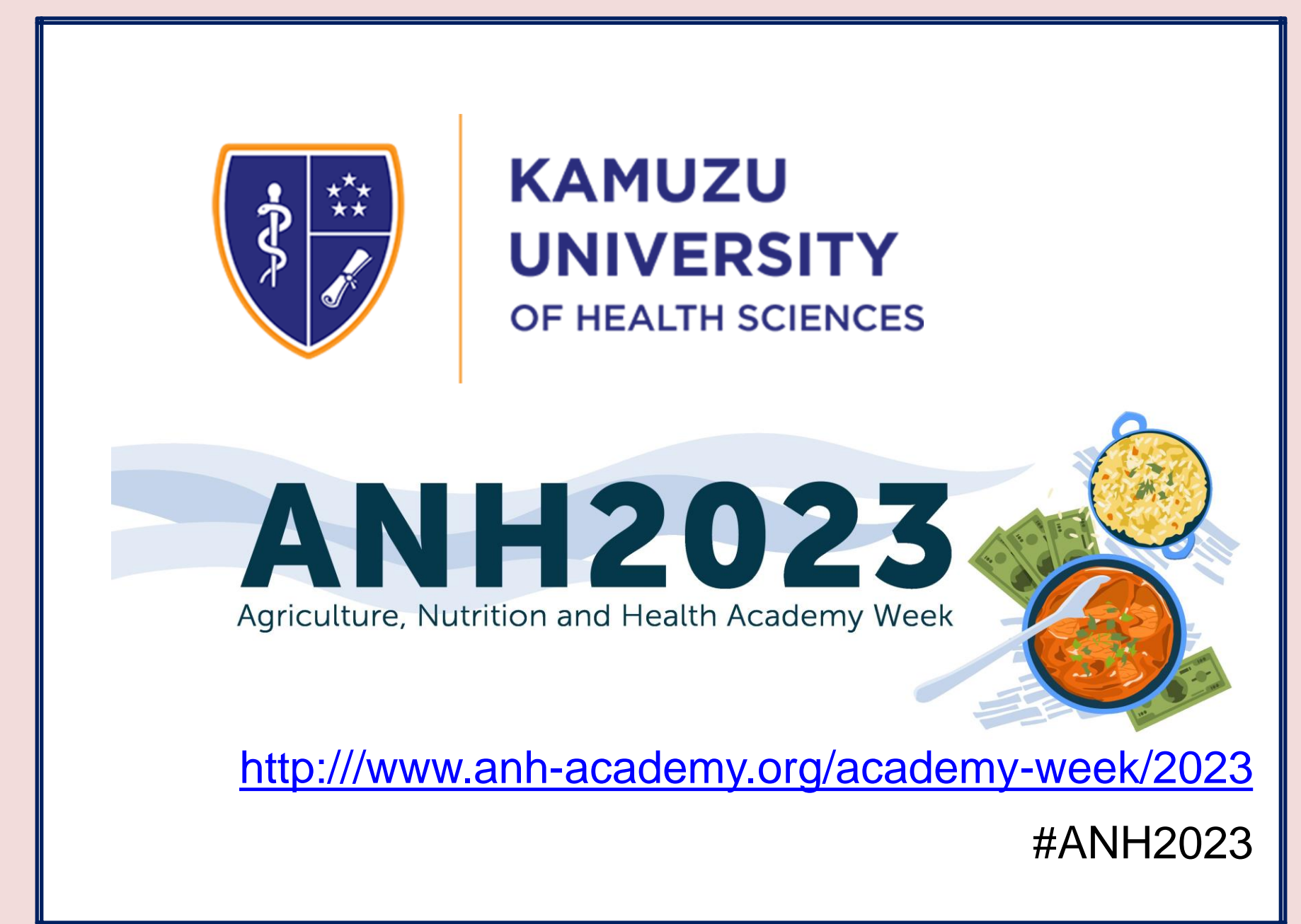


**Does empowerment with a single food resource cushion rural Women of Reproductive Age from increased risks of inadequate nutrient intakes in times of limited food availability?**

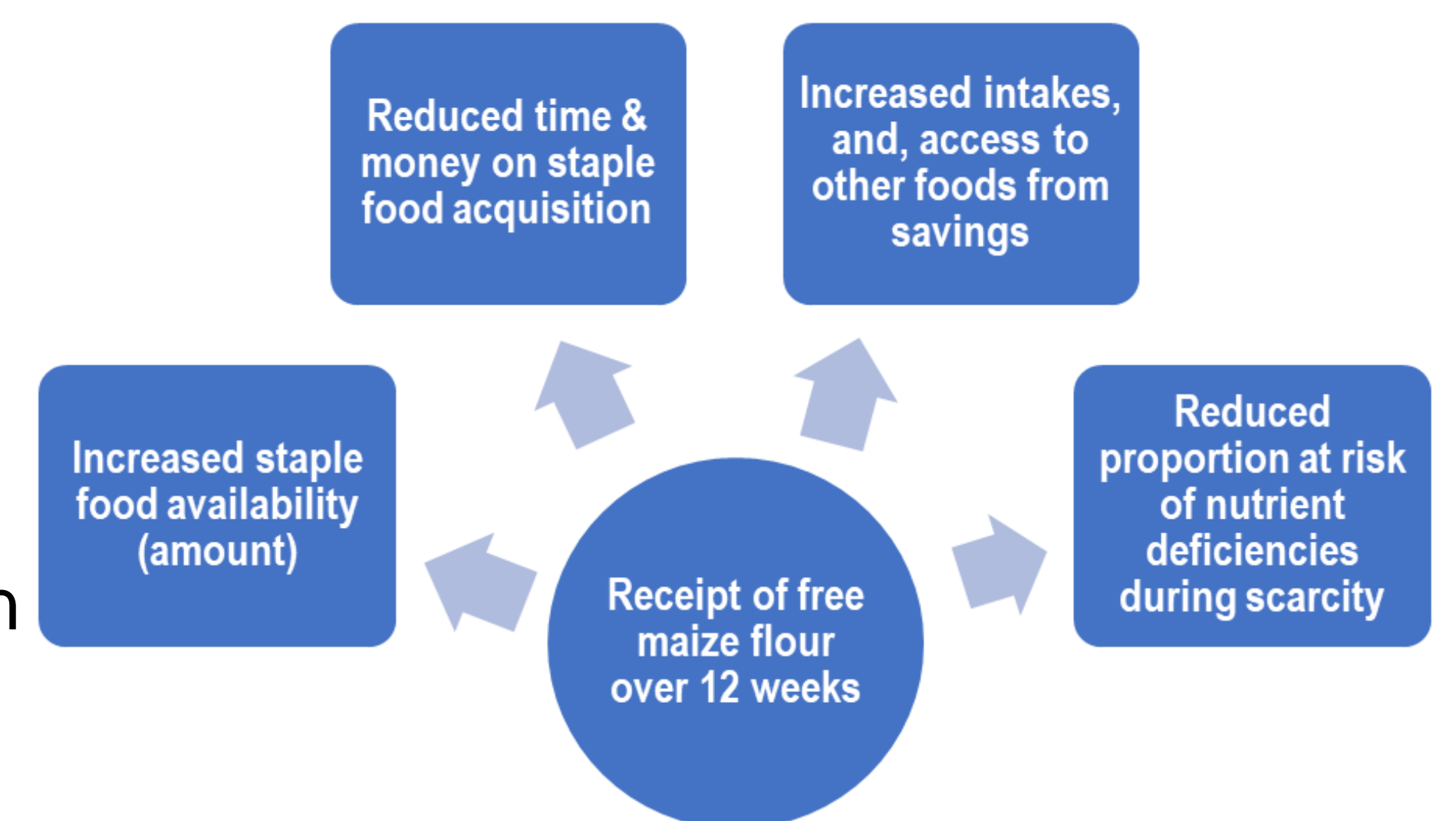
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**INTRODUCTION**

- Optimal nutrition in women is achieved in environments that enable them to have knowledge of, access to, and control over food and health resources yet chronic food insecurity persists and varies by season in Malawi.
- We assessed the effect of receipt of a single food resource (free maize flour) on risks of inadequate micronutrient intakes in a rural Malawian community



**METHODS**

- Data were collected using multiple-pass interactive 24-hr recalls, on all days, using two cross-sectional surveys conducted in July (Baseline) and October (Endline) 2019 .
  - Participants were non-pregnant women aged 20 to 49 (n=179, with 53 repeat recalls) whose households received maize flour (350 g/household member/day) for 12 weeks as part of a community feeding trial
- Protein, calcium, zinc, folate, iron and vitamin A intakes were calculated, using food composition data.
  - Wilcoxon Rank sum test was used for comparison of median intakes & nutrient densities & IMAPP (Intake Modeling, Assessment and Planning Program) for the estimation of the percentage at risk of inadequate intakes.

**FINDINGS**

Table 1: Changes in median (IQR) nutrient intakes

	Baseline	Endline	P-value*
Energy (Kcal)	2422.6 (2010.1, 3057.9)	2148.1 (1833.9, 2493.1)	<0.001
Protein (g)	79.4 (61.8, 98.5)	71.0 (56.8, 83.6)	0.002
Calcium (mg)	439.5 (269.4, 714.6)	351.1 (218.8, 550.3)	0.001
Folate (mcg)	347.8 (248.1, 461.1)	254.9 (191.9, 351.1)	<0.001
Zinc (mg)	9.3 (7.2, 11.5)	8.3 (6.8, 11.2)	0.602
Iron (mg)	16.4 (12.1, 20.2)	15.0 (13.1, 18.2)	0.091
Vitamin A (RAE)	189.3 (68.9, 546.9)	127.6 (55.4, 219.4)	<0.001

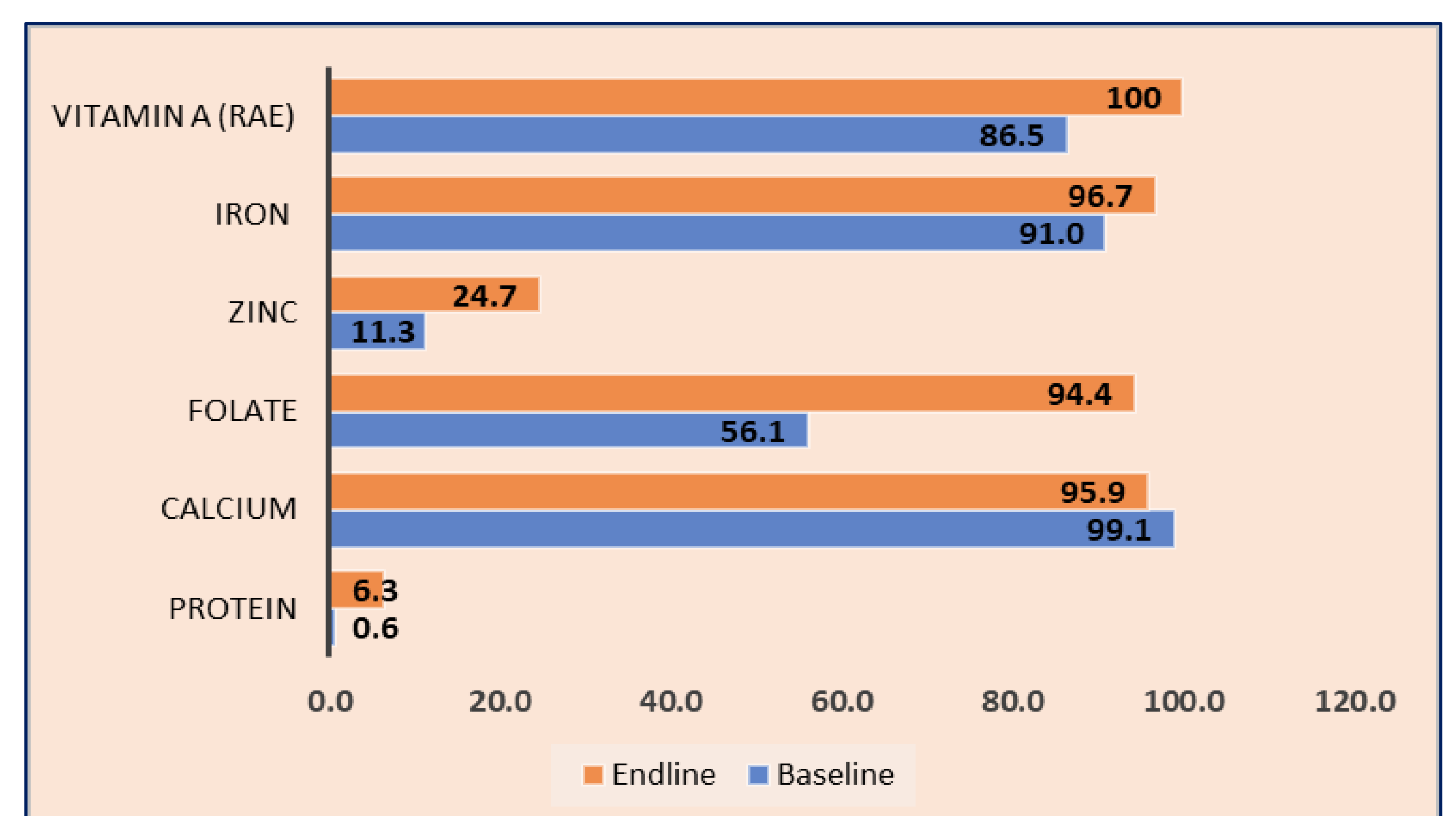


Fig 1: Proportions at risk of inadequate intakes



**CONCLUSIONS**

- While the provision of a single food resource may have increased maize flour consumption (median % energy from grains increased by 18.8 percentage points), it did not cushion against increased risk of inadequate nutrient intakes that come with a shift in seasonality.
  - Intakes for all nutrients except zinc decreased
  - Inadequate intakes increased for all nutrients but calcium
- Actions to improve nutritional outcomes must be very intentional and holistic, incorporating nutrition education while promoting actions that improve access to diverse food resources.