

Nutritional Properties and Lipid Oxidation Assessments of Sucuks Prepared with Camel (*Camelus Dromedarius*) Meat and Hump

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Abstract : Different formulations of Turkish fermented sausages (sucuks) prepared with camel meat-hump (CH), camel meat-beef fat (CB), beef-hump (BH) and beef-beef fat (BB), were characterized. The sausages were analytically compared to determine differences in proximate composition and total cholesterol content (TCC), quality parameters such as fatty acids profile and fat quality characteristics, and lipid oxidation parameters including peroxide value, thiobarbituric acid-reactive substances (TBARS) and resulted carbonyl compounds. The PUFAs/SFAs ratio was higher in CB and BB samples than CH and BH ($p < 0.05$). The higher calculated atherogenic and thrombogenic indexes (AI and TI) were obtained from the samples made with hump ($p < 0.05$) as a result of high amounts of their SFAs. The CH sausages contained high amount of total fat ($p < 0.05$) among all samples. The CB sucuks exhibited the highest protein content and the lowest TCC and rancidity at the end of ripening ($p < 0.05$). The TBARS results showed that beef fat samples were more susceptible to lipid oxidation. Moreover, no significant difference ($p < 0.05$) was observed for the values of short aldehydes among the sucuk samples excepting nonanal. This study demonstrated that supplementing camel meat for the production of dry-fermented sausage resulted in high quality products with good functional and nutritional characteristics.

Keywords : fermented sausages, quality properties, SPME, total cholesterol content

Conference Title : ICSR2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020