

Appendix I

**Figure 1:** Trends in infant and young child feeding (IYCF) indicators across time points by intervention participation. A-B: Mean number of food groups and meals per day consumed by child, with standard deviation shown, over three time points by intervention participation. C-F: Probability of meeting binary IYCF indicators, with 95% confidence intervals shown, over three time points by intervention participation. Baseline: Intervention (n=48), Comparison (n=178), Total (n=226); Immediate Post: Intervention (n=48), Comparison (n=174), Total (n=222); 6 Months Post: Intervention (n=45), Comparison (n=169), Total (n=214).

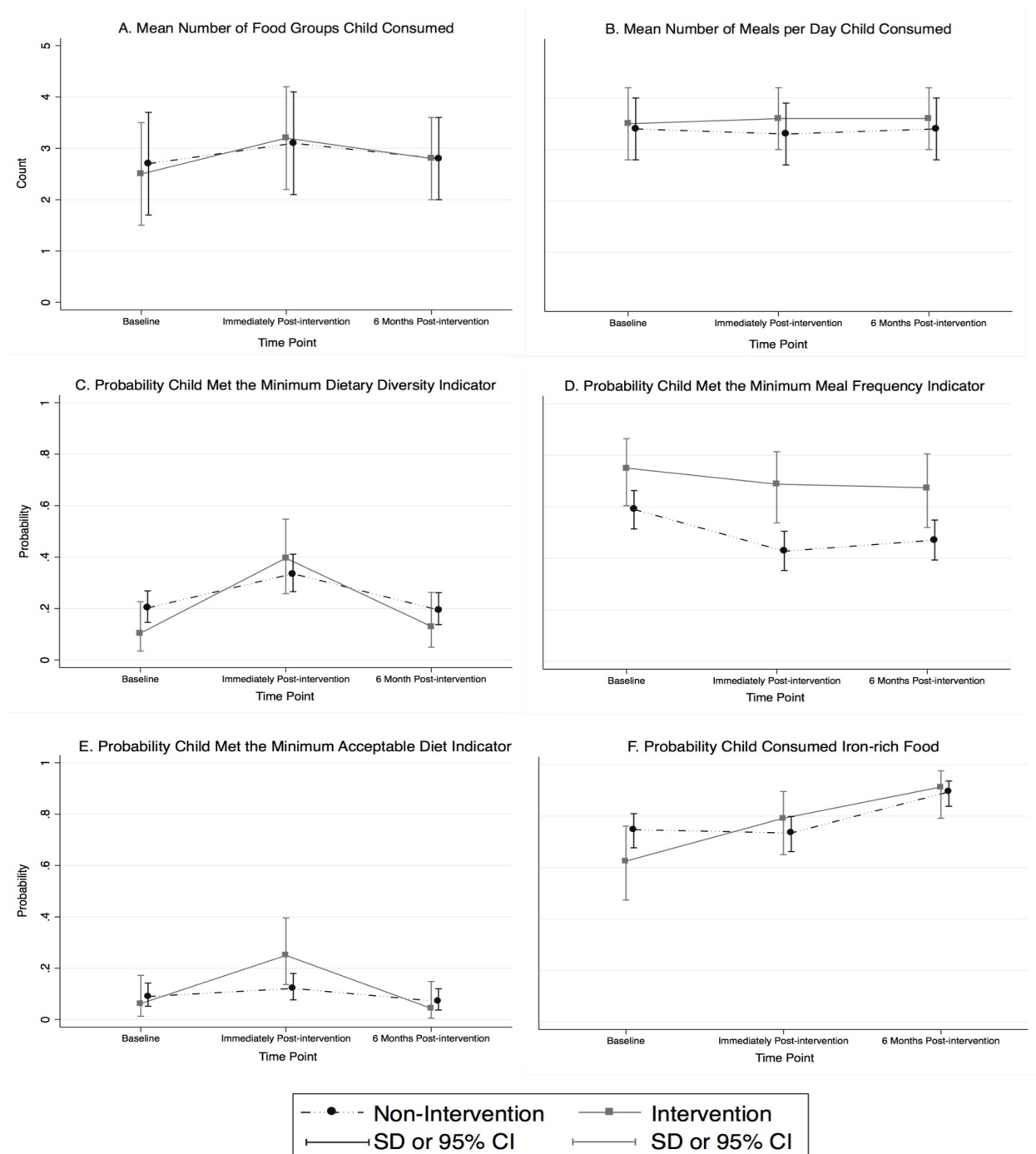


Table 1. Descriptive variables for primary caregivers such as age, sex, marital status, relationship to the child, and educational status were compared between intervention and comparison groups to determine their similarity at baseline.

<b>Dietary Outcome Measure<sup>b</sup></b>	<b>Baseline (n=227)</b>	<b>Immediately Post (n=222)</b>	<b>6 Months Post (n=214)</b>
<b>Number of Food Groups Per Day</b>	$\beta$ (95% CI)	$\beta$ (95% CI)	$\beta$ (95% CI)
Intervention Participation	-0.16 (-0.47, 0.15)	0.13 (-0.19, 0.45)	-0.01 (-0.28, 0.25)
Breastfed Yesterday	-0.54 (-0.89, -0.20)	-0.40 (-0.83, 0.03)	-0.42 (-1.23, 0.39)
Caregiver's Age (years)	-0.01 (-0.03, 0.01)	0.00 (-0.02, 0.02)	0.01 (-0.01, 0.02)
<b>Caregiver's Education<sup>c</sup></b>			
< Primary	-0.18 (-0.47, 0.11)	0.02 (-0.29, 0.32)	-0.08 (-0.34, 0.17)
Primary		<i>Comparison Group</i>	
> Primary	0.14 (-0.20, 0.47)	0.36 (0.01, 0.71)	-0.17 (-0.46, 0.12)
Child Age (months)	0.01 (-0.01, 0.04)	-0.00 (-0.02, 0.02)	0.01 (-0.01, 0.03)
Child Gender (Female=1)	0.06 (-0.19, 0.31)	-0.06 (-0.33, 0.20)	0.04 (-0.18, 0.25)
Food Insecurity Score	-0.02 (-0.05, 0.01)	-0.02 (-0.05, 0.02)	-0.02 (-0.04, 0.00)
Household Size	0.09 (0.01, 0.17)	0.09 (0.01, 0.17)	0.01 (-0.06, 0.07)
Male Present (Yes)	-0.29 (-0.88, 0.30)	0.48 (-0.13, 1.10)	0.09 (-0.40, 0.58)
<b>Met Minimum Meal Frequency Indicator</b>	OR (95% CI)	OR (95% CI)	OR (95% CI)
Intervention	2.21 (1.01, 4.86)	2.85 (1.39, 5.81)	2.24 (1.09, 4.60)
Breastfed Yesterday	11.20 (4.10, 30.64)	3.34 (1.17, 9.53)	0.90 (0.11, 7.40)
Caregiver's Age (years)	0.97 (0.93, 1.02)	1.00 (0.95, 1.04)	1.03 (0.99, 1.09)
<b>Caregiver's Education<sup>c</sup></b>			
< Primary	1.16 (0.57, 2.34)	0.74 (0.38, 1.46)	0.69 (0.36, 1.34)
Primary		<i>Comparison Group</i>	
> Primary	1.39 (0.60, 3.22)	1.00 (0.47, 2.13)	1.19 (0.56, 2.55)
Child Age (months)	1.02 (0.96, 1.07)	0.95 (0.91, 1.00)	0.99 (0.95, 1.03)
Child Gender (Female=1)	0.85 (0.47, 1.57)	1.02 (0.58, 1.81)	0.60 (0.34, 1.05)

Food Insecurity Score	0.99 (0.92, 1.06)	1.00 (0.93, 1.07)	0.99 (0.93, 1.05)
Household Size	1.10 (0.92, 1.33)	1.05 (0.88, 1.24)	0.96 (0.81, 1.14)
Male Present (Yes)	1.25 (0.28, 5.61)	1.72 (0.45, 6.56)	1.45 (0.14, 14.72)
<b>Met Minimum Dietary Diversity Indicator</b>	OR (95% CI)	OR (95% CI)	OR (95% CI)
Intervention	0.46 (0.16, 1.28)	1.39 (0.70, 2.80)	0.64 (0.24, 1.69)
Breastfed Yesterday	0.27 (0.09, 0.82)	0.60 (0.22, 1.66)	<i>omitted</i>
Caregiver's Age (years)	1.00 (0.94, 1.06)	1.02 (0.97, 1.07)	0.97 (0.91, 1.03)
Caregiver's Education <sup>c</sup>			
< Primary	0.42 (0.17, 1.03)	0.91 (0.48, 1.81)	1.01 (0.45, 2.28)
Primary		<i>Comparison Group</i>	
> Primary	1.21 (0.50, 2.94)	2.46 (1.15, 5.24)	0.88 (0.34, 2.33)
Child Age (months)	0.98 (0.92, 1.04)	1.00 (0.94, 1.03)	1.04 (0.99, 1.09)
Child Gender (Female=1)	0.96 (0.47, 1.97)	0.87 (0.48, 1.56)	1.49 (0.72, 3.08)
Food Insecurity Score	0.96 (0.87, 1.04)	1.00 (0.93, 1.07)	1.00 (0.93, 1.09)
Household Size	1.16 (0.93, 1.44)	1.21 (1.01, 1.45)	1.09 (0.87, 1.36)
Male Present (Yes)	1.41 (0.15, 13.49)	3.36 (0.63, 18.02)	<i>omitted</i>
<b>Met Minimum Acceptable Diet Indicator</b>	OR (95% CI)	OR (95% CI)	OR (95% CI)
Intervention	0.68 (0.18, 2.57)	2.28 (0.97, 5.33)	0.54 (0.11, 2.55)
Breastfed Yesterday	0.68 (0.18, 2.59)	1.56 (0.48, 5.10)	<i>omitted</i>
Caregiver's Age	1.07 (0.99, 1.15)	1.03 (0.97, 1.09)	1.00 (0.91, 1.09)
Caregiver's Education <sup>c</sup>			
< Primary	0.20 (0.05, 0.77)	1.64 (0.58, 4.60)	1.29 (0.37, 4.54)
Primary		<i>Comparison Group</i>	
> Primary	0.54 (0.16, 1.81)	4.12 (1.48, 11.48)	1.04 (0.23, 4.70)
Child Age (months)	0.93 (0.84, 1.02)	0.98 (0.92, 1.05)	1.00 (0.92, 1.09)
Child Gender (Female=1)	0.62 (0.22, 1.73)	1.44 (0.65, 3.19)	0.91 (0.30, 2.73)
Food Insecurity Score	0.89 (0.78, 1.01)	0.99 (0.90, 1.08)	0.97 (0.86, 1.10)

Household Size	1.15 (0.83, 1.57)	0.97 (0.76, 1.23)	0.99 (0.71, 1.39)
Male Present (Yes)	<i>omitted</i>	0.36 (0.04, 3.23)	<i>omitted</i>
<b>Met Consumption of Iron-rich Food Indicator</b>	OR (95% CI)	OR (95% CI)	OR (95% CI)
Intervention	0.62 (0.31, 1.26)	1.37 (0.61, 3.07)	1.71 (0.48, 6.45)
Breastfed Yesterday	0.87 (0.39, 1.94)	1.27 (0.45, 3.57)	0.25 (0.01, 4.62)
Caregiver's Age	1.00 (0.95, 1.05)	<b>0.95 (0.91, 1.00)</b>	0.98 (0.90, 1.07)
Caregiver's Education <sup>c</sup>			
< Primary	1.05 (0.52, 2.15)	1.37 (0.64, 2.91)	3.71 (1.00, 13.81)
Primary		<i>Comparison Group</i>	
> Primary	1.13 (0.49, 2.59)	1.12 (0.48, 2.57)	0.71 (0.22, 2.29)
Child Age (months)	1.06 (1.00, 1.13)	1.03 (0.98, 1.08)	1.16 (1.06, 1.27)
Child Gender (Female=1)	1.13 (0.61, 2.06)	0.87 (0.46, 1.65)	1.39 (0.51, 3.81)
Food Insecurity Score	1.02 (0.94, 1.10)	0.98 (0.91, 1.06)	0.91 (0.82, 1.01)
Household Size	0.96 (0.79, 1.15)	1.08 (0.90, 1.29)	1.15 (0.81, 1.65)
Male Present (Yes)	0.66 (0.15, 2.89)	3.23 (1.00, 10.48)	<i>omitted</i>

a) Statistical significance with an  $\alpha < 0.05$  indicated in boldface. b) See WHO 2008 for definition of IYCF indicators. c) < Primary indicates not attending or completing primary level, > Primary includes attending secondary level and attending some college and/or completing a certificate, degree or diploma.

## Appendix II

**Table 1.** Comparison of sociodemographic characteristics of adult primary caregivers at baseline.

Adult Variables	Intervention (n=47)	Comparison	Total	P-value
	Mean (SD) or N(%)	(n=176) Mean (SD) or N(%)	(n = 223) Mean (SD) or N(%)	
Mean Age (Years)	27.8 (8.1)	29.2 (6.7)	28.9 (7.0)	p = 0.07†
Sex (Female)	47 (100%)	175 (99.4%)	222 (99.6%)	p = 1.00 <sup>δ</sup>
Religion				
Christian	46 (97.9%)	176 (100%)	222 (99.6%)	
Muslim	1 (2.1%)	0 (0%)	1 (0.5%)	p = 0.21 <sup>δ</sup>
Currently Married <sup>a</sup>	45 (95.7%)	154 (88.0%)	199 (89.2%)	p = 0.12 <sup>δ</sup>
Pregnant <sup>b</sup>	2 (4.3%)	11 (6.3%)	13 (5.8%)	p = 1.00 <sup>δ</sup>
Head of Household	5 (10.6%)	34 (19.3%)	39 (17.5%)	p = 0.20 <sup>δ</sup>
Number of People in Household	5.5 (1.3)	5.9 (1.9)	5.8 (1.8)	p = 0.16†
Food Insecurity Score (HFIAS) <sup>c</sup>	7.1 (3.6)	8.6 (4.5)	8.3 (4.4)	p = 0.05†
Adult Male Present	46 (97.9%)	163 (92.6%)	209 (93.7)	p = 0.31 <sup>δ</sup>
Relationship to Child				
Mother	45 (95.7%)	167 (94.9%)	212 (95.1%)	
Grandmother	2 (4.3%)	8 (4.1%)	10 (4.5%)	
Father	0 (0%)	1 (0.6%)	1 (0.5%)	p = 1.00 <sup>δ</sup>
Highest Education Level <sup>d</sup>				
< Primary	19 (40.3%)	71 (40.3%)	90 (40.4%)	
Primary	16 (34.0%)	66 (37.5%)	82 (36.8%)	
> Primary	12 (25.5%)	39 (22.2%)	51 (22.9%)	p = 0.86□
Asset Index <sup>e</sup>	2.0 (1.0)	2.0 (0.9)	2.0 (0.9)	p = 0.54†

† Wilcoxon Rank-Sum Test   <sup>δ</sup> Fisher's Exact Test   □ Chi2 Test

a) "Currently Married" includes participants who are remarried and married living apart; it excludes participants who are never married, widowed, divorced or separated. b) Pregnancy status naturally changes over the course of the study, however the average percentage of women who are pregnant at any given data point remains consistent. c) Household Food Insecurity Access Scale score ranges from 0, food secure, to 27, severely food insecure (Coates, Swindale, & Bilinsky 2007); in the study sample HFIAS scores ranged from 0 to 22. d) "< Primary" indicates not attending or completing primary level, "> Primary" includes attending secondary level and attending some college and/or completing a certificate, degree or diploma. e) Asset index is a principal components analysis of specific assets in the household, used here as a proxy for socioeconomic status. It includes household ownership of a bed, wall unit or cupboard, sofa without cushions, and sofa with permanent cushions. A higher number indicates a higher socioeconomic status. The Asset index ranged from 0 to 4.

**Table 2.** Comparison of sociodemographic characteristics of child participants at baseline.

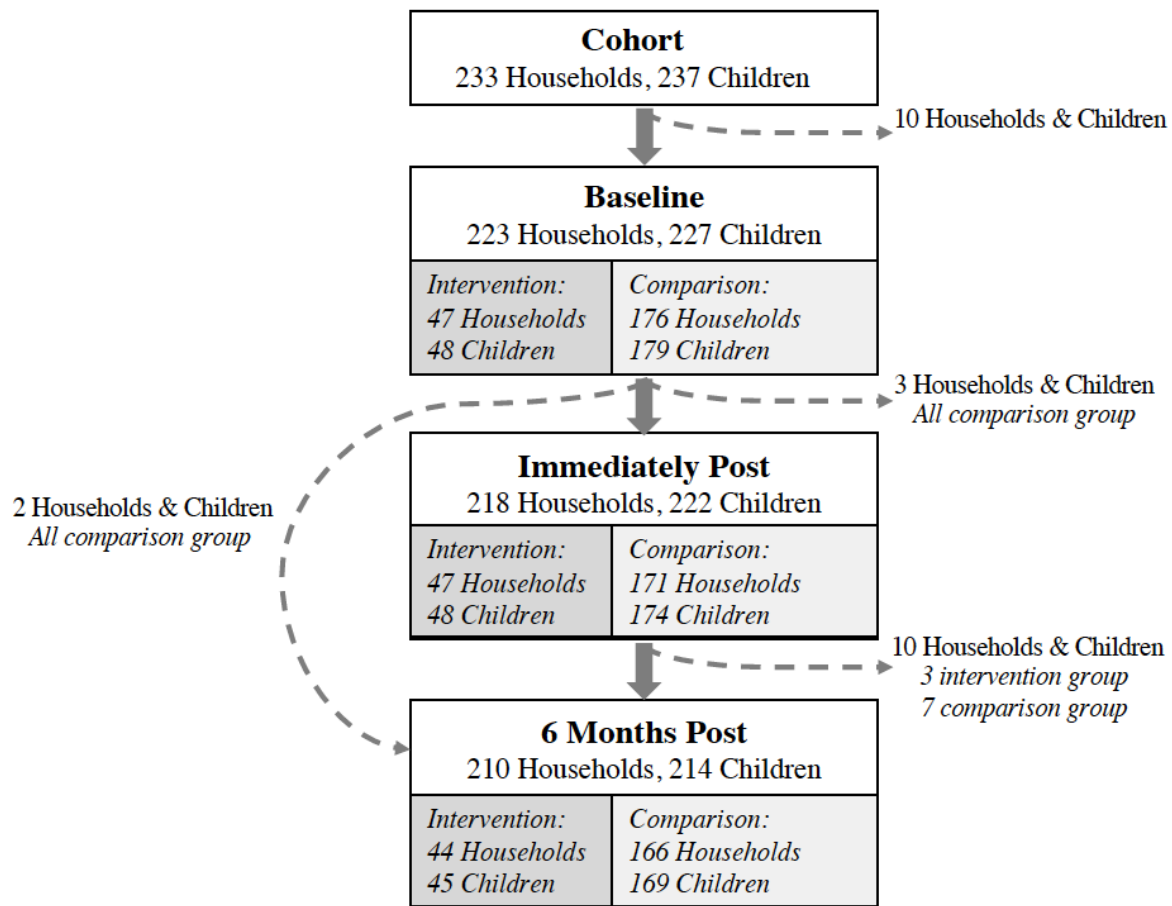
Child Variables	Intervention (n=48)	Comparison (n=179)	Total (n = 227)	P-value
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Mean Age (Months)	22.4 (SD=6.7, range 12.7-35.7)	24.0 (SD=7.2, range 12.4-39.0)	23.6 (SD=7.1, range 12.3-39.0)	p = 0.20†
Sex (Female)	24 (50%)	94 (52.5%)	118 (52.0%)	p = 0.76□
Breastfed Ever	48 (100%)	179 (100%)	227 (100%)	N/A
Mean Time to Initiate Breastfeeding After Birth (Hours) <sup>a, b</sup>	3.3 (SD=6.2, range 0-24)	3.1 (SD 6.8, range 0-48)	3.1 (SD 6.7, range 0-48)	p = 0.75†
Early Initiation of Breastfeeding Indicator Met <sup>a, c</sup>	31 (64.6%)	105 (59.0%)	136 (60.2%)	p = 0.48□
Median Duration of Breastfeeding (Months) <sup>d, e</sup>	14 (12, 15)	12.5 (12, 14)	13.5 (12, 15)	p = 0.51†
Duration of Breastfeeding Indicator Met <sup>d, f</sup>	24 (75.0%)	80 (64.5%)	104 (66.7%)	p = 0.26 □
Currently Breastfeeding	16 (33.3%)	54 (30.2%)	70 (30.8%)	p = 0.67□
Mean Age at Introduction of Complementary Foods (Months)	5.2 (SD = 2.5)	5.2 (SD = 2.2)	5.2 (SD = 2.2)	p = 0.87‡

† Wilcoxon Rank-Sum Test    § Fisher's Exact Test    □ Chi2 Test    ‡ T-test

a) Comparison (n=178) and Total (n=226) as this data was collected prior to the start of the intervention study. b) Time, in hours, after birth before child was put to the breast (WHO, 2008) c) Early initiation of breastfeeding criteria: child was put to the breast within one hour of birth (WHO, 2008) d) Intervention (n=32), Comparison (n=124) and Total (n=156), this excludes children who were currently breastfeeding. e) The age in months when 50% of children did not receive breast milk during the previous day, with interquartile range in parentheses (WHO, 2008). f) Duration of breastfeeding criteria: child received breast milk for at least 12 months (WHO, 2008)

Figure 1. Flow diagram depicting households and children lost to follow up during the course of the study.



**Table 3.** Comparison of sociodemographic characteristics of adult primary caregivers at baseline for participants who were lost to follow-up.

Adult Variables	Baseline Participants (n = 223) Mean (SD) or N(%)	Lost to Follow-up	
		Baseline to Immediately Post (n=5) Mean (SD) or N(%)	Immediately Post to 6 Months Post (n=10) Mean (SD) or N(%)
Intervention Participant (Yes)	47 (21%)	0 (0%)	3 (30%)
Mean Age (Years)	28.9 (7.0)	24.6 (5.1)	22.9 (4.0)
Sex (Female)	222 (99.6%)	5 (100%)	10 (100%)
Religion			
Christian	222 (99.6%)	5 (100%)	10 (100%)
Muslim	1 (0.5%)		

Currently Married <sup>a</sup>	199 (89.2%)	5 (100%)	10 (100%)
Pregnant <sup>b</sup>	13 (5.8%)	1 (20%)	1 (10%)
Head of Household	39 (17.5%)	1 (20%)	0 (0%)
Number of People in Household	5.8 (1.8)	5 (1.2)	5.3 (2.2)
Food Insecurity Score (HFIAS) <sup>c</sup>	8.3 (4.4)	4.8 (3.5)	8.2 (4.5)
Adult Male Present	209 (93.7%)	5 (100%)	10 (100%)
Relationship to Child			
Mother	212 (95.1%)	5 (100%)	10 (100%)
Grandmother	10 (4.5%)		
Father	1 (0.5%)		
Highest Education Level <sup>d</sup>			
< Primary	90 (40.4%)	2 (40%)	3 (30%)
Primary	82 (36.8%)	1 (20%)	4 (40%)
> Primary	51 (22.9%)	2 (40%)	3 (30%)
Asset Index <sup>e</sup>	2.0 (0.9)	1.6 (1.1)	1.5 (0.8)

a) "Currently Married" includes participants who are remarried and married living apart; it excludes participants who are never married, widowed, divorced or separated. b) Pregnancy status naturally changes over the course of the study, however the average percentage of women who are pregnant at any given data point remains consistent. c) Household Food Insecurity Access Scale score ranges from 0, food secure, to 27, severely food insecure (Coates, Swindale, & Bilinsky 2007); in the study sample HFIAS scores ranged from 0 to 22. d) "< Primary" indicates not attending or completing primary level, "> Primary" includes attending secondary level and attending some college and/or completing a certificate, degree or diploma. e) Asset index is a principal components analysis of specific assets in the household, used here as a proxy for socioeconomic status. It includes household ownership of a bed, wall unit or cupboard, sofa without cushions, and sofa with permanent cushions. A higher number indicates a higher socioeconomic status. The Asset index ranged from 0 to 4.

**Table 4.** Comparison of sociodemographic characteristics of child participants at baseline for participants who were lost to follow-up

Child Variables	Baseline Participants (n = 223) Mean (SD) or N(%)	Lost to Follow-up	
		Baseline to Immediately Post (n=5) Mean (SD) or N(%)	Immediately Post to 6 Months Post (n=10) Mean (SD) or N(%)
Intervention Participant (Yes)	48 (20%)	0 (0%)	3 (30%)
Mean Age (Months)	23.6 (SD=7.1, range 12.3-39.0)	20.7 (SD=4.0, range 16.6-26.8)	24.3 (SD=6.2, range 13.3-33.6)
Sex (Female)	118 (52.0%)	4 (80%)	3 (30%)
Breastfed Ever	227 (100%)	5 (100%)	10 (100%)
Mean Time to Initiate Breastfeeding After Birth (Hours) <sup>a, b</sup>	3.1 (SD 6.7, range 0-48)	0.8 (SD 1.1, range 0-2)	2.2 (SD 3.2, range 0-8)



Early Initiation of Breastfeeding Indicator Met <sup>a, c</sup>	136 (60.2%)	3 (60%)	6 (60%)
Median Duration of Breastfeeding (Months) <sup>d, e</sup>	13.5 (12, 15)	18 (16, 20)	15 (6.6, 24)
Duration of Breastfeeding Indicator Met <sup>d, f</sup>	104 (66.7%)	2 (100%)	5 (62.5%)
Currently Breastfeeding	70 (30.8%)	3 (60%)	2 (20%)
Mean Age at Introduction of Complementary Foods (Months)	5.2 (SD = 2.2)	4.8 (SD = 2.2)	4.8 (SD = 2.1)

a) Comparison (n=178) and Total (n=226) as this data was collected prior to the start of the intervention study. b) Time, in hours, after birth before child was put to the breast (WHO, 2008) c) Early initiation of breastfeeding criteria: child was put to the breast within one hour of birth (WHO, 2008) d) Intervention (n=32), Comparison (n=124) and Total (n=156), this excludes children who were currently breastfeeding. e) The age in months when 50% of children did not receive breast milk during the previous day, with interquartile range in parentheses (WHO, 2008). f) Duration of breastfeeding criteria: child received breast milk for at least 12 months (WHO, 2008)