



PHYSICOCHEMICAL CHARACTERISTICS, FATTY ACID COMPOSITION, AND FUNCTIONAL PROPERTIES OF THE TRADITIONAL SALTED DRIED MEAT OF *CAMELUS DROMEDARIUS* FROM ALGERIAN EASTERN SAHARA: "EL KADID"

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ABSTRACT

This is the first report describing physicochemical characteristics, fatty acid composition, and functional properties of traditional salted dried meat *El Kadid* produced from *Camelus dromedarius*. The samples were prepared according to the traditional Saharan method. The pH values ranged from 5.01±0.01 to 5.97±0.06; water activity ranged from 0.684±0.003 to 0.689±0.002; ash content ranged from 2.25±0.08 to 2.85±0.02%; moisture level was < 1%, and dry matter content exceeded 99%. The acid index, peroxide index, and acidity were in the range of 13.76 ± 0.14 to 20.66 ± 0.12 mg KOHg⁻¹, 0.45 ± 0.03 to 1.0 meqkg⁻¹, and 0.16 ± 0.01 to 1.80 ± 0.02%, respectively. Protein, fat, and salt content were 19.73–22.52%, 3.17–7.14%, and 23.37–57.86% respectively. 19 fatty acids were identified, The oleic acid C18:1 was the predominant monounsaturated fatty acid (1.80%–59.98%) and palmitic acid C16:0 was the major SFA (25.98%–48.31%). regarding functional properties, Water Absorption Capacity and Oil Absorption Capacity values varied between 2.42 ± 0.03 - 5.30 ± 0.05 and 10.34 ± 0.05 to 13.34 ± 0.05 mLg⁻¹ respectively.