

# DIVERSITY AND CHARACTERISTICS OF POTATO FLAKES IN NAIROBI AND NAKURU, KENYA

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## ABSTRACT

Potato flakes are some of the most important form of dehydrated potato products that can be used in different ways including substitution for fresh mashed potatoes. Unlike French fries and crisps whose consumption patterns and diversity is well established, little or no information can be obtained on flakes in Kenya. This study was, therefore designed to assess the diversity and characteristics of potato flakes in Nairobi and Nakuru, Kenya. Potato flakes diversity and characteristics were determined through a structured questionnaire administered to attendants in 148 retail outlets (supermarkets and shops) followed by sampling and laboratory analysis of the available brands. Of all supermarkets surveyed, only 3.4% stocked potato flakes. There were only 2 brands of flakes, one imported and another, local brand. The sales were reportedly low due to the high cost (55%) of the products, lack of public awareness of the product (35%) and inadequate supply (15%). The oil and moisture contents of potato flakes from supermarkets in Nairobi and Nakuru significantly ( $P < 0.05$ ) differed between the brands being generally lower in the imported brand compared to local brand, ranging from 0.13% to 0.32%. There were no significant ( $P > 0.05$ ) differences in levels of sodium chloride with the maximum recorded being 2.11% in imported flakes. The moisture content ranged from 8.52% to 10.51% in local and imported flakes brands, respectively. The sale of potato flakes can, however, be increased if the processors produced smaller unit weight packages that are more affordable and create awareness to the general public consumer.

**Key words:** Flakes, lightness, mash potatoes, dehydration