

## Effect of Golden Oyster Mushroom (*Pleurotus citrinopileatus*) Powder on Physiochemical, Antioxidative, and Sensory Properties of Noodles

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**Abstract :** The use of natural ingredients to enhance the nutritional and sensory properties of food products has gained significant interest in recent years. This study focuses on the effect of Golden oyster mushroom powder (GOMP) on the physiochemical, antioxidative, and sensory properties of noodles. The aim of this study is to investigate the influence of GOMP on the nutritional, antioxidant, and sensory properties of noodles. The study determined the color, moisture, total ash, protein, total phenolic, flavonoid contents, water activity, and antioxidant activity of GOMP and noodles. The incorporation of GOMP at levels of 5-15% increased the ash, protein, flavonoid, and total phenolic contents of the noodles. It also enhanced their antioxidant activities, as evidenced by improved DPPH radical scavenging activity and metal chelating activity. However, the incorporation of GOMP resulted in a decrease in the L\* and b\* values of the noodles. Furthermore, the GOMP-enriched noodles exhibited a lower cutting force compared to the control. This study highlights the potential of GOMP as a nutritional and antioxidant ingredient in noodle preparation. It adds to the existing literature by providing evidence of the positive effects of GOMP on the nutritional and functional properties of noodles. The researchers collected data on the physiochemical properties, nutritional contents, and antioxidant activities of GOMP and noodles. Statistical analysis was then performed to assess the differences between the control and GOMP-enriched noodles. The results of this study demonstrate that the inclusion of GOMP at the amount of 5-15% can increase the nutritional and antioxidant properties of noodles without significantly impacting sensory attributes.

**Keywords :** oyster mushroom, noodles, antioxidant activity, phytochemical, sensory property

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