Influence of thawing and cooking methods on quality of libyan camel meat

Elneairy, N.A, Elgerbi, A.M. and Aboshenaf, F .

Abstract

The effect of thawing and cooking methods on chemical composition and quality attributes of Libyan camel meat was investigated. The camel meat was prepared then packaged and frozen at -28°C for 20 days. Chemical composition, microbiological examination and sensory evaluation were conducted on samples thawed and cooked samples by different methods. The percent of loss drip ranged from 1.02 to 22.95%, thawed sample in running water had the highest value meanwhile, thawed sample in microwave had the lowest value. Thawing and cooking decrease water holding capacity (WHC) of camel meat. Thawing decreased ash content of camel meat while thawing decreased proteins content in all samples except sample thawed in microwave. Microwave thawing and cooking decreased loss of proteins and minerals meanwhile, proteins and minerals moved from meat to soup during wet cooking (Blanching). The total bacterial count, coliform group were very low for sample thawed in microwave and refrigerator methods in comparison with that thawed at room temperature and running water. The staphylococcus was 6.5x102and 1.1x103 for thawed samples by refrigerator and microwave thawing, respectively. Meanwhile, it was 3.3x104 for sample thawed at room temperature. Cooking under pressure enhanced WHC, texture and juiciness of meat from aged camel. Cooking loss ranged from 26.25 to 34.12 % Thawed sample by microwave then cooked under pressure had the lower cooking loss. The best quality of camel meat was observed for thawed sample in microwave then cooked in pan under pressure followed by thawed sample in refrigerator and cooked in pan under pressure .

Keywords: Libyan camel meat, Thawing, cooking, Chemical composition, Total bacterial count, Sensory evaluation .