



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Role of agriculture in achieving human nutrition outcomes: Focus on livestock and animal source foods

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USAID
FROM THE AMERICAN PEOPLE

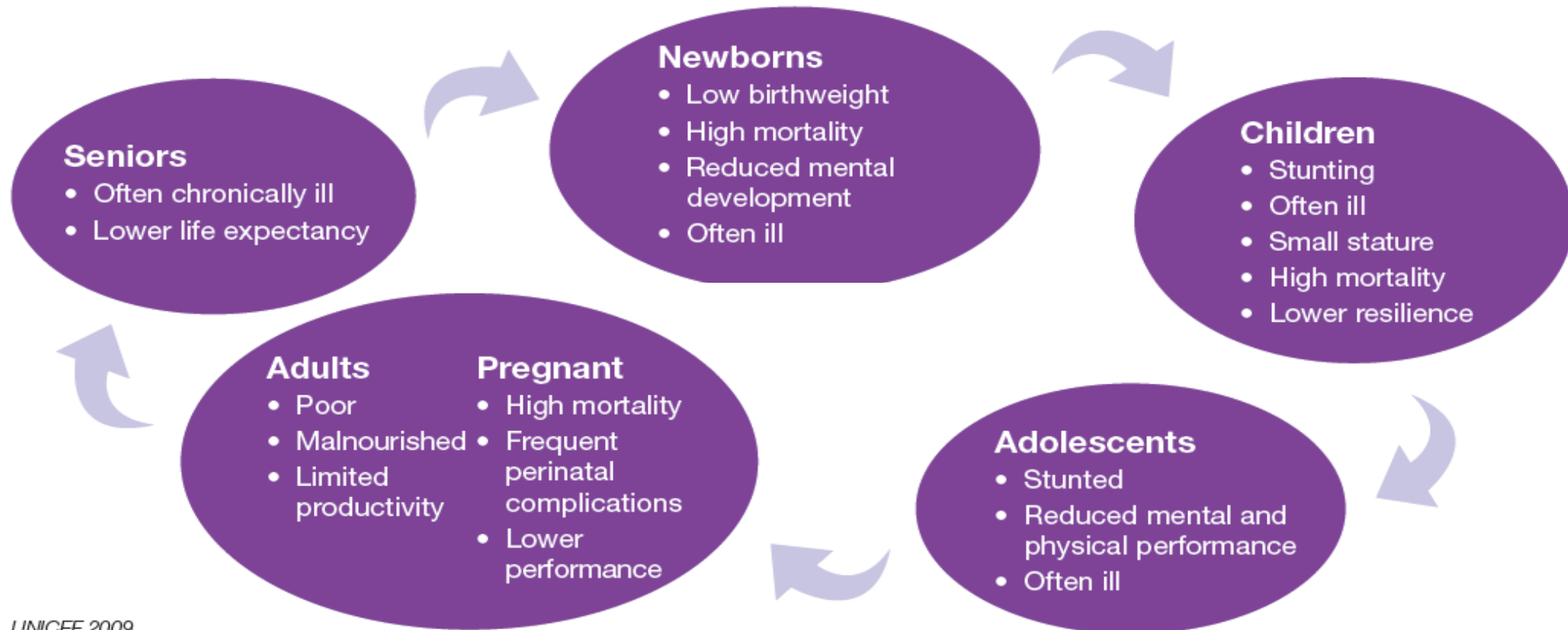


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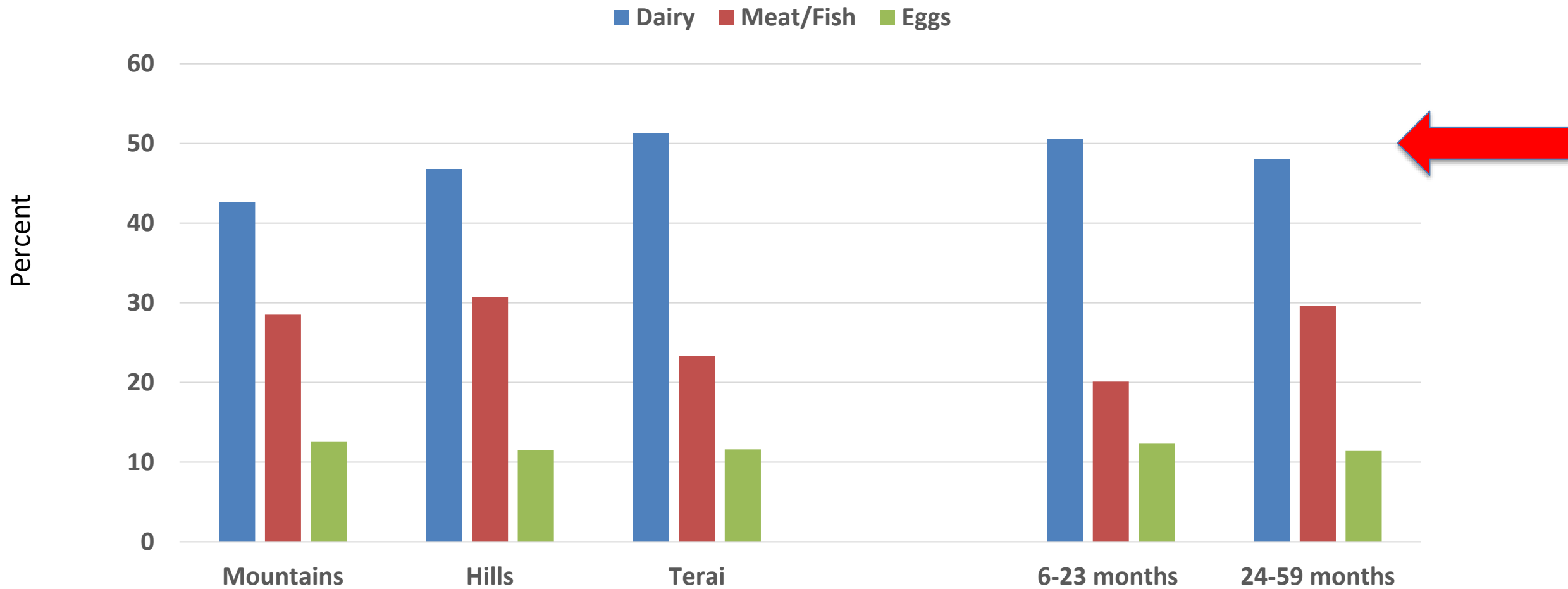
ANIMAL SOURCE FOODS

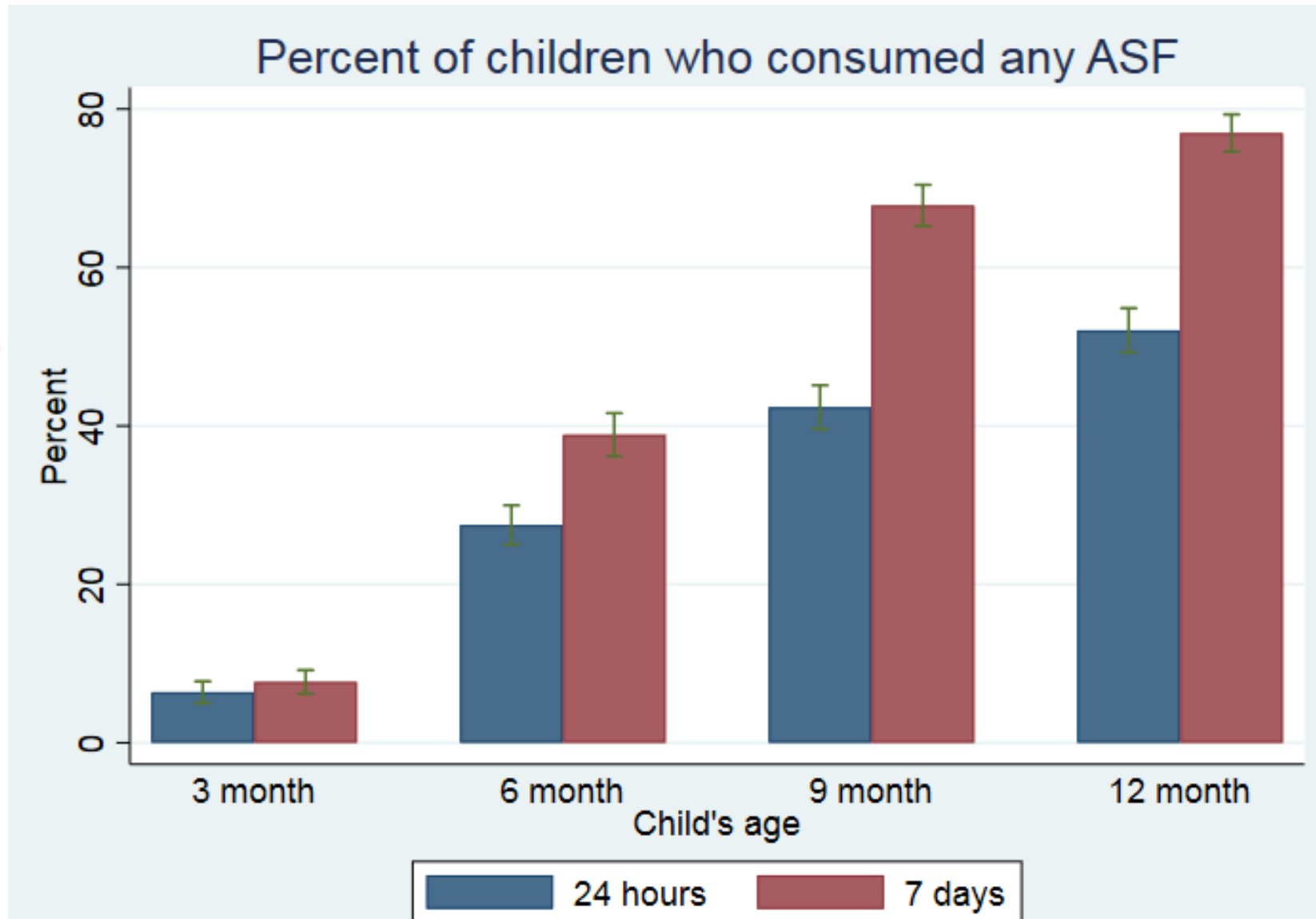
- Sources of high quality protein, micronutrients (iron, zinc, vitamin A, B12, choline, essential amino acids, fatty acids).





PERCENT CHILDREN 6-59 MONTHS CONSUMING ANIMAL SOURCE FOODS





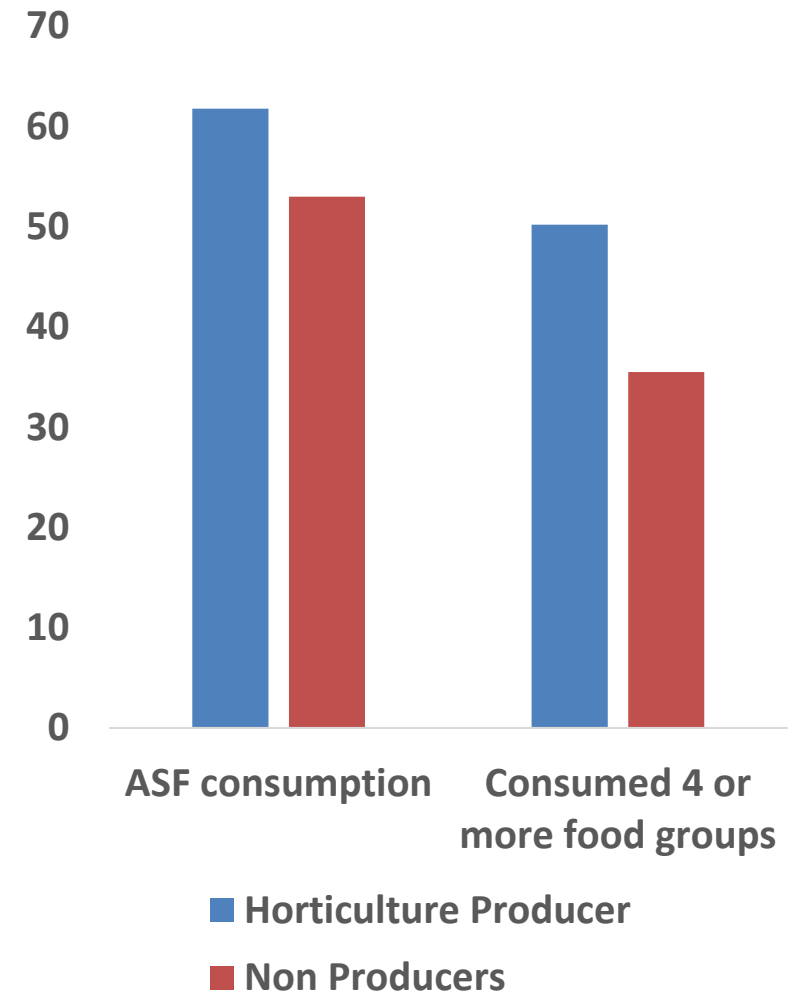
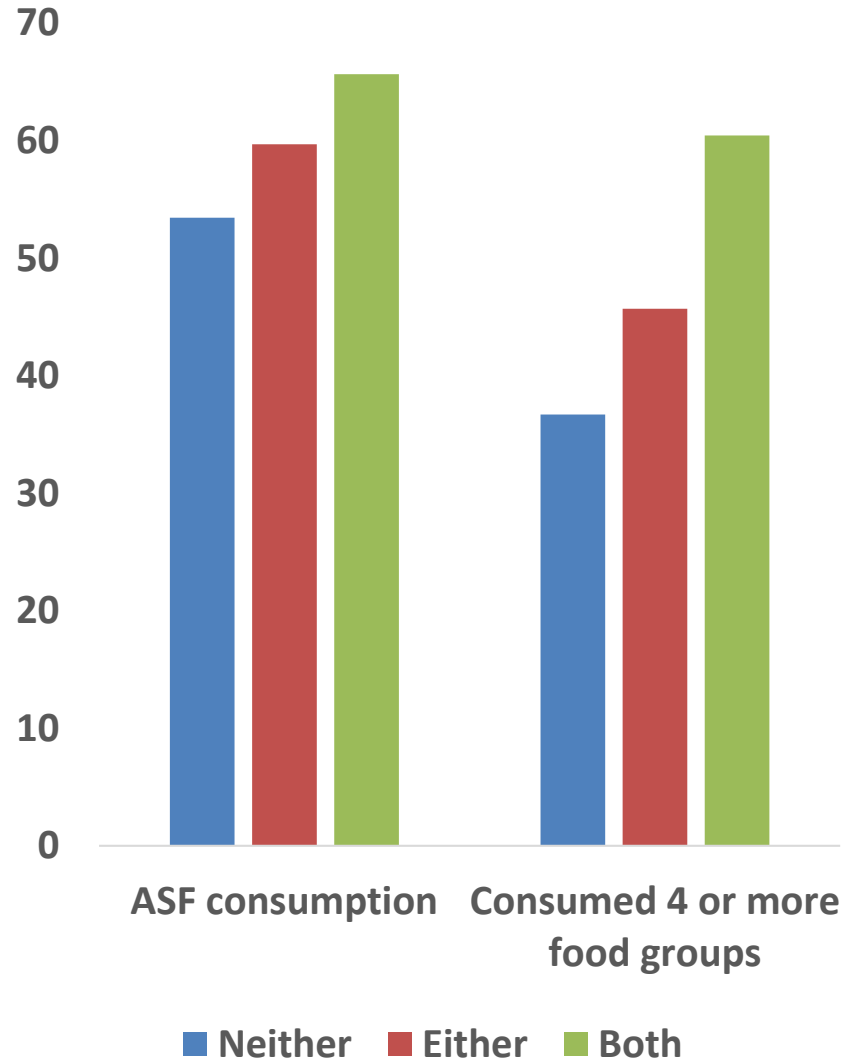
N=1500
infants

Longitudinal
follow-ups
every three
months



Infant Diet By Aquaculture-Horticulture Engagement

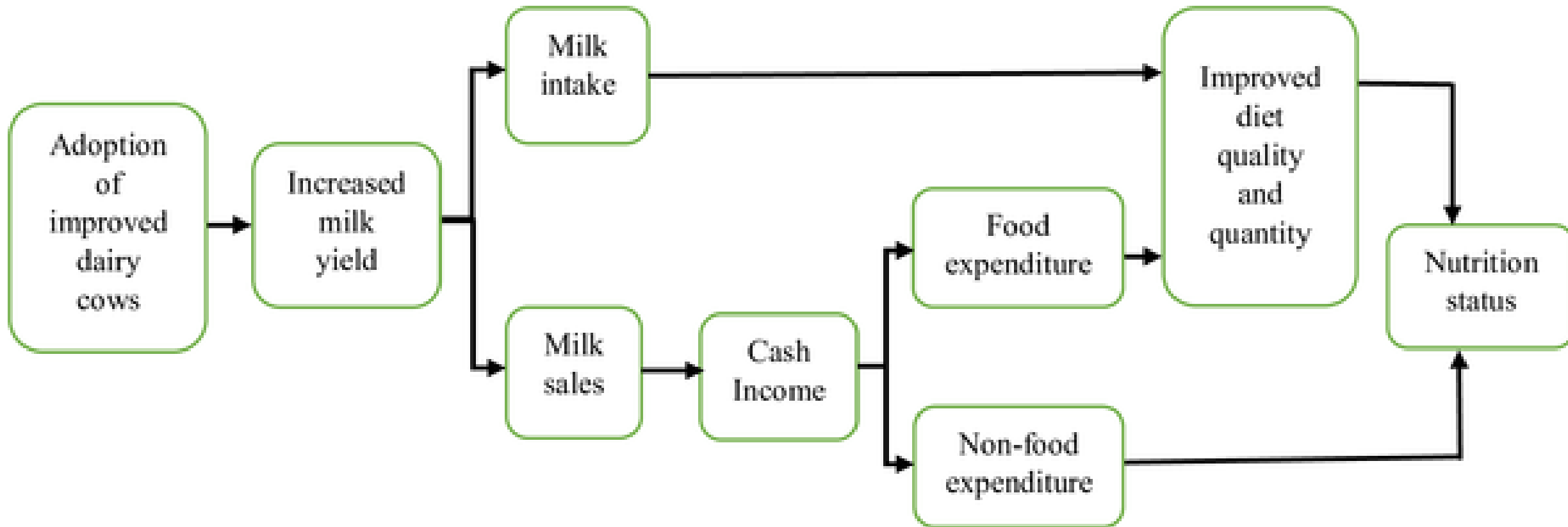
Question: What systemic effect does USAID's support for **aquaculture and horticulture** had on **production of nutrient-dense foods, and their marketing, diets and nutrition?**



Adjusted for wealth, education, age of the child, gender of household head



N=900 households



Kabunga NS, Ghosh S, Webb P (2017) Does ownership of improved dairy cow breeds improve child nutrition? A pathway analysis for Uganda. PLOS ONE 12(11): e0187816. <https://doi.org/10.1371/journal.pone.0187816>
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0187816>



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Outcome	Mean		Average Treatment Effects	Number of Observations	
	Adopters	Non Adopters		Adopters	Non Adopters
Annual Milk Yield (liters/cow)	232.32	63.59	168.73*** (60.23)	149	700
Annual Milk Intake (liters/person)	66.2	27.04	39.16** (17.66)	149	700
Annual Milk Sales (%)	28.65	10.51	18.14*** (3.84)	149	700
Food PCE (UGX, monthly)	10.17	10.02	0.15** (0.08)	149	700
Non Food PCE (log) (Monthly)	9.71	9.58	0.13 (0.07)	145	668
Height for Age Z score	-0.95	-1.43	0.48* (0.26)	108	572
Weight for Age Z score	-0.55	-0.65	0.10 (0.18)	108	572
Weight for height Z score	0.01	0.11	-0.1 (0.10)	102	564



Table 3. (a) Cattle Ownership and Child Malaria in Selected Districts (b) Malaria and Child Anemia in Selected Districts

	Results excluding. Kisoro District	4 Northern districts alone
A: Impact of cattle ownership on child malaria outcomes		
Own Cattle	0.112 (0.056)**	0.102 (0.060)*
Constant	-0.088 (0.877)	0.775 (1.005)
<i>Insig2u Constant</i>	-1.168 (0.156)***	-1.277 (0.176)***
Probability > chi-square	0.000	0.000
Number of child observations	6,078	4,959
B: Malaria impact on child anemia outcomes		
Child has malaria	0.736 (0.045)***	0.693 (0.048)***
Constant	1.091 (0.540)**	2.252 (0.715)***
<i>Insig2u Constant</i>	-2.005 (0.229)***	-2.059 (0.264)***
Probability > chi-square	0.000	0.000
Number of child observations	6,013	4,906

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Figures in parenthesis are standard errors clustered at household level. All other covariates are omitted for brevity. Equation (4) (CRE with control function) was used for this analysis.



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SESSION

- What do we know about nutrition and cognition?
- What are the considerations around food safety with respect to livestock products at household, community and value chain level?
- What are the considerations around human-animal interactions at the household, community level
- What is the role of agricultural extension?
- **What is the role of private sector?**



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