Proximate composition and antioxidant activities of instant noodle fortified with wood ear mushroom (auricularia polytricha) powder

ABSTRACT

This study was conducted to determine the proximate composition, total dietary fibre, antioxidant activities and total phenolic content of wood ear mushroom and instant noodles incorporated with 5% of the mushroom powder. The proximate composition of wood ear mushroom powder was 9.76 %, 2.40 %, 7.52 %, 0.15 %, 48.06 %, 69.43 % for moisture, ash, protein, fat, crude fibre, carbohydrate, and total dietary fibre, respectively. The incorporation of wood ear mushroom powder had significant (p=0.000) effect on the proximate composition of the instant noodles where it significantly affects the moisture and improved the ash, protein, total dietary fibre, and antioxidant activities. The proximate composition of 5% wood ear mushroom noodles was 10.20% moisture, 2.87% ash, 12.32% protein, 0.22% fat, 5.68% crude fibre and 72.14% carbohydrates while the total dietary fibre was 12.89%. The DPPH inhibition and reducing power capacity was due to the increase of total phenolic content 1.19 mg/ml per GAE in modified instant noodles. In conclusion, the addition of wood ear mushroom powder could have potential health benefits.