



Enhancing children's diets requires more than raising maternal awareness: results from a cluster-randomized controlled trial of a multi-sectoral nutrition-sensitive social behavior change intervention

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FEED THE FUTURE

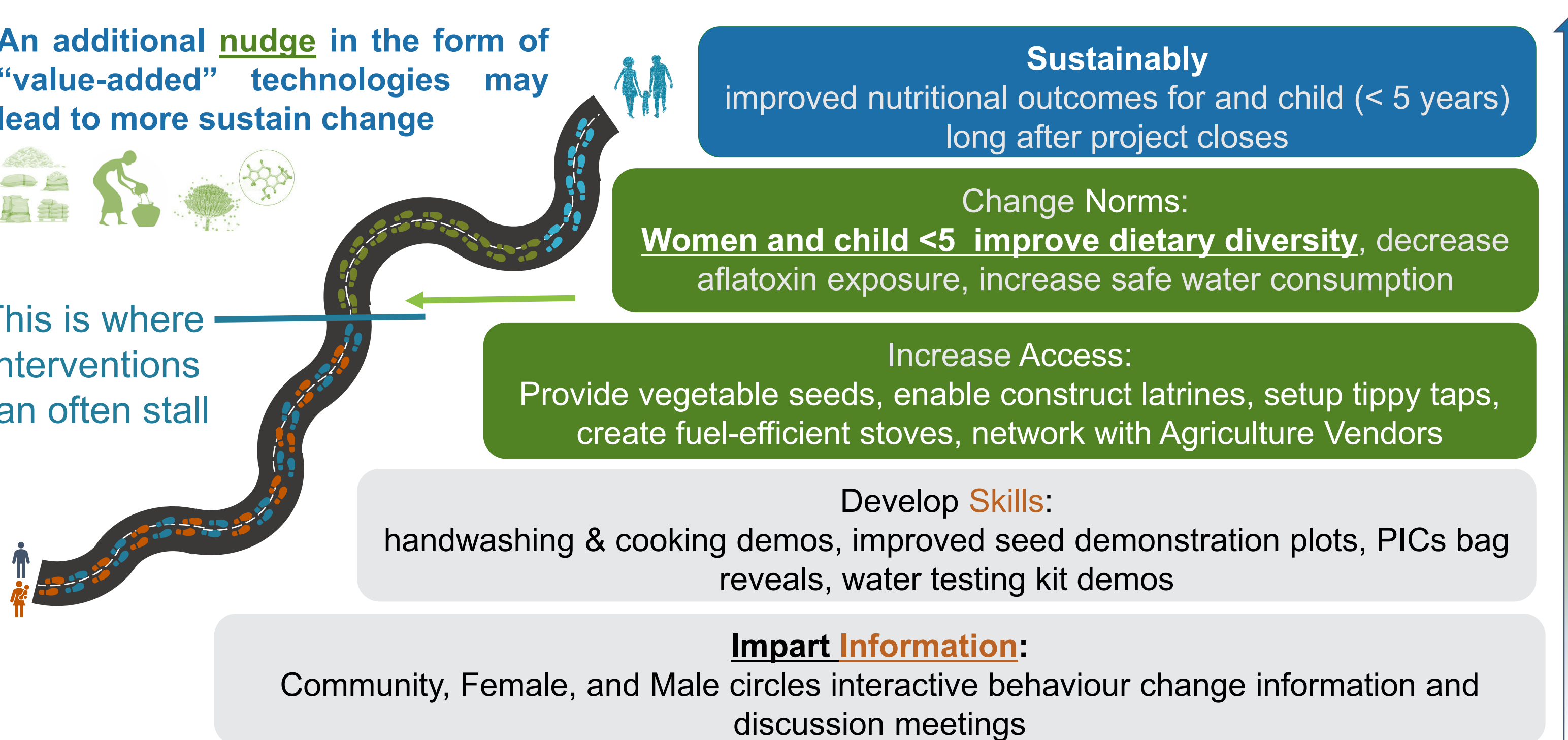
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Introduction

- Malnutrition, in all its forms, is a burden that **disproportionately impacts rural and impoverished communities in complex environments.**
- Improving diets** to be more diverse and nutrient-rich is one path to improving nutritional well-being and reducing the impact these complex environments have on early life course development.
- Social behavior change (SBC)** interventions can be low-cost, often sustainable interventions for reducing barriers to consuming a diverse diet.

RQ and Theoretical Framework

Does enabling families (particularly mothers and other caregivers) to 'assess and act' on drivers of malnutrition through a targeted SBC+ (NIPP+) package succeed in a sustained **reduction of risk factors** thereby improving child health and nutrition?

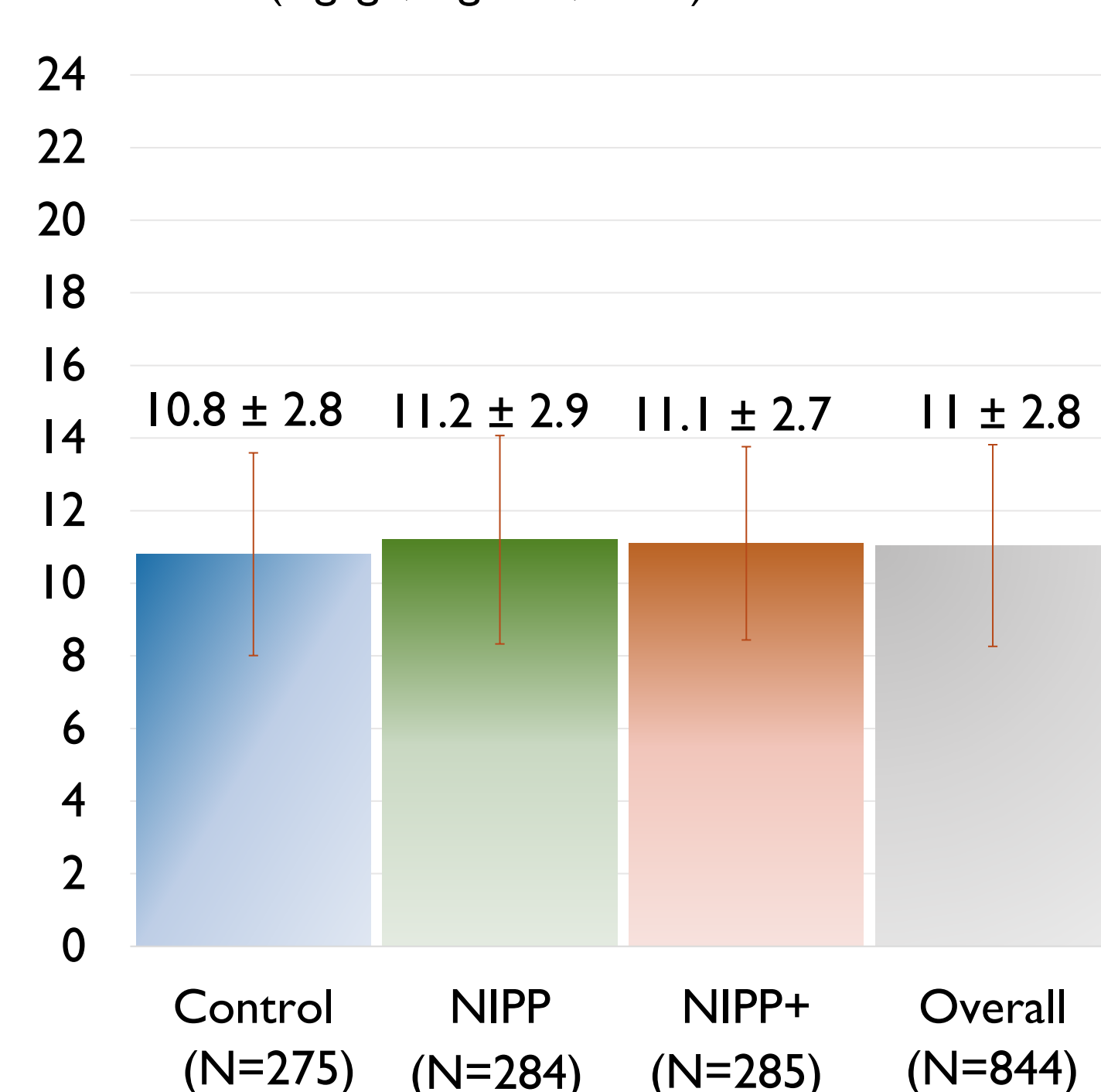


Analytical Methods

- Pre-Post evaluation design
- Outcome variables included
 - a score assessing maternal knowledge across five food-related domains,
 - 24-hour recall minimum dietary diversity score for children (MDDC) and women (MDDW), and
 - if the child consumed animal-sourced food (ASF).
- Ordinal logistic regression estimated differences in the knowledge score across treatment arms and logistic regression for each diet quality indicator, controlling for clustering and maternal knowledge.

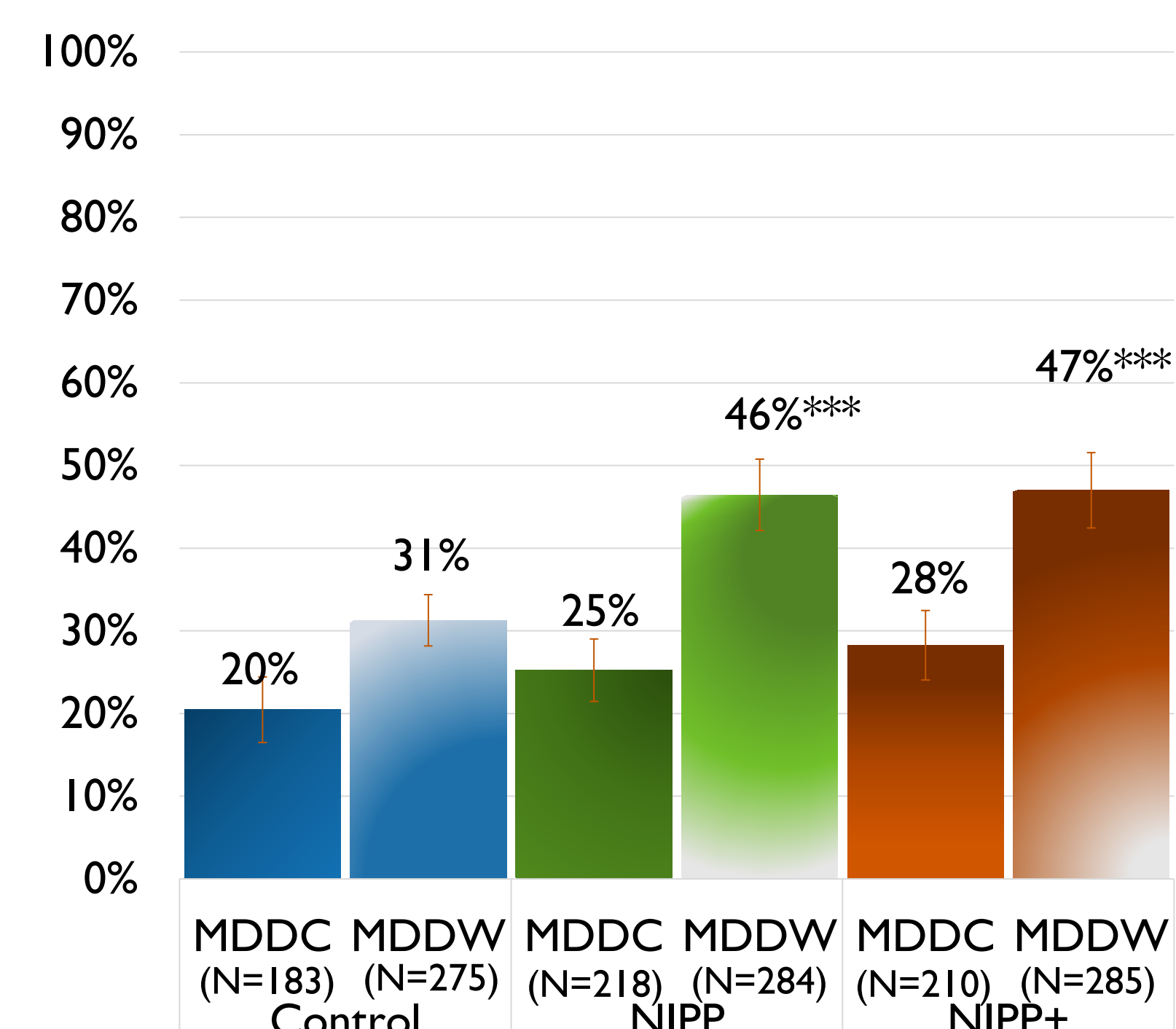
Results

Figure 1: Mean \pm SD number of questions answered correctly out of 25 about common causes of malnutrition, ways of preventing malnutrition, ways of identifying malnutrition, and ways of preserving food at **endline**. (Agago, Uganda, 2021)



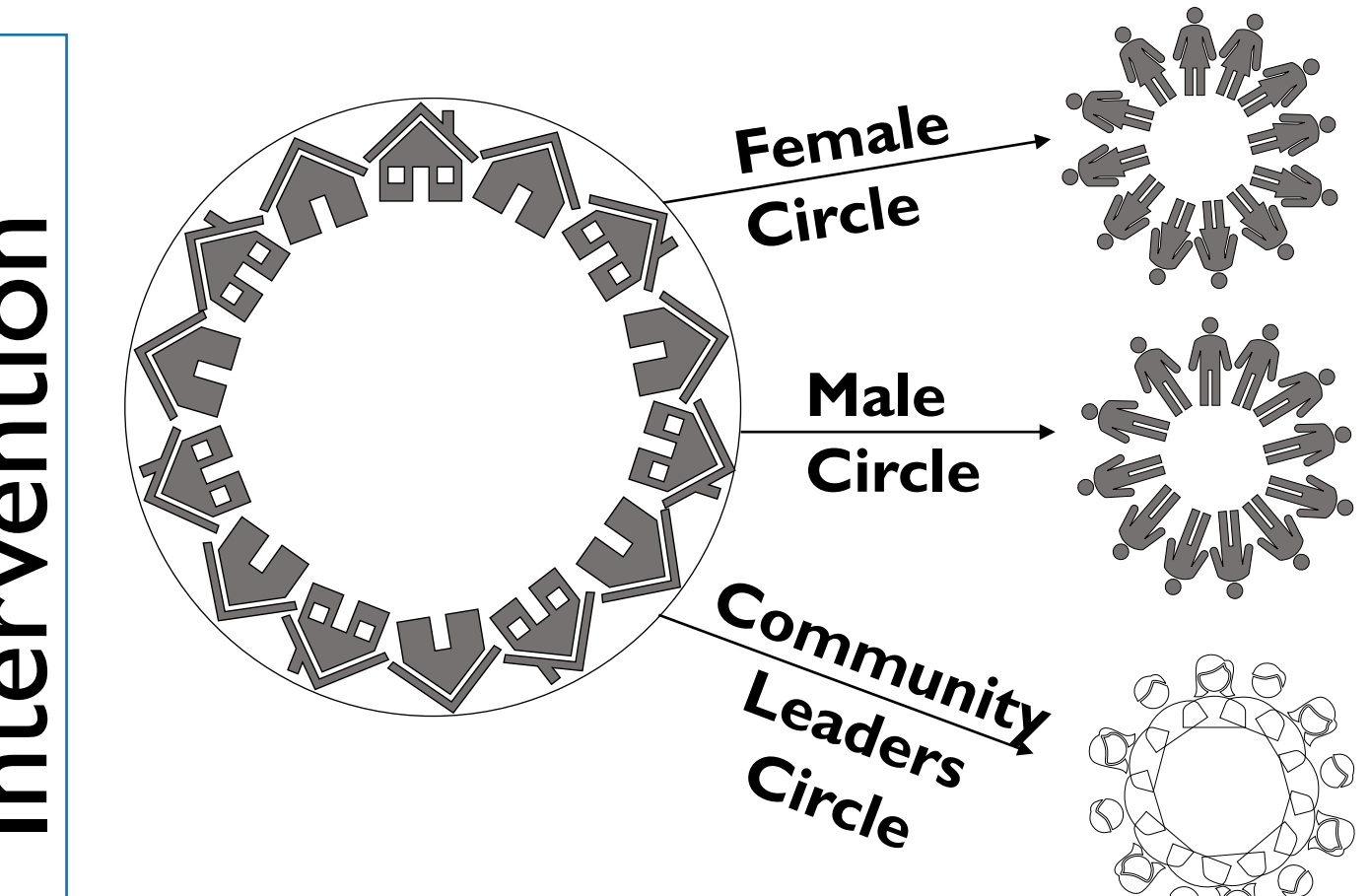
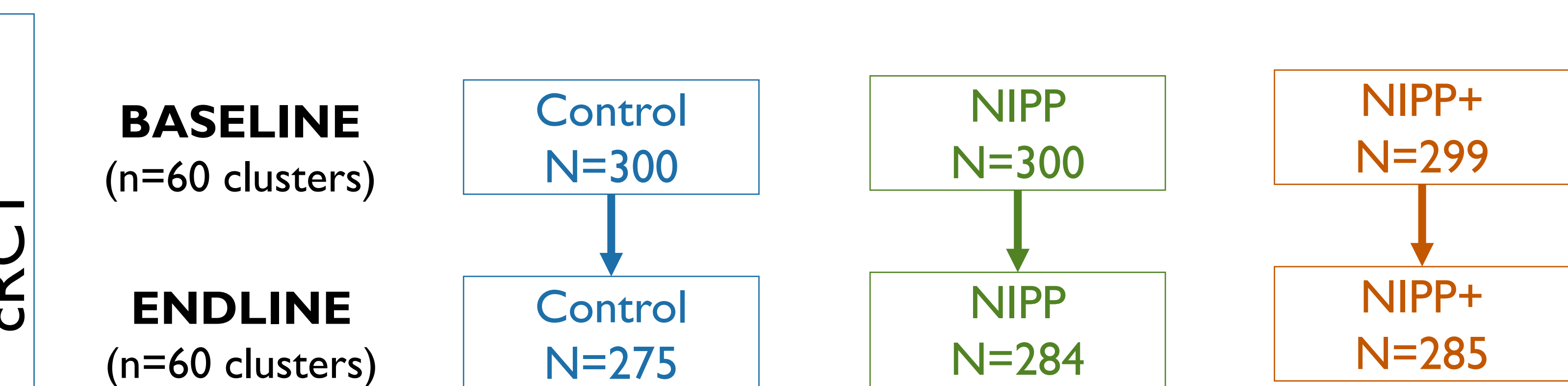
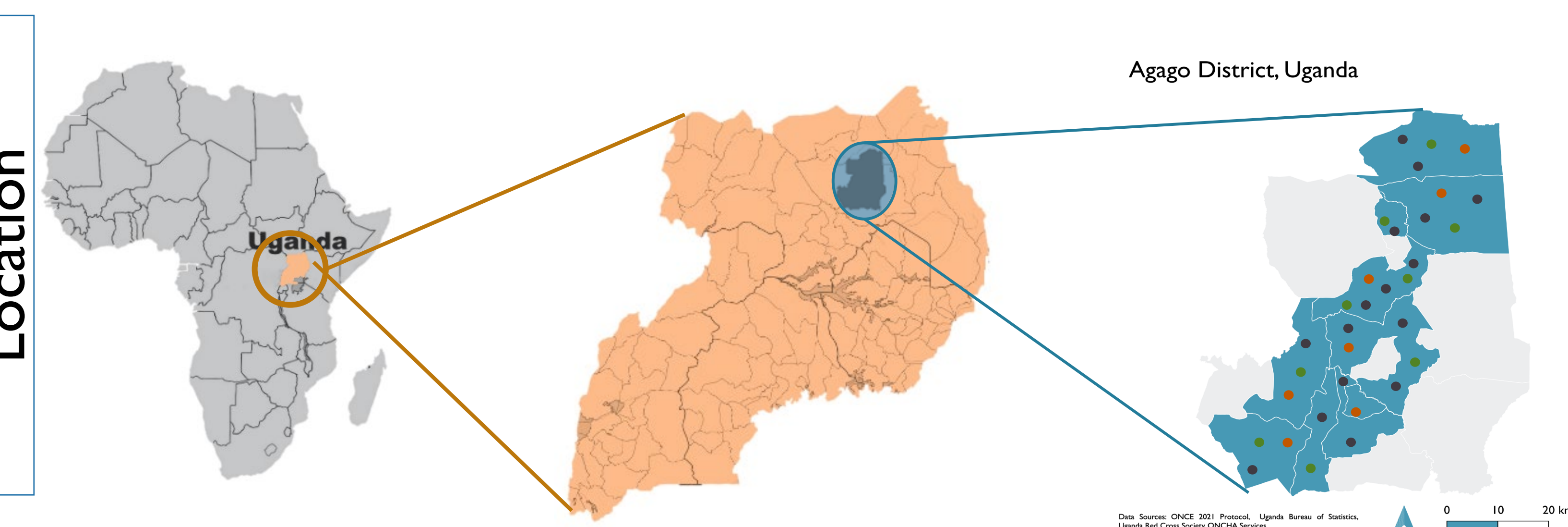
Abbreviations: NIPP, Nutrition Impact and Positive Practice; SD, standard deviation

Figure 2: Percentage of children 6-24 months achieving and percentage of female caregivers achieving minimum dietary diversity at **endline**. (Agago, Uganda, 2021), adjusted marginal predictions



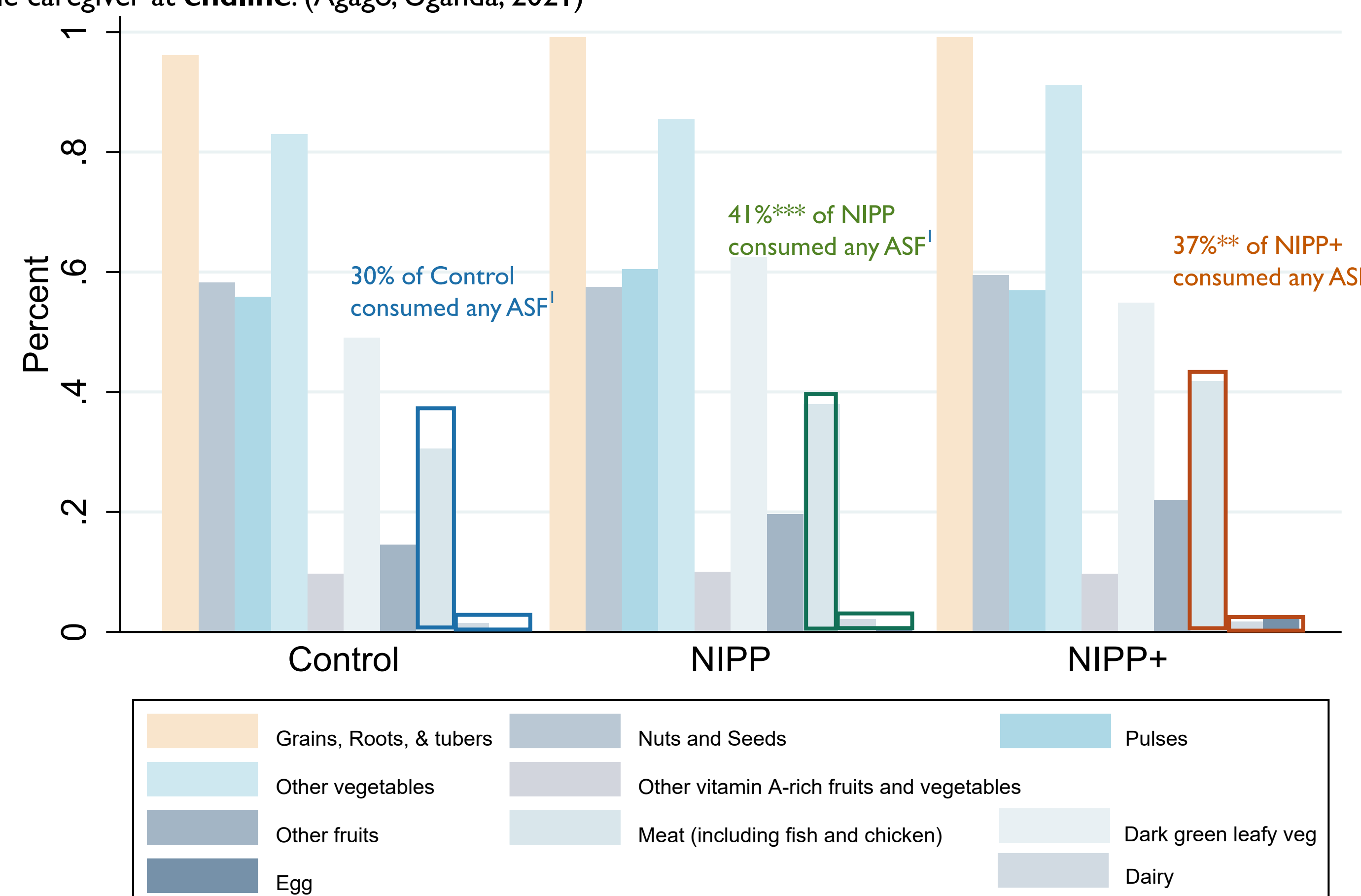
Model adjusted for nutrition knowledge, food preservation knowledge, and clustering. Abbreviations: NIPP, Nutrition Impact and Positive Practice; MDDC, minimum dietary diversity for children; MDDW, minimum dietary diversity for women. *** p<.01 compared to control.

One Nutrition in Complex Environments: Study Design



- Nutrition Impact and Positive Practice (NIPP)
- Recruit households – not individuals
- Form gender-specific sub-circles (gendered SBCC approach)
- Each circle meets twice a week for 12 weeks
- Facilitated by volunteers in the community (positive deviants)
- Taught about good diet, WASH, food storage, and disease prevention, among others
- NIPP+ includes additional modules on improved technologies for WASH and food storage**

Figure 3: Percentage of children 6-24 months consuming each food group in previous 24 hours as reported by female caregiver at **endline**. (Agago, Uganda, 2021)



¹Marginal probabilities of logistic model, model adjusted for nutrition knowledge, food preservation knowledge, and clustering. Abbreviations: NIPP, Nutrition Impact and Positive Practice; ASF, animal sourced-foods. *** p<.01 ** p<.05 compared to control.

Conclusions

- A 12-week SBC program with or without new technologies could improve maternal diet and increase children's consumption of ASF.
- Differences in ASF consumption were due to factors other than understanding of key practices.
- Proportions achieving minimum standards remained unacceptably low across arms as were scores demonstrating understanding of the structural causes of malnutrition.
- While an SBC intervention can provide nudges to improve both maternal and child nutritional well-being, structural barriers to actioning those nudges also need to be addressed.



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