

Topic Area: Food Security

Abstract Title

Effects of a Combined Horticulture and Peer-Led Nutrition Education Intervention on Diet Diversity and Food Related Practices among Rural Kenyan Women One-Year Post Intervention

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Abstract

Introduction: Horticulture interventions in developing countries are most effective in improving micronutrient malnutrition when combined with nutrition education, although there have been few studies assessing their long-term impact. In 2017, a peer-led nutrition education and horticulture intervention was implemented in a women's group in Eastern Kenya which focused on introducing food related practices aimed at increasing micronutrient intakes; a comparison group received no intervention. While we found that the intervention group had higher diet diversity (variety) and was more likely to adopt recommended food related practices such as adding orange and green vegetables to staple foods immediately after the intervention (reported elsewhere), it is not known if these positive changes are retained in the longer term.

Objective: To assess the impact of a combined horticulture and peer-led nutrition education intervention on diet diversity and food related practices among rural Kenyan women from post-intervention (2017) to 2018.

Methods: Food related practices were assessed one year after the intervention (2018) using a questionnaire during home interviews; a 24-hour recall and a standardized food coding method was used to assess diet diversity. Diet diversity scores and practices were compared between 2017 and 2018 for the intervention (n=29) and comparison group (n=19) using Wilcoxon rank sum and chi square tests.

Results: Diet diversity scores were significantly higher in 2018 than in 2017 for the intervention group (p=0.025). All recommended food related practices were maintained from 2017 to 2018 except for adding an orange vegetable to mukimo, a starchy vegetable dish, which was significantly lower (p=0.01). There were no significant differences in practices among women in the comparison group from 2017 to 2018.

Conclusions: Results suggest that in women receiving a combined nutrition and horticulture intervention, improvements in healthy food related practices and diet diversity were sustained one-year post intervention suggesting that they may be effective in the long term.

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