

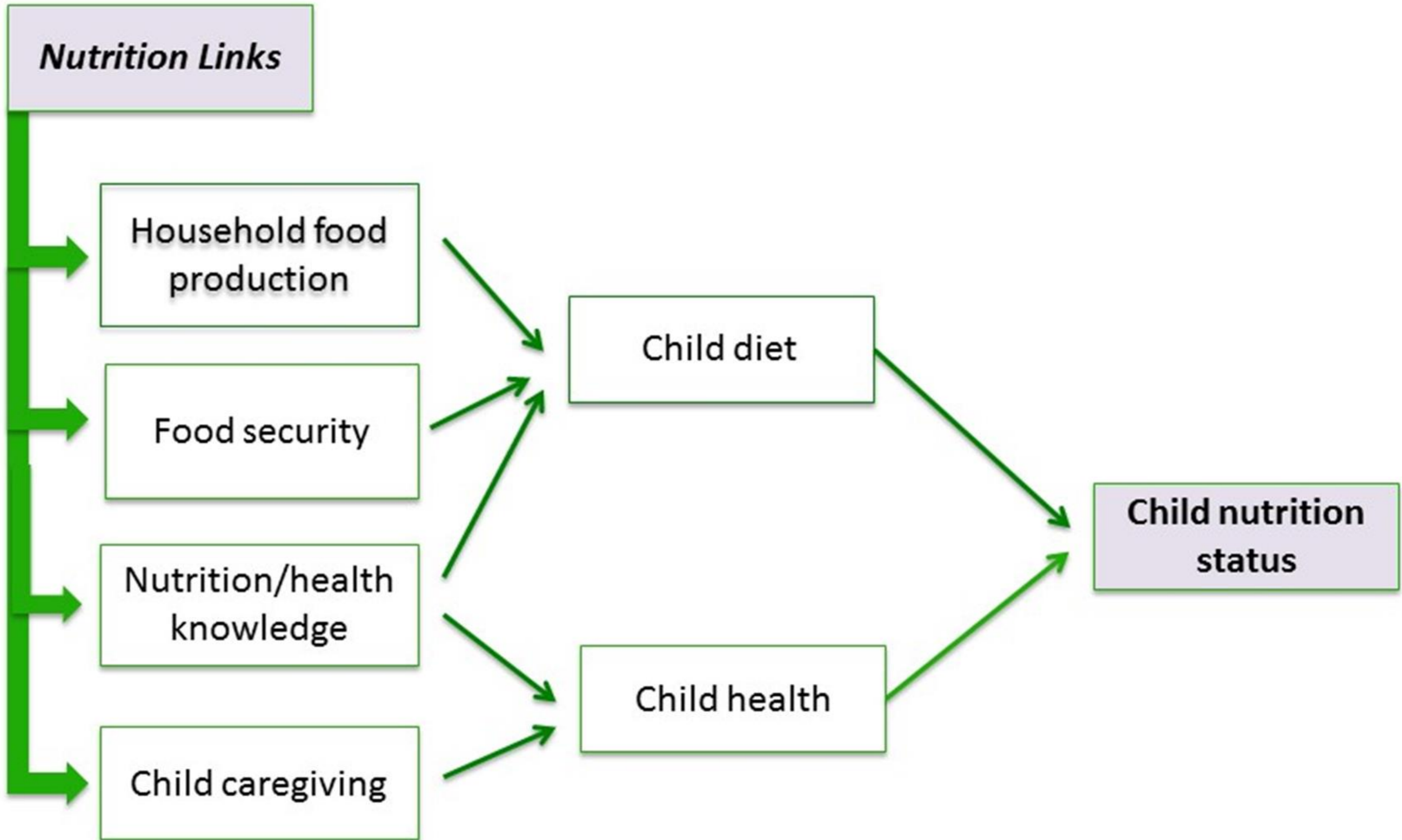
Nutrition Links Study Results



World Vision Global Health, Nutrition and HIV
Community of Practice Webinar

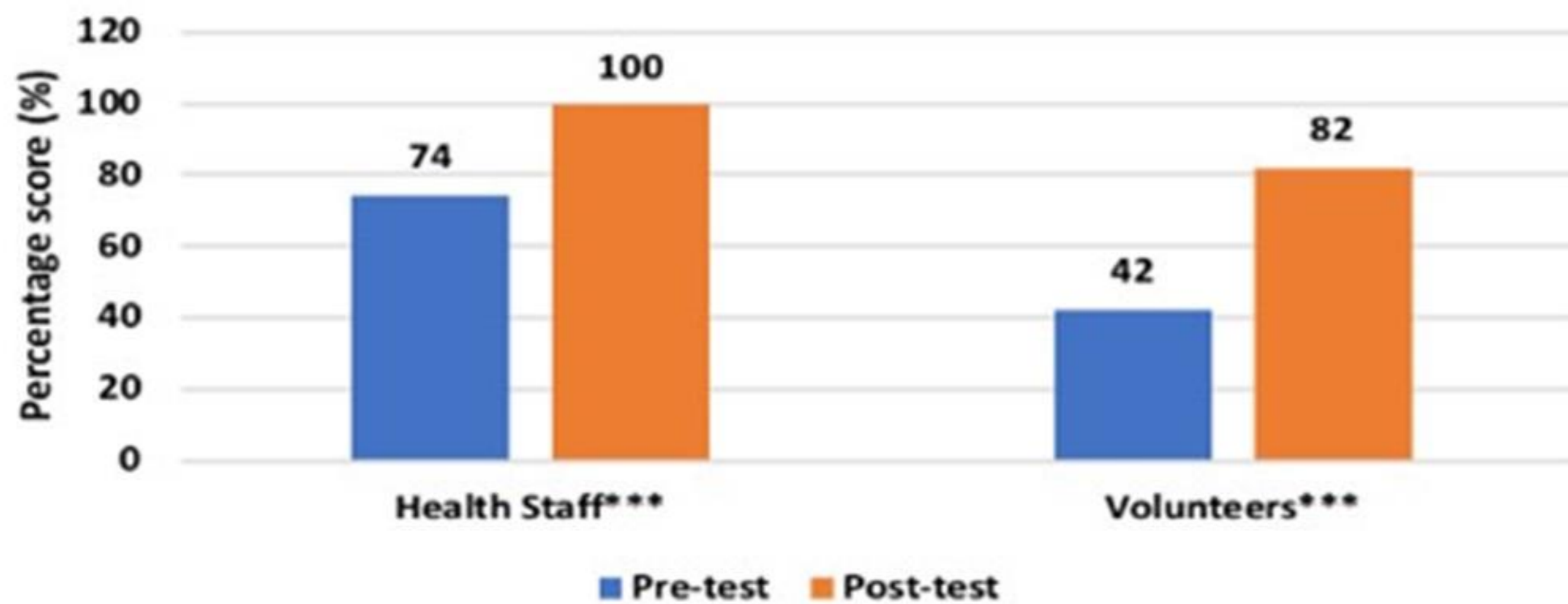
Grace S Marquis
McGill University





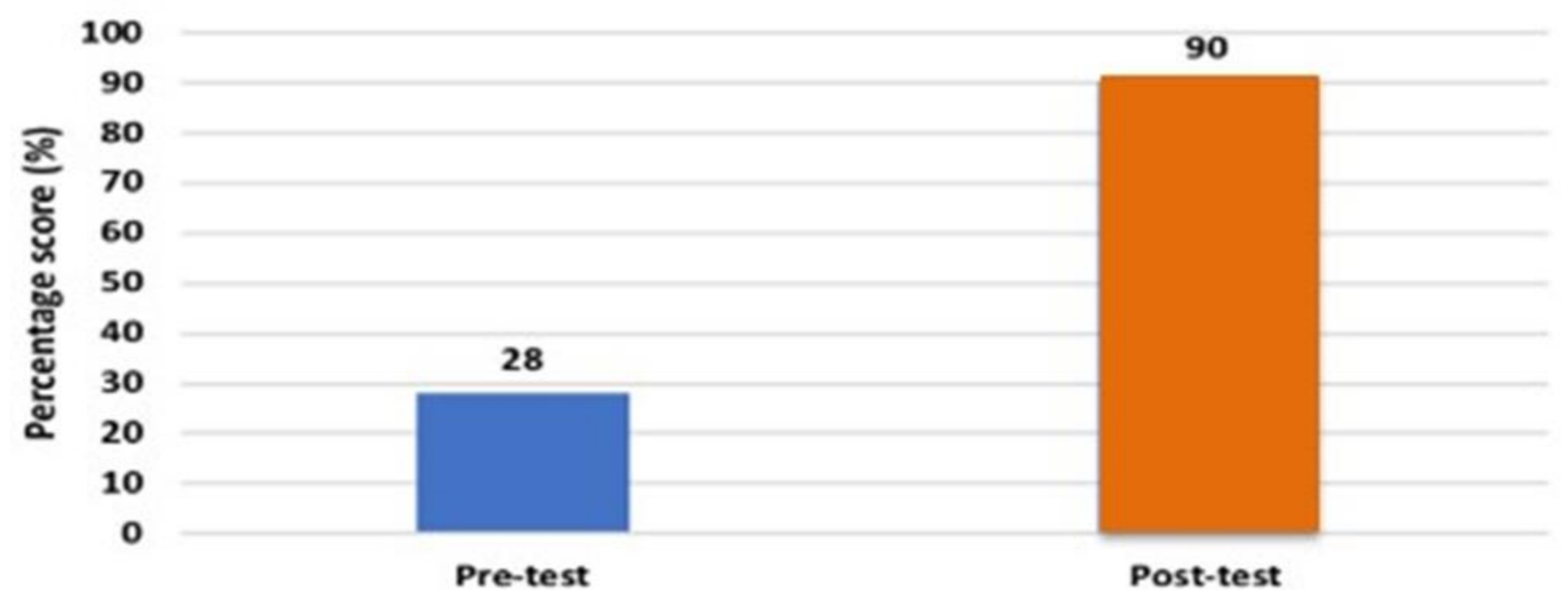
Harmonizing nutrition knowledge

Figure 1. Comparison in knowledge scores between health staff and volunteers before and after CBGP training - 2016



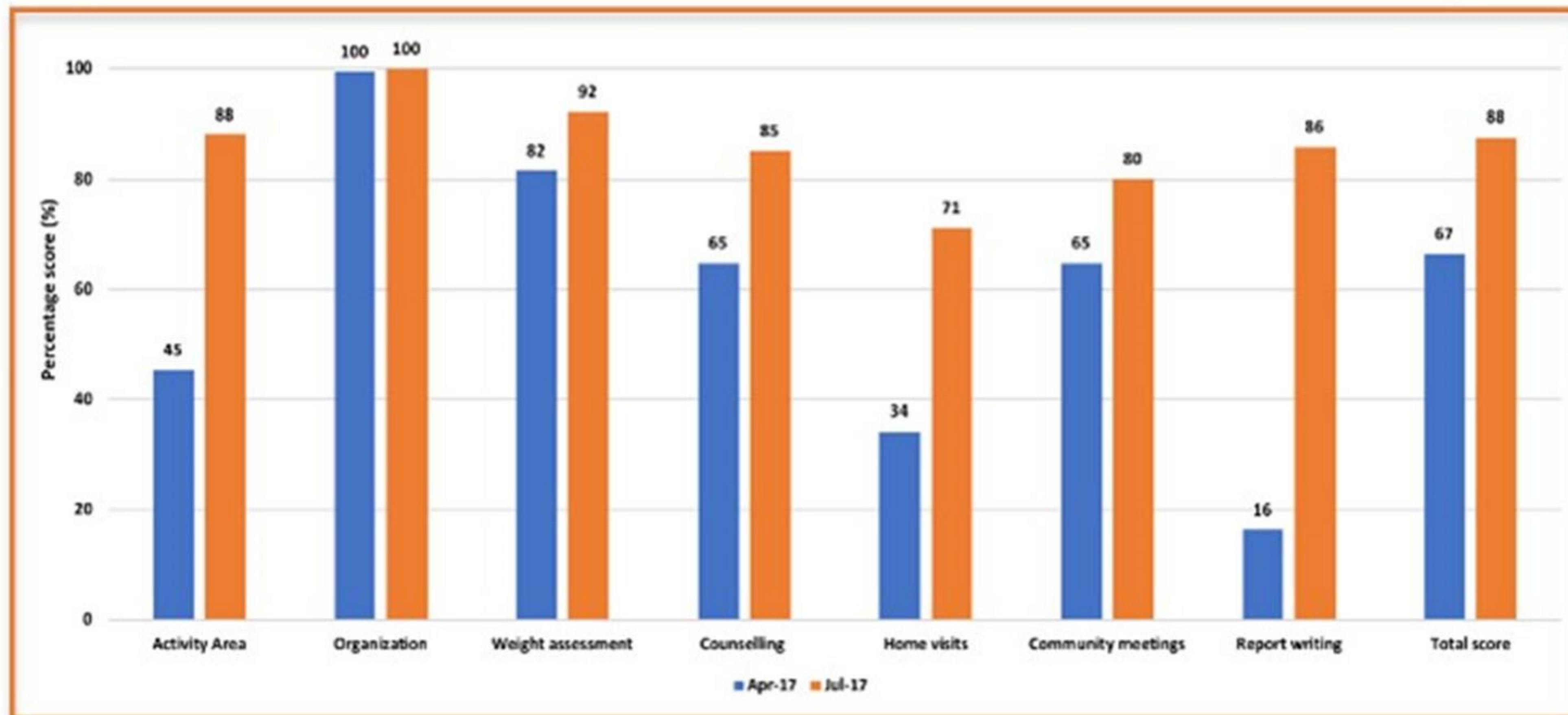
- Targeted training improved nutrition knowledge within the health sector
- Training for the non-health sector improved nutrition knowledge and collaborations

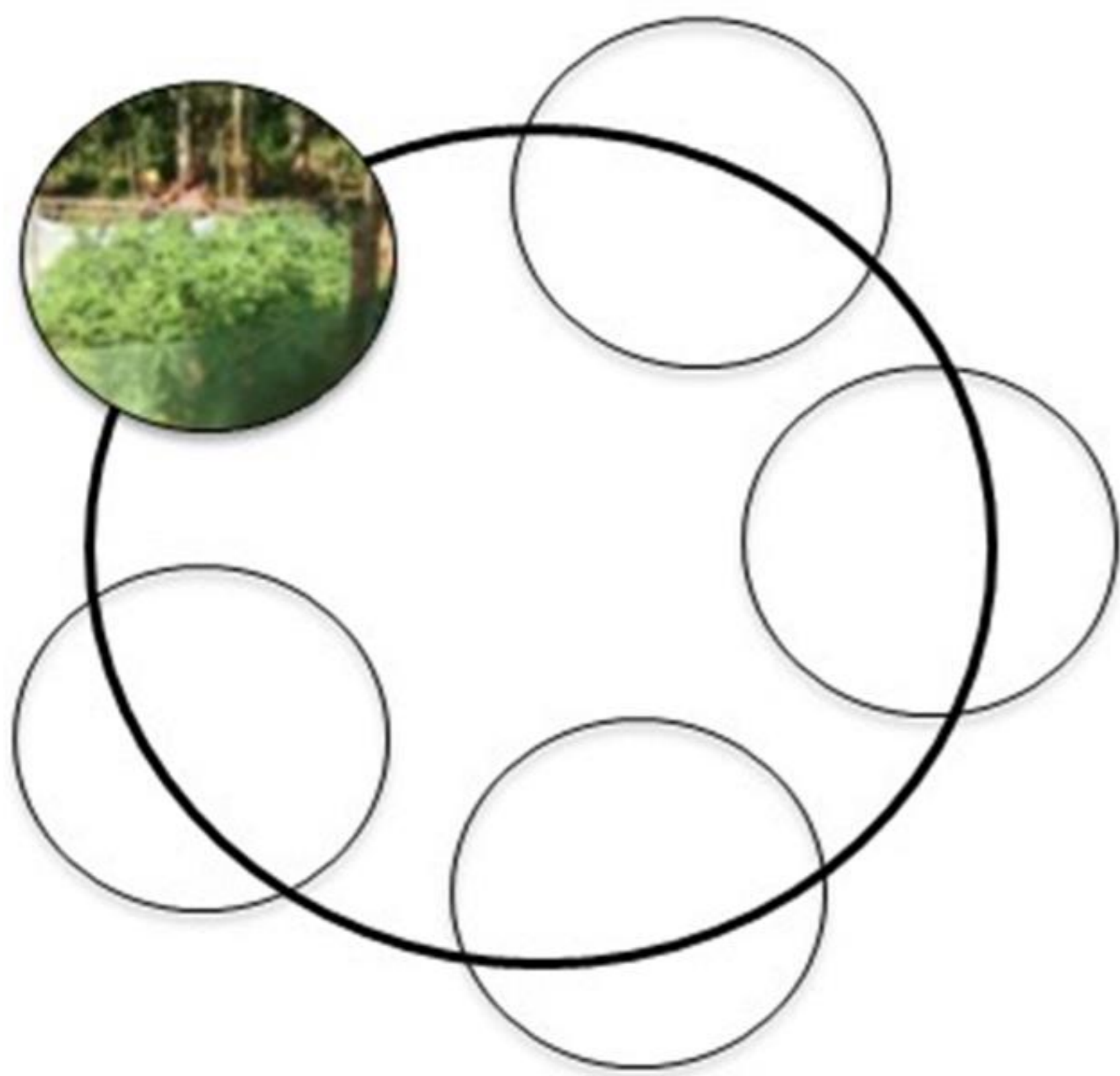
Figure 3. Comparison in knowledge scores before and after ENA training - 2016***



Effect of Monitoring and Supportive Supervision on Health Staff Performance

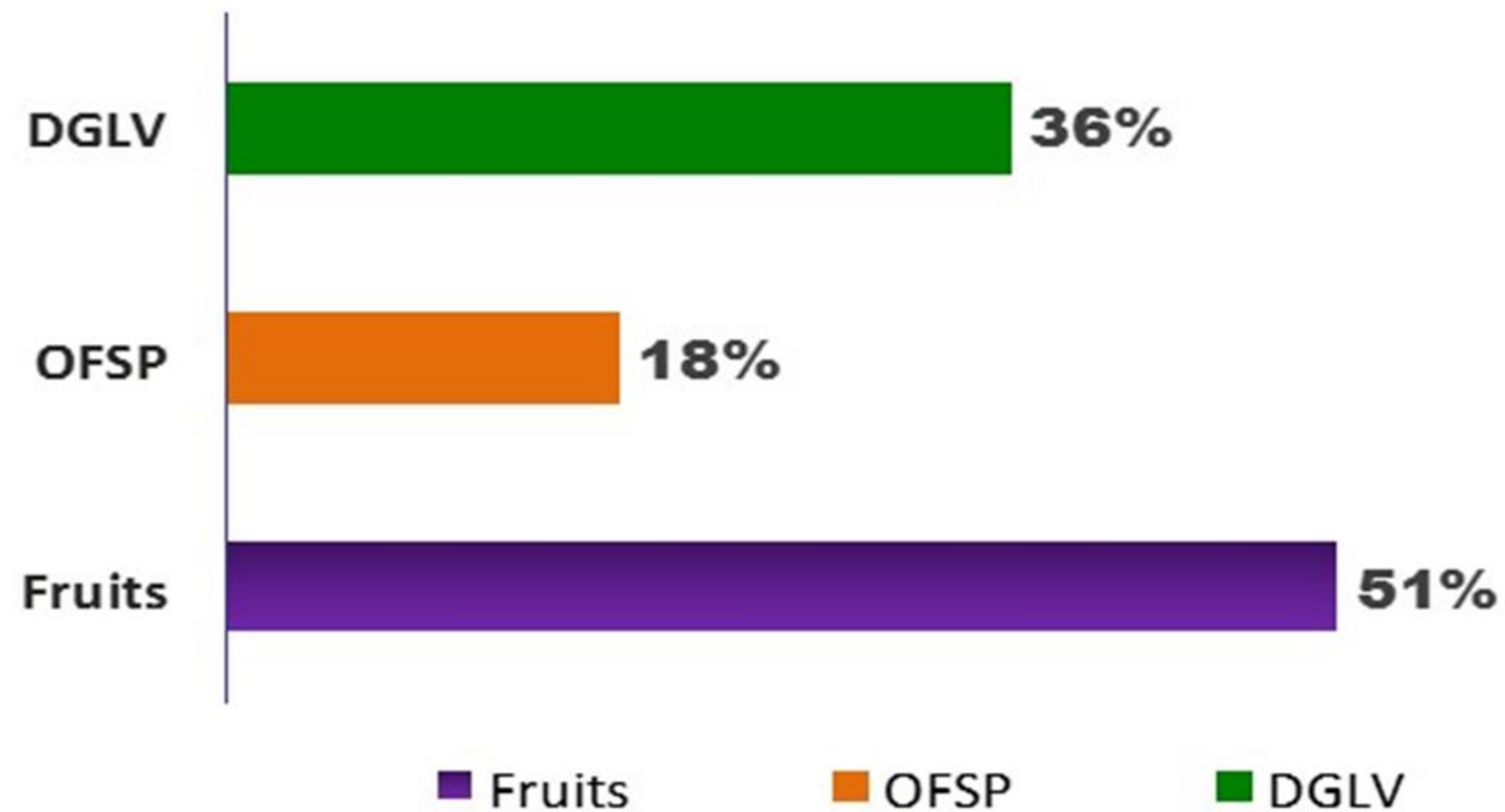
Changes observed in aspects of community based growth promotion skills when health staff were monitored 3 months apart



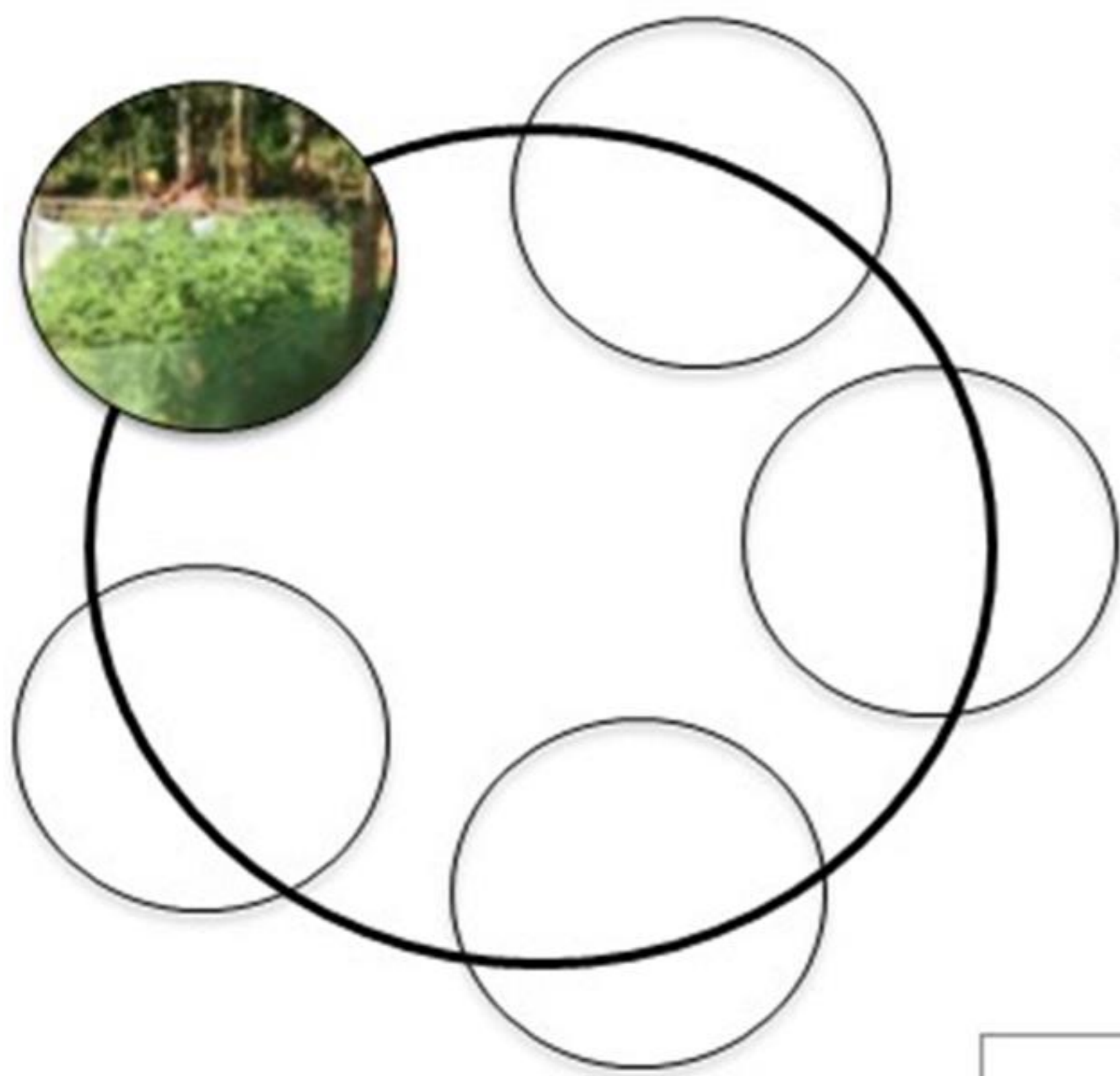


Diversifying household food production

At baseline, only about 1/3 (36%) of households in the district had a home garden and grew dark green leafy vegetables.

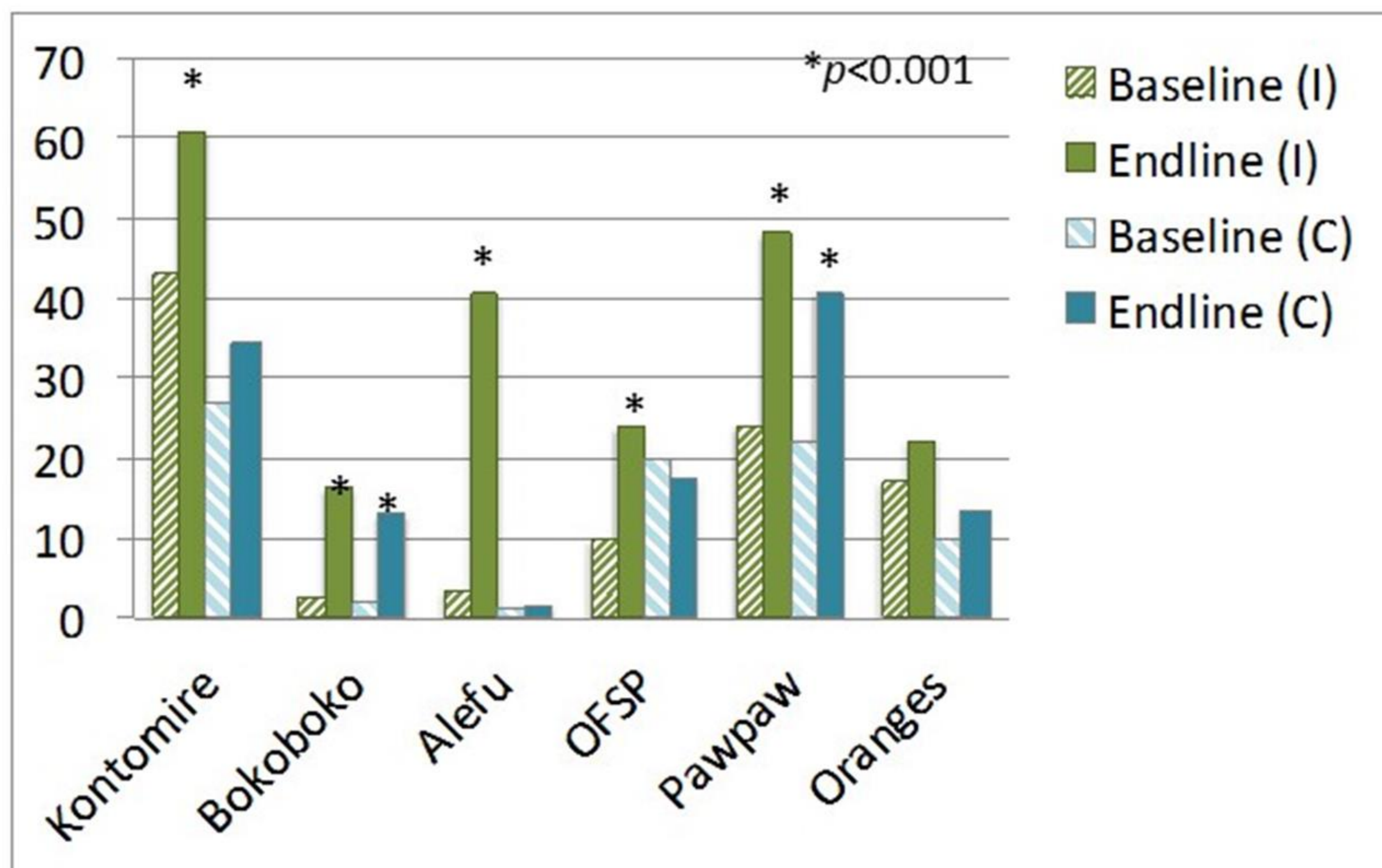


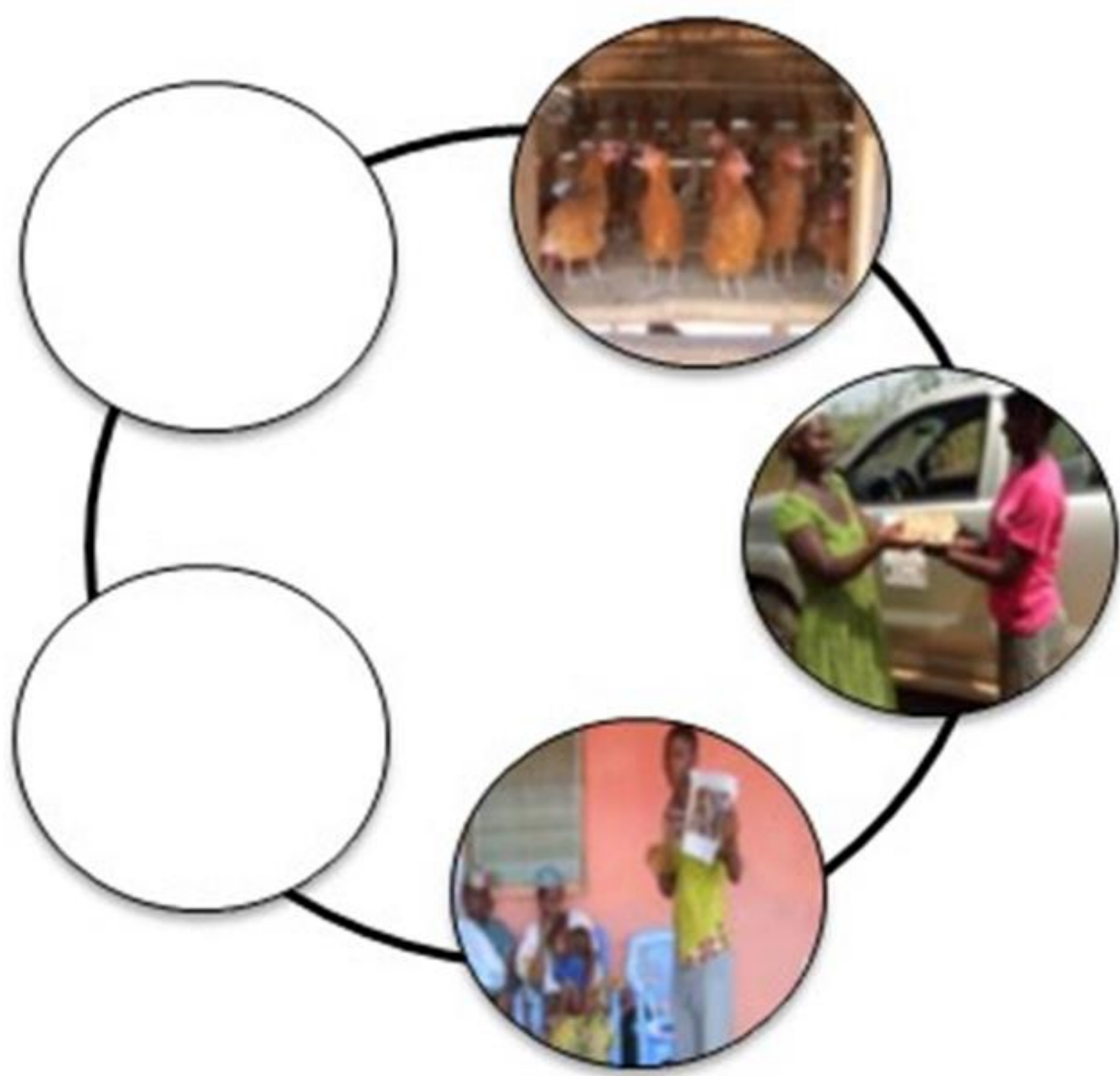
OFSP: Orange flesh sweet potato DGLV: Dark green leafy vegetables



Did the intervention contribute to diversifying household food production?

YES! Production increased especially for dark green leafy vegetables such as *bokoboko* (waterleaf) & *alefu* (Amaranth)

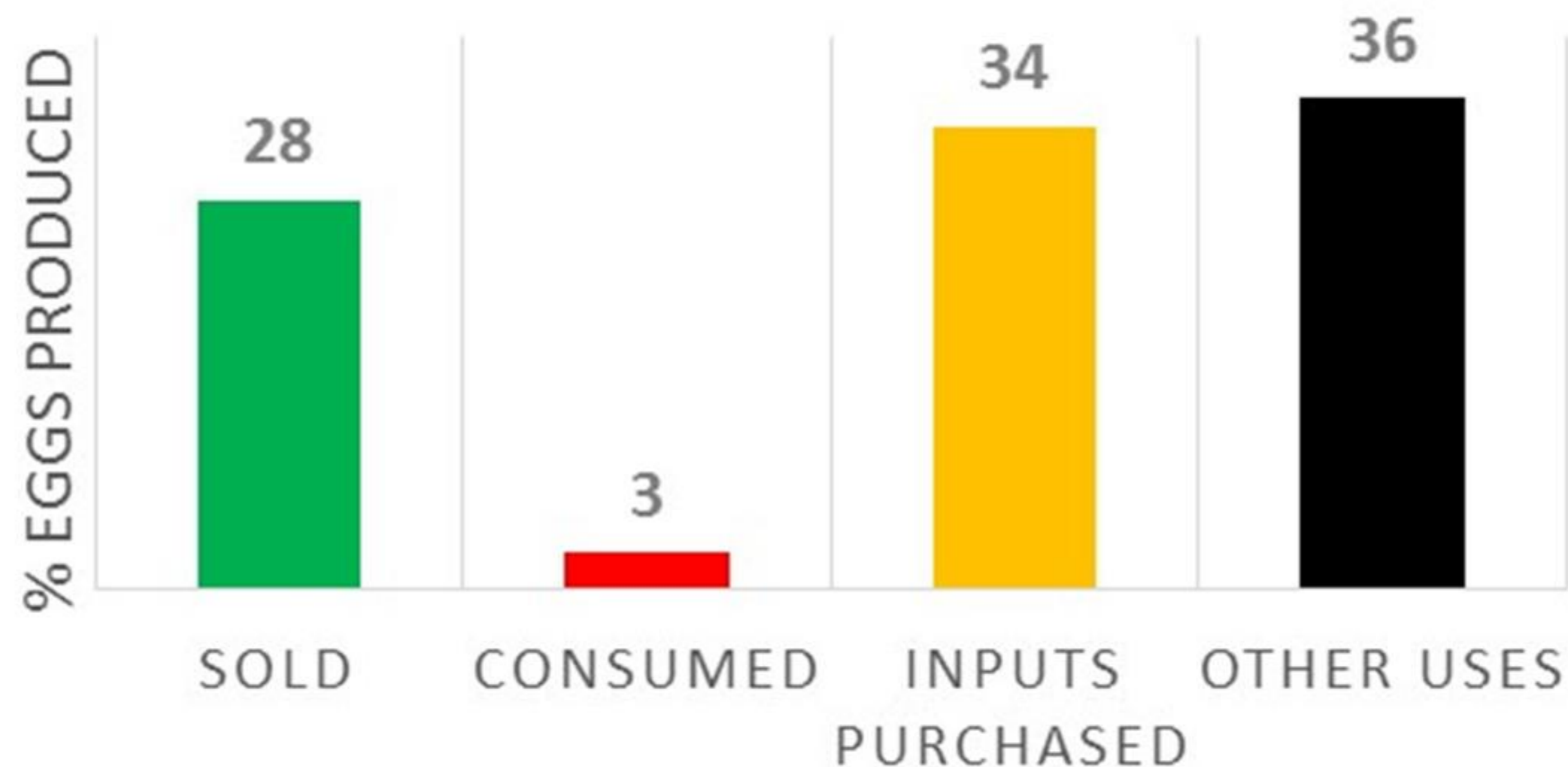




Did the intervention contribute to diverse household food production?

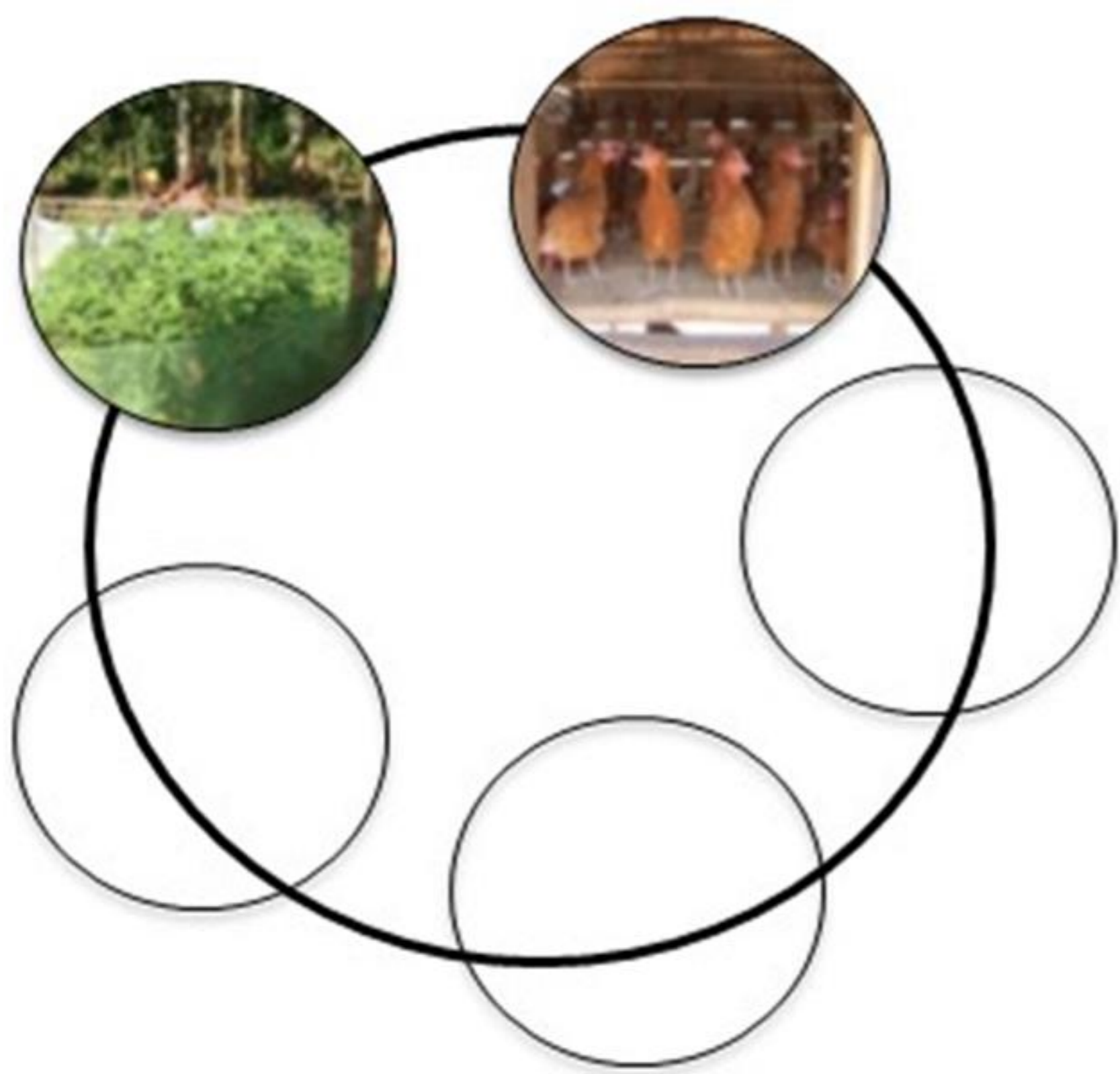
YES! Dramatic increase in the availability of eggs in the intervention households (110 ± 51 eggs/week)

USE OF EGGS COLLECTED: TOTAL OF 1,243,271



Other uses =undeclared, gifted, damaged, pass-on-the- gift repayment

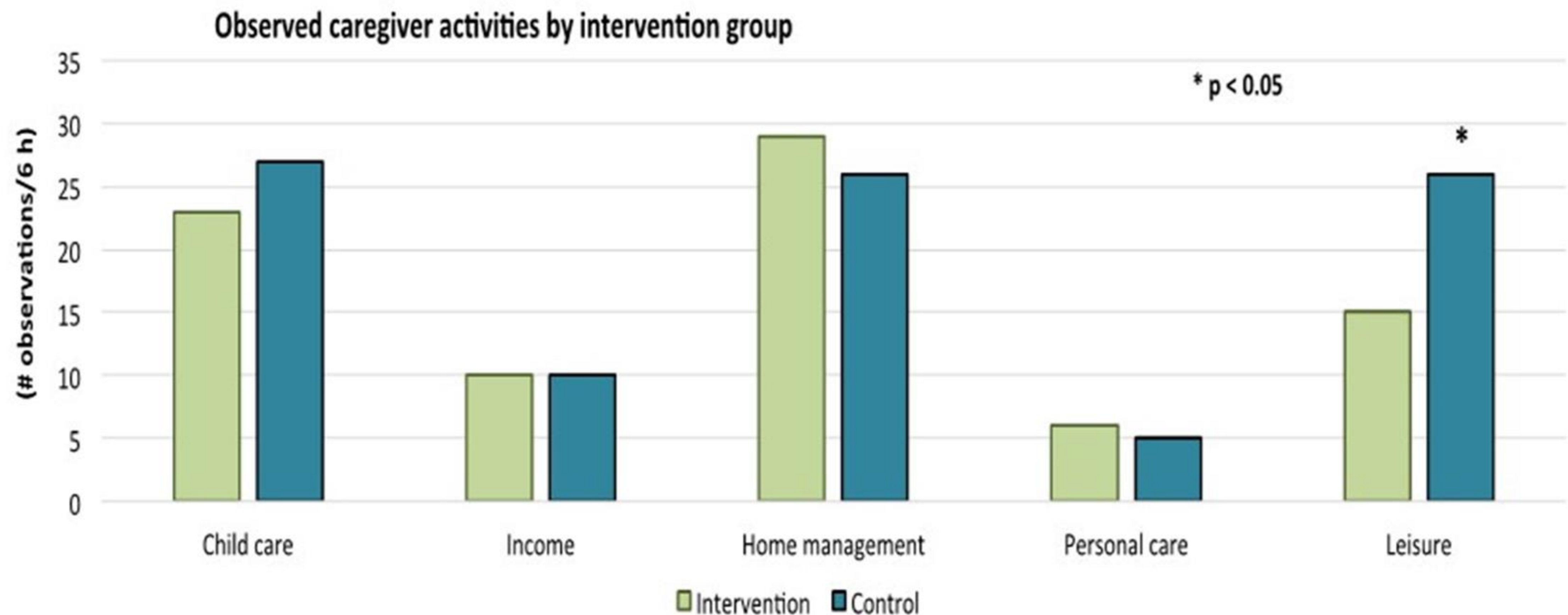
(Afua 2017)



Did the intervention activities decrease time given to child care?

No. Intervention caregivers spent the same amount of time on child care activities as caregivers in control communities.

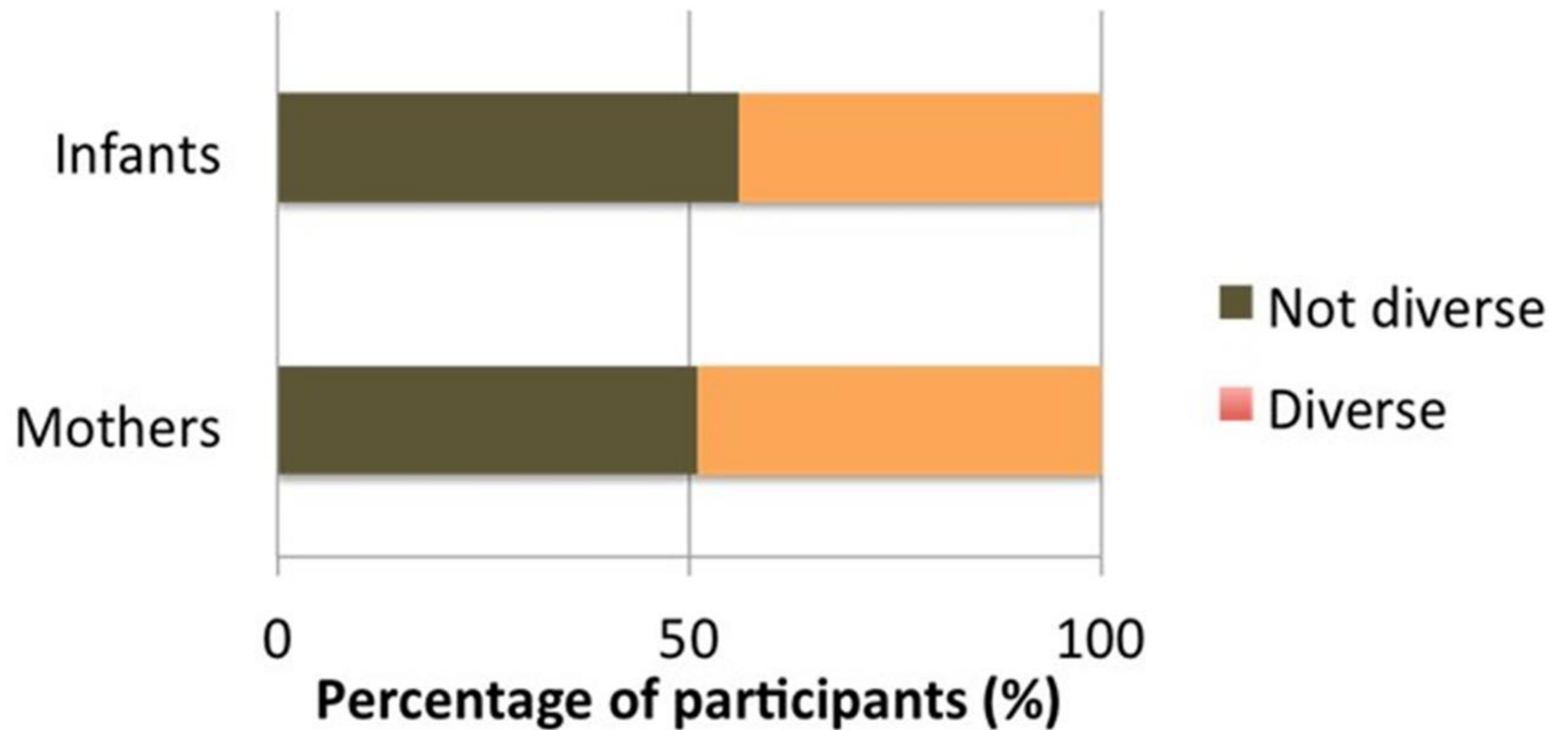
The amount of leisure time was lower.





Diversity of children's diet

At baseline, only about half of mothers and infants (6-12 mo) had a diverse diet.



¹Diverse: child ≥ 4 foods; mother ≥ 5 foods)

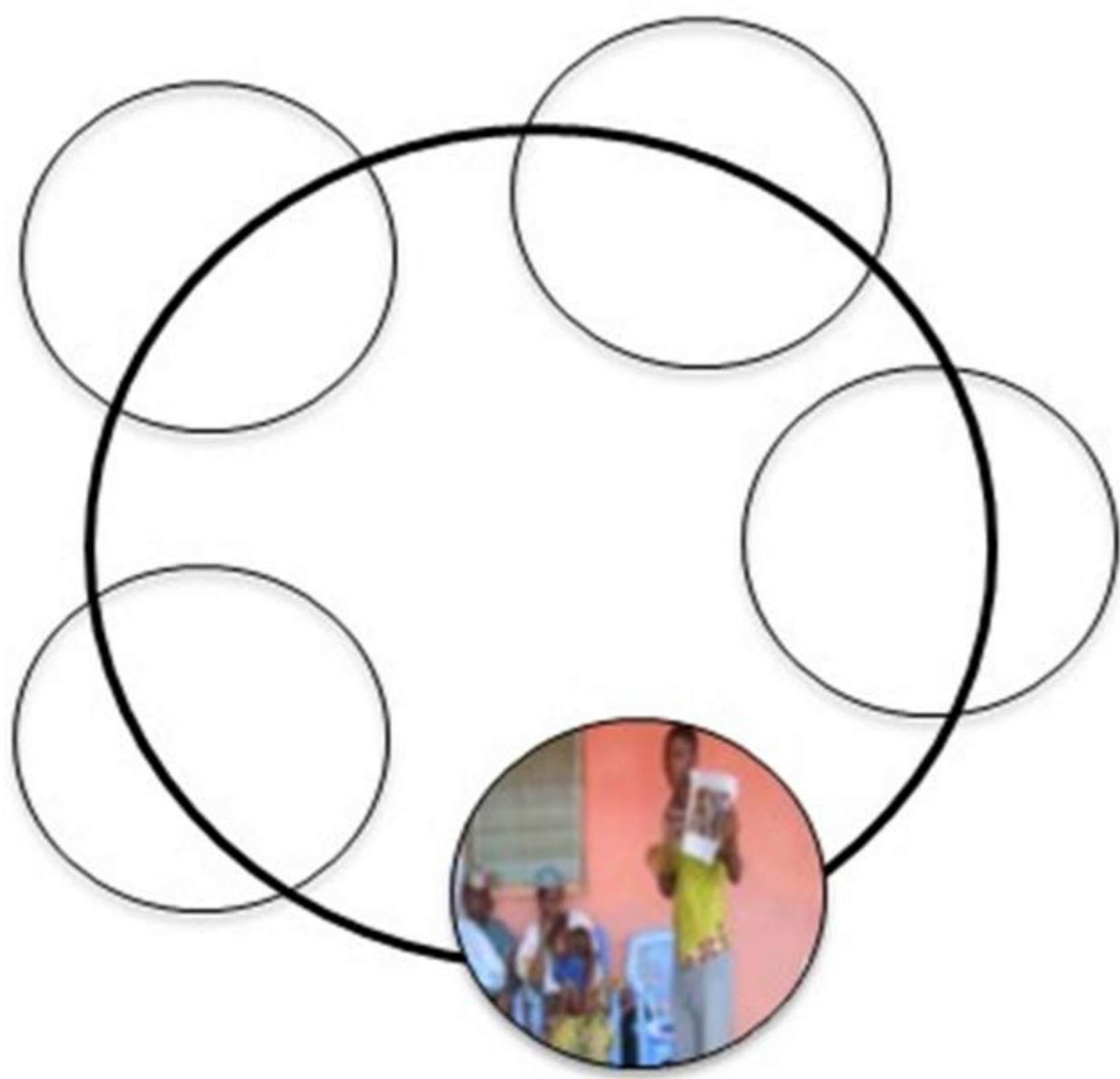
(Colecraft 2017)



Diversity of children's diet

The child's diet was more diverse if

- (i) the mother's diet was diverse
- (ii) the household grew nutrient-rich crops
- (iii) the child was older



Did the intervention contribute to a diverse child's diet?

Yes!

“We were taught how to prepare good food; not just any kind of food. The food must play a specific role in our body. We must eat healthy foods, energy giving foods, body building foods and protective foods. You must eat all these foods every day so that you will be strong and healthy.”

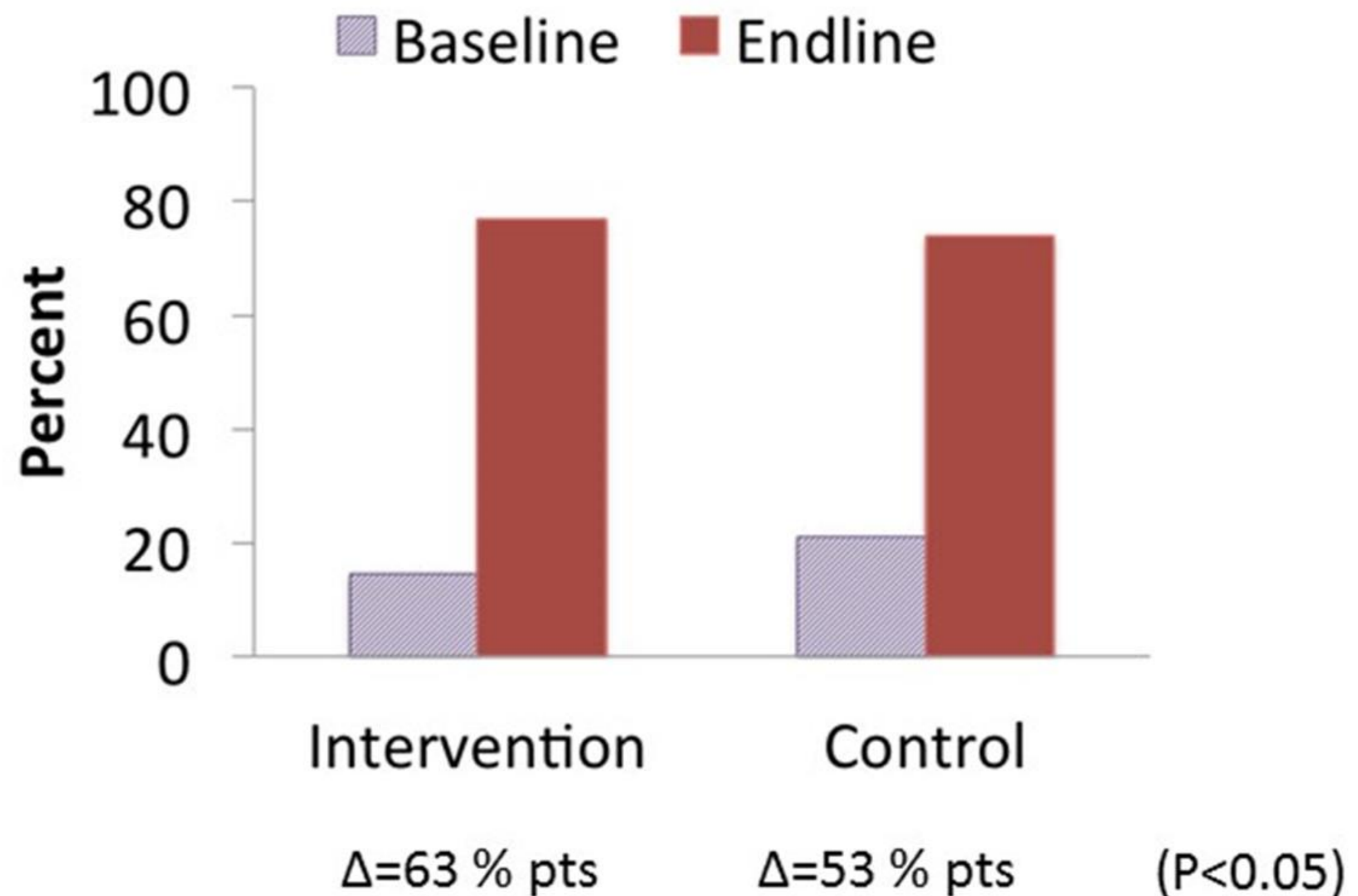
[FGD, Community based Growth Promotion].





Did the intervention contribute to a diverse child's diet?

YES. The change from baseline to endline was greater in the intervention group for diet diversity (≥ 4 foods)





What factors contributed to a diverse diet?

<i>If...</i>	<i>the odds of having a diverse diet was ...</i>	<i>compared to....</i>
Participated in the intervention	↑ (65% higher)	being in the control group
Mother had secondary education	↑ (268% higher)	having no formal education
Lived in a high wealth household	↑ (53% higher)	living in a low wealth household
Mother not married/cohabitation	↓ (69% lower)	being married

Odds ratios were adjusted for clusters and phase of enrollment



Did the intervention contribute to lower food insecurity?

PARTLY. Intervention households in the second year experienced less food insecurity ($p < 0.01$)

“Because at first, you would be there and you would not know where the money will come from before you use it to buy food and eat... you don’t get some but when the chicken were there, if someone comes and buys eggs or even no one buys it and you send one crate of eggs to the market, or two crates, you can buy things to eat [...] the eggs have helped us.”

“Because of [the garden] we did not eat only one-way food. Mmm [smiling] like eating banku every day, eating banku everyday, we don’t eat like that. [smiling]”



Did the intervention contribute to lower child morbidity?

No. Symptoms of illness were related to other factors.

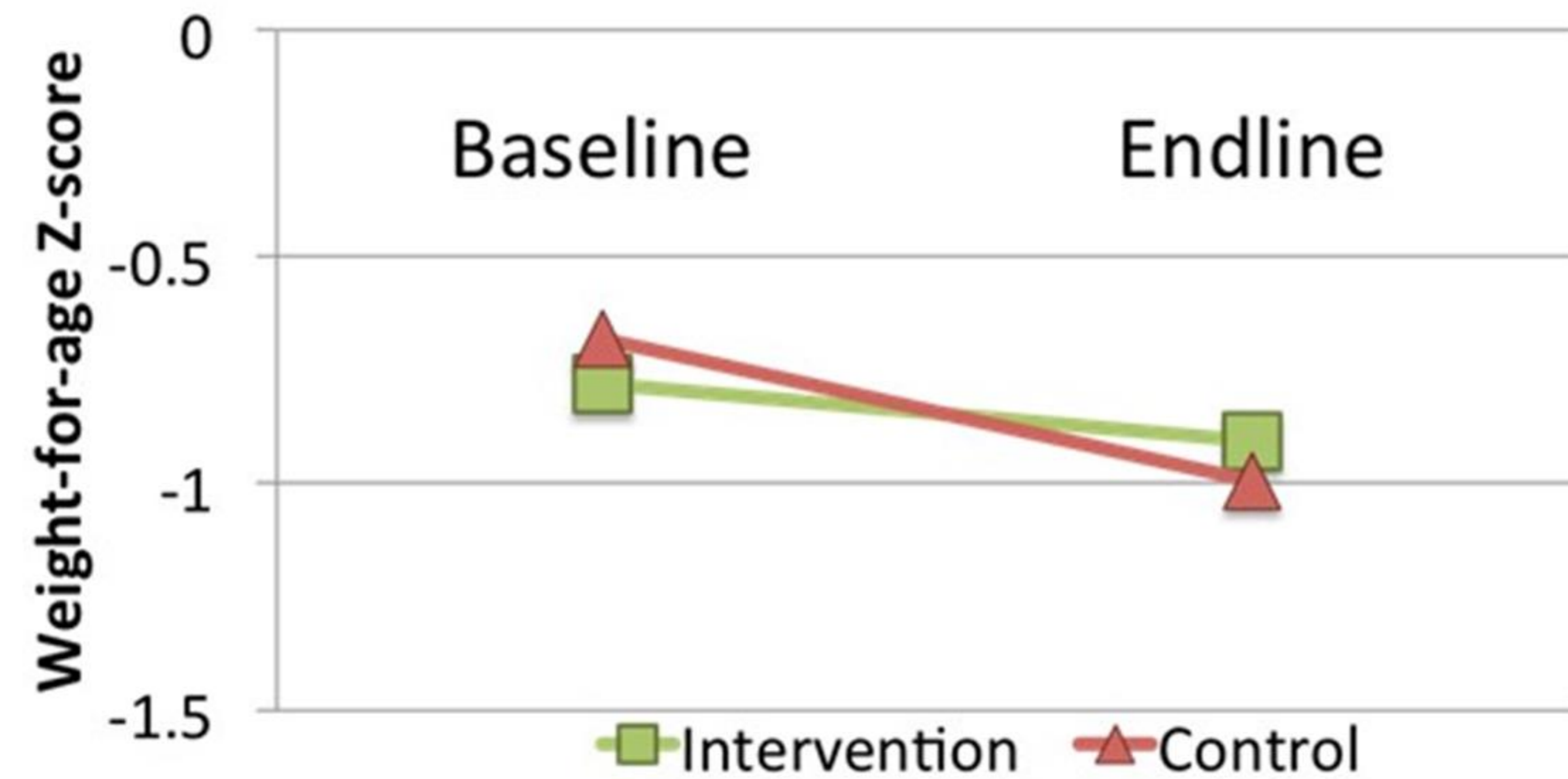
Symptom	Increased risk	Decreased risk
Fever	Past history of fever Higher maternal depression	Male Higher hemoglobin
Cough	Past history of cough Higher maternal depression	
Diarrhea	Higher child age Low maternal diet diversity Higher maternal depression	Higher age when weaned

Adjusted for clusters and phase of enrollment



Did the intervention contribute to better growth indicators?

YES! The intervention improved weight-for-age. It decreased the decline over time.



Adjusted difference due to the intervention

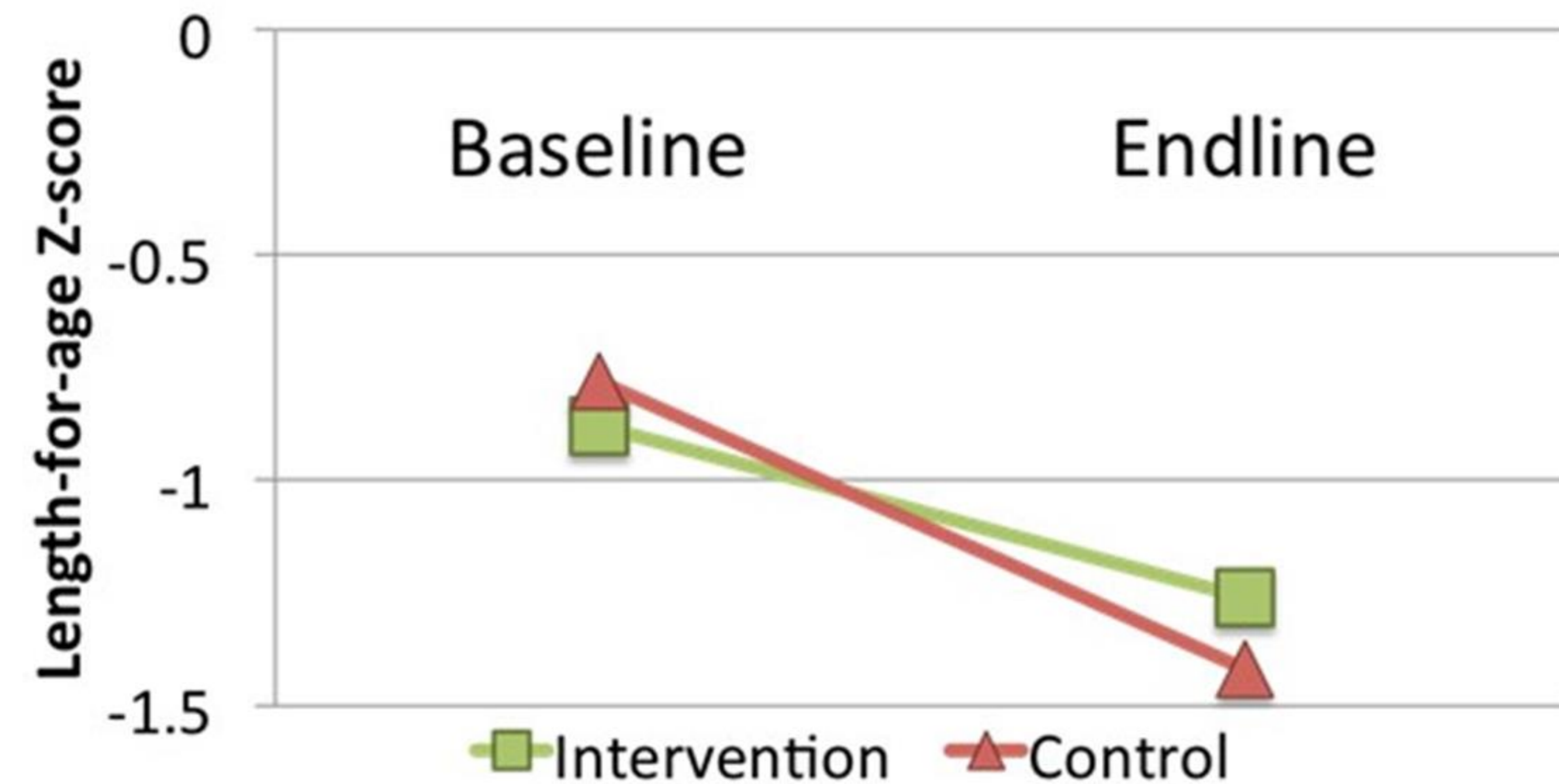
**+0.15 Z-scores
($P < 0.05$)**

Unadjusted baseline-endline: Intervention $\Delta = -0.13$ WAZ
Control $\Delta = -0.32$ WAZ



Did the intervention contribute to better growth indicators?

YES! The intervention improved linear growth. It reduced the decline in length-for-age over time



Adjusted difference due to the intervention

**+0.22 Z-scores
($P < 0.01$)**

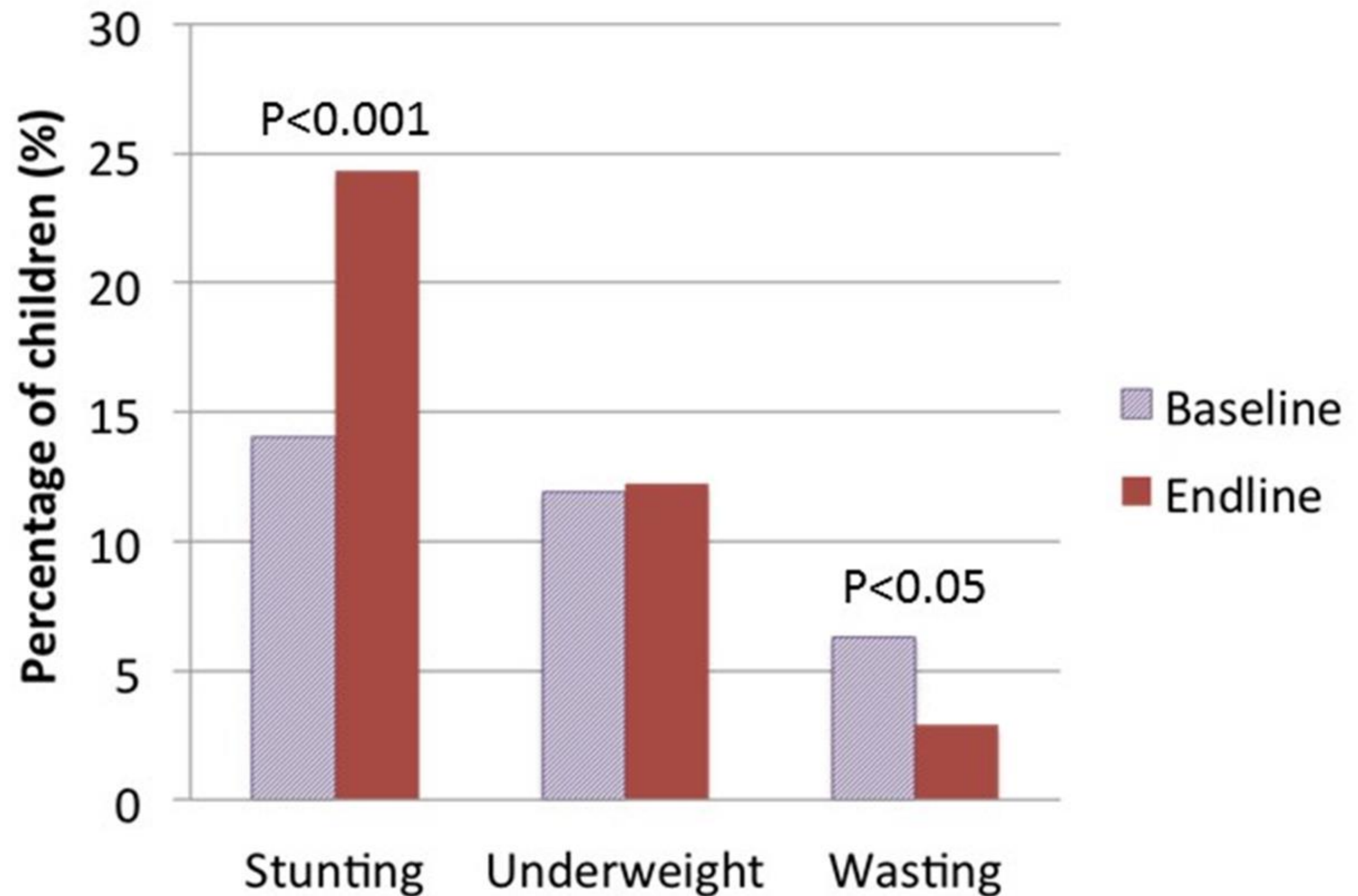
Unadjusted baseline-endline:

Intervention $\Delta = -0.38$ LAZ
Control $\Delta = -0.64$ LAZ



Child growth indicators

Overall, stunting increased ($p < 0.001$) and wasting decreased ($p < 0.05$) over time. The intervention did not affect these rates.



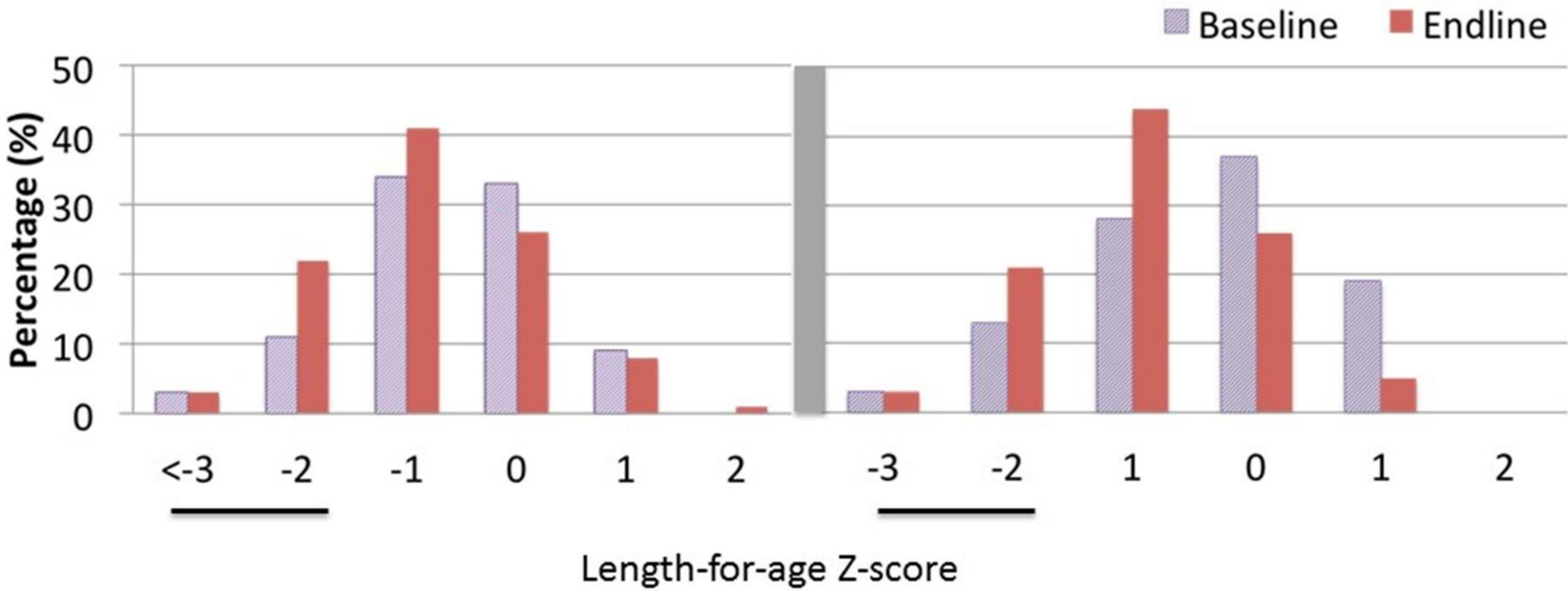
Why did the intervention not affect stunting?



- Most children are > -2 SD cut-off
- Largest changes is above -2 SD

Intervention

Control



Summary

- In this region of rural Ghana, there had been little diversity in children's diets.
- The integrated intervention – nutrition education, income generation, and gardening - resulted in improved children's diet.
- Increased activities for women did not negatively affect time spent on child care.
- The integrated intervention led to improved indicators of nutritional status for children.
- Integrated interventions can be supported through collaborative multi-sector services.



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For Children. For Change. For Life.



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