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Processing and Consumption of Fruits and Vegetables: Knowledge, Attitude, and Practices of Rural Households in East Africa

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Abstract

Despite the potentials of fruits and vegetables (FVs) for good human health, consumption has been below recommended intake amounts, notably in Sub-Saharan Africa. High post-harvest losses of FVs and limiting availability account for low consumption, among others. Addressing this challenge includes innovations to process more FVs directly at the heart of areas of food production, mostly rural communities. Therefore, the “Fruits and Vegetables for all seasons” project, in one work component gauges the knowledge, attitudes, and practices (KAPs) of rural households in East Africa on the processing and consumption of FVs. Household surveys with women between 15–49 years were conducted in six study sites – three fruit and three vegetable production areas – in Kenya, Tanzania, and Uganda. Two 24-hour dietary and 7-day FVs recalls were carried out in plenty and lean seasons. Closed and open-ended questions were constructed to assess knowledge, attitudes, and practices on FVs processing and consumption. Demographic and socioeconomic data were collected in one season. The final analysis consisted of 586 and 734 households from the fruit and vegetable areas, respectively. Mean intakes for vegetables were 122–146 g day⁻¹ and 88–180 g day⁻¹ for plenty and lean seasons, respectively; intakes for fruits were 27–134 g/day in plenty and 3–45 g day⁻¹ in lean season, being far below the recommended 200 g day⁻¹ for fruits or vegetables. More than 60 % of the women obtained high knowledge scores on FV processing and consumption. Equally, a large proportion (>85 %) had positive attitudes towards FV consumption. However, FV processing among participants was abysmally low, largely attributable to a lack of technical knowhow and processing equipment. A small number of households (85) who process FVs rely on traditional drying methods for reasons being simple, readily available, or best method. A positive attitude towards FV consumption was positively associated with vegetable consumption in Kenya and negatively in Uganda. High knowledge scores on FV consumption positively correlated with fruit intake in Tanzania. The positive attitude towards FV consumption, yet lack of processing knowledge should be a basis for local and regional interventions to increase FV processing and thus, FV availability year-round.

Keywords: East Africa, Fruits, KAPs, Processing, Rural households, Vegetables