

## Effects of Replacement of Backfat with Soybean Oil on the Quality Characteristics of Spreadable Liver Sausage

Geun-Pyo Hong\*, Se-Yeon Oh, Sung- Lee<sup>1</sup> and Sang-Gi Min

\*Department of Animal Products Science, Konkuk University

<sup>1</sup>Department of Foods and Biotechnology, Hanseo University

Spreadable liver sausages were manufactured with five replacing soybean oil level (0, 5, 10, 15 and 20%) in order to study on the effect of replacement pork backfat with soybean oil on processing and quality characteristics. Replacing soybean oil level showed a significant effect on cooking yield. The higher the soybean oil level the higher the cooking yield. Replacing soybean oil had no effect on emulsion stability, WHC and purge loss, respectively. In rheological characteristics, no difference among treatments except hardness were observed ( $P>0.05$ ). Treatments replaced with soybean oil tended to harder than pork backfat control. In lipid oxidation, no differences in TBARS value were observed between treatments until 7 days of storage. However, replacing soybean oil treatments increased significantly over the rest of storage, especially in 20% soybean oil replaced treatment. The numbers of total aerobic count and lactic acid bacteria increased with replacing soybean oil level due to increase pH value. The results indicate that replacement pork backfat with soybean oil improved nutritional quality without alternation of original characteristics such as physicochemical and rheological properties of liver sausage.