



NATIONAL
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GENERATION AND MOBILIZATION OF NUTRITION
EVIDENCE TO TACKLE MALNUTRITION: FROM DATA TO ACTION

A Low Health Literacy Approach Nutrition Education Intervention Improved Consumption of Animal Source Foods by Mother-Child Pairs: A Cluster-Randomized Controlled Trial

Alemneh Kabeta, Mary Murimi, Kebede Abegaz, Dejene Hailu

Hawassa University

Addis Ababa, Dec 8-10, 2021

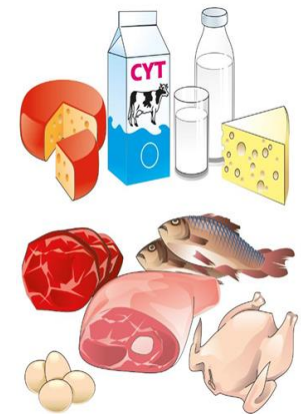
Outline

- Introduction
- Objective
- Materials and Methods
- Results
- Conclusions
- Recommendations
- Acknowledgements

Introduction: Why ASF coupled with DD?


- ASF: rich source of bioavailable nutrients, small amount contributes a lot, complement plant-based dishes
- 6/12-HDSS, 3/10 or 4/9 for MDD-(W) and 3/7-MDD of IYC are ASF
- Inclusion of ASF in DDs: ↓ Child & Maternal undernutrition & adverse pregnancy outcomes, and ↑ Breast Milk nutrient concentration
- But ASF are the most limited food groups and considered as food for special events in Ethiopia

	Flesh/Meat %	Eggs %	Dairy%	Fish%
Household	32.5	13.8	34.3	1.1
Women	17.1 Meat and Fish	18.2	12.4	
Children	<5 Meat and Fish	<25	<45	



- Improving consumption of ASF as part of DDs: recommended to be among exercises to halt malnutrition

Methods and Materials: Summary

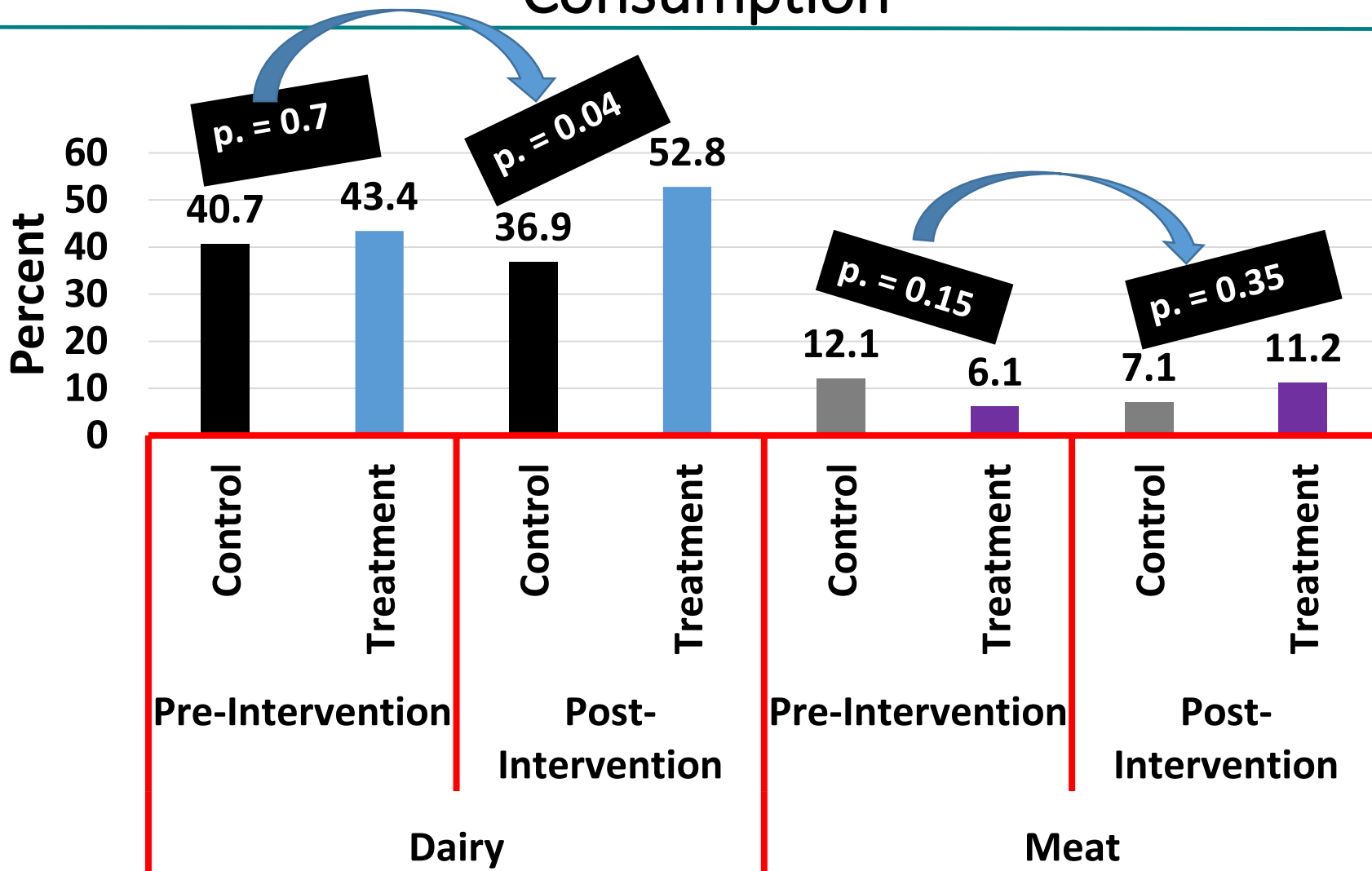
Specific Objectives	Study Design	Sample Size	Participants	Statistical Analysis
<p>Primary: To evaluate effect of nutrition education intervention on the consumption of ASF by mothers and children</p>	<p>R C T</p>	190 (90/90)	Mother-Child Pairs	<ul style="list-style-type: none"> - Descriptive - χ^2 - t-test
<p>Secondary: To evaluate effect of nutrition education intervention on nutritional status of mothers and children</p>		190 (90/90)	Mother-Child Pairs	<p>Ethics</p> 

Computer Applications: SPSS, Excel and WHOAnthro

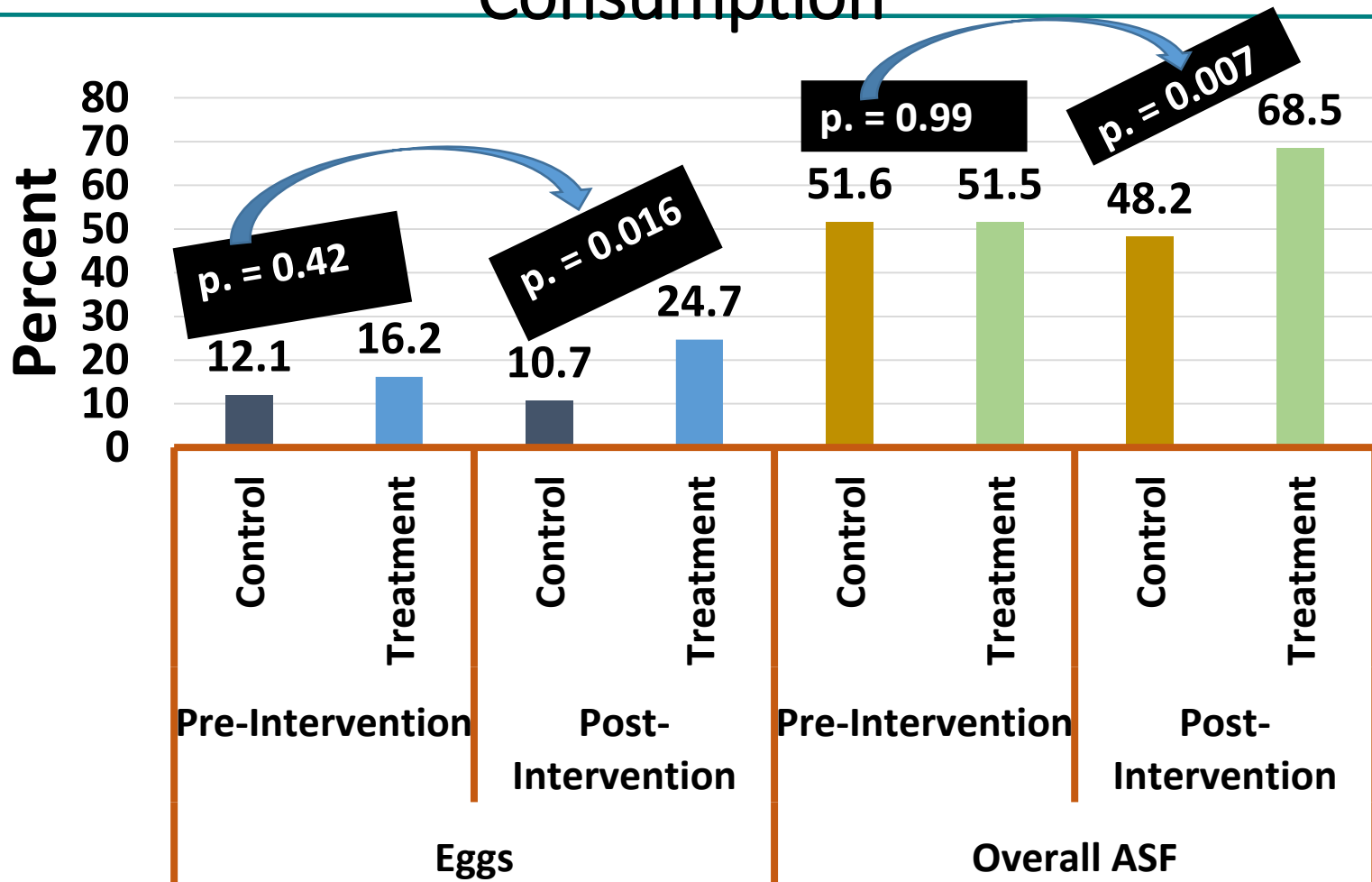
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Results

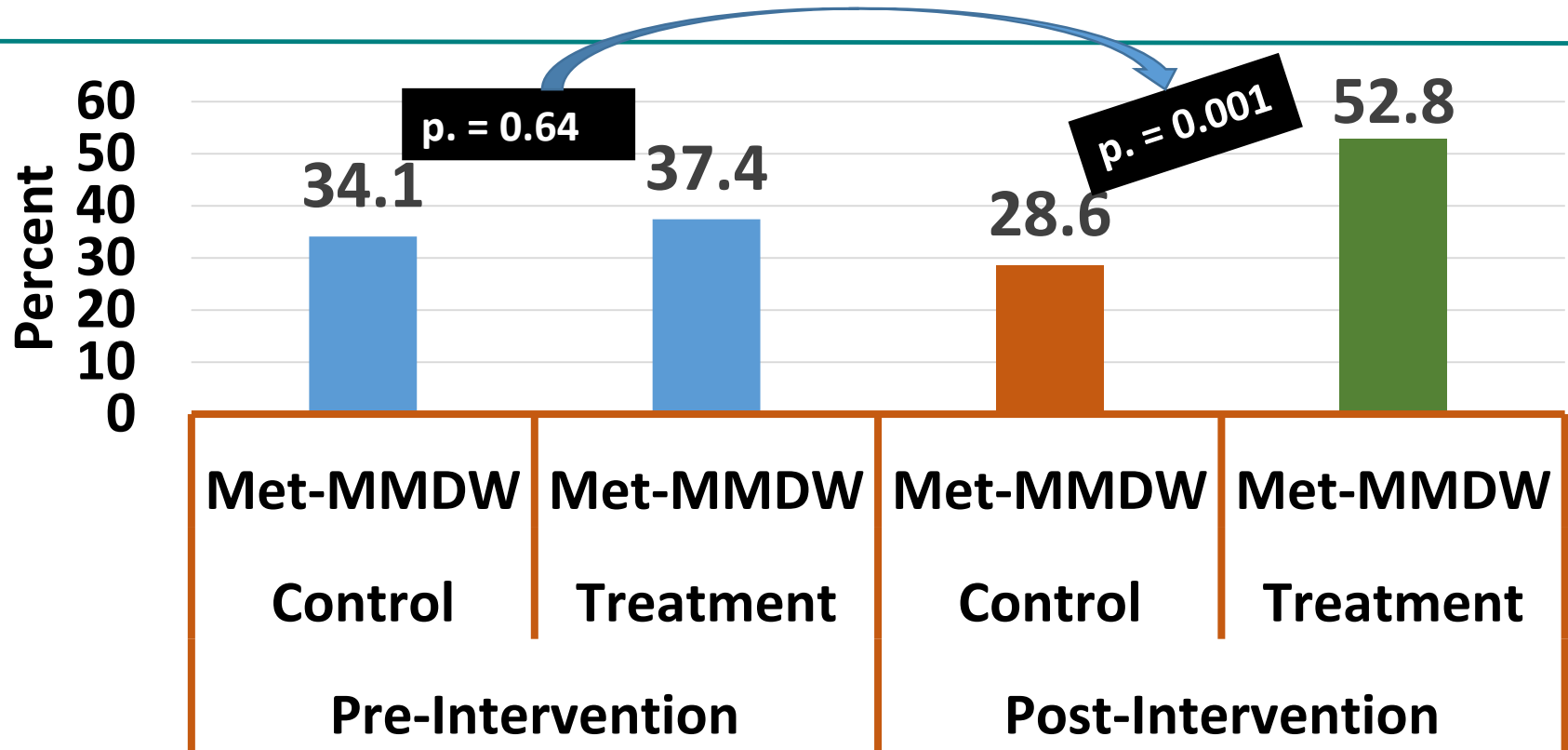
Effect of NE on Maternal Dairy and Meat Consumption



Effect of NE on Maternal Eggs and Overall ASF Consumption

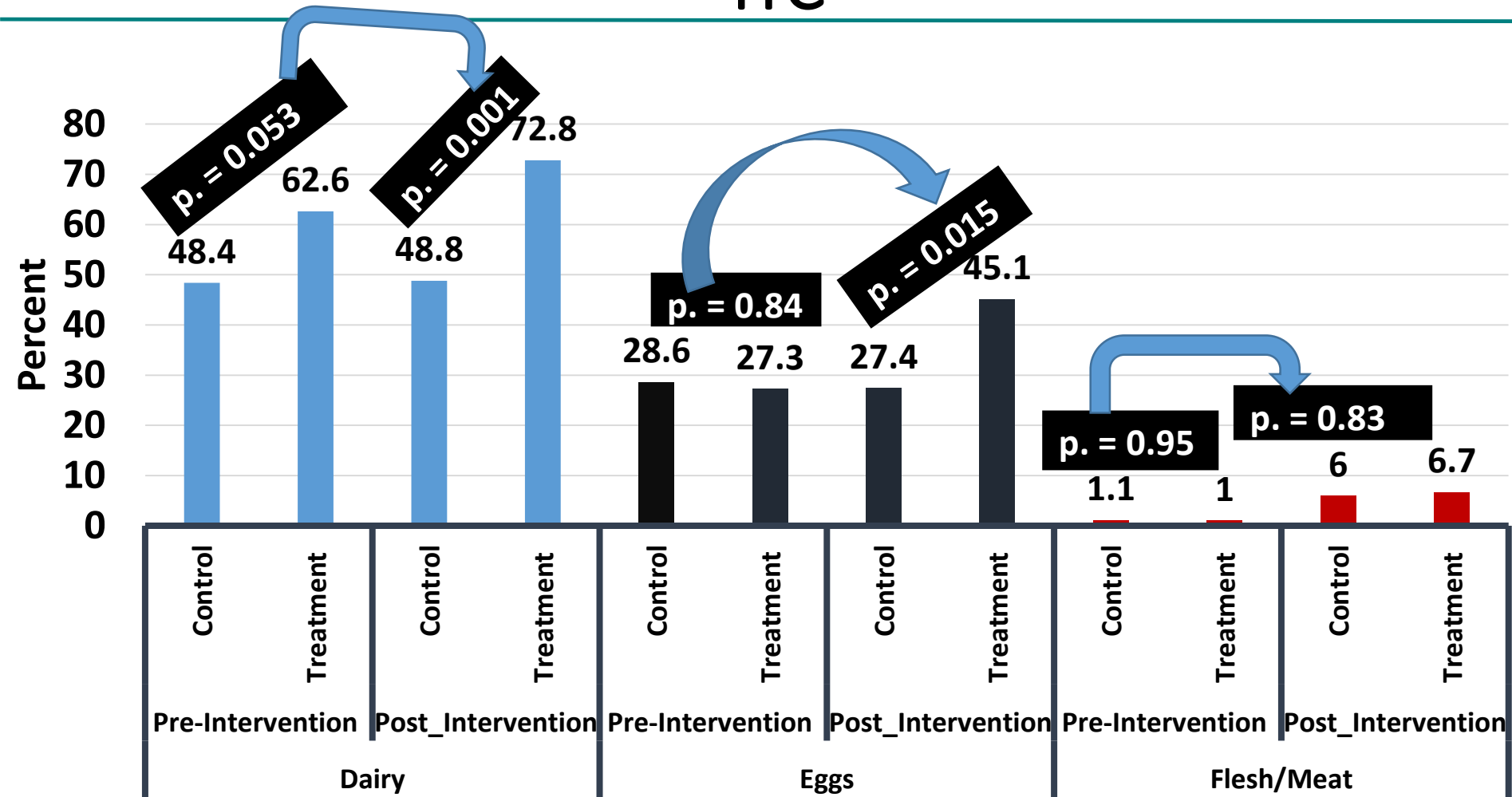


Effect of NE on Maternal MDD

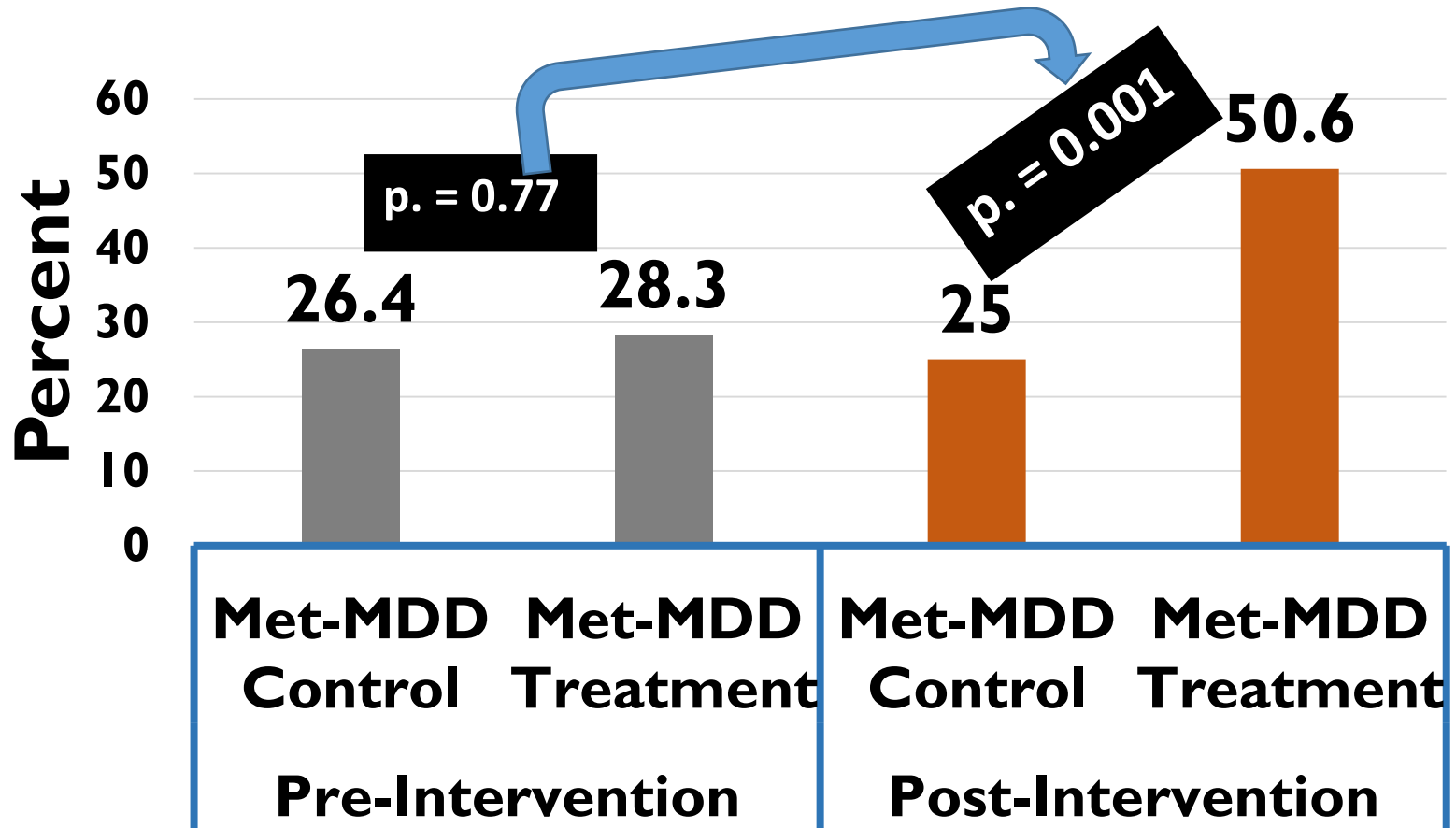


Mean(SD)	Variable	Pre-Intervention (n=190)			Post-Intervention (n=173)		
		Treatment (n=99)	Control (n=91)	p	Treatment (n=89)	Control (n=84)	p
	MDDW [Mean(SD)]	4.27(1.52)	4.28(1.68)	0.96	4.56(1.16)	3.93(1.14)	0.001

Effect of NE on Consumption of ASF by the IYC



Effect of NE on MDD of IYC



Effect of NE on Mean score of MDD and Nutritional Status of the IYC

Variables	Baseline (n=190)			Endline (n=173)		
	Treatment n=99	Control n=91	p	Treatment , n=89	Control, n=84	p
MDD score [Mean(SD)]	2.64(1.48)	2.54(1.46)	0.65	3.43(1.09)	2.61(1.25)	<0.001
Weight [Mean(SD)]	8.57(1.58)	8.24(1.29)	0.13	11.03(1.79)	10.54(1.47)	0.048
Height [mean(SD)]	70.98(4.29)	70.83(4.93)	0.82	82.34(4.23)	81.80(4.25)	0.40
WHZ [Mean(SD)]	-0.06(1.67)	-0.33(1.21)	0.20	0.26(1.43)	-0.34(1.14)	0.003
HAZ [Mean(SD)]	-0.99(1.40)	-1.33(1.28)	0.10	-0.87(1.32)	-1.23(-1.32)	0.949
WAZ [Mean(SD)]	-0.58(1.48)	-0.85(1.26)	0.06	-0.42(1.28)	-0.85(1.15)	0.022

Conclusions

- A LHLANE improved;
 - ✓ Consumption of dairy and eggs by mothers and children and DD of mothers and children, but not consumption of meat.
 - ✓ WHZ and WAZ of children, but not HAZ of children and NS (BMI and MUAC) of mothers.

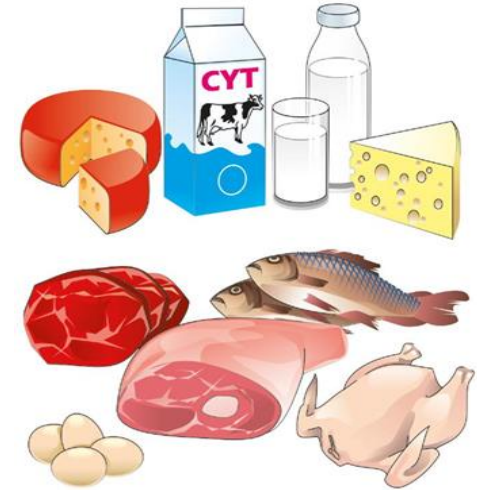
Recommendations

- National Nutrition Policy and Programs should focus on nutrition education and operations can use a LHHA to promote the inclusion of ASF in diets integrated with activities to;
 - ✓ boost healthy agricultural productivity-emphasis to the livestock sector
 - ✓ revise active nutrition and food security programs in rural settings in view of inclusion of ASF in diets
 - ✓ empower women through education and engagement in small scale businesses like livestock husbandry, feed production and livestock and ASF marketing value chain

Acknowledgments

- Hawassa University
- Study District Offices Administrative, Health and Agriculture Offices
- Study Participants

Let us work for ASF
inclusive diversified
diet for better
nutritional status of
primarily women
and children and
possibly to all
citizens!



Thank
You!