Dietary Patterns and their Association with Overweight and Obesity among Rural Populations in East Africa

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Abstract

Nutritional concerns had been focused mainly on hunger and in addressing underweight in sub-Saharan Africa. However, socio-economic, cultural, societal and behavioural change patterns in developing countries have brought about the "nutrition transition" – shift towards more modern diets and its associated health conditions. Studies done so far reveal that dietary patterns contain more and more processed foods in urban areas with less emphasis on rural settings. Also, patterns associated with processed foods do not examine what level of processed foods they are. The "Fruits and Vegetables for all seasons" (FruVaSe) project, as one of its work components, seeks to assess dietary patterns – exploring the level of processed foods within the patterns, if any – that exist among rural populations in East Africa and their association with overweight and obesity.

Household surveys focusing on women of reproductive age (15–49years) were conducted in six study sites in Kenya, Tanzania, and Uganda. Four repeated 24-hour dietary recalls were collected across two seasons (plenty and lean), demographic and socio-economic data, and anthropometric measurements were conducted in only one season. In all, 1800 households were surveyed, however, final analysis consisted of 1153 households. Standard food recipes were prepared to determine intake quantities for the 24-hour recalls.

The percentage of overweight and obese women in Kenya and Tanzania was estimated at 47 % and 42 %, respectively. Overweight and obese data for Uganda was almost twice as little as that of either Kenya or Tanzania (26 %). Dietary patterns across the three countries will be analysed using principal component analysis. Dietary patterns examined will be related to the overweight and obesity data. Possible confounding factors such as wealth, age, nutrition education received, and educational status are to be adjusted for during analysis. It is expected that women with higher BMI follow dietary patterns which contain a greater amount of processed foods.

Keywords: Dietary patterns, East Africa, obesity, overweight, rural communities, women

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