND DIETARY
FIBER AS AN ANIMAL-BASED SIDE DISH FOR ELEMENTARY
SCHOOL CHILDREN**

Nur Asti Fauziyah¹, Setyowati², Slamet Iskandar³

^{1,2,3}Jurusan Gizi Poltekkes Kemenkes Yogyakarta

Jl. Tatabumi No. 3 Banyuraden, Gamping, Sleman, Yogyakarta, 55293

Email : fauziyahasti543@gmail.com

ABSTRACT

Background : Indonesia as a maritime country has the potential for abundant marine resources, one of which is protein-rich mackerel. Fish consumption continues to increase in line with the nutritional needs of children who need protein and fiber intake to support growth and development. However, processed mackerel products are still limited. The addition of white oyster mushrooms, which are rich in fiber and protein, to mackerel sausage is an innovation that can increase the nutritional content of the product. This product is expected to be an alternative animal side dish rich in fiber and protein that supports the nutritional adequacy of elementary school children.

Objectives : This research aims to determine the effect of variations in the mixture of white oyster mushrooms on physical properties, organoleptic properties, protein content, and dietary fiber of mackerel sausage.

Methods : This type of research is a pure experiment with a simple randomized design. There were 4 treatments with 0%, 25%, 35%, and 45% white oyster mushroom mixture. Physical properties were analyzed descriptively. Organoleptic properties were analyzed by Kruskal Wallis statistical test, if there was a difference, followed by Mann Whitney test. Protein and dietary fiber content were analyzed by One Way Anova statistical test, if there was a difference, followed by Duncan's test. This research was conducted from January to May 2025.

Results : Physical properties showed that the more white oyster mushroom mixture in mackerel sausage, the more brownish the color, the less fishy aroma, the more savory taste, and the less chewy texture. Organoleptic properties showed that the sausage product most favored by panelists overall was sausage C (65%: 35%). The protein content test showed that the more the mixture of white oyster mushrooms, the protein content in the sausage decreased. The food fiber content test showed that the more the mixture of white oyster mushrooms, the more the food fiber content in the sausage increased.

Conclusion : There is an effect of variations in the mixture of white oyster mushrooms on the physical properties, organoleptic properties, protein content, and dietary fiber of mackerel sausage.

Key Words : Sausage, white oyster mushroom, mackerel, physical properties, organoleptic properties, protein, dietary fiber

**VARIASI CAMPURAN JAMUR TIRAM PUTIH PADA SOSIS IKAN
KEMBUNG DITINJAU DARI SIFAT FISIK, SIFAT ORGANOLEPTIK,
KADAR PROTEIN, DAN SERAT PANGAN SEBAGAI LAUK HEWANI
ANAK SEKOLAH DASAR**

Nur Asti Fauziyah¹, Setyowati², Slamet Iskandar³

^{1,2,3}Jurusan Gizi Poltekkes Kemenkes Yogyakarta

Jl. Tatabumi No. 3 Banyuraden, Gamping, Sleman, Yogyakarta, 55293

Email : fauziyahasti543@gmail.com

ABSTRAK

Latar Belakang : Indonesia sebagai negara maritim memiliki potensi sumber daya laut yang melimpah, salah satunya ikan kembung yang kaya protein. Konsumsi ikan yang terus meningkat sejalan dengan kebutuhan gizi anak yang memerlukan asupan protein dan serat untuk mendukung pertumbuhan dan perkembangan. Namun, produk olahan ikan kembung masih terbatas. Penambahan jamur tiram putih yang kaya serat dan protein ke dalam sosis ikan kembung merupakan inovasi yang dapat meningkatkan nilai gizi produk. Produk ini diharapkan dapat menjadi alternatif lauk hewani kaya serat dan protein yang mendukung kecukupan gizi anak sekolah dasar.

Tujuan : Penelitian ini bertujuan untuk mengetahui pengaruh variasi campuran jamur tiram putih terhadap sifat fisik, sifat organoleptik, kadar protein, dan serat pangan sosis ikan kembung.

Metode : Jenis penelitian ini adalah eksperimen murni dengan desain penelitian rancangan acak sederhana. Terdapat 4 perlakuan dengan campuran jamur tiram putih 0%, 25%, 35%, dan 45%. Sifat fisik dianalisis secara deskriptif. Sifat organoleptik dianalisis dengan uji statistik *Kruskall Wallis*, apabila ada perbedaan dilanjutkan uji *Mann Whitney*. Kadar protein dan serat pangan dianalisis dengan uji statistik *One Way Anova*, apabila ada perbedaan dilanjutkan uji *Duncan*. Penelitian ini dilaksanakan dari Januari hingga Mei 2025.

Hasil : Sifat fisik menunjukkan bahwa semakin banyak campuran jamur tiram putih pada sosis ikan kembung, warna semakin kecoklatan, aroma amis semakin berkurang, rasa gurih semakin bertambah, dan tekstur kenyal semakin berkurang. Sifat organoleptik menunjukkan bahwa produk sosis yang paling disukai oleh panelis secara keseluruhan adalah sosis perlakuan C (65%:35%). Uji kadar protein menunjukkan semakin banyak campuran jamur tiram putih, kadar protein dalam sosis semakin menurun. Uji kadar serat pangan menunjukkan semakin banyak campuran jamur tiram putih, kadar serat pangan dalam sosis semakin meningkat.

Kesimpulan : Ada pengaruh variasi campuran jamur tiram putih terhadap sifat fisik, sifat organoleptik, kadar protein, dan serat pangan sosis ikan kembung.

Kata Kunci : Sosis, jamur tiram putih, ikan kembung, sifat fisik, sifat organoleptik, protein, serat pangan