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## Food Security and Dietary Diversity of Women of Reproductive Age in Teso South Sub-county, Kenya

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## Abstract

Introduction: Food insecurity and poor quality diets remain a challenge in rural areas despite their high agricultural potential. Consequently, these lead to malnutrition especially among women of reproductive age. This study aimed to investigate the food security and dietary diversity levels and their influence on the nutritional status of women of reproductive age in a rural setting in Western Kenya.

Method: A cross sectional nutrition survey was conducted in May-June 2016 (pre-harvest season) targeting a random sample of 418 farm households with women and their children aged 6–59 months in Teso South Sub-County. The 24-hour dietary recalls were used to assess the women's dietary intakes. The Minimum Dietary Diversity — Women (MDD-W) was calculated as indicator for dietary diversity. Food insecurity was measured using the Household Food Insecurity Experience Scale. The weight and height measurements were assessed to compute body mass index (BMI) of the women.

Results: Among the surveyed households, the prevalence of moderate and severe food insecurity was 23.4 % and 46.4 %, respectively. Mean (SD) women's dietary diversity score was 4.2 (1.19) out of 10 food groups. The most consumed food group was cereals (100 %) followed by other vegetables (88.8 %) and dark-green vegetables (73.2 %) while the least consumed were nuts and seeds (6.3 %). The proportion of women who achieved MDD-W was 43.6 %. The prevalence of underweight and overweight/ obese was 10.9 % and 23.6 % respectively. Bivariate correlation analysis indicated that food insecurity (r= -0.067, p=0.530) and dietary diversity (r= -0.035, p=0.577) had no significant correlation with BMI of the women.

Conclusion: These results indicate that food insecurity and dietary diversity do not have a significant influence on the nutrition status of women in Teso. This implies there may be other factors which may have a significant effect on their BMI. Further studies should be undertaken considering other variables which may show significant influence on the nutrition status of women in rural settings of Kenya.

**Keywords:** Dietary diversity, food security, Nutritional status, Rural, Women

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