

LOW FAT MEATBALLS CONTAINING LEGUME FLOURS AS  
EXTENDERS : PHYSICOCHEMICAL CHARACTERISTICS

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## ABSTRACT

This study was conducted to determine the physicochemical characteristics of low fat chicken meatballs extended each with Lentil flour (*Lens culinaria*), chickpea flour (*Cicer arietinum*) and green bean flour (*Vigna radiata*) at level of 10%. Uncooked and cooked meatballs were analyzed for protein, fat, moisture, pH and water holding capacity. Addition of legumes in the chicken meat produced a higher protein content but lower fat percentage in the meatballs. Meatball containing chickpea had the highest protein value of 47.40% while meatball extended with green beans had lowest fat content of 8.98%. Water holding capacity and pH were determined at week 0, 2 and 4 for both cooked and uncooked meatballs which were stored under chilled conditions at 4°C. Meatballs samples containing legumes had higher water holding capacity than the control sample but did not show any significance difference ( $P>0.05$ ) during the four weeks. pH value for both uncooked and cooked meatballs increased upon storage of four weeks and varied slightly among the formulated samples. Cooking showed a reduced effect on percentage of moisture and fat of the meatballs but increased the protein content, water holding capacity and pH value of all the formulated meatballs.