

## Supplementary material

### Supplemental text

**Intervention uptake** - Data collected during swapping visits indicates that treatment households obtained on average 47% of their maize grains (out of the total monthly average purchase of 18.4 kg) and 78% of their maize flour (out of the total monthly average purchase of 4.15 kg) from a study stockist. Nearly all households (98%) in treatment areas had their stored maize tested at least once, and the mean (median) number of times maize was tested was 5.2 (5). About half of all treatment households (54%) had their maize swapped at least once; among these, maize was swapped an average of 1.6 times.

**Supplemental Table 1: Intracluster correlation for outcome variables**

	Intracluster correlation (95% CI)
Primary outcomes	
LAZ (endline)	0.07 (0.01 to 0.13)
Stunting (endline)	0.03 (0.00 to 0.07)
Ln serum AFB1-lysine adduct level (endline) <sup>b</sup>	0.14 (0.05 to 0.22)
Secondary outcomes	
LAZ (midline)	0.03 (0.00 to 0.08)
Stunting (midline)	0.03 (0.00 to 0.08)
Ln serum AFB1-lysine adduct level (midline)	0.06 (0.00 to 0.12)

**Supplemental Table 2: Impact of the intervention on child LAZ, stunting, and Ln serum AFB1-lysine adduct levels (analyses not controlling for socio-economic baseline variables)**

	Intervention	Control	Impact estimate (95% CI)	P-value <sup>a</sup>	n
Primary outcomes					
LAZ (endline)	-1.68±1.08	-1.59±1.27	-0.017 (-0.199 to 0.164)	0.575	881
Stunting (endline)	39.26	35.71	0.018 (-0.054 to 0.090)	0.694	881
Ln serum AFB1-lysine adduct level (endline) <sup>b</sup>	1.78±1.28	2.01±1.37	-0.235 (-0.575 to 0.105)	0.086	798
Secondary outcomes					
LAZ (midline)	-1.17±1.13	-1.32±1.24	0.148 (-0.040 to 0.337)	0.060	613
Stunting (midline)	20.00	26.57	-0.067 (-0.133 to -0.001)	0.024	613
Ln serum AFB1-lysine adduct level (midline) <sup>c</sup>	1.54±1.17	1.60±1.21	-0.039 (-0.312 to 0.243)	0.390	524

<sup>a</sup> One-sided p-values are shown.

<sup>b</sup> Sample sizes for serum aflatoxin were 436 and 362 in the intervention and control arms at endline, respectively. Absolute AFB1-lysine adduct level were 14.79±30.24 pg /mg albumin in the intervention arm and 22.19±58.1 pg /mg albumin in the control arm.

<sup>c</sup> Sample sizes for serum aflatoxin were 279 and 245 in the intervention and control arms at midline, respectively. Absolute AFB1-lysine adduct level were 9.83±18.62 pg /mg albumin in the intervention arm and 16.12±71.94 pg /mg albumin in the control arm.

**Supplemental Table 3: Sensitivity analyses of the impact of the intervention on child LAZ, stunting, and Ln serum AFB1-lysine adduct levels**

	Impact estimate (95% CI)	P-value <sup>a</sup>	n
Reduced model			
LAZ (endline)	-0.029 (-0.19 to 0.132)	0.639	881
Stunting (endline)	0.025 (-0.045 to 0.094)	0.758	881
Ln serum AFB1-lysine adduct levels (endline)	-0.261 (-0.545 to 0.024)	0.036	798
Logodds model			
LAZ (endline)	0.019 (-0.143 to 0.182)	0.406	857
Stunting (endline)	0.009 (-0.061 to 0.078)	0.599	857
Ln serum AFB1-lysine adduct levels (endline)	-0.279 (-0.546 to -0.011)	0.021	779
Multiple imputation			
LAZ (endline)	-0.026 (-0.181 to 0.13)	0.629	953
Stunting (endline)	0.027 (-0.042 to 0.096)	0.784	953
Ln serum AFB1-lysine adduct levels (endline)	-0.254 (-0.516 to 0.008)	0.028	953

<sup>a</sup> One-sided p-values are shown.

**Supplemental Table 4: Wave-specific impact of the intervention on child Ln serum AFB1-lysine adduct levels**

	Impact estimate (95% CI)	P-value <sup>a</sup>	n
Wave 2	-0.043 (-0.829 to 0.744)	0.913	102
Wave 3	0.015 (-0.586 to 0.615)	0.960	88
Wave 4	-0.029 (-0.586 to 0.527)	0.542	190
Wave 5	-0.556 (-0.941 to -0.171)	0.006	206
Wave 6	-0.476 (-0.867 to -0.086)	0.018	212

<sup>a</sup> One-sided p-values are shown.

**Supplemental Table 5: Impact of the intervention on child LAZ, stunting, and Ln serum AFB1-lysine adduct levels on a homogenous group of children at endline and midline**

	Impact estimate (95% CI)	P-value <sup>a</sup>	n
Endline			
LAZ (endline)	0.068 (-0.073 to 0.209)	0.170	611
Stunting (endline)	-0.019 (-0.094 to 0.055)	0.305	611
Midline			
LAZ (endline)	0.162 (-0.006 to 0.33)	0.029	611
Stunting (endline)	-0.067 (-0.126 to -0.009)	0.013	611

<sup>a</sup> One-sided p-values are shown.

Supplemental Figure 1

