**Supplemental Figure 1. CONSORT Flow Diagram**

**Assessed for Eligibility (N=972)**

## Enrollment

**Cluster Randomized (n=600)**

**Excluded (n=372)**

* CD4 T-cell levels < 100 cells/mm3 (n=93)
* Child age not eligible (n=77)
* CD4 count/ART prescription not updated (n=202)

Program 1:

Standard Education (n=150)

Received allocated

Intervention

(n=150)

Program 2:

Nutrition Education (n=150)

Received allocated

Intervention

(n=150)

Program 3:

Nutrition Supplements

(n=150)

Received allocated

Intervention

(n=150)

Program 4:

Nutrition Education & Nutrition supplements

(n=150)

Received allocated

Intervention

(n=150)

**6-Month Follow-Up**

(n =600)

None lost to Follow-up

**12-Month Follow-Up**

(n =600)

None lost to Follow-up

**18-Month Follow-Up**

(n =600)

None lost to Follow-up

## Analysis (n =600)

***Table S1. Marginal Contrasts of Mixed Effects for Primary Outcomes***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Program 1:**  **Standard Education**  **(n=150)** | **Program 2:**  **+ Nutrition Education**  **(n=150)** | | **Program 3:**  **+ Nutrition Supplements**  **(n=150)** | | **Program 4:**  **+ Nutrition Education & Supplements**  **(n=150)** | |
|  | Ma  (95% CI) | Ma  (95% CI) | Differenceb  (95% CI) | Ma  (95% CI) | Differenceb  (95% CI) | Ma  (95% CI) | Differenceb  (95% CI) |
| **Primary Outcomes** | |  |  |  |  |  |  |
| **CD4 Count** |  |  |  |  |  |  |  |
| Baseline | 466.98  (430.11, 503.85) | 427.04  (391.22, 462.86) | -39.94  (-91.79, 11.90) | 455.35  (419.50, 491.19) | -11.63  (-63.00, 39.73) | 440.30  (403.67, 476.94) | -26.68  (-80.19, 26.84) |
| At 6 | 810.95  (774.08, 847.82) | 783.18  (747.36, 819.01) | -27.77  (-79.62, 24.08) | 925.01  (889.16, 960.84) | 114.05  (62.68, 165.42)\*\*\* | 971.12  (934.49, 1007.76) | 160.17  (106.66, 213.68)\*\*\* |
| At 12 mo | 908.17  (871.30, 945.04) | 908.91  (873.09, 944.73) | 0.74  (-51.11, 52.58) | 1034.24  (998.40, 1070.09) | 126.07  (74.70, 177.44)\*\*\* | 1119.92  (1083.29, 1156.56) | 211.95  (158.24, 265.26)\*\*\* |
| At 18 mo | 996.60  (959.73, 1003.47) | 1011.59  (975.78, 1047.42) | 15.00  (-36.85, 66.84) | 1128.01  (1092.16, 1163.85) | 131.41  (80.04, 182.78)\*\*\* | 1220.41  (1183.78, 1257.04) | 223.81  (170.29, 277.32)\*\*\* |
|  |  |  |  |  |  |  |  |
| **BMIc** |  |  |  |  |  |  |  |
| Baseline | 19.67  (19.00, 20.34) | 20.20  (19.55, 20.85) | 0.53  (-0.41, 1.47) | 20.61  (19.96, 21.27) | 0.94  (-0.01, 1.88) | 19.87  (19.20, 20.54) | 0.20  (-0.77, 1.18) |
| At 6 | 20.68  (20.01, 21.36) | 21.48  (20.82, 22.12) | 0.79  (-0.15, 1.74) | 22.99  (22.34, 23.64) | 2.31  (1.37, 3.24)\*\*\* | 22.60  (21.93, 23.67) | 1.91  (0.94, 2.89)\*\*\* |
| At 12 mo | 21.14  (20.47, 21.81) | 22.08  (21.42, 22.73) | 0.93  (-0.01, 1.88) | 23.50  (22.85, 24.15) | 2.36  (1.42, 3.29)\*\*\* | 23.24  (22.58, 23.91) | 2.10  (1.12, 3.08)\*\*\* |
| At 18 mo | 21.64  (20.97, 22.31) | 22.59  (21.94, 23.24) | 0.95  (-0.001, 1.89) | 23.97  (23.32, 24.63) | 2.33  (1.39, 3.26)\*\*\* | 23.79  (23.12, 24.46) | 2.14  (1.17, 3.12)\*\*\* |
| aMarginal means presented from multilevel model fixed effects: group (ASHA + =reference group), time (baseline=reference group), group X time, adjusted for all covariates significantly different at baseline (age, quality of life, total MET, internalized stigma, social support, food insecurity, education) and % ART adherence  bContrast from Standard Education (SE)  cBMI=Body Mass Index  \* *p* < .05; \*\**p* < .01; \*\*\**p*<.001 | | | | | | | |

***Table S2. Marginal Contrasts of Mixed Effects for Secondary Outcomes***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Program 1:**  **Standard Education**  **(n=150)** | **Program 2:**  **+ Nutrition Education**  **(n=150)** | | **Program 3:**  **+ Nutrition Supplements**  **(n=150)** | | **Program 4:**  **+ Nutrition Education & Supplements**  **(n=150)** | |
|  | Ma  (95% CI) | Ma  (95% CI) | Differenceb  (95% CI) | Ma  (95% CI) | Differenceb  (95% CI) | Ma  (95% CI) | Differenceb  (95% CI) |
| **Secondary Outcomes** | | | | | | | |
| **Hemoglobin** |  |  |  |  |  |  |  |
| Baseline | 70.87  (69.45, 72.29) | 72.86  (71.46, 74.26) | 1.99  (-0.02, 3.99) | 72.26  (70.86, 73.66) | 1.39  (-0.61, 3.39) | 70.50  (69.08 , 71.92) | -0.37  (-2.42, 1.67) |
| At 6 | 103.00  (101.58, 104.42) | 105.49  (104.09, 106.89) | 2.49  (0.48, 4.49)\* | 106.90  (105.50, 108.30) | 3.90  (1.91, 5.90)\*\*\* | 108.72  (107.30, 110.14) | 5.72  (3.67, 7.76)\*\*\* |
| At 12 mo | 109.41  (107.99, 110.83) | 113.23  (111.83, 114.64) | 3.82  (1.82, 5.82)\*\*\* | 111.90  (110.50, 113.30) | 2.49  (0.50, 4.49)\* | 116.48  (115.06, 117.90) | 7.07  (5.02, 9.11)\*\*\* |
| At 18 mo | 112.40  (110.98, 113.82) | 115.92  (114.52, 117.32) | 3.52  (1.51, 5.52)\*\* | 114.72  (113.32, 116.12) | 2.31  (0.32, 4.30)\* | 118.95  (117.53, 120.36) | 6.54  (4.50, 8.59)\*\*\* |
|  |  |  |  |  |  |  |  |
| **Serum Albumin** |  |  |  |  |  |  |  |
| Baseline | 30.91  (30.27, 31.54) | 30.54  (29.92, 31.16) | -0.38  (-1.27, 0.52) | 30.22  (29.59, 30.84) | -0.70  (-1.60, 0.19) | 31.29  (30.65, 31.92) | 0.38  (-0.54, 1.29) |
| At 6 | 38.59  (37.96, 39.23) | 39.57  (38.94, 40.20) | 0.97  (0.07, 1.87)\* | 40.86  (40.23, 41.49) | 2.26  (1.36, 3.15)\*\*\* | 41.59  (40.95, 42.22) | 2.99  (2.08, 3.90)\*\*\* |
| At 12 mo | 41.28  (40.65, 41.92) | 42.02  (41.39, 42.64) | 0.73  (-0.17, 1.63) | 42.95  (42.32, 43.58) | 1.67  (0.77, 2.56)\*\*\* | 44.11  (43.47, 44.74) | 2.82  (1.91, 3.74)\*\*\* |
| At 18 mo | 43.10  (42.47, 43.74) | 43.85  (43.22, 44.48) | 0.74  (-0.15, 1.64) | 44.55  (43.92, 45.18) | 1.45  (0.54, 2.33)\*\* | 45.77  (45.14, 46.41) | 2.67  (1.76, 3.58)\*\*\* |
|  |  |  |  |  |  |  |  |
| aMarginal means presented from multilevel model fixed effects: group (ASHA + =reference group), time (baseline=reference group), group X time, adjusted for all covariates significantly different at baseline (age, quality of life, total MET, internalized stigma, social support, food insecurity, education) and % ART adherence  bContrast from Standard Education (SE)  cBMI=Body Mass Index  \* *p* < .05; \*\**p* < .01; \*\*\**p*<.001 | | | | | | | |