



Characteristics of potato crisps processing industries in Kenya

George O. Abong^{1*}, Michael W. Okoth¹, Jasper K. Imungi¹
and Jackson N. Kabira²

¹Department of Food Science, Nutrition and Technology, University of Nairobi, P.O. Box 29053-00625, Nairobi (Kangemi), Kenya;

²National Potato Research Centre (KARI), Tigoni, P.O. Box 338-00217, Limuru. Nairobi, Kenya.

*Corresponding author: Email: georkoyo@yahoo.com; Phone: +254735508558

ABSTRACT

Objective: To characterize the potato crisps processing industry in Kenya in terms of preferred potato varieties, constraints and pre-processing storage practices.

Methodology and results: A total of 24 brands of potato crisps had earlier been identified from supermarkets and kiosks in Nairobi city and with appropriate contact information provided on the labels, the processors were contacted, visited and interviewed. A total of 23 processors traced up to within and around Nairobi city and Nakuru Town were interviewed between October 2009 and February 2010. Data was collected using structured questionnaires administered to managers or owners of the processing firms. The number of employees ranged from 2 to 250 and 60.9 % of the processing industries had 5 or less employees, 21.7 % employed 6-10 people while only 4.3 % had over 100 employees. In addition to potato crisps 60 % processed peanuts, 30.4 % processed *chevda* and potato sticks, 26.1 % processed pop-corns, 13 % processed banana



crisps, and 8.7 % processed cassava crisps while 4.3 % also processed arrow roots crisps, spices, peas and herbs. A total of 4.3 % pointed at lack of proper equipments and market, 63.6 % complained of lack of and poor raw potato quality while 42.5 % cited lack of finances to increase volume of production. Majority (82.6 %) of the processors sell their products to supermarkets compared to a few (4.3 %) that sold their products to wholesalers while 13 % sold to individuals and kiosks. Potato variety Dutch Robjyn grown mostly in Bomet district of Rift Valley province is the cultivar of choice for many processors in Kenya. Other cultivars have been used in processing through trial and error when there are insufficient amounts of Dutch Robjyn.

Conclusions and application of results: The potato crisps processing industry in Kenya is largely dominated by small scale processors who are faced with a myriad of problems including price fluctuations of raw potato, unavailability and poor quality of raw potatoes, and lack of skills and information in raw potato storage. The industry relies heavily on only one variety that is not always available to meet the needs of all the processors. The information generated in this study is critical to potato breeders, and it provides strong justification for breeding more crisping cultivars. Post harvest technologists can use the information to research on performance of other potato cultivars for processing potato crisps in Kenya.

Key words: Potato, processors, crisping, cultivars.