

# P47

## Investigation of unauthorized tissue in sausage and hamburger by histological method

M. Adibmoradi, KH. Brazandagan

Department of Basic Sciences, Faculty of Veterinary Medicine, University of Tehran, Iran

E-mail: adibmoradi@ut.ac.ir

**Abstract** Consumption of meat products such as sausages are increasing in big cities. Therefore, the importance the quality and safety of these products are increasing, especially application on non-edible tissue in formulation cause unsafe products. The aim of this study was to assess non-edible such as intestine, kidney, salivary glands, mammary glands, lung, smooth muscle, CNS...in red meat sausage and hamburger via histological method. In this study 50 samples from three sausages groups (40,55 and 70 percented meat content) and 50 samples of three type of Iranian commercial hamburgers (with meat 40,60,and 70 percent red meat content)were studied by histological method. From each samples nine pieces of 1×2×2 cm<sup>3</sup> thick were taken and after labeling, paraffin block prepared and 36 sections from each samples stained with hematoxylin-eosin.prepared slides are examined individually under the light microscope using a 10x ocular and a 10×objective. Longitudinal and cross sections of scattered pieces of skeletal muscles were clearly distinguished in red-pink color. Although connective tissue fibers especially collagens were coagulated by heat but distinguished clearly in an integrated form with pink colour. Fat tissues has been solved in xylole solutions and seen in white colour.

This study showed that for quality evaluation of sausages and hamburger histological studies are essential, especially when distinguishing inappropriate tissues and organs in meat products, has been considered.

**Keywords** histology;unauthorised tissue;sausage;hamburger