**Appendix S1: Random forest Box plots for country level Analysis (Figures S1-S3).**

1. The box plots present a summary of country-level predictors for underweight (BMI <18.5 kg/m$^2$), overweight (BMI 25.0 – 29.9 kg/m$^2$) and obesity (BMI > 29.9 kg/m$^2$) prevalence.
2. Variables to the right of the dashed line (absolute value of the lowest ranking variable) are the most influential predictors for underweight, overweight and obesity prevalence, ranked based on the relative importance score.
3. Presented alongside the figure caption is the root mean square error (RMSE), used as goodness of fit statistic for the model.
4. Variable Definitions:
   a. **GDP:** Gross domestic product divided by midyear population (Current USSD).
   b. **Urbanization:** Proportion of the total population living in urban areas (% of the total).
   c. **GINI Index (GINI Coefficient):** Measure of deviation of individual's income from a perfectly equal distribution (0=Perfect Equality while 1=Perfect Inequality).
   d. **Globalization (KOF Index of Globalization):** Measure of the degree of Globalization incorporating, the social, political, and economic dimensions.
   e. **Fertility:** Average number of live births per woman until the end of her child-bearing years.
   a. **Life Expectancy:** Average number of years a newborn female is expected to live if mortality patterns remain the same.
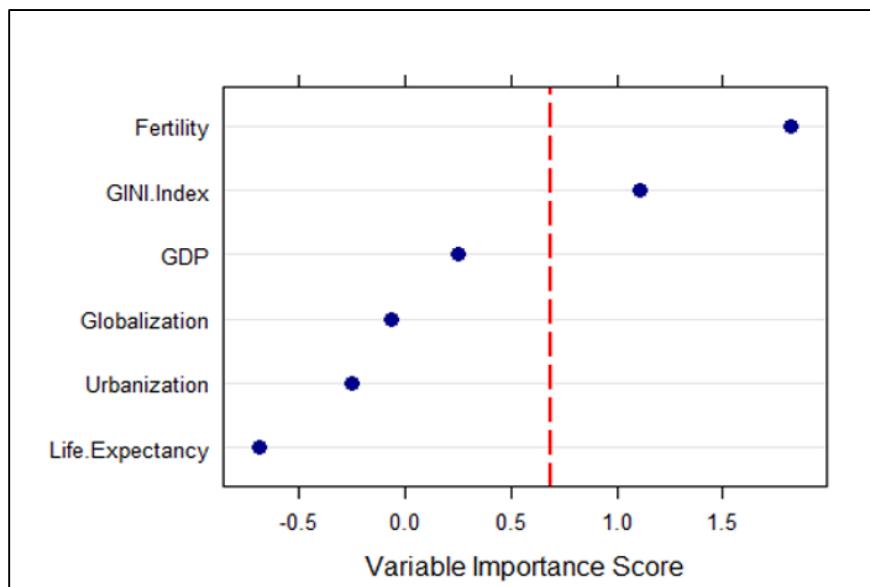


**Figure S1:** Predictors for underweight prevalence (RMSE = 5.6417).
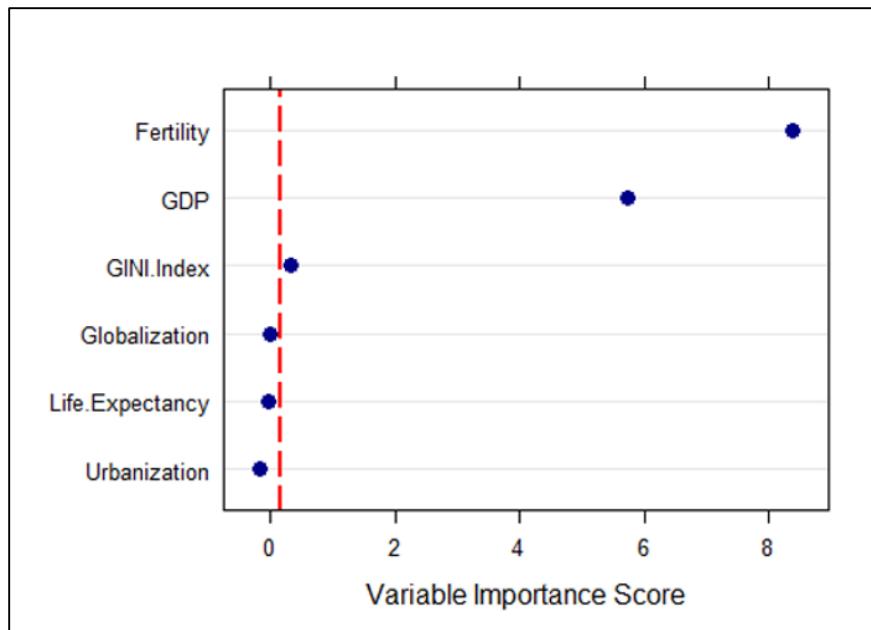
**Figure S2:** Predictors for overweight prevalence (RMSE=4.9637).
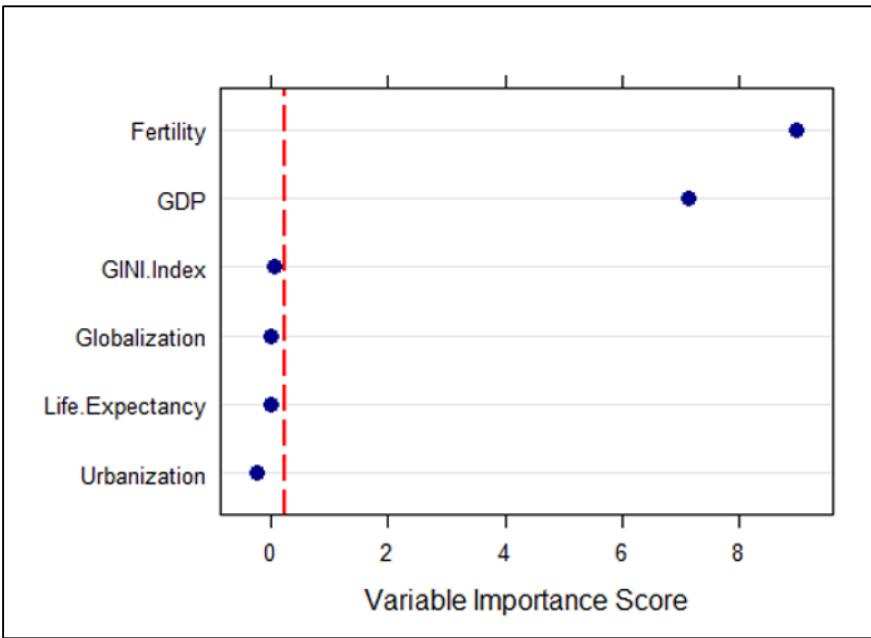


**Figure S3:** Predictors for obesity prevalence (RMSE = 4.2199).

**Appendix 2: Descriptive statistics for individual-level data for each country included in the study (Tables S1 – S34).**

Table S1: Descriptive statistics for the study population in Madagascar.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 7,379 | |
| **Nutritional status** | | |
| Underweight | 1,985 | (26.9) |
| Normal Weight | 4,937 | (66.9) |
| Overweight/Obesity | 457 | (6.2) |
| **Age** | | |
| 15-19 | 1,682 | (22.8) |
| 20-24 | 1,092 | (14.8) |
| 25-29 | 1,159 | (15.7) |
| 30-34 | 1,018 | (13.8) |
| 35-39 | 893 | (12.1) |
| 40-44 | 834 | (11.3) |
| 45-49 | 701 | (9.5) |
| **Religion** | | |
| Catholics | 2,597 | (35.2) |
| Other Christians | 2,634 | (35.7) |
| Islam | 44 | (0.6) |
| Traditionalist | 162 | (2.2) |
| Others | 443 | (6.0) |
| No Religion | 1,498 | (20.3) |
| **Parity** | | |
| 0 | 1,874 | (25.4) |
| 1 | 1,063 | (14.4) |
| 2 | 996 | (13.5) |
| 3 | 893 | (12.1) |
| 4 | 671 | (9.1) |
| 5 | 576 | (7.8) |
| 6+ | 1,306 | (17.7) |
| **Marital Status** | | |
| Single | 1,468 | (19.9) |
| Married | 4,929 | (66.8) |
| Formerly Married | 981 | (13.3) |
| **Residential Setting** | | |
| Rural | 6,088 | (82.5) |
| Urban | 1,291 | (17.5) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Analamanga | 1,299 | (17.6) |
| Vakinankaratra | 649 | (8.8) |
| Itasy | 303 | (4.1) |
| Bongolava | 214 | (2.9) |
| Haute Matsiatra | 391 | (5.3) |
| Anamoroni'i mania | 251 | (3.4) |
| Vatovavy Fitovinany | 362 | (4.9) |
| Ihorombe | 140 | (1.9) |
| Atsimo Atsinanana | 229 | (3.1) |
| Atsinanana | 472 | (6.4) |
| Analanjirofo | 369 | (5.0) |
| Alaotra Mangoro | 369 | (5.0) |
| Boeny | 258 | (3.5) |
| Sofia | 450 | (6.1) |
| Betsiboka | 103 | (1.4) |
| Melaky | 74 | (1.0) |
| Atsimo Andrefana | 354 | (4.8) |
| Androy | 170 | (2.3) |
| Anosy | 214 | (2.9) |
| Menabe | 170 | (2.3) |
| Diana | 199 | (2.7) |
| Sava | 339 | (4.6 |
| **Level of Education** | | |
| No Education | 1,358 | (18.4) |
| Primary | 3,594 | (48.7) |
| Secondary | 2,251 | (30.5) |
| Higher | 177 | (2.4) |
| **Wealth Quintile** | | |
| Poorest | 1,254 | (17.0) |
| Poorer | 1,350 | (18.3) |
| Middle | 1,350 | (18.3) |
| Richer | 1,557 | (21.1) |
| Richest | 1,867 | (25.3) |
| **Occupation** | | |
| Not Working | 1,173 | (15.9) |
| Nonmanual | 1,011 | (13.7) |
| Manual | 635 | (8.6) |
| Agricultural | 4,545 | (61.6) |
| Others | 15 | (0.2) |
| **Media Exposure** | | |
| Not Exposed | 2,302 | (31.2) |
| Exposed to one media source | 2,885 | (39.1) |
| Exposed to two media sources | 1,181 | (16.0) |
| Exposed to three media sources | 1,011 | (13.7) |
| **Hormonal Contraceptives use** | | |
| No | 5,726 | (77.6) |
| Yes | 1,653 | (22.4) |

**Table S2:** Descriptive statistics for the study population in Ethiopia.

| Variable | Sample Size n (%) |
|---|---|
| **Total Sample Size** | 13,222   (100) |
| **Nutritional status** | |
| Underweight | 2,988   (20.6) |
| Normal Weight | 9,229   (69.8) |
| Overweight/Obesity | 1,005   (7.6) |
| **Age** | |
| 15-19 | 3,015   (22.8) |
| 20-24 | 2,182   (16.5) |
| 25-29 | 2,367   (17.9) |
| 30-34 | 1,904   (14.4) |
| 35-39 | 1,626   (12.3) |
| 40-44 | 1,164   (8.8) |
| 45-49 | 965   (7.3) |
| **Ethnicity** | |
| Amhara | 4,112   (31.1) |
| Affar | 79   (0.6) |
| Guragie | 383   (2.9) |
| Hadiye | 304   (2.3) |
| Oromo | 4,350   (32.9) |
| Sidama | 542   (4.1) |
| Somali | 331   (2.5) |
| Tigray | 1,045   (7.9) |
| Welaita | 410   (3.1) |
| Others | 1,666   (12.6) |
| **Religion** | |
| Catholic | 106   (0.8) |
| Other Christians | 9,070   (68.6) |
| Islam | 3,900   (29.5) |
| Others | 145   (1.1) |
| **Parity** | |
| 0 | 4,535   (34.3) |
| 1 | 1,454   (11.0) |
| 2 | 1,283   (9.7) |
| 3 | 1,203   (9.1) |
| 4 | 1,018   (7.7) |
| 5 | 1,031   (7.8) |
| 6+ | 2,697   (20.4) |
| **Marital Status** | |
| Single | 3,755   (28.4) |
| Married | 8,145   (61.6) |
| Formerly Married | 1,322   (10.0) |
| **Residential Setting** | |
| Rural | 10,207   (77.2) |
| Urban | 3,015   (22.8) |

| Variable | Sample Size n (%) |
|---|---|
| **Region** | |
| Tigray | 978 (7.4) |
| Afar | 106 (0.8) |
| Amhara | 3,279 (24.8) |
| Oromia | 4,667 (35.3) |
| Somali | 344 (2.6) |
| Benishangul | 132 (1.0) |
| Snnpr | 2,763 (20.9) |
| Gambela | 40 (0.3) |
| Harari | 26 (0.2) |
| Addis Adaba | 820 (6.2) |
|    Dire Dawa | 66 (0.5) |
| **Level of Education** | |
| No Education | 6,241 (47.2) |
| Primary | 4,667 (35.3) |
| Secondary | 1,560 (11.8) |
|    Higher | 754 (5.7) |
| **Wealth Quintile** | |
| Poorest | 2,129 (16.1) |
| Poorer | 2,274 (17.2) |
| Middle | 2,565 (19.4) |
| Richer | 2,671 (20.2) |
|    Richest | 3,583 (27.1) |
| **Occupation** | |
| Not Working | 6,426 (48.6) |
| Nonmanual | 2,935 (22.2) |
| Manual | 740 (5.6) |
| Agricultural | 2,790 (21.1) |
|    Others | 331 (2.5) |
| **Media Exposure** | |
| Not Exposed | 7,351 (55.6) |
| Exposed to one media source | 2,724 (20.6) |
| Exposed to two media sources | 2,116 (16.0) |
|    Exposed to three media sources | 1,031 (7.8) |
| **Hormonal Contraceptives use** | |
| No | 9,824 (74.3) |
|    Yes | 3,398 (25.7) |

**Table S3:** Descriptive statistics for the study population in Burundi.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 3,929 | (100) |
| **Nutritional status** | | |
| Underweight | 636 | (16.2) |
| Normal Weight | 2,998 | (76.3) |
| Overweight/Obesity | 295 | (7.5) |
| **Age** | | |
| 15-19 | 1,096 | (27.9) |
| 20-24 | 699 | (17.8) |
| 25-29 | 617 | (15.7) |
| 30-34 | 416 | (10.6) |
| 35-39 | 416 | (10.6) |
| 40-44 | 334 | (8.5) |
| 45-49 | 350 | (8.9) |
| **Religion** | | |
| Catholics | 2,428 | (61.8) |
| Other Christians | 1,320 | (33.6) |
| Islam | 83 | (2.1) |
| Others | 98 | (2.5) |
| **Parity** | | |
| 0 | 1,521 | (38.7) |
| 1 | 389 | (9.9) |
| 2 | 369 | (9.4) |
| 3 | 326 | (8.3) |
| 4 | 283 | (7.2) |
| 5 | 271 | (6.9) |
| 6+ | 770 | (19.6) |
| **Marital Status** | | |
| Single | 1,493 | (38.0) |
| Married | 2,055 | (52.3) |
| Formerly Married | 381 | (9.7) |
| **Residential Setting** | | |
| Rural | 3,509 | (89.3) |
| Urban | 420 | (10.7) |
| **Region** | | |
| Bujumbura | 287 | (7.3) |
| North | 1,163 | (29.6) |
| Centre East | 963 | (24.5) |
| West | 648 | (16.5) |
| South | 868 | (22.1) |
| **Level of Education** | | |
| No Education | 1,752 | (44.6) |
| Primary | 1,654 | (42.1) |
| Secondary | 491 | (12.5) |
| Higher | 31 | (0.8) |
| **Wealth Quintile** | | |
| Poorest | 786 | (20.0) |
| Poorer | 778 | (19.8) |
| Middle | 758 | (19.3) |
| Richer | 790 | (20.1) |
| Richest | 817 | (20.8) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Occupation** | | |
| Not Working | 805 | (20.5) |
| Nonmanual | 251 | (6.4) |
| Agricultural | 2,833 | (72.1) |
| Others | 39 | (1.0) |
| **Media Exposure** | | |
| Not Exposed | 723 | (18.4) |
| Exposed to one media source | 2,090 | (53.2) |
| Exposed to two media sources | 860 | (21.9) |
| Exposed to three media sources | 255 | (6.5) |
| **Hormonal Contraceptives use** | | |
| No | 3,564 | (90.7) |
| Yes | 365 | (9.3) |

**Table S4:** Descriptive statistics for the study population in Burkina Faso.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 7,212 | (100) |
| **Nutritional status** | | |
| Underweight | 1,139 | (15.8) |
| Normal Weight | 5,265 | (73.0) |
| Overweight/Obesity | 808 | (11.2) |
| **Age** | | |
| 15-19 | 1,500 | (20.8) |
| 20-24 | 1,298 | (18.0) |
| 25-29 | 1,161 | (16.1) |
| 30-34 | 1,067 | (14.8) |
| 35-39 | 858 | (11.9) |
| 40-44 | 692 | (9.6) |
| 45-49 | 635 | (8.8) |
| **Ethnicity** | | |
| Bobo | 368 | (5.1) |
| Fulfuldé / Peul | 534 | (7.4) |
| Gourmantché | 454 | (6.3) |
| Gourouns | 325 | (4.5) |
| Lobi | 173 | (2.4) |
| Mossi | 3,765 | (52.2) |
| Sénoufo | 346 | (4.8) |
| Dagara | 195 | (2.7) |
| Bissa | 303 | (4.2) |
| Others | 750 | (10.4) |
| **Religion** | | |
| Catholic | 1,709 | (23.7) |
| Other Christians | 512 | (7.1) |
| Islam | 4,421 | (61.3) |
| Traditionalists | 512 | (7.1) |
| No Religion | 58 | (0.8) |
| **Parity** | | |
| 0 | 1,753 | (24.3) |
| 1 | 801 | (11.1) |
| 2 | 801 | (11.1) |
| 3 | 793 | (11.0) |
| 4 | 728 | (10.1) |
| 5 | 635 | (8.8) |
| 6+ | 1,702 | (23.6) |
| **Marital Status** | | |
| Single | 1,457 | (20.2) |
| Married | 5,496 | (76.2) |
| Formerly Married | 260 | (3.6) |
| **Residential Setting** | | |
| Rural | 5,171 | (71.7) |
| Urban | 2,041 | (28.3) |

| Variable | Sample Size n (%) |
|---|---|
| **Region** | |
| Boucle de mouhoun | 772 (10.7) |
| Cascades | 274 (3.8) |
| Centre | 1,118 (15.5) |
| Centre-Est | 534 (7.4) |
| Centre-Nord | 483 (6.7) |
| Centre-Ouest | 555 (7.7) |
| Centre-Sud | 317 (4.4) |
| Est | 584 (8.1) |
| Hauts Basins | 916 (12.7) |
| Nord | 512 (7.1) |
| Plateau Central | 339 (4.7) |
| Sahel | 498 (6.9) |
| Sud-Ouest | 310 (4.3) |
| **Level of Education** | |
| No Education | 5,243 (72.7) |
| Primary | 1,024 (14.2) |
| Secondary | 865 (12.0) |
| Higher | 79 (1.1) |
| **Wealth Quintile** | |
| Poorest | 1,298 (18.0) |
| Poorer | 1,320 (18.3) |
| Middle | 1,320 (18.3) |
| Richer | 1,414 (19.6) |
| Richest | 1,861 (25.8) |
| **Occupation** | |
| Not Working | 1,522 (21.1) |
| Nonmanual | 1,760 (24.4) |
| Manual | 4,76 (6.6) |
| Agricultural | 3,296 (45.7) |
| Others | 1,59 (2.2) |
| **Media Exposure** | |
| Not Exposed | 1,846 (25.6) |
| Exposed to one media source | 3,152 (43.7) |
| Exposed to two media sources | 1,630 (22.6) |
| Exposed to three media sources | 584 (8.1) |
| **Hormonal Contraceptives use** | |
| No | 6,354 (88.1) |
| Yes | 858 (11.9) |

**Table S5:** Descriptive statistics for the study population in Chad.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 8,873 | (100) |
| **Nutritional status** | | |
| Underweight | 1,730 | (19.5) |
| Normal Weight | 6,131 | (69.1) |
| Overweight/Obesity | 1,012 | (11.4) |
| **Age** | | |
| 15-19 | 2,032 | (22.9) |
| 20-24 | 1,366 | (15.4) |
| 25-29 | 1,544 | (17.4) |
| 30-34 | 1,224 | (13.8) |
| 35-39 | 1,065 | (12.0) |
| 40-44 | 816 | (9.2) |
| 45-49 | 825 | (9.3) |
| **Ethnicity** | | |
| Toupouri/Kéra | 186 | (2.1) |
| Gorane | 515 | (5.8) |
| Arab | 816 | (9.2) |
| Baguirmi/Barma | 89 | (1.0) |
| Kanembou/Bornou/Boudouma | 896 | (10.1) |
| Boulala/Médégo/Kouka | 328 | (3.7) |
| Ouadaï/Maba/Massalit/Mimi | 710 | (8.0) |
| Zaghawa/Bideyat/Kobé | 106 | (1.2) |
| Dadajo/Kibet/Mouro | 204 | (2.3) |
| Bidio/Migami/Kenga/Dangléat | 213 | (2.4) |
| Moundang | 248 | (2.8) |
| Massa/Mousseye/Mousgoume | 444 | (5.0) |
| Sara (Ngambaye/Sara Madjin-        Gaye/Mbaye) | 2,839 | (32.0) |
| Peul/Foulbé/Bodoré | | |
| Tama/Assongori/Mararit | 142 | (1.6) |
| Gabri/Kabalaye/Nangtchéré/ | 98 | (1.1) |
| Soumraye | | |
| Marba/Lélé/Mesmé | 160 | (1.8) |
| Karo/Zimé/Pévé | 328 | (3.7) |
| Others | 115 | (1.3) |
| | 435 | (4.9) |
| **Religion** | | |
| Catholic | 1,872 | (21.1) |
| Other Christians | 2,227 | (25.1) |
| Islam | 4,507 | (50.8) |
| Traditionalists | 27 | (0.3) |
| No Religion | 240 | (2.7) |
| **Parity** | | |
| 0 | 1,917 | (21.6) |
| 1 | 852 | (9.6) |
| 2 | 790 | (8.9) |
| 3 | 843 | (9.5) |
| 4 | 816 | (9.2) |
| 5 | 736 | (8.3) |
| 6+ | 2,919 | (32.9) |
| **Marital Status** | | |
| Single | 1,686 | (19.0) |
| Married | 6,309 | (71.1) |
| Formerly Married | 878 | (9.9) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Residential Setting** | | |
| Rural | 6,752 | (76.1) |
| Urban | 2,121 | (23.9) |
| **Region** | | |
| Batha | 319 | (3.6) |
| Borkou, Tibesti | 44 | (0.5) |
| Chari Baguirmi | 355 | (4.0) |
| Guéra | 453 | (5.1) |
| Hadjer-Lamis | 586 | (6.6) |
| Kanem | 346 | (3.9) |
| Lac | 506 | (5.7) |
| Logone Occidental | 612 | (6.9) |
| Logone Oriental | 896 | (10.1) |
| Mandoul | 621 | (7.0) |
| Mayo Kebbi Est | 665 | (7.5) |
| Mayo Kebbi Ouest | 479 | (5.4) |
| Moyen Chari | 506 | (5.7) |
| Ouaddaï | 479 | (5.4) |
| Salamat | 142 | (1.6) |
| Tandjilé | 532 | (6.0) |
| Wadi Fira | 240 | (2.7) |
| N'Djaména | 799 | (9.0) |
| Barh El Gazal | 115 | (1.3) |
| Ennedi Est, Ennedi Ouest | 44 | (0.5) |
| Sila | 133 | (1.5) |
| **Level of Education** | | |
| No Education | 5,448 | (61.4) |
| Primary | 2,067 | (23.3) |
| Secondary | 1,278 | (14.4) |
| Higher | 80 | (0.9) |
| **Wealth Quintile** | | |
| Poorest | 1,757 | (19.8) |
| Poorer | 1,677 | (18.9) |
| Middle | 1,712 | (19.3) |
| Richer | 1,810 | (20.4) |
| Richest | 1,917 | (21.6) |
| **Occupation** | | |
| Not Working | 4,321 | (48.7) |
| Nonmanual | 3,106 | (35.0) |
| Manual | 115 | (1.3) |
| Agricultural | 1,269 | (14.3) |
| Others | 62 | (0.7) |
| **Media Exposure** | | |
| Not Exposed | 6,273 | (70.7) |
| Exposed to one media source | 1,331 | (15.0) |
| Exposed to two media sources | 772 | (8.7) |
| Exposed to three media sources | 497 | (5.6) |
| **Hormonal Contraceptives use** | | |
| No | 8,580 | (96.7) |
| Yes | 293 | (3.3) |

**Table S6:** Descriptive statistics for the study population in Democratic Republic of Congo.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 7,655 | (100) |
| **Nutritional status** | | |
| Underweight | 1,125 | (14.7) |
| Normal Weight | 5,305 | (69.3) |
| Overweight/Obesity | 1,225 | (16.0) |
| **Age** | | |
| 15-19 | 1,782 | (23.3) |
| 20-24 | 1,323 | (17.3) |
| 25-29 | 1.301 | (17.0) |
| 30-34 | 1,008 | (13.2) |
| 35-39 | 900 | (11.8) |
| 40-44 | 733 | (9.6) |
| 45-49 | 608 | (7.9) |
| **Ethnicity** | | |
| Bakongo Nord & Sud | 710 | (9.3) |
| Bas Kasaï et Kwilu-Kwango | 1,331 | (17.4) |
| Cuvette central | 707 | (9.2) |
| Ubangi et Itimbiri | 854 | (11.2) |
| Uele Lac Albert | 559 | (7.3) |
| Basele-K, Man. et Kivu | 1,509 | (19.7) |
| Kasai, Katanga, Tanganyika | 1,884 | (24.6) |
| Others | 100 | (1.3) |
| **Religion** | | |
| Catholic | 2,339 | (30.6) |
| Other Christians | 5,088 | (66.5) |
| Islam | 73 | (1.0) |
| Traditionalists | 41 | (0.5) |
| No Religion | 115 | (1.5) |
| **Parity** | | |
| 0 | 2,162 | (28.2) |
| 1 | 987 | (12.9) |
| 2 | 805 | (10.5) |
| 3 | 684 | (8.9) |
| 4 | 673 | (8.8) |
| 5 | 611 | (8.0) |
| 6+ | 1,733 | (22.6) |
| **Marital Status** | | |
| Single | 2,287 | (29.9) |
| Married | 4,488 | (58.6) |
| Formerly Married | 880 | (11.5) |
| **Residential Setting** | | |
| Rural | 4,749 | (62.0) |
| Urban | 2,905 | (38.0) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Kinshasa | 934 | (12.2) |
| Bandundu | 1,238 | (16.2) |
| Bas-Congo | 374 | (4.9) |
| Equateur | 987 | (12.9) |
| Kasai-Occidental | 480 | (6.3) |
| Kasai-Oriental | 781 | (10.2) |
| Katanga | 682 | (8.9) |
| Maniema | 234 | (3.1) |
| Nord-Kivu | 701 | (9.2) |
| Orientale | 726 | (9.5) |
| Sud-Kivu | 517 | (6.8) |
| **Level of Education** | | |
| No Education | 1,210 | (15.8) |
| Primary | 2,771 | (36.2) |
| Secondary | 3,372 | (44.1) |
| Higher | 302 | (4.0) |
| **Wealth Quintile** | | |
| Poorest | 1,409 | (18.4) |
| Poorer | 1,424 | (18.6) |
| Middle | 1,472 | (19.2) |
| Richer | 1,484 | (19.4) |
| Richest | 1,866 | (24.4) |
| **Occupation** | | |
| Not Working | 2,169 | (28.3) |
| Nonmanual | 2,307 | (30.1) |
| Manual | 27 | (0.4) |
| Agricultural | 3,152 | (41.2) |
| **Media Exposure** | | |
| Not Exposed | 3,841 | (50.2) |
| Exposed to one media source | 1,924 | (25.1) |
| Exposed to two media sources | 1,357 | (17.7) |
| Exposed to three media sources | 534 | (7.0) |
| **Hormonal Contraceptives use** | | |
| No | 7,462 | (97.5) |
| Yes | 193 | (2.5) |

**Table S7:** Descriptive statistics for the study population in Niger.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 4,104 | (100) |
| **Nutritional status** | | |
| Underweight | 648 | (15.8) |
| Normal Weight | 2,733 | (66.6) |
| Overweight/Obesity | 722 | (17.6) |
| **Age** | | |
| 15-19 | 718 | (17.5) |
| 20-24 | 669 | (16.3) |
| 25-29 | 743 | (18.1) |
| 30-34 | 657 | (16.0) |
| 35-39 | 550 | (13.4) |
| 40-44 | 402 | (9.8) |
| 45-49 | 365 | (8.9) |
| **Parity** | | |
| 0 | 702 | (17.1) |
| 1 | 394 | (9.6) |
| 2 | 386 | (9.4) |
| 3 | 402 | (9.8) |
| 4 | 415 | (10.1) |
| 5 | 382 | (9.3) |
| 6+ | 1,424 | (34.7) |
| **Marital Status** | | |
| Single | 435 | (10.6) |
| Married | 3,497 | (85.2) |
| Formerly Married | 172 | (4.2) |
| **Residential Setting** | | |
| Rural | 3,316 | (80.8) |
| Urban | 788 | (19.2) |
| **Region** | | |
| Agadez | 86 | (2.1) |
| Diffa | 127 | (3.1) |
| Dosso | 570 | (13.9) |
| Maradi | 841 | (20.5) |
| Tahoua | 936 | (22.8) |
| Tillaberi | 521 | (12.7) |
| Zinder | 681 | (16.6) |
| Niamey | 341 | (8.3) |
| **Level of Education** | | |
| No Education | 3,279 | (79.9) |
| Primary | 476 | (11.6) |
| Secondary | 328 | (8.0) |
| Higher | 21 | (0.5) |
| **Wealth Quintile** | | |
| Poorest | 718 | (17.5) |
| Poorer | 780 | (19.0) |
| Middle | 817 | (19.9) |
| Richer | 870 | (21.2) |
| Richest | 919 | (22.4) |
| **Occupation** | | |
| Not Working | 2,963 | (72.2) |
| Nonmanual | 923 | (22.5) |
| Manual | 107 | (2.6) |
| Agricultural | 111 | (2.7) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Media Exposure** | | |
| Not Exposed | 1,395 | (34.0) |
| Exposed to one media source | 1,736 | (42.3) |
| Exposed to two media sources | 825 | (20.1) |
| Exposed to three media sources | 148 | (3.6) |
| **Hormonal Contraceptives use** | | |
| No | 3,739 | (91.1) |
| Yes | 365 | (8.9) |

**Table S8:** Descriptive statistics for the study population in Mali.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 4,397 | (100) |
| **Nutritional status** | | |
| Underweight | 510 | (11.6) |
| Normal Weight | 3,095 | (70.4) |
| Overweight/Obesity | 791 | (18.0) |
| **Age** | | |
| 15-19 | 805 | (18.3) |
| 20-24 | 739 | (16.8) |
| 25-29 | 818 | (18.6) |
| 30-34 | 660 | (15.0) |
| 35-39 | 536 | (12.2) |
| 40-44 | 470 | (10.7) |
| 45-49 | 369 | (8.4) |
| **Ethnicity** | | |
| Bambara | 1,508 | (34.3) |
| Malinke | 317 | (7.2) |
| Peulh | 651 | (14.8) |
| Sarakole/Soninke/Marka | 506 | (11.5) |
| Dogon | 413 | (9.4) |
| Sénoufo/Minianka | 466 | (10.6) |
| Others | 536 | (12.2) |
| **Religion** | | |
| Catholics | 119 | (2.7) |
| Other Christians | 75 | (1.7) |
| Islam | 4,063 | (92.4) |
| Traditionalist | 31 | (0.7) |
| No Religion | 110 | (2.5) |
| **Parity** | | |
| 0 | 835 | (19.0) |
| 1 | 541 | (12.3) |
| 2 | 563 | (12.8) |
| 3 | 506 | (11.5) |
| 4 | 497 | (11.3) |
| 5 | 470 | (10.7) |
| 6+ | 985 | (22.4) |
| **Marital Status** | | |
| Single | 682 | (15.5) |
| Married | 3,619 | (82.3) |
| Formerly Married | 97 | (2.2) |
| **Residential Setting** | | |
| Rural | 3,258 | (74.1) |
| Urban | 1,139 | (25.9) |
| **Region** | | |
| Kayes | 563 | (12.8) |
| Sikasso | 923 | (21.0) |
| Koulikoro | 1,011 | (23.0) |
| Segou | 791 | (18.0) |
| Mopti | 519 | (11.8) |
| Bamako | 589 | (13.4) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Level of Education** | | |
| No Education | 3,280 | (74.6) |
| Primary | 413 | (9.4) |
| Secondary | 642 | (14.6) |
| Higher | 62 | (1.4) |
| **Wealth Quintile** | | |
| Poorest | 835 | (19.0) |
| Poorer | 796 | (18.1) |
| Middle | 831 | (18.9) |
| Richer | 871 | (19.8) |
| Richest | 1,064 | (24.2) |
| **Occupation** | | |
| Not Working | 2,220 | (50.5) |
| Nonmanual | 893 | (20.3) |
| Manual | 616 | (14.0) |
| Agricultural | 668 | (15.2) |
| **Media Exposure** | | |
| Not Exposed | 1,148 | (26.1) |
| Exposed to one media source | 1,161 | (26.4) |
| Exposed to two media sources | 1,732 | (39.4) |
| Exposed to three media sources | 356 | (8.1) |
| **Hormonal Contraceptives use** | | |
| No | 3,927 | (89.3) |
| Yes | 470 | (10.7) |

**Table S9:** Descriptive statistics for the study population in Gambia.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 3,886 | (100) |
| **Nutritional status** | | |
| Underweight | 653 | (16.8) |
| Normal Weight | 2,359 | (60.7) |
| Overweight/Obesity | 874 | (22.5) |
| **Age** | | |
| 15-19 | 940 | (24.2) |
| 20-24 | 797 | (20.5) |
| 25-29 | 665 | (17.1) |
| 30-34 | 567 | (14.6) |
| 35-39 | 389 | (10.0) |
| 40-44 | 299 | (7.7) |
| 45-49 | 229 | (5.9) |
| **Ethnicity** | | |
| Mandinka/Jahanka | 1,348 | (34.7) |
| Wollof | 536 | (13.8) |
| Jola/Karoninka | 400 | (10.3) |
| Fula/Tukulur/Lorobo | 878 | (22.6) |
| Serere | 109 | (2.8) |
| Serahuleh | 241 | (6.2) |
| Others | 190 | (4.9) |
| Non-Gambian | 183 | (4.7) |
| **Religion** | | |
| Other Christians | 144 | (3.7) |
| Islam | 3,742 | (96.3) |
| **Parity** | | |
| 0 | 1364 | (35.1) |
| 1 | 497 | (12.8) |
| 2 | 427 | (11.0) |
| 3 | 354 | (9.1) |
| 4 | 303 | (7.8) |
| 5 | 295 | (7.6) |
| 6+ | 645 | (16.6) |
| **Marital Status** | | |
| Single | 1,209 | (31.1) |
| Married | 2,456 | (63.2) |
| Formerly Married | 222 | (5.7) |
| **Residential Setting** | | |
| Rural | 1,714 | (44.1) |
| Urban | 2,172 | (55.9) |
| **Region** | | |
| Banjul | 85 | (2.2) |
| Kanifing | 902 | (23.2) |
| Brikama | 1,310 | (33.7) |
| Mansakonko | 190 | (4.9) |
| Kerewan | 443 | (11.4) |
| Kuntaur | 194 | (5.0) |
| Janjanbureh | 284 | (7.3) |
| Base | 478 | (12.3) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Level of Education** | | |
| No Education | 1,791 | (46.1) |
| Primary | 521 | (13.4) |
| Secondary | 1,368 | (35.2) |
| Higher | 206 | (5.3) |
| **Wealth Quintile** | | |
| Poorest | 645 | (16.6) |
| Poorer | 754 | (19.4) |
| Middle | 653 | (16.8) |
| Richer | 851 | (21.9) |
| Richest | 983 | (25.3) |
| **Occupation** | | |
| Not Working | 1,892 | (48.7) |
| Nonmanual | 1,053 | (27.1) |
| Manual | 89 | (2.3) |
| Agricultural | 851 | (21.9) |
| **Media Exposure** | | |
| Not Exposed | 330 | (8.5) |
| Exposed to one media source | 968 | (24.9) |
| Exposed to two media sources | 1,943 | (50.0) |
| Exposed to three media sources | 645 | (16.6) |
| **Hormonal Contraceptives use** | | |
| No | 3,633 | (93.5) |
| Yes | 253 | (6.5) |

**Table S10:** Descriptive statistics for the study population in Uganda.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 2,308 | (100) |
| **Nutritional status** | | |
| Underweight | 275 | (11.9) |
| Normal Weight | 1,606 | (69.6) |
| Overweight/Obesity | 429 | (18.6) |
| **Age** | | |
| 15-19 | 586 | (25.4) |
| 20-24 | 372 | (16.1) |
| 25-29 | 406 | (17.6) |
| 30-34 | 275 | (11.9) |
| 35-39 | 291 | (12.6) |
| 40-44 | 194 | (8.4) |
| 45-49 | 185 | (8.0) |
| **Ethnicity** | | |
| Baganda | 411 | (17.8) |
| Banyankole | 226 | (9.8) |
| Basoga | 185 | (8.0) |
| Bakiga | 180 | (7.8) |
| Iteso | 164 | (7.1) |
| Others | 1142 | (49.5) |
| **Religion** | | |
| Catholic | 972 | (42.1) |
| Other Christians | 1,022 | (44.3) |
| Islam | 284 | (12.3) |
| Others | 30 | (1.3) |
| **Parity** | | |
| 0 | 655 | (28.4) |
| 1 | 201 | (8.7) |
| 2 | 238 | (10.3) |
| 3 | 217 | (9.4) |
| 4 | 231 | (10.0) |
| 5 | 173 | (7.5) |
| 6+ | 593 | (25.7) |
| **Marital Status** | | |
| Single | 676 | (29.3) |
| Married | 1,322 | (57.3) |
| Formerly Married | 309 | (13.4) |
| **Residential Setting** | | |
| Rural | 1,807 | (78.3) |
| Urban | 501 | (21.7) |
| **Region** | | |
| Kampala | 242 | (10.5) |
| Central 1 | 245 | (10.6) |
| Central 2 | 231 | (10.0) |
| East Central | 219 | (9.5) |
| Eastern | 337 | (14.6) |
| North | 192 | (8.3) |
| Karamoja | 65 | (2.8) |
| West-Nile | 138 | (6.0) |
| Western | 332 | (14.4) |
| South West | 307 | (13.3) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Level of Education** | | |
| No Education | 270 | (11.7) |
| Primary | 1,376 | (59.6) |
| Secondary | 531 | (23.0) |
| Higher | 132 | (5.7) |
| **Wealth Quintile** | | |
| Poorest | 379 | (16.4) |
| Poorer | 383 | (16.6) |
| Middle | 420 | (18.2) |
| Richer | 503 | (21.8) |
| Richest | 623 | (27.0) |
| **Occupation** | | |
| Not Working | 632 | (27.4) |
| Nonmanual | 554 | (24.0) |
| Agricultural | 1,122 | (48.6) |
| **Media Exposure** | | |
| Not Exposed | 291 | (12.6) |
| Exposed to one media source | 1,013 | (43.9) |
| Exposed to two media sources | 619 | (26.8) |
| Exposed to three media sources | 385 | (16.7) |
| **Hormonal Contraceptives use** | | |
| No | 1,872 | (81.1) |
| Yes | 436 | (18.9) |

**Table S11:** Descriptive statistics for the study population in Guinea.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 4,038 | (100) |
| **Nutritional status** | | |
| Underweight | 497 | (12.3) |
| Normal Weight | 2,758 | (68.3) |
| Overweight/Obesity | 783 | (19.4) |
| **Age** | | |
| 15-19 | 969 | (24.0) |
| 20-24 | 690 | (17.1) |
| 25-29 | 630 | (15.6) |
| 30-34 | 509 | (12.6) |
| 35-39 | 501 | (12.4) |
| 40-44 | 396 | (9.8) |
| 45-49 | 343 | (8.5) |
| **Ethnicity** | | |
| Soussou | 820 | (20.3) |
| Peulh | 1,300 | (32.2) |
| Malinké | 1,244 | (30.8) |
| Kissi | 190 | (4.7) |
| Toma | 113 | (2.8) |
| Guerzé | 258 | (6.4) |
| Other | 113 | (2.8) |
| **Religion** | | |
| Other Christians | 371 | (9.2) |
| Islam | 3,477 | (86.1) |
| No Religion | 190 | (4.7) |
| **Parity** | | |
| 0 | 1,094 | (27.1) |
| 1 | 553 | (13.7) |
| 2 | 472 | (11.7) |
| 3 | 359 | (8.9) |
| 4 | 384 | (9.5) |
| 5 | 363 | (9.0) |
| 6+ | 812 | (20.1) |
| **Marital Status** | | |
| Single | 1,078 | (26.7) |
| Married | 2,774 | (68.7) |
| Formerly Married | 186 | (4.6) |
| **Residential Setting** | | |
| Rural | 2,556 | (63.3) |
| Urban | 1,482 | (36.7) |
| **Region** | | |
| Boké | 412 | (10.2) |
| Conakry | 852 | (21.1) |
| Faranah | 335 | (8.3) |
| Kankan | 521 | (12.9) |
| Kindia | 557 | (13.8) |
| Labé | 363 | (9.0) |
| Mamou | 258 | (6.4) |
| N'Zérékoré | 739 | (18.3) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Level of Education** | | |
| No Education | 2,625 | (65.0) |
| Primary | 573 | (14.2) |
| Secondary | 711 | (17.6) |
| Higher | 129 | (3.2) |
| **Wealth Quintile** | | |
| Poorest | 690 | (17.1) |
| Poorer | 763 | (18.9) |
| Middle | 755 | (18.7) |
| Richer | 848 | (21.0) |
| Richest | 981 | (24.3) |
| **Occupation** | | |
| Not Working | 1,070 | (26.5) |
| Nonmanual | 1,175 | (29.1) |
| Manual | 258 | (6.4) |
| Agricultural | 1,534 | (38.0) |
| **Media Exposure** | | |
| Not Exposed | 1,175 | (29.1) |
| Exposed to one media source | 1,195 | (29.6) |
| Exposed to two media sources | 1,333 | (33.0) |
| Exposed to three media sources | 335 | (8.3) |
| **Hormonal Contraceptives use** | | |
| No | 3,881 | (96.1) |
| Yes | 157 | (3.9) |

**Table S12:** Descriptive statistics for the study population in Senegal.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 5,020 | (100) |
| **Nutritional status** | | |
| Underweight | 1,109 | (22.1) |
| Normal Weight | 2,841 | (56.6) |
| Overweight/Obesity | 1,069 | (21.3) |
| **Age** | | |
| 15-19 | 1,195 | (23.8) |
| 20-24 | 974 | (19.4) |
| 25-29 | 813 | (16.2) |
| 30-34 | 648 | (12.9) |
| 35-39 | 532 | (10.6) |
| 40-44 | 502 | (10.0) |
| 45-49 | 356 | (7.1) |
| **Ethnicity** | | |
| Wolof | 2,018 | (40.2) |
| Poular | 1,205 | (24.0) |
| Serer | 738 | (14.7) |
| Mandingue | 186 | (3.7) |
| Diola | 216 | (4.3) |
| Soninke | 141 | (2.8) |
| Not a Senegalese | 126 | (2.5) |
| Others | 392 | (7.8) |
| **Religion** | | |
| Islam | 4,774 | (95.1) |
| Other | 246 | (4.9) |
| **Parity** | | |
| 0 | 1,888 | (37.6) |
| 1 | 633 | (12.6) |
| 2 | 527 | (10.5) |
| 3 | 427 | (8.5) |
| 4 | 366 | (7.3) |
| 5 | 326 | (6.5) |
| 6+ | 853 | (17.0) |
| **Marital Status** | | |
| Single | 1,642 | (32.7) |
| Married | 3,132 | (62.4) |
| Formerly Married | 246 | (4.9) |
| **Residential Setting** | | |
| Rural | 2,480 | (49.4) |
| Urban | 2,540 | (50.6) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Dakar | 1,335 | (26.6) |
| Ziguinchor | 201 | (4.0) |
| Diourbel | 592 | (11.8) |
| Saint-Louis | 301 | (6.0) |
| Tambacounda | 206 | (4.1) |
| Kaolack | 382 | (7.6) |
| Thiès | 673 | (13.4) |
| Louga | 361 | (7.2) |
| Fatick | 236 | (4.7) |
| Kolda | 196 | (3.9) |
| Matam | 186 | (3.7) |
| Kaffrine | 186 | (3.7) |
| Kedougou | 35 | (0.7) |
| Sedhiou | 131 | (2.6) |
| **Level of Education** | | |
| No Education | 2,791 | (55.6) |
| Primary | 1,089 | (21.7) |
| Secondary | 1,049 | (20.9) |
| Higher | 90 | (1.8) |
| **Wealth Quintile** | | |
| Poorest | 768 | (15.3) |
| Poorer | 838 | (16.7) |
| Middle | 1,029 | (20.5) |
| Richer | 1,130 | (22.5) |
| Richest | 1,255 | (25.0) |
| **Occupation** | | |
| Not Working | 2666 | (53.1) |
| Nonmanual | 1,822 | (36.3) |
| Manual | 85 | (1.7) |
| Agricultural | 447 | (8.9) |
| **Media Exposure** | | |
| Not Exposed | 361 | (7.2) |
| Exposed to one media source | 1,064 | (21.2) |
| Exposed to two media sources | 2,535 | (50.5) |
| Exposed to three media sources | 1,059 | (21.1) |
| **Hormonal Contraceptives use** | | |
| No | 4,598 | (91.6) |
| Yes | 422 | (8.4) |

**Table S13:** Descriptive statistics for the study population in Namibia.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 3,921 | (100) |
| **Nutritional status** | | |
| Underweight | 549 | (14.0) |
| Normal Weight | 2,137 | (54.5) |
| Overweight/Obesity | 1,235 | (31.5) |
| **Age** | | |
| 15-19 | 823 | (21.0) |
| 20-24 | 753 | (19.2) |
| 25-29 | 612 | (15.6) |
| 30-34 | 514 | (13.1) |
| 35-39 | 498 | (12.7) |
| 40-44 | 392 | (10.0) |
| 45-49 | 329 | (8.4) |
| **Religion** | | |
| Catholic | 772 | (19.7) |
| Other Christians | 2,776 | (70.8) |
| Others | 329 | (8.4) |
| No Religion | 43 | (1.1) |
| **Parity** | | |
| 0 | 1,274 | (32.5) |
| 1 | 769 | (19.6) |
| 2 | 698 | (17.8) |
| 3 | 478 | (12.2) |
| 4 | 294 | (7.5) |
| 5 | 176 | (4.5) |
| 6+ | 231 | (5.9) |
| **Marital Status** | | |
| Single | 2,368 | (60.4) |
| Married | 1,259 | (32.1) |
| Formerly Married | 294 | (7.5) |
| **Residential Setting** | | |
| Rural | 1,792 | (45.7) |
| Urban | 2,129 | (54.3) |
| **Region** | | |
| Caprivi | 208 | (5.3) |
| Erongo | 333 | (8.5) |
| Hardap | 149 | (3.8) |
| Karas | 157 | (4.0) |
| Kavango | 341 | (8.7) |
| Khomas | 823 | (21.0) |
| Kunene | 110 | (2.8) |
| Ohangwena | 412 | (10.5) |
| Omaheke | 102 | (2.6) |
| Omusati | 388 | (9.9) |
| Oshana | 353 | (9.0) |
| Oshikoto | 310 | (7.9) |
| Otjozondjupa | 235 | (6.0) |
| **Level of Education** | | |
| No Education | 184 | (4.7) |
| Primary | 788 | (20.1) |
| Secondary | 2,604 | (66.4) |
| Higher | 345 | (8.8) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Wealth Quintile** | | |
| Poorest | 623 | (15.9) |
| Poorer | 706 | (18.0) |
| Middle | 765 | (19.5) |
| Richer | 949 | (24.2) |
| Richest | 878 | (22.4) |
| **Occupation** | | |
| Not Working | 2,180 | (55.6) |
| Nonmanual | 1,557 | (39.7) |
| Manual | 125 | (3.2) |
| Agricultural | 59 | (1.5) |
| **Media Exposure** | | |
| Not Exposed | 314 | (8.0) |
| Exposed to one media source | 772 | (19.7) |
| Exposed to two media sources | 1,243 | (31.7) |
| Exposed to three media sources | 1,592 | (40.6) |
| **Hormonal Contraceptives use** | | |
| No | 2,843 | (72.5) |
| Yes | 1,078 | (27.5) |

**Table S14:** Descriptive statistics for the study population in Congo.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 4,822 | (100) |
| **Nutritional status** | | |
| Underweight | 694 | (14.4) |
| Normal Weight | 2,864 | (59.4) |
| Overweight/Obesity | 1,263 | (26.2) |
| **Age** | | |
| 15-19 | 1,022 | (21.2) |
| 20-24 | 853 | (17.7) |
| 25-29 | 815 | (16.9) |
| 30-34 | 709 | (14.7) |
| 35-39 | 617 | (12.8) |
| 40-44 | 424 | (8.8) |
| 45-49 | 381 | (7.9) |
| **Ethnicity** | | |
| Kongo | 2,667 | (55.3) |
| Punu | 222 | (4.6) |
| Duma | 43 | (0.9) |
| Mbéré/Mbéti/Kélé | 101 | (2.1) |
| Téké | 632 | (13.1) |
| Mbochi | 526 | (10.9) |
| Sangha | 121 | (2.5) |
| Oubanguiens | 39 | (0.8) |
| Pygmée | 29 | (0.6) |
| Etranger | 391 | (8.1) |
| Others | 53 | (1.1) |
| **Religion** | | |
| Catholic | 1,524 | (31.6) |
| Other Christians | 2,831 | (58.7) |
| Islam | 53 | (1.1) |
| Traditionalists | 227 | (4.7) |
| Other | 29 | (0.6) |
| No Religion | 159 | (3.3) |
| **Parity** | | |
| 0 | 1,133 | (23.5) |
| 1 | 767 | (15.9) |
| 2 | 815 | (16.9) |
| 3 | 694 | (14.4) |
| 4 | 501 | (10.4) |
| 5 | 328 | (6.8) |
| 6+ | 583 | (12.1) |
| **Marital Status** | | |
| Single | 1,297 | (26.9) |
| Married | 2,676 | (55.5) |
| Formerly Married | 849 | (17.6) |
| **Residential Setting** | | |
| Rural | 1,533 | (31.8) |
| Urban | 3,289 | (68.2) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Kouilou | 130 | (2.7) |
| Niari | 246 | (5.1) |
| Lekoumou | 87 | (1.8) |
| Bouenza | 530 | (11.0) |
| Pool | 280 | (5.8) |
| Plateaux | 140 | (2.9) |
| Cuvette | 149 | (3.1) |
| Cuvette - Ouest | 58 | (1.2) |
| Sangha | 77 | (1.6) |
| Likouala | 193 | (4.0) |
| Brazzaville | 1,606 | (33.3) |
| Pointe-noire | 1,326 | (27.5) |
| **Level of Education** | | |
| No Education | 265 | (5.5) |
| Primary | 1,186 | (24.6) |
| Secondary | 3,139 | (65.1) |
| Higher | 231 | (4.8) |
| **Wealth Quintile** | | |
| Poorest | 810 | (16.8) |
| Poorer | 979 | (20.3) |
| Middle | 1,032 | (21.4) |
| Richer | 964 | (20.0) |
| Richest | 1,037 | (21.5) |
| **Occupation** | | |
| Not Working | 1,639 | (34.0) |
| Nonmanual | 1,967 | (40.8) |
| Manual | 236 | (4.9) |
| Agricultural | 935 | (19.4) |
| Other | 43 | (0.9) |
| **Media Exposure** | | |
| Not Exposed | 1,259 | (26.1) |
| Exposed to one media source | 1,331 | (27.6) |
| Exposed to two media sources | 1,379 | (28.6) |
| Exposed to three media sources | 853 | (17.7) |
| **Hormonal Contraceptives use** | | |
| No | 4,576 | (94.9) |
| Yes | 246 | (5.1) |

**Table S15**: Descriptive statistics for the study population in Nigeria.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 32,078 | (100) |
| **Nutritional status** | | |
| Underweight | 3,689 | (11.5) |
| Normal Weight | 20,466 | (63.8) |
| Overweight/Obesity | 7,923 | (24.7) |
| **Age** | | |
| 15-19 | 6,833 | (21.3) |
| 20-24 | 5,229 | (16.3) |
| 25-29 | 5,357 | (16.7) |
| 30-34 | 4,202 | (13.1) |
| 35-39 | 3,914 | (12.2) |
| 40-44 | 3,240 | (10.1) |
| 45-49 | 3,304 | (10.3) |
| **Ethnicity** | | |
| Ekoi | 32 | (0.1) |
| Fulani | 1,989 | (6.2) |
| Hausa | 8,372 | (26.1) |
| Ibibio | 770 | (2.4) |
| Igala | 321 | (1.0) |
| Igbo | 4,876 | (15.2) |
| Ijaw/Izon | 642 | (2.0) |
| Kanuri/Beriberi | 577 | (1.8) |
| Tiv | 642 | (2.0) |
| Yoruba | 4,812 | (15.0) |
| Others | 9,046 | (28.2) |
| **Religion** | | |
| Other Christians | 12,061 | (37.6) |
| Catholics | 3,721 | (11.6) |
| Islam | 16,007 | (49.9) |
| Traditionalists | 289 | (0.9) |
| **Parity** | | |
| 0 | 10,105 | (31.5) |
| 1 | 3,272 | (10.2) |
| 2 | 3,079 | (9.6) |
| 3 | 3,047 | (9.5) |
| 4 | 2,983 | (9.3) |
| 5 | 2,598 | (8.1) |
| 6+ | 6,993 | (21.8) |
| **Marital Status** | | |
| Single | 8,950 | (27.9) |
| Married | 21,460 | (66.9) |
| Formerly Married | 1,668 | (5.2) |
| **Residential Setting** | | |
| Rural | 18,060 | (56.3) |
| Urban | 14,018 | (43.7) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Sokoto | 866 | (2.7) |
| Zamfara | 1.026 | (3.2) |
| Katsina | 1,155 | (3.6) |
| Jigawa | 1,091 | (3.4) |
| Yobe | 770 | (2.4) |
| Borno | 1,123 | (3.5) |
| Adamawa | 642 | (2.0) |
| Gombe | 417 | (1.3) |
| Bauchi | 866 | (2.7) |
| Kano | 2,598 | (8.1) |
| Kaduna | 1,604 | (5.0) |
| Kebbi | 962 | (3.0) |
| Niger | 1,123 | (3.5) |
| Fct-Abuja | 289 | (0.9) |
| Nasarawa | 481 | (1.5) |
| Plateau | 545 | (1.7) |
| Taraba | 706 | (2.2) |
| Benue | 994 | (3.1) |
| Kogi | 609 | (1.9) |
| Kwara | 545 | (1.7) |
| Oyo | 1,315 | (4.1) |
| Osun | 706 | (2.2) |
| Ekiti | 289 | (0.9) |
| Ondo | 706 | (2.2) |
| Edo | 674 | (2.1) |
| Anambra | 898 | (2.8) |
| Enugu | 834 | (2.6) |
| Ebonyi | 962 | (3.0) |
| Cross River | 609 | (1.9) |
| Akwa Ibom | 770 | (2.4) |
| Abia | 449 | (1.4) |
| Imo | 738 | (2.3) |
| Rivers | 1,091 | (3.4) |
| Bayelsa | 289 | (0.9) |
| Delta | 866 | (2.7) |
| Lagos | 1,732 | (5.4) |
| Ogun | 738 | (2.3) |
| **Level of Education** | | |
| No Education | 11,484 | (35.8) |
| Primary | 5,517 | (17.2) |
| Secondary | 11,965 | (37.3) |
| Higher | 3,112 | (9.7) |
| **Wealth Quintile** | | |
| Poorest | 5,485 | (17.1) |
| Poorer | 5,870 | (18.3) |
| Middle | 6,223 | (19.4) |
| Richer | 6,768 | (21.1) |
| Richest | 7,731 | (24.1) |
| **Occupation** | | |
| Not Working | 11,805 | (36.8) |
| Nonmanual | 14,211 | (44.3) |
| Manual | 2,855 | (8.9) |
| Agricultural | 3,176 | (9.9) |
| Others | 32 | (0.1) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Media Exposure** | | |
| Not Exposed | 8,565 | (26.7) |
| Exposed to one media source | 6,833 | (21.3) |
| Exposed to two media sources | 10,201 | (31.8) |
| Exposed to three media sources | 6,480 | (20.2) |
| **Hormonal Contraceptives use** | | |
| No | 30,314 | (94.5) |
| Yes | 1,764 | (5.5) |

**Table S16:** Descriptive statistics for the study population in Zambia.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 14,129 | (100) |
| **Nutritional status** | | |
| Underweight | 1,455 | (10.3) |
| Normal Weight | 9,424 | (66.7) |
| Overweight/Obesity | 3,250 | (23.0) |
| **Age** | | |
| 15-19 | 3,221 | (22.8) |
| 20-24 | 2,458 | (17.4) |
| 25-29 | 2,303 | (16.3) |
| 30-34 | 2,049 | (14.5) |
| 35-39 | 1,766 | (12.5) |
| 40-44 | 1,356 | (9.6) |
| 45-49 | 975 | (6.9) |
| **Ethnicity** | | |
| Bemba | 3,447 | (24.4) |
| Tonga | 1,950 | (13.8) |
| Chewa | 1,046 | (7.4) |
| Lozi | 819 | (5.8) |
| Nsenga | 763 | (5.4) |
| Tumbuka | 706 | (5.0) |
| Ngoni | 622 | (4.4) |
| Lala | 438 | (3.1) |
| Kaonde | 353 | (2.5) |
| Namwanga | 438 | (3.1) |
| Mambwe | 410 | (2.9) |
| Lunda(North-Western) | 283 | (2.0) |
| Luvale | 325 | (2.3) |
| Others | 2,529 | (17.9) |
| **Religion** | | |
| Catholic | 2,600 | (18.4) |
| Other Christians | 11,374 | (80.5) |
| Islam | 85 | (0.6) |
| Other | 71 | (0.5) |
| **Parity** | | |
| 0 | 3,561 | (25.2) |
| 1 | 1,936 | (13.7) |
| 2 | 1,794 | (12.7) |
| 3 | 1,597 | (11.3) |
| 4 | 1,342 | (9.5) |
| 5 | 1,116 | (7.9) |
| 6+ | 2,783 | (19.7) |
| **Marital Status** | | |
| Single | 4,253 | (30.1) |
| Married | 8,054 | (57.0) |
| Formerly Married | 1,823 | (12.9) |
| **Residential Setting** | | |
| Rural | 7,404 | (52.4) |
| Urban | 6,725 | (47.6) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Central | 1,257 | (8.9) |
| Copperbelt | 2,487 | (17.6) |
| Eastern | 1,653 | (11.7) |
| Luapula | 933 | (6.6) |
| Lusaka | 2,896 | (20.5) |
| Muchinga | 735 | (5.2) |
| Northern | 989 | (7.0) |
| North Western | 608 | (4.3) |
| Southern | 1,724 | (12.2) |
| Western | 848 | (6.0) |
| **Level of Education** | | |
| No Education | 1,116 | (7.9) |
| Primary | 6,542 | (46.3) |
| Secondary | 5,736 | (40.6) |
| Higher | 735 | (5.2) |
| **Wealth Quintile** | | |
| Poorest | 2,360 | (16.7) |
| Poorer | 2,374 | (16.8) |
| Middle | 2,642 | (18.7) |
| Richer | 3,052 | (21.6) |
| Richest | 3,702 | (26.2) |
| **Occupation** | | |
| Not Working | 6,796 | (48.1) |
| Nonmanual | 3,546 | (25.1) |
| Manual | 170 | (1.2) |
| Agricultural | 3,419 | (24.2) |
| Other | 198 | (1.4) |
| **Media Exposure** | | |
| Not Exposed | 3,405 | (24.1) |
| Exposed to one media source | 3,914 | (27.7) |
| Exposed to two media sources | 3,716 | (26.3) |
| Exposed to three media sources | 3,094 | (21.9) |
| **Hormonal Contraceptives use** | | |
| No | 9,989 | (70.7) |
| Yes | 4,140 | (29.3) |

**Table S17:** Descriptive statistics for the study population in Sierra Leone.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 6,971 | (100) |
| **Nutritional status** | | |
| Underweight | 641 | (9.2) |
| Normal Weight | 5,047 | (72.4) |
| Overweight/Obesity | 1,283 | (18.4) |
| **Age** | | |
| 15-19 | 1,555 | (22.3) |
| 20-24 | 1,087 | (15.6) |
| 25-29 | 1,150 | (16.5) |
| 30-34 | 941 | (13.5) |
| 35-39 | 997 | (14.3) |
| 40-44 | 606 | (8.7) |
| 45-49 | 634 | (9.1) |
| **Ethnicity** | | |
| Creole | 77 | (1.1) |
| Fullah | 230 | (3.3) |
| Kono | 293 | (4.2) |
| Limba | 432 | (6.2) |
| Loko | 230 | (3.3) |
| Mandigo | 174 | (2.5) |
| Mende | 2,307 | (33.1) |
| Sherbro | 174 | (2.5) |
| Temne | 2,489 | (35.7) |
| Koranko | 195 | (2.8) |
| Others | 369 | (5.3) |
| **Religion** | | |
| Other Christians | 1,506 | (21.6) |
| Islam | 5,451 | (78.2) |
| Other | 14 | (0.2) |
| **Parity** | | |
| 0 | 1,743 | (25.0) |
| 1 | 941 | (13.5) |
| 2 | 857 | (12.3) |
| 3 | 753 | (10.8) |
| 4 | 753 | (10.8) |
| 5 | 641 | (9.2) |
| 6+ | 1,283 | (18.4) |
| **Marital Status** | | |
| Single | 2,036 | (29.2) |
| Married | 4,434 | (63.6) |
| Formerly Married | 502 | (7.2) |
| **Residential Setting** | | |
| Rural | 4,392 | (63.0) |
| Urban | 2,579 | (37.0) |
| **Region** | | |
| Eastern | 1,471 | (21.1) |
| Northern | 2,642 | (37.9) |
| Southern | 1,443 | (20.7) |
| Western | 1,415 | (20.3) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Level of Education** | | |
| No Education | 3,834 | (55.0) |
| Primary | 955 | (13.7) |
| Secondary | 1,952 | (28.0) |
| Higher | 230 | (3.3) |
| **Wealth Quintile** | | |
| Poorest | 1,234 | (17.7) |
| Poorer | 1,283 | (18.4) |
| Middle | 1,331 | (19.1) |
| Richer | 1,387 | (19.9) |
| Richest | 1,736 | (24.9) |
| **Occupation** | | |
| Not Working | 1,980 | (28.4) |
| Nonmanual | 383 | (5.5) |
| Manual | 1,903 | (27.3) |
| Agricultural | 2,705 | (38.8) |
| **Media Exposure** | | |
| Not Exposed | 2,363 | (33.9) |
| Exposed to one media source | 3,046 | (43.7) |
| Exposed to two media sources | 1,074 | (15.4) |
| Exposed to three media sources | 488 | (7.0) |
| **Hormonal Contraceptives use** | | |
| No | 5556 | (79.7) |
| Yes | 1415 | (20.3) |

**Table S18:** Descriptive statistics for the study population in Mozambique.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 11,617 | (100) |
| **Nutritional status** | | |
| Underweight | 999 | (8.6) |
| Normal Weight | 8,713 | (75.0) |
| Overweight/Obesity | 1,905 | (16.4) |
| **Age** | | |
| 15-19 | 2,591 | (22.3) |
| 20-24 | 1,917 | (16.5) |
| 25-29 | 1,859 | (16.0) |
| 30-34 | 1,626 | (14.0) |
| 35-39 | 1,464 | (12.6) |
| 40-44 | 1,080 | (9.3) |
| 45-49 | 1,080 | (9.3) |
| **Ethnicity** | | |
| Emakhuwa | 2,416 | (20.8) |
| Português | 1,104 | (9.5) |
| Xichangana | 1,626 | (14.0) |
| Cisena | 1,150 | (9.9) |
| Elomwe | 871 | (7.5) |
| Echuwabo | 732 | (6.3) |
| Cinyanja | 883 | (7.6) |
| Cindau | 569 | (4.9) |
| Xitswa | 488 | (4.2) |
| Cinyungwe | 372 | (3.2) |
| Ciyao | 256 | (2.2) |
| Others | 1,150 | (9.9) |
| **Religion** | | |
| Catholic | 3,415 | (29.4) |
| Other Christians | 4,891 | (42.1) |
| Islam | 1,975 | (17.0) |
| Other | 256 | (2.2) |
| No Religion | 1,080 | (9.3) |
| **Parity** | | |
| 0 | 2,602 | (22.4) |
| 1 | 1,801 | (15.5) |
| 2 | 1,603 | (13.8) |
| 3 | 1,382 | (11.9) |
| 4 | 1,255 | (10.8) |
| 5 | 918 | (7.9) |
| 6+ | 2,056 | (17.7) |
| **Marital Status** | | |
| Single | 2,335 | (20.1) |
| Married | 7,551 | (65.0) |
| Formerly Married | 1,731 | (14.9) |
| **Residential Setting** | | |
| Rural | 7,458 | (64.2) |
| Urban | 4,159 | (35.8) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Niassa | 534 | (4.6) |
| Cabo Delgado | 836 | (7.2) |
| Nampula | 1,580 | (13.6) |
| Zambezia | 2,068 | (17.8) |
| Tete | 1,336 | (11.5) |
| Manica | 802 | (6.9) |
| Sofala | 1,220 | (10.5) |
| Inhambane | 755 | (6.5) |
| Gaza | 720 | (6.2) |
| Maputo Provincia | 953 | (8.2) |
| Maputo Cidade | 813 | (7.0) |
| **Level of Education** | | |
| No Education | 3,590 | (30.9) |
| Primary | 5,762 | (49.6) |
| Secondary | 2,091 | (18.0) |
| Higher | 174 | (1.5) |
| **Wealth Quintile** | | |
| Poorest | 2,103 | (18.1) |
| Poorer | 2,091 | (18.0) |
| Middle | 2,161 | (18.6) |
| Richer | 2,358 | (20.3) |
| Richest | 2,904 | (25.0) |
| **Occupation** | | |
| Not Working | 6,145 | (52.9) |
| Nonmanual | 1,928 | (16.6) |
| Manual | 128 | (1.1) |
| Agricultural | 3,415 | (29.4) |
| **Media Exposure** | | |
| Not Exposed | 3,288 | (28.3) |
| Exposed to one media source | 4,531 | (39.0) |
| Exposed to two media sources | 2,451 | (21.1) |
| Exposed to three media sources | 1,348 | (11.6) |
| **Hormonal Contraceptives use** | | |
| No | 10,455 | (90.0) |
| Yes | 1.162 | (10.0) |

**Table S19:** Descriptive statistics for the study population in Malawi.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 7,179 | (100) |
| **Nutritional status** | | |
| Underweight | 517 | (7.2) |
| Normal Weight | 5,176 | (72.1) |
| Overweight/Obesity | 1,486 | (20.7) |
| **Age** | | |
| 15-19 | 1,543 | (21.5) |
| 20-24 | 1,407 | (19.6) |
| 25-29 | 1,149 | (16.0) |
| 30-34 | 1,084 | (15.1) |
| 35-39 | 847 | (11.8) |
| 40-44 | 646 | (9.0) |
| 45-49 | 503 | (7.0) |
| **Ethnicity** | | |
| Chewa | 2,462 | (34.3) |
| Tombuka | 646 | (9.0) |
| Lomwe | 1,436 | (20.0) |
| Tonga | 122 | (1.7) |
| Yao | 969 | (13.5) |
| Sena | 244 | (3.4) |
| Nkhonde | 65 | (0.9) |
| Ngoni | 840 | (11.7) |
| Mang'anja | 194 | (2.7) |
| Nyanja | 79 | (1.1) |
| Others | 122 | (1.7) |
| **Religion** | | |
| Catholic | 1,299 | (18.1) |
| Other Christians | 4,946 | (68.9) |
| Islam | 890 | (12.4) |
| Other | 7 | (0.1) |
| No Religion | 36 | (0.5) |
| **Parity** | | |
| 0 | 1,608 | (22.4) |
| 1 | 1,041 | (14.5) |
| 2 | 1,055 | (14.7) |
| 3 | 948 | (13.2) |
| 4 | 768 | (10.7) |
| 5 | 632 | (8.8) |
| 6+ | 1,127 | (15.7) |
| **Marital Status** | | |
| Single | 1,622 | (22.6) |
| Married | 4,551 | (63.4) |
| Formerly Married | 1,005 | (14.0) |
| **Residential Setting** | | |
| Rural | 5,851 | (81.5) |
| Urban | 1,328 | (18.5) |
| **Region** | | |
| Northern | 818 | (11.4) |
| Central | 3,044 | (42.4) |
| Southern | 3,317 | (46.2) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Level of Education** | | |
| No Education | 883 | (12.3) |
| Primary | 4,365 | (60.8) |
| Secondary | 1,701 | (23.7) |
| Higher | 230 | (3.2) |
| **Wealth Quintile** | | |
| Poorest | 1,328 | (18.5) |
| Poorer | 1,386 | (19.3) |
| Middle | 1,357 | (18.9) |
| Richer | 1,371 | (19.1) |
| Richest | 1,737 | (24.2) |
| **Occupation** | | |
| Not Working | 2,290 | (31.9) |
| Nonmanual | 948 | (13.2) |
| Manual | 1,084 | (15.1) |
| Agricultural | 2,857 | (39.8) |
| **Media Exposure** | | |
| Not Exposed | 3,152 | (43.9) |
| Exposed to one media source | 2,125 | (29.6) |
| Exposed to two media sources | 1,228 | (17.1) |
| Exposed to three media sources | 675 | (9.4) |
| **Hormonal Contraceptives use** | | |
| No | 4,530 | (63.1) |
| Yes | 2,649 | (36.9) |

**Table S20:** Descriptive statistics for the study population in Ivory Coast.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 4,057 | (100) |
| **Nutritional status** | | |
| Underweight | 316 | (7.8) |
| Normal Weight | 2,698 | (66.5) |
| Overweight/Obesity | 1,043 | (25.7) |
| **Age** | | |
| 15-19 | 876 | (21.6) |
| 20-24 | 759 | (18.7) |
| 25-29 | 722 | (17.8) |
| 30-34 | 548 | (13.5) |
| 35-39 | 471 | (11.6) |
| 40-44 | 361 | (8.9) |
| 45-49 | 321 | (7.9) |
| **Ethnicity** | | |
| Akan | 1,266 | (31.2) |
| Krou | 430 | (10.6) |
| Mandé du nord | 519 | (12.8) |
| Mandé du sud | 369 | (9.1) |
| Voltaïque/Gur | 609 | (15.0) |
| Autres nationalités | 864 | (21.3) |
| **Religion** | | |
| Catholic | 755 | (18.6) |
| Other Christians | 1,067 | (26.3) |
| Islam | 1,639 | (40.4) |
| Traditionalist | 89 | (2.2) |
| Other | 53 | (1.3) |
| No Religion | 454 | (11.2) |
| **Parity** | | |
| 0 | 1,124 | (27.7) |
| 1 | 621 | (15.3) |
| 2 | 540 | (13.3) |
| 3 | 442 | (10.9) |
| 4 | 337 | (8.3) |
| 5 | 316 | (7.8) |
| 6+ | 678 | (16.7) |
| **Marital Status** | | |
| Single | 1,335 | (32.9) |
| Married | 2,418 | (59.6) |
| Formerly Married | 304 | (7.5) |
| **Residential Setting** | | |
| Rural | 1,972 | (48.6) |
| Urban | 2,085 | (51.4) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Centre | 272 | (6.7) |
| Centre-Est | 110 | (2.7) |
| Centre-Nord | 329 | (8.1) |
| Centre-Ouest | 552 | (13.6) |
| Nord | 207 | (5.1) |
| Nord-Est | 166 | (4.1) |
| Nord-Ouest | 166 | (4.1) |
| Ouest | 475 | (11.7) |
| Sud sans Abidjan | 527 | (13.0) |
| Sud-Ouest | 312 | (7.7) |
| Ville d'Abidjan | 941 | (23.2) |
| **Level of Education** | | |
| No Education | 2,170 | (53.5) |
| Primary | 1,018 | (25.1) |
| Secondary | 771 | (19.0) |
| Higher | 97 | (2.4) |
| **Wealth Quintile** | | |
| Poorest | 690 | (17.0) |
| Poorer | 730 | (18.0) |
| Middle | 779 | (19.2) |
| Richer | 856 | (21.1) |
| Richest | 1,002 | (24.7) |
| **Occupation** | | |
| Not Working | 1,160 | (28.6) |
| Nonmanual | 1,740 | (42.9) |
| Manual | 231 | (5.7) |
| Agricultural | 925 | (22.8) |
| **Media Exposure** | | |
| Not Exposed | 1,091 | (26.9) |
| Exposed to one media source | 1,245 | (30.7) |
| Exposed to two media sources | 1,116 | (27.5) |
| Exposed to three media sources | 604 | (14.9) |
| **Hormonal Contraceptives use** | | |
| No | 3,684 | (90.8) |
| Yes | 373 | (9.2) |

**Table S21:** Descriptive statistics for the study population in Rwanda.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 5,995 | (100) |
| **Nutritional status** | | |
| Underweight | 402 | (6.7) |
| Normal Weight | 4,358 | (72.7) |
| Overweight/Obesity | 1,235 | (20.6) |
| **Age** | | |
| 15-19 | 1,349 | (22.5) |
| 20-24 | 1,061 | (17.7) |
| 25-29 | 977 | (16.3) |
| 30-34 | 863 | (14.4) |
| 35-39 | 695 | (11.6) |
| 40-44 | 570 | (9.5) |
| 45-49 | 480 | (8.0) |
| **Religion** | | |
| Catholic | 2,410 | (40.2) |
| Other Christians | 3,447 | (57.5) |
| Islam | 120 | (2.0) |
| No Religion | 18 | (0.3) |
| **Parity** | | |
| 0 | 2,206 | (36.8) |
| 1 | 791 | (13.2) |
| 2 | 743 | (12.4) |
| 3 | 594 | (9.9) |
| 4 | 498 | (8.3) |
| 5 | 426 | (7.1) |
| 6+ | 737 | (12.3) |
| **Marital Status** | | |
| Single | 2,482 | (41.4) |
| Married | 2,848 | (47.5) |
| Formerly Married | 665 | (11.1) |
| **Residential Setting** | | |
| Rural | 4,802 | (80.1) |
| Urban | 1,193 | (19.9) |
| **Region** | | |
| Kigali city | 797 | (13.3) |
| South | 1,445 | (24.1) |
| West | 1.307 | (21.8) |
| North | 1,001 | (16.7) |
| East | 1,445 | (24.1) |
| **Level of Education** | | |
| No Education | 719 | (12.0) |
| Primary | 3,855 | (64.3) |
| Secondary | 1,271 | (21.2) |
| Higher | 150 | (2.5) |
| **Wealth Quintile** | | |
| Poorest | 1,169 | (19.5) |
| Poorer | 1,181 | (19.7) |
| Middle | 1,127 | (18.8) |
| Richer | 1,115 | (18.6) |
| Richest | 1,403 | (23.4) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Occupation** | | |
| Not Working | 917 | (15.3) |
| Nonmanual | 971 | (16.2) |
| Manual | 234 | (3.9) |
| Agricultural | 3,873 | (64.6) |
| **Media Exposure** | | |
| Not Exposed | 833 | (13.9) |
| Exposed to one media source | 2,236 | (37.3) |
| Exposed to two media sources | 1,834 | (30.6) |
| Exposed to three media sources | 1,091 | (18.2) |
| **Hormonal Contraceptives use** | | |
| No | 4,448 | (74.2) |
| Yes | 1,547 | (25.8) |

**Table S22:** Descriptive statistics for the study population in Liberia.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 3,998 | (100) |
| **Nutritional status** | | |
| Underweight | 300 | (7.5) |
| Normal Weight | 2,639 | (66.0) |
| Overweight/Obesity | 1,059 | (26.5) |
| **Age** | | |
| 15-19 | 864 | (21.6) |
| 20-24 | 720 | (18.0) |
| 25-29 | 676 | (16.9) |
| 30-34 | 496 | (12.4) |
| 35-39 | 508 | (12.7) |
| 40-44 | 396 | (9.9) |
| 45-49 | 340 | (8.5) |
| **Ethnicity** | | |
| Bassa | 452 | (11.3) |
| Gio | 276 | (6.9) |
| Gola | 148 | (3.7) |
| Grebo | 332 | (8.3) |
| Kissi | 136 | (3.4) |
| Kpelle | 1,003 | (25.1) |
| Krahn | 116 | (2.9) |
| Kru | 272 | (6.8) |
| Lorma | 188 | (4.7) |
| Mano | 320 | (8.0) |
| Vai | 196 | (4.9) |
| Others | 560 | (14.0) |
| **Religion** | | |
| Other Christians | 3,454 | (86.4) |
| Islam | 448 | (11.2) |
| No Religion | 96 | (2.4) |
| **Parity** | | |
| 0 | 884 | (22.1) |
| 1 | 684 | (17.1) |
| 2 | 584 | (14.6) |
| 3 | 440 | (11.0) |
| 4 | 352 | (8.8) |
| 5 | 304 | (7.6) |
| 6+ | 752 | (18.8) |
| **Marital Status** | | |
| Single | 1,323 | (33.1) |
| Married | 2,231 | (55.8) |
| Formerly Married | 444 | (11.1) |
| **Residential Setting** | | |
| Rural | 1,567 | (39.2) |
| Urban | 2,431 | (60.8) |
| **Region** | | |
| North Western | 360 | (9.0) |
| South Central | 2,123 | (53.1) |
| South Eastern A | 204 | (5.1) |
| South Eastern B | 252 | (6.3) |
| North Central | 1,059 | (26.5) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Level of Education** | | |
| No Education | 1,327 | (33.2) |
| Primary | 1,159 | (29.0) |
| Secondary | 1,383 | (34.6) |
| Higher | 128 | (3.2) |
| **Wealth Quintile** | | |
| Poorest | 692 | (17.3) |
| Poorer | 716 | (17.9) |
| Middle | 704 | (17.6) |
| Richer | 956 | (23.9) |
| Richest | 932 | (23.3) |
| **Occupation** | | |
| Not Working | 1,687 | (42.2) |
| Nonmanual | 1,211 | (30.3) |
| Manual | 104 | (2.6) |
| Agricultural | 940 | (23.5) |
| Others | 56 | (1.4) |
| **Media Exposure** | | |
| Not Exposed | 872 | (21.8) |
| Exposed to one media source | 1,431 | (35.8) |
| Exposed to two media sources | 1,051 | (26.3) |
| Exposed to three media sources | 644 | (16.1) |
| **Hormonal Contraceptives use** | | |
| No | 3,142 | (78.6) |
| Yes | 856 | (21.4) |

**Table S23:** Descriptive statistics for the study population in Benin.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 14,060 | (100) |
| **Nutritional status** | | |
| Underweight | 886 | (6.3) |
| Normal Weight | 9,392 | (66.8) |
| Overweight/Obesity | 3,782 | (26.9) |
| **Age** | | |
| 15-19 | 2,643 | (18.8) |
| 20-24 | 2,278 | (16.2) |
| 25-29 | 2,503 | (17.8) |
| 30-34 | 2,179 | (15.5) |
| 35-39 | 1,884 | (13.4) |
| 40-44 | 1,504 | (10.7) |
| 45-49 | 1,069 | (7.6) |
| **Ethnicity** | | |
| Adja | 2,207 | (15.7) |
| Bariba | 1,195 | (8.5) |
| Dendi | 436 | (3.1) |
| Fon | 6,468 | (46.0) |
| Yoa | 408 | (2.9) |
| Betamaribe | 858 | (6.1) |
| Peulh | 436 | (3.1) |
| Yoruba | 1,772 | (12.6) |
| Other Béninois | 56 | (0.4) |
| Other Nationalities | 225 | (1.6) |
| **Religion** | | |
| Catholic | 4,710 | (33.5) |
| Other Christians | 3,529 | (25.1) |
| Islam | 3,093 | (22.0) |
| Traditionalists | 1,772 | (12.6) |
| Other | 267 | (1.9) |
| No Religion | 689 | (4.9) |
| **Parity** | | |
| 0 | 3,726 | (26.5) |
| 1 | 1,715 | (12.2) |
| 2 | 1,870 | (13.3) |
| 3 | 1,772 | (12.6) |
| 4 | 1,603 | (11.4) |
| 5 | 1,195 | (8.5) |
| 6+ | 2,179 | (15.5) |
| **Marital Status** | | |
| Single | 3,698 | (26.3) |
| Married | 9,491 | (67.5) |
| Formerly Married | 872 | (6.2) |
| **Residential Setting** | | |
| Rural | 7,466 | (53.1) |
| Urban | 6,594 | (46.9) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Alibori | 703 | (5.0) |
| Atacora | 1,153 | (8.2) |
| Atlantique | 1,758 | (12.5) |
| Borgou | 1,012 | (7.2) |
| Collines | 942 | (6.7) |
| Couffo | 970 | (6.9) |
| Donga | 576 | (4.1) |
| Littoral | 2,221 | (15.8) |
| Mono | 787 | (5.6) |
| Ouémé | 1.687 | (12.0) |
| Plateau | 984 | (7.0) |
| Zou | 1,265 | (9.0) |
| **Level of Education** | | |
| No Education | 8,211 | (58.4) |
| Primary | 2,475 | (17.6) |
| Secondary | 3,107 | (22.1) |
| Higher | 267 | (1.9) |
| **Wealth Quintile** | | |
| Poorest | 2,362 | (16.8) |
| Poorer | 2,531 | (18.0) |
| Middle | 2,615 | (18.6) |
| Richer | 3,051 | (21.7) |
| Richest | 3,501 | (24.9) |
| **Occupation** | | |
| Not Working | 5,329 | (37.9) |
| Nonmanual | 5,202 | (37.0) |
| Manual | 830 | (5.9) |
| Agricultural | 1,997 | (14.2) |
| Others | 703 | (5.0) |
| **Media Exposure** | | |
| Not Exposed | 4,063 | (28.9) |
| Exposed to one media source | 3,698 | (26.3) |
| Exposed to two media sources | 4,499 | (32.0) |
| Exposed to three media sources | 1,800 | (12.8) |
| **Hormonal Contraceptives use** | | |
| No | 13,455 | (95.7) |
| Yes | 605 | (4.3) |

**Table S24:** Descriptive statistics for the study population in Kenya.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 12,967 | (100) |
| **Nutritional status** | | |
| Underweight | 1,167 | (9.0) |
| Normal Weight | 7,547 | (58.2) |
| Overweight/Obesity | 4,253 | (32.8) |
| **Age** | | |
| 15-19 | 2,451 | (18.9) |
| 20-24 | 2,230 | (17.2) |
| 25-29 | 2,516 | (19.4) |
| 30-34 | 1,893 | (14.6) |
| 35-39 | 1,647 | (12.7) |
| 40-44 | 1,219 | (9.4) |
| 45-49 | 1,011 | (7.8) |
| **Ethnicity** | | |
| Embu | 130 | (1.0) |
| Kalenjin | 1,595 | (12.3) |
| Kamba | 1,504 | (11.6) |
| Kikuyu | 2,749 | (21.2) |
| Kisii | 791 | (6.1) |
| Luhya | 2,049 | (15.8) |
| Luo | 1,375 | (10.6) |
| Maasai | 246 | (1.9) |
| Meru | 765 | (5.9) |
| Mijikenda/Swahili | 674 | (5.2) |
| Somali | 272 | (2.1) |
| Taita/Taveta | 117 | (0.9) |
| Turkana | 156 | (1.2) |
| Samburu | 52 | (0.4) |
| Other | 493 | (3.8) |
| **Religion** | | |
| Catholic | 2,593 | (20.0) |
| Other Christians | 9,362 | (72.2) |
| Islam | 765 | (5.9) |
| Others | 39 | (0.3) |
| No Religion | 207 | (1.6) |
| **Parity** | | |
| 0 | 3,410 | (26.3) |
| 1 | 1,971 | (15.2) |
| 2 | 2,075 | (16.0) |
| 3 | 1,712 | (13.2) |
| 4 | 1,297 | (10.0) |
| 5 | 882 | (6.8) |
| 6+ | 1,621 | (12.5) |
| **Marital Status** | | |
| Single | 3,955 | (30.5) |
| Married | 7,469 | (57.6) |
| Formerly Married | 1,543 | (11.9) |
| **Residential Setting** | | |
| Rural | 7,780 | (60.0) |
| Urban | 5,187 | (40.0) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Coast | 1,245 | (9.6) |
| North Eastern | 233 | (1.8) |
| Eastern | 1,893 | (14.6) |
| Central | 1,673 | (12.9) |
| Rift Valley | 3,307 | (25.5) |
| Western | 1,413 | (10.9) |
| Nyanza | 1,699 | (13.1) |
| Nairobi | 1,504 | (11.6) |
| **Level of Education** | | |
| No Education | 843 | (6.5) |
| Primary | 6,509 | (50.2) |
| Secondary | 4,227 | (32.6) |
| Higher | 1,387 | (10.7) |
| **Wealth Quintile** | | |
| Poorest | 1,906 | (14.7) |
| Poorer | 2,308 | (17.8) |
| Middle | 2,580 | (19.9) |
| Richer | 2,775 | (21.4) |
| Richest | 3,397 | (26.2) |
| **Occupation** | | |
| Not Working | 4,357 | (33.6) |
| Nonmanual | 4,940 | (38.1) |
| Manual | 934 | (7.2) |
| Agricultural | 2,736 | (21.1) |
| **Media Exposure** | | |
| Not Exposed | 1,504 | (11.6) |
| Exposed to one media source | 3,786 | (29.2) |
| Exposed to two media sources | 4,240 | (32.7) |
| Exposed to three media sources | 3,436 | (26.5) |
| **Hormonal Contraceptives use** | | |
| No | 8,454 | (65.2) |
| Yes | 4,513 | (34.8) |

**Table S25:** Descriptive statistics for the study population in Sao Tome and Principe.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 2,078 | (100) |
| **Nutritional status** | | |
| Underweight | 160 | (7.7) |
| Normal Weight | 1,226 | (59.0) |
| Overweight/Obesity | 692 | (33.3) |
| **Age** | | |
| 15-19 | 453 | (21.8) |
| 20-24 | 347 | (16.7) |
| 25-29 | 330 | (15.9) |
| 30-34 | 310 | (14.9) |
| 35-39 | 204 | (9.8) |
| 40-44 | 247 | (11.9) |
| 45-49 | 187 | (9.0) |
| **Religion** | | |
| Catholic | 1,459 | (70.2) |
| Other Christians | 301 | (14.5) |
| Other | 102 | (4.9) |
| No Religion | 216 | (10.4) |
| **Parity** | | |
| 0 | 544 | (26.2) |
| 1 | 274 | (13.2) |
| 2 | 291 | (14.0) |
| 3 | 276 | (13.3) |
| 4 | 220 | (10.6) |
| 5 | 160 | (7.7) |
| 6+ | 312 | (15.0) |
| **Marital Status** | | |
| Single | 524 | (25.2) |
| Married | 1,299 | (62.5) |
| Formerly Married | 256 | (12.3) |
| **Region** | | |
| Região Centro | 1,216 | (58.5) |
| Região Sul | 305 | (14.7) |
| Região Norte | 449 | (21.6) |
| Região do Príncipe | 108 | (5.2) |
| **Residential Setting** | | |
| Rural | 756 | (36.4) |
| Urban | 1,322 | (63.6) |
| **Level of Education** | | |
| No Education | 125 | (6.0) |
| Primary | 1,189 | (57.2) |
| Secondary | 765 | (36.8) |
| **Wealth Quintile** | | |
| Poorest | 362 | (17.4) |
| Poorer | 387 | (18.6) |
| Middle | 349 | (16.8) |
| Richer | 455 | (21.9) |
| Richest | 526 | (25.3) |
| **Occupation** | | |
| Not Working | 860 | (41.4) |
| Nonmanual | 1,056 | (50.8) |
| Manual | 162 | (7.8) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Media Exposure** | | |
| Not Exposed | 77 | (3.7) |
| Exposed to one media source | 87 | (4.2) |
| Exposed to two media sources | 794 | (38.2) |
| Exposed to three media sources | 1,120 | (53.9) |
| **Hormonal Contraceptives use** | | |
| No | 1,644 | (79.1) |
| Yes | 434 | (20.9) |

**Table S26:** Descriptive statistics for the study population in Togo.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 4,238 | (100) |
| **Nutritional status** | | |
| Underweight | 297 | (7.0) |
| Normal Weight | 2,640 | (62.3) |
| Overweight/Obesity | 1,301 | (30.7) |
| **Age** | | |
| 15-19 | 831 | (19.6) |
| 20-24 | 729 | (17.2) |
| 25-29 | 661 | (15.6) |
| 30-34 | 585 | (13.8) |
| 35-39 | 576 | (13.6) |
| 40-44 | 470 | (11.1) |
| 45-49 | 386 | (9.1) |
| **Ethnicity** | | |
| Adja-Ewé/Mina | 1,784 | (42.1) |
| Kabye/Tem | 1,110 | (26.2) |
| Akposso/Akebou | 174 | (4.1) |
| Ana-Ife | 123 | (2.9) |
| Para-Gourma/Akan | 737 | (17 .4) |
| Other Togolese | 68 | (1.6) |
| Stranger | 242 | (5.7) |
| **Religion** | | |
| Other Christians | 2,623 | (61.9) |
| Islam | 716 | (16.9) |
| Traditionalist | 602 | (14.2) |
| No Religion | 297 | (7.0) |
| **Parity** | | |
| 0 | 1,259 | (29.7) |
| 1 | 615 | (14.5) |
| 2 | 538 | (12.7) |
| 3 | 487 | (11.5) |
| 4 | 407 | (9.6) |
| 5 | 301 | (7.1) |
| 6+ | 631 | (14.9) |
| **Marital Status** | | |
| Single | 1,263 | (29.8) |
| Married | 2,649 | (62.5) |
| Formerly Married | 326 | (7.7) |
| **Residential Setting** | | |
| Rural | 2,263 | (53.4) |
| Urban | 1,975 | (46.6) |
| **Region** | | |
| Grande Agglomération de Lomé | 1,322 | (31.2) |
| Maritime (Sans Agglomération de Lomé) | 661 | (15.6) |
| Plateaux | | |
| Centrale | 915 | (21.6) |
| Kara | 403 | (9.5) |
| Savenes | 470 | (11.1) |
| | 466 | (11.0) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Level of Education** | | |
| No Education | 1,280 | (30.2) |
| Primary | 1,441 | (34.0) |
| Secondary | 1373 | (32.4) |
| Higher | 144 | (3.4) |
| **Wealth Quintile** | | |
| Poorest | 708 | (16.7) |
| Poorer | 665 | (15.7) |
| Middle | 767 | (18.1) |
| Richer | 1,004 | (23.7) |
| Richest | 1,093 | (25.8) |
| **Occupation** | | |
| Not Working | 1,144 | (27.0) |
| Nonmanual | 1,831 | (43.2) |
| Manual | 483 | (11.4) |
| Agricultural | 780 | (18.4) |
| **Media Exposure** | | |
| Not Exposed | 1,144 | (27.0) |
| Exposed to one media source | 1,301 | (30.7) |
| Exposed to two media sources | 1,322 | (31.2) |
| Exposed to three media sources | 470 | (11.1) |
| **Hormonal Contraceptives use** | | |
| No | 3,746 | (88.4) |
| Yes | 492 | (11.6) |

**Table S27:** Descriptive statistics for the study population in Cameroon.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 6,813 | (100) |
| **Nutritional status** | | |
| Underweight | 470 | (6.9) |
| Normal Weight | 4,156 | (61.0) |
| Overweight/Obesity | 2,187 | (32.1) |
| **Age** | | |
| 15-19 | 1,669 | (24.5) |
| 20-24 | 1,308 | (19.2) |
| 25-29 | 1,145 | (16.8) |
| 30-34 | 804 | (11.8) |
| 35-39 | 736 | (10.8) |
| 40-44 | 572 | (8.4) |
| 45-49 | 579 | (8.5) |
| **Ethnicity** | | |
| Arabes-Choa/Peulh/Haoussa/Kanuri Biu-Mandara | 579 | (8.5) |
| Adamaoua-Oubangui | 899 | (13.2) |
| Bantoïde Sud-Ouest | 620 | (9.1) |
| Grassfields | 89 | (1.3) |
| Bamilike/Bamoun | 1,022 | (15.0) |
| Côtier/Ngoe/Oroko | 1,703 | (25.0) |
| Beti/Bassa/Mbam | 293 | (4.3) |
| Kako/Meka/Pygmé | 1,254 | (18.4) |
| Stranger/Others | 191 | (2.8) |
| | 164 | (2.4) |
| **Religion** | | |
| Catholic | 2,541 | (37.3) |
| Other Christians | 2,569 | (37.7) |
| Islam | 1,301 | (19.1) |
| Traditionalist | 184 | (2.7) |
| Others | 82 | (1.2) |
| No Religion | 136 | (2.0) |
| **Parity** | | |
| 0 | 2,119 | (31.1) |
| 1 | 940 | (13.8) |
| 2 | 838 | (12.3) |
| 3 | 681 | (10.0) |
| 4 | 559 | (8.2) |
| 5 | 477 | (7.0) |
| 6+ | 1,199 | (17.6) |
| **Marital Status** | | |
| Single | 2,092 | (30.7) |
| Married | 4,095 | (60.1) |
| Formerly Married | 627 | (9.2) |
| **Residential Setting** | | |
| Rural | 3,025 | (44.4) |
| Urban | 3,788 | (55.6) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Adamaoua | 334 | (4.9) |
| Centre (sans Yaoundé) | 463 | (6.8) |
| Douala | 824 | (12.1) |
| Est | 266 | (3.9) |
| Extrême-Nord | 1,036 | (15.2) |
| Littoral (sans Douala) | 286 | (4.2) |
| Nord | 640 | (9.4) |
| Nord-Ouest | 722 | (10.6) |
| Ouest | 749 | (11.0) |
| Sud | 184 | (2.7) |
| Sud-Ouest | 518 | (7.6) |
| Yaoundé | 790 | (11.6) |
| **Level of Education** | | |
| No Education | 1,213 | (17.8) |
| Primary | 2,330 | (34.2) |
| Secondary | 2,868 | (42.1) |
| Higher | 402 | (5.9) |
| **Wealth Quintile** | | |
| Poorest | 1,015 | (14.9) |
| Poorer | 1,158 | (17.0) |
| Middle | 1,274 | (18.7) |
| Richer | 1,642 | (24.1) |
| Richest | 1,724 | (25.3) |
| **Occupation** | | |
| Not Working | 2,112 | (31.0) |
| Nonmanual | 2,119 | (31.1) |
| Manual | 831 | (12.2) |
| Agricultural | 1,751 | (25.7) |
| **Media Exposure** | | |
| Not Exposed | 1,676 | (24.6) |
| Exposed to one media source | 1,587 | (23.3) |
| Exposed to two media sources | 2,044 | (30.0) |
| Exposed to three media sources | 1,506 | (22.1) |
| **Hormonal Contraceptives use** | | |
| No | 6,459 | (94.8) |
| Yes | 354 | (5.2) |

**Table S28:** Descriptive statistics for study population in Comoros.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 4,479 | (100) |
| **Nutritional status** | | |
| Underweight | 318 | (7.1) |
| Normal Weight | 2,562 | (57.2) |
| Overweight/Obesity | 1,599 | (35.7) |
| **Age** | | |
| 15-19 | 1,178 | (26.3) |
| 20-24 | 806 | (18.0) |
| 25-29 | 690 | (15.4) |
| 30-34 | 596 | (13.3) |
| 35-39 | 529 | (11.8) |
| 40-44 | 412 | (9.2) |
| 45-49 | 269 | (6.0) |
| **Parity** | | |
| 0 | 2,145 | (47.9) |
| 1 | 394 | (8.8) |
| 2 | 385 | (8.6) |
| 3 | 376 | (8.4) |
| 4 | 331 | (7.4) |
| 5 | 237 | (5.3) |
| 6+ | 609 | (13.6) |
| **Marital Status** | | |
| Single | 1,608 | (35.9) |
| Married | 2,558 | (57.1) |
| Formerly Married | 314 | (7.0) |
| **Residential Setting** | | |
| Rural | 2,938 | (65.6) |
| Urban | 1,541 | (34.4) |
| **Region** | | |
| Ngazidja | 2,159 | (48.2) |
| Mwali | 269 | (6.0) |
| Ndzuwani | 2,051 | (45.8) |
| **Level of Education** | | |
| No Education | 1,380 | (30.8) |
| Primary | 833 | (18.6) |
| Secondary | 1,841 | (41.1) |
| Higher | 426 | (9.5) |
| **Wealth Quintile** | | |
| Poorest | 708 | (15.8) |
| Poorer | 882 | (19.7) |
| Middle | 941 | (21.0) |
| Richer | 950 | (21.2) |
| Richest | 999 | (22.3) |
| **Occupation** | | |
| Not Working | 2,737 | (61.1) |
| Nonmanual | 873 | (19.5) |
| Manual | 434 | (9.7) |
| Agricultural | 434 | (9.7) |
| **Media Exposure** | | |
| Not Exposed | 815 | (18.2) |
| Exposed to one media source | 1,026 | (22.9) |
| Exposed to two media sources | 1,774 | (39.6) |
| Exposed to three media sources | 864 | (19.3) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Hormonal Contraceptives use** | | |
| No | 4,143 | (92.5) |
| Yes | 336 | (7.5) |

**Table S29:** Descriptive statistics for the study population in Tanzania.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 11,535 | (100) |
| **Nutritional status** | | |
| Underweight | 1,096 | (9.5) |
| Normal Weight | 7,152 | (62.0) |
| Overweight/Obesity | 3,287 | (28.5) |
| **Age** | | |
| 15-19 | 2,549 | (22.1) |
| 20-24 | 2,042 | (17.7) |
| 25-29 | 1,742 | (15.1) |
| 30-34 | 1,488 | (12.9) |
| 35-39 | 1,442 | (12.5) |
| 40-44 | 1,292 | (11.2) |
| 45-49 | 980 | (8.5) |
| **Parity** | | |
| 0 | 3,045 | (26.4) |
| 1 | 1,776 | (15.4) |
| 2 | 1,569 | (13.6) |
| 3 | 1,292 | (11.2) |
| 4 | 1,073 | (9.3) |
| 5 | 865 | (7.5) |
| 6+ | 1,915 | (16.6) |
| **Marital Status** | | |
| Single | 3,161 | (27.4) |
| Married | 6,806 | (59.0) |
| Formerly Married | 1,569 | (13.6) |
| **Residential Setting** | | |
| Rural | 7,256 | (62.9) |
| Urban | 4,279 | (37.1) |
| **Level of Education** | | |
| No Education | 1,638 | (14.2) |
| Primary | 7,094 | (61.5) |
| Secondary | 2,642 | (22.9) |
| Higher | 161 | (1.4) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Dodoma | 496 | (4.3) |
| Arusha | 450 | (3.9) |
| Kilimanjaro | 335 | (2.9) |
| Tanga | 623 | (5.4) |
| Morogoro | 577 | (5.0) |
| Pwani | 254 | (2.2) |
| Dar es salaam | 1,384 | (12.0) |
| Lindi | 265 | (2.3) |
| Mtwara | 381 | (3.3) |
| Ruvuma | 323 | (2.8) |
| Iringa | 219 | (1.9) |
| Mbeya | 715 | (6.2) |
| Singida | 311 | (2.7) |
| Tabora | 588 | (5.1) |
| Rukwa | 242 | (2.1) |
| Kigoma | 473 | (4.1) |
| Shinyanga | 415 | (3.6) |
| Kagera | 542 | (4.7) |
| Mwanza | 715 | (6.2) |
| Mara | 427 | (3.7) |
| Manyara | 335 | (2.9) |
| Njombe | 185 | (1.6) |
| Katavi | 104 | (0.9) |
| Simiyu | 415 | (3.6) |
| geita | 404 | (3.5) |
| Kaskazini Unguja | 46 | (0.4) |
| Kusini Unguja | 35 | (0.3) |
| Mjini Magharibi | 185 | (1.6) |
| Kaskazini Pemba | 46 | (0.4) |
| Kusini Pemba | 46 | (0.4) |
| **Wealth Quintile** | | |
| Poorest | 1,823 | (15.8) |
| Poorer | 1,938 | (16.8) |
| Middle | 2,030 | (17.6) |
| Richer | 2,492 | (21.6) |
| Richest | 3,253 | (28.2) |
| **Occupation** | | |
| Not Working | 2,665 | (23.1) |
| Nonmanual | 1,615 | (14.0) |
| Manual | 2,353 | (20.4) |
| Agricultural | 4,902 | (42.5) |
| **Media Exposure** | | |
| Not Exposed | 1,661 | (14.4) |
| Exposed to one media source | 2,930 | (25.4) |
| Exposed to two media sources | 3,380 | (29.3) |
| Exposed to three media sources | 3,564 | (30.9) |
| **Hormonal Contraceptives use** | | |
| No | 8,963 | (77.7) |
| Yes | 2,572 | (22.3) |

**Table S30:** Descriptive statistics for the study population in Zimbabwe.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 8,721 | (100) |
| **Nutritional status** | | |
| Underweight | 541 | (6.2) |
| Normal Weight | 5,145 | (59.0) |
| Overweight/Obesity | 3,035 | (34.8) |
| **Age** | | |
| 15-19 | 1,980 | (22.7) |
| 20-24 | 1,404 | (16.1) |
| 25-29 | 1,395 | (16.0) |
| 30-34 | 1,378 | (15.8) |
| 35-39 | 1,108 | (12.7) |
| 40-44 | 916 | (10.5) |
| 45-49 | 541 | (6.2) |
| **Religion** | | |
| Catholic | 602 | (6.9) |
| Other Christians | 7,622 | (87.4) |
| Islam | 26 | (0.3) |
| Traditionalists | 52 | (0.6) |
| No Religion | 419 | (4.8) |
| **Parity** | | |
| 0 | 2,390 | (27.4) |
| 1 | 1,282 | (14.7) |
| 2 | 1,544 | (17.7) |
| 3 | 1,456 | (16.7) |
| 4 | 985 | (11.3) |
| 5 | 523 | (6.0) |
| 6+ | 541 | (6.2) |
| **Marital Status** | | |
| Single | 2,381 | (27.3) |
| Married | 5,137 | (58.9) |
| Formerly Married | 1,203 | (13.8) |
| **Residential Setting** | | |
| Rural | 5,381 | (61.7) |
| Urban | 3,340 | (38.3) |
| **Region** | | |
| Manicaland | 1,099 | (12.6) |
| Mashonaland Central | 759 | (8.7) |
| Mashonaland East | 846 | (9.7) |
| Mashonaland West | 1,020 | (11.7) |
| Matabeleland North | 419 | (4.8) |
| Matabeleland South | 366 | (4.2) |
| Midlands | 1,099 | (12.6) |
| Masvingo | 1,047 | (12.0) |
| Harare | 1,552 | (17.8) |
| Bulawayo | 515 | (5.9) |
| **Level of Education** | | |
| No Education | 105 | (1.2) |
| Primary | 2,250 | (25.8) |
| Secondary | 5,730 | (65.7) |
| Higher | 637 | (7.3) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Wealth Quintile** | | |
| Poorest | 1,474 | (16.9) |
| Poorer | 1,474 | (16.9) |
| Middle | 1,570 | (18.0) |
| Richer | 1,980 | (22.7) |
| Richest | 2,224 | (25.5) |
| **Occupation** | | |
| Not Working | 4,247 | (48.7) |
| Nonmanual | 3,305 | (37.9) |
| Manual | 253 | (2.9) |
| Agricultural | 820 | (9.4) |
| Others | 96 | (1.1) |
| **Media Exposure** | | |
| Not Exposed | 2,058 | (23.6) |
| Exposed to one media source | 2,398 | (27.5) |
| Exposed to two media sources | 2,363 | (27.1) |
| Exposed to three media sources | 1,901 | (21.8) |
| **Hormonal Contraceptives use** | | |
| No | 4,718 | (54.1) |
| Yes | 4,003 | (45.9) |

**Table S31:** Descriptive statistics for the study population in Gabon.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 4,213 | (100) |
| **Nutritional status** | | |
| Underweight | 333 | (7.9) |
| Normal Weight | 2,157 | (51.2) |
| Overweight/Obesity | 1,723 | (40.9) |
| **Age** | | |
| 15-19 | 948 | (22.5) |
| 20-24 | 750 | (17.8) |
| 25-29 | 653 | (15.5) |
| 30-34 | 594 | (14.1) |
| 35-39 | 510 | (12.1) |
| 40-44 | 417 | (9.9) |
| 45-49 | 341 | (8.1) |
| **Ethnicity** | | |
| Shira-Punu/Vili | 994 | (23.6) |
| Fang | 1,222 | (29.0) |
| Kota-Kele | 286 | (6.8) |
| Mbede-Teke | 354 | (8.4) |
| Myene | 303 | (7.2) |
| Nzabi-Duma | 598 | (14.2) |
| Okande-Tsogho | 105 | (2.5) |
| Pygmee | 21 | (0.5) |
| Other | 329 | (7.8) |
| **Religion** | | |
| Catholic | 1,786 | (42.4) |
| Other Christians | 2,132 | (50.6) |
| Others | 72 | (1.7) |
| No Religion | 223 | (5.3) |
| **Parity** | | |
| 0 | 1192 | (28.3) |
| 1 | 809 | (19.2) |
| 2 | 632 | (15.0) |
| 3 | 447 | (10.6) |
| 4 | 362 | (8.6) |
| 5 | 206 | (4.9) |
| 6+ | 565 | (13.4) |
| **Marital Status** | | |
| Single | 1,622 | (38.5) |
| Married | 2,052 | (48.7) |
| Formerly Married | 539 | (12.8) |
| **Residential Setting** | | |
| Rural | 543 | (12.9) |
| Urban | 3,670 | (87.1) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Estuaire | 472 | (11.2) |
| Libreville-Port-Gentil | 2,313 | (54.9) |
| Haut-Ogooué | 409 | (9.7) |
| Moyen-Ogooué | 135 | (3.2) |
| Ngounié | 265 | (6.3) |
| Nyanga | 105 | (2.5) |
| Ogooué Maritime | 46 | (1.1) |
| Ogooué-Ivindo | 139 | (3.3) |
| Ogooué-Lolo | 143 | (3.4) |
| Woleu-N'tem | 185 | (4.4) |
| **Level of Education** | | |
| No Education | 55 | (1.3) |
| Primary | 944 | (22.4) |
| Secondary | 2,802 | (66.5) |
| Higher | 413 | (9.8) |
| **Wealth Quintile** | | |
| Poorest | 674 | (16.0) |
| Poorer | 784 | (18.6) |
| Middle | 923 | (21.9) |
| Richer | 817 | (19.4) |
| Richest | 1,015 | (24.1) |
| **Occupation** | | |
| Not Working | 2,212 | (52.5) |
| Nonmanual | 1,584 | (37.6) |
| Manual | 185 | (4.4) |
| Agricultural | 232 | (5.5) |
| **Media Exposure** | | |
| Not Exposed | 177 | (4.2) |
| Exposed to one media source | 881 | (20.9) |
| Exposed to two media sources | 1,496 | (35.5) |
| Exposed to three media sources | 1,660 | (39.4) |
| **Hormonal Contraceptives use** | | |
| No | 4,036 | (95.8) |
| Yes | 177 | (4.2) |

**Table S32:** Descriptive statistics for the study population in Ghana.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 4,238 | (100) |
| **Nutritional status** | | |
| Underweight | 263 | (6.2) |
| Normal Weight | 2,276 | (53.7) |
| Overweight/Obesity | 1,699 | (40.1) |
| **Age** | | |
| 15-19 | 780 | (18.4) |
| 20-24 | 699 | (16.5) |
| 25-29 | 674 | (15.9) |
| 30-34 | 602 | (14.2) |
| 35-39 | 576 | (13.6) |
| 40-44 | 492 | (11.6) |
| 45-49 | 415 | (9.8) |
| **Ethnicity** | | |
| Akan | 2,170 | (51.2) |
| Ga/Dangme | 335 | (7.9) |
| Ewe | 559 | (13.2) |
| Guan | 106 | (2.5) |
| Mole-Dagbani | 593 | (14.0) |
| Grusi | 119 | (2.8) |
| Gurma | 242 | (5.7) |
| Mande | 34 | (0.8) |
| Others | 81 | (1.9) |
| **Religion** | | |
| Catholics | 445 | (10.5) |
| Other Christians | 2,971 | (70.1) |
| Islam | 636 | (15.0) |
| Traditionalist | 89 | (2.1) |
| No Religion | 97 | (2.3) |
| **Parity** | | |
| 0 | 1,382 | (32.6) |
| 1 | 555 | (13.1) |
| 2 | 559 | (13.2) |
| 3 | 504 | (11.9) |
| 4 | 411 | (9.7) |
| 5 | 314 | (7.4) |
| 6+ | 513 | (12.1) |
| **Marital Status** | | |
| Single | 1,458 | (34.4) |
| Married | 2,293 | (54.1) |
| Formerly Married | 487 | (11.5) |
| **Residential Setting** | | |
| Rural | 1907 | (45.0) |
| Urban | 2331 | (55.0) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Region** | | |
| Western | 500 | (11.8) |
| Central | 428 | (10.1) |
| Greater Accra | 877 | (20.7) |
| Volta | 322 | (7.6) |
| Eastern | 373 | (8.8) |
| Ashanti | 767 | (18.1) |
| Brong Ahafo | 348 | (8.2) |
| Northern | 364 | (8.6) |
| Upper East | 161 | (3.8) |
| Upper West | 97 | (2.3) |
| **Level of Education** | | |
| No Education | 797 | (18.8) |
| Primary | 771 | (18.2) |
| Secondary | 2,420 | (57.1) |
| Higher | 250 | (5.9) |
| **Wealth Quintile** | | |
| Poorest | 699 | (16.5) |
| Poorer | 720 | (17.0) |
| Middle | 882 | (20.8) |
| Richer | 954 | (22.5) |
| Richest | 983 | (23.2) |
| **Occupation** | | |
| Not Working | 987 | (23.3) |
| Nonmanual | 1,924 | (45.4) |
| Manual | 542 | (12.8) |
| Agricultural | 784 | (18.5) |
| **Media Exposure** | | |
| Not Exposed | 318 | (7.5) |
| Exposed to one media source | 949 | (22.4) |
| Exposed to two media sources | 2,272 | (53.6) |
| Exposed to three media sources | 699 | (16.5) |
| **Hormonal Contraceptives use** | | |
| No | 3,585 | (84.6) |
| Yes | 653 | (15.4) |

**Table S33:** Descriptive statistics for study population in Lesotho.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Total Sample Size** | 3,157 | (100) |
| **Nutritional status** | | |
| Underweight | 136 | (4.3) |
| Normal Weight | 1,620 | (51.3) |
| Overweight/Obesity | 1,402 | (44.4) |
| **Age** | | |
| 15-19 | 695 | (22.0) |
| 20-24 | 603 | (19.1) |
| 25-29 | 515 | (16.3) |
| 30-34 | 455 | (14.4) |
| 35-39 | 344 | (10.9) |
| 40-44 | 290 | (9.2) |
| 45-49 | 256 | (8.1) |
| **Religion** | | |
| Catholic | 1,250 | (39.6) |
| Other Christians | 1,856 | (58.8) |
| Other | 51 | (1.6) |
| **Parity** | | |
| 0 | 957 | (30.3) |
| 1 | 691 | (21.9) |
| 2 | 606 | (19.2) |
| 3 | 388 | (12.3) |
| 4 | 230 | (7.3) |
| 5 | 139 | (4.4) |
| 6+ | 145 | (4.6) |
| **Marital Status** | | |
| Single | 1,070 | (33.9) |
| Married | 1,667 | (52.8) |
| Formerly Married | 420 | (13.3) |
| **Residential Setting** | | |
| Rural | 2,039 | (64.6) |
| Urban | 1,118 | (35.4) |
| **Region** | | |
| Maseru | 859 | (27.2) |
| Botha-Bothe | 186 | (5.9) |
| Leribe | 502 | (15.9) |
| Berea | 420 | (13.3) |
| Mafeteng | 268 | (8.5) |
| Mohale's Hoek | 268 | (8.5) |
| Quthing | 161 | (5.1) |
| Qacha's-Nek | 95 | (3.0) |
| Mokhotlong | 167 | (5.3) |
| Thaba Tseka | 230 | (7.3) |
| **Level of Education** | | |
| No Education | 35 | (1.1) |
| Primary | 1,241 | (39.3) |
| Secondary | 1,635 | (51.8) |
| Higher | 246 | (7.8) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Wealth Quintile** | | |
| Poorest | 445 | (14.1) |
| Poorer | 524 | (16.6) |
| Middle | 597 | (18.9) |
| Richer | 758 | (24.0) |
| Richest | 833 | (26.4) |
| **Media Exposure** | | |
| Not Exposed | 537 | (17.0) |
| Exposed to one media source | 1,017 | (32.2) |
| Exposed to two media sources | 947 | (30.0) |
| Exposed to three media sources | 657 | (20.8) |
| **Hormonal Contraceptives use** | | |
| No | 2,254 | (71.4) |
| Yes | 903 | (28.6) |

**Table S34:** Descriptive statistics for the study population in Eswatini.

| Variable | Sample Size n (%) | |
|---|---|---|
| **Sample Size** | 4,402 | (100) |
| **Nutritional status** | | |
| Underweight | 141 | (3.2) |
| Normal Weight | 2,034 | (46.2) |
| Overweight/Obesity | 2,227 | (50.6) |
| **Age** | | |
| 15-19 | 1,145 | (26.0) |
| 20-24 | 867 | (19.7) |
| 25-29 | 625 | (14.2) |
| 30-34 | 550 | (12.5) |
| 35-39 | 445 | (10.1) |
| 40-44 | 405 | (9.2) |
| 45-49 | 365 | (8.3) |
| **Religion** | | |
| Catholic | 211 | (4.8) |
| Other Christians | 4,001 | (90.9) |
| Traditionalists | 18 | (0.4) |
| No Religion | 172 | (3.9) |
| **Parity** | | |
| 0 | 1,351 | (30.7) |
| 1 | 814 | (18.5) |
| 2 | 643 | (14.6) |
| 3 | 475 | (10.8) |
| 4 | 321 | (7.3) |
| 5 | 242 | (5.5) |
| 6+ | 555 | (12.6) |
| **Marital Status** | | |
| Single | 2,227 | (50.6) |
| Married | 1,770 | (40.2) |
| Formerly Married | 405 | (9.2) |
| **Residential Setting** | | |
| Rural | 3,253 | (73.9) |
| Urban | 1,149 | (26.1) |
| **Region** | | |
| Hhohho | 1,171 | (26.6) |
| Manzini | 1,461 | (33.2) |
| Shiselweni | 929 | (21.1) |
| Lubombo | 841 | (19.1) |
| **Level of Education** | | |
| No Education | 352 | (8.0) |
| Primary | 1,431 | (32.5) |
| Secondary | 2,289 | (52.0) |
| Higher | 330 | (7.5) |
| **Wealth Quintile** | | |
| Poorest | 687 | (15.6) |
| Poorer | 744 | (16.9) |
| Middle | 867 | (19.7) |
| Richer | 995 | (22.6) |
| Richest | 1,109 | (25.2) |

| Variable | Sample Size n (%) | |
|---|---|---|
| **Occupation** | | |
| Not Working | 2,483 | (56.4) |
| Nonmanual | 1,448 | (32.9) |
| Manual | 299 | (6.8) |
| Agricultural | 172 | (3.9) |
| **Media Exposure** | | |
| Not Exposed | 409 | (9.3) |
| Exposed to one media source | 1,052 | (23.9) |
| Exposed to two media sources | 1,576 | (35.8) |
| Exposed to three media sources | 1,365 | (31.0) |
| **Hormonal Contraceptives use** | | |
| No | 3,561 | (80.9) |
| Yes | 841 | (19.1) |

**Appendix 3: Random forest box plots for individual-level analyses (Figures S4 -S37).**

1. The box plots present a summary of the individual level predictors for nutritional status i.e. both underweight (BMI <18.5 kg/m$^2$) and overweight/obesity (BMI ≥ 25.0 kg/m$^2$) among women of child-bearing age for each country.
2. Variables to the right of the dashed line (absolute value of the lowest ranking variable) are the most influential predictors for the individual's nutritional status, ranked based on the relative importance score.
3. Presented alongside the figure caption is the Out-of-Bag error (OOB Error), used as goodness of fit statistic for the model.
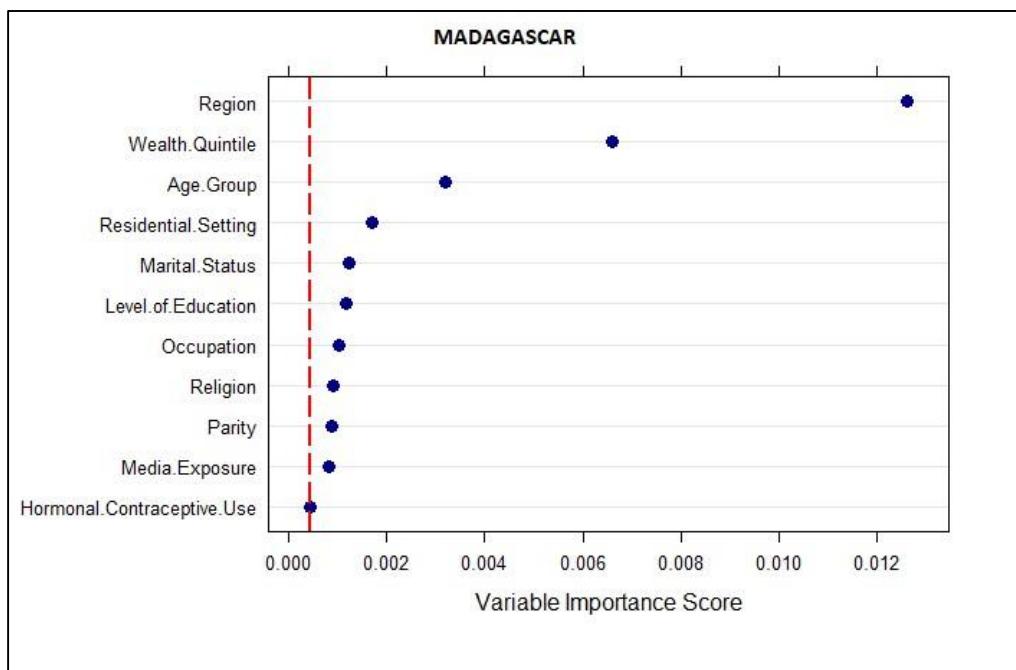


**Figure S4:** Predictors for nutritional status in Madagascar (OOB error = 29.0%).
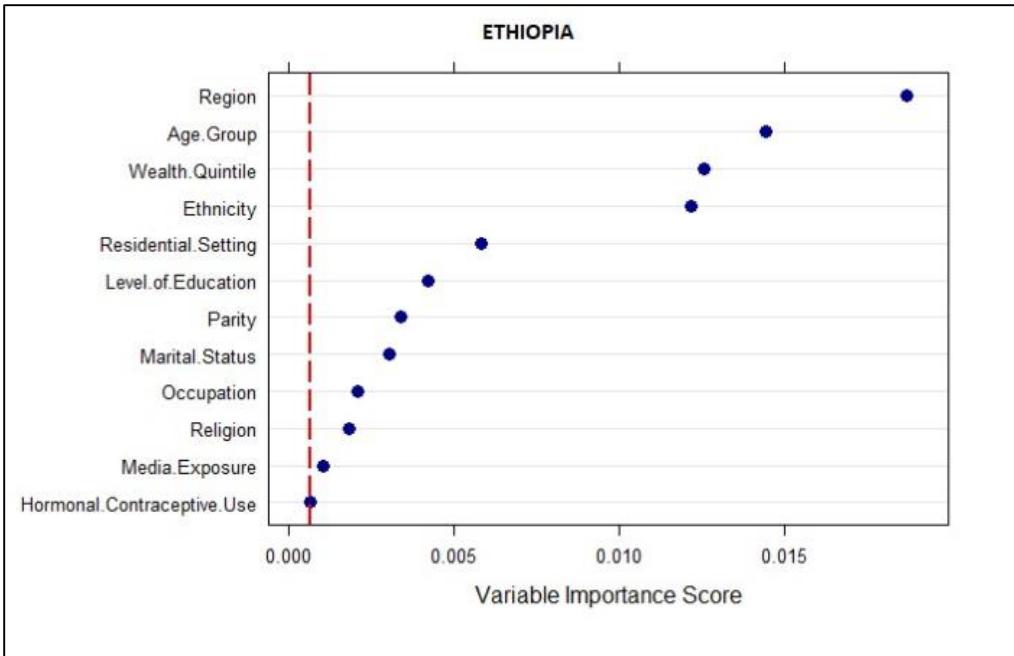
**Figure S5:** Predictors for nutritional status in Ethiopia (OOB error = 30.5%).
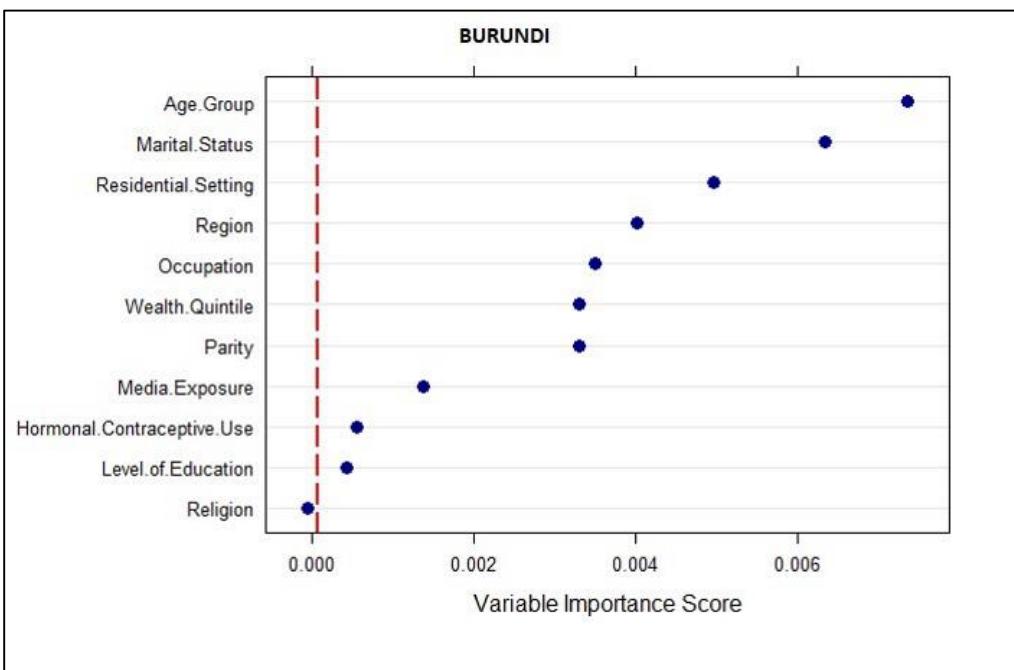


**Figure S6:** Predictors for nutritional status in Burundi (OOB error = 24.1%).
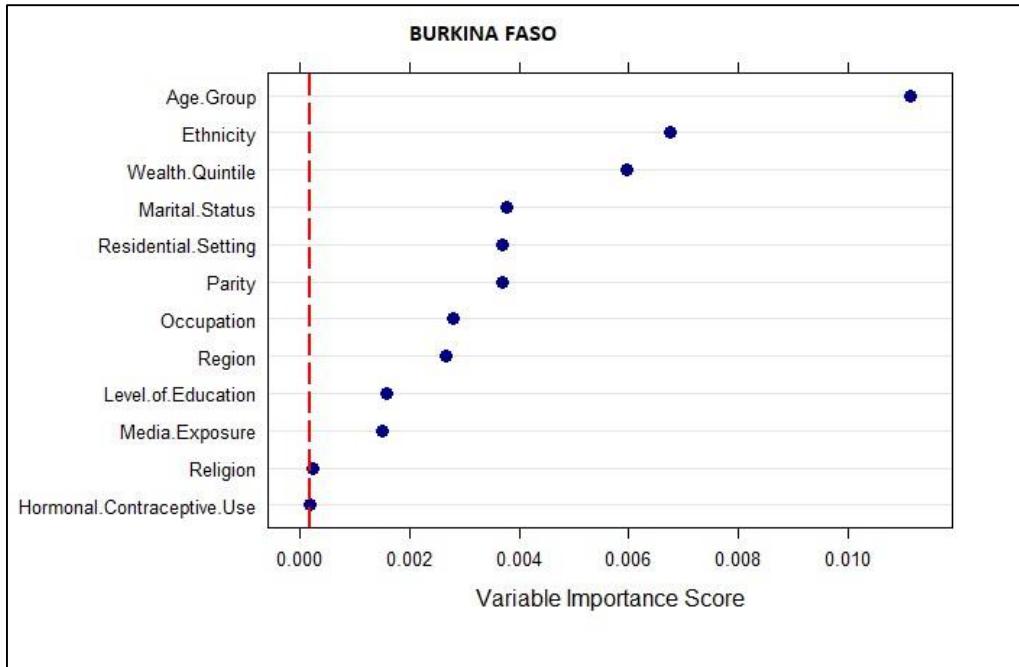
**Figure S7:** Predictors for nutritional status in Burkina Faso (OOB error = 22.8%).
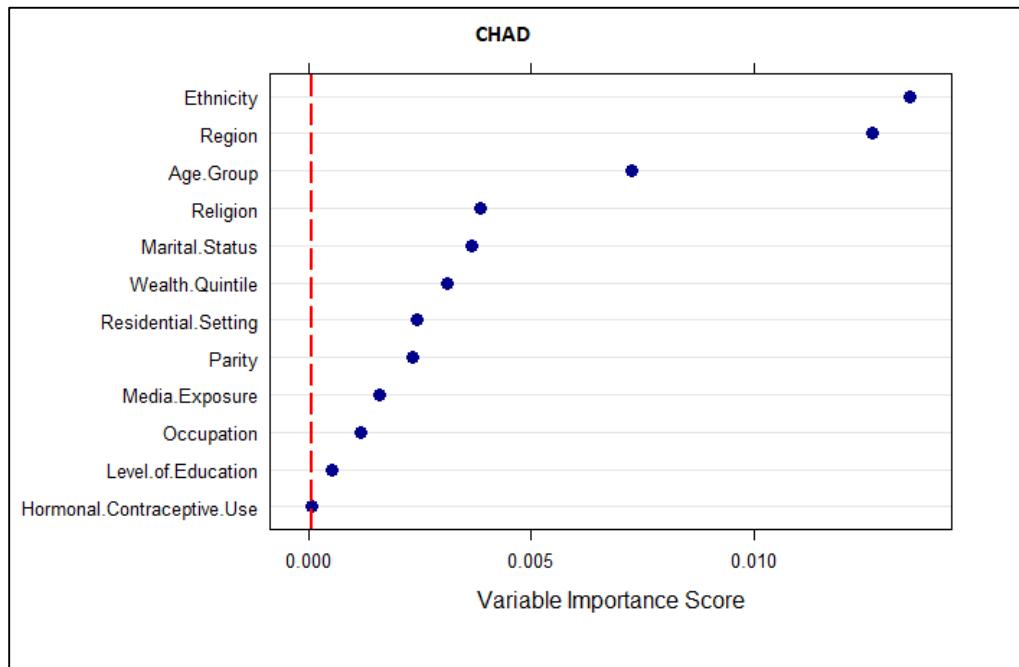


**Figure S8:** Predictors for nutritional status in Chad (OOB error = 27.4%).
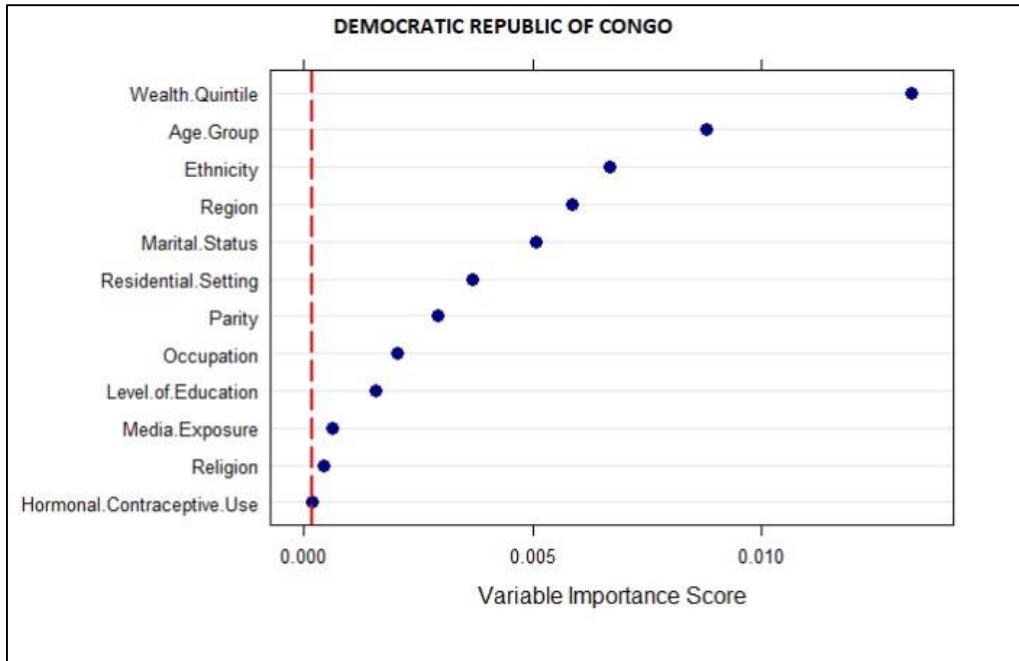
**Figure S9:** Predictors for nutritional status in D R Congo (OOB error = 29.0%).
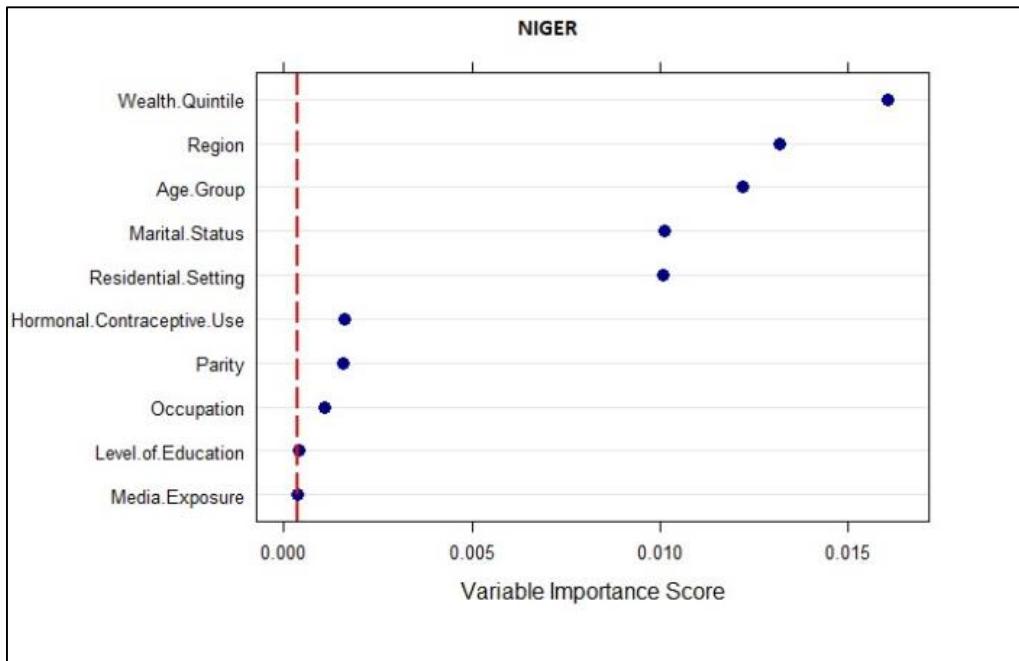


**Figure S10:** Predictors for nutritional status in Niger (OOB error = 29.3%).
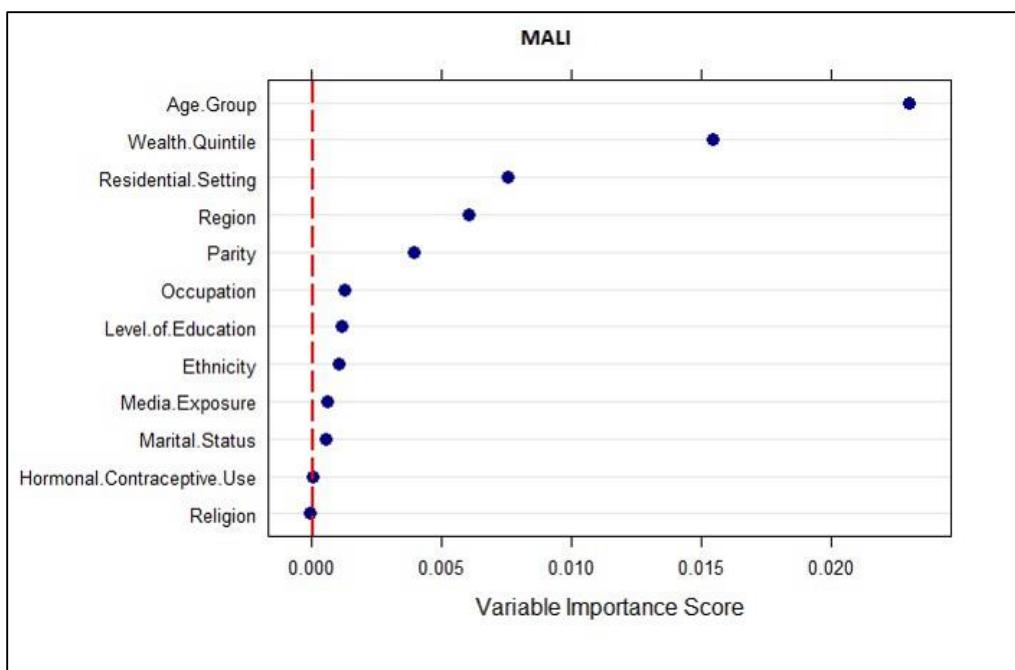
**Figure S11:** Predictors for nutritional status in Mali (OOB error = 26.4%).
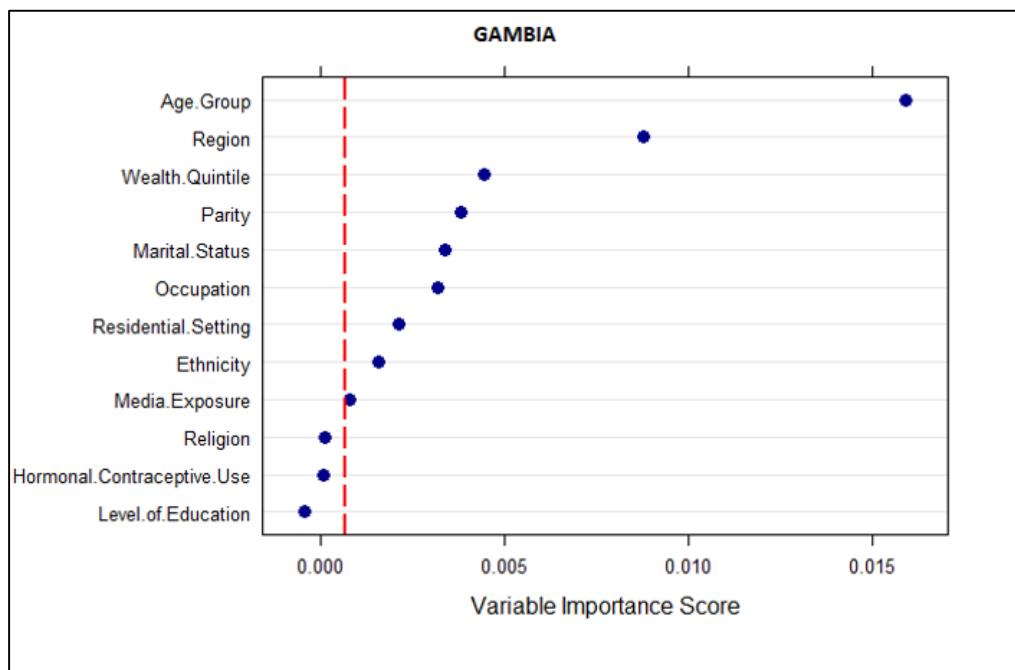


**Figure S12:** Predictors for nutritional status in Gambia (OOB error = 34.0%).
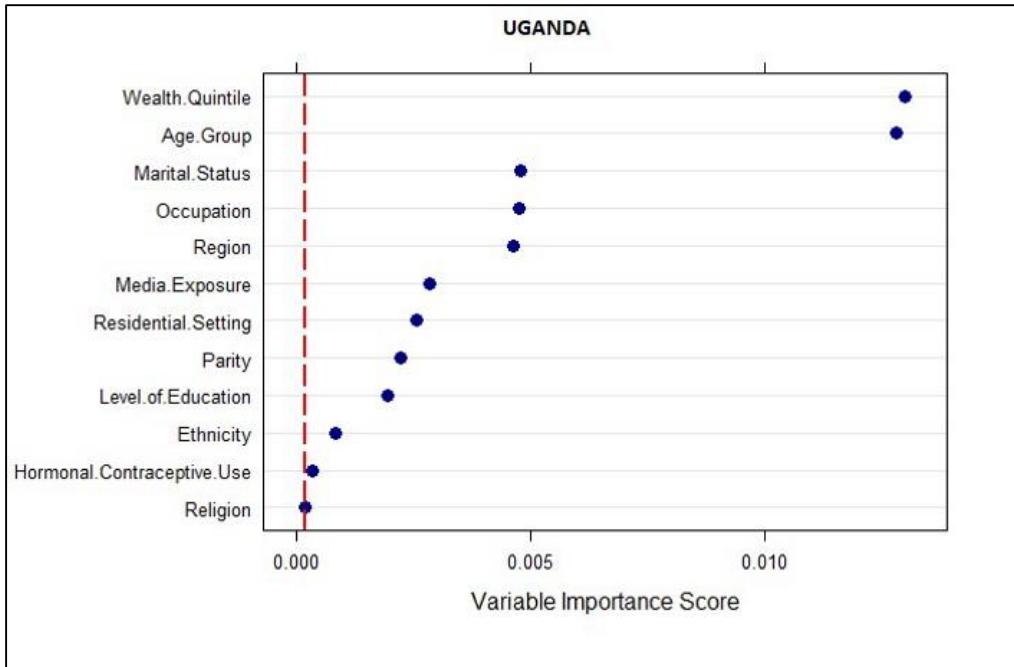
**Figure S13:** Predictors for nutritional status in Uganda (OOB error = 27.2%).
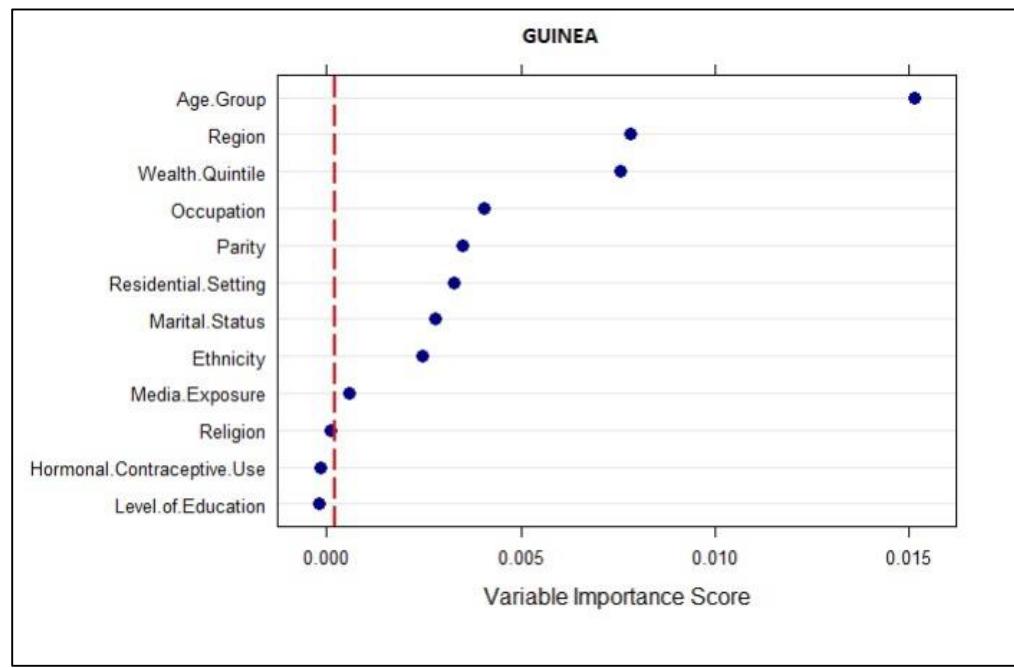


**Figure S14:** Predictors for nutritional status in Guinea (OOB error = 27.4%).
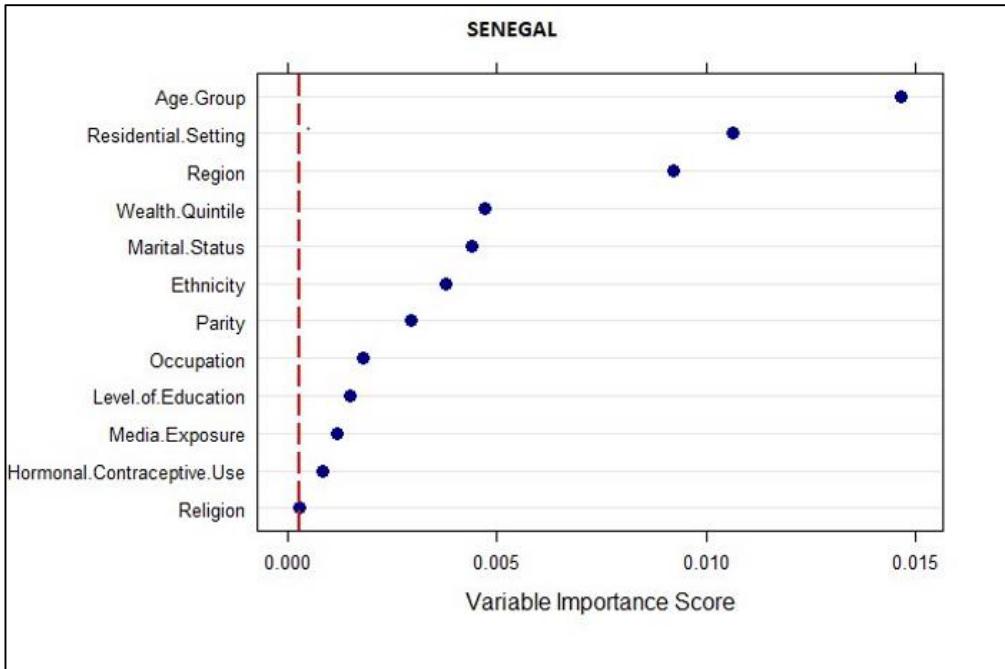
**Figure S15:** Predictors for nutritional status in Senegal (OOB error = 33.5%).
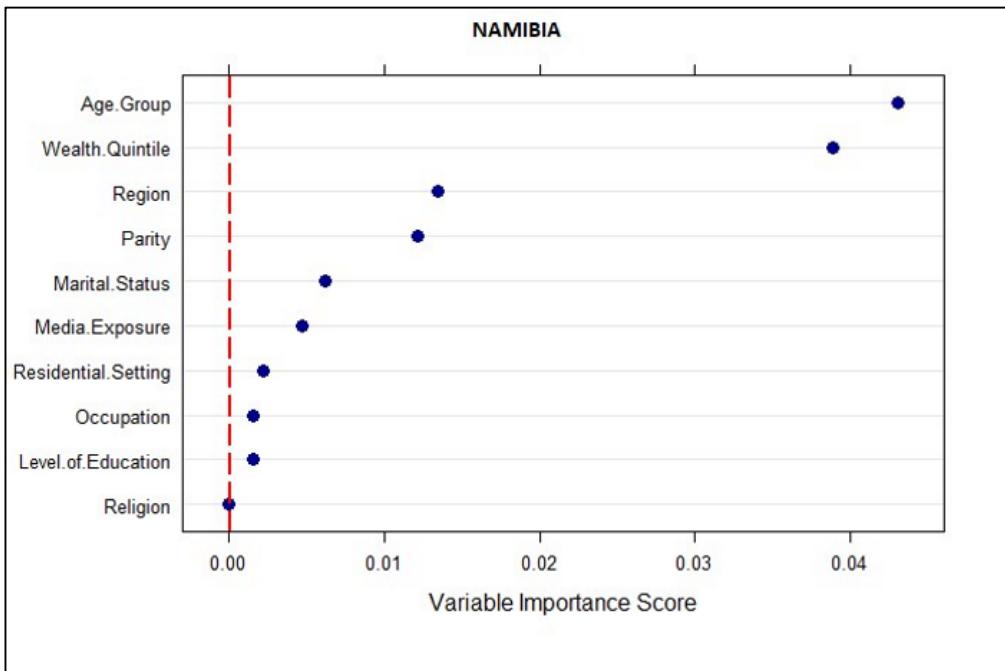


**Figure S16:** Predictors for nutritional status in Namibia (OOB error = 30.0%).
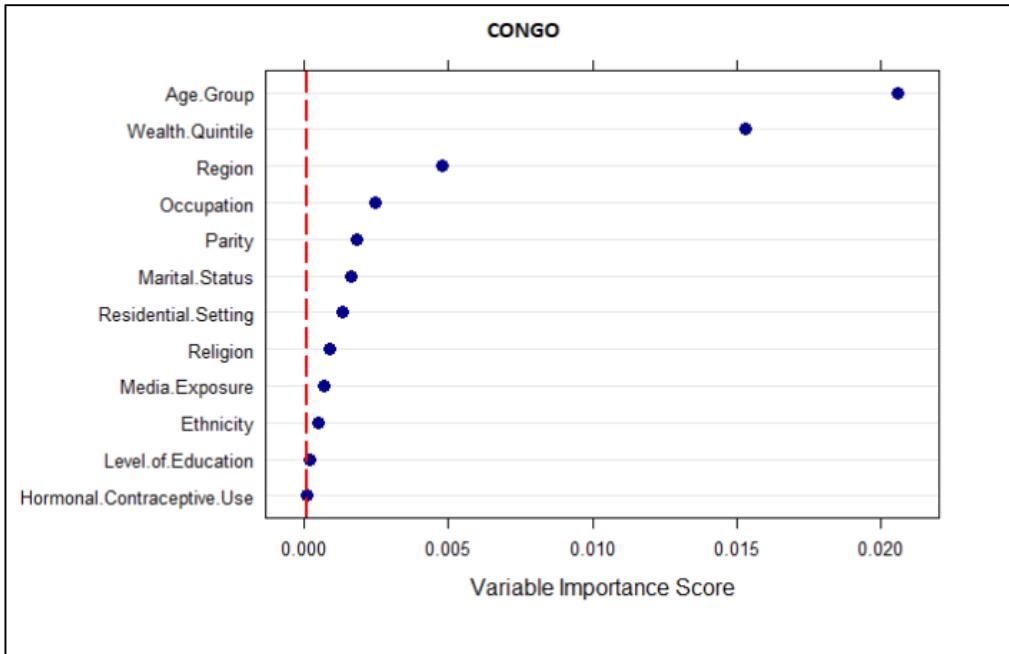
**Figure S17:** Predictors for nutritional status in Congo (OOB error = 28.6%).
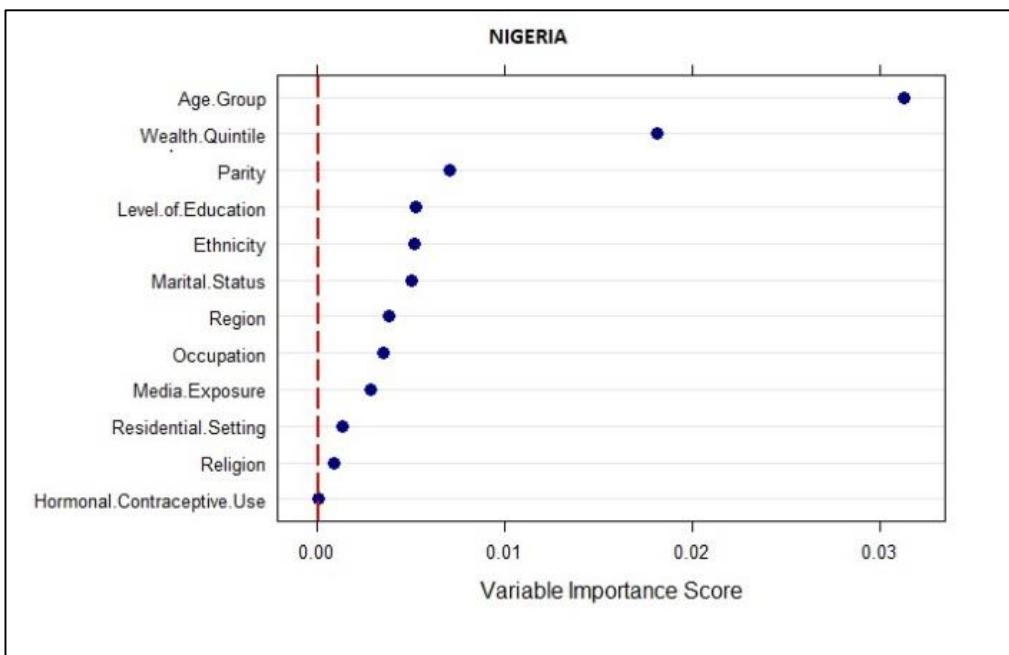


**Figure S18:** Predictors for nutritional status in Nigeria (OOB error = 27.7%).
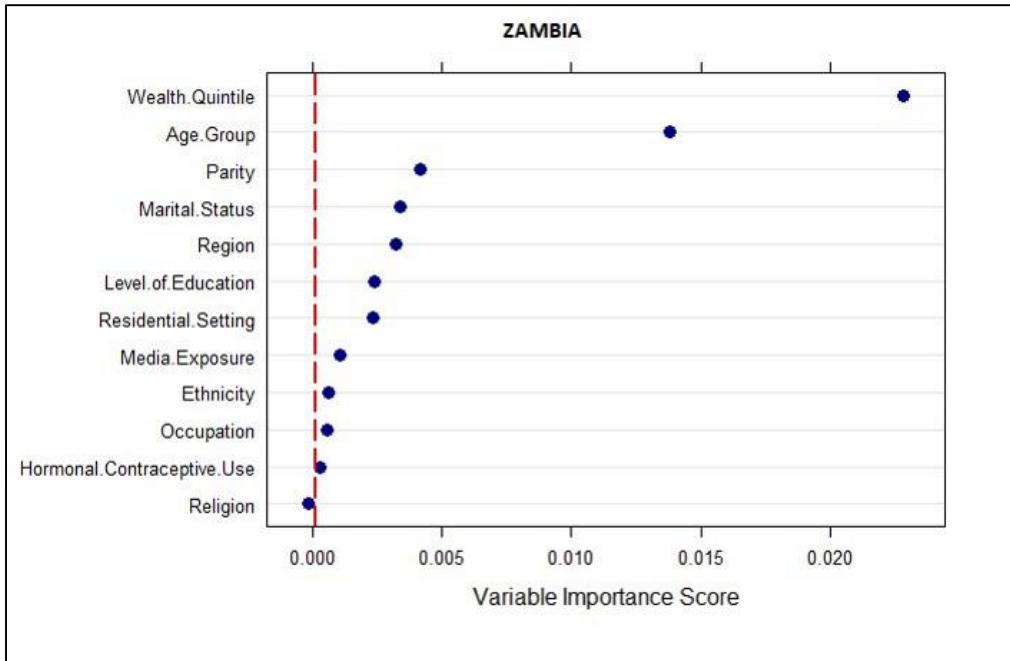
**Figure S19:** Predictors for nutritional status in Zambia (OOB error = 25.7%).
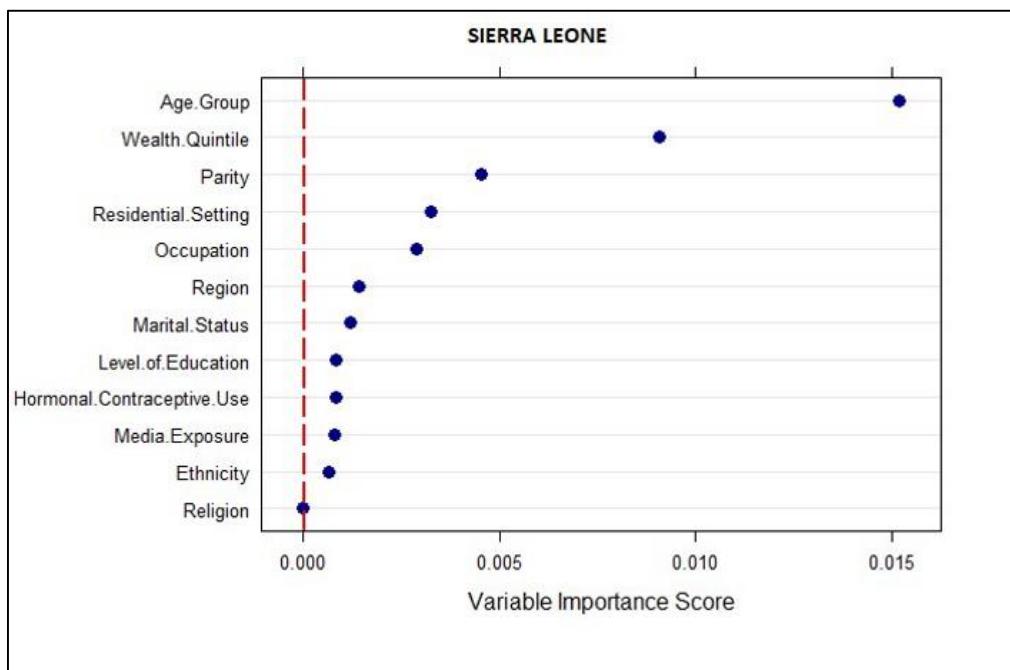


**Figure S20:** Predictors for nutritional status in Sierra Leone (OOB error = 24.9%).
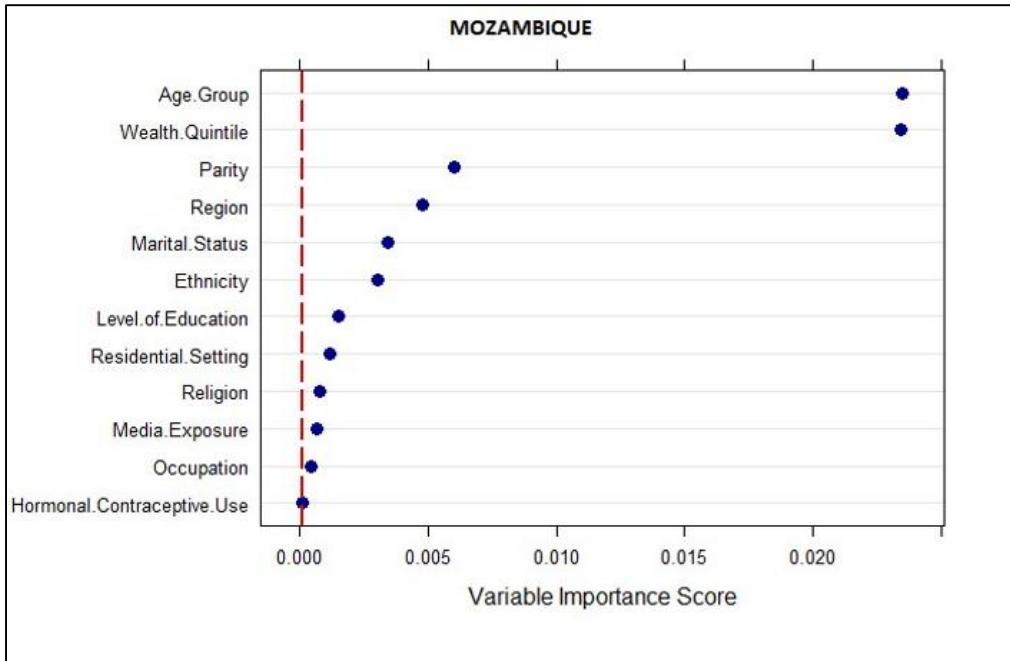
**Figure S21:** Predictors for nutritional status in Mozambique (OOB error = 22.7%).
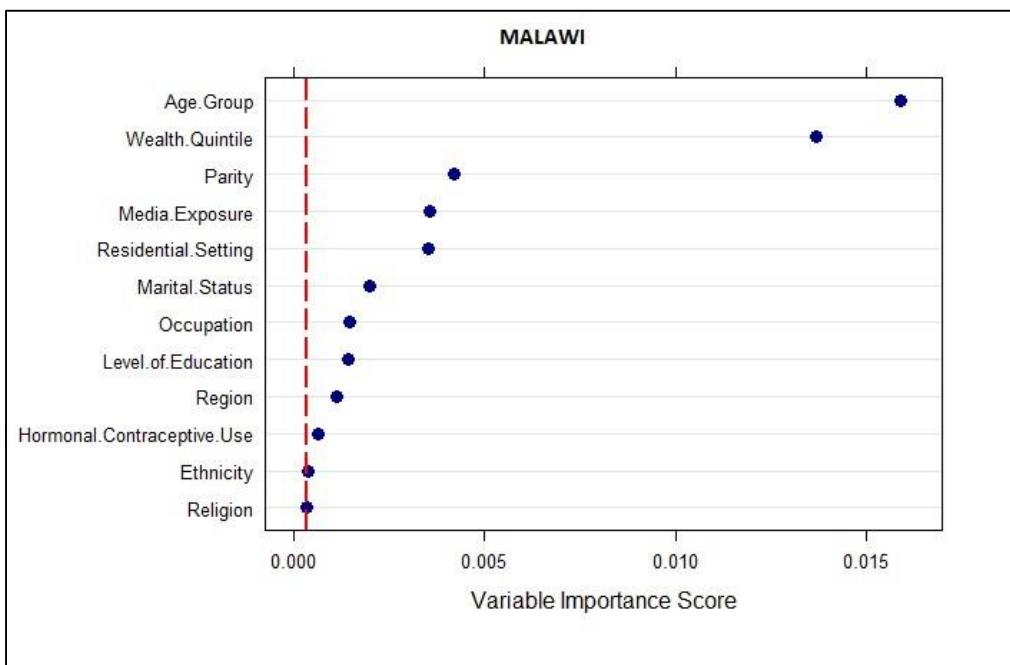


**Figure S22:** Predictors for nutritional status in Malawi (OOB error = 23.4%).
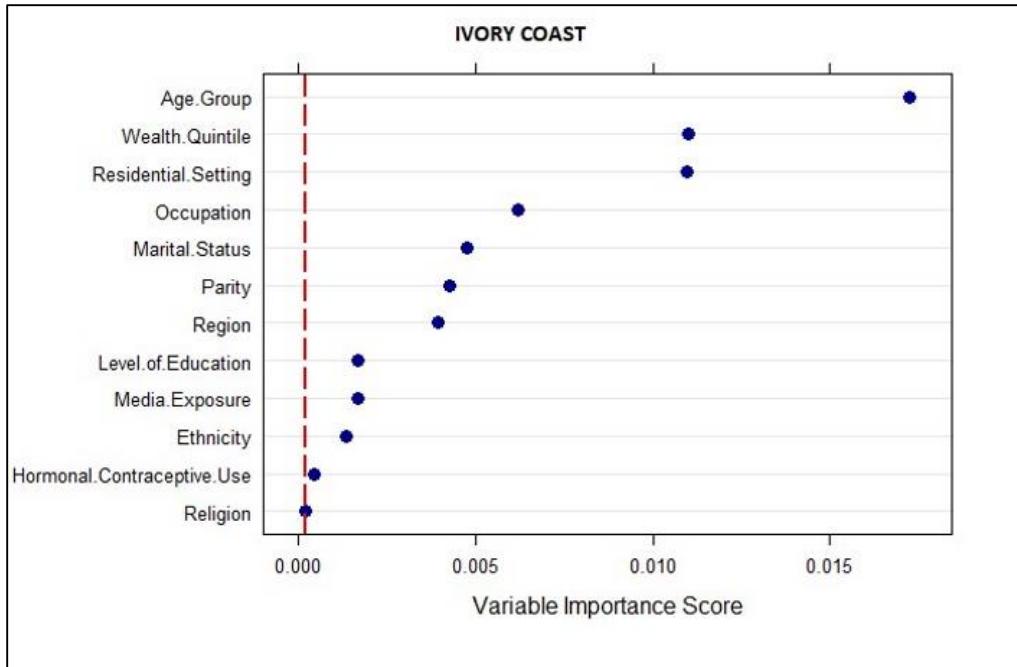
**Figure S23:** Predictors for nutritional status in Ivory Coast (OOB error = 24.5%).
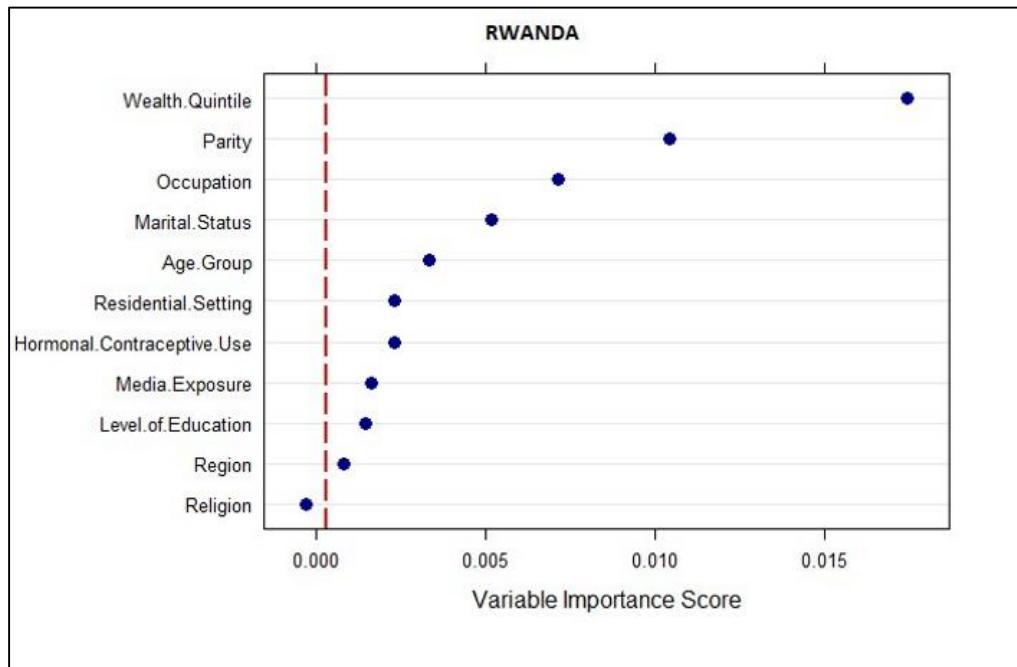


**Figure S24:** Predictors for nutritional status in Rwanda (OOB error = 24.2%).
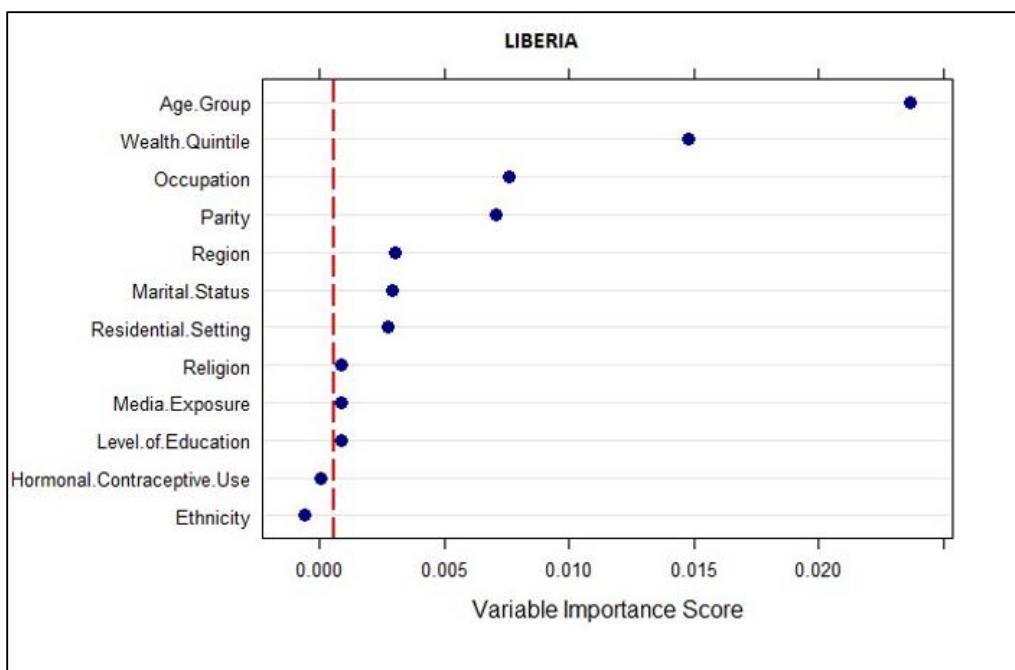
**Figure S25:** Predictors for nutritional status in Liberia (OOB error = 25.5%).
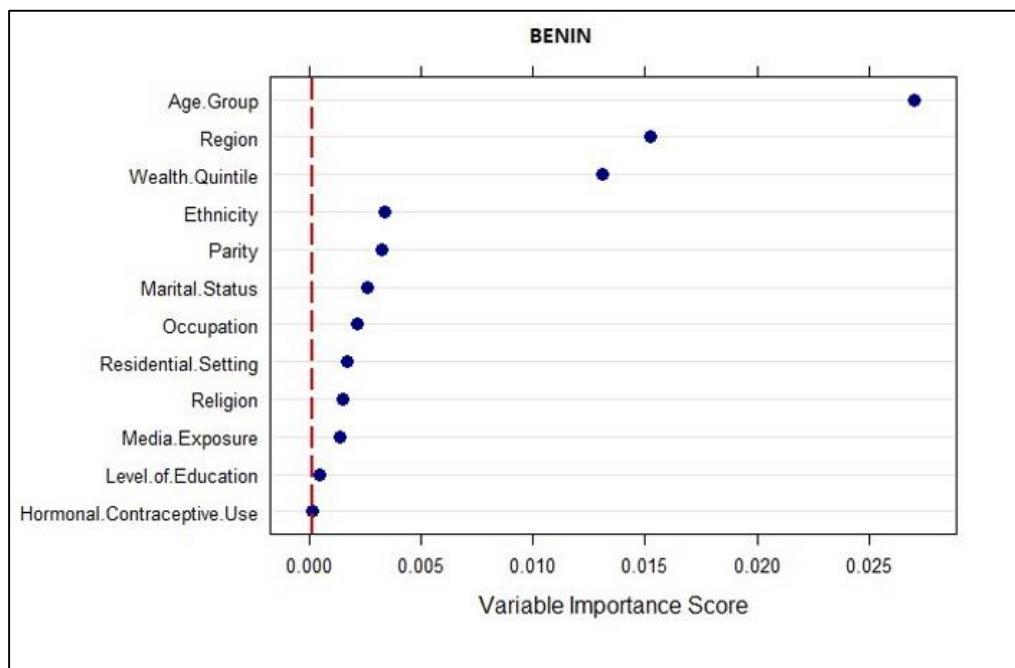


**Figure S26:** Predictors for nutritional status in Benin (OOB error = 24.5%).
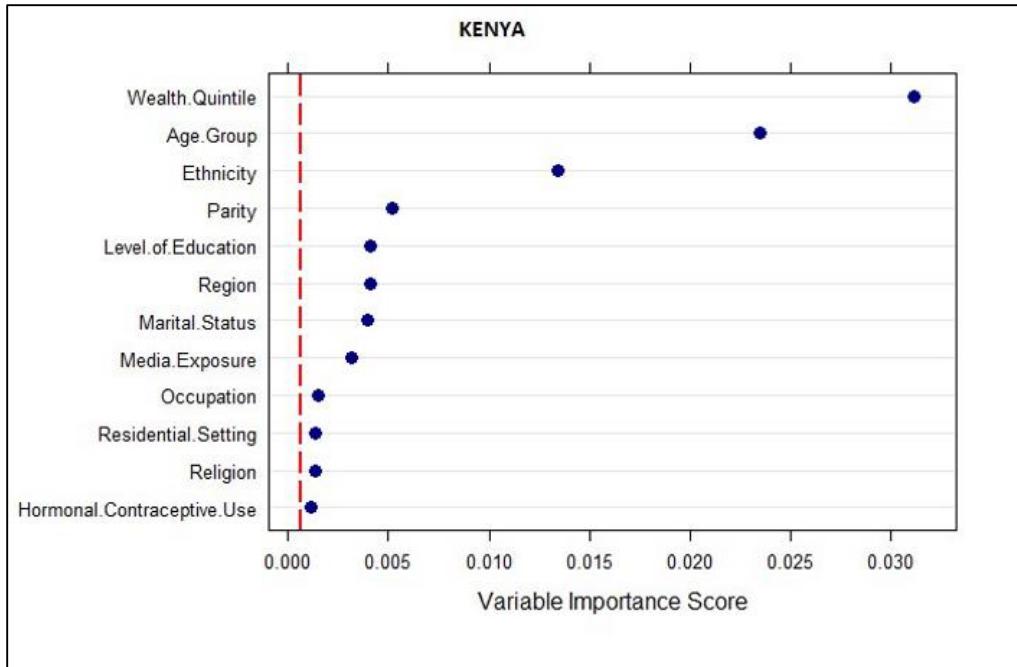
**Figure S27:** Predictors for nutritional status in Kenya (OOB error = 28.8%).
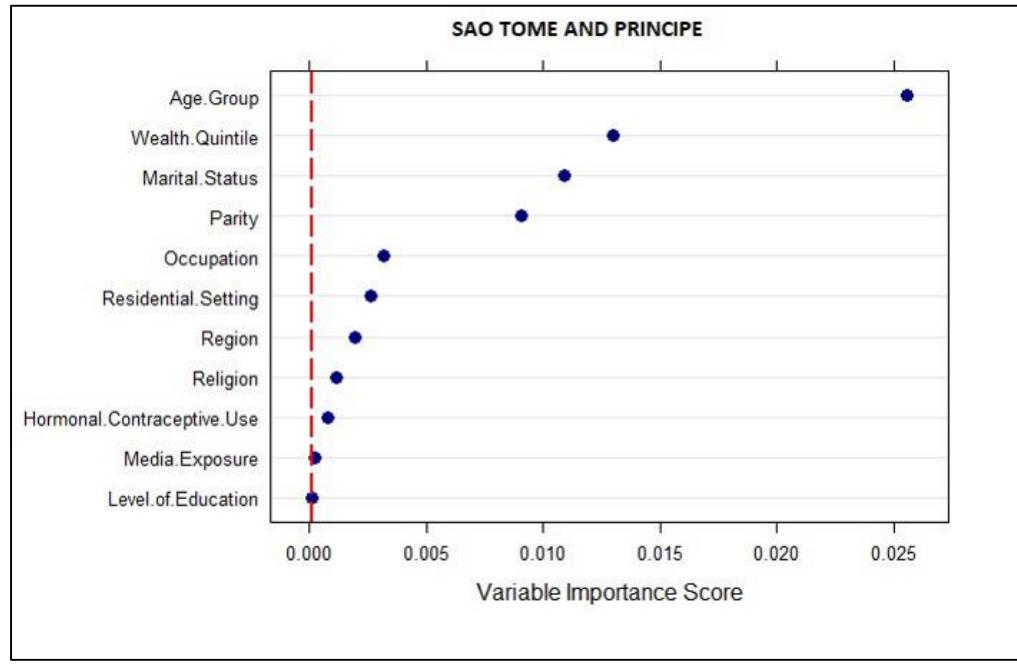


**Figure S28:** Predictors for nutritional status in Sao Tome and Principe (OOB error = 28.5%).
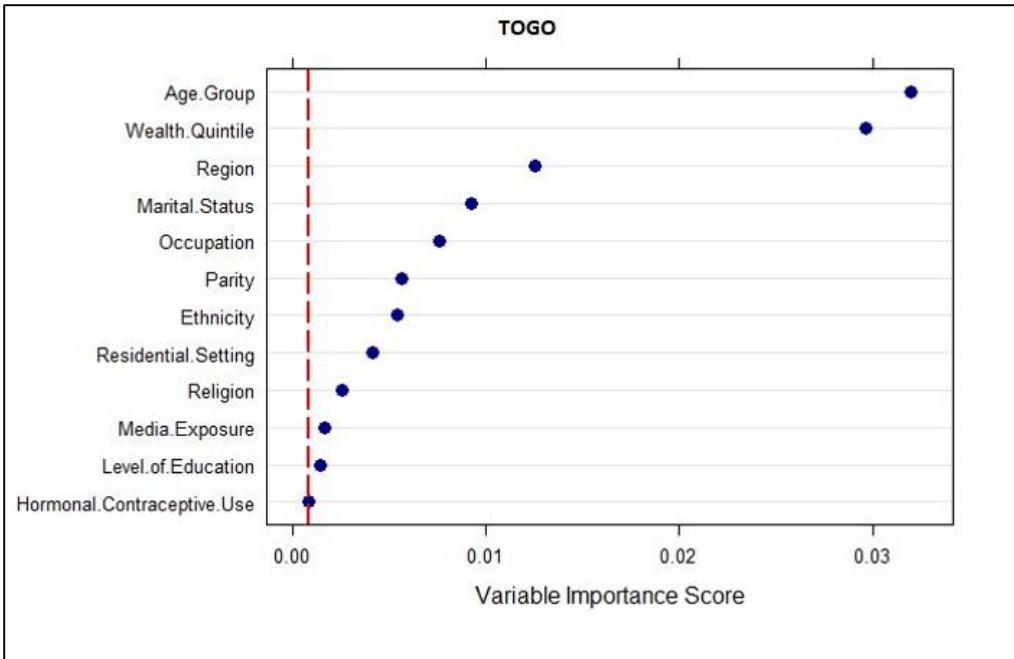
**Figure S29:** Predictors for nutritional status in Togo (OOB error = 24.7%).
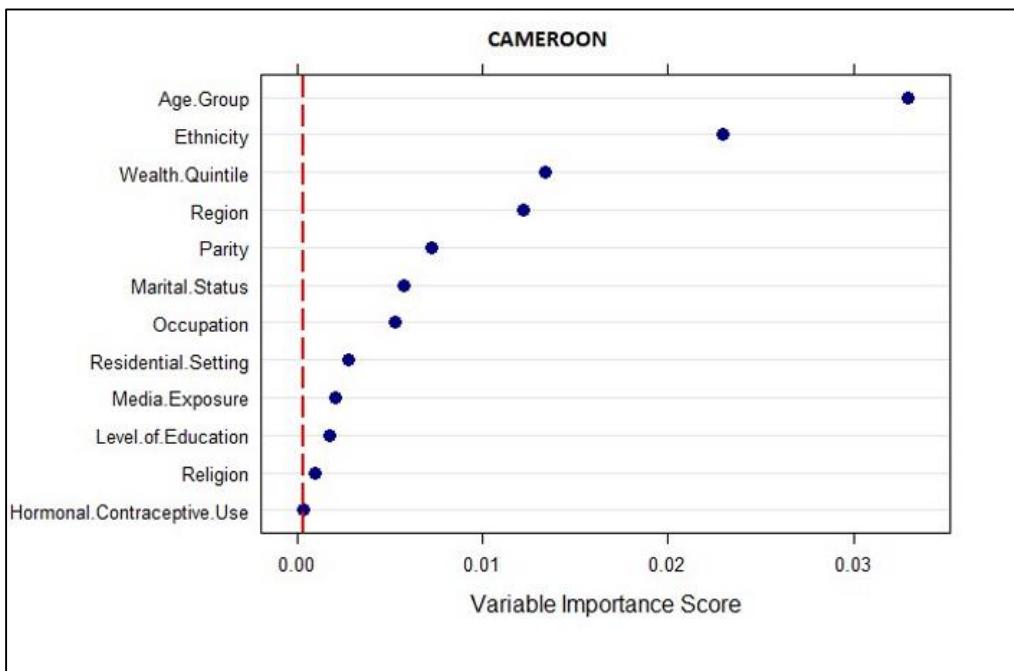


**Figure S30:** Predictors for nutritional status in Cameroon (OOB error = 24.9%).
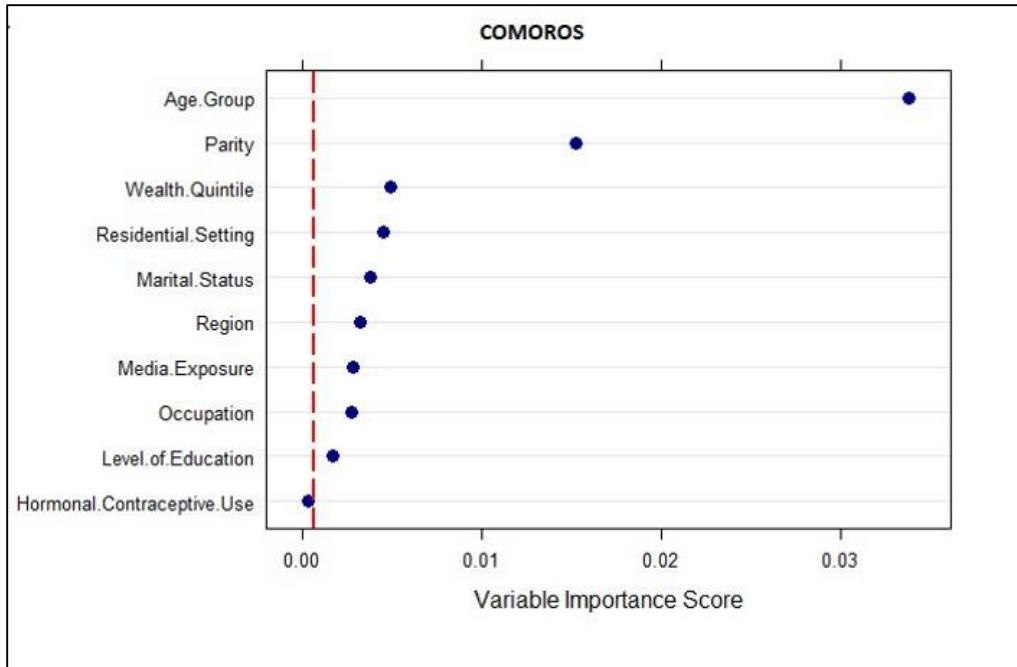
**Figure S31:** Predictors for nutritional status in Comoros (OOB error = 28.9%).
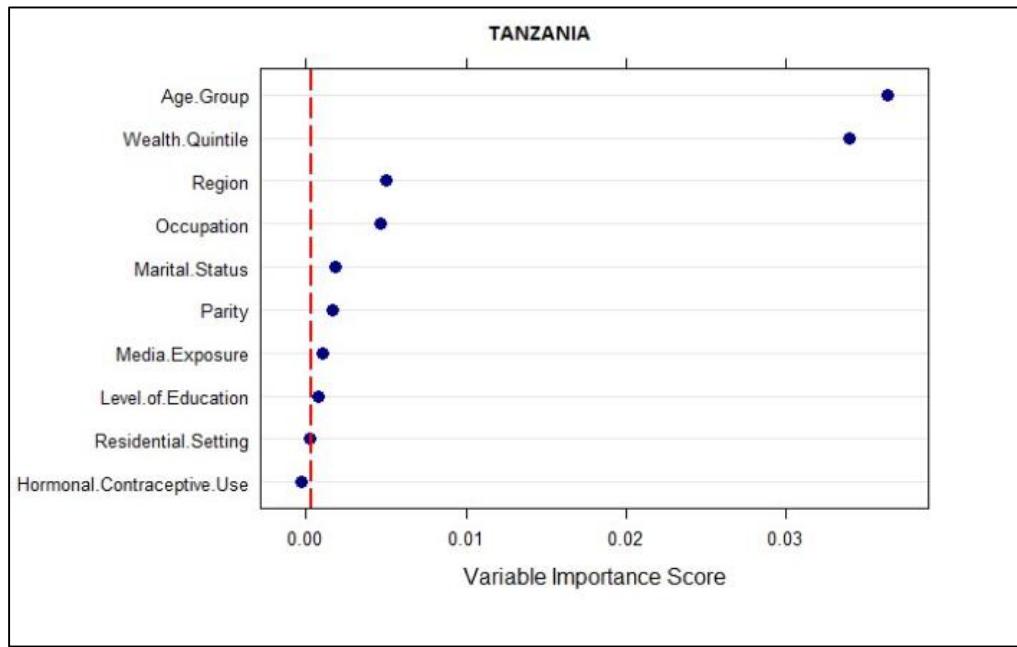


**Figure S32:** Predictors for nutritional status in Tanzania (OOB error = 26.6%).
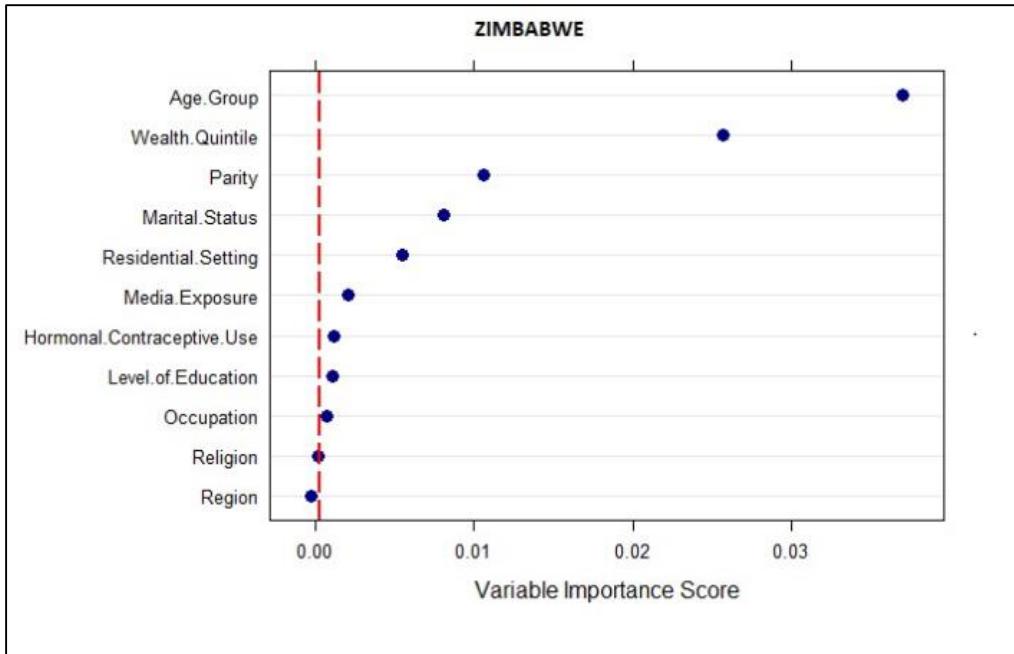
**Figure S33:** Predictors for nutritional status in Zimbabwe (OOB error = 28.1%).
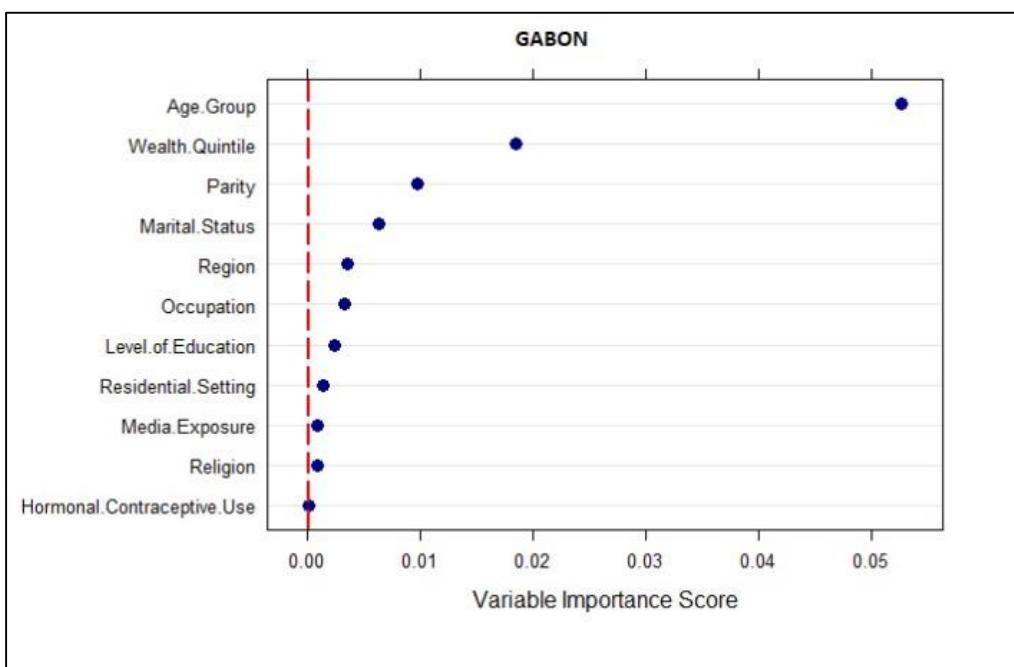


**Figure S34:** Predictors for nutritional status in Gabon (OOB error = 27.8%).
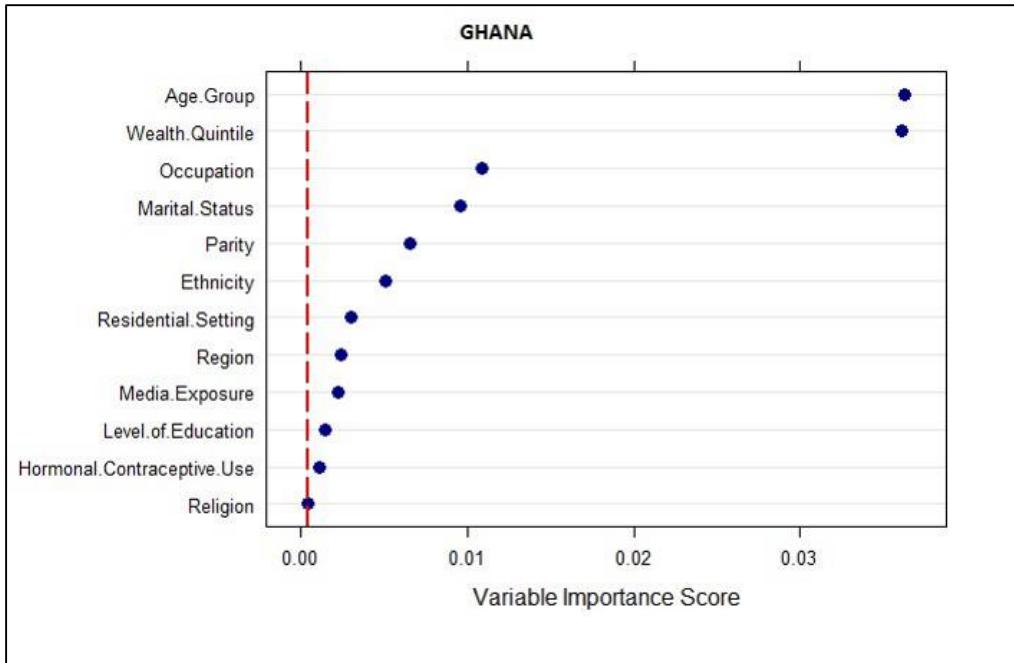
**Figure S35:** Predictors for nutritional status in Ghana (OOB error = 24.4%).
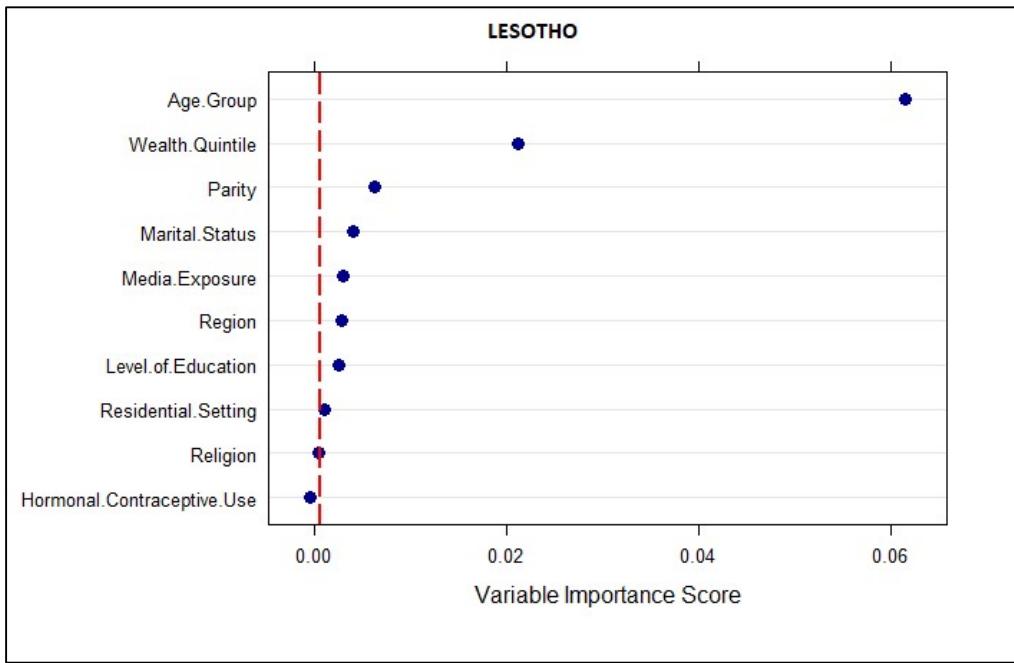


**Figure S36:** Predictors for nutritional status in Lesotho (OOB error = 27.0%).
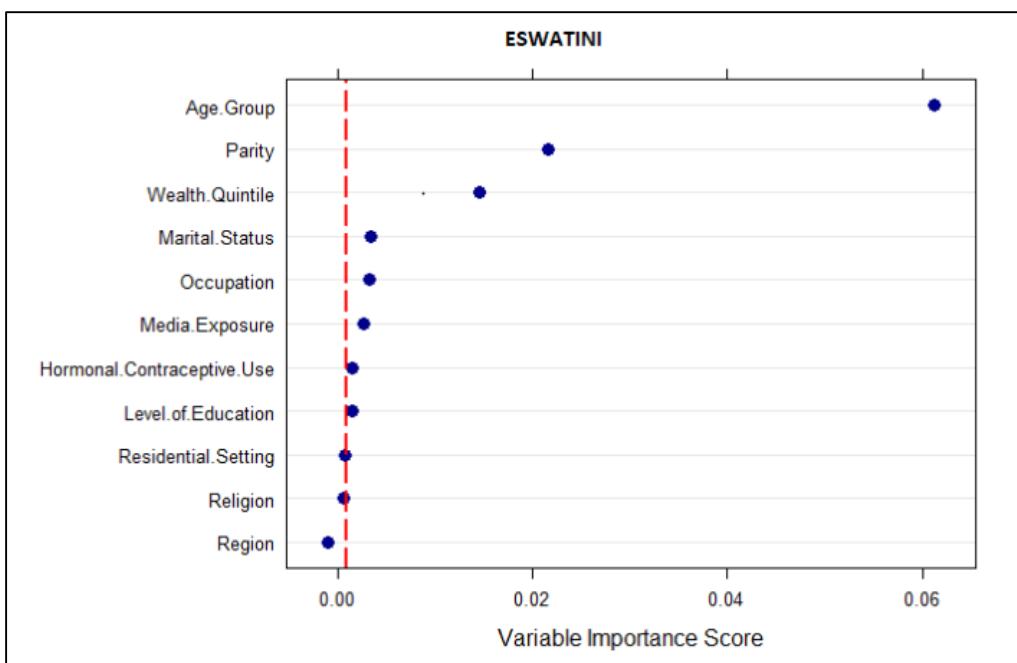
**Figure S37:** Predictors for nutritional status in Eswatini (OOB error = 27.3%).

**Appendix 4: Logistic regression results for individual-level analysis (Table S35-S68).**

1. Multivariable multinomial regression models were implemented to calculate the adjusted and unadjusted associations for each country.
2. Normal weight (BMI 18.5 – 24.9 kg/m$^2$) was used as the reference category for the outcome.
3. Beneath each plot, F-value (P-value) has been presented as the goodness of fit statistic.

**Table S35:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Madagascar.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.80 (0.66, 0.98) | 0.84 (0.66, 1.06) | 3.93 (2.01, 7.67) | 2.78 (1.31, 5.89) |
| 25-29 | 0.95 (0.75, 1.19) | 0.96 (0.71, 1.28) | 6.21 (3.26, 11.8) | 3.74 (1.67, 8.41) |
| 30-34 | 0.96 (0.76, 1.22) | 1.00 (0.74, 1.34) | 10.1 (5.29, 19.2) | 5.76 (2.60, 12.8) |
| 35-39 | 1.11 (0.88, 1.40) | 1.16 (0.85, 1.59) | 13.1 (7.05, 24.5) | 7.32 (3.27, 16.4) |
| 40-44 | 1.04 (0.83, 1.30) | 1.04 (0.77, 1.41) | 11.0 (5.72, 21.1) | 6.29 (2.76, 14.3) |
| 45-49 | 1.24 (0.97, 1.58) | 1.24 (0.89, 1.73) | 10.3 (5.27, 20.1) | 6.29 (2.64, 15.0) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.89 (0.75, 1.06) | 0.93 (0.77, 1.12) | 1.00 (0.77, 1.29) | 1.01 (0.77, 1.31) |
| Islam | 1.24 (0.66, 2.33) | 1.24 (0.67, 2.27) | 1.93 (0.66, 5.59) | 1.08 (0.46, 2.52) |
| Traditionalist | 1.06 (0.64, 1.75) | 1.04 (0.65, 1.69) | 0.75 (0.30, 1.87) | 2.04 (0.65, 6.43) |
| Others | 0.87 (0.66, 1.13) | 0.96 (0.73, 1.26) | 1.41 (0.91, 2.17) | 1.19 (0.78, 1.83) |
| No Religion | 1.15 (0.96, 1.39) | 1.02 (0.81, 1.27) | 0.49 (0.33, 0.72) | 1.26 (0.77, 2.06) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.94 (0.76, 1.18) | 1.03 (0.77, 1.36) | 2.32 (1.49, 3.63) | 1.23 (0.71, 2.16) |
| 2 | 0.95 (0.77, 1.18) | 1.06 (0.80, 1.40) | 4.01 (2.43, 6.62) | 1.68 (0.90, 3.15) |
| 3 | 1.04 (0.80, 1.34) | 1.12 (0.81, 1.55) | 4.04 (2.59, 6.30) | 1.40 (0.74, 2.63) |
| 4 | 1.19 (0.94, 1.50) | 1.23 (0.88, 1.73) | 3.13 (1.86, 5.26) | 1.22 (0.59, 2.52) |
| 5 | 1.02 (0.78, 1.35) | 0.99 (0.68, 1.43) | 3.19 (1.89, 5.36) | 1.42 (0.67, 3.01) |
| 6+ | 1.34 (1.09, 1.65) | 1.14 (0.83, 1.57) | 2.83 (1.85, 4.33) | 1.45 (0.73, 2.88) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.96 (0.81, 1.14) | 0.86 (0.66, 1.12) | 5.34 (3.42, 8.36) | 1.65 (0.92, 2.96) |
| Formerly Married | 1.13 (0.89, 1.43) | 0.92 (0.67, 1.26) | 4.84 (2.84, 8.27) | 1.57 (0.83, 2.96) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.80 (0.66, 0.95) | 1.11 (0.85, 1.45) | 2.73 (2.10, 3.55) | 0.84 (0.61, 1.17) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Region** | | | | |
| Analamanga (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Vakinankarata | 1.29 (0.88, 1.88) | 1.01 (0.65, 1.56) | 0.45 (0.22, 0.94) | 1.26 (0.67, 2.35) |
| Itasy | 1.53 (1.03, 2.27) | 1.25 (0.79, 2.00) | 0.40 (0.20, 0.80) | 1.21 (0.61, 2.38) |
| Bongolava | 0.18 (0.09, 0.36) | 0.14 (0.07, 0.30) | 0.58 (0.29, 1.18) | 1.85 (0.79, 4.34) |
| Haute Matsiatra | 2.35 (1.56, 3.53) | 1.89 (1.19, 2.98) | 1.01 (0.57, 1.81) | 2.51 (1.45, 4.36) |
| Anamoronn Mania | 2.63 (1.76, 3.95) | 2.10 (1.32, 3.36) | 0.64 (0.27, 1.53) | 1.56 (0.78, 3.14) |
| Vatovavy Fitovinany | 2.11 (1.37, 3.24) | 1.39 (0.85, 2.30) | 0.59 (0.32, 1.10) | 2.53 (1.33, 4.78) |
| Ihorombe | 1.23 (0.80, 1.89) | 0.82 (0.50, 1.34) | 0.53 (0.25, 1.11) | 1.99 (0.90, 4.38) |
| Atsimo Atsinanana | 2.10 (1.29, 3.43) | 1.34 (0.78, 2.28) | 0.25 (0.08, 0.79) | 1.59 (0.54, 4.64) |
| Atsinanana | 1.63 (1.15, 2.32) | 1.27 (0.86, 1.86) | 0.78 (0.42, 1.47) | 1.38 (0.74, 2.58) |
| Ananlanjirofo | 2.14 (1.37, 3.36) | 1.53 (0.93, 2.50) | 0.41 (0.16, 1.06) | 1.44 (0.56, 3.67) |
| Alaotra Mangoro | 1.08 (0.72, 1.63) | 0.91 (0.57, 1.43) | 0.63 (0.32, 1.22) | 1.11 (0.58, 2.12) |
| Boeny | 1.71 (1.11, 2.66) | 1.33 (0.81, 2.19) | 2.27 (1.32, 3.91) | 4.22 (2.52, 7.05) |
| Sofia | 1.01 (0.62, 1.65) | 0.67 (0.39, 1.15) | 0.26 (0.10, 0.69) | 0.88 (0.33, 2.39) |
| Betsiboka | 0.91 (0.60, 1.38) | 0.65 (0.39, 1.06) | 0.21 (0.08, 0.57) | 0.61 (0.30, 1.26) |
| Melaky | 0.85 (0.54, 1.33) | 0.53 (0.31, 0.91) | 0.33 (0.14, 0.80) | 1.48 (0.64, 3.40) |
| Atsimo Andrefana | 1.44 (0.86, 2.39) | 0.99 (0.57, 1.73) | 1.11 (0.62, 1.98) | 3.32 (1.74, 6.30) |
| Androy | 1.53 (1.07, 2.20) | 0.91 (0.58, 1.43) | 0.41 (0.19, 0.88) | 2.56 (1.09, 5.99) |
| Anosy | 1.13 (0.68, 1.86) | 0.74 (0.43, 1.29) | 0.40 (0.15, 1.07) | 1.65 (0.70, 3.93) |
| Menabe | 1.15 (0.68, 1.94) | 0.78 (0.46, 1.35) | 1.32 (0.80, 2.17) | 4.90 (2.69, 8.92) |
| Diana | 1.37 (0.87, 2.17) | 1.06 (0.65, 1.74) | 0.98 (0.53, 1.81) | 2.15 (1.08, 4.27) |
| Sava | 1.03 (0.64, 1.65) | 0.81 (0.48, 1.38) | 0.59 (0.27, 1.29) | 1.88 (0.79, 4.47) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.79 (0.66, 0.93) | 0.88 (0.72, 1.07) | 1.40 (0.93, 2.10) | 1.02 (0.62, 1.68) |
| Secondary | 0.67 (0.56, 0.80) | 0.85 (0.66, 1.09) | 3.17 (2.11, 4.76) | 1.02 (0.59, 1.75) |
| Higher | 0.39 (0.21, 0.72) | 0.59 (0.30, 1.15) | 4.69 (2.35, 9.36) | 0.85 (0.35, 2.04) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 1.03 (0.83, 1.27) | 0.97 (0.78, 1.21) | 1.23 (0.65, 2.32) | 1.44 (0.72, 2.88) |
| Middle | 0.77 (0.61, 0.97) | 0.76 (0.58, 0.98) | 1.40 (0.73, 2.68) | 1.65 (0.81, 3.36) |
| Richer | 0.66 (0.51, 0.85) | 0.67 (0.49, 0.91) | 2.73 (1.58, 4.74) | 3.20 (1.61, 6.37) |
| Richest | 0.57 (0.45, 0.72) | 0.55 (0.38, 0.80) | 7.87 (4.78, 12.9) | 7.11 (3.47, 14.6) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.71 (0.55, 0.91) | 0.74 (0.56, 0.98) | 4.18 (2.86, 6.11) | 1.70 (1.13, 2.55) |
| Manual | 0.85 (0.64, 1.13) | 0.83 (0.61, 1.13) | 1.84 (1.22, 2.79) | 1.06 (0.66, 1.68) |
| Agricultural | 1.11 (0.94, 1.32) | 0.87 (0.66, 1.13) | 0.73 (0.51, 1.02) | 0.90 (0.56, 1.44) |
| Others | 0.62 (0.08, 4.85) | 0.65 (0.07, 5.69) | 0.52 (0.07, 4.20) | 0.27 (0.03, 2.20) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.85 (0.73, 1.00) | 1.06 (0.89, 1.27) | 1.69 (1.18, 2.43) | 1.27 (0.81, 1.98) |
| Exposed to two media sources | 0.68 (0.56, 0.83) | 1.06 (0.81, 1.38) | 3.87 (2.69, 5.56) | 1.73 (1.07, 2.79) |
| Exposed to three media sources | 0.63 (0.50, 0.80) | 1.10 (0.78, 1.55) | 6.08 (4.20, 8.81) | 2.24 (1.30, 3.87) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.87 (0.74, 1.04) | 0.92 (0.76, 1.11) | 1.41 (1.08, 1.83) | 1.12 (0.86, 1.47) |

Overall Model Fit: $F_{(112, 440)} = 6.49$, $P=0.0000$.

**Table S36:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Ethiopia.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.66 (0.55, 0.79) | 0.68 (0.55, 0.84) | 1.37 (0.90, 2.09) | 1.19 (0.76, 1.88) |
| 25-29 | 0.55 (0.45, 0.66) | 0.56 (0.43, 0.73) | 2.15 (1.58, 2.94) | 1.99 (1.30, 3.05) |
| 30-34 | 0.64 (0.53, 0.79) | 0.62 (0.45, 0.85) | 3.26 (2.27, 4.67) | 3.79 (2.31, 6.24) |
| 35-39 | 0.75 (0.62, 0.90) | 0.70 (0.51, 0.97) | 2.90 (1.95, 4.31) | 3.66 (2.18, 6.14) |
| 40-44 | 0.78 (0.62, 0.97) | 0.73 (0.51, 1.05) | 3.35 (2.20, 5.09) | 5.15 (2.87, 9.25) |
| 45-49 | 0.88 (0.68, 1.14) | 0.81 (0.56, 1.18) | 2.90 (1.86, 4.53) | 4.40 (2.43, 7.96) |
| **Ethnicity** | | | | |
| Oromo (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Affar | 2.12 (1.56, 2.89) | 1.05 (0.58, 1.90) | 0.65 (0.36, 1.20) | 0.90 (0.42, 1.90) |
| Amhara | 0.81 (0.69, 0.95) | 0.89 (0.64, 1.24) | 1.00 (0.74, 1.35) | 1.07 (0.82, 1.38) |
| Guragie | 1.12 (0.72, 1.75) | 1.73 (1.01, 2.98) | 2.33 (1.37, 3.98) | 0.97 (0.63, 1.50) |
| Hadiye | 0.81 (0.54, 1.23) | 1.23 (0.65, 2.30) | 0.67 (0.35, 1.28) | 0.90 (0.45, 1.80) |
| Sidama | 0.73 (0.47, 1.13) | 1.17 (0.65, 2.10) | 0.38 (0.21, 0.72) | 0.80 (0.35, 1.86) |
| Somali | 1.62 (1.32, 2.00) | 1.36 (0.57, 3.25) | 2.64 (1.78, 3.90) | 2.39 (1.30, 4.38) |
| Tigray | 1.55 (1.28, 1.88) | 1.77 (1.05, 2.98) | 1.21 (0.82, 1.80) | 1.13 (0.79, 1.61) |
| Welaita | 0.44 (0.37, 0.53) | 0.70 (0.47, 1.05) | 0.64 (0.22, 1.86) | 0.68 (0.31, 1.50) |
| Others | 0.42 (0.33, 0.54) | 0.61 (0.41, 0.90) | 0.79 (0.55, 1.14) | 1.10 (0.70, 1.73) |
| **Religion** | | | | |
| Other Christians (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Catholics | 0.53 (0.25, 1.11) | 0.60 (0.30, 1.22) | 0.85 (0.26, 2.73) | 0.84 (0.14, 5.10) |
| Islam | 1.34 (1.17, 1.55) | 1.06 (0.91, 1.25) | 0.88 (0.65, 1.19) | 1.08 (0.80, 1.48) |
| Others | 1.09 (0.48, 2.45) | 1.15 (0.67, 1.97) | 0.70 (0.30, 1.64) | 1.34 (0.46, 3.94) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.86 (0.70, 1.06) | 1.26 (0.94, 1.67) | 1.45 (1.06, 2.00) | 0.88 (0.54, 1.43) |
| 2 | 0.75 (0.58, 0.96) | 1.21 (0.85, 1.72) | 1.81 (1.28, 2.55) | 0.93 (0.55, 1.56) |
| 3 | 0.91 (0.74, 1.11) | 1.53 (1.09, 2.14) | 2.15 (1.57, 2.96) | 1.39 (0.84, 2.32) |
| 4 | 0.72 (0.56, 0.91) | 1.18 (0.82, 1.71) | 1.18 (0.82, 1.70) | 0.73 (0.42, 1.26) |
| 5 | 0.99 (0.80, 1.23) | 1.54 (1.05, 2.24) | 0.87 (0.55, 1.38) | 0.68 (0.35, 1.31) |
| 6+ | 0.96 (0.81, 1.13) | 1.33 (0.93, 1.90) | 0.91 (0.68, 1.24) | 0.67 (0.38, 1.17) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.82 (0.72, 0.92) | 0.77 (0.58, 1.01) | 1.37 (1.10, 1.71) | 1.68 (1.09, 2.59) |
| Formerly Married | 0.91 (0.74, 1.12) | 0.84 (0.61, 1.14) | 2.14 (1.60, 2.86) | 1.71 (1.06, 2.74) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.67 (0.57, 0.80) | 0.68 (0.50, 0.93) | 6.89 (5.15, 9.23) | 1.78 (1.23, 2.58) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Region** | | | | |
| Addis Ababa (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Tigray | 2.44 (1.91, 3.11) | 1.13 (0.69, 1.85) | 0.18 (0.13, 0.26) | 0.52 (0.30, 0.90) |
| Afar | 3.23 (2.54, 4.12) | 2.13 (1.34, 3.39) | 0.32 (0.22, 0.46) | 1.08 (0.62, 1.91) |
| Amhara | 1.33 (1.07, 1.65) | 1.20 (0.84, 1.71) | 0.09 (0.07, 0.12) | 0.35 (0.22, 0.53) |
| Oromia | 1.55 (1.26, 1.90) | 1.12 (0.78, 1.61) | 0.21 (0.14, 0.32) | 0.80 (0.53, 1.23) |
| Somali | 2.47 (1.92, 3.18) | 1.14 (0.45, 2.84) | 0.54 (0.41, 0.72) | 1.64 (0.89, 3.02) |
| Benishangul | 1.21 (0.95, 1.54) | 1.22 (0.86, 1.74) | 0.19 (0.14, 0.25) | 0.95 (0.60, 1.50) |
| Snnpr | 0.81 (0.64, 1.03) | 0.70 (0.48, 1.01) | 0.14 (0.10, 0.19) | 0.71 (0.41, 1.22) |
| Gambela | 2.25 (1.66, 3.06) | 2.61 (1.73, 3.94) | 0.27 (0.20, 0.38) | 0.60 (0.39, 0.92) |
| Harari | 1.54 (1.17, 2.04) | 1.28 (0.90, 1.84) | 0.67 (0.53, 0.84) | 1.04 (0.77, 1.42) |
| Dire Dawa | 1.69 (1.33, 2.14) | 1.42 (1.02, 1.97) | 0.74 (0.60, 0.91) | 1.04 (0.78, 1.38) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.06 (0.93, 1.20) | 1.05 (0.90, 1.24) | 1.64 (1.35, 2.00) | 1.49 (1.11, 1.99) |
| Secondary | 0.73 (0.58, 0.91) | 0.80 (0.61, 1.04) | 2.92 (2.23, 3.84) | 1.57 (1.04, 2.39) |
| Higher | 1.03 (0.79, 1.35) | 1.65 (1.19, 2.30) | 5.88 (3.88, 8.92) | 1.75 (1.00, 3.04) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.77 (0.63, 0.95) | 0.85 (0.68, 1.07) | 1.01 (0.64, 1.61) | 1.43 (0.87, 2.34) |
| Middle | 0.84 (0.68, 1.04) | 0.96 (0.76, 1.21) | 0.93 (0.58, 1.49) | 1.27 (0.75, 2.16) |
| Richer | 0.79 (0.64, 0.96) | 0.92 (0.73, 1.16) | 1.60 (1.05, 2.43) | 2.12 (1.35, 3.32) |
| Richest | 0.61 (0.49, 0.75) | 0.82 (0.58, 1.17) | 8.24 (5.66, 12.00) | 4.36 (2.73, 6.97) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.68 (0.58, 0.80) | 0.79 (0.66, 0.94) | 2.77 (2.15, 3.55) | 1.23 (0.96, 1.59) |
| Manual | 0.70 (0.53, 0.91) | 0.75 (0.56, 0.98) | 1.35 (0.90, 2.01) | 0.77 (0.52, 1.14) |
| Agricultural | 0.84 (0.73, 0.97) | 0.77 (0.66, 0.91) | 0.42 (0.28, 0.61) | 0.64 (0.42, 0.98) |
| Others | 1.10 (0.77, 1.57) | 1.11 (0.76, 1.62) | 1.02 (0.61, 1.72) | 0.61 (0.33, 1.13) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.97 (0.83, 1.14) | 1.04 (0.87, 1.24) | 1.88 (1.41, 2.49) | 0.96 (0.66, 1.40) |
| Exposed to two media sources | 0.87 (0.73, 1.04) | 0.99 (0.80, 1.22) | 4.02 (2.97, 5.44) | 1.34 (0.94, 1.91) |
| Exposed to three media sources | 0.79 (0.63, 1.00) | 0.92 (0.68, 1.25) | 6.21 (4.64, 8.31) | 1.48 (0.91, 2.39) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.73 (0.63, 0.85) | 0.89 (0.75, 1.05) | 0.98 (0.81, 1.20) | 0.90 (0.70, 1.17) |

Overall Model Fit: $F_{(104, 514)} = 16.72$, $P = 0.0000$.

**Table S37:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Burundi.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.36 (0.26, 0.48) | 0.48 (0.34, 0.68) | 1.03 (0.68, 1.57) | 1.02 (0.60, 1.76) |
| 25-29 | 0.47 (0.34, 0.64) | 0.69 (0.44, 1.08) | 1.26 (0.82, 1.94) | 1.14 (0.61, 2.13) |
| 30-34 | 0.52 (0.37, 0.72) | 0.77 (0.46, 1.27) | 1.42 (0.92, 2.19) | 1.22 (0.60, 2.48) |
| 35-39 | 0.82 (0.58, 1.17) | 1.31 (0.73, 2.36) | 1.46 (0.91, 2.34) | 1.64 (0.80, 3.39) |
| 40-44 | 0.88 (0.63, 1.24) | 1.42 (0.81, 2.48) | 1.48 (0.92, 2.37) | 1.98 (0.88, 4.44) |
| 45-49 | 1.17 (0.84, 1.63) | 1.87 (1.03, 3.40) | 1.55 (0.99, 2.45) | 2.21 (0.96, 5.06) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.75 (0.60, 0.94) | 0.84 (0.67, 1.06) | 1.47 (1.14, 1.89) | 1.30 (1.00, 1.69) |
| Islam | 0.65 (0.32, 1.32) | 0.86 (0.40, 1.86) | 4.44 (2.59, 7.62) | 1.84 (1.07, 3.15) |
| Others | 1.14 (0.67, 1.94) | 1.20 (0.69, 2.06) | 1.10 (0.44, 2.73) | 1.42 (0.51, 3.99) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.68 (0.49, 0.95) | 2.12 (1.32, 3.40) | 0.94 (0.60, 1.48) | 0.73 (0.32, 1.67) |
| 2 | 0.53 (0.36, 0.78) | 1.75 (0.95, 3.23) | 1.00 (0.64, 1.54) | 0.72 (0.30, 1.73) |
| 3 | 0.69 (0.46, 1.02) | 2.21 (1.18, 4.12) | 1.28 (0.85, 1.94) | 0.95 (0.39, 2.31) |
| 4 | 0.86 (0.56, 1.33) | 2.17 (1.10, 4.29) | 1.34 (0.85, 2.12) | 0.89 (0.37, 2.14) |
| 5 | 0.97 (0.65, 1.46) | 2.12 (1.04, 4.32) | 1.47 (0.94, 2.31) | 0.97 (0.39, 2.41) |
| 6+ | 0.96 (0.74, 1.25) | 1.64 (0.84, 3.20) | 1.14 (0.78, 1.66) | 0.74 (0.28, 1.93) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.62 (0.50, 0.77) | 0.36 (0.22, 0.59) | 1.24 (0.95, 1.62) | 1.55 (0.72, 3.34) |
| Formerly Married | 1.16 (0.85, 1.56) | 0.51 (0.30, 0.87) | 0.93 (0.60, 1.46) | 1.03 (0.44, 2.39) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.72 (0.52, 0.99) | 0.87 (0.43, 1.77) | 6.62 (5.04, 8.70) | 2.20 (1.36, 3.56) |
| **Region** | | | | |
| Bujumbura (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| North | 1.46 (0.98, 2.17) | 1.11 (0.51, 2.41) | 0.12 (0.09, 0.18) | 0.69 (0.42, 1.15) |
| Centre East | 1.51 (1.01, 2.26) | 1.10 (0.51, 2.38) | 0.13 (0.09, 0.20) | 0.78 (0.45, 1.36) |
| West | 1.32 (0.87, 2.00) | 1.12 (0.50, 2.49) | 0.16 (0.11, 0.25) | 0.95 (0.54, 1.69) |
| South | 1.24 (0.85, 1.83) | 1.08 (0.51, 2.29) | 0.18 (0.13, 0.25) | 0.94 (0.56, 1.58) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.04 (0.83, 1.30) | 0.95 (0.76, 1.20) | 1.33 (0.99, 1.77) | 1.09 (0.76, 1.55) |
| Secondary | 0.81 (0.59, 1.10) | 0.62 (0.40, 0.95) | 3.13 (2.22, 4.43) | 1.19 (0.71, 1.99) |
| Higher | 0.62 (0.18, 2.07) | 0.64 (0.18, 2.31) | 9.18 (5.40, 15.6) | 1.17 (0.59, 2.33) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.61 (0.46, 0.81) | 0.58 (0.42, 0.78) | 0.77 (0.41, 1.43) | 0.69 (0.36, 1.30) |
| Middle | 0.70 (0.51, 0.98) | 0.67 (0.47, 0.95) | 1.68 (0.95, 2.99) | 1.39 (0.77, 2.52) |
| Richer | 0.66 (0.49, 0.89) | 0.62 (0.45, 0.86) | 1.48 (0.84, 2.61) | 1.17 (0.63, 2.18) |
| Richest | 0.54 (0.40, 0.74) | 0.57 (0.38, 0.84) | 5.79 (3.64, 9.20) | 1.80 (0.99, 3.27) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.31 (0.18, 0.52) | 0.38 (0.22, 0.68) | 3.79 (2.61, 5.51) | 1.61 (1.06, 2.43) |
| Agricultural | 0.55 (0.44, 0.70) | 0.53 (0.41, 0.69) | 0.50 (0.36, 0.68) | 0.69 (0.42, 1.14) |
| Others | 0.36 (0.10, 1.27) | 0.30 (0.08, 1.08) | 1.29 (0.54, 3.05) | 0.77 (0.31, 1.94) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.99 (0.76, 1.28) | 1.14 (0.86, 1.51) | 1.35 (0.85, 2.12) | 1.15 (0.70, 1.91) |
| Exposed to two media sources | 1.03 (0.76, 1.40) | 1.14 (0.81, 1.59) | 2.83 (1.73, 4.63) | 1.58 (0.88, 2.82) |
| Exposed to three media sources | 1.13 (0.73, 1.75) | 1.88 (1.11, 3.18) | 6.68 (3.95, 11.3) | 1.54 (0.79, 2.99) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.60 (0.41, 0.88) | 0.90 (0.59, 1.38) | 1.91 (1.37, 2.65) | 1.65 (1.11, 2.46) |

Overall Model Fit: $F_{(72, 272)} = 6.88$, $P=0.0000$.

**Table S38:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Burkina Faso.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.48 (0.38, 0.60) | 0.75 (0.56, 1.02) | 1.43 (0.95, 2.14) | 1.14 (0.73, 1.78) |
| 25-29 | 0.46 (0.35, 0.59) | 0.78 (0.51, 1.19) | 2.21 (1.51, 3.23) | 2.04 (1.27, 3.28) |
| 30-34 | 0.59 (0.47, 0.76) | 1.07 (0.71, 1.62) | 3.00 (2.09, 4.32) | 3.67 (2.27, 5.94) |
| 35-39 | 0.65 (0.51, 0.82) | 1.19 (0.78, 1.81) | 2.95 (2.06, 4.21) | 4.49 (2.66, 7.56) |
| 40-44 | 0.79 (0.62, 1.00) | 1.51 (0.98, 2.32) | 5.43 (3.80, 7.77) | 11.1 (6.56, 18.8) |
| 45-49 | 0.74 (0.57, 0.96) | 1.38 (0.87, 2.18) | 4.37 (3.01, 6.33) | 10.5 (6.07, 18.1) |
| **Ethnicity** | | | | |
| Mossi (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Bobo | 0.72 (0.49, 1.08) | 0.89 (0.54, 1.48) | 1.31 (0.80, 2.16) | 1.33 (0.78, 2.27) |
| Fulfuldé / Peul | 3.01 (2.31, 3.91) | 2.81 (2.10, 3.76) | 0.71 (0.45, 1.10) | 0.95 (0.57, 1.59) |
| Gourmantché | 2.03 (1.47, 2.80) | 0.95 (0.61, 1.49) | 0.40 (0.23, 0.70) | 0.87 (0.46, 1.65) |
| Gourouns | 0.96 (0.59, 1.56) | 0.98 (0.58, 1.66) | 0.99 (0.63, 1.56) | 0.97 (0.58, 1.62) |
| Lobi | 1.01 (0.68, 1.50) | 0.67 (0.31, 1.42) | 0.62 (0.36, 1.07) | 0.86 (0.40, 1.85) |
| Sénoufo | 0.73 (0.44, 1.22) | 1.19 (0.66, 2.15) | 1.08 (0.75, 1.57) | 1.04 (0.63, 1.71) |
| Dagara | 0.67 (0.46, 0.97) | 0.52 (0.31, 0.88) | 0.91 (0.47, 1.75) | 0.85 (0.37, 1.97) |
| Bissa | 0.73 (0.51, 1.04) | 0.69 (0.40, 1.18) | 0.88 (0.52, 1.50) | 1.16 (0.68, 1.98) |
| Others | 0.89 (0.59, 1.36) | 1.06 (0.70, 1.59) | 1.73 (1.26, 2.38) | 1.50 (1.06, 2.14) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.17 (0.83, 1.65) | 0.96 (0.69, 1.33) | 0.78 (0.53, 1.15) | 0.80 (0.53, 1.20) |
| Islam | 1.18 (0.98, 1.43) | 1.02 (0.83, 1.25) | 0.97 (0.77, 1.23) | 1.41 (1.06, 1.87) |
| Traditionalists | 1.34 (0.97, 1.86) | 1.09 (0.78, 1.52) | 0.26 (0.15, 0.43) | 0.60 (0.32, 1.12) |
| No Religion | 0.87 (0.41, 1.85) | 0.62 (0.29, 1.32) | 0.39 (0.09, 1.75) | 0.92 (0.25, 3.44) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.50 (0.38, 0.66) | 0.76 (0.51, 1.13) | 1.59 (1.15, 2.21) | 1.10 (0.71, 1.71) |
| 2 | 0.50 (0.38, 0.67) | 0.75 (0.48, 1.18) | 1.57 (1.14, 2.16) | 0.86 (0.53, 1.37) |
| 3 | 0.45 (0.34, 0.59) | 0.64 (0.40, 1.02) | 2.02 (1.51, 2.69) | 0.93 (0.58, 1.50) |
| 4 | 0.79 (0.61, 1.02) | 1.00 (0.62, 1.63) | 2.01 (1.44, 2.80) | 0.88 (0.53, 1.45) |
| 5 | 0.67 (0.50, 0.89) | 0.74 (0.44, 1.23) | 1.95 (1.37, 2.77) | 0.82 (0.47, 1.43) |
| 6+ | 0.78 (0.64, 0.95) | 0.66 (0.41, 1.07) | 1.46 (1.11, 1.92) | 0.53 (0.30, 0.93) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.62 (0.52, 0.73) | 0.50 (0.34, 0.75) | 1.90 (1.44, 2.50) | 1.81 (1.10, 2.98) |
| Formerly Married | 0.53 (0.34, 0.83) | 0.50 (0.29, 0.88) | 2.77 (1.74, 4.41) | 1.27 (0.61, 2.63) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.47 (0.37, 0.58) | 0.62 (0.46, 0.84) | 4.65 (3.84, 5.64) | 1.51 (1.12, 2.05) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Region** | | | | |
| Centre (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Boucle de Mouhoun | 1.49 (0.99, 2.23) | 0.86 (0.55, 1.35) | 0.29 (0.20, 0.42) | 0.64 (0.39, 1.04) |
| Cascades | 0.96 (0.58, 1.61) | 0.61 (0.33, 1.15) | 0.41 (0.29, 0.57) | 0.76 (0.46, 1.24) |
| Centre-Est | 1.93 (1.22, 3.03) | 1.36 (0.79, 2.33) | 0.21 (0.15, 0.30) | 0.46 (0.30, 0.71) |
| Centre-Nord | 1.60 (1.02, 2.49) | 1.03 (0.64, 1.65) | 0.15 (0.08, 0.28) | 0.45 (0.23, 0.87) |
| Centre-Ouest | 2.10 (1.41, 3.13) | 1.38 (0.89, 2.14) | 0.25 (0.15, 0.41) | 0.73 (0.44, 1.21) |
| Centre-Sud | 2.25 (1.43, 3.54) | 1.53 (0.95, 2.45) | 0.14 (0.08, 0.26) | 0.40 (0.21, 0.75) |
| Est | 4.19 (2.85, 6.16) | 2.61 (1.64, 4.15) | 0.19 (0.12, 0.31) | 0.88 (0.52, 1.50) |
| Hauts Basins | 1.44 (0.93, 2.22) | 1.06 (0.65, 1.71) | 0.60 (0.45, 0.79) | 0.85 (0.63, 1.16) |
| Nord | 2.30 (1.51, 3.50) | 1.44 (0.94, 2.22) | 0.16 (0.10, 0.25) | 0.41 (0.26, 0.64) |
| Plateau Central | 1.31 (0.83, 2.08) | 0.86 (0.54, 1.39) | 0.18 (0.12, 0.27) | 0.54 (0.33, 0.88) |
| Sahel | 2.83 (1.77, 4.54) | 0.93 (0.56, 1.55) | 0.28 (0.19, 0.43) | 0.83 (0.49, 1.40) |
| Sud-Ouest | 1.74 (1.20, 2.54) | 1.70 (0.90, 3.22) | 0.22 (0.16, 0.32) | 1.01 (0.55, 1.88) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.70 (0.55, 0.89) | 0.87 (0.67, 1.13) | 2.04 (1.65, 2.54) | 1.34 (1.02, 1.75) |
| Secondary | 0.70 (0.54, 0.92) | 0.78 (0.55, 1.11) | 3.04 (2.44, 3.79) | 1.74 (1.25, 2.42) |
| Higher | 0.77 (0.40, 1.51) | 1.63 (0.71, 3.75) | 3.62 (1.98, 6.62) | 0.89 (0.44, 1.81) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.82 (0.66, 1.01) | 0.88 (0.71, 1.08) | 1.36 (0.88, 2.10) | 1.45 (0.94, 2.26) |
| Middle | 0.67 (0.53, 0.85) | 0.78 (0.61, 1.00) | 1.50 (0.97, 2.31) | 1.59 (1.00, 2.52) |
| Richer | 0.52 (0.41, 0.65) | 0.70 (0.54, 0.92) | 2.35 (1.50, 3.69) | 1.91 (1.17, 3.12) |
| Richest | 0.34 (0.26, 0.45) | 0.47 (0.32, 0.67) | 8.25 (5.60, 12.2) | 3.58 (2.09, 6.13) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.68 (0.53, 0.85) | 0.74 (0.58, 0.96) | 1.56 (1.23, 1.98) | 1.04 (0.82, 1.32) |
| Manual | 0.51 (0.34, 0.76) | 0.57 (0.37, 0.87) | 0.78 (0.50, 1.21) | 0.80 (0.54, 1.19) |
| Agricultural | 0.86 (0.69, 1.06) | 0.75 (0.59, 0.95) | 0.31 (0.24, 0.41) | 0.61 (0.44, 0.84) |
| Others | 0.76 (0.42, 1.36) | 0.69 (0.34, 1.39) | 0.59 (0.31, 1.10) | 0.60 (0.34, 1.07) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.81 (0.69, 0.96) | 0.94 (0.79, 1.12) | 1.19 (0.92, 1.53) | 0.97 (0.74, 1.27) |
| Exposed to two media sources | 0.68 (0.54, 0.85) | 1.26 (0.97, 1.65) | 3.17 (2.44, 4.12) | 1.11 (0.82, 1.50) |
| Exposed to three media sources | 0.54 (0.37, 0.77) | 1.27 (0.77, 2.10) | 4.83 (3.56, 6.55) | 1.11 (0.73, 1.70) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.59 (0.45, 0.76) | 0.87 (0.67, 1.15) | 2.33 (1.93, 2.81) | 1.54 (1.20, 1.97) |

Overall Model Fit: $F_{(110, 438)} = 10.81$, $P=0.0000$.

**Table S39:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Chad.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.71 (0.57, 0.88) | 0.80 (0.62, 1.03) | 1.40 (0.98, 1.99) | 1.51 (0.90, 2.54) |
| 25-29 | 0.71 (0.58, 0.85) | 0.87 (0.64, 1.18) | 2.27 (1.65, 3.12) | 3.30 (1.84, 5.92) |
| 30-34 | 0.59 (0.47, 0.73) | 0.83 (0.59, 1.15) | 3.13 (2.27, 4.31) | 5.31 (2.85, 9.90) |
| 35-39 | 0.66 (0.52, 0.84) | 0.93 (0.63, 1.36) | 4.33 (3.08, 6.08) | 7.62 (3.86, 15.0) |
| 40-44 | 0.72 (0.57, 0.92) | 1.05 (0.73, 1.51) | 4.88 (3.49, 6.82) | 9.01 (4.35, 18.6) |
| 45-49 | 0.68 (0.53, 0.88) | 0.97 (0.64, 1.47) | 4.33 (3.03, 6.17) | 8.40 (4.26, 16.6) |
| **Ethnicity** | | | | |
| Sara (Ngambaye/Sara Madjin-Gaye/Mbaye) (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Gorane | 5.93 (4.03, 8.72) | 2.35 (1.18, 4.68) | 1.76 (0.88, 3.51) | 1.56 (0.60, 4.11) |
| Arab | 4.02 (2.77, 5.84) | 2.44 (1.29, 4.61) | 1.82 (0.90, 3.69) | 1.32 (0.53, 3.30) |
| Baguirmi/Barma | 1.61 (0.79, 3.25) | 0.91 (0.40, 2.10) | 4.72 (2.24, 9.93) | 3.55 (1.39, 9.09) |
| Kanembou/Bornou/Boudouma | 4.43 (3.05, 6.44) | 1.81 (0.92, 3.56) | 1.30 (0.62, 2.73) | 1.70 (0.65, 4.45) |
| Boulala/Médégo/Kouka | 4.19 (2.77, 6.33) | 2.17 (1.06, 4.41) | 1.58 (0.74, 3.36) | 1.10 (0.42, 2.89) |
| Ouadaï/Maba/Massalit/Mimi | 2.65 (1.77, 3.99) | 1.75 (0.86, 3.55) | 1.21 (0.59, 2.46) | 1.09 (0.44, 2.73) |
| Zaghawa/Bideyat/Kobé | 5.64 (3.49, 9.10) | 4.07 (1.91, 8.67) | 2.80 (1.04, 7.53) | 1.81 (0.57, 5.70) |
| Dadajo/Kibet/Mouro | 2.19 (1.35, 3.54) | 1.21 (0.58, 2.52) | 1.00 (0.36, 2.76) | 1.00 (0.33, 3.06) |
| Bidio/Migami/Kenga/Dangléat | 2.23 (1.26, 3.93) | 1.38 (0.65, 2.94) | 1.08 (0.43, 2.69) | 1.08 (0.28, 4.15) |
| Moundang | 0.78 (0.40, 1.50) | 1.25 (0.53, 2.98) | 1.94 (0.95, 3.96) | 1.43 (0.54, 3.78) |
| Massa/Mousseye/Mousgoume | 0.75 (0.40, 1.40) | 0.62 (0.31, 1.26) | 0.59 (0.25, 1.40) | 0.61 (0.26, 1.41) |
| Toupouri/Kéra | 0.79 (0.54, 1.14) | 1.03 (0.57, 1.86) | 2.43 (1.31, 4.52) | 1.90 (0.88, 4.10) |
| Peul/Foulbé/Bodoré | 6.09 (3.54, 10.5) | 3.84 (1.89, 7.80) | 2.16 (0.90, 5.19) | 1.41 (0.48, 4.16) |
| Tama/Assongori/Mararit | 2.16 (1.25, 3.74) | 1.64 (0.68, 3.94) | 1.26 (0.59, 2.69) | 1.49 (0.52, 4.24) |
| Gabri/Kabalaye/Nangtchéré/Soumraye | 0.86 (0.45, 1.63) | 1.32 (0.57, 3.06) | 2.70 (1.23, 5.93) | 2.17 (0.80, 5.89) |
| Marba/Lélé/Mesmé | 0.72 (0.42, 1.23) | 1.12 (0.53, 2.33) | 0.81 (0.35, 1.87) | 0.68 (0.28, 1.66) |
| Karo/Zimé/Pévé | 0.49 (0.17, 1.44) | 0.85 (0.24, 3.03) | 1.79 (0.87, 3.66) | 1.78 (0.67, 4.72) |
| Others | 1.79 (1.09, 2.92) | 1.39 (0.72, 2.69) | 3.11 (1.55, 6.26) | 2.37 (1.04, 5.38) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.04 (0.75, 1.44) | 0.88 (0.62, 1.24) | 1.21 (0.99, 1.49) | 1.27 (1.02, 1.58) |
| Islam | 4.77 (3.85, 5.91) | 2.02 (1.23, 3.31) | 0.92 (0.72, 1.18) | 1.80 (1.12, 2.90) |
| Traditionalists | 1.88 (0.46, 7.64) | 1.23 (0.26, 5.82) | 0.30 (0.04, 2.18) | 0.70 (0.09, 5.26) |
| No Religion | 0.85 (0.54, 1.33) | 0.78 (0.48, 1.27) | 0.37 (0.20, 0.69) | 0.69 (0.34, 1.41) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.79 (0.60, 1.04) | 1.26 (0.87, 1.83) | 0.91 (0.58, 1.45) | 0.82 (0.35, 1.91) |
| 2 | 0.70 (0.55, 0.90) | 1.06 (0.72, 1.56) | 1.59 (1.11, 2.29) | 1.07 (0.51, 2.24) |
| 3 | 0.74 (0.57, 0.96) | 1.09 (0.74, 1.62) | 1.41 (0.94, 2.12) | 0.74 (0.35, 1.56) |
| 4 | 0.78 (0.61, 0.99) | 1.10 (0.72, 1.69) | 1.84 (1.23, 2.75) | 0.94 (0.43, 2.04) |
| 5 | 0.69 (0.54, 0.87) | 0.85 (0.57, 1.27) | 1.58 (1.08, 2.30) | 0.72 (0.35, 1.47) |
| 6+ | 0.63 (0.53, 0.74) | 0.81 (0.56, 1.17) | 2.13 (1.62, 2.80) | 0.76 (0.39, 1.49) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.72 (0.61, 0.85) | 0.72 (0.51, 1.01) | 1.58 (1.20, 2.09) | 0.92 (0.38, 2.22) |
| Formerly Married | 0.67 (0.51, 0.87) | 0.74 (0.49, 1.13) | 2.90 (2.04, 4.11) | 1.09 (0.42, 2.81) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.95 (0.79, 1.14) | 1.20 (0.84, 1.73) | 3.71 (3.10, 4.43) | 1.81 (1.33, 2.44) |
| **Region** | | | | |
| N'Djaména (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Batha | 2.31 (1.66, 3.22) | 1.24 (0.80, 1.93) | 0.30 (0.17, 0.52) | 0.64 (0.33, 1.25) |
| Borkou, Tibesti | 1.76 (1.19, 2.62) | 0.82 (0.53, 1.29) | 0.82 (0.59, 1.14) | 1.17 (0.69, 1.96) |
| Chari Baguirmi | 1.77 (1.22, 2.57) | 1.12 (0.76, 1.63) | 0.26 (0.18, 0.39) | 0.53 (0.32, 0.88) |
| Guéra | 1.25 (0.82, 1.89) | 0.90 (0.59, 1.40) | 0.21 (0.10, 0.45) | 0.44 (0.19, 1.01) |
| Hadjer-Lamis | 1.55 (1.08, 2.22) | 0.77 (0.52, 1.14) | 0.21 (0.12, 0.38) | 0.46 (0.26, 0.82) |
| Kanem | 3.38 (2.50, 4.57) | 1.65 (1.06, 2.56) | 0.14 (0.08, 0.24) | 0.25 (0.12, 0.52) |
| Lac | 2.70 (2.09, 3.50) | 1.54 (1.00, 2.37) | 0.09 (0.05, 0.16) | 0.19 (0.09, 0.40) |
| Logone Occidental | 0.45 (0.27, 0.77) | 0.93 (0.55, 1.58) | 0.57 (0.42, 0.79) | 0.95 (0.64, 1.40) |
| Logone Oriental | 0.56 (0.39, 0.82) | 1.16 (0.75, 1.78) | 0.33 (0.25, 0.45) | 0.69 (0.46, 1.02) |
| Mandoul | 0.46 (0.34, 0.62) | 1.00 (0.66, 1.52) | 0.28 (0.19, 0.41) | 0.58 (0.37, 0.92) |
| Mayo Kebbi Est | 0.52 (0.34, 0.80) | 1.33 (0.77, 2.27) | 0.15 (0.09, 0.26) | 0.70 (0.39, 1.28) |
| Mayo Kebbi Ouest | 0.38 (0.24, 0.61) | 0.65 (0.33, 1.27) | 0.31 (0.23, 0.44) | 0.82 (0.47, 1.41) |
| Moyen Chari | 0.40 (0.26, 0.63) | 0.65 (0.40, 1.06) | 0.46 (0.30, 0.72) | 0.75 (0.48, 1.18) |
| Ouaddaï | 1.33 (0.91, 1.94) | 0.79 (0.50, 1.25) | 0.20 (0.12, 0.33) | 0.48 (0.25, 0.91) |
| Salamat | 1.52 (1.02, 2.27) | 0.89 (0.56, 1.41) | 0.16 (0.09, 0.29) | 0.31 (0.17, 0.58) |
| Tandjilé | 0.35 (0.23, 0.53) | 0.74 (0.40, 1.40) | 0.28 (0.18, 0.42) | 0.78 (0.44, 1.38) |
| Wadi Fira | 1.31 (0.95, 1.81) | 0.60 (0.37, 0.98) | 0.19 (0.13, 0.29) | 0.50 (0.26, 0.95) |
| Barh El Gazal | 3.28 (2.19, 4.90) | 1.56 (0.96, 2.53) | 0.28 (0.15, 0.52) | 0.47 (0.23, 0.95) |
| Ennedi Est, Ennedi Ouest | 2.18 (1.21, 3.91) | 0.81 (0.40, 1.64) | 0.50 (0.27, 0.92) | 0.93 (0.44, 1.97) |
| Sila | 1.87 (1.24, 2.82) | 1.19 (0.74, 1.92) | 0.14 (0.07, 0.28) | 0.36 (0.18, 0.73) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.44 (0.36, 0.52) | 0.98 (0.80, 1.20) | 1.43 (1.14, 1.79) | 1.37 (1.01, 1.85) |
| Secondary | 0.55 (0.44, 0.68) | 1.22 (0.90, 1.66) | 1.69 (1.34, 2.14) | 1.48 (1.02, 2.14) |
| Higher | 0.26 (0.08, 0.86) | 0.67 (0.18, 2.53) | 6.15 (3.63, 10.4) | 1.79 (0.96, 3.31) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 1.09 (0.88, 1.35) | 0.98 (0.79, 1.22) | 1.19 (0.89, 1.59) | 1.41 (1.02, 1.94) |
| Middle | 1.41 (1.15, 1.73) | 1.07 (0.87, 1.31) | 1.02 (0.71, 1.46) | 1.15 (0.79, 1.68) |
| Richer | 1.61 (1.29, 2.01) | 1.05 (0.79, 1.38) | 1.22 (0.87, 1.70) | 1.37 (0.94, 1.97) |
| Richest | 1.12 (0.91, 1.37) | 0.72 (0.52, 0.99) | 4.02 (3.06, 5.26) | 1.73 (1.20, 2.49) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.35 (0.29, 0.42) | 0.73 (0.61, 0.88) | 1.67 (1.35, 2.06) | 1.25 (0.99, 1.59) |
| Manual | 0.88 (0.61, 1.27) | 0.72 (0.50, 1.03) | 0.57 (0.23, 1.43) | 0.45 (0.15, 1.36) |
| Agricultural | 0.71 (0.58, 0.86) | 1.05 (0.85, 1.30) | 0.78 (0.54, 1.11) | 1.00 (0.68, 1.47) |
| Others | 0.41 (0.17, 0.99) | 0.47 (0.24, 0.95) | 0.21 (0.05, 0.91) | 0.32 (0.07, 1.49) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.72 (0.59, 0.88) | 0.97 (0.77, 1.22) | 1.97 (1.50, 2.59) | 1.17 (0.85, 1.61) |
| Exposed to two media sources | 0.66 (0.51, 0.85) | 0.83 (0.60, 1.13) | 2.44 (1.86, 3.21) | 1.02 (0.71, 1.46) |
| Exposed to three media sources | 0.72 (0.51, 1.03) | 0.90 (0.56, 1.46) | 3.80 (2.85, 5.06) | 1.25 (0.79, 1.99) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.23 (0.12, 0.46) | 0.48 (0.23, 1.01) | 1.93 (1.37, 2.74) | 0.91 (0.62, 1.33) |

Overall Model Fit: $F_{(144, 430)} = 14.19$, $P$=0.0000.

**Table S40:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Democratic Republic of Congo.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.73 (0.56, 0.94) | 0.90 (0.62, 1.30) | 1.40 (1.01, 1.92) | 1.25 (0.80, 1.93) |
| 25-29 | 0.58 (0.44, 0.76) | 0.64 (0.40, 1.00) | 2.05 (1.51, 2.79) | 2.01 (1.28, 3.15) |
| 30-34 | 0.58 (0.42, 0.80) | 0.66 (0.38, 1.15) | 2.76 (2.07, 3.68) | 2.76 (1.75, 4.34) |
| 35-39 | 0.67 (0.50, 0.92) | 0.88 (0.54, 1.45) | 3.50 (2.59, 4.73) | 3.53 (2.09, 5.96) |
| 40-44 | 0.66 (0.46, 0.95) | 0.85 (0.48, 1.48) | 3.29 (2.35, 4.61) | 3.51 (2.02, 6.09) |
| 45-49 | 0.42 (0.29, 0.60) | 0.48 (0.27, 0.84) | 3.31 (2.40, 4.55) | 4.56 (2.76, 7.52) |
| **Ethnicity** | | | | |
| Kasai, Katanga, Tanganyika (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Bakongo Nord & Sud | 1.18 (0.75, 1.84) | 1.13 (0.68, 1.86) | 1.90 (1.31, 2.76) | 1.19 (0.68, 2.08) |
| Bas Kasaï et Kwilu-Kwango | 1.64 (1.33, 2.02) | 1.42 (1.01, 2.01) | 0.76 (0.50, 1.14) | 0.98 (0.56, 1.73) |
| Cuvette central | 1.21 (0.92, 1.59) | 0.90 (0.59, 1.37) | 0.75 (0.42, 1.34) | 1.06 (0.58, 1.92) |
| Ubangi et Itimbiri | 0.49 (0.36, 0.67) | 0.34 (0.18, 0.61) | 0.98 (0.64, 1.50) | 1.25 (0.68, 2.29) |
| Uele Lac Albert | 0.52 (0.36, 0.75) | 0.41 (0.16, 1.06) | 1.68 (1.15, 2.44) | 1.33 (0.70, 2.53) |
| Basele-K, Man. et Kivu | 0.45 (0.33, 0.62) | 0.34 (0.08, 1.40) | 2.26 (1.53, 3.35) | 2.23 (1.14, 4.35) |
| Others | 1.59 (0.71, 3.58) | 1.43 (0.74, 2.75) | 2.49 (0.97, 6.41) | 1.97 (0.70, 5.53) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.01 (0.81, 1.26) | 0.97 (0.78, 1.21) | 1.18 (0.97, 1.44) | 1.18 (0.97, 1.43) |
| Islam | 0.64 (0.32, 1.27) | 0.92 (0.45, 1.91) | 1.83 (1.03, 3.24) | 1.64 (0.84, 3.20) |
| Traditionalists | 3.68 (1.43, 9.46) | 2.22 (0.84, 5.84) | 2.06 (0.48, 8.86) | 2.74 (0.88, 8.50) |
| Others | 0.97 (0.50, 1.91) | 0.85 (0.39, 1.84) | 0.80 (0.47, 1.57) | 1.13 (0.56, 2.31) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.85 (0.63, 1.16) | 1.02 (0.68, 1.53) | 0.92 (0.67, 1.28) | 0.67 (0.42, 1.07) |
| 2 | 0.58 (0.42, 0.78) | 0.75 (0.47, 1.19) | 1.30 (0.97, 1.75) | 0.78 (0.47, 1.29) |
| 3 | 0.77 (0.56, 1.05) | 1.07 (0.65, 1.77) | 1.60 (1.19, 2.14) | 0.86 (0.51, 1.46) |
| 4 | 0.95 (0.69, 1.31) | 1.33 (0.75, 2.37) | 1.34 (0.95, 1.90) | 0.69 (0.41, 1.15) |
| 5 | 0.76 (0.55, 1.07) | 0.99 (0.58, 1.68) | 1.52 (1.16, 2.01) | 0.80 (0.49, 1.33) |
| 6+ | 0.56 (0.43, 0.73) | 0.73 (0.44, 1.19) | 1.75 (1.39, 2.20) | 0.78 (0.49, 1.25) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.67 (0.55, 0.82) | 0.70 (0.49, 1.02) | 1.66 (1.35, 2.03) | 2.20 (1.46, 3.32) |
| Formerly Married | 0.75 (0.58, 0.96) | 0.87 (0.59, 1.30) | 1.72 (1.31, 2.26) | 1.63 (1.03, 2.59) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.59 (0.49, 0.71) | 0.77 (0.56, 1.06) | 3.03 (2.21, 4.16) | 1.03 (0.69, 1.54) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Region** | | | | |
| Kinshasa (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Bandundu | 3.08 (2.25, 4.21) | 1.29 (0.81, 2.08) | 0.11 (0.07, 0.18) | 0.49 (0.28, 0.84) |
| Bas-Congo | 3.05 (1.66, 5.59) | 1.55 (0.84, 2.89) | 0.27 (0.15, 0.48) | 0.53 (0.32, 0.89) |
| Equateur | 1.40 (0.98, 1.99) | 1.53 (0.83, 2.81) | 0.22 (0.14, 0.32) | 0.78 (0.48, 1.28) |
| Kasai-Occidental | 1.62 (1.16, 2.27) | 0.86 (0.53, 1.41) | 0.18 (0.10, 0.33) | 0.59 (0.31, 1.14) |
| Kasai-Oriental | 1.97 (1.42, 2.72) | 1.16 (0.73, 1.84) | 0.25 (0.17, 0.38) | 0.68 (0.38, 1.21) |
| Katanga | 2.00 (1.42, 2.83) | 1.12 (0.69, 1.81) | 0.41 (0.26, 0.65) | 1.06 (0.59, 1.88) |
| Maniema | 1.04 (0.64, 1.72) | 1.67 (0.40, 7.07) | 0.41 (0.30, 0.55) | 0.73 (0.35, 1.50) |
| Nord-Kivu | 0.71 (0.47, 1.07) | 1.05 (0.27, 4.06) | 0.77 (0.54, 1.09) | 1.29 (0.68, 2.45) |
| Orientale | 0.92 (0.60, 1.41) | 1.15 (0.41, 3.21) | 0.57 (0.42, 0.78) | 1.74 (1.00, 3.03) |
| Sud-Kivu | 0.91 (0.46, 1.78) | 1.45 (0.35, 6.05) | 0.76 (0.39, 1.49) | 1.32 (0.61, 2.83) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.36 (1.10, 1.67) | 1.15 (0.93, 1.43) | 1.13 (0.81, 1.58) | 1.18 (0.85, 1.64) |
| Secondary | 1.09 (0.84, 1.42) | 0.86 (0.62, 1.19) | 1.63 (1.23, 2.16) | 1.19 (0.85, 1.68) |
| Higher | 0.67 (0.40, 1.12) | 0.89 (0.48, 1.66) | 3.50 (2.48, 4.93) | 1.41 (0.82, 2.43) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 1.13 (0.89, 1.45) | 1.11 (0.87, 1.42) | 1.02 (0.67, 1.54) | 0.98 (0.62, 1.54) |
| Middle | 0.87 (0.66, 1.15) | 0.89 (0.66, 1.19) | 1.42 (0.98, 2.04) | 1.18 (0.78, 1.77) |
| Richer | 0.77 (0.54, 1.10) | 0.88 (0.64, 1.21) | 2.85 (1.70, 4.78) | 2.06 (1.33, 3.19) |
| Richest | 0.51 (0.39, 0.66) | 0.61 (0.40, 0.92) | 5.97 (4.40, 8.08) | 4.34 (2.78, 6.77) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.50 (0.38, 0.64) | 0.64 (0.49, 0.85) | 1.60 (1.35, 1.91) | 1.04 (0.85, 1.26) |
| Manual | 0.14 (0.03, 0.69) | 0.25 (0.05, 1.36) | 1.08 (0.42, 2.77) | 0.66 (0.25, 1.79) |
| Agricultural | 0.95 (0.79, 1.14) | 0.93 (0.74, 1.18) | 0.49 (0.38, 0.64) | 0.56 (0.42, 0.74) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.81 (0.63, 1.03) | 1.00 (0.74, 1.35) | 1.71 (1.33, 2.20) | 0.99 (0.78, 1.25) |
| Exposed to two media sources | 0.68 (0.50, 0.91) | 0.92 (0.64, 1.31) | 2.65 (2.15, 3.27) | 1.15 (0.85, 1.55) |
| Exposed to three media sources | 0.67 (0.42, 1.06) | 1.06 (0.62, 1.80) | 3.43 (2.54, 4.63) | 1.28 (0.92, 1.77) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.28 (0.11, 0.72) | 0.45 (0.17, 1.22) | 2.49 (1.68, 3.70) | 1.33 (0.86, 2.04) |

Overall Model Fit: $F_{(100, 371)} = 12.92$, $P=0.0000$.

**Table S41:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Niger.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.43 (0.32, 0.57) | 0.67 (0.46, 0.98) | 1.78 (1.16, 2.72) | 1.50 (0.89, 2.53) |
| 25-29 | 0.34 (0.25, 0.46) | 0.54 (0.33, 0.89) | 3.27 (2.20, 4.86) | 3.67 (2.11, 6.36) |
| 30-34 | 0.36 (0.24, 0.52) | 0.52 (0.31, 0.87) | 4.96 (3.31, 7.42) | 6.72 (3.73, 12.1) |
| 35-39 | 0.30 (0.21, 0.44) | 0.42 (0.23, 0.78) | 4.72 (3.20, 6.97) | 6.45 (3.67, 11.3) |
| 40-44 | 0.44 (0.30, 0.65) | 0.59 (0.33, 1.05) | 5.19 (3.39, 7.96) | 7.68 (4.17, 14.1) |
| 45-49 | 0.54 (0.32, 0.89) | 0.72 (0.36, 1.47) | 4.91 (3.14, 7.70) | 7.68 (4.21, 14.0) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.42 (0.28, 0.62) | 0.61 (0.37, 0.99) | 1.72 (1.11, 2.65) | 1.02 (0.56, 1.85) |
| 2 | 0.29 (0.19, 0.45) | 0.54 (0.31, 0.93) | 2.11 (1.43, 3.14) | 0.87 (0.46, 1.64) |
| 3 | 0.37 (0.25, 0.56) | 0.67 (0.37, 1.23) | 1.87 (1.27, 2.76) | 0.71 (0.40, 1.29) |
| 4 | 0.36 (0.24, 0.53) | 0.71 (0.39, 1.31) | 2.20 (1.46, 3.30) | 0.66 (0.35, 1.24) |
| 5 | 0.30 (0.19, 0.47) | 0.64 (0.34, 1.22) | 1.91 (1.28, 2.84) | 0.50 (0.27, 0.93) |
| 6+ | 0.41 (0.31, 0.55) | 0.82 (0.45, 1.50) | 2.09 (1.49, 2.93) | 0.51 (0.28, 0.92) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.35 (0.27, 0.46) | 0.57 (0.37, 0.88) | 2.60 (1.72, 3.92) | 3.93 (2.21, 6.99) |
| Formerly Married | 0.39 (0.22, 0.69) | 0.62 (0.31, 1.21) | 3.15 (1.82, 5.44) | 2.69 (1.30, 5.57) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.90 (0.70, 1.15) | 1.04 (0.68, 1.59) | 3.99 (3.24, 4.93) | 1.57 (1.06, 2.33) |
| **Region** | | | | |
| Niamey (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Agadez | 1.16 (0.72, 1.87) | 1.09 (0.65, 1.84) | 0.53 (0.37, 0.75) | 0.86 (0.55, 1.34) |
| Diffa | 0.63 (0.35, 1.14) | 0.73 (0.38, 1.41) | 0.14 (0.09, 0.22) | 0.29 (0.15, 0.56) |
| Dosso | 0.97 (0.61, 1.55) | 0.97 (0.55, 1.70) | 0.38 (0.27, 0.52) | 1.18 (0.78, 1.78) |
| Maradi | 1.17 (0.75, 1.85) | 1.24 (0.72, 2.16) | 0.13 (0.09, 0.19) | 0.36 (0.23, 0.56) |
| Tahoua | 0.95 (0.58, 1.53) | 0.87 (0.50, 1.52) | 0.30 (0.22, 0.43) | 0.97 (0.63, 1.47) |
| Tillaberi | 0.99 (0.60, 1.64) | 0.99 (0.55, 1.77) | 0.35 (0.26, 0.48) | 1.04 (0.69, 1.58) |
| Zinder | 1.55 (0.99, 2.43) | 1.69 (0.99, 2.87) | 0.10 (0.07, 0.16) | 0.26 (0.16, 0.43) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.99 (0.71, 1.37) | 0.84 (0.58, 1.23) | 1.68 (1.31, 2.15) | 1.22 (0.92, 1.62) |
| Secondary | 1.53 (1.13, 2.08) | 0.92 (0.58, 1.44) | 1.89 (1.40, 2.55) | 1.38 (0.90, 2.11) |
| Higher | 0.30 (0.07, 1.36) | 0.33 (0.06, 1.78) | 4.63 (2.08, 10.3) | 0.89 (0.34, 2.36) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.90 (0.65, 1.25) | 0.94 (0.67, 1.33) | 1.09 (0.72, 1.65) | 1.04 (0.69, 1.57) |
| Middle | 0.86 (0.63, 1.18) | 0.88 (0.63, 1.22) | 1.00 (0.65, 1.56) | 0.95 (0.61, 1.49) |
| Richer | 0.67 (0.47, 0.96) | 0.69 (0.47, 1.01) | 1.54 (1.02, 2.31) | 1.46 (0.97, 2.20) |
| Richest | 0.66 (0.48, 0.91) | 0.50 (0.31, 0.80) | 4.68 (3.23, 6.80) | 3.31 (2.07, 5.30) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.83 (0.62, 1.12) | 0.93 (0.68, 1.27) | 1.69 (1.35, 2.10) | 1.23 (0.95, 1.60) |
| Manual | 0.60 (0.31, 1.16) | 0.63 (0.31, 1.29) | 2.32 (1.52, 3.55) | 1.50 (0.88, 2.53) |
| Agricultural | 1.04 (0.51, 2.14) | 1.10 (0.53, 2.29) | 1.40 (0.75, 2.61) | 1.45 (0.74, 2.84) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.85 (0.66, 1.09) | 0.91 (0.69, 1.19) | 1.07 (0.83, 1.38) | 0.85 (0.65, 1.11) |
| Exposed to two media sources | 0.90 (0.68, 1.19) | 0.97 (0.70, 1.33) | 2.50 (1.90, 3.29) | 1.08 (0.78, 1.51) |
| Exposed to three media sources | 1.26 (0.81, 1.97) | 1.20 (0.66, 2.19) | 3.31 (2.21, 4.95) | 1.02 (0.59, 1.77) |
| **Hormonal Contraceptives use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.44 (0.26, 0.74) | 0.70 (0.42, 1.17) | 2.69 (2.04, 3.54) | 1.44 (1.07, 1.95) |

Overall Model Fit: $F_{(72, 385)} = 10.21$, $P=0.0000$.

**Table S42:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Mali.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.60 (0.44, 0.83) | 0.77 (0.52, 1.13) | 1.40 (0.94, 2.07) | 1.65 (1.08, 2.50) |
| 25-29 | 0.59 (0.44, 0.79) | 0.80 (0.52, 1.24) | 2.90 (2.07, 4.06) | 4.30 (2.76, 6.71) |
| 30-34 | 0.41 (0.28, 0.61) | 0.51 (0.30, 0.89) | 3.38 (2.31, 4.94) | 4.90 (2.98, 8.07) |
| 35-39 | 0.42 (0.28, 0.63) | 0.54 (0.30, 0.95) | 5.21 (3.53, 7.71) | 7.84 (4.69, 13.1) |
| 40-44 | 0.68 (0.46, 1.00) | 0.89 (0.51, 1.56) | 4.96 (3.50, 7.04) | 7.61 (4.58, 12.6) |
| 45-49 | 0.55 (0.34, 0.89) | 0.70 (0.38, 1.32) | 4.52 (3.12, 6.55) | 7.84 (4.72, 13.0) |
| **Ethnicity** | | | | |
| Bambara (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Malinke | 0.85 (0.56, 1.30) | 0.96 (0.60, 1.52) | 1.01 (0.71, 1.42) | 0.73 (0.51, 1.05) |
| Peulh | 1.37 (0.99, 1.89) | 1.31 (0.93, 1.84) | 1.10 (0.81, 1.50) | 0.99 (0.72, 1.37) |
| Sarakole/Soninke/Marka | 1.19 (0.83, 1.72) | 1.34 (0.87, 2.06) | 1.25 (0.91, 1.72) | 1.03 (0.71, 1.49) |
| Dogon | 0.82 (0.54, 1.24) | 0.53 (0.34, 0.83) | 0.87 (0.60, 1.26) | 1.03 (0.63, 1.68) |
| Sénoufo/Minianka | 0.86 (0.55, 1.34) | 0.82 (0.52, 1.29) | 0.81 (0.53, 1.23) | 0.84 (0.54, 1.29) |
| Others | 0.71 (0.50, 1.02) | 0.71 (0.47, 1.06) | 1.31 (0.98, 1.76) | 1.15 (0.83, 1.59) |
| **Religion** | | | | |
| Islam (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Catholics | 0.50 (0.20, 1.23) | 0.61 (0.23, 1.59) | 0.85 (0.44, 1.67) | 0.85 (0.43, 1.66) |
| Other Christians | 0.47 (0.18, 1.21) | 0.57 (0.22, 1.50) | 0.52 (0.29, 0.92) | 0.70 (0.40, 1.24) |
| Traditionalists | 0.22 (0.05, 1.04) | 0.25 (0.05, 1.22) | 0.29 (0.08, 1.02) | 0.55 (0.17, 1.82) |
| No Religion | 1.33 (0.72, 2.43) | 1.40 (0.74, 2.68) | 0.46 (0.20, 1.02) | 0.89 (0.37, 2.09) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.88 (0.64, 1.22) | 1.08 (0.72, 1.60) | 1.10 (0.77, 1.56) | 0.82 (0.52, 1.30) |
| 2 | 0.40 (0.28, 0.57) | 0.52 (0.32, 0.84) | 1.55 (1.12, 2.15) | 0.82 (0.53, 1.28) |
| 3 | 0.37 (0.24, 0.58) | 0.46 (0.25, 0.82) | 1.52 (1.06, 2.19) | 0.66 (0.41, 1.07) |
| 4 | 0.64 (0.44, 0.93) | 0.82 (0.47, 1.43) | 1.93 (1.40, 2.65) | 0.80 (0.49, 1.29) |
| 5 | 0.63 (0.43, 0.92) | 0.88 (0.51, 1.50) | 1.70 (1.20, 2.40) | 0.66 (0.40, 1.10) |
| 6+ | 0.54 (0.41, 0.73) | 0.75 (0.45, 1.26) | 2.27 (1.67, 3.08) | 0.86 (0.54, 1.37) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.56 (0.45, 0.70) | 0.75 (0.51, 1.10) | 2.01 (1.45, 2.78) | 1.42 (0.85, 2.38) |
| Formerly Married | 0.66 (0.34, 1.29) | 0.88 (0.41, 1.87) | 2.67 (1.50, 4.78) | 1.20 (0.59, 2.45) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.99 (0.79, 1.25) | 0.98 (0.63, 1.52) | 3.25 (2.67, 3.96) | 1.55 (1.08, 2.23) |
| **Region** | | | | |
| Bamako (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Kayes | 0.89 (0.59, 1.35) | 0.74 (0.39, 1.40) | 0.36 (0.26, 0.49) | 0.87 (0.60, 1.27) |
| Sikasso | 0.92 (0.66, 1.29) | 0.91 (0.58, 1.43) | 0.30 (0.21, 0.42) | 0.71 (0.48, 1.04) |
| Koulikoro | 1.08 (0.79, 1.49) | 1.20 (0.79, 1.83) | 0.33 (0.25, 0.44) | 0.74 (0.52, 1.06) |
| Segou | 0.84 (0.56, 1.24) | 0.94 (0.60, 1.50) | 0.33 (0.24, 0.46) | 0.89 (0.62, 1.27) |
| Mopti | 1.25 (0.89, 1.75) | 1.64 (1.01, 2.66) | 0.36 (0.26, 0.49) | 1.06 (0.63, 1.77) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.89 (0.61, 1.31) | 0.75 (0.52, 1.10) | 1.93 (1.52, 2.46) | 1.62 (1.23, 2.15) |
| Secondary | 0.98 (0.74, 1.30) | 0.57 (0.38, 0.84) | 1.45 (1.14, 1.84) | 1.37 (0.95, 1.99) |
| Higher | 1.39 (0.62, 3.11) | 0.83 (0.28, 2.45) | 1.34 (0.72, 2.48) | 0.73 (0.38, 1.38) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.97 (0.71, 1.34) | 1.00 (0.72, 1.40) | 0.91 (0.65, 1.28) | 0.89 (0.63, 1.27) |
| Middle | 1.05 (0.76, 1.46) | 1.06 (0.76, 1.48) | 0.93 (0.65, 1.33) | 0.92 (0.62, 1.35) |
| Richer | 1.02 (0.72, 1.44) | 1.15 (0.76, 1.73) | 1.72 (1.23, 2.40) | 1.57 (1.06, 2.31) |
| Richest | 0.96 (0.71, 1.29) | 0.99 (0.58, 1.69) | 3.84 (2.86, 5.16) | 2.96 (1.85, 4.76) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.53 (0.38, 0.74) | 0.57 (0.41, 0.80) | 1.90 (1.48, 2.43) | 1.17 (0.90, 1.50) |
| Agricultural | 0.82 (0.60, 1.11) | 0.87 (0.63, 1.20) | 0.69 (0.49, 0.96) | 0.89 (0.61, 1.31) |
| Don't Know | 0.83 (0.59, 1.17) | 0.89 (0.63, 1.26) | 1.49 (1.17, 1.90) | 1.20 (0.93, 1.56) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.96 (0.73, 1.27) | 0.97 (0.74, 1.27) | 1.14 (0.89, 1.47) | 1.02 (0.78, 1.33) |
| Exposed to two media sources | 0.87 (0.66, 1.15) | 0.88 (0.65, 1.18) | 1.84 (1.44, 2.37) | 1.05 (0.79, 1.39) |
| Exposed to three media sources | 1.04 (0.70, 1.56) | 1.09 (0.60, 1.99) | 2.30 (1.69, 3.13) | 0.91 (0.61, 1.37) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.85 (0.60, 1.19) | 1.12 (0.79, 1.59) | 1.67 (1.30, 2.13) | 0.99 (0.76, 1.28) |

Overall Model Fit: $F_{(88, 311)} = 6.29$, *P*=0.0000.

**Table S43:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Gambia.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.61 (0.44, 0.85) | 0.92 (0.66, 1.30) | 1.44 (1.00, 2.08) | 1.44 (0.96, 2.16) |
| 25-29 | 0.55 (0.37, 0.82) | 1.09 (0.65, 1.83) | 3.10 (2.06, 4.68) | 3.15 (1.89, 5.27) |
| 30-34 | 0.45 (0.31, 0.65) | 1.02 (0.61, 1.69) | 2.75 (1.83, 4.14) | 3.28 (1.89, 5.68) |
| 35-39 | 0.38 (0.23, 0.63) | 0.92 (0.48, 1.79) | 4.97 (3.30, 7.50) | 6.57 (3.64, 11.9) |
| 40-44 | 0.50 (0.30, 0.84) | 1.30 (0.64, 2.66) | 6.13 (3.88, 9.69) | 8.71 (4.55, 16.7) |
| 45-49 | 0.41 (0.24, 0.69) | 0.99 (0.47, 2.07) | 5.87 (3.63, 9.48) | 8.52 (4.51, 16.1) |
| **Ethnicity** | | | | |
| Mandinka/Jahanka (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Wollof | 0.98 (0.63, 1.50) | 0.95 (0.61, 1.47) | 1.09 (0.77, 1.55) | 1.12 (0.74, 1.70) |
| Jola/Karoninka | 0.61 (0.39, 0.98) | 0.63 (0.37, 1.06) | 1.35 (0.93, 1.97) | 0.96 (0.62, 1.50) |
| Fula/Tukulur/Lorobo | 1.35 (1.00, 1.82) | 1.34 (1.00, 1.79) | 1.02 (0.78, 1.34) | 1.14 (0.86, 1.52) |
| Serere | 1.00 (0.49, 2.02) | 1.15 (0.57, 2.33) | 1.83 (1.08, 3.11) | 1.14 (0.66, 1.99) |
| Serahuleh | 0.86 (0.53, 1.38) | 0.99 (0.58, 1.70) | 1.12 (0.74, 1.67) | 1.15 (0.76, 1.75) |
| Others | 1.07 (0.62, 1.84) | 1.03 (0.46, 2.30) | 1.27 (0.76, 2.14) | 1.10 (0.58, 2.07) |
| Non-Gambian | 0.53 (0.26, 1.09) | 0.64 (0.29, 1.40) | 1.60 (0.97, 2.63) | 1.43 (0.85, 2.41) |
| **Religion** | | | | |
| Islam (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Christians | 0.93 (0.54, 1.61) | 1.12 (0.49, 2.57) | 1.14 (0.68, 1.90) | 0.61 (0.33, 1.13) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.64 (0.45, 0.93) | 1.15 (0.73, 1.81) | 1.41 (1.00, 1.98) | 1.13 (0.68, 1.88) |
| 2 | 0.57 (0.38, 0.84) | 1.12 (0.62, 2.03) | 1.34 (0.93, 1.92) | 0.90 (0.49, 1.67) |
| 3 | 0.57 (0.37, 0.89) | 1.00 (0.55, 1.81) | 2.35 (1.55, 3.55) | 1.47 (0.79, 2.75) |
| 4 | 0.68 (0.44, 1.05) | 1.15 (0.59, 2.26) | 3.05 (2.01, 4.62) | 1.60 (0.92, 2.76) |
| 5 | 0.36 (0.20, 0.64) | 0.59 (0.29, 1.21) | 1.88 (1.17, 3.03) | 0.85 (0.43, 1.69) |
| 6+ | 0.44 (0.33, 0.60) | 0.65 (0.35, 1.21) | 2.46 (1.74, 3.47) | 0.98 (0.52, 1.86) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.48 (0.39, 0.60) | 0.45 (0.31, 0.65) | 1.67 (1.26, 2.22) | 0.69 (0.42, 1.12) |
| Formerly Married | 0.24 (0.13, 0.46) | 0.25 (0.12, 0.49) | 3.32 (2.33, 4.73) | 0.95 (0.56, 1.61) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.78 (0.61, 1.00) | 1.23 (0.81, 1.88) | 1.79 (1.46, 2.19) | 0.76 (0.48, 1.20) |
| **Region** | | | | |
| Banjul (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Kanifing | 0.80 (0.53, 1.21) | 0.77 (0.49, 1.20) | 0.72 (0.54, 0.96) | 0.85 (0.62, 1.18) |
| Brikama | 1.05 (0.69, 1.60) | 0.99 (0.59, 1.64) | 0.42 (0.31, 0.56) | 0.56 (0.40, 0.78) |
| Mansakonko | 1.50 (0.99, 2.28) | 1.22 (0.68, 2.21) | 0.36 (0.25, 0.53) | 0.58 (0.34, 0.98) |
| Kerewan | 1.44 (0.99, 2.08) | 1.10 (0.64, 1.90) | 0.30 (0.21, 0.42) | 0.50 (0.29, 0.87) |
| Kuntaur | 1.16 (0.77, 1.76) | 0.88 (0.48, 1.61) | 0.27 (0.18, 0.41) | 0.44 (0.24, 0.81) |
| Janjanbureh | 1.77 (1.14, 2.73) | 1.30 (0.71, 2.39) | 0.41 (0.30, 0.58) | 0.71 (0.43, 1.18) |
| Base | 1.03 (0.67, 1.58) | 0.79 (0.41, 1.50) | 0.27 (0.18, 0.40) | 0.41 (0.23, 0.76) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.88 (0.63, 1.22) | 0.70 (0.49, 1.01) | 0.83 (0.64, 1.09) | 1.18 (0.86, 1.62) |
| Secondary | 1.32 (1.01, 1.72) | 0.95 (0.67, 1.35) | 0.90 (0.72, 1.14) | 1.24 (0.85, 1.82) |
| Higher | 0.51 (0.27, 0.96) | 0.42 (0.20, 0.90) | 1.26 (0.80, 1.99) | 1.24 (0.69, 2.24) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 1.22 (0.92, 1.61) | 1.23 (0.92, 1.64) | 1.01 (0.68, 1.49) | 0.99 (0.66, 1.48) |
| Middle | 1.14 (0.81, 1.59) | 1.13 (0.80, 1.59) | 1.55 (1.14, 2.12) | 1.64 (1.15, 2.34) |
| Richer | 0.80 (0.56, 1.14) | 0.79 (0.48, 1.29) | 2.01 (1.47, 2.74) | 1.88 (1.25, 2.83) |
| Richest | 0.70 (0.49, 1.01) | 0.67 (0.38, 1.19) | 2.18 (1.59, 2.97) | 1.95 (1.20, 3.16) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.59 (0.43, 0.82) | 0.86 (0.60, 1.24) | 2.32 (1.82, 2.95) | 1.41 (1.07, 1.87) |
| Manual | 0.38 (0.13, 1.06) | 0.53 (0.18, 1.58) | 2.77 (1.70, 4.52) | 1.88 (1.16, 3.04) |
| Agricultural | 0.91 (0.71, 1.18) | 1.13 (0.82, 1.57) | 0.93 (0.74, 1.17) | 0.88 (0.66, 1.17) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.81 (0.58, 1.14) | 0.88 (0.63, 1.24) | 1.09 (0.68, 1.73) | 1.11 (0.69, 1.79) |
| Exposed to two media sources | 0.68 (0.46, 1.00) | 0.77 (0.52, 1.12) | 1.34 (0.84, 2.14) | 1.12 (0.66, 1.89) |
| Exposed to three media sources | 0.78 (0.50, 1.22) | 0.96 (0.56, 1.65) | 1.54 (0.94, 2.50) | 0.96 (0.50, 1.87) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.31 (0.15, 0.64) | 0.48 (0.22, 1.03) | 1.57 (1.09, 2.26) | 1.03 (0.72, 1.48) |

Overall Model Fit: $F_{(88, 180)} = 8.63$, $P=0.0000$.

**Table S44:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Uganda.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.77 (0.46, 1.27) | 0.81 (0.45, 1.43) | 1.20 (0.74, 1.95) | 0.93 (0.53, 1.62) |
| 25-29 | 0.64 (0.42, 0.99) | 0.67 (0.34, 1.30) | 1.45 (0.95, 2.20) | 1.27 (0.72, 2.25) |
| 30-34 | 0.77 (0.45, 1.30) | 0.85 (0.38, 1.89) | 2.39 (1.59, 3.58) | 2.55 (1.34, 4.84) |
| 35-39 | 0.85 (0.49, 1.47) | 0.83 (0.34, 2.05) | 2.25 (1.45, 3.48) | 3.10 (1.48, 6.52) |
| 40-44 | 1.22 (0.72, 2.07) | 1.24 (0.55, 2.78) | 2.53 (1.53, 4.19) | 4.04 (1.89, 8.64) |
| 45-49 | 1.13 (0.67, 1.90) | 0.96 (0.35, 2.63) | 3.40 (2.11, 5.47) | 4.99 (2.31, 10.8) |
| **Ethnicity** | | | | |
| Baganda (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Banyankole | 0.64 (0.25, 1.62) | 0.87 (0.33, 2.30) | 0.59 (0.36, 0.97) | 0.99 (0.52, 1.86) |
| Basoga | 0.96 (0.44, 2.09) | 0.55 (0.22, 1.35) | 0.41 (0.24, 0.70) | 0.55 (0.25, 1.21) |
| Bakiga | 1.33 (0.63, 2.80) | 2.06 (0.84, 5.04) | 0.80 (0.47, 1.35) | 1.21 (0.60, 2.41) |
| Iteso | 3.63 (1.88, 7.01) | 2.01 (0.82, 4.97) | 0.33 (0.18, 0.62) | 0.94 (0.39, 2.29) |
| Others | 2.14 (1.27, 3.59) | 1.45 (0.74, 2.85) | 0.35 (0.24, 0.51) | 0.66 (0.40, 1.09) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.84 (0.61, 1.15) | 1.03 (0.72, 1.49) | 1.31 (0.99, 1.72) | 1.13 (0.83, 1.53) |
| Islam | 0.61 (0.37, 0.99) | 0.76 (0.45, 1.28) | 1.67 (1.13, 2.48) | 1.29 (0.82, 2.02) |
| Others | 0.68 (0.15, 3.06) | 0.88 (0.16, 4.89) | 1.88 (0.54, 6.58) | 1.30 (0.36, 4.76) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.59 (0.33, 1.05) | 0.55 (0.22, 1.34) | 1.73 (1.12, 2.67) | 1.07 (0.63, 1.79) |
| 2 | 0.87 (0.50, 1.49) | 0.76 (0.26, 2.19) | 1.57 (0.98, 2.51) | 0.75 (0.39, 1.44) |
| 3 | 0.82 (0.44, 1.51) | 0.70 (0.21, 2.28) | 1.10 (0.68, 1.78) | 0.42 (0.21, 0.86) |
| 4 | 0.94 (0.54, 1.63) | 0.73 (0.23, 2.29) | 1.91 (1.24, 2.96) | 0.77 (0.36, 1.68) |
| 5 | 0.94 (0.52, 1.70) | 0.74 (0.23, 2.38) | 1.86 (1.13, 3.05) | 0.54 (0.24, 1.22) |
| 6+ | 0.93 (0.63, 1.37) | 0.56 (0.18, 1.71) | 1.40 (0.99, 1.98) | 0.39 (0.19, 0.81) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.88 (0.63, 1.22) | 1.10 (0.42, 2.87) | 1.58 (1.17, 2.14) | 2.03 (1.11, 3.70) |
| Formerly Married | 1.21 (0.76, 1.92) | 1.51 (0.57, 3.97) | 1.80 (1.20, 2.69) | 1.72 (0.85, 3.47) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.74 (0.52, 1.05) | 1.10 (0.66, 1.82) | 3.04 (2.33, 3.96) | 1.57 (1.00, 2.46) |
| **Region** | | | | |
| Kampala (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Central 1 | 0.71 (0.27, 1.86) | 0.46 (0.17, 1.26) | 0.44 (0.25, 0.76) | 0.86 (0.47, 1.57) |
| Central 2 | 0.79 (0.37, 1.69) | 0.48 (0.21, 1.12) | 0.36 (0.21, 0.61) | 0.70 (0.39, 1.23) |
| East central | 1.15 (0.60, 2.20) | 0.99 (0.39, 2.46) | 0.29 (0.17, 0.48) | 0.86 (0.40, 1.86) |
| Eastern | 1.95 (1.08, 3.51) | 0.61 (0.24, 1.52) | 0.17 (0.10, 0.30) | 0.65 (0.28, 1.50) |
| North | 1.45 (0.78, 2.70) | 0.45 (0.17, 1.16) | 0.12 (0.07, 0.22) | 0.51 (0.24, 1.05) |
| Karamoja | 3.32 (1.57, 7.04) | 0.90 (0.29, 2.82) | 0.02 (0.01, 0.09) | 0.10 (0.02, 0.50) |
| West Nile | 1.84 (1.00, 3.40) | 0.57 (0.23, 1.43) | 0.07 (0.04, 0.14) | 0.25 (0.11, 0.57) |
| Western | 0.76 (0.38, 1.52) | 0.34 (0.14, 0.84) | 0.42 (0.26, 0.68) | 1.30 (0.72, 2.37) |
| South west | 0.41 (0.18, 0.95) | 0.19 (0.07, 0.50) | 0.38 (0.24, 0.60) | 1.01 (0.49, 2.10) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.58 (0.37, 0.91) | 0.64 (0.38, 1.06) | 0.89 (0.57, 1.39) | 0.84 (0.50, 1.43) |
| Secondary | 0.28 (0.16, 0.50) | 0.43 (0.21, 0.89) | 1.20 (0.75, 1.92) | 0.63 (0.33, 1.20) |
| Higher | 0.41 (0.18, 0.90) | 0.73 (0.29, 1.89) | 3.18 (1.74, 5.84) | 0.96 (0.47, 1.96) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.80 (0.52, 1.24) | 1.04 (0.63, 1.72) | 1.61 (0.78, 3.30) | 1.21 (0.58, 2.54) |
| Middle | 0.37 (0.22, 0.62) | 0.58 (0.31, 1.09) | 2.29 (1.23, 4.28) | 1.39 (0.72, 2.68) |
| Richer | 0.36 (0.22, 0.59) | 0.61 (0.32, 1.16) | 4.57 (2.52, 8.29) | 2.66 (1.37, 5.16) |
| Richest | 0.31 (0.19, 0.51) | 0.47 (0.19, 1.16) | 7.61 (4.28, 13.5) | 3.12 (1.43, 6.81) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.87 (0.57, 1.32) | 0.93 (0.58, 1.49) | 2.28 (1.64, 3.17) | 1.39 (0.94, 2.05) |
| Agricultural | 0.96 (0.66, 1.39) | 0.86 (0.57, 1.30) | 0.93 (0.66, 1.32) | 0.79 (0.53, 1.17) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.69 (0.46, 1.02) | 0.91 (0.60, 1.39) | 1.63 (0.99, 2.68) | 1.27 (0.76, 2.14) |
| Exposed to two media sources | 0.56 (0.35, 0.90) | 0.83 (0.48, 1.45) | 2.28 (1.31, 3.96) | 1.25 (0.69, 2.24) |
| Exposed to three media sources | 0.36 (0.20, 0.66) | 0.65 (0.30, 1.41) | 4.13 (2.39, 7.13) | 1.36 (0.74, 2.52) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.44 (0.27, 0.70) | 0.58 (0.34, 0.97) | 1.06 (0.78, 1.45) | 0.82 (0.56, 1.20) |

Overall Model Fit: $F_{(90, 304)} = 5.07$, $P=0.0000$.

**Table S45:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Guinea.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.66 (0.48, 0.91) | 0.86 (0.59, 1.25) | 1.82 (1.33, 2.48) | 2.01 (1.39, 2.91) |
| 25-29 | 0.47 (0.32, 0.69) | 0.69 (0.44, 1.07) | 2.56 (1.73, 3.77) | 3.59 (2.06, 6.26) |
| 30-34 | 0.49 (0.33, 0.74) | 0.82 (0.48, 1.40) | 2.88 (1.95, 4.24) | 4.42 (2.38, 8.20) |
| 35-39 | 0.52 (0.36, 0.76) | 0.91 (0.55, 1.50) | 3.79 (2.69, 5.35) | 6.62 (3.73, 11.73) |
| 40-44 | 0.72 (0.49, 1.05) | 1.23 (0.71, 2.13) | 3.86 (2.66, 5.62) | 7.74 (4.24, 14.13) |
| 45-49 | 0.59 (0.38, 0.90) | 0.90 (0.50, 1.62) | 3.98 (2.75, 5.75) | 9.20 (4.82, 17.56) |
| **Ethnicity** | | | | |
| Peulh (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Soussou | 0.54 (0.39, 0.76) | 0.63 (0.42, 0.96) | 2.27 (1.67, 3.10) | 1.80 (1.32, 2.46) |
| Malinké | 0.78 (0.60, 1.01) | 0.83 (0.57, 1.22) | 1.41 (1.11, 1.81) | 1.54 (1.10, 2.15) |
| Kissi | 0.54 (0.31, 0.94) | 0.22 (0.08, 0.66) | 0.87 (0.54, 1.41) | 1.95 (0.81, 4.69) |
| Toma | 0.31 (0.14, 0.68) | 0.08 (0.02, 0.41) | 0.88 (0.27, 2.84) | 1.84 (0.39, 8.64) |
| Guerzé | 0.31 (0.12, 0.83) | 0.14 (0.04, 0.45) | 1.23 (0.85, 1.79) | 1.64 (0.74, 3.66) |
| Autre/Manquant | 0.66 (0.41, 1.06) | 0.50 (0.24, 1.06) | 1.78 (1.00, 3.19) | 1.83 (0.99, 3.41) |
| **Religion** | | | | |
| Other Christians (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Islam | 1.69 (0.96, 2.96) | 0.35 (0.14, 0.84) | 1.42 (1.01, 2.01) | 1.48 (0.71, 3.07) |
| No Religion | 1.01 (0.39, 2.62) | 1.63 (0.44, 6.09) | 1.03 (0.52, 2.05) | 1.66 (0.76, 3.66) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.69 (0.48, 0.97) | 0.80 (0.51, 1.24) | 1.06 (0.76, 1.49) | 0.76 (0.48, 1.21) |
| 2 | 0.68 (0.47, 1.00) | 0.83 (0.51, 1.36) | 1.39 (1.03, 1.87) | 0.77 (0.49, 1.23) |
| 3 | 0.56 (0.36, 0.86) | 0.69 (0.40, 1.19) | 1.35 (0.96, 1.89) | 0.56 (0.33, 0.95) |
| 4 | 0.62 (0.40, 0.95) | 0.74 (0.40, 1.35) | 1.28 (0.84, 1.96) | 0.50 (0.27, 0.92) |
| 5 | 0.37 (0.21, 0.67) | 0.40 (0.19, 0.83) | 1.97 (1.35, 2.86) | 0.79 (0.43, 1.45) |
| 6+ | 0.62 (0.46, 0.83) | 0.56 (0.34, 0.95) | 1.06 (0.76, 1.49) | 0.52 (0.30, 0.93) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.65 (0.51, 0.83) | 0.76 (0.53, 1.09) | 1.56 (1.15, 2.12) | 1.82 (1.12, 2.96) |
| Formerly Married | 0.61 (0.30, 1.22) | 0.76 (0.36, 1.60) | 1.45 (0.82, 2.55) | 1.02 (0.50, 2.09) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.91 (0.69, 1.19) | 1.11 (0.68, 1.80) | 3.39 (2.70, 4.25) | 1.29 (0.92, 1.81) |
| **Region** | | | | |
| Conakry (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Boké | 0.97 (0.63, 1.48) | 0.98 (0.56, 1.70) | 0.51 (0.36, 0.73) | 0.83 (0.56, 1.24) |
| Faranah | 0.95 (0.59, 1.52) | 0.90 (0.43, 1.86) | 0.25 (0.16, 0.37) | 0.60 (0.36, 0.99) |
| Kankan | 1.12 (0.71, 1.77) | 1.07 (0.52, 2.22) | 0.31 (0.20, 0.49) | 0.75 (0.45, 1.25) |
| Kindia | 0.74 (0.46, 1.19) | 0.90 (0.51, 1.60) | 0.35 (0.23, 0.52) | 0.49 (0.30, 0.79) |
| Labé | 1.23 (0.83, 1.83) | 1.00 (0.55, 1.82) | 0.20 (0.13, 0.30) | 0.61 (0.35, 1.05) |
| Mamou | 1.63 (1.06, 2.51) | 1.44 (0.79, 2.62) | 0.25 (0.17, 0.37) | 0.61 (0.36, 1.02) |
| N'Zérékoré | 0.59 (0.36, 0.98) | 0.67 (0.30, 1.49) | 0.32 (0.23, 0.44) | 0.74 (0.48, 1.15) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.10 (0.81, 1.49) | 1.02 (0.74, 1.42) | 1.20 (0.93, 1.55) | 1.07 (0.81, 1.42) |
| Secondary | 1.12 (0.79, 1.60) | 0.94 (0.63, 1.41) | 1.84 (1.37, 2.48) | 1.44 (1.03, 2.01) |
| Higher | 0.71 (0.34, 1.48) | 0.63 (0.24, 1.66) | 1.66 (0.98, 2.84) | 0.69 (0.34, 1.37) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.77 (0.58, 1.03) | 1.04 (0.79, 1.37) | 1.35 (0.80, 2.27) | 1.18 (0.71, 1.97) |
| Middle | 0.61 (0.44, 0.85) | 0.73 (0.52, 1.01) | 2.87 (1.81, 4.56) | 2.35 (1.50, 3.69) |
| Richer | 0.56 (0.41, 0.76) | 0.62 (0.42, 0.92) | 4.30 (2.70, 6.84) | 2.58 (1.53, 4.35) |
| Richest | 0.75 (0.53, 1.05) | 0.88 (0.47, 1.65) | 7.34 (4.62, 11.7) | 2.65 (1.47, 4.77) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.52 (0.37, 0.74) | 0.77 (0.54, 1.11) | 1.94 (1.51, 2.49) | 0.98 (0.72, 1.34) |
| Manual | 0.66 (0.42, 1.05) | 0.71 (0.44, 1.15) | 0.74 (0.44, 1.24) | 0.63 (0.37, 1.08) |
| Agricultural | 0.86 (0.65, 1.12) | 1.10 (0.80, 1.51) | 0.49 (0.36, 0.65) | 0.61 (0.43, 0.86) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.95 (0.73, 1.23) | 0.88 (0.67, 1.15) | 1.43 (1.06, 1.93) | 1.25 (0.92, 1.70) |
| Exposed to two media sources | 0.77 (0.57, 1.02) | 0.74 (0.53, 1.03) | 3.39 (2.63, 4.39) | 1.72 (1.21, 2.44) |
| Exposed to three media sources | 1.01 (0.62, 1.66) | 0.83 (0.44, 1.57) | 3.55 (2.18, 5.80) | 1.57 (0.78, 3.16) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.28 (0.11, 0.71) | 0.35 (0.14, 0.91) | 1.81 (1.13, 2.89) | 1.22 (0.73, 2.03) |

Overall Model Fit: $F_{(88, 198)} = 7.39$, $P=0.0000$.

**Table S46:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Senegal.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.83 (0.64, 1.07) | 1.05 (0.80, 1.39) | 2.07 (1.30, 3.28) | 1.93 (1.19, 3.12) |
| 25-29 | 0.58 (0.42, 0.79) | 0.88 (0.61, 1.27) | 2.95 (1.74, 5.01) | 2.60 (1.42, 4.76) |
| 30-34 | 0.50 (0.36, 0.68) | 0.84 (0.56, 1.24) | 4.19 (2.87, 6.13) | 3.48 (2.14, 5.65) |
| 35-39 | 0.39 (0.27, 0.58) | 0.71 (0.44, 1.14) | 5.48 (3.66, 8.20) | 4.97 (2.99, 8.25) |
| 40-44 | 0.28 (0.18, 0.43) | 0.57 (0.34, 0.97) | 6.65 (4.29, 10.3) | 5.39 (3.11, 9.32) |
| 45-49 | 0.36 (0.23, 0.55) | 0.70 (0.43, 1.15) | 7.99 (4.81, 13.3) | 6.63 (3.53, 12.4) |
| **Ethnicity** | | | | |
| Wolof (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poular | 1.01 (0.81, 1.27) | 1.05 (0.78, 1.42) | 0.74 (0.59, 0.93) | 0.72 (0.54, 0.98) |
| Serer | 0.76 (0.55, 1.04) | 0.86 (0.61, 1.23) | 0.60 (0.45, 0.80) | 0.65 (0.46, 0.92) |
| Mandingue | 0.52 (0.34, 0.79) | 0.53 (0.32, 0.89) | 1.18 (0.71, 1.96) | 1.12 (0.60, 2.07) |
| Diola | 0.34 (0.16, 0.73) | 0.45 (0.16, 1.29) | 0.74 (0.45, 1.20) | 0.47 (0.23, 0.95) |
| Soninke | 0.64 (0.35, 1.18) | 0.63 (0.31, 1.29) | 1.08 (0.62, 1.86) | 1.08 (0.63, 1.84) |
| Not a Senegalese | 0.48 (0.17, 1.39) | 0.52 (0.20, 1.39) | 0.96 (0.49, 1.86) | 0.97 (0.48, 1.97) |
| Others | 0.67 (0.44, 1.03) | 0.76 (0.48, 1.23) | 0.96 (0.56, 1.65) | 0.77 (0.42, 1.40) |
| **Religion** | | | | |
| Islam (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Others | 0.46 (0.30, 0.70) | 0.54 (0.35, 0.84) | 0.79 (0.48, 1.30) | 0.81 (0.41, 1.58) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.75 (0.55, 1.03) | 1.01 (0.70, 1.44) | 1.86 (1.37, 2.52) | 1.22 (0.78, 1.91) |
| 2 | 0.69 (0.51, 0.93) | 0.95 (0.68, 1.33) | 1.46 (0.99, 2.16) | 0.85 (0.50, 1.44) |
| 3 | 0.62 (0.44, 0.87) | 0.87 (0.57, 1.33) | 2.34 (1.66, 3.30) | 1.27 (0.73, 2.22) |
| 4 | 0.51 (0.36, 0.72) | 0.72 (0.44, 1.20) | 2.00 (1.42, 2.82) | 0.97 (0.55, 1.71) |
| 5 | 0.43 (0.28, 0.67) | 0.66 (0.38, 1.16) | 2.54 (1.58, 4.09) | 1.16 (0.61, 2.20) |
| 6+ | 0.37 (0.28, 0.49) | 0.58 (0.38, 0.89) | 2.68 (2.00, 3.59) | 1.33 (0.80, 2.21) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.60 (0.50, 0.72) | 0.67 (0.50, 0.89) | 2.13 (1.64, 2.76) | 1.20 (0.75, 1.92) |
| Formerly Married | 0.45 (0.28, 0.71) | 0.53 (0.30, 0.93) | 2.56 (1.72, 3.81) | 1.01 (0.54, 1.87) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.80 (0.64, 1.01) | 0.88 (0.68, 1.13) | 2.35 (1.91, 2.89) | 1.60 (1.22, 2.09) |
| **Region** | | | | |
| Dakar (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Ziguinchor | 0.57 (0.35, 0.93) | 0.63 (0.29, 1.33) | 0.66 (0.43, 1.00) | 1.63 (0.96, 2.76) |
| Diourbel | 1.60 (1.01, 2.54) | 1.22 (0.78, 1.92) | 0.39 (0.27, 0.56) | 0.61 (0.42, 0.89) |
| Saint-Louis | 1.10 (0.70, 1.71) | 0.73 (0.46, 1.16) | 0.57 (0.39, 0.84) | 0.94 (0.60, 1.46) |
| Tambacounda | 1.40 (0.81, 2.42) | 1.16 (0.66, 2.04) | 0.54 (0.35, 0.83) | 1.18 (0.68, 2.04) |
| Kaolack | 0.90 (0.60, 1.34) | 0.71 (0.46, 1.09) | 0.37 (0.25, 0.55) | 0.57 (0.36, 0.92) |
| Thiès | 1.07 (0.66, 1.75) | 0.80 (0.48, 1.34) | 0.56 (0.40, 0.78) | 0.81 (0.54, 1.21) |
| Louga | 2.55 (1.67, 3.91) | 1.89 (1.18, 3.00) | 0.44 (0.28, 0.70) | 0.78 (0.46, 1.31) |
| Fatick | 0.74 (0.44, 1.25) | 0.57 (0.32, 1.02) | 0.43 (0.28, 0.67) | 0.97 (0.60, 1.58) |
| Kolda | 1.34 (0.82, 2.20) | 1.06 (0.61, 1.84) | 0.48 (0.31, 0.73) | 1.13 (0.68, 1.88) |
| Matam | 1.46 (0.96, 2.22) | 1.01 (0.64, 1.61) | 0.41 (0.28, 0.59) | 0.77 (0.49, 1.22) |
| Kaffrine | 1.19 (0.75, 1.87) | 0.82 (0.49, 1.37) | 0.32 (0.20, 0.50) | 0.64 (0.37, 1.08) |
| Kedougou | 0.71 (0.39, 1.30) | 0.68 (0.34, 1.38) | 0.21 (0.13, 0.34) | 0.40 (0.22, 0.71) |
| Sedhiou | 1.01 (0.63, 1.61) | 1.06 (0.61, 1.86) | 0.32 (0.21, 0.47) | 0.62 (0.32, 1.22) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.93 (0.73, 1.18) | 0.99 (0.76, 1.29) | 1.31 (1.03, 1.66) | 1.17 (0.84, 1.62) |
| Secondary | 1.11 (0.86, 1.45) | 1.09 (0.73, 1.65) | 0.96 (0.72, 1.27) | 1.27 (0.89, 1.81) |
| Higher | 0.10 (0.03, 0.38) | 0.13 (0.03, 0.53) | 1.32 (0.65, 2.68) | 0.87 (0.36, 2.08) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.92 (0.71, 1.19) | 0.99 (0.73, 1.34) | 1.05 (0.79, 1.40) | 0.98 (0.72, 1.32) |
| Middle | 0.91 (0.70, 1.18) | 0.98 (0.71, 1.35) | 1.69 (1.26, 2.27) | 1.22 (0.87, 1.72) |
| Richer | 1.16 (0.88, 1.53) | 1.37 (0.94, 1.99) | 2.36 (1.79, 3.13) | 1.38 (0.94, 2.01) |
| Richest | 0.72 (0.52, 0.99) | 0.84 (0.55, 1.28) | 2.88 (2.05, 4.05) | 1.67 (1.11, 2.51) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.65 (0.53, 0.79) | 0.76 (0.61, 0.96) | 2.58 (2.08, 3.20) | 1.53 (1.17, 2.01) |
| Manual | 0.48 (0.20, 1.15) | 0.49 (0.21, 1.17) | 1.18 (0.67, 2.10) | 0.80 (0.42, 1.50) |
| Agricultural | 0.81 (0.62, 1.04) | 0.91 (0.69, 1.21) | 1.08 (0.79, 1.48) | 1.12 (0.78, 1.62) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.80 (0.58, 1.10) | 0.76 (0.55, 1.04) | 1.11 (0.79, 1.57) | 0.95 (0.67, 1.35) |
| Exposed to two media sources | 0.83 (0.61, 1.13) | 0.68 (0.49, 0.92) | 1.88 (1.34, 2.62) | 1.22 (0.84, 1.77) |
| Exposed to three media sources | 0.67 (0.45, 1.00) | 0.51 (0.32, 0.82) | 1.92 (1.24, 2.97) | 1.08 (0.63, 1.86) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.49 (0.28, 0.85) | 0.72 (0.42, 1.25) | 1.63 (1.20, 2.20) | 1.04 (0.70, 1.54) |

Overall Model Fit: $F_{(100, 263)} = 10.15$, $P=0.0000$.

**Table S47:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Namibia.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.56 (0.42, 0.74) | 0.84 (0.61, 1.15) | 2.51 (1.66, 3.80) | 1.53 (1.00, 2.33) |
| 25-29 | 0.40 (0.27, 0.59) | 0.74 (0.46, 1.19) | 5.06 (3.33, 7.68) | 2.53 (1.66, 3.87) |
| 30-34 | 0.36 (0.23, 0.56) | 0.67 (0.38, 1.18) | 8.27 (5.55, 12.3) | 4.32 (2.81, 6.63) |
| 35-39 | 0.57 (0.38, 0.85) | 0.99 (0.58, 1.70) | 8.77 (5.80, 13.2) | 4.43 (2.74, 7.14) |
| 40-44 | 0.72 (0.47, 1.10) | 1.05 (0.61, 1.81) | 14.3 (9.14, 22.2) | 7.65 (4.46, 13.1) |
| 45-49 | 0.60 (0.39, 0.94) | 0.70 (0.39, 1.27) | 11.1 (7.21, 17.1) | 5.76 (3.40, 9.75) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.74 (0.56, 0.97) | 0.72 (0.53, 0.98) | 0.98 (0.79, 1.22) | 0.83 (0.64, 1.07) |
| Others | 0.60 (0.35, 1.03) | 0.66 (0.37, 1.15) | 1.36 (1.00, 1.84) | 0.83 (0.58, 1.19) |
| No Religion | 0.46 (0.14, 1.49) | 0.41 (0.12, 1.42) | 1.35 (0.45, 4.03) | 1.52 (0.54, 4.31) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.57 (0.41, 0.79) | 0.71 (0.49, 1.03) | 3.08 (2.28, 4.16) | 2.00 (1.42, 2.82) |
| 2 | 0.49 (0.35, 0.68) | 0.58 (0.37, 0.90) | 4.14 (3.14, 5.45) | 1.93 (1.37, 2.73) |
| 3 | 0.37 (0.24, 0.58) | 0.44 (0.26, 0.75) | 4.47 (3.32, 6.02) | 1.59 (1.05, 2.42) |
| 4 | 0.60 (0.37, 0.98) | 0.64 (0.37, 1.10) | 5.79 (4.13, 8.13) | 2.17 (1.38, 3.41) |
| 5 | 0.72 (0.41, 1.27) | 0.62 (0.33, 1.19) | 6.12 (4.14, 9.04) | 2.81 (1.64, 4.83) |
| 6+ | 1.08 (0.71, 1.64) | 0.90 (0.48, 1.71) | 3.51 (2.43, 5.08) | 1.69 (0.97, 2.93) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.65 (0.50, 0.83) | 0.86 (0.63, 1.18) | 2.79 (2.34, 3.32) | 1.52 (1.20, 1.93) |
| Formerly Married | 1.18 (0.75, 1.85) | 1.46 (0.87, 2.46) | 2.66 (1.96, 3.60) | 1.33 (0.90, 1.96) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.75 (0.59, 0.97) | 1.25 (0.91, 1.71) | 2.23 (1.89, 2.63) | 0.97 (0.76, 1.24) |
| **Region** | | | | |
| Khomas (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Caprivi | 0.85 (0.45, 1.59) | 0.79 (0.40, 1.58) | 0.48 (0.32, 0.71) | 0.69 (0.45, 1.06) |
| Erongo | 0.72 (0.37, 1.41) | 0.78 (0.39, 1.55) | 1.08 (0.78, 1.49) | 0.93 (0.66, 1.31) |
| Hardap | 1.83 (1.01, 3.30) | 1.74 (0.91, 3.34) | 1.38 (0.96, 1.98) | 1.25 (0.83, 1.90) |
| Karas | 0.90 (0.49, 1.67) | 0.87 (0.45, 1.68) | 1.24 (0.93, 1.66) | 1.03 (0.72, 1.47) |
| Kavango | 1.29 (0.74, 2.27) | 0.88 (0.45, 1.72) | 0.33 (0.23, 0.46) | 0.51 (0.35, 0.76) |
| Kunene | 1.43 (0.71, 2.85) | 1.42 (0.66, 3.06) | 1.36 (0.93, 1.98) | 1.72 (1.09, 2.70) |
| Changwena | 1.94 (1.12, 3.36) | 1.55 (0.83, 2.90) | 0.29 (0.20, 0.42) | 0.50 (0.31, 0.81) |
| Omaheke | 1.37 (0.75, 2.48) | 1.23 (0.63, 2.39) | 0.98 (0.67, 1.44) | 1.05 (0.64, 1.71) |
| Omusati | 1.48 (0.85, 2.58) | 1.06 (0.56, 2.01) | 0.36 (0.25, 0.53) | 0.58 (0.35, 0.96) |
| Oshana | 1.27 (0.71, 2.27) | 1.12 (0.60, 2.06) | 0.63 (0.44, 0.91) | 0.77 (0.51, 1.17) |
| Oshikoto | 1.14 (0.63, 2.05) | 0.99 (0.51, 1.89) | 0.57 (0.42, 0.78) | 0.84 (0.58, 1.20) |
| Otjozondjupa | 1.45 (0.76, 2.77) | 1.29 (0.65, 2.57) | 1.14 (0.83, 1.59) | 0.96 (0.66, 1.41) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.52 (0.96, 2.40) | 1.47 (0.90, 2.41) | 0.68 (0.45, 1.05) | 0.87 (0.54, 1.41) |
| Secondary | 0.92 (0.58, 1.46) | 1.03 (0.60, 1.74) | 0.86 (0.58, 1.27) | 0.93 (0.58, 1.48) |
| Higher | 0.64 (0.33, 1.26) | 0.85 (0.41, 1.79) | 1.19 (0.75, 1.90) | 0.96 (0.53, 1.75) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.73 (0.53, 1.02) | 0.82 (0.59, 1.16) | 1.60 (1.12, 2.29) | 1.33 (0.89, 1.99) |
| Middle | 0.71 (0.50, 1.00) | 0.81 (0.56, 1.19) | 2.71 (1.94, 3.78) | 2.08 (1.40, 3.09) |
| Richer | 0.67 (0.48, 0.95) | 0.82 (0.52, 1.31) | 4.74 (3.46, 6.50) | 3.58 (2.35, 5.44) |
| Richest | 0.51 (0.34, 0.76) | 0.62 (0.36, 1.07) | 4.56 (3.30, 6.31) | 3.52 (2.24, 5.53) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.55 (0.42, 0.71) | 0.73 (0.54, 0.99) | 2.86 (2.38, 3.42) | 1.26 (1.01, 1.56) |
| Manual | 0.51 (0.22, 1.21) | 0.66 (0.29, 1.50) | 2.74 (1.78, 4.21) | 1.12 (0.68, 1.84) |
| Agricultural | 0.82 (0.35, 1.91) | 0.94 (0.40, 2.23) | 1.70 (1.05, 2.78) | 1.07 (0.60, 1.92) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.87 (0.62, 1.24) | 0.96 (0.67, 1.37) | 1.15 (0.78, 1.68) | 1.20 (0.79, 1.83) |
| Exposed to two media sources | 0.93 (0.67, 1.29) | 1.08 (0.74, 1.57) | 1.72 (1.20, 2.45) | 1.45 (0.95, 2.22) |
| Exposed to three media sources | 0.58 (0.40, 0.85) | 0.75 (0.48, 1.19) | 2.71 (1.96, 3.76) | 1.68 (1.09, 2.59) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.54 (0.41, 0.71) | 0.72 (0.54, 0.95) | 1.41 (1.18, 1.68) | 1.11 (0.89, 1.38) |

Overall Model Fit: $F_{(88, 431)} = 8.68$, *P*=0.0000.

**Table S48:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Congo.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.56 (0.37, 0.84) | 0.74 (0.45, 1.22) | 2.95 (1.90, 4.57) | 2.59 (1.55, 4.34) |
| 25-29 | 0.49 (0.32, 0.74) | 0.69 (0.39, 1.21) | 5.16 (3.31, 8.04) | 4.59 (2.53, 8.31) |
| 30-34 | 0.60 (0.36, 1.00) | 0.81 (0.44, 1.47) | 9.56 (5.64, 16.2) | 8.85 (4.61, 17.0) |
| 35-39 | 0.56 (0.37, 0.83) | 0.73 (0.40, 1.34) | 8.96 (5.33, 15.1) | 9.06 (4.51, 18.2) |
| 40-44 | 0.85 (0.51, 1.42) | 1.04 (0.57, 1.89) | 9.50 (5.97, 15.1) | 12.6 (6.29, 25.4) |
| 45-49 | 0.42 (0.25, 0.70) | 0.50 (0.23, 1.12) | 7.96 (4.89, 12.9) | 12.9 (6.45, 25.8) |
| **Ethnicity** | | | | |
| Kongo (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Punu | 1.11 (0.58, 2.14) | 1.25 (0.60, 2.59) | 0.88 (0.56, 1.38) | 1.00 (0.59, 1.72) |
| Duma | 0.84 (0.44, 1.60) | 0.88 (0.49, 1.61) | 0.40 (0.14, 1.09) | 0.81 (0.28, 2.35) |
| Mbéré/Mbéti/Kélé | 0.47 (0.20, 1.12) | 0.56 (0.24, 1.32) | 1.10 (0.55, 2.20) | 1.30 (0.53, 3.19) |
| Téké | 0.99 (0.70, 1.40) | 1.16 (0.78, 1.73) | 1.07 (0.76, 1.51) | 1.32 (0.85, 2.06) |
| Mbochi | 1.22 (0.76, 1.96) | 1.46 (0.80, 2.67) | 0.90 (0.66, 1.22) | 0.93 (0.65, 1.33) |
| Sangha | 0.85 (0.43, 1.71) | 1.96 (0.67, 5.76) | 1.19 (0.73, 1.95) | 2.17 (1.13, 4.17) |
| Oubanguiens | 0.45 (0.18, 1.15) | 1.19 (0.38, 3.79) | 0.84 (0.56, 1.26) | 1.90 (1.03, 3.48) |
| Pygmée | 1.54 (0.78, 3.04) | 3.05 (1.39, 6.68) | 0.15 (0.05, 0.46) | 1.08 (0.32, 3.64) |
| Etranger | 0.48 (0.23, 0.99) | 0.65 (0.30, 1.38) | 1.14 (0.81, 1.60) | 1.45 (0.87, 2.45) |
| Others | 1.22 (0.27, 5.42) | 1.62 (0.28, 9.24) | 1.49 (0.56, 3.97) | 2.15 (0.91, 5.11) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.84 (0.63, 1.12) | 0.84 (0.65, 1.10) | 0.90 (0.73, 1.12) | 0.97 (0.76, 1.23) |
| Islam | 0.44 (0.09, 2.23) | 1.01 (0.16, 6.33) | 1.52 (0.76, 3.03) | 1.37 (0.60, 3.11) |
| Traditionalist | 1.39 (0.88, 2.19) | 1.30 (0.84, 2.01) | 0.49 (0.29, 0.82) | 0.64 (0.35, 1.18) |
| Others | 0.30 (0.08, 1.07) | 0.29 (0.07, 1.21) | 0.64 (0.16, 2.52) | 0.83 (0.24, 2.90) |
| No Religion | 0.85 (0.50, 1.45) | 0.68 (0.39, 1.18) | 0.43 (0.20, 0.90) | 0.69 (0.35, 1.36) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.85 (0.58, 1.25) | 1.13 (0.77, 1.65) | 2.45 (1.62, 3.69) | 1.58 (0.89, 2.80) |
| 2 | 0.61 (0.41, 0.90) | 0.86 (0.53, 1.37) | 2.81 (1.87, 4.23) | 1.35 (0.74, 2.47) |
| 3 | 0.46 (0.30, 0.71) | 0.69 (0.39, 1.21) | 3.24 (2.11, 4.97) | 1.30 (0.72, 2.34) |
| 4 | 0.91 (0.57, 1.43) | 1.32 (0.73, 2.40) | 4.55 (2.97, 6.96) | 1.69 (0.83, 3.41) |
| 5 | 0.70 (0.40, 1.23) | 1.10 (0.55, 2.23) | 3.57 (2.20, 5.80) | 1.27 (0.60, 2.69) |
| 6+ | 0.70 (0.44, 1.10) | 1.05 (0.56, 1.99) | 2.77 (1.80, 4.26) | 1.06 (0.53, 2.11) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.58 (0.44, 0.76) | 0.74 (0.49, 1.10) | 2.84 (2.10, 3.84) | 0.99 (0.63, 1.54) |
| Formerly Married | 0.85 (0.56, 1.30) | 0.99 (0.61, 1.60) | 2.53 (1.84, 3.47) | 0.85 (0.53, 1.37) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.13 (0.87, 1.47) | 1.56 (0.90, 2.70) | 2.81 (2.28, 3.45) | 1.14 (0.65, 2.00) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Region** | | | | |
| Brazzaville (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Kouilou | 0.87 (0.59, 1.27) | 1.03 (0.55, 1.90) | 0.37 (0.26, 0.53) | 1.06 (0.54, 2.06) |
| Niari | 0.97 (0.63, 1.47) | 1.01 (0.58, 1.74) | 0.51 (0.33, 0.79) | 0.84 (0.49, 1.45) |
| Lekoumou | 0.78 (0.50, 1.23) | 0.89 (0.43, 1.85) | 0.24 (0.15, 0.37) | 0.52 (0.24, 1.12) |
| Bouenza | 1.20 (0.79, 1.82) | 1.43 (0.84, 2.41) | 0.40 (0.26, 0.63) | 0.87 (0.49, 1.56) |
| Pool | 0.85 (0.55, 1.33) | 1.02 (0.53, 1.98) | 0.28 (0.19, 0.41) | 0.65 (0.32, 1.32) |
| Plateaux | 1.70 (1.13, 2.56) | 1.81 (0.87, 3.78) | 0.28 (0.17, 0.46) | 0.66 (0.30, 1.45) |
| Cuvette | 0.79 (0.47, 1.34) | 0.89 (0.37, 2.15) | 0.53 (0.36, 0.79) | 0.83 (0.41, 1.68) |
| Cuvette - Ouest | 0.99 (0.53, 1.86) | 1.46 (0.60, 3.56) | 0.25 (0.14, 0.43) | 0.38 (0.16, 0.92) |
| Sangha | 0.49 (0.27, 0.89) | 0.34 (0.13, 0.88) | 0.71 (0.49, 1.02) | 0.87 (0.46, 1.66) |
| Likouala | 0.49 (0.29, 0.82) | 0.51 (0.19, 1.33) | 0.43 (0.30, 0.61) | 0.75 (0.36, 1.57) |
| Pointe-noire | 0.98 (0.57, 1.68) | 0.98 (0.59, 1.63) | 1.09 (0.80, 1.47) | 1.22 (0.85, 1.74) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.17 (0.81, 1.71) | 1.05 (0.69, 1.60) | 1.19 (0.72, 1.97) | 1.48 (0.83, 2.66) |
| Secondary | 1.22 (0.82, 1.83) | 1.05 (0.65, 1.69) | 1.96 (1.22, 3.16) | 1.60 (0.88, 2.90) |
| Higher | 0.34 (0.11, 1.05) | 0.39 (0.10, 1.46) | 2.52 (1.36, 4.65) | 1.27 (0.60, 2.69) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 1.18 (0.86, 1.62) | 0.96 (0.66, 1.38) | 1.81 (1.28, 2.58) | 1.21 (0.88, 1.66) |
| Middle | 1.46 (0.93, 2.28) | 1.01 (0.56, 1.81) | 2.52 (1.84, 3.45) | 1.30 (0.81, 2.08) |
| Richer | 0.81 (0.52, 1.26) | 0.58 (0.29, 1.19) | 3.74 (2.75, 5.07) | 2.08 (1.23, 3.51) |
| Richest | 0.69 (0.47, 1.02) | 0.44 (0.22, 0.86) | 5.27 (4.06, 6.85) | 2.77 (1.68, 4.59) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.73 (0.50, 1.06) | 0.83 (0.59, 1.16) | 2.13 (1.62, 2.79) | 1.15 (0.83, 1.61) |
| Manual | 0.71 (0.37, 1.38) | 0.88 (0.46, 1.69) | 1.29 (0.75, 2.22) | 0.81 (0.45, 1.47) |
| Agricultural | 0.77 (0.58, 1.01) | 0.84 (0.54, 1.30) | 0.53 (0.40, 0.71) | 0.55 (0.35, 0.85) |
| Others | 0.44 (0.14, 1.39) | 0.87 (0.28, 2.72) | 0.58 (0.14, 2.44) | 0.29 (0.07, 1.14) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.83 (0.63, 1.11) | 0.92 (0.69, 1.23) | 1.50 (1.10, 2.03) | 0.88 (0.62, 1.25) |
| Exposed to two media sources | 0.80 (0.56, 1.15) | 0.90 (0.60, 1.34) | 1.84 (1.36, 2.47) | 0.85 (0.58, 1.24) |
| Exposed to three media sources | 0.90 (0.63, 1.27) | 1.20 (0.78, 1.87) | 2.83 (2.03, 3.96) | 1.05 (0.69, 1.60) |
| **Hormonal Contraceptives use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 1.01 (0.39, 2.65) | 1.13 (0.42, 3.05) | 1.86 (1.25, 2.77) | 1.14 (0.72, 1.79) |

Overall Model Fit: $F_{(112, 248)} = 6.76$, $P=0.0000$

**Table S49:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Nigeria.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.53 (0.47, 0.59) | 0.72 (0.64, 0.82) | 2.15 (1.85, 2.51) | 1.73 (1.47, 2.04) |
| 25-29 | 0.43 (0.38, 0.49) | 0.66 (0.56, 0.78) | 4.21 (3.63, 4.89) | 2.97 (2.48, 3.55) |
| 30-34 | 0.36 (0.30, 0.42) | 0.57 (0.46, 0.70) | 6.01 (5.20, 6.94) | 4.13 (3.42, 5.00) |
| 35-39 | 0.35 (0.30, 0.42) | 0.57 (0.44, 0.72) | 8.88 (7.65, 10.3) | 6.58 (5.39, 8.04) |
| 40-44 | 0.34 (0.28, 0.41) | 0.53 (0.41, 0.68) | 8.72 (7.53, 10.1) | 7.05 (5.74, 8.66) |
| 45-49 | 0.40 (0.34, 0.49) | 0.58 (0.44, 0.76) | 9.02 (7.70, 10.6) | 8.26 (6.70, 10.2) |
| **Ethnicity** | | | | |
| Hausa (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Ekoi | 0.19 (0.02, 1.70) | 0.25 (0.02, 2.63) | 2.03 (0.62, 6.61) | 1.25 (0.40, 3.94) |
| Fulani | 1.36 (1.12, 1.65) | 1.33 (1.08, 1.64) | 0.71 (0.53, 0.93) | 0.78 (0.55, 1.11) |
| Ibibio | 0.56 (0.42, 0.74) | 0.84 (0.53, 1.31) | 2.89 (2.31, 3.61) | 1.65 (1.13, 2.40) |
| Igala | 0.57 (0.29, 1.14) | 0.69 (0.36, 1.34) | 1.66 (1.27, 2.16) | 1.20 (0.83, 1.73) |
| Igbo | 0.47 (0.39, 0.56) | 0.88 (0.59, 1.31) | 2.45 (2.08, 2.88) | 1.45 (1.06, 1.98) |
| Ijaw/Izon | 0.56 (0.39, 0.81) | 1.18 (0.64, 2.17) | 2.53 (1.99, 3.20) | 1.56 (1.11, 2.20) |
| Kanuri/Beriberi | 0.86 (0.57, 1.30) | 0.84 (0.54, 1.30) | 0.90 (0.61, 1.32) | 0.68 (0.46, 1.00) |
| Tiv | 0.45 (0.29, 0.69) | 0.88 (0.51, 1.51) | 1.22 (0.93, 1.61) | 1.47 (0.93, 2.33) |
| Yoruba | 0.73 (0.63, 0.84) | 0.99 (0.70, 1.40) | 2.69 (2.34, 3.10) | 1.11 (0.84, 1.47) |
| Others | 0.55 (0.47, 0.63) | 0.79 (0.63, 1.00) | 1.71 (1.49, 1.97) | 1.15 (0.92, 1.44) |
| **Religion** | | | | |
| Other Christians (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Catholics | 0.97 (0.78, 1.20) | 1.11 (0.88, 1.40) | 0.89 (0.80, 0.99) | 0.99 (0.87, 1.12) |
| Islam | 1.91 (1.71, 2.12) | 1.33 (1.12, 1.59) | 0.54 (0.49, 0.60) | 1.07 (0.94, 1.23) |
| Traditionalists | 1.12 (0.74, 1.68) | 1.01 (0.61, 1.67) | 0.39 (0.24, 0.61) | 0.74 (0.48, 1.14) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.58 (0.50, 0.68) | 0.76 (0.62, 0.93) | 1.63 (1.42, 1.87) | 0.93 (0.77, 1.14) |
| 2 | 0.55 (0.47, 0.65) | 0.84 (0.68, 1.05) | 2.02 (1.76, 2.33) | 0.87 (0.70, 1.09) |
| 3 | 0.54 (0.45, 0.64) | 0.87 (0.69, 1.10) | 2.67 (2.33, 3.05) | 0.99 (0.80, 1.23) |
| 4 | 0.54 (0.45, 0.65) | 0.92 (0.73, 1.17) | 3.05 (2.69, 3.45) | 0.98 (0.79, 1.20) |
| 5 | 0.48 (0.39, 0.60) | 0.81 (0.62, 1.05) | 2.97 (2.57, 3.43) | 0.99 (0.79, 1.24) |
| 6+ | 0.50 (0.44, 0.57) | 0.78 (0.62, 0.98) | 2.48 (2.21, 2.78) | 0.91 (0.74, 1.11) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.58 (0.52, 0.65) | 0.54 (0.44, 0.65) | 2.51 (2.25, 2.80) | 1.74 (1.45, 2.09) |
| Formerly Married | 0.61 (0.49, 0.74) | 0.75 (0.59, 0.96) | 4.09 (3.53, 4.73) | 2.02 (1.62, 2.53) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.90 (0.81, 1.01) | 1.11 (0.97, 1.28) | 2.15 (1.96, 2.36) | 1.15 (1.02, 1.29) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Region** | | | | |
| Lagos (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Sokoto | 1.82 (1.22, 2.71) | 1.04 (0.63, 1.72) | 0.21 (0.16, 0.27) | 0.82 (0.56, |
| Zamfara | 1.38 (0.96, 1.99) | 0.88 (0.54, 1.43) | 0.18 (0.13, 0.24) | 1.18) |
| Katsina | 1.28 (0.87, 1.87) | 0.84 (0.52, 1.37) | 0.14 (0.10, 0.20) | 0.73 (0.49, |
| Jigawa | 1.98 (1.36, 2.90) | 1.21 (0.73, 2.00) | 0.22 (0.14, 0.37) | 1.09) |
| Yobe | 1.10 (0.65, 1.86) | 0.51 (0.26, 0.98) | 0.34 (0.25, 0.48) | 0.51 (0.35, 0.75) |
| Borno | 1.39 (0.92, 2.12) | 0.78 (0.48, 1.27) | 0.27 (0.19, 0.37) | 0.97 (0.52, |
| Adamawa | 1.49 (0.94, 2.36) | 1.14 (0.72, 1.80) | 0.40 (0.28, 0.56) | 1.81) |
| Gombe | 2.44 (1.61, 3.70) | 1.68 (1.03, 2.74) | 0.29 (0.21, 0.38) | 1.90 (1.24, 2.91) |
| Bauchi | 2.37 (1.64, 3.42) | 1.39 (0.88, 2.18) | 0.24 (0.17, 0.33) | 1.02 (0.73, |
| Kano | 1.90 (1.35, 2.67) | 1.08 (0.69, 1.69) | 0.29 (0.22, 0.38) | 1.43) |
| Kaduna | 0.94 (0.61, 1.47) | 0.80 (0.48, 1.34) | 0.37 (0.28, 0.50) | 1.18 (0.83, |
| Kebbi | 0.99 (0.66, 1.50) | 0.59 (0.36, 0.96) | 0.27 (0.19, 0.40) | 1.69) |
| Niger | 0.54 (0.26, 1.10) | 0.38 (0.21, 0.70) | 0.37 (0.28, 0.49) | 0.92 (0.68, |
| Fct-abuja | 0.61 (0.36, 1.06) | 0.58 (0.34, 0.98) | 0.92 (0.68, 1.25) | 1.23) |
| Nasarawa | 0.42 (0.16, 1.06) | 0.33 (0.13, 0.82) | 0.35 (0.28, 0.45) | 0.97 (0.69, |
| Plateau | 0.44 (0.27, 0.71) | 0.39 (0.23, 0.67) | 0.44 (0.33, 0.58) | 1.37) |
| Taraba | 0.89 (0.51, 1.53) | 0.58 (0.33, 1.03) | 0.40 (0.31, 0.52) | 0.82 (0.58, |
| Benue | 0.71 (0.47, 1.07) | 0.61 (0.37, 1.01) | 0.28 (0.20, 0.39) | 1.14) |
| Kogi | 0.93 (0.58, 1.50) | 0.82 (0.54, 1.24) | 0.48 (0.38, 0.60) | 0.73 (0.53, |
| Kwara | 1.17 (0.79, 1.74) | 0.80 (0.53, 1.21) | 0.59 (0.47, 0.74) | 1.02) |
| Oyo | 1.49 (0.95, 2.34) | 1.23 (0.83, 1.81) | 0.53 (0.42, 0.66) | 1.10 (0.67, |
| Osun | 0.93 (0.63, 1.38) | 0.77 (0.52, 1.13) | 0.49 (0.39, 0.63) | 1.81) |
| Ekiti | 0.72 (0.46, 1.11) | 0.62 (0.40, 0.96) | 0.53 (0.40, 0.71) | 1.02 (0.71, |
| Ondo | 0.88 (0.56, 1.38) | 0.74 (0.47, 1.15) | 0.56 (0.44, 0.71) | 1.47) |
| Edo | 0.87 (0.54, 1.41) | 0.79 (0.48, 1.32) | 0.62 (0.50, 0.76) | 1.38 (1.04, 1.84) |
| Anambra | 0.33 (0.17, 0.66) | 0.29 (0.14, 0.60) | 0.65 (0.47, 0.92) | 0.97 (0.74, |
| Enugu | 0.57 (0.35, 0.94) | 0.43 (0.22, 0.82) | 0.61 (0.46, 0.79) | 1.29) |
| Ebonyi | 1.16 (0.82, 1.65) | 0.89 (0.54, 1.45) | 0.26 (0.18, 0.40) | 1.12 (0.85, |
| Cross River | 0.89 (0.57, 1.41) | 0.97 (0.58, 1.61) | 0.50 (0.38, 0.65) | 1.47) |
| Akwa Ibom | 0.86 (0.57, 1.30) | 0.84 (0.50, 1.40) | 0.58 (0.44, 0.77) | 1.43 (1.02, 2.02) |
| Abia | 0.71 (0.46, 1.10) | 0.72 (0.41, 1.27) | 0.53 (0.38, 0.73) | 0.88 (0.53, |
| Imo | 0.63 (0.40, 1.00) | 0.57 (0.31, 1.03) | 0.70 (0.50, 0.99) | 1.47) |
| Rivers | 0.71 (0.42, 1.19) | 0.70 (0.40, 1.23) | 0.80 (0.61, 1.07) | 0.95 (0.71, |
| Bayelsa | 0.61 (0.40, 0.93) | 0.42 (0.21, 0.81) | 0.55 (0.45, 0.68) | 1.26) |
| Delta | 0.72 (0.49, 1.06) | 0.59 (0.39, 0.90) | 0.46 (0.36, 0.58) | 0.90 (0.70, |
| Ogun | 1.35 (0.89, 2.04) | 1.41 (0.93, 2.13) | 0.71 (0.54, 0.94) | 1.14) |
| | | | | 0.70 (0.54, 0.93) |
| | | | | 0.63 (0.49, 0.80) |
| | | | | 0.72 (0.51, 1.01) |
| | | | | 0.88 (0.69, 1.12) |
| | | | | 1.09 (0.81, 1.46) |
| | | | | 0.78 (0.49, 1.24) |
| | | | | 1.11 (0.80, 1.53) |
| | | | | 0.51 (0.34, 0.78) |
| | | | | 0.97 (0.69, 1.37) |
| | | | | 0.96 (0.66, 1.40) |
| | | | | 0.64 (0.44, 0.92) |
| | | | | 0.93 (0.61, 1.41) |
| | | | | 1.24 (0.91, 1.68) |

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Level of Education** | | | | |
| No Education | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.82 (0.72, 0.93) | 1.09 (0.94, 1.28) | 2.13 (1.89, 2.40) | 1.29 (1.14, 1.46) |
| Secondary | 0.81 (0.72, 0.91) | 0.80 (0.67, 0.96) | 1.78 (1.59, 1.99) | 1.39 (1.22, 1.58) |
| Higher | 0.39 (0.31, 0.50) | 0.61 (0.46, 0.82) | 4.07 (3.55, 4.65) | 1.68 (1.43, 1.97) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.80 (0.69, 0.92) | 0.91 (0.78, 1.06) | 1.43 (1.20, 1.70) | 1.45 (1.22, 1.72) |
| Middle | 0.72 (0.61, 0.84) | 0.96 (0.80, 1.14) | 2.22 (1.87, 2.63) | 1.97 (1.65, 2.36) |
| Richer | 0.67 (0.58, 0.78) | 0.90 (0.74, 1.10) | 3.49 (2.95, 4.14) | 2.70 (2.23, 3.28) |
| Richest | 0.49 (0.41, 0.59) | 0.69 (0.54, 0.87) | 5.58 (4.70, 6.62) | 3.74 (3.04, 4.61) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.52 (0.46, 0.57) | 0.76 (0.68, 0.85) | 2.91 (2.65, 3.19) | 1.27 (1.14, 1.41) |
| Manual | 0.83 (0.70, 0.97) | 0.94 (0.80, 1.11) | 1.74 (1.52, 1.98) | 1.08 (0.94, 1.24) |
| Agricultural | 0.43 (0.36, 0.51) | 0.85 (0.69, 1.04) | 1.42 (1.22, 1.65) | 0.75 (0.63, 0.89) |
| Others | 1.69 (0.82, 3.50) | 1.49 (0.78, 2.83) | 1.16 (0.38, 3.61) | 1.11 (0.45, 2.75) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.83 (0.74, 0.94) | 0.87 (0.76, 0.99) | 1.40 (1.25, 1.58) | 1.19 (1.05, 1.34) |
| Exposed to two media sources | 0.61 (0.53, 0.69) | 0.67 (0.57, 0.79) | 2.25 (2.01, 2.51) | 1.15 (1.02, 1.30) |
| Exposed to three media sources | 0.60 (0.51, 0.70) | 0.65 (0.53, 0.79) | 2.96 (2.61, 3.35) | 1.34 (1.17, 1.54) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.26 (0.19, 0.36) | 0.53 (0.38, 0.74) | 2.06 (1.81, 2.34) | 1.06 (0.93, 1.22) |

Overall Model Fit: $F_{(158, 666)} = 26.99$, $P=0.0000$.

**Table S50:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Zambia.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.58 (0.47, 0.72) | 0.76 (0.60, 0.97) | 1.97 (1.57, 2.48) | 1.51 (1.17, 1.94) |
| 25-29 | 0.51 (0.41, 0.63) | 0.74 (0.55, 1.00) | 3.00 (2.44, 3.68) | 1.93 (1.48, 2.51) |
| 30-34 | 0.53 (0.42, 0.67) | 0.82 (0.58, 1.15) | 4.04 (3.34, 4.90) | 2.55 (1.90, 3.41) |
| 35-39 | 0.72 (0.58, 0.89) | 1.11 (0.80, 1.54) | 4.53 (3.66, 5.61) | 2.88 (2.08, 3.99) |
| 40-44 | 0.69 (0.53, 0.90) | 1.07 (0.72, 1.59) | 5.50 (4.48, 6.75) | 4.06 (2.97, 5.55) |
| 45-49 | 0.83 (0.63, 1.09) | 1.26 (0.84, 1.89) | 6.19 (4.90, 7.82) | 4.82 (3.42, 6.79) |
| **Ethnicity** | | | | |
| Bemba (Reference) | 1.00 | 1.00 | | 1.00 |
| Tonga | 0.70 (0.55, 0.90) | 0.62 (0.42, 0.91) | 0.96 (0.78, 1.17) | 1.01 (0.79, 1.28) |
| Chewa | 0.76 (0.56, 1.03) | 0.89 (0.59, 1.36) | 1.21 (0.97, 1.51) | 1.30 (0.97, 1.74) |
| Lozi | 1.28 (0.95, 1.73) | 0.84 (0.60, 1.19) | 0.92 (0.73, 1.17) | 1.14 (0.85, 1.52) |
| Nsenga | 0.69 (0.47, 1.01) | 0.79 (0.51, 1.21) | 1.29 (1.03, 1.62) | 1.21 (0.89, 1.66) |
| Tumbuka | 0.69 (0.47, 1.02) | 0.78 (0.51, 1.18) | 1.16 (0.86, 1.55) | 1.18 (0.86, 1.62) |
| Ngoni | 0.73 (0.49, 1.10) | 0.92 (0.58, 1.46) | 1.59 (1.23, 2.07) | 1.27 (0.94, 1.71) |
| Lala | 0.74 (0.49, 1.13) | 0.63 (0.39, 1.02) | 0.89 (0.64, 1.25) | 1.08 (0.77, 1.52) |
| Kaonde | 0.61 (0.37, 0.99) | 0.67 (0.39, 1.15) | 1.15 (0.80, 1.64) | 1.22 (0.84, 1.77) |
| Namwanga | 1.08 (0.76, 1.54) | 1.03 (0.72, 1.48) | 0.99 (0.71, 1.38) | 0.89 (0.60, 1.33) |
| Mambwe | 0.77 (0.50, 1.17) | 0.79 (0.51, 1.21) | 0.97 (0.71, 1.32) | 0.90 (0.66, 1.22) |
| Lunda(North-Western) | 1.06 (0.75, 1.48) | 1.29 (0.80, 2.06) | 0.98 (0.66, 1.46) | 1.47 (0.90, 2.41) |
| Luvale | 0.91 (0.58, 1.42) | 0.79 (0.49, 1.29) | 1.00 (0.66, 1.52) | 1.28 (0.82, 1.99) |
| Others | 1.02 (0.85, 1.24) | 0.85 (0.70, 1.05) | 1.05 (0.88, 1.25) | 1.18 (0.99, 1.42) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.00 (0.84, 1.20) | 1.02 (0.84, 1.23) | 1.01 (0.87, 1.17) | 0.97 (0.82, 1.15) |
| Islam | 1.62 (0.76, 3.48) | 1.81 (0.84, 3.89) | 3.26 (1.70, 6.24) | 1.46 (0.80, 2.65) |
| Others | 0.91 (0.43, 1.94) | 0.76 (0.34, 1.71) | 0.63 (0.32, 1.23) | 0.74 (0.37, 1.47) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.64 (0.51, 0.79) | 0.89 (0.70, 1.14) | 1.46 (1.19, 1.80) | 1.02 (0.79, 1.32) |
| 2 | 0.61 (0.48, 0.76) | 1.03 (0.75, 1.42) | 2.22 (1.85, 2.66) | 1.19 (0.90, 1.57) |
| 3 | 0.56 (0.44, 0.71) | 0.93 (0.65, 1.32) | 2.78 (2.33, 3.33) | 1.41 (1.03, 1.93) |
| 4 | 0.76 (0.59, 0.98) | 1.17 (0.79, 1.73) | 2.69 (2.16, 3.34) | 1.41 (1.03, 1.92) |
| 5 | 0.50 (0.37, 0.67) | 0.70 (0.46, 1.07) | 2.65 (2.13, 3.28) | 1.46 (1.03, 2.07) |
| 6+ | 0.72 (0.60, 0.85) | 0.83 (0.57, 1.21) | 2.54 (2.14, 3.00) | 1.50 (1.08, 2.08) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.62 (0.54, 0.71) | 0.61 (0.47, 0.80) | 2.37 (2.04, 2.77) | 1.36 (1.04, 1.77) |
| Formerly Married | 0.64 (0.52, 0.80) | 0.57 (0.41, 0.81) | 2.32 (1.93, 2.78) | 1.19 (0.90, 1.59) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.87 (0.75, 1.01) | 1.22 (0.99, 1.49) | 2.69 (2.39, 3.03) | 1.12 (0.96, 1.30) |
| **Region** | | | | |
| Lusaka (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Central | 1.00 (0.75, 1.33) | 0.88 (0.63, 1.21) | 0.43 (0.35, 0.52) | 0.75 (0.61, 0.92) |
| Copperbelt | 1.03 (0.78, 1.38) | 0.92 (0.68, 1.25) | 0.81 (0.68, 0.96) | 0.88 (0.73, 1.07) |
| Eastern | 0.73 (0.55, 0.97) | 0.51 (0.36, 0.74) | 0.44 (0.37, 0.53) | 0.90 (0.71, 1.14) |
| Luapula | 0.98 (0.74, 1.29) | 0.63 (0.45, 0.87) | 0.27 (0.21, 0.35) | 0.62 (0.47, 0.83) |
| Muchinga | 1.33 (0.98, 1.79) | 0.84 (0.61, 1.17) | 0.29 (0.24, 0.37) | 0.69 (0.53, 0.89) |
| Northern | 1.25 (0.95, 1.65) | 0.75 (0.54, 1.03) | 0.27 (0.21, 0.35) | 0.67 (0.51, 0.89) |
| North Western | 0.85 (0.61, 1.17) | 0.55 (0.36, 0.84) | 0.32 (0.25, 0.42) | 0.59 (0.41, 0.84) |
| Southern | 0.94 (0.70, 1.25) | 1.01 (0.68, 1.50) | 0.52 (0.41, 0.64) | 0.91 (0.72, 1.15) |
| Western | 1.98 (1.47, 2.66) | 1.31 (0.91, 1.89) | 0.24 (0.18, 0.31) | 0.51 (0.37, 0.69) |

|  | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.99 (0.78, 1.24) | 0.94 (0.75, 1.18) | 1.06 (0.86, 1.31) | 1.00 (0.80, 1.26) |
| Secondary | 0.76 (0.59, 0.97) | 0.66 (0.50, 0.86) | 1.38 (1.12, 1.70) | 1.23 (0.95, 1.58) |
| Higher | 0.64 (0.41, 0.99) | 0.76 (0.47, 1.24) | 3.66 (2.74, 4.88) | 1.67 (1.19, 2.36) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.82 (0.68, 0.99) | 0.83 (0.69, 1.01) | 1.43 (1.17, 1.74) | 1.34 (1.09, 1.65) |
| Middle | 0.65 (0.53, 0.79) | 0.62 (0.49, 0.79) | 2.15 (1.76, 2.62) | 1.84 (1.48, 2.28) |
| Richer | 0.56 (0.45, 0.70) | 0.44 (0.33, 0.59) | 4.16 (3.45, 5.03) | 3.23 (2.49, 4.20) |
| Richest | 0.67 (0.53, 0.84) | 0.47 (0.33, 0.67) | 5.84 (4.83, 7.05) | 4.53 (3.42, 6.00) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.66 (0.55, 0.80) | 0.79 (0.64, 0.96) | 2.16 (1.91, 2.44) | 1.15 (0.99, 1.32) |
| Manual | 0.74 (0.36, 1.50) | 0.86 (0.42, 1.78) | 3.01 (1.95, 4.65) | 1.47 (0.90, 2.41) |
| Agricultural | 1.00 (0.87, 1.15) | 0.98 (0.84, 1.15) | 0.65 (0.57, 0.75) | 0.86 (0.74, 1.00) |
| Others | 0.59 (0.28, 1.26) | 0.63 (0.29, 1.35) | 3.17 (2.17, 4.64) | 1.88 (1.26, 2.80) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 1.00 (0.84, 1.18) | 1.10 (0.92, 1.32) | 1.30 (1.12, 1.52) | 0.99 (0.84, 1.16) |
| Exposed to two media sources | 0.97 (0.80, 1.16) | 1.23 (1.00, 1.53) | 2.08 (1.77, 2.45) | 1.03 (0.86, 1.24) |
| Exposed to three media sources | 0.71 (0.57, 0.89) | 0.94 (0.71, 1.25) | 2.77 (2.37, 3.23) | 1.01 (0.83, 1.24) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.61 (0.51, 0.72) | 0.80 (0.66, 0.97) | 1.54 (1.39, 1.70) | 1.27 (1.12, 1.44) |

Overall Model Fit: $F_{(110, 592)} = 16.04$, *P*=0.0000.

**Table S51:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Sierra Leone.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
|  | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.51 (0.36, 0.72) | 0.67 (0.46, 0.98) | 1.74 (1.28, 2.38) | 1.73 (1.17, 2.54) |
| 25-29 | 0.37 (0.27, 0.52) | 0.48 (0.30, 0.77) | 2.42 (1.77, 3.30) | 2.59 (1.71, 3.91) |
| 30-34 | 0.58 (0.40, 0.83) | 0.73 (0.43, 1.23) | 3.41 (2.45, 4.74) | 3.77 (2.40, 5.92) |
| 35-39 | 0.55 (0.40, 0.76) | 0.67 (0.40, 1.12) | 3.60 (2.72, 4.76) | 4.03 (2.66, 6.10) |
| 40-44 | 0.63 (0.41, 0.98) | 0.74 (0.39, 1.40) | 4.92 (3.52, 6.89) | 5.25 (3.28, 8.39) |
| 45-49 | 0.40 (0.26, 0.61) | 0.46 (0.25, 0.85) | 4.62 (3.39, 6.30) | 5.32 (3.30, 8.56) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Ethnicity** | | | | |
| Temne (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Creole | 1.27 (0.41, 3.91) | 1.27 (0.38, 4.28) | 3.11 (1.57, 6.16) | 1.95 (1.05, 3.64) |
| Fullah | 1.29 (0.82, 2.04) | 1.47 (0.87, 2.47) | 2.25 (1.43, 3.53) | 1.38 (0.85, 2.23) |
| Kono | 1.22 (0.82, 1.82) | 1.04 (0.61, 1.77) | 0.88 (0.60, 1.30) | 0.89 (0.53, 1.51) |
| Limba | 0.76 (0.47, 1.24) | 0.69 (0.41, 1.16) | 1.11 (0.77, 1.61) | 1.04 (0.66, 1.62) |
| Loko | 0.83 (0.33, 2.11) | 0.78 (0.30, 2.03) | 1.70 (0.78, 3.69) | 1.42 (0.80, 2.50) |
| Mandigo | 0.91 (0.46, 1.79) | 0.94 (0.46, 1.93) | 1.47 (0.90, 2.38) | 0.92 (0.56, 1.52) |
| Mende | 0.98 (0.74, 1.29) | 0.97 (0.64, 1.49) | 1.26 (1.01, 1.58) | 1.11 (0.84, 1.47) |
| Sherbro | 0.70 (0.33, 1.49) | 0.68 (0.32, 1.44) | 1.40 (0.89, 2.21) | 1.19 (0.74, 1.92) |
| Koranko | 0.93 (0.50, 1.74) | 0.85 (0.44, 1.66) | 0.61 (0.35, 1.07) | 1.01 (0.62, 1.67) |
| Others | 1.50 (0.97, 2.33) | 1.46 (0.89, 2.37) | 0.97 (0.64, 1.47) | 1.04 (0.69, 1.57) |
| **Religion** | | | | |
| Other Christians (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Islam | 0.95 (0.76, 1.18) | 0.89 (0.71, 1.12) | 0.77 (0.63, 0.94) | 0.95 (0.77, 1.19) |
| Other | 0.46 (0.10, 2.27) | 0.35 (0.07, 1.76) | 0.36 (0.10, 1.28) | 0.65 (0.18, 2.39) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.43 (0.30, 0.61) | 0.62 (0.42, 0.92) | 1.52 (1.17, 1.97) | 1.09 (0.76, 1.55) |
| 2 | 0.51 (0.36, 0.72) | 0.90 (0.56, 1.44) | 1.87 (1.39, 2.51) | 1.05 (0.71, 1.54) |
| 3 | 0.52 (0.36, 0.75) | 0.94 (0.56, 1.57) | 2.10 (1.62, 2.71) | 1.18 (0.80, 1.74) |
| 4 | 0.57 (0.39, 0.82) | 1.03 (0.62, 1.70) | 2.38 (1.82, 3.10) | 1.19 (0.81, 1.75) |
| 5 | 0.53 (0.34, 0.82) | 0.91 (0.52, 1.57) | 2.44 (1.80, 3.30) | 1.17 (0.80, 1.73) |
| 6+ | 0.61 (0.45, 0.82) | 1.00 (0.58, 1.72) | 2.35 (1.84, 3.01) | 1.17 (0.78, 1.76) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.60 (0.47, 0.76) | 0.82 (0.53, 1.26) | 1.79 (1.46, 2.19) | 1.46 (1.11, 1.92) |
| Formerly Married | 0.62 (0.40, 0.97) | 0.94 (0.54, 1.62) | 3.19 (2.42, 4.19) | 1.97 (1.36, 2.86) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.85 (0.64, 1.12) | 0.96 (0.62, 1.48) | 2.33 (1.91, 2.83) | 1.30 (0.97, 1.76) |
| **Region** | | | | |
| Western (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Eastern | 1.32 (0.81, 2.15) | 1.10 (0.67, 1.81) | 0.64 (0.47, 0.87) | 1.27 (0.89, 1.83) |
| Northern | 1.29 (0.84, 1.96) | 1.14 (0.70, 1.85) | 0.44 (0.33, 0.58) | 1.06 (0.75, 1.49) |
| Southern | 1.24 (0.80, 1.92) | 1.05 (0.63, 1.77) | 0.66 (0.50, 0.88) | 1.46 (1.04, 2.06) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.27 (0.98, 1.65) | 1.02 (0.75, 1.40) | 0.91 (0.71, 1.15) | 1.05 (0.78, 1.39) |
| Secondary | 1.28 (0.99, 1.65) | 0.91 (0.62, 1.32) | 1.07 (0.85, 1.34) | 1.11 (0.84, 1.47) |
| Higher | 0.73 (0.38, 1.42) | 1.09 (0.42, 2.80) | 1.59 (1.05, 2.40) | 0.57 (0.32, 1.03) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.99 (0.71, 1.37) | 0.97 (0.70, 1.34) | 1.37 (1.00, 1.87) | 1.42 (1.03, 1.95) |
| Middle | 0.89 (0.65, 1.24) | 0.88 (0.64, 1.23) | 1.52 (1.11, 2.07) | 1.54 (1.10, 2.16) |
| Richer | 0.94 (0.67, 1.32) | 0.94 (0.65, 1.36) | 2.29 (1.73, 3.03) | 1.99 (1.43, 2.77) |
| Richest | 0.75 (0.51, 1.11) | 0.71 (0.39, 1.29) | 3.66 (2.78, 4.83) | 2.89 (1.89, 4.40) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.25 (0.12, 0.52) | 0.34 (0.15, 0.76) | 1.81 (1.30, 2.52) | 0.92 (0.64, 1.31) |
| Manual | 0.44 (0.31, 0.60) | 0.54 (0.38, 0.76) | 1.33 (1.08, 1.63) | 0.84 (0.67, 1.05) |
| Agricultural | 0.72 (0.56, 0.93) | 0.80 (0.60, 1.07) | 0.61 (0.48, 0.77) | 0.57 (0.44, 0.74) |

|  | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 1.14 (0.92, 1.43) | 1.14 (0.90, 1.44) | 1.32 (1.06, 1.64) | 1.17 (0.94, 1.46) |
| Exposed to two media sources | 1.00 (0.72, 1.39) | 1.03 (0.72, 1.48) | 2.06 (1.61, 2.64) | 1.39 (1.04, 1.86) |
| Exposed to three media sources | 1.04 (0.68, 1.58) | 1.07 (0.69, 1.64) | 2.60 (1.97, 3.45) | 1.94 (1.39, 2.71) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.82 (0.64, 1.06) | 0.87 (0.66, 1.14) | 1.14 (0.93, 1.40) | 0.96 (0.76, 1.21) |

Overall Model Fit: $F_{(88, 320)} = 7.57$, $P=0.0000$.

**Table S52:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Mozambique.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.43 (0.34, 0.54) | 0.63 (0.46, 0.86) | 1.52 (1.20, 1.93) | 1.46 (1.10, 1.94) |
| 25-29 | 0.47 (0.34, 0.64) | 0.71 (0.47, 1.06) | 2.67 (2.15, 3.31) | 2.67 (2.00, 3.58) |
| 30-34 | 0.43 (0.32, 0.58) | 0.65 (0.43, 0.99) | 3.34 (2.66, 4.20) | 3.87 (2.80, 5.33) |
| 35-39 | 0.48 (0.34, 0.66) | 0.69 (0.43, 1.11) | 3.49 (2.84, 4.29) | 4.71 (3.46, 6.41) |
| 40-44 | 0.63 (0.45, 0.88) | 0.90 (0.60, 1.36) | 4.23 (3.30, 5.42) | 6.53 (4.52, 9.43) |
| 45-49 | 0.84 (0.61, 1.17) | 1.20 (0.77, 1.87) | 4.78 (3.82, 6.00) | 8.84 (6.10, 12.8) |
| **Ethnicity** | | | | |
| Xichangana (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Emakhuwa | 1.21 (0.88, 1.68) | 1.08 (0.63, 1.85) | 0.31 (0.23, 0.40) | 0.67 (0.45, 0.99) |
| Português | 1.63 (1.18, 2.25) | 1.34 (0.90, 2.00) | 0.92 (0.75, 1.14) | 0.88 (0.72, 1.08) |
| Cisena | 1.99 (1.45, 2.72) | 1.14 (0.70, 1.86) | 0.13 (0.09, 0.19) | 0.43 (0.29, 0.63) |
| Elomwe | 2.81 (1.91, 4.11) | 1.17 (0.68, 2.01) | 0.11 (0.07, 0.18) | 0.54 (0.29, 1.03) |
| Echuwabo | 1.58 (0.95, 2.64) | 0.79 (0.44, 1.43) | 0.25 (0.16, 0.40) | 0.77 (0.46, 1.29) |
| Cinyanja | 1.39 (0.96, 2.03) | 0.88 (0.52, 1.50) | 0.21 (0.15, 0.30) | 0.65 (0.41, 1.02) |
| Cindau | 1.40 (0.99, 1.98) | 0.93 (0.54, 1.58) | 0.34 (0.26, 0.45) | 0.88 (0.59, 1.31) |
| Xitswa | 0.86 (0.54, 1.34) | 1.01 (0.54, 1.89) | 0.72 (0.54, 0.96) | 0.84 (0.60, 1.17) |
| Cinyungwe | 2.02 (1.33, 3.08) | 1.35 (0.72, 2.53) | 0.26 (0.15, 0.42) | 0.50 (0.30, 0.85) |
| Ciyao | 1.66 (0.93, 2.95) | 1.10 (0.48, 2.55) | 0.22 (0.14, 0.35) | 0.59 (0.30, 1.14) |
| Others | 1.36 (1.00, 1.84) | 1.14 (0.75, 1.72) | 0.63 (0.52, 0.76) | 0.93 (0.76, 1.15) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.92 (0.73, 1.16) | 1.00 (0.76, 1.31) | 1.16 (0.98, 1.38) | 0.95 (0.80, 1.13) |
| Islam | 0.88 (0.65, 1.18) | 1.00 (0.70, 1.43) | 0.67 (0.54, 0.83) | 0.77 (0.59, 1.01) |
| Others | 1.17 (0.64, 2.14) | 1.33 (0.69, 2.56) | 1.43 (1.04, 1.95) | 0.83 (0.60, 1.14) |
| No Religion | 1.04 (0.78, 1.40) | 1.02 (0.74, 1.41) | 0.73 (0.56, 0.96) | 0.93 (0.70, 1.24) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.51 (0.39, 0.68) | 0.81 (0.59, 1.13) | 1.11 (0.89, 1.39) | 0.75 (0.57, 0.99) |
| 2 | 0.49 (0.37, 0.65) | 0.86 (0.58, 1.28) | 1.64 (1.35, 1.99) | 0.94 (0.71, 1.23) |
| 3 | 0.47 (0.34, 0.65) | 0.80 (0.52, 1.23) | 2.10 (1.70, 2.60) | 1.03 (0.76, 1.40) |
| 4 | 0.48 (0.35, 0.66) | 0.79 (0.53, 1.18) | 1.81 (1.47, 2.23) | 0.88 (0.64, 1.21) |
| 5 | 0.59 (0.41, 0.84) | 0.85 (0.53, 1.37) | 1.91 (1.53, 2.37) | 0.87 (0.63, 1.19) |
| 6+ | 0.59 (0.45, 0.78) | 0.71 (0.48, 1.06) | 1.46 (1.22, 1.75) | 0.76 (0.57, 1.02) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.51 (0.42, 0.62) | 0.57 (0.44, 0.75) | 1.44 (1.24, 1.68) | 1.33 (1.05, 1.67) |
| Formerly Married | 0.50 (0.38, 0.65) | 0.55 (0.40, 0.76) | 1.51 (1.24, 1.83) | 0.97 (0.72, 1.31) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.77 (0.63, 0.93) | 0.99 (0.77, 1.28) | 3.02 (2.56, 3.56) | 0.99 (0.79, 1.24) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Region** | | | | |
| Maputo Provincia (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Niassa | 1.39 (0.90, 2.14) | 1.49 (0.79, 2.80) | 0.26 (0.19, 0.37) | 1.21 (0.73, 1.99) |
| Cabo Delgado | 1.32 (0.87, 2.00) | 1.03 (0.56, 1.91) | 0.26 (0.19, 0.35) | 1.17 (0.76, 1.79) |
| Nampula | 0.83 (0.51, 1.34) | 0.67 (0.35, 1.29) | 0.30 (0.20, 0.44) | 1.25 (0.78, 2.00) |
| Zambezia | 1.99 (1.39, 2.86) | 1.63 (0.95, 2.79) | 0.12 (0.08, 0.18) | 0.51 (0.31, 0.83) |
| Tete | 1.35 (0.91, 1.99) | 1.32 (0.74, 2.38) | 0.21 (0.16, 0.28) | 0.80 (0.53, 1.21) |
| Manica | 1.27 (0.84, 1.90) | 1.29 (0.78, 2.15) | 0.31 (0.24, 0.41) | 0.73 (0.54, 1.01) |
| Sofala | 1.43 (1.00, 2.04) | 1.14 (0.68, 1.89) | 0.22 (0.15, 0.33) | 0.65 (0.42, 1.01) |
| Inhambane | 0.71 (0.46, 1.09) | 0.61 (0.34, 1.10) | 0.61 (0.47, 0.80) | 1.24 (0.92, 1.68) |
| Gaza | 0.83 (0.55, 1.26) | 0.90 (0.57, 1.40) | 0.52 (0.40, 0.68) | 0.83 (0.64, 1.08) |
| Maputo Cidade | 1.06 (0.74, 1.53) | 1.00 (0.67, 1.49) | 1.15 (0.94, 1.42) | 0.96 (0.80, 1.16) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.05 (0.85, 1.28) | 0.97 (0.79, 1.18) | 1.63 (1.40, 1.91) | 1.25 (1.03, 1.50) |
| Secondary | 0.79 (0.62, 1.00) | 0.67 (0.49, 0.93) | 2.79 (2.32, 3.35) | 1.38 (1.08, 1.76) |
| Higher | 1.14 (0.62, 2.12) | 1.05 (0.55, 2.03) | 8.23 (5.82, 11.6) | 1.91 (1.17, 3.10) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.91 (0.72, 1.15) | 0.94 (0.74, 1.20) | 1.17 (0.77, 1.77) | 0.99 (0.65, 1.52) |
| Middle | 0.59 (0.45, 0.77) | 0.66 (0.51, 0.86) | 2.02 (1.42, 2.86) | 1.56 (1.07, 2.26) |
| Richer | 0.53 (0.39, 0.71) | 0.71 (0.52, 0.96) | 3.49 (2.46, 4.95) | 2.27 (1.56, 3.30) |
| Richest | 0.60 (0.46, 0.77) | 0.76 (0.51, 1.14) | 9.76 (6.89, 13.8) | 5.17 (3.41, 7.85) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.65 (0.50, 0.84) | 0.92 (0.69, 1.22) | 2.73 (2.35, 3.17) | 1.07 (0.91, 1.26) |
| Manual | 0.54 (0.21, 1.41) | 0.78 (0.30, 1.97) | 2.63 (1.73, 4.02) | 1.14 (0.73, 1.80) |
| Agricultural | 1.16 (0.97, 1.38) | 1.36 (1.13, 1.65) | 0.69 (0.58, 0.84) | 0.83 (0.68, 1.02) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.79 (0.64, 0.97) | 0.75 (0.59, 0.94) | 1.12 (0.94, 1.32) | 1.05 (0.87, 1.27) |
| Exposed to two media sources | 0.66 (0.51, 0.87) | 0.76 (0.55, 1.06) | 2.43 (2.02, 2.92) | 1.18 (0.94, 1.49) |
| Exposed to three media sources | 0.75 (0.56, 1.01) | 0.85 (0.56, 1.29) | 3.69 (3.00, 4.53) | 1.25 (0.97, 1.62) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.54 (0.38, 0.77) | 0.86 (0.60, 1.24) | 2.41 (2.09, 2.77) | 1.35 (1.16, 1.58) |

Overall Model Fit: $F_{(108, 482)} = 13.93$, *P*=0.0000.

**Table S53:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Malawi.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.39 (0.27, 0.56) | 0.76 (0.49, 1.18) | 2.03 (1.45, 2.84) | 2.18 (1.43, 3.33) |
| 25-29 | 0.45 (0.30, 0.67) | 1.02 (0.58, 1.81) | 3.61 (2.63, 4.96) | 4.41 (2.69, 7.25) |
| 30-34 | 0.61 (0.41, 0.92) | 1.40 (0.78, 2.53) | 5.27 (4.01, 6.95) | 7.58 (4.73, 12.1) |
| 35-39 | 0.49 (0.33, 0.74) | 1.22 (0.66, 2.23) | 5.66 (4.06, 7.89) | 8.98 (5.38, 15.0) |
| 40-44 | 0.60 (0.39, 0.93) | 1.34 (0.72, 2.49) | 4.63 (3.28, 6.55) | 7.47 (4.45, 12.5) |
| 45-49 | 0.55 (0.33, 0.91) | 1.20 (0.59, 2.44) | 5.37 (3.84, 7.49) | 8.81 (5.14, 15.1) |
| **Ethnicity** | | | | |
| Chewa (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Tombuka | 0.88 (0.55, 1.42) | 0.88 (0.44, 1.79) | 1.43 (1.07, 1.90) | 1.01 (0.64, 1.61) |
| Lomwe | 1.37 (1.02, 1.85) | 1.30 (0.84, 2.00) | 1.12 (0.90, 1.40) | 0.95 (0.72, 1.25) |
| Tonga | 1.30 (0.69, 2.46) | 1.31 (0.58, 2.97) | 1.42 (0.88, 2.29) | 0.94 (0.50, 1.75) |
| Yao | 1.08 (0.73, 1.58) | 0.66 (0.40, 1.09) | 1.17 (0.89, 1.54) | 1.05 (0.72, 1.54) |
| Sena | 0.80 (0.45, 1.42) | 0.77 (0.40, 1.48) | 0.98 (0.65, 1.48) | 0.75 (0.48, 1.16) |
| Nkhonde | 1.01 (0.45, 2.28) | 0.96 (0.38, 2.47) | 1.93 (0.97, 3.83) | 1.15 (0.55, 2.38) |
| Ngoni | 1.28 (0.87, 1.90) | 1.34 (0.89, 2.02) | 1.73 (1.37, 2.19) | 1.45 (1.13, 1.86) |
| Mang'anja | 1.30 (0.69, 2.46) | 1.27 (0.62, 2.61) | 1.39 (0.78, 2.48) | 0.88 (0.50, 1.53) |
| Nyanja | 0.64 (0.22, 1.90) | 0.62 (0.21, 1.84) | 1.42 (0.80, 2.55) | 1.07 (0.54, 2.12) |
| Others | 0.25 (0.10, 0.65) | 0.29 (0.10, 0.84) | 1.91 (1.23, 2.98) | 1.36 (0.80, 2.30) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.86 (0.67, 1.11) | 0.94 (0.72, 1.21) | 1.04 (0.87, 1.25) | 1.03 (0.85, 1.25) |
| Islam | 1.11 (0.75, 1.64) | 1.63 (1.01, 2.62) | 0.87 (0.62, 1.21) | 0.95 (0.63, 1.45) |
| Others | 0.89 (0.10, 8.37) | 0.99 (0.09, 11.1) | 0.87 (0.15, 4.96) | 0.84 (0.18, 3.82) |
| No Religion | 1.84 (0.57, 6.00) | 2.08 (0.63, 6.95) | 1.36 (0.39, 4.68) | 1.57 (0.45, 5.50) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.45 (0.31, 0.66) | 0.91 (0.57, 1.44) | 1.32 (1.00, 1.72) | 0.61 (0.39, 0.94) |
| 2 | 0.36 (0.24, 0.55) | 0.76 (0.43, 1.36) | 1.91 (1.44, 2.54) | 0.58 (0.35, 0.96) |
| 3 | 0.54 (0.35, 0.83) | 0.97 (0.51, 1.84) | 2.23 (1.68, 2.97) | 0.50 (0.29, 0.83) |
| 4 | 0.63 (0.40, 0.99) | 0.96 (0.49, 1.88) | 2.36 (1.78, 3.12) | 0.47 (0.28, 0.80) |
| 5 | 0.45 (0.29, 0.70) | 0.63 (0.31, 1.27) | 1.84 (1.35, 2.50) | 0.37 (0.21, 0.65) |
| 6+ | 0.49 (0.34, 0.71) | 0.64 (0.33, 1.22) | 2.44 (1.89, 3.14) | 0.50 (0.29, 0.86) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.43 (0.33, 0.56) | 0.50 (0.32, 0.80) | 2.13 (1.71, 2.67) | 1.31 (0.83, 2.07) |
| Formerly Married | 0.56 (0.39, 0.82) | 0.53 (0.32, 0.88) | 2.05 (1.55, 2.72) | 1.35 (0.84, 2.16) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.11 (0.78, 1.59) | 1.25 (0.81, 1.93) | 2.78 (2.35, 3.29) | 1.41 (1.13, 1.76) |
| **Region** | | | | |
| Central (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Northern | 0.89 (0.62, 1.29) | 1.09 (0.58, 2.05) | 1.23 (0.99, 1.52) | 1.11 (0.73, 1.68) |
| Southern | 1.21 (0.95, 1.55) | 1.08 (0.74, 1.58) | 1.00 (0.85, 1.18) | 1.02 (0.82, 1.26) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.04 (0.75, 1.45) | 0.95 (0.67, 1.36) | 0.70 (0.56, 0.86) | 0.77 (0.60, 0.99) |
| Secondary | 0.95 (0.64, 1.42) | 0.75 (0.45, 1.24) | 1.21 (0.95, 1.53) | 0.86 (0.63, 1.17) |
| Higher | 0.29 (0.05, 1.60) | 0.24 (0.04, 1.43) | 2.21 (1.42, 3.45) | 0.76 (0.42, 1.37) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.79 (0.56, 1.12) | 0.77 (0.54, 1.11) | 1.05 (0.75, 1.46) | 1.07 (0.77, 1.50) |
| Middle | 0.87 (0.63, 1.20) | 0.83 (0.59, 1.17) | 1.57 (1.13, 2.18) | 1.51 (1.08, 2.11) |
| Richer | 0.96 (0.68, 1.35) | 0.92 (0.63, 1.34) | 2.23 (1.62, 3.07) | 1.96 (1.42, 2.71) |
| Richest | 0.94 (0.66, 1.35) | 0.94 (0.60, 1.47) | 4.20 (3.11, 5.67) | 2.95 (2.08, 4.19) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.57 (0.37, 0.89) | 0.85 (0.52, 1.39) | 2.28 (1.79, 2.90) | 1.08 (0.83, 1.42) |
| Manual | 0.87 (0.60, 1.24) | 1.16 (0.80, 1.69) | 1.53 (1.23, 1.91) | 1.15 (0.90, 1.48) |
| Agricultural | 0.78 (0.60, 1.01) | 1.04 (0.77, 1.39) | 0.73 (0.61, 0.89) | 0.71 (0.58, 0.88) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.72 (0.54, 0.97) | 0.76 (0.56, 1.04) | 1.32 (1.11, 1.57) | 1.04 (0.87, 1.26) |
| Exposed to two media sources | 0.75 (0.53, 1.07) | 0.74 (0.51, 1.09) | 1.96 (1.58, 2.42) | 1.17 (0.91, 1.49) |
| Exposed to three media sources | 0.66 (0.41, 1.06) | 0.64 (0.37, 1.09) | 2.41 (1.90, 3.07) | 1.05 (0.77, 1.43) |
| **Hormonal Contraceptives use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.49 (0.38, 0.64) | 0.67 (0.50, 0.90) | 1.23 (1.06, 1.44) | 1.32 (1.10, 1.60) |

Overall Model Fit: $F_{(90, 705)}$ = 9.22, *P*=0.0000.

**Table S54:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Ivory Coast.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.38 (0.25, 0.57) | 0.65 (0.40, 1.05) | 1.88 (1.31, 2.71) | 1.84 (1.28, 2.64) |
| 25-29 | 0.34 (0.23, 0.52) | 0.88 (0.49, 1.59) | 2.74 (1.88, 3.99) | 2.80 (1.83, 4.31) |
| 30-34 | 0.37 (0.21, 0.66) | 1.20 (0.58, 2.48) | 4.98 (3.38, 7.35) | 5.24 (3.15, 8.71) |
| 35-39 | 0.38 (0.23, 0.65) | 1.47 (0.74, 2.94) | 4.44 (3.05, 6.46) | 5.14 (3.10, 8.53) |
| 40-44 | 0.41 (0.24, 0.70) | 1.68 (0.78, 3.65) | 5.11 (3.58, 7.28) | 6.78 (4.08, 11.3) |
| 45-49 | 0.37 (0.21, 0.65) | 1.53 (0.71, 3.28) | 5.13 (3.62, 7.26) | 6.42 (3.83, 10.8) |
| **Ethnicity** | | | | |
| Akan (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Krou | 0.95 (0.58, 1.55) | 0.90 (0.48, 1.67) | 0.91 (0.65, 1.28) | 0.80 (0.55, 1.17) |
| Mandé du nord | 1.13 (0.70, 1.81) | 1.29 (0.68, 2.46) | 1.58 (1.15, 2.15) | 0.92 (0.57, 1.49) |
| Mandé du sud | 0.77 (0.44, 1.35) | 0.74 (0.38, 1.45) | 0.80 (0.54, 1.20) | 0.84 (0.50, 1.41) |
| Voltaïque/Gur | 1.23 (0.79, 1.94) | 1.25 (0.77, 2.03) | 0.78 (0.54, 1.12) | 0.77 (0.48, 1.26) |
| Autres nationalités | 1.14 (0.75, 1.72) | 1.30 (0.80, 2.10) | 1.04 (0.77, 1.39) | 0.84 (0.57, 1.24) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.07 (0.67, 1.71) | 1.21 (0.76, 1.94) | 0.98 (0.73, 1.30) | 1.01 (0.74, 1.36) |
| Islam | 1.14 (0.74, 1.77) | 1.23 (0.78, 1.94) | 1.26 (0.97, 1.63) | 1.33 (0.92, 1.93) |
| Traditionalist | 1.04 (0.43, 2.52) | 1.37 (0.50, 3.76) | 0.77 (0.42, 1.39) | 1.39 (0.69, 2.79) |
| Others | 0.80 (0.18, 3.46) | 1.05 (0.21, 5.21) | 0.94 (0.38, 2.34) | 1.28 (0.54, 3.02) |
| No Religion | 0.81 (0.45, 1.47) | 1.01 (0.54, 1.88) | 0.53 (0.37, 0.75) | 0.93 (0.63, 1.36) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.61 (0.39, 0.95) | 0.87 (0.53, 1.43) | 1.33 (0.95, 1.85) | 0.94 (0.60, 1.47) |
| 2 | 0.36 (0.23, 0.57) | 0.62 (0.35, 1.11) | 1.36 (0.93, 1.98) | 0.82 (0.50, 1.34) |
| 3 | 0.34 (0.17, 0.68) | 0.57 (0.27, 1.23) | 1.96 (1.42, 2.69) | 1.05 (0.64, 1.73) |
| 4 | 0.56 (0.32, 0.99) | 0.86 (0.41, 1.82) | 3.13 (2.10, 4.66) | 1.91 (1.03, 3.56) |
| 5 | 0.26 (0.14, 0.47) | 0.39 (0.18, 0.85) | 1.52 (1.04, 2.24) | 0.69 (0.38, 1.24) |
| 6+ | 0.30 (0.19, 0.48) | 0.38 (0.19, 0.77) | 1.91 (1.45, 2.51) | 1.02 (0.59, 1.76) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.36 (0.27, 0.47) | 0.46 (0.29, 0.73) | 1.76 (1.44, 2.15) | 1.11 (0.77, 1.61) |
| Formerly Married | 0.47 (0.25, 0.88) | 0.57 (0.26, 1.25) | 2.66 (1.85, 3.83) | 1.29 (0.82, 2.03) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.31 (0.98, 1.76) | 1.59 (0.82, 3.09) | 2.73 (2.23, 3.35) | 1.67 (1.15, 2.43) |
| **Region** | | | | |
| Ville d'Abidjan (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Centre | 0.77 (0.48, 1.23) | 0.82 (0.47, 1.45) | 0.40 (0.25, 0.63) | 0.73 (0.45, 1.17) |
| Centre-Est | 1.20 (0.68, 2.12) | 1.29 (0.69, 2.42) | 0.46 (0.30, 0.70) | 0.84 (0.52, 1.34) |
| Centre-Nord | 0.69 (0.38, 1.25) | 0.65 (0.36, 1.17) | 0.46 (0.31, 0.66) | 0.68 (0.46, 0.99) |
| Centre-Ouest | 0.84 (0.46, 1.54) | 1.02 (0.53, 1.95) | 0.53 (0.38, 0.75) | 1.07 (0.72, 1.58) |
| Nord | 1.05 (0.60, 1.82) | 1.42 (0.77, 2.60) | 0.26 (0.17, 0.40) | 0.50 (0.31, 0.81) |
| Nord-est | 1.24 (0.79, 1.93) | 1.08 (0.61, 1.92) | 0.21 (0.14, 0.34) | 0.49 (0.28, 0.85) |
| Nord-Ouest | 1.03 (0.65, 1.63) | 1.33 (0.73, 2.42) | 0.36 (0.24, 0.54) | 0.71 (0.42, 1.22) |
| Ouest | 0.77 (0.42, 1.41) | 1.00 (0.48, 2.08) | 0.40 (0.27, 0.58) | 0.88 (0.56, 1.37) |
| Sud sans Abidjan | 0.75 (0.41, 1.38) | 0.76 (0.38, 1.49) | 0.54 (0.37, 0.79) | 0.94 (0.61, 1.46) |
| Sud-ouest | 0.58 (0.30, 1.13) | 0.63 (0.33, 1.21) | 0.31 (0.20, 0.50) | 0.76 (0.47, 1.24) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.53 (1.05, 2.23) | 1.51 (1.02, 2.24) | 1.32 (1.08, 1.61) | 1.33 (1.04, 1.71) |
| Secondary | 1.80 (1.25, 2.59) | 1.35 (0.79, 2.31) | 1.20 (0.93, 1.55) | 1.10 (0.76, 1.60) |
| Higher | 0.05 (0.01, 0.40) | 0.04 (0.01, 0.38) | 2.02 (1.02, 4.00) | 1.24 (0.60, 2.56) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 1.00 (0.65, 1.56) | 0.88 (0.56, 1.39) | 1.55 (1.06, 2.27) | 1.33 (0.86, 2.05) |
| Middle | 0.92 (0.58, 1.45) | 0.54 (0.30, 0.96) | 1.95 (1.33, 2.87) | 1.44 (0.91, 2.29) |
| Richer | 0.87 (0.56, 1.37) | 0.41 (0.21, 0.83) | 3.41 (2.42, 4.79) | 1.71 (1.08, 2.71) |
| Richest | 1.23 (0.82, 1.85) | 0.51 (0.25, 1.05) | 4.07 (2.89, 5.74) | 2.16 (1.28, 3.63) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.49 (0.33, 0.72) | 0.56 (0.39, 0.82) | 2.10 (1.67, 2.64) | 1.31 (1.01, 1.70) |
| Manual | 1.02 (0.55, 1.88) | 1.02 (0.53, 1.97) | 1.29 (0.84, 2.00) | 1.21 (0.74, 1.97) |
| Agricultural | 0.58 (0.41, 0.84) | 0.82 (0.52, 1.28) | 0.64 (0.47, 0.86) | 0.74 (0.51, 1.07) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 1.11 (0.74, 1.66) | 0.98 (0.63, 1.54) | 1.68 (1.29, 2.18) | 1.10 (0.81, 1.49) |
| Exposed to two media sources | 1.08 (0.74, 1.58) | 0.82 (0.52, 1.29) | 2.21 (1.73, 2.83) | 1.23 (0.91, 1.66) |
| Exposed to three media sources | 1.01 (0.60, 1.69) | 0.69 (0.34, 1.39) | 2.53 (1.80, 3.54) | 1.27 (0.79, 2.03) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.61 (0.33, 1.14) | 0.83 (0.43, 1.59) | 1.84 (1.41, 2.41) | 1.38 (0.99, 1.90) |

Overall Model Fit: $F_{(98, 233)} = 6.43$, $P=0.0000$.

**Table S55:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Rwanda.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.30 (0.21, 0.43) | 0.35 (0.24, 0.52) | 1.47 (1.18, 1.83) | 1.32(1.01, 1.73) |
| 25-29 | 0.45 (0.31, 0.65) | 0.60 (0.37, 0.99) | 1.66 (1.30, 2.10) | 1.23 (0.91, 1.66) |
| 30-34 | 0.54 (0.37, 0.80) | 0.77 (0.43, 1.38) | 1.92 (1.53, 2.40) | 1.28 (0.92, 1.79) |
| 35-39 | 0.61 (0.42, 0.91) | 0.92 (0.50, 1.71) | 2.29 (1.80, 2.91) | 1.37 (0.94, 2.00) |
| 40-44 | 0.55 (0.36, 0.83) | 0.79 (0.42, 1.51) | 1.95 (1.51, 2.51) | 1.29 (0.86, 1.95) |
| 45-49 | 1.02 (0.71, 1.46) | 1.42 (0.76, 2.66) | 1.67 (1.26, 2.21) | 1.25 (0.81, 1.93) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.83 (0.66, 1.04) | 0.88 (0.69, 1.12) | 1.22 (1.06, 1.40) | 1.18 (1.02, 1.35) |
| Islam | 0.65 (0.29, 1.45) | 0.58 (0.24, 1.42) | 1.94 (1.21, 3.12) | 1.07 (0.68, 1.67) |
| No Religion | 1.62 (0.34, 7.63) | 1.78 (0.38, 8.36) | 2.05 (0.73, 5.81) | 2.41 (0.82, 7.07) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.53 (0.36, 0.77) | 0.84 (0.48, 1.48) | 1.22 (0.99, 1.52) | 0.87 (0.64, 1.19) |
| 2 | 0.64 (0.45, 0.92) | 0.91 (0.46, 1.82) | 1.57 (1.26, 1.97) | 1.11 (0.77, 1.60) |
| 3 | 0.51 (0.33, 0.79) | 0.60 (0.28, 1.27) | 1.62 (1.29, 2.03) | 1.21 (0.80, 1.81) |
| 4 | 0.87 (0.59, 1.29) | 0.91 (0.42, 1.97) | 1.73 (1.38, 2.16) | 1.39 (0.93, 2.08) |
| 5 | 1.07 (0.70, 1.63) | 1.02 (0.47, 2.21) | 1.94 (1.48, 2.55) | 1.59 (1.01, 2.49) |
| 6+ | 0.69 (0.47, 1.00) | 0.60 (0.27, 1.37) | 1.60 (1.29, 1.99) | 1.47 (0.93, 2.31) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.63 (0.50, 0.80) | 0.97 (0.56, 1.69) | 1.76 (1.52, 2.05) | 1.58 (1.19, 2.11) |
| Formerly Married | 1.14 (0.82, 1.58) | 1.10 (0.62, 1.98) | 1.32 (1.05, 1.65) | 1.46 (1.02, 2.08) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.05 (0.81, 1.35) | 1.24 (0.88, 1.74) | 2.86 (2.43, 3.37) | 1.45 (1.14, 1.85) |
| **Region** | | | | |
| Kigali City (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| South | 1.39 (0.99, 1.94) | 1.31 (0.87, 1.97) | 0.38 (0.31, 0.47) | 1.02 (0.77, 1.37) |
| West | 0.73 (0.49, 1.09) | 0.65 (0.41, 1.03) | 0.46 (0.37, 0.59) | 1.23 (0.90, 1.70) |
| North | 0.70 (0.45, 1.08) | 0.64 (0.39, 1.06) | 0.49 (0.38, 0.62) | 1.34 (0.98, 1.83) |
| East | 1.15 (0.80, 1.65) | 1.24 (0.82, 1.88) | 0.48 (0.39, 0.60) | 1.26 (0.93, 1.70) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.86 (0.62, 1.20) | 0.95 (0.67, 1.34) | 1.27 (1.02, 1.58) | 1.23 (0.98, 1.56) |
| Secondary | 0.84 (0.58, 1.23) | 0.83 (0.52, 1.34) | 1.67 (1.30, 2.13) | 1.33 (1.00, 1.77) |
| Higher | 1.94 (1.02, 3.68) | 2.58 (1.19, 5.57) | 4.39 (2.87, 6.74) | 1.77 (1.12, 2.80) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.68 (0.49, 0.94) | 0.68 (0.49, 0.94) | 1.42 (1.09, 1.85) | 1.33 (1.00, 1.76) |
| Middle | 0.67 (0.48, 0.93) | 0.69 (0.50, 0.95) | 1.55 (1.21, 1.99) | 1.42 (1.09, 1.85) |
| Richer | 0.50 (0.35, 0.73) | 0.45 (0.31, 0.67) | 2.32 (1.78, 3.01) | 2.03 (1.51, 2.72) |
| Richest | 0.65 (0.48, 0.88) | 0.43 (0.28, 0.64) | 4.54 (3.56, 5.79) | 2.72 (1.93, 3.85) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.47 (0.32, 0.69) | 0.55 (0.36, 0.83) | 2.07 (1.67, 2.55) | 1.26 (0.98, 1.61) |
| Manual | 0.71 (0.39, 1.29) | 0.79 (0.44, 1.43) | 1.27 (0.87, 1.85) | 0.97 (0.67, 1.39) |
| Agricultural | 0.54 (0.41, 0.70) | 0.51 (0.37, 0.71) | 0.68 (0.56, 0.81) | 0.67 (0.52, 0.87) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.70 (0.52, 0.95) | 0.78 (0.56, 1.07) | 1.70 (1.32, 2.18) | 1.41 (1.08, 1.84) |
| Exposed to two media sources | 0.62 (0.45, 0.85) | 0.66 (0.46, 0.95) | 2.35 (1.83, 3.00) | 1.53 (1.15, 2.03) |
| Exposed to three media sources | 0.86 (0.61, 1.21) | 0.88 (0.58, 1.32) | 2.71 (2.10, 3.50) | 1.51 (1.12, 2.04) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.48 (0.35, 0.65) | 0.63 (0.45, 0.88) | 1.55 (1.34, 1.80) | 1.33 (1.11, 1.61) |

Overall Model Fit: $F_{(72, 361)} = 8.40$, *P*=0.0000.

**Table S56:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Liberia.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.36 (0.22, 0.58) | 0.56 (0.32, 1.00) | 2.18 (1.17, 4.05) | 1.40 (0.67, 2.89) |
| 25-29 | 0.29 (0.16, 0.53) | 0.47 (0.22, 1.01) | 4.18 (2.31, 7.55) | 2.25 (1.08, 4.69) |
| 30-34 | 0.45 (0.27, 0.78) | 0.66 (0.34, 1.28) | 6.13 (3.47, 10.8) | 3.00 (1.36, 6.61) |
| 35-39 | 0.32 (0.16, 0.65) | 0.54 (0.18, 1.59) | 8.60 (4.97, 14.9) | 4.11 (1.86, 9.08) |
| 40-44 | 0.69 (0.37, 1.29) | 1.22 (0.45, 3.33) | 10.4 (5.94, 18.2) | 5.61 (2.47, 12.7) |
| 45-49 | 0.86 (0.45, 1.63) | 1.53 (0.54, 4.35) | 10.8 (6.05, 19.3) | 6.38 (2.92, 13.9) |
| **Ethnicity** | | | | |
| Kpelle (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Bassa | 1.29 (0.81, 2.06) | 2.10 (1.09, 4.02) | 0.78 (0.57, 1.05) | 0.59 (0.38, 0.93) |
| Gio | 1.52 (0.73, 3.13) | 2.77 (0.50, 15.5) | 0.65 (0.34, 1.24) | 0.72 (0.35, 1.45) |
| Gola | 0.77 (0.39, 1.52) | 1.24 (0.59, 2.59) | 1.23 (0.83, 1.84) | 0.84 (0.47, 1.51) |
| Grebo | 0.85 (0.47, 1.54) | 1.86 (0.61, 5.64) | 1.27 (0.78, 2.07) | 1.01 (0.44, 2.32) |
| Kissi | 0.77 (0.37, 1.63) | 1.01 (0.44, 2.30) | 1.47 (0.75, 2.88) | 1.28 (0.63, 2.64) |
| Krahn | 0.49 (0.25, 0.94) | 0.76 (0.33, 1.72) | 1.28 (0.79, 2.06) | 1.13 (0.47, 2.75) |
| Kru | 0.85 (0.38, 1.90) | 2.03 (0.64, 6.38) | 1.89 (1.21, 2.97) | 1.15 (0.52, 2.52) |
| Lorma | 0.99 (0.40, 2.44) | 1.53 (0.59, 3.94) | 1.22 (0.69, 2.15) | 1.07 (0.51, 2.25) |
| Mano | 0.26 (0.11, 0.60) | 0.48 (0.12, 2.01) | 0.81 (0.57, 1.17) | 0.90 (0.46, 1.75) |
| Vai | 1.03 (0.33, 3.17) | 2.01 (0.57, 7.14) | 1.91 (1.13, 3.24) | 1.41 (0.70, 2.83) |
| Others | 1.30 (0.71, 2.38) | 2.08 (1.08, 4.01) | 1.02 (0.70, 1.49) | 0.82 (0.50, 1.36) |
| **Religion** | | | | |
| Other Christians (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Islam | 0.80 (0.39, 1.64) | 0.67 (0.30, 1.50) | 1.23 (0.93, 1.64) | 1.07 (0.70, 1.65) |
| No Religion | 0.76 (0.29, 1.98) | 0.69 (0.30, 1.57) | 0.53 (0.28, 0.98) | 0.94 (0.41, 2.13) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.33 (0.20, 0.54) | 0.52 (0.31, 0.87) | 2.21 (1.45, 3.36) | 1.62 (0.94, 2.80) |
| 2 | 0.40 (0.25, 0.64) | 0.67 (0.40, 1.14) | 3.81 (2.38, 6.11) | 2.07 (1.08, 3.98) |
| 3 | 0.40 (0.19, 0.86) | 0.64 (0.28, 1.49) | 3.78 (2.32, 6.14) | 1.92 (0.97, 3.79) |
| 4 | 0.54 (0.28, 1.03) | 0.76 (0.34, 1.66) | 4.89 (2.93, 8.18) | 2.29 (1.08, 4.86) |
| 5 | 0.67 (0.37, 1.22) | 0.76 (0.33, 1.75) | 8.63 (5.69, 13.1) | 3.31 (1.64, 6.67) |
| 6+ | 0.48 (0.30, 0.74) | 0.39 (0.17, 0.92) | 5.92 (3.77, 9.28) | 2.20 (1.05, 4.60) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.66 (0.46, 0.96) | 0.90 (0.55, 1.50) | 3.93 (2.98, 5.17) | 1.66 (1.10, 2.51) |
| Formerly Married | 0.38 (0.22, 0.66) | 0.45 (0.24, 0.86) | 4.14 (2.77, 6.19) | 1.57 (0.96, 2.55) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.93 (0.67, 1.29) | 1.21 (0.81, 1.81) | 1.50 (1.20, 1.88) | 1.15 (0.84, 1.56) |

|  | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Region** | | | | |
| Montserrado (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Bomi | 1.05 (0.52, 2.10) | 1.12 (0.47, 2.68) | 0.98 (0.67, 1.44) | 1.67 (0.99, 2.83) |
| Bong | 1.31 (0.80, 2.15) | 1.47 (0.72, 3.00) | 0.47 (0.29, 0.73) | 0.77 (0.41, 1.45) |
| Gbarpolu | 1.60 (0.91, 2.79) | 1.23 (0.59, 2.58) | 0.79 (0.48, 1.32) | 1.38 (0.77, 2.46) |
| Grand Basa | 1.21 (0.66, 2.24) | 0.76 (0.34, 1.68) | 0.56 (0.41, 0.77) | 1.13 (0.72, 1.78) |
| Grand Cape Mount | 0.48 (0.20, 1.17) | 0.35 (0.11, 1.19) | 0.96 (0.62, 1.46) | 1.18 (0.65, 2.14) |
| Grand Gedeh | 0.70 (0.36, 1.37) | 0.95 (0.44, 2.06) | 0.62 (0.42, 0.93) | 0.76 (0.31, 1.85) |
| Grand Kru | 0.43 (0.15, 1.25) | 0.21 (0.05, 0.88) | 0.71 (0.44, 1.14) | 1.21 (0.50, 2.94) |
| Lofa | 0.99 (0.53, 1.83) | 0.88 (0.39, 2.02) | 0.35 (0.24, 0.51) | 0.57 (0.32, 1.04) |
| Margibi | 1.31 (0.74, 2.32) | 1.14 (0.54, 2.41) | 0.72 (0.52, 0.98) | 1.00 (0.66, 1.49) |
| Maryland | 0.70 (0.35, 1.38) | 0.40 (0.13, 1.21) | 0.66 (0.39, 1.11) | 0.88 (0.35, 2.25) |
| Nimba | 0.87 (0.48, 1.59) | 0.70 (0.15, 3.21) | 0.44 (0.28, 0.69) | 0.71 (0.28, 1.81) |
| River Cess | 0.93 (0.53, 1.64) | 0.41 (0.17, 0.98) | 0.41 (0.28, 0.61) | 1.04 (0.56, 1.93) |
| River Gee | 0.83 (0.43, 1.61) | 0.60 (0.21, 1.73) | 0.63 (0.33, 1.22) | 0.92 (0.35, 2.41) |
| Sinoe | 0.93 (0.45, 1.92) | 0.56 (0.20, 1.59) | 0.84 (0.53, 1.33) | 1.06 (0.50, 2.25) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.39 (0.95, 2.04) | 0.99 (0.64, 1.52) | 0.61 (0.49, 0.77) | 1.04 (0.76, 1.44) |
| Secondary | 0.70 (0.40, 1.22) | 0.47 (0.23, 0.96) | 0.86 (0.66, 1.12) | 1.13 (0.77, 1.67) |
| Higher | 0.37 (0.06, 2.43) | 0.28 (0.04, 2.00) | 2.15 (1.13, 4.06) | 1.94 (0.90, 4.18) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.91 (0.64, 1.28) | 0.86 (0.58, 1.29) | 1.22 (0.93, 1.60) | 1.27 (0.96, 1.70) |
| Middle | 0.63 (0.42, 0.93) | 0.57 (0.36, 0.90) | 1.38 (1.05, 1.82) | 1.35 (0.98, 1.86) |
| Richer | 0.57 (0.33, 1.00) | 0.38 (0.21, 0.70) | 1.94 (1.35, 2.77) | 1.94 (1.30, 2.89) |
| Richest | 0.92 (0.55, 1.56) | 0.54 (0.25, 1.19) | 2.51 (1.90, 3.31) | 2.60 (1.50, 4.49) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.67 (0.44, 1.01) | 0.95 (0.59, 1.52) | 2.24 (1.69, 2.97) | 1.04 (0.73, 1.47) |
| Manual | 1.51 (0.68, 3.36) | 1.60 (0.82, 3.13) | 2.35 (1.39, 3.96) | 1.24 (0.74, 2.08) |
| Agricultural | 1.04 (0.74, 1.46) | 0.97 (0.64, 1.48) | 0.88 (0.67, 1.16) | 0.67 (0.49, 0.91) |
| Others | 1.47 (0.48, 4.46) | 1.00 (0.34, 3.00) | 0.77 (0.18, 3.20) | 2.14 (0.57, 7.99) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 1.31 (0.91, 1.89) | 1.50 (1.01, 2.20) | 1.45 (1.16, 1.80) | 1.23 (0.95, 1.59) |
| Exposed to two media sources | 1.03 (0.63, 1.68) | 1.31 (0.68, 2.52) | 1.78 (1.39, 2.27) | 1.37 (0.99, 1.88) |
| Exposed to three media sources | 1.15 (0.65, 2.04) | 1.67 (0.79, 3.55) | 1.66 (1.22, 2.27) | 1.17 (0.67, 2.05) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.52 (0.32, 0.84) | 0.71 (0.42, 1.20) | 1.13 (0.92, 1.39) | 1.09 (0.84, 1.42) |

Overall Model Fit: $F_{(114, 179)} = 13.28$, $P=0.0000$.

**Table S57:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Benin.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.57 (0.46, 0.70) | 0.68 (0.53, 0.86) | 1.46 (1.21, 1.78) | 1.37 (1.09, 1.73) |
| 25-29 | 0.32 (0.24, 0.41) | 0.45 (0.32, 0.62) | 2.24 (1.86, 2.70) | 2.09 (1.62, 2.69) |
| 30-34 | 0.39 (0.31, 0.50) | 0.58 (0.41, 0.82) | 3.06 (2.55, 3.66) | 3.03 (2.30, 3.98) |
| 35-39 | 0.39 (0.29, 0.51) | 0.59 (0.39, 0.88) | 4.27 (3.57, 5.10) | 4.32 (3.27, 5.72) |
| 40-44 | 0.38 (0.28, 0.51) | 0.56 (0.36, 0.86) | 4.41 (3.68, 5.28) | 4.74 (3.55, 6.33) |
| 45-49 | 0.41 (0.27, 0.60) | 0.59 (0.36, 0.95) | 4.81 (3.98, 5.81) | 5.28 (3.93, 7.09) |
| **Ethnicity** | | | | |
| Fon (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Adja | 0.92 (0.74, 1.15) | 0.91 (0.60, 1.37) | 0.83 (0.72, 0.96) | 1.23 (0.97, 1.56) |
| Bariba | 0.73 (0.50, 1.04) | 1.38 (0.69, 2.73) | 0.47 (0.39, 0.57) | 0.72 (0.52, 1.00) |
| Dendi | 0.66 (0.38, 1.14) | 1.16 (0.59, 2.30) | 0.72 (0.57, 0.91) | 0.92 (0.67, 1.26) |
| Yoa | 0.53 (0.32, 0.87) | 1.35 (0.69, 2.67) | 0.41 (0.32, 0.53) | 0.84 (0.59, 1.21) |
| Betamaribe | 1.04 (0.78, 1.38) | 1.24 (0.60, 2.58) | 0.21 (0.16, 0.28) | 0.76 (0.53, 1.10) |
| Peulh | 0.80 (0.49, 1.32) | 1.56 (0.78, 3.10) | 0.42 (0.31, 0.56) | 0.70 (0.46, 1.04) |
| Yoruba | 1.11 (0.85, 1.44) | 1.11 (0.78, 1.56) | 0.85 (0.72, 1.00) | 0.79 (0.65, 0.95) |
| Other Béninois | 1.08 (0.29, 4.01) | 1.96 (0.51, 7.50) | 0.76 (0.31, 1.85) | 0.95 (0.44, 2.03) |
| Other Nationalities | 1.07 (0.47, 2.43) | 1.33 (0.55, 3.19) | 1.54 (1.10, 2.15) | 1.27 (0.90, 1.79) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.08 (0.86, 1.37) | 1.12 (0.89, 1.41) | 0.89 (0.78, 1.00) | 0.95 (0.83, 1.09) |
| Islam | 0.78 (0.60, 1.02) | 0.92 (0.66, 1.29) | 0.68 (0.60, 0.78) | 1.24 (1.03, 1.50) |
| Traditionalists | 1.46 (1.14, 1.85) | 1.76 (1.37, 2.27) | 0.51 (0.43, 0.61) | 0.77 (0.64, 0.94) |
| Others | 0.97 (0.54, 1.73) | 0.97 (0.55, 1.71) | 0.94 (0.69, 1.28) | 1.13 (0.80, 1.58) |
| No Religion | 1.07 (0.78, 1.48) | 1.13 (0.82, 1.57) | 0.51 (0.40, 0.64) | 0.78 (0.61, 1.00) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.64 (0.50, 0.82) | 1.09 (0.79, 1.50) | 1.51 (1.28, 1.79) | 1.14 (0.87, 1.50) |
| 2 | 0.53 (0.42, 0.67) | 1.08 (0.75, 1.57) | 1.90 (1.63, 2.23) | 1.10 (0.84, 1.45) |
| 3 | 0.39 (0.30, 0.52) | 0.86 (0.57, 1.28) | 2.14 (1.84, 2.49) | 1.19 (0.89, 1.58) |
| 4 | 0.41 (0.30, 0.54) | 0.89 (0.57, 1.37) | 2.52 (2.15, 2.95) | 1.29 (0.97, 1.73) |
| 5 | 0.44 (0.32, 0.61) | 0.96 (0.62, 1.49) | 2.12 (1.78, 2.53) | 1.10 (0.82, 1.49) |
| 6+ | 0.45 (0.35, 0.58) | 0.97 (0.63, 1.51) | 2.09 (1.79, 2.43) | 1.09 (0.81, 1.47) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.47 (0.40, 0.55) | 0.77 (0.56, 1.05) | 1.97 (1.74, 2.23) | 0.96 (0.73, 1.28) |
| Formerly Married | 0.37 (0.23, 0.60) | 0.57 (0.32, 1.01) | 2.54 (2.08, 3.12) | 0.88 (0.63, 1.23) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.03 (0.86, 1.23) | 1.08 (0.88, 1.34) | 1.92 (1.73, 2.13) | 1.26 (1.12, 1.43) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Region** | | | | |
| Ouémé (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Alibori | 0.73 (0.43, 1.24) | 0.66 (0.33, 1.32) | 0.45 (0.36, 0.56) | 0.69 (0.49, 0.98) |
| Atacora | 0.99 (0.69, 1.43) | 0.71 (0.32, 1.57) | 0.20 (0.16, 0.25) | 0.35 (0.25, 0.49) |
| Atlantique | 1.15 (0.82, 1.62) | 1.06 (0.75, 1.48) | 0.84 (0.69, 1.01) | 0.89 (0.71, 1.10) |
| Borgou | 0.56 (0.37, 0.86) | 0.45 (0.25, 0.82) | 0.56 (0.45, 0.69) | 0.71 (0.52, 0.97) |
| Collines | 0.93 (0.64, 1.35) | 0.94 (0.61, 1.45) | 0.79 (0.64, 0.96) | 1.14 (0.90, 1.43) |
| Couffo | 0.72 (0.49, 1.05) | 0.65 (0.38, 1.13) | 0.33 (0.25, 0.44) | 0.41 (0.29, 0.60) |
| Donga | 0.38 (0.24, 0.61) | 0.35 (0.19, 0.65) | 0.30 (0.23, 0.38) | 0.33 (0.23, 0.47) |
| Littoral | 0.73 (0.48, 1.10) | 0.57 (0.37, 0.89) | 1.38 (1.14, 1.66) | 1.01 (0.81, 1.26) |
| Mono | 1.21 (0.83, 1.76) | 1.08 (0.63, 1.88) | 0.96 (0.79, 1.17) | 1.05 (0.77, 1.44) |
| Pateau | 1.38 (0.96, 1.98) | 1.35 (0.90, 2.05) | 0.72 (0.55, 0.95) | 1.03 (0.76, 1.40) |
| Zou | 1.08 (0.80, 1.46) | 0.95 (0.69, 1.31) | 0.74 (0.61, 0.90) | 0.92 (0.74, 1.13) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.26 (1.01, 1.57) | 1.10 (0.86, 1.42) | 1.62 (1.45, 1.81) | 1.26 (1.10, 1.43) |
| Secondary | 1.62 (1.34, 1.95) | 1.11 (0.85, 1.46) | 1.07 (0.95, 1.20) | 1.06 (0.90, 1.25) |
| Higher | 0.88 (0.42, 1.85) | 0.90 (0.40, 2.03) | 1.66 (1.20, 2.28) | 0.92 (0.64, 1.33) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.82 (0.64, 1.05) | 0.85 (0.66, 1.09) | 1.40 (1.18, 1.67) | 1.36 (1.15, 1.62) |
| Middle | 0.72 (0.55, 0.94) | 0.70 (0.53, 0.93) | 1.86 (1.57, 2.19) | 1.63 (1.37, 1.95) |
| Richer | 0.80 (0.61, 1.04) | 0.79 (0.58, 1.07) | 2.78 (2.36, 3.28) | 2.04 (1.70, 2.45) |
| Richest | 0.96 (0.73, 1.27) | 1.04 (0.72, 1.49) | 3.72 (3.16, 4.37) | 2.40 (1.94, 2.98) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.54 (0.45, 0.65) | 0.78 (0.63, 0.97) | 2.06 (1.85, 2.28) | 1.23 (1.09, 1.38) |
| Manual | 0.96 (0.73, 1.28) | 1.14 (0.84, 1.54) | 1.24 (1.01, 1.51) | 0.90 (0.73, 1.12) |
| Agricultural | 0.64 (0.50, 0.81) | 0.81 (0.63, 1.05) | 0.88 (0.75, 1.03) | 0.96 (0.81, 1.13) |
| Others | 0.60 (0.39, 0.92) | 0.85 (0.54, 1.35) | 2.17 (1.75, 2.69) | 1.15 (0.92, 1.43) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.84 (0.66, 1.07) | 0.82 (0.64, 1.07) | 1.04 (0.92, 1.18) | 0.82 (0.72, 0.94) |
| Exposed to two media sources | 0.87 (0.71, 1.06) | 0.80 (0.63, 1.02) | 1.66 (1.48, 1.87) | 0.93 (0.81, 1.06) |
| Exposed to three media sources | 1.23 (0.93, 1.64) | 0.84 (0.60, 1.19) | 1.42 (1.23, 1.65) | 0.88 (0.72, 1.08) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.58 (0.37, 0.92) | 0.80 (0.50, 1.29) | 1.65 (1.36, 2.00) | 1.19 (0.95, 1.48) |

Overall Model Fit: $F_{(110, 506)} = 13.85$, *P*=0.0000.

**Table S58:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Kenya.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.59 (0.47, 0.75) | 0.83 (0.63, 1.09) | 1.82 (1.43, 2.32) | 1.08 (0.80, 1.46) |
| 25-29 | 0.58 (0.46, 0.73) | 0.93 (0.66, 1.32) | 3.51 (2.78, 4.42) | 1.73 (1.25, 2.39) |
| 30-34 | 0.42 (0.32, 0.55) | 0.67 (0.45, 1.00) | 5.21 (4.11, 6.60) | 2.63 (1.82, 3.79) |
| 35-39 | 0.55 (0.42, 0.71) | 0.79 (0.53, 1.18) | 4.83 (3.85, 6.06) | 2.85 (1.97, 4.14) |
| 40-44 | 0.50 (0.37, 0.68) | 0.70 (0.44, 1.10) | 5.93 (4.70, 7.48) | 3.82 (2.66, 5.49) |
| 45-49 | 0.63 (0.46, 0.86) | 0.84 (0.52, 1.34) | 6.18 (4.80, 7.94) | 4.35 (2.97, 6.37) |
| **Ethnicity** | | | | |
| Kikuyu (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Embu | 0.93 (0.39, 2.21) | 1.06 (0.44, 2.57) | 0.46 (0.28, 0.75) | 0.50 (0.29, 0.86) |
| Kalenjin | 1.45 (1.07, 1.96) | 1.10 (0.71, 1.70) | 0.26 (0.22, 0.31) | 0.42 (0.33, 0.54) |
| Kamba | 1.28 (0.91, 1.81) | 1.24 (0.70, 2.20) | 0.54 (0.44, 0.67) | 0.68 (0.48, 0.96) |
| Kisii | 0.55 (0.32, 0.95) | 0.54 (0.26, 1.12) | 0.49 (0.40, 0.60) | 0.75 (0.54, 1.04) |
| Luhya | 0.85 (0.61, 1.18) | 0.63 (0.36, 1.12) | 0.44 (0.35, 0.55) | 0.77 (0.58, 1.02) |
| Luo | 0.84 (0.60, 1.16) | 0.79 (0.45, 1.37) | 0.35 (0.29, 0.43) | 0.58 (0.42, 0.80) |
| Maasai | 4.04 (2.80, 5.83) | 2.34 (1.40, 3.91) | 0.37 (0.25, 0.56) | 0.76 (0.47, 1.22) |
| Meru | 1.22 (0.80, 1.86) | 1.23 (0.64, 2.35) | 0.40 (0.31, 0.53) | 0.47 (0.31, 0.71) |
| Mijikenda/Swahili | 1.48 (1.03, 2.12) | 0.51 (0.28, 0.91) | 0.33 (0.25, 0.42) | 0.56 (0.38, 0.84) |
| Somali | 4.80 (3.39, 6.78) | 1.22 (0.45, 3.31) | 0.42 (0.30, 0.60) | 1.27 (0.58, 2.79) |
| Taita/Taveta | 0.76 (0.32, 1.79) | 0.55 (0.20, 1.46) | 1.06 (0.73, 1.54) | 0.90 (0.56, 1.45) |
| Turkana | 7.05 (4.85, 10.2) | 2.95 (1.75, 4.99) | 0.09 (0.05, 0.20) | 0.22 (0.10, 0.48) |
| Samburu | 6.66 (4.19, 10.6) | 3.18 (1.86, 5.43) | 0.06 (0.02, 0.13) | 0.10 (0.04, 0.26) |
| Other | 1.94 (1.32, 2.84) | 0.85 (0.48, 1.51) | 0.39 (0.29, 0.53) | 0.72 (0.47, 1.09) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.81 (0.66, 0.98) | 0.89 (0.72, 1.09) | 0.93 (0.80, 1.08) | 0.94 (0.82, 1.09) |
| Islam | 2.35 (1.81, 3.03) | 1.70 (1.11, 2.59) | 0.90 (0.72, 1.13) | 1.19 (0.84, 1.67) |
| Others | 1.38 (0.42, 4.54) | 1.41 (0.51, 3.94) | 1.06 (0.54, 2.10) | 0.65 (0.36, 1.18) |
| No Religion | 1.46 (0.94, 2.27) | 1.19 (0.75, 1.89) | 0.36 (0.23, 0.55) | 0.62 (0.38, 1.02) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.59 (0.45, 0.77) | 0.93 (0.67, 1.28) | 2.22 (1.83, 2.68) | 1.23 (0.93, 1.63) |
| 2 | 0.54 (0.42, 0.71) | 0.90 (0.63, 1.28) | 3.48 (2.92, 4.16) | 1.57 (1.16, 2.13) |
| 3 | 0.65 (0.50, 0.86) | 0.98 (0.66, 1.45) | 3.64 (2.97, 4.45) | 1.54 (1.11, 2.14) |
| 4 | 0.66 (0.50, 0.87) | 0.85 (0.57, 1.28) | 3.15 (2.57, 3.86) | 1.40 (0.98, 1.98) |
| 5 | 0.67 (0.50, 0.91) | 0.99 (0.63, 1.56) | 3.01 (2.42, 3.74) | 1.38 (0.95, 2.00) |
| 6+ | 0.74 (0.59, 0.93) | 0.81 (0.53, 1.25) | 1.99 (1.66, 2.38) | 1.09 (0.76, 1.57) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.65 (0.56, 0.76) | 0.74 (0.57, 0.96) | 2.74 (2.39, 3.14) | 1.42 (1.13, 1.79) |
| Formerly Married | 0.66 (0.51, 0.86) | 0.78 (0.55, 1.12) | 2.59 (2.14, 3.15) | 1.16 (0.88, 1.54) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.60 (0.50, 0.72) | 1.03 (0.84, 1.27) | 2.06 (1.82, 2.34) | 1.13 (0.98, 1.31) |

|  | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Region** | | | | |
| Nairobi (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Coast | 3.53 (1.97, 6.31) | 2.08 (1.10, 3.95) | 0.61 (0.45, 0.82) | 1.27 (0.86, 1.88) |
| North Eastern | 10.1 (5.56, 18.4) | 1.24 (0.44, 3.53) | 0.39 (0.25, 0.59) | 0.69 (0.33, 1.45) |
| Eastern | 2.98 (1.67, 5.30) | 1.40 (0.75, 2.62) | 0.54 (0.40, 0.71) | 1.17 (0.79, 1.74) |
| Central | 2.43 (1.33, 4.44) | 1.95 (0.96, 3.96) | 1.08 (0.82, 1.42) | 1.10 (0.80, 1.52) |
| Rift Valley | 3.58 (2.04, 6.29) | 1.59 (0.85, 2.95) | 0.50 (0.39, 0.66) | 1.15 (0.85, 1.55) |
| Western | 2.31 (1.27, 4.20) | 1.94 (0.96, 3.92) | 0.39 (0.26, 0.57) | 0.85 (0.55, 1.32) |
| Nyanza | 1.67 (0.93, 3.01) | 1.37 (0.71, 2.65) | 0.42 (0.32, 0.56) | 0.93 (0.65, 1.33) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.34 (0.28, 0.42) | 0.82 (0.63, 1.07) | 1.60 (1.24, 2.05) | 1.18 (0.85, 1.63) |
| Secondary | 0.25 (0.20, 0.31) | 0.64 (0.46, 0.89) | 1.93 (1.50, 2.49) | 1.29 (0.91, 1.81) |
| Higher | 0.24 (0.16, 0.36) | 0.86 (0.54, 1.38) | 2.96 (2.20, 3.99) | 1.27 (0.86, 1.87) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.52 (0.43, 0.63) | 0.86 (0.69, 1.08) | 1.70 (1.39, 2.07) | 1.50 (1.21, 1.87) |
| Middle | 0.37 (0.30, 0.46) | 0.63 (0.50, 0.80) | 2.29 (1.89, 2.78) | 1.83 (1.47, 2.28) |
| Richer | 0.30 (0.23, 0.39) | 0.58 (0.43, 0.78) | 4.12 (3.39, 5.00) | 2.82 (2.24, 3.56) |
| Richest | 0.28 (0.21, 0.37) | 0.55 (0.39, 0.77) | 5.92 (4.88, 7.19) | 3.75 (2.88, 4.89) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.41 (0.33, 0.50) | 0.67 (0.53, 0.84) | 2.62 (2.27, 3.01) | 1.25 (1.04, 1.50) |
| Manual | 0.38 (0.27, 0.52) | 0.54 (0.39, 0.75) | 1.71 (1.37, 2.14) | 1.05 (0.81, 1.37) |
| Agricultural | 0.55 (0.45, 0.66) | 0.78 (0.63, 0.98) | 1.63 (1.40, 1.89) | 1.00 (0.82, 1.22) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.47 (0.39, 0.57) | 0.73 (0.59, 0.90) | 1.70 (1.40, 2.06) | 1.26 (1.02, 1.55) |
| Exposed to two media sources | 0.34 (0.28, 0.42) | 0.61 (0.48, 0.78) | 2.31 (1.91, 2.79) | 1.21 (0.97, 1.50) |
| Exposed to three media sources | 0.32 (0.25, 0.41) | 0.58 (0.42, 0.80) | 3.12 (2.53, 3.84) | 1.56 (1.22, 1.99) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.44 (0.36, 0.54) | 0.70 (0.56, 0.87) | 1.55 (1.39, 1.73) | 1.14 (1.00, 1.31) |

Overall Model Fit: $F_{(108, 1393)} = 16.96$, $P=0.0000$.

**Table S59:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Sao Tome and Principe.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.99 (0.63, 1.55) | 1.36 (0.73, 2.55) | 1.98 (1.30, 3.04) | 1.35 (0.78, 2.33) |
| 25-29 | 0.42 (0.19, 0.92) | 0.52 (0.15, 1.78) | 3.03 (1.88, 4.89) | 1.64 (0.92, 2.94) |
| 30-34 | 0.36 (0.17, 0.76) | 0.45 (0.12, 1.69) | 4.31 (2.69, 6.90) | 2.14 (1.12, 4.11) |
| 35-39 | 0.53 (0.22, 1.29) | 0.63 (0.15, 2.65) | 6.37 (3.96, 10.24) | 3.17 (1.62, 6.20) |
| 40-44 | 0.27 (0.11, 0.65) | 0.32 (0.08, 1.24) | 5.29 (3.15, 8.89) | 2.65 (1.27, 5.52) |
| 45-49 | 0.63 (0.24, 1.70) | 0.60 (0.23, 1.59) | 7.17 (4.79, 10.75) | 3.70 (1.86, 7.34) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.43 (0.20, 0.95) | 0.35 (0.15, 0.80) | 0.86 (0.62, 1.20) | 1.12 (0.76, 1.64) |
| Others | 0.17 (0.03, 0.88) | 0.14 (0.02, 0.77) | 1.08 (0.62, 1.88) | 1.19 (0.68, 2.09) |
| None | 0.69 (0.37, 1.29) | 0.57 (0.30, 1.08) | 0.61 (0.37, 0.99) | 0.76 (0.45, 1.29) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.58 (0.30, 1.14) | 0.92 (0.40, 2.09) | 2.73 (1.59, 4.71) | 0.84 (0.36, 1.96) |
| 2 | 0.42 (0.21, 0.81) | 0.79 (0.23, 2.73) | 2.43 (1.52, 3.90) | 0.55 (0.21, 1.42) |
| 3 | 0.42 (0.20, 0.90) | 1.15 (0.32, 4.12) | 3.36 (2.09, 5.41) | 0.66 (0.26, 1.64) |
| 4 | 0.47 (0.19, 1.17) | 1.30 (0.27, 6.29) | 4.74 (2.92, 7.68) | 0.86 (0.32, 2.33) |
| 5 | 0.36 (0.14, 0.91) | 1.11 (0.27, 4.53) | 5.33 (3.34, 8.50) | 0.83 (0.31, 2.24) |
| 6+ | 0.31 (0.12, 0.75) | 0.91 (0.24, 3.50) | 4.16 (2.64, 6.54) | 0.63 (0.23, 1.72) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.40 (0.25, 0.62) | 0.59 (0.24, 1.48) | 4.46 (3.13, 6.36) | 3.57 (1.78, 7.18) |
| Formerly Married | 0.55 (0.29, 1.04) | 0.71 (0.25, 2.04) | 3.04 (1.98, 4.66) | 2.26 (1.21, 4.21) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.77 (1.02, 3.06) | 1.33 (0.82, 2.14) | 1.36 (1.09, 1.70) | 1.36 (1.03, 1.79) |
| **Region** | | | | |
| Região Centro (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Região Sul | 0.73 (0.42, 1.26) | 0.89 (0.51, 1.57) | 0.89 (0.68, 1.16) | 1.22 (0.84, 1.76) |
| Região Norte | 0.54 (0.27, 1.09) | 0.65 (0.33, 1.28) | 0.79 (0.60, 1.03) | 1.04 (0.75, 1.45) |
| Região do Príncipe | 0.93 (0.43, 2.02) | 1.22 (0.51, 2.89) | 1.01 (0.77, 1.33) | 1.33 (0.88, 2.01) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.21 (0.51, 2.87) | 1.01 (0.38, 2.67) | 1.32 (0.80, 2.17) | 1.38 (0.89, 2.13) |
| Secondary | 1.42 (0.55, 3.68) | 0.49 (0.16, 1.58) | 0.93 (0.57, 1.51) | 1.15 (0.70, 1.90) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.72 (0.33, 1.57) | 0.66 (0.29, 1.50) | 1.07 (0.71, 1.59) | 1.03 (0.69, 1.55) |
| Middle | 0.79 (0.43, 1.46) | 0.66 (0.33, 1.32) | 1.21 (0.79, 1.85) | 1.19 (0.76, 1.87) |
| Richer | 0.54 (0.28, 1.03) | 0.42 (0.20, 0.89) | 1.77 (1.20, 2.61) | 1.89 (1.25, 2.84) |
| Richest | 1.65 (0.89, 3.06) | 1.21 (0.56, 2.62) | 1.81 (1.28, 2.56) | 2.03 (1.39, 2.98) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.96 (0.70, 1.31) | 1.22 (0.80, 1.84) | 2.26 (1.80, 2.83) | 1.46 (1.13, 1.89) |
| Manual | 0.54 (0.21, 1.40) | 0.71 (0.25, 1.99) | 2.06 (1.29, 3.28) | 1.20 (0.73, 2.00) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.39 (0.09, 1.71) | 0.38 (0.08, 1.89) | 1.31 (0.60, 2.87) | 1.51 (0.67, 3.44) |
| Exposed to two media sources | 0.97 (0.28, 3.33) | 0.92 (0.25, 3.52) | 1.33 (0.74, 2.39) | 1.40 (0.75, 2.63) |
| Exposed to three media sources | 1.34 (0.40, 4.55) | 1.10 (0.28, 4.31) | 1.32 (0.77, 2.28) | 1.36 (0.73, 2.54) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.42 (0.21, 0.86) | 0.63 (0.31, 1.28) | 1.10 (0.82, 1.48) | 0.87 (0.64, 1.18) |

Overall Model Fit: F (66, 21) = 8.15, P=0.0000.

**Table S60:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Togo.

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **VARIABLES** | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.58 (0.40, 0.85) | 0.94 (0.60, 1.48) | 1.83 (1.33, 2.51) | 1.29 (0.93, 1.81) |
| 25-29 | 0.55 (0.35, 0.86) | 1.13 (0.59, 2.16) | 3.35 (2.48, 4.52) | 2.17 (1.46, 3.24) |
| 30-34 | 0.62 (0.39, 0.97) | 1.41 (0.67, 2.97) | 4.96 (3.63, 6.78) | 3.56 (2.32, 5.47) |
| 35-39 | 0.76 (0.47, 1.22) | 1.94 (0.91, 4.12) | 6.31 (4.70, 8.46) | 5.20 (3.38, 8.00) |
| 40-44 | 0.77 (0.49, 1.23) | 1.98 (0.85, 4.62) | 7.36 (5.34, 10.2) | 6.71 (4.30, 10.5) |
| 45-49 | 0.82 (0.50, 1.34) | 2.12 (0.93, 4.82) | 6.35 (4.55, 8.84) | 6.87 (4.25, 11.1) |
| **Ethnicity** | | | | |
| Adja-Ewé/Mina (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Kabye/Tem | 0.68 (0.49, 0.95) | 0.55 (0.34, 0.90) | 0.70 (0.56, 0.86) | 0.93 (0.71, 1.22) |
| Akposso/Akebou | 0.36 (0.12, 1.05) | 0.39 (0.12, 1.27) | 0.89 (0.60, 1.33) | 1.34 (0.89, 2.01) |
| Ana-Ife | 0.82 (0.23, 2.87) | 0.92 (0.25, 3.38) | 0.77 (0.52, 1.15) | 1.21 (0.77, 1.92) |
| Para-Gourma/Akan | 1.35 (1.01, 1.79) | 0.67 (0.39, 1.17) | 0.33 (0.25, 0.45) | 0.70 (0.44, 1.11) |
| Other Togolese | 1.31 (0.61, 2.83) | 1.04 (0.34, 3.16) | 0.31 (0.15, 0.65) | 0.40 (0.16, 0.95) |
| Stranger | 0.95 (0.50, 1.80) | 1.21 (0.59, 2.48) | 1.98 (1.45, 2.72) | 1.66 (1.17, 2.36) |
| **Religion** | | | | |
| Other Christians (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Islam | 0.92 (0.64, 1.31) | 0.89 (0.57, 1.41) | 1.12 (0.91, 1.38) | 1.61 (1.22, 2.12) |
| Traditionalists | 1.66 (1.23, 2.23) | 1.32 (0.91, 1.91) | 0.35 (0.27, 0.47) | 0.68 (0.48, 0.96) |
| No Religion | 1.05 (0.69, 1.60) | 0.87 (0.56, 1.35) | 0.61 (0.45, 0.81) | 0.99 (0.70, 1.39) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.61 (0.40, 0.95) | 0.88 (0.49, 1.57) | 1.66 (1.28, 2.17) | 0.75 (0.51, 1.10) |
| 2 | 0.56 (0.35, 0.92) | 0.82 (0.41, 1.63) | 2.85 (2.15, 3.77) | 0.86 (0.57, 1.30) |
| 3 | 0.66 (0.40, 1.07) | 0.82 (0.39, 1.71) | 3.00 (2.31, 3.90) | 0.86 (0.55, 1.37) |
| 4 | 0.67 (0.38, 1.16) | 0.78 (0.35, 1.76) | 2.91 (2.21, 3.85) | 0.77 (0.47, 1.26) |
| 5 | 0.92 (0.54, 1.59) | 0.87 (0.38, 2.02) | 2.57 (1.86, 3.57) | 0.92 (0.55, 1.53) |
| 6+ | 0.80 (0.56, 1.15) | 0.58 (0.26, 1.33) | 1.84 (1.42, 2.38) | 0.77 (0.48, 1.24) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.73 (0.56, 0.95) | 0.73 (0.41, 1.30) | 2.87 (2.35, 3.49) | 2.03 (1.35, 3.06) |
| Formerly Married | 0.45 (0.24, 0.86) | 0.40 (0.16, 0.99) | 3.76 (2.71, 5.20) | 2.01 (1.22, 3.32) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.71 (0.52, 0.97) | 1.73 (0.87, 3.42) | 2.80 (2.37, 3.31) | 0.94 (0.64, 1.39) |
| **Region** | | | | |
| Grande Agglomération de Lomé (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Maritime (Sans Agglomération de Lomé) | 1.82 (1.16, 2.86) | 1.47 (0.71, 3.05) | 0.56 (0.43, 0.74) | 0.99 (0.70, 1.39) |
| Plateaux | 0.87 (0.53, 1.44) | 0.82 (0.40, 1.68) | 0.42 (0.33, 0.52) | 0.72 (0.52, 1.01) |
| Centrale | 0.97 (0.58, 1.60) | 1.31 (0.61, 2.84) | 0.45 (0.36, 0.57) | 0.70 (0.49, 0.98) |
| Kara | 1.65 (1.04, 2.63) | 1.82 (0.88, 3.78) | 0.28 (0.21, 0.37) | 0.59 (0.40, 0.87) |
| Savenes | 2.23 (1.46, 3.39) | 2.15 (1.00, 4.66) | 0.14 (0.09, 0.20) | 0.46 (0.25, 0.81) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.92 (0.67, 1.25) | 1.27 (0.89, 1.83) | 1.59 (1.31, 1.93) | 1.38 (1.11, 1.71) |
| Secondary | 0.97 (0.70, 1.34) | 1.28 (0.82, 2.01) | 1.28 (1.03, 1.60) | 1.46 (1.06, 2.01) |
| Higher | 0.75 (0.33, 1.70) | 1.18 (0.45, 3.13) | 1.83 (1.20, 2.78) | 1.70 (0.99, 2.93) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.69 (0.49, 0.97) | 0.81 (0.56, 1.17) | 1.80 (1.26, 2.57) | 1.16 (0.80, 1.69) |
| Middle | 0.69 (0.50, 0.97) | 0.70 (0.46, 1.06) | 2.59 (1.91, 3.52) | 1.41 (0.98, 2.04) |
| Richer | 0.45 (0.28, 0.72) | 0.32 (0.14, 0.70) | 4.50 (3.34, 6.07) | 2.11 (1.29, 3.46) |
| Richest | 0.53 (0.36, 0.79) | 0.35 (0.15, 0.84) | 6.75 (5.09, 8.94) | 3.12 (1.82, 5.35) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.52 (0.37, 0.74) | 0.57 (0.39, 0.84) | 3.54 (2.84, 4.41) | 1.59 (1.24, 2.03) |
| Manual | 0.82 (0.53, 1.28) | 0.98 (0.60, 1.60) | 1.93 (1.47, 2.54) | 1.16 (0.84, 1.59) |
| Agricultural | 0.93 (0.67, 1.29) | 0.81 (0.53, 1.26) | 0.88 (0.65, 1.18) | 0.94 (0.67, 1.31) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.79 (0.59, 1.05) | 0.89 (0.65, 1.22) | 1.36 (1.10, 1.68) | 1.13 (0.91, 1.41) |
| Exposed to two media sources | 0.65 (0.47, 0.89) | 0.90 (0.62, 1.32) | 2.53 (2.04, 3.13) | 1.36 (1.04, 1.77) |
| Exposed to three media sources | 0.68 (0.41, 1.11) | 0.89 (0.48, 1.65) | 2.50 (1.87, 3.33) | 1.39 (0.95, 2.04) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.37 (0.21, 0.66) | 0.44 (0.24, 0.80) | 1.08 (0.87, 1.34) | 0.98 (0.76, 1.28) |

Overall Model Fit: $F_{(86, 234)} = 9.74$, *P*=0.0000.

**Table S61:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Cameroon.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.85 (0.64, 1.12) | 0.81 (0.56, 1.16) | 1.65 (1.35, 2.02) | 1.34 (1.03, 1.72) |
| 25-29 | 0.91 (0.63, 1.32) | 0.84 (0.52, 1.37) | 2.43 (2.01, 2.95) | 1.96 (1.49, 2.59) |
| 30-34 | 0.60 (0.38, 0.93) | 0.63 (0.37, 1.08) | 3.53 (2.82, 4.43) | 2.92 (2.13, 4.02) |
| 35-39 | 1.23 (0.85, 1.78) | 1.19 (0.70, 2.00) | 5.01 (4.01, 6.26) | 4.52 (3.19, 6.40) |
| 40-44 | 0.98 (0.64, 1.51) | 1.05 (0.58, 1.90) | 5.20 (4.13, 6.55) | 5.57 (3.89, 7.98) |
| 45-49 | 0.91 (0.58, 1.43) | 1.01 (0.55, 1.86) | 4.52 (3.57, 5.73) | 4.92 (3.35, 7.24) |
| **Ethnicity** | | | | |
| Bamilike/Bamoun (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Arabes-Choa/Peulh/Haoussa/Kanuri | 16.1 (9.41, 27.4) | 6.48 (2.65, 15.9) | 0.23 (0.16, 0.31) | 0.31 (0.19, 0.50) |
| Biu-Mandara | 5.49 (3.19, 9.44) | 2.42 (0.97, 6.03) | 0.15 (0.10, 0.21) | 0.44 (0.28, 0.70) |
| Adamaoua-Oubangui | 5.65 (3.23, 9.88) | 2.62 (1.10, 6.24) | 0.21 (0.15, 0.30) | 0.40 (0.27, 0.59) |
| Bantoïde Sud-Ouest | 3.65 (1.20, 11.1) | 3.16 (0.85, 11.8) | 0.61 (0.33, 1.14) | 0.51 (0.29, 0.89) |
| Grassfields | 1.26 (0.65, 2.43) | 1.10 (0.43, 2.81) | 0.62 (0.51, 0.77) | 0.70 (0.49, 0.98) |
| Côtier/Ngoe/Oroko | 2.62 (1.18, 5.79) | 2.89 (1.26, 6.60) | 0.55 (0.41, 0.73) | 0.45 (0.31, 0.64) |
| Beti/Bassa/Mbam | 2.96 (1.69, 5.17) | 3.52 (1.92, 6.47) | 0.50 (0.41, 0.60) | 0.42 (0.33, 0.54) |
| Kako/Meka/Pygmé | 4.24 (2.18, 8.27) | 2.46 (0.98, 6.19) | 0.31 (0.23, 0.43) | 0.26 (0.15, 0.45) |
| Stranger/Others | 8.50 (3.90, 18.6) | 5.09 (1.89, 13.7) | 0.58 (0.37, 0.90) | 0.68 (0.44, 1.05) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.28 (0.97, 1.69) | 1.24 (0.93, 1.66) | 1.01 (0.88, 1.16) | 1.01 (0.87, 1.18) |
| Islam | 3.64 (2.55, 5.19) | 1.31 (0.82, 2.09) | 0.66 (0.54, 0.81) | 1.10 (0.83, 1.47) |
| Traditionalists | 1.95 (1.12, 3.40) | 1.04 (0.52, 2.06) | 0.27 (0.14, 0.52) | 0.54 (0.30, 0.98) |
| Others | 1.53 (0.53, 4.45) | 1.56 (0.51, 4.76) | 0.88 (0.50, 1.56) | 0.68 (0.36, 1.30) |
| No Religion | 1.66 (0.72, 3.84) | 1.30 (0.56, 3.03) | 0.81 (0.54, 1.21) | 0.94 (0.61, 1.45) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 1.02 (0.70, 1.48) | 1.24 (0.82, 1.87) | 1.78 (1.46, 2.16) | 1.30 (1.00, 1.69) |
| 2 | 1.38 (0.86, 2.21) | 1.70 (1.03, 2.81) | 2.21 (1.78, 2.74) | 1.44 (1.06, 1.96) |
| 3 | 1.20 (0.82, 1.74) | 1.49 (0.89, 2.50) | 2.04 (1.63, 2.55) | 1.24 (0.91, 1.71) |
| 4 | 1.07 (0.66, 1.75) | 1.37 (0.77, 2.44) | 2.87 (2.27, 3.63) | 1.45 (1.02, 2.05) |
| 5 | 1.27 (0.80, 2.02) | 1.52 (0.83, 2.78) | 2.90 (2.22, 3.78) | 1.57 (1.04, 2.35) |
| 6+ | 1.42 (1.02, 1.98) | 1.18 (0.70, 2.00) | 2.24 (1.87, 2.68) | 1.44 (1.02, 2.04) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 1.31 (1.00, 1.72) | 0.63 (0.42, 0.96) | 2.04 (1.77, 2.35) | 1.37 (1.08, 1.75) |
| Formerly Married | 0.62 (0.38, 1.01) | 0.33 (0.18, 0.60) | 2.16 (1.72, 2.71) | 1.01 (0.73, 1.40) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.66 (0.50, 0.85) | 1.28 (0.88, 1.88) | 2.32 (2.01, 2.67) | 0.89 (0.70, 1.12) |

|  | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Region** | | | | |
| Yaoundé (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Adamaoua | 4.69 (2.47, 8.91) | 2.37 (0.88, 6.40) | 0.40 (0.29, 0.55) | 0.75 (0.49, 1.13) |
| Centre (sans Yaoundé) | 0.86 (0.44, 1.72) | 0.77 (0.38, 1.58) | 0.45 (0.33, 0.62) | 0.65 (0.43, 0.97) |
| Douala | 1.01 (0.46, 2.20) | 1.13 (0.52, 2.46) | 1.01 (0.79, 1.28) | 0.82 (0.62, 1.07) |
| Est | 2.81 (1.50, 5.23) | 2.09 (0.94, 4.62) | 0.50 (0.37, 0.68) | 1.25 (0.81, 1.94) |
| Extrême-Nord | 3.81 (2.09, 6.93) | 2.01 (0.76, 5.31) | 0.11 (0.07, 0.17) | 0.31 (0.17, 0.58) |
| Littoral (sans Douala) | 0.69 (0.26, 1.83) | 0.68 (0.25, 1.85) | 0.89 (0.65, 1.22) | 1.04 (0.73, 1.48) |
| Nord | 2.88 (1.59, 5.21) | 1.58 (0.61, 4.07) | 0.29 (0.20, 0.41) | 0.71 (0.43, 1.19) |
| Nord-Ouest | 0.68 (0.32, 1.44) | 1.20 (0.40, 3.65) | 0.62 (0.47, 0.81) | 0.93 (0.60, 1.45) |
| Ouest | 0.53 (0.22, 1.27) | 1.06 (0.42, 2.68) | 0.93 (0.73, 1.19) | 0.91 (0.66, 1.27) |
| Sud | 1.86 (0.92, 3.78) | 1.44 (0.66, 3.15) | 0.50 (0.37, 0.67) | 0.81 (0.58, 1.12) |
| Sud-Ouest | 0.94 (0.43, 2.07) | 1.06 (0.43, 2.60) | 0.91 (0.68, 1.21) | 1.20 (0.83, 1.74) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 0.49 (0.38, 0.64) | 0.94 (0.67, 1.31) | 2.40 (1.89, 3.06) | 1.07 (0.78, 1.46) |
| Secondary | 0.28 (0.21, 0.38) | 0.82 (0.51, 1.32) | 2.89 (2.31, 3.62) | 1.21 (0.86, 1.70) |
| Higher | 0.20 (0.10, 0.40) | 0.84 (0.35, 2.02) | 4.12 (3.04, 5.58) | 1.05 (0.67, 1.65) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.54 (0.39, 0.76) | 0.73 (0.49, 1.10) | 2.52 (1.83, 3.47) | 1.44 (1.01, 2.05) |
| Middle | 0.40 (0.28, 0.58) | 0.50 (0.31, 0.81) | 4.64 (3.35, 6.44) | 2.21 (1.50, 3.26) |
| Richer | 0.44 (0.30, 0.66) | 0.63 (0.35, 1.15) | 5.77 (4.22, 7.87) | 2.50 (1.61, 3.90) |
| Richest | 0.32 (0.21, 0.48) | 0.51 (0.26, 1.00) | 8.03 (5.91, 10.9) | 3.51 (2.24, 5.50) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.70 (0.51, 0.96) | 0.81 (0.58, 1.12) | 2.43 (2.08, 2.85) | 1.20 (0.99, 1.46) |
| Manual | 0.70 (0.42, 1.17) | 0.79 (0.52, 1.19) | 1.72 (1.40, 2.12) | 1.18 (0.94, 1.48) |
| Agricultural | 0.75 (0.56, 1.00) | 0.76 (0.52, 1.10) | 0.88 (0.73, 1.06) | 0.61 (0.48, 0.78) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.72 (0.56, 0.94) | 1.15 (0.87, 1.52) | 2.16 (1.73, 2.69) | 1.08 (0.84, 1.39) |
| Exposed to two media sources | 0.49 (0.37, 0.66) | 0.96 (0.68, 1.34) | 2.64 (2.16, 3.22) | 1.08 (0.83, 1.41) |
| Exposed to three media sources | 0.33 (0.22, 0.50) | 0.79 (0.48, 1.31) | 3.21 (2.62, 3.94) | 1.24 (0.93, 1.66) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.65 (0.35, 1.21) | 0.91 (0.50, 1.69) | 1.33 (1.03, 1.72) | 0.79 (0.59, 1.06) |

Overall Model Fit: $F_{(108, 447)} = 11.56$, *P*=0.0000.

**Table S62:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Comoros.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.70 (0.46, 1.06) | 0.81 (0.54, 1.21) | 2.10 (1.56, 2.82) | 1.69 (1.25, 2.28) |
| 25-29 | 0.55 (0.35, 0.87) | 0.78 (0.48, 1.28) | 4.28 (3.26, 5.62) | 2.71 (1.99, 3.69) |
| 30-34 | 0.39 (0.22, 0.71) | 0.66 (0.34, 1.26) | 5.81 (4.49, 7.53) | 3.47 (2.39, 5.03) |
| 35-39 | 0.31 (0.16, 0.60) | 0.53 (0.24, 1.17) | 5.77 (4.43, 7.51) | 3.14 (2.24, 4.40) |
| 40-44 | 0.62 (0.34, 1.16) | 1.04 (0.50, 2.19) | 5.81 (4.32, 7.81) | 2.97 (2.01, 4.39) |
| 45-49 | 0.73 (0.35, 1.51) | 1.22 (0.44, 3.38) | 8.23 (5.75, 11.79) | 4.31 (2.79, 6.66) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.78 (0.44, 1.38) | 1.19 (0.60, 2.36) | 2.65 (2.04, 3.45) | 1.45 (1.03, 2.06) |
| 2 | 0.65 (0.36, 1.16) | 1.08 (0.51, 2.31) | 2.63 (1.97, 3.51) | 1.27 (0.89, 1.85) |
| 3 | 0.40 (0.20, 0.82) | 0.68 (0.32, 1.47) | 3.64 (2.76, 4.81) | 1.76 (1.25, 2.49) |
| 4 | 0.30 (0.13, 0.69) | 0.53 (0.20, 1.46) | 3.86 (2.77, 5.37) | 1.74 (1.11, 2.71) |
| 5 | 0.50 (0.24, 1.05) | 0.94 (0.36, 2.43) | 2.99 (2.15, 4.15) | 1.27 (0.82, 1.96) |
| 6+ | 0.63 (0.35, 1.11) | 1.05 (0.48, 2.31) | 3.73 (2.93, 4.75) | 1.75 (1.17, 2.64) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.51 (0.39, 0.67) | 0.75 (0.45, 1.25) | 3.84 (3.11, 4.76) | 1.42 (1.02, 1.96) |
| Formerly Married | 0.93 (0.54, 1.59) | 1.25 (0.67, 2.34) | 2.59 (1.89, 3.55) | 0.97 (0.66, 1.44) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.94 (0.68, 1.30) | 0.87 (0.60, 1.27) | 1.55 (1.27, 1.89) | 1.28 (1.03, 1.60) |
| **Region** | | | | |
| Ngazidja (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Mwali | 1.34 (0.86, 2.07) | 1.31 (0.72, 2.37) | 1.33 (1.07, 1.67) | 1.85 (1.37, 2.50) |
| Ndzuwani | 1.07 (0.76, 1.51) | 1.12 (0.71, 1.74) | 1.03 (0.84, 1.27) | 1.27 (0.98, 1.64) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.38 (0.87, 2.17) | 1.27 (0.76, 2.11) | 0.92 (0.71, 1.20) | 1.15 (0.87, 1.53) |
| Secondary | 1.86 (1.27, 2.72) | 1.43 (0.90, 2.28) | 0.59 (0.49, 0.71) | 0.96 (0.75, 1.21) |
| Higher | 1.28 (0.67, 2.44) | 1.25 (0.61, 2.56) | 1.05 (0.81, 1.35) | 0.88 (0.65, 1.21) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 1.47 (0.94, 2.28) | 1.38 (0.87, 2.19) | 1.34 (0.99, 1.81) | 1.60 (1.19, 2.16) |
| Middle | 1.11 (0.68, 1.80) | 1.08 (0.61, 1.91) | 1.67 (1.24, 2.26) | 2.00 (1.43, 2.79) |
| Richer | 0.89 (0.55, 1.42) | 0.83 (0.47, 1.46) | 1.65 (1.23, 2.20) | 1.95 (1.40, 2.71) |
| Richest | 1.23 (0.74, 2.04) | 1.08 (0.57, 2.07) | 2.18 (1.63, 2.91) | 2.63 (1.87, 3.70) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.72 (0.48, 1.06) | 0.82 (0.52, 1.29) | 2.17 (1.77, 2.67) | 1.32 (1.07, 1.64) |
| Manual | 0.76 (0.47, 1.23) | 0.85 (0.53, 1.37) | 0.99 (0.72, 1.36) | 0.86 (0.61, 1.22) |
| Agricultural | 0.68 (0.41, 1.14) | 0.92 (0.50, 1.68) | 1.63 (1.20, 2.23) | 1.15 (0.79, 1.68) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 1.23 (0.79, 1.92) | 1.09 (0.69, 1.72) | 1.18 (0.91, 1.54) | 1.15 (0.87, 1.51) |
| Exposed to two media sources | 1.08 (0.75, 1.56) | 0.97 (0.67, 1.41) | 1.29 (1.01, 1.66) | 1.28 (0.96, 1.72) |
| Exposed to three media sources | 1.55 (1.00, 2.41) | 1.24 (0.77, 2.00) | 1.19 (0.92, 1.53) | 1.61 (1.13, 2.28) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.47 (0.22, 0.98) | 0.68 (0.32, 1.47) | 2.04 (1.56, 2.65) | 1.15 (0.87, 1.52) |

Overall Model Fit: $F_{(62, 185)} = 12.61$, $P=0.0000$.

**Table S63:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Tanzania.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.44 (0.35, 0.56) | 0.67 (0.52, 0.87) | 1.85 (1.47, 2.34) | 1.70 (1.27, 2.27) |
| 25-29 | 0.35 (0.27, 0.46) | 0.65 (0.46, 0.92) | 3.22 (2.53, 4.11) | 3.12 (2.24, 4.36) |
| 30-34 | 0.48 (0.37, 0.64) | 1.00 (0.69, 1.47) | 4.52 (3.61, 5.67) | 4.94 (3.58, 6.81) |
| 35-39 | 0.49 (0.37, 0.65) | 1.08 (0.73, 1.59) | 4.75 (3.81, 5.93) | 5.86 (4.19, 8.21) |
| 40-44 | 0.59 (0.45, 0.77) | 1.29 (0.87, 1.91) | 5.63 (4.53, 6.99) | 8.44 (6.05, 11.8) |
| 45-49 | 0.59 (0.44, 0.79) | 1.27 (0.82, 1.97) | 5.48 (4.46, 6.73) | 8.99 (6.51, 12.4) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.51 (0.39, 0.66) | 0.84 (0.62, 1.16) | 1.65 (1.37, 1.98) | 1.07 (0.84, 1.38) |
| 2 | 0.39 (0.30, 0.51) | 0.70 (0.47, 1.05) | 2.42 (2.02, 2.89) | 1.06 (0.80, 1.41) |
| 3 | 0.47 (0.35, 0.62) | 0.79 (0.51, 1.23) | 2.53 (2.11, 3.04) | 0.92 (0.69, 1.24) |
| 4 | 0.53 (0.40, 0.72) | 0.79 (0.53, 1.18) | 2.29 (1.82, 2.88) | 0.92 (0.66, 1.30) |
| 5 | 0.51 (0.37, 0.71) | 0.66 (0.41, 1.05) | 1.96 (1.54, 2.48) | 0.80 (0.57, 1.12) |
| 6+ | 0.52 (0.42, 0.64) | 0.56 (0.38, 0.85) | 1.81 (1.49, 2.20) | 0.78 (0.57, 1.08) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.49 (0.42, 0.57) | 0.62 (0.48, 0.81) | 2.01 (1.76, 2.30) | 1.32 (1.06, 1.64) |
| Formerly Married | 0.52 (0.40, 0.68) | 0.66 (0.47, 0.93) | 2.03 (1.72, 2.40) | 1.07 (0.84, 1.35) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.93 (0.78, 1.10) | 1.07 (0.85, 1.35) | 2.66 (2.33, 3.05) | 1.05 (0.88, 1.25) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Region** | | | | |
| Dar es salaam (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Dodoma | 1.35 (0.89, 2.06) | 1.07 (0.66, 1.72) | 0.35 (0.24, 0.51) | 0.85 (0.58, 1.25) |
| Arusha | 1.52 (1.01, 2.30) | 1.28 (0.81, 2.03) | 0.56 (0.41, 0.77) | 0.94 (0.71, 1.23) |
| Kilimanjaro | 0.92 (0.54, 1.59) | 0.78 (0.44, 1.39) | 0.82 (0.55, 1.23) | 1.20 (0.82, 1.74) |
| Tanga | 1.01 (0.62, 1.64) | 0.82 (0.47, 1.43) | 0.67 (0.46, 0.99) | 1.22 (0.87, 1.71) |
| Morogoro | 0.34 (0.20, 0.59) | 0.33 (0.19, 0.58) | 0.60 (0.42, 0.86) | 1.17 (0.83, 1.64) |
| Pwani | 1.13 (0.75, 1.70) | 1.04 (0.67, 1.64) | 0.70 (0.47, 1.03) | 1.35 (0.87, 2.10) |
| Lindi | 0.68 (0.40, 1.14) | 0.62 (0.34, 1.15) | 0.42 (0.31, 0.58) | 1.06 (0.72, 1.58) |
| Mtwara | 0.93 (0.57, 1.52) | 0.86 (0.50, 1.47) | 0.46 (0.34, 0.62) | 1.12 (0.82, 1.53) |
| Ruvuma | 0.63 (0.36, 1.12) | 0.59 (0.33, 1.08) | 0.29 (0.19, 0.47) | 0.63 (0.42, 0.96) |
| Iringa | 0.79 (0.52, 1.20) | 0.68 (0.43, 1.06) | 0.43 (0.29, 0.64) | 0.72 (0.49, 1.07) |
| Mbeya | 0.40 (0.22, 0.71) | 0.31 (0.17, 0.57) | 0.54 (0.36, 0.80) | 1.19 (0.80, 1.75) |
| Singida | 1.63 (1.08, 2.46) | 1.42 (0.91, 2.23) | 0.35 (0.25, 0.51) | 0.97 (0.66, 1.41) |
| Tabora | 1.02 (0.65, 1.60) | 0.83 (0.49, 1.41) | 0.38 (0.29, 0.52) | 1.34 (0.97, 1.85) |
| Rukwa | 0.46 (0.26, 0.80) | 0.39 (0.22, 0.71) | 0.29 (0.20, 0.42) | 0.78 (0.52, 1.16) |
| Kigoma | 0.96 (0.63, 1.46) | 0.81 (0.50, 1.32) | 0.25 (0.19, 0.35) | 0.78 (0.54, 1.14) |
| Shinyanga | 0.77 (0.50, 1.18) | 0.64 (0.40, 1.04) | 0.35 (0.25, 0.48) | 0.90 (0.67, 1.21) |
| Kagera | 1.16 (0.73, 1.86) | 1.02 (0.61, 1.71) | 0.19 (0.13, 0.28) | 0.53 (0.35, 0.79) |
| Mwanza | 0.82 (0.51, 1.33) | 0.65 (0.40, 1.03) | 0.31 (0.21, 0.45) | 0.68 (0.48, 0.98) |
| Mara | 0.89 (0.58, 1.36) | 0.79 (0.50, 1.26) | 0.21 (0.13, 0.32) | 0.46 (0.31, 0.68) |
| Manyara | 1.53 (0.99, 2.36) | 1.14 (0.71, 1.82) | 0.30 (0.22, 0.42) | 0.91 (0.62, 1.32) |
| Njombe | 0.47 (0.25, 0.86) | 0.44 (0.23, 0.85) | 0.44 (0.34, 0.58) | 0.81 (0.59, 1.12) |
| Katavi | 0.70 (0.41, 1.22) | 0.61 (0.34, 1.10) | 0.28 (0.20, 0.40) | 0.86 (0.62, 1.20) |
| Simiyu | 1.24 (0.81, 1.91) | 0.98 (0.60, 1.60) | 0.19 (0.13, 0.28) | 0.67 (0.47, 0.96) |
| geita | 1.17 (0.75, 1.82) | 1.01 (0.61, 1.66) | 0.28 (0.19, 0.41) | 0.85 (0.61, 1.19) |
| Kaskazini Unguja | 1.58 (0.98, 2.52) | 1.29 (0.75, 2.22) | 0.71 (0.55, 0.92) | 1.38 (0.94, 2.03) |
| | 1.51 (0.97, 2.34) | 1.37 (0.84, 2.23) | 0.81 (0.57, 1.15) | 1.32 (0.88, 1.97) |
| Kusini Unguja | 1.78 (1.29, 2.48) | 1.63 (1.16, 2.29) | 0.97 (0.76, 1.24) | 1.05 (0.78, 1.42) |
| Mjini Magharibi | 1.34 (0.89, 2.02) | 0.96 (0.61, 1.51) | 0.46 (0.30, 0.71) | 0.95 (0.60, 1.49) |
| Kaskazini Pemba | 0.89 (0.57, 1.40) | 0.61 (0.37, 1.01) | 0.59 (0.40, 0.87) | 1.36 (0.94, 1.96) |
| Kusini Pemba | | | | |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.02 (0.81, 1.28) | 1.05 (0.83, 1.33) | 1.44 (1.23, 1.69) | 1.04 (0.88, 1.24) |
| Secondary | 1.22 (0.95, 1.57) | 0.99 (0.72, 1.36) | 1.79 (1.48, 2.15) | 1.14 (0.91, 1.44) |
| Higher | 0.59 (0.17, 2.02) | 0.73 (0.20, 2.67) | 6.09 (3.96, 9.36) | 1.55 (1.04, 2.31) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.98 (0.79, 1.23) | 1.06 (0.86, 1.32) | 1.38 (1.11, 1.72) | 1.33 (1.06, 1.67) |
| Middle | 0.72 (0.57, 0.91) | 0.75 (0.60, 0.96) | 1.79 (1.45, 2.23) | 1.71 (1.36, 2.14) |
| Richer | 0.82 (0.65, 1.04) | 0.74 (0.57, 0.96) | 3.52 (2.88, 4.32) | 2.92 (2.32, 3.68) |
| Richest | 0.79 (0.63, 1.00) | 0.57 (0.41, 0.81) | 6.19 (5.07, 7.56) | 4.57 (3.42, 6.12) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.49 (0.38, 0.63) | 0.67 (0.50, 0.89) | 2.80 (2.40, 3.27) | 1.30 (1.08, 1.57) |
| Manual | 0.54 (0.42, 0.70) | 0.81 (0.61, 1.06) | 2.19 (1.86, 2.58) | 1.09 (0.91, 1.30) |
| Agricultural | 0.58 (0.49, 0.68) | 0.74 (0.60, 0.92) | 0.78 (0.67, 0.92) | 0.79 (0.66, 0.95) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.74 (0.59, 0.93) | 0.74 (0.59, 0.93) | 1.26 (1.03, 1.54) | 0.97 (0.79, 1.18) |
| Exposed to two media sources | 0.79 (0.62, 1.00) | 0.74 (0.58, 0.94) | 1.94 (1.60, 2.36) | 1.18 (0.98, 1.43) |
| Exposed to three media sources | 0.72 (0.58, 0.91) | 0.67 (0.52, 0.88) | 2.80 (2.29, 3.42) | 1.30 (1.05, 1.62) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.54 (0.44, 0.67) | 0.83 (0.66, 1.05) | 1.23 (1.08, 1.39) | 1.10 (0.97, 1.26) |

Overall Model Fit: $F_{(116, 434)} = 16.49$, $P=0.0000$.

**Table S64:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Zimbabwe.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.55 (0.42, 0.72) | 0.89 (0.65, 1.23) | 1.94 (1.58, 2.38) | 1.42 (1.11, 1.82) |
| 25-29 | 0.28 (0.19, 0.42) | 0.64 (0.40, 1.03) | 3.06 (2.48, 3.79) | 2.08 (1.55, 2.80) |
| 30-34 | 0.48 (0.35, 0.66) | 1.21 (0.72, 2.02) | 5.19 (4.21, 6.40) | 3.28 (2.44, 4.42) |
| 35-39 | 0.53 (0.36, 0.77) | 1.29 (0.72, 2.31) | 5.67 (4.52, 7.12) | 3.60 (2.62, 4.93) |
| 40-44 | 0.42 (0.27, 0.65) | 0.92 (0.49, 1.73) | 7.09 (5.71, 8.81) | 4.56 (3.33, 6.26) |
| 45-49 | 0.64 (0.40, 1.04) | 1.31 (0.67, 2.57) | 6.95 (5.35, 9.03) | 4.77 (3.28, 6.93) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.04 (0.71, 1.51) | 1.09 (0.74, 1.60) | 0.83 (0.68, 1.02) | 0.95 (0.76, 1.19) |
| Islam | 0.77 (0.09, 6.49) | 0.91 (0.14, 6.07) | 1.01 (0.35, 2.92) | 1.13 (0.35, 3.63) |
| Traditionalist | 0.55 (0.08, 3.83) | 0.66 (0.10, 4.53) | 1.09 (0.57, 2.08) | 1.26 (0.63, 2.54) |
| No Religion | 0.89 (0.46, 1.71) | 0.91 (0.47, 1.78) | 0.75 (0.56, 0.99) | 1.05 (0.77, 1.43) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.65 (0.49, 0.86) | 0.83 (0.57, 1.21) | 1.68 (1.42, 1.98) | 0.86 (0.65, 1.13) |
| 2 | 0.43 (0.31, 0.59) | 0.58 (0.34, 0.97) | 2.58 (2.14, 3.12) | 0.96 (0.71, 1.32) |
| 3 | 0.37 (0.26, 0.52) | 0.48 (0.27, 0.85) | 3.18 (2.66, 3.79) | 1.04 (0.75, 1.45) |
| 4 | 0.42 (0.29, 0.63) | 0.46 (0.24, 0.89) | 3.01 (2.44, 3.71) | 1.00 (0.70, 1.42) |
| 5 | 0.43 (0.25, 0.74) | 0.45 (0.21, 0.95) | 3.00 (2.28, 3.93) | 1.11 (0.74, 1.66) |
| 6+ | 0.61 (0.39, 0.95) | 0.55 (0.27, 1.12) | 3.43 (2.73, 4.32) | 1.37 (0.93, 2.01) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.42 (0.34, 0.53) | 0.69 (0.48, 0.99) | 2.88 (2.48, 3.33) | 1.80 (1.38, 2.35) |
| Formerly Married | 0.68 (0.52, 0.90) | 1.10 (0.72, 1.67) | 2.95 (2.48, 3.52) | 1.55 (1.14, 2.12) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.73 (0.58, 0.93) | 1.78 (1.04, 3.07) | 2.16 (1.88, 2.49) | 0.93 (0.72, 1.21) |
| **Region** | | | | |
| Harare (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Manicaland | 1.07 (0.68, 1.70) | 0.81 (0.46, 1.41) | 0.50 (0.39, 0.65) | 0.88 (0.67, 1.17) |
| Mashonaland Central | 1.15 (0.70, 1.88) | 0.88 (0.49, 1.58) | 0.45 (0.35, 0.58) | 0.87 (0.65, 1.16) |
| Mashonaland East | 2.69 (1.68, 4.31) | 2.22 (1.29, 3.82) | 0.61 (0.48, 0.78) | 0.93 (0.71, 1.22) |
| Mashonaland West | 1.98 (1.25, 3.12) | 1.64 (0.94, 2.85) | 0.54 (0.43, 0.68) | 0.83 (0.62, 1.12) |
| Mashonaland North | 2.85 (1.70, 4.76) | 1.87 (1.01, 3.45) | 0.48 (0.35, 0.65) | 1.05 (0.77, 1.43) |
| Mashonaland South | 2.99 (1.86, 4.79) | 2.07 (1.17, 3.63) | 0.50 (0.39, 0.65) | 0.93 (0.68, 1.26) |
| Midlands | 1.84 (1.16, 2.94) | 1.37 (0.76, 2.46) | 0.54 (0.40, 0.72) | 0.93 (0.67, 1.30) |
| Masvingo | 0.94 (0.55, 1.61) | 0.66 (0.36, 1.20) | 0.51 (0.39, 0.66) | 0.91 (0.69, 1.20) |
| Bulawayo | 1.59 (0.99, 2.57) | 1.44 (0.87, 2.38) | 0.95 (0.76, 1.19) | 1.07 (0.82, 1.39) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.03 (0.38, 2.82) | 0.95 (0.35, 2.57) | 0.77 (0.48, 1.25) | 1.01 (0.57, 1.78) |
| Secondary | 1.04 (0.39, 2.79) | 0.91 (0.34, 2.42) | 1.07 (0.67, 1.72) | 1.15 (0.65, 2.04) |
| Higher | 0.65 (0.22, 1.97) | 0.99 (0.32, 3.08) | 2.48 (1.51, 4.09) | 1.29 (0.71, 2.36) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 1.07 (0.79, 1.44) | 1.04 (0.78, 1.38) | 1.39 (1.12, 1.73) | 1.44 (1.16, 1.80) |
| Middle | 1.10 (0.82, 1.47) | 0.94 (0.68, 1.28) | 1.87 (1.54, 2.28) | 1.92 (1.55, 2.39) |
| Richer | 0.80 (0.58, 1.11) | 0.48 (0.29, 0.78) | 2.83 (2.30, 3.48) | 2.89 (2.21, 3.78) |
| Richest | 0.56 (0.40, 0.78) | 0.26 (0.14, 0.48) | 3.94 (3.26, 4.76) | 4.16 (3.02, 5.75) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.58 (0.46, 0.74) | 0.75 (0.57, 1.00) | 2.16 (1.92, 2.44) | 1.17 (1.02, 1.36) |
| Manual | 0.58 (0.30, 1.13) | 0.79 (0.39, 1.59) | 1.85 (1.37, 2.50) | 0.89 (0.64, 1.24) |
| Agricultural | 0.59 (0.38, 0.91) | 0.76 (0.48, 1.21) | 1.24 (1.01, 1.52) | 0.91 (0.73, 1.13) |
| Others | 1.28 (0.56, 2.97) | 1.62 (0.70, 3.72) | 2.24 (1.32, 3.80) | 1.07 (0.62, 1.84) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.89 (0.69, 1.17) | 1.01 (0.77, 1.32) | 1.18 (1.01, 1.37) | 0.97 (0.83, 1.14) |
| Exposed to two media sources | 0.85 (0.63, 1.15) | 1.03 (0.75, 1.41) | 1.70 (1.44, 2.00) | 1.09 (0.91, 1.30) |
| Exposed to three media sources | 0.61 (0.45, 0.84) | 0.87 (0.60, 1.26) | 2.45 (2.08, 2.89) | 1.29 (1.06, 1.58) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.53 (0.42, 0.65) | 0.87 (0.64, 1.18) | 1.49 (1.34, 1.67) | 1.04 (0.90, 1.19) |

Overall Model Fit: $F_{(86, 296)} = 6.49$, *P*=0.0000.

**Table S65:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Gabon.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.61 (0.37, 0.99) | 0.77 (0.40, 1.46) | 1.88 (1.26, 2.80) | 1.83 (1.16, 2.89) |
| 25-29 | 0.40 (0.22, 0.73) | 0.55 (0.22, 1.40) | 3.43 (2.29, 5.14) | 2.93 (1.77, 4.84) |
| 30-34 | 0.30 (0.14, 0.64) | 0.41 (0.13, 1.23) | 6.49 (4.20, 10.0) | 5.42 (3.18, 9.23) |
| 35-39 | 0.38 (0.16, 0.91) | 0.58 (0.15, 2.21) | 7.25 (4.98, 10.5) | 6.42 (3.96, 10.4) |
| 40-44 | 0.20 (0.09, 0.43) | 0.32 (0.09, 1.22) | 7.99 (5.04, 12.7) | 7.02 (4.12, 12.0) |
| 45-49 | 0.24 (0.11, 0.51) | 0.48 (0.13, 1.69) | 9.04 (5.81, 14.0) | 9.10 (5.03, 16.5) |
| **Ethnicity** | | | | |
| Shira-Punu/Vili (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Fang | 0.48 (0.28, 0.83) | 0.46 (0.25, 0.84) | 1.31 (0.90, 1.91) | 1.37 (0.87, 2.17) |
| Kota-Kele | 0.57 (0.31, 1.03) | 0.51 (0.21, 1.23) | 0.78 (0.51, 1.19) | 0.98 (0.58, 1.64) |
| Mbede-Teke | 0.67 (0.36, 1.26) | 0.61 (0.26, 1.47) | 1.12 (0.73, 1.71) | 1.04 (0.62, 1.76) |
| Myene | 1.20 (0.59, 2.44) | 0.89 (0.39, 2.05) | 1.68 (1.04, 2.73) | 1.80 (1.05, 3.06) |
| Nzabi-Duma | 1.06 (0.67, 1.68) | 1.02 (0.66, 1.59) | 1.07 (0.78, 1.47) | 1.10 (0.77, 1.57) |
| Okande-Tsogho | 0.64 (0.36, 1.13) | 0.65 (0.36, 1.17) | 0.74 (0.45, 1.20) | 1.29 (0.70, 2.36) |
| Pygmee | 0.22 (0.04, 1.33) | 0.28 (0.04, 1.86) | 0.08 (0.03, 0.23) | 0.10 (0.02, 0.52) |
| Other | 0.43 (0.24, 0.80) | 0.44 (0.23, 0.83) | 0.88 (0.60, 1.30) | 0.93 (0.57, 1.53) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.72 (1.18, 2.53) | 1.53 (0.99, 2.35) | 1.02 (0.82, 1.27) | 1.19 (0.91, 1.54) |
| Others | 1.08 (0.36, 3.27) | 0.83 (0.25, 2.74) | 1.05 (0.52, 2.14) | 1.18 (0.54, 2.60) |
| No Religion | 1.45 (0.74, 2.85) | 1.39 (0.65, 2.99) | 0.82 (0.56, 1.19) | 1.39 (0.82, 2.34) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.47 (0.30, 0.72) | 0.75 (0.48, 1.15) | 1.57 (1.05, 2.35) | 0.89 (0.55, 1.44) |
| 2 | 0.40 (0.19, 0.84) | 0.83 (0.34, 2.06) | 3.54 (2.39, 5.24) | 1.42 (0.84, 2.43) |
| 3 | 0.68 (0.31, 1.47) | 1.80 (0.73, 4.45) | 3.00 (1.88, 4.78) | 0.89 (0.50, 1.59) |
| 4 | 0.25 (0.11, 0.57) | 0.81 (0.27, 2.43) | 3.55 (2.40, 5.25) | 0.98 (0.57, 1.66) |
| 5 | 0.55 (0.25, 1.22) | 1.71 (0.49, 6.00) | 4.31 (2.75, 6.77) | 1.12 (0.62, 2.03) |
| 6+ | 0.21 (0.12, 0.37) | 0.82 (0.29, 2.37) | 4.21 (2.80, 6.33) | 1.13 (0.66, 1.92) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.38 (0.24, 0.59) | 0.61 (0.35, 1.05) | 2.72 (2.15, 3.44) | 1.29 (0.96, 1.73) |
| Formerly Married | 0.44 (0.24, 0.79) | 0.89 (0.46, 1.71) | 4.13 (2.80, 6.09) | 1.70 (1.07, 2.72) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.13 (0.84, 1.52) | 0.70 (0.48, 1.03) | 1.49 (1.16, 1.89) | 1.10 (0.80, 1.51) |
| **Region** | | | | |
| Estuaire (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Libreville-Port-Gentil | 1.42 (0.92, 2.20) | 1.69 (1.01, 2.82) | 1.23 (0.86, 1.76) | 1.04 (0.69, 1.59) |
| Haut-Ogooué | 1.28 (0.80, 2.07) | 1.51 (0.73, 3.14) | 0.89 (0.60, 1.31) | 1.04 (0.62, 1.75) |
| Moyen-Ogooué | 2.02 (1.23, 3.32) | 2.40 (1.26, 4.55) | 0.97 (0.66, 1.44) | 1.08 (0.71, 1.65) |
| Ngounié | 1.19 (0.75, 1.87) | 1.27 (0.76, 2.12) | 0.46 (0.31, 0.70) | 0.58 (0.35, 0.95) |
| Nyanga | 0.93 (0.56, 1.53) | 0.93 (0.53, 1.64) | 0.66 (0.43, 1.01) | 0.86 (0.50, 1.49) |
| Ogooué Maritime | 1.13 (0.62, 2.06) | 1.09 (0.55, 2.14) | 0.98 (0.64, 1.51) | 0.88 (0.54, 1.44) |
| Ogooué-Ivindo | 1.08 (0.71, 1.66) | 1.96 (1.01, 3.82) | 0.56 (0.38, 0.83) | 0.92 (0.58, 1.46) |
| Ogooué-Lolo | 1.09 (0.64, 1.86) | 1.37 (0.73, 2.56) | 0.73 (0.47, 1.13) | 0.99 (0.60, 1.63) |
| Woleu-N'tem | 0.56 (0.22, 1.44) | 1.05 (0.39, 2.84) | 0.88 (0.62, 1.26) | 0.92 (0.58, 1.44) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 4.23 (1.01, 17.8) | 3.57 (0.77, 16.6) | 2.95 (1.46, 5.95) | 2.89 (1.47, 5.68) |
| Secondary | 8.31 (2.01, 34.4) | 5.22 (1.15, 23.7) | 2.96 (1.55, 5.63) | 3.39 (1.74, 6.63) |
| Higher | 4.06 (0.83, 20.0) | 3.04 (0.56, 16.5) | 3.85 (1.75, 8.47) | 2.48 (1.10, 5.61) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.95 (0.61, 1.48) | 0.73 (0.45, 1.19) | 1.33 (1.01, 1.77) | 1.35 (0.91, 1.99) |
| Middle | 1.26 (0.80, 2.00) | 1.00 (0.58, 1.75) | 1.85 (1.43, 2.39) | 1.85 (1.19, 2.87) |
| Richer | 0.98 (0.61, 1.58) | 0.66 (0.37, 1.17) | 1.93 (1.41, 2.64) | 1.96 (1.21, 3.17) |
| Richest | 1.65 (1.01, 2.69) | 1.22 (0.70, 2.12) | 2.45 (1.75, 3.41) | 2.57 (1.59, 4.15) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.45 (0.27, 0.75) | 0.67 (0.39, 1.17) | 2.16 (1.71, 2.73) | 1.01 (0.78, 1.32) |
| Manual | 0.56 (0.16, 1.87) | 0.71 (0.20, 2.58) | 3.40 (1.97, 5.85) | 1.82 (1.04, 3.18) |
| Agricultural | 0.55 (0.34, 0.88) | 1.01 (0.61, 1.69) | 1.13 (0.73, 1.74) | 0.93 (0.58, 1.48) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 1.62 (0.96, 2.73) | 1.51 (0.83, 2.73) | 1.35 (0.83, 2.21) | 0.98 (0.55, 1.75) |
| Exposed to two media sources | 1.33 (0.79, 2.23) | 1.24 (0.67, 2.28) | 1.58 (0.97, 2.57) | 0.91 (0.52, 1.61) |
| Exposed to three media sources | 1.67 (1.01, 2.77) | 1.49 (0.75, 2.95) | 1.60 (1.02, 2.51) | 0.77 (0.42, 1.40) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 1.28 (0.46, 3.60) | 1.77 (0.67, 4.72) | 1.85 (0.97, 3.56) | 1.45 (0.70, 2.99) |

Overall Model Fit: $F_{(98, 218)} = 13.70$, $P=0.0000$.

**Table S66:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Ghana.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.47 (0.29, 0.76) | 0.67 (0.41, 1.10) | 3.63 (2.55, 5.18) | 3.04 (2.01, 4.60) |
| 25-29 | 0.56 (0.34, 0.91) | 1.03 (0.57, 1.84) | 7.91 (5.62, 11.1) | 5.51 (3.53, 8.61) |
| 30-34 | 0.58 (0.35, 0.96) | 1.04 (0.49, 2.20) | 11.1 (7.71, 16.1) | 8.56 (5.19, 14.1) |
| 35-39 | 0.57 (0.34, 0.97) | 1.06 (0.44, 2.52) | 11.1 (7.76, 15.8) | 9.00 (5.33, 15.2) |
| 40-44 | 0.31 (0.16, 0.64) | 0.54 (0.19, 1.56) | 13.6 (9.39, 19.8) | 12.0 (7.02, 20.6) |
| 45-49 | 0.42 (0.24, 0.75) | 0.65 (0.26, 1.58) | 10.7 (7.27, 15.6) | 10.2 (5.92, 17.4) |
| **Ethnicity** | . | | | |
| Akan (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Ga/Dangme | 0.91 (0.48, 1.73) | 0.74 (0.36, 1.52) | 1.11 (0.83, 1.50) | 1.00 (0.65, 1.53) |
| Ewe | 0.89 (0.53, 1.47) | 0.59 (0.30, 1.18) | 0.72 (0.53, 0.98) | 0.79 (0.56, 1.11) |
| Guan | 0.77 (0.38, 1.56) | 0.51 (0.24, 1.09) | 0.86 (0.58, 1.25) | 1.00 (0.66, 1.50) |
| Mole-Dagbani | 1.12 (0.79, 1.58) | 0.68 (0.34, 1.36) | 0.36 (0.26, 0.49) | 0.71 (0.49, 1.02) |
| Grusi | 0.57 (0.30, 1.07) | 0.39 (0.19, 0.80) | 0.38 (0.24, 0.62) | 0.79 (0.51, 1.22) |
| Gurma | 1.11 (0.74, 1.67) | 0.57 (0.27, 1.18) | 0.21 (0.13, 0.33) | 0.78 (0.45, 1.36) |
| Mande | 0.35 (0.07, 1.77) | 0.14 (0.02, 0.89) | 0.67 (0.28, 1.60) | 1.27 (0.42, 3.85) |
| Others | 3.03 (1.34, 6.83) | 2.08 (0.91, 4.77) | 1.49 (0.85, 2.61) | 1.54 (0.75, 3.16) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 1.09 (0.69, 1.74) | 1.14 (0.68, 1.90) | 1.31 (1.01, 1.70) | 0.86 (0.64, 1.15) |
| Islam | 1.44 (0.86, 2.39) | 1.51 (0.85, 2.69) | 0.97 (0.66, 1.43) | 1.38 (0.91, 2.08) |
| Traditionalist | 1.76 (0.78, 3.95) | 1.52 (0.67, 3.46) | 0.61 (0.32, 1.16) | 1.69 (0.88, 3.21) |
| No Religion | 0.33 (0.10, 1.12) | 0.37 (0.11, 1.30) | 0.65 (0.39, 1.07) | 0.78 (0.42, 1.42) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.42 (0.25, 0.72) | 0.60 (0.34, 1.05) | 2.09 (1.59, 2.74) | 0.94 (0.65, 1.36) |
| 2 | 0.71 (0.40, 1.27) | 1.03 (0.50, 2.11) | 3.87 (2.94, 5.10) | 1.34 (0.90, 1.99) |
| 3 | 0.51 (0.29, 0.90) | 0.72 (0.36, 1.45) | 3.65 (2.80, 4.75) | 1.22 (0.80, 1.86) |
| 4 | 0.66 (0.38, 1.17) | 0.92 (0.42, 1.98) | 3.25 (2.37, 4.46) | 0.98 (0.60, 1.60) |
| 5 | 0.29 (0.13, 0.67) | 0.39 (0.12, 1.20) | 2.21 (1.57, 3.11) | 0.83 (0.51, 1.36) |
| 6+ | 0.59 (0.38, 0.94) | 0.85 (0.36, 2.02) | 2.23 (1.67, 2.96) | 1.30 (0.78, 2.16) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.54 (0.39, 0.75) | 0.83 (0.50, 1.37) | 3.14 (2.58, 3.81) | 1.48 (1.06, 2.06) |
| Formerly Married | 0.75 (0.42, 1.33) | 1.26 (0.59, 2.68) | 4.55 (3.47, 5.96) | 1.74 (1.14, 2.66) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 0.96 (0.72, 1.28) | 1.12 (0.76, 1.66) | 2.30 (1.91, 2.78) | 0.71 (0.55, 0.92) |
| **Region** | | | | |
| Greater Accra (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Western | 0.83 (0.45, 1.52) | 0.72 (0.35, 1.48) | 0.55 (0.42, 0.72) | 0.81 (0.59, 1.12) |
| Central | 0.55 (0.27, 1.12) | 0.47 (0.21, 1.06) | 0.50 (0.38, 0.66) | 0.73 (0.51, 1.03) |
| Volta | 1.01 (0.50, 2.06) | 1.18 (0.50, 2.78) | 0.35 (0.23, 0.51) | 0.79 (0.51, 1.23) |
| Eastern | 1.04 (0.56, 1.94) | 0.93 (0.44, 1.93) | 0.47 (0.35, 0.62) | 0.72 (0.49, 1.04) |
| Ashanti | 1.01 (0.54, 1.86) | 0.81 (0.38, 1.73) | 0.59 (0.44, 0.79) | 0.77 (0.54, 1.10) |
| Brong Ahafo | 0.92 (0.51, 1.67) | 0.72 (0.33, 1.59) | 0.39 (0.27, 0.55) | 0.85 (0.57, 1.27) |
| Northern | 1.24 (0.74, 2.07) | 1.04 (0.47, 2.32) | 0.11 (0.08, 0.18) | 0.41 (0.22, 0.75) |
| Upper East | 1.12 (0.66, 1.89) | 0.94 (0.40, 2.20) | 0.18 (0.12, 0.26) | 0.73 (0.45, 1.19) |
| Upper West | 0.82 (0.46, 1.46) | 0.73 (0.31, 1.75) | 0.19 (0.13, 0.27) | 0.71 (0.41, 1.24) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.52 (1.04, 2.23) | 1.67 (1.06, 2.64) | 1.70 (1.33, 2.17) | 1.44 (1.10, 1.88) |
| Secondary | 1.22 (0.90, 1.66) | 1.26 (0.81, 1.96) | 2.06 (1.67, 2.54) | 1.45 (1.11, 1.89) |
| Higher | 1.36 (0.62, 3.02) | 1.93 (0.74, 5.06) | 3.91 (2.70, 5.66) | 1.38 (0.82, 2.31) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.84 (0.57, 1.23) | 0.89 (0.57, 1.40) | 2.42 (1.84, 3.20) | 1.65 (1.20, 2.26) |
| Middle | 0.57 (0.38, 0.85) | 0.62 (0.34, 1.15) | 4.50 (3.40, 5.95) | 2.73 (1.90, 3.93) |
| Richer | 0.79 (0.51, 1.23) | 0.76 (0.38, 1.51) | 7.89 (5.88, 10.6) | 4.41 (2.87, 6.75) |
| Richest | 0.74 (0.47, 1.16) | 0.55 (0.25, 1.23) | 10.7 (8.15, 14.1) | 6.47 (4.00, 10.5) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.51 (0.34, 0.78) | 0.62 (0.38, 1.02) | 3.70 (2.97, 4.60) | 1.24 (0.96, 1.60) |
| Manual | 0.42 (0.24, 0.74) | 0.55 (0.29, 1.03) | 2.50 (1.88, 3.32) | 1.14 (0.83, 1.57) |
| Agricultural | 0.74 (0.52, 1.06) | 1.07 (0.64, 1.78) | 0.79 (0.61, 1.03) | 0.57 (0.39, 0.81) |
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.86 (0.55, 1.33) | 0.89 (0.55, 1.46) | 2.49 (1.75, 3.53) | 1.75 (1.16, 2.65) |
| Exposed to two media sources | 0.73 (0.46, 1.16) | 0.79 (0.45, 1.40) | 4.42 (3.14, 6.22) | 1.88 (1.24, 2.87) |
| Exposed to three media sources | 0.84 (0.50, 1.41) | 0.78 (0.39, 1.56) | 4.89 (3.26, 7.34) | 2.09 (1.25, 3.48) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.36 (0.21, 0.61) | 0.44 (0.25, 0.76) | 0.96 (0.78, 1.19) | 0.85 (0.65, 1.11) |

Overall Model Fit: $F_{(100, 308)} = 9.39$, $P=0.0000$.

**Table S67:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Lesotho.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.85 (0.50, 1.45) | 1.29 (0.72, 2.28) | 2.12 (1.54, 2.90) | 1.61 (1.10, 2.37 |
| 25-29 | 0.33 (0.16, 0.69) | 0.63 (0.28, 1.44) | 4.28 (3.02, 6.05) | 2.96 (1.90, 4.60) |
| 30-34 | 0.55 (0.26, 1.16) | 1.33 (0.56, 3.14) | 4.73 (3.41, 6.57) | 3.12 (2.04, 4.77) |
| 35-39 | 0.18 (0.05, 0.58) | 0.42 (0.11, 1.64) | 6.48 (4.52, 9.28) | 4.32 (2.61, 7.16) |
| 40-44 | 0.37 (0.14, 0.99) | 0.91 (0.34, 2.43) | 8.09 (5.91, 11.1) | 5.93 (3.72, 9.46) |
| 45-49 | 0.37 (0.16, 0.89) | 0.92 (0.27, 3.12) | 8.75 (5.73, 13.4) | 6.99 (3.94, 12.4) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.70 (0.47, 1.04) | 0.72 (0.48, 1.10) | 0.96 (0.79, 1.16) | 0.91 (0.74, 1.13) |
| Others | 0.28 (0.04, 2.17) | 0.29 (0.04, 1.91) | 0.73 (0.40, 1.35) | 0.78 (0.36, 1.68) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.61 (0.37, 1.00) | 0.71 (0.36, 1.38) | 2.26 (1.73, 2.95) | 1.14 (0.79, 1.65) |
| 2 | 0.34 (0.16, 0.72) | 0.43 (0.15, 1.22) | 3.45 (2.60, 4.58) | 1.33 (0.84, 2.09) |
| 3 | 0.16 (0.05, 0.54) | 0.20 (0.05, 0.81) | 3.55 (2.60, 4.84) | 1.23 (0.74, 2.02) |
| 4 | 0.43 (0.18, 1.01) | 0.59 (0.17, 2.11) | 4.90 (3.26, 7.36) | 1.47 (0.84, 2.56) |
| 5 | 0.22 (0.05, 0.98) | 0.27 (0.04, 1.72) | 4.59 (2.82, 7.46) | 1.56 (0.84, 2.88) |
| 6+ | 0.34 (0.10, 1.11) | 0.42 (0.09, 1.90) | 3.42 (2.29, 5.09) | 1.11 (0.60, 2.07) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.46 (0.29, 0.72) | 0.80 (0.41, 1.55) | 3.11 (2.51, 3.86) | 1.50 (1.08, 2.08) |
| Formerly Married | 0.33 (0.15, 0.73) | 0.64 (0.24, 1.73) | 2.71 (2.03, 3.60) | 1.03 (0.70, 1.51) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.15 (0.75, 1.78) | 1.27 (0.70, 2.31) | 1.42 (1.14, 1.77) | 0.92 (0.70, 1.20) |
| **Region** | | | | |
| Maseru (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Botha-Bothe | 0.58 (0.25, 1.33) | 0.65 (0.27, 1.55) | 0.97 (0.69, 1.36) | 1.33 (0.91, 1.95) |
| Leribe | 0.75 (0.35, 1.63) | 0.83 (0.39, 1.78) | 1.03 (0.73, 1.45) | 1.14 (0.79, 1.65) |
| Berea | 1.46 (0.72, 2.93) | 1.48 (0.72, 3.04) | 1.09 (0.80, 1.49) | 1.04 (0.74, 1.47) |
| Mafeteng | 1.42 (0.69, 2.92) | 1.56 (0.78, 3.10) | 1.10 (0.76, 1.60) | 1.18 (0.80, 1.73) |
| Mohale's Hoek | 0.75 (0.35, 1.62) | 0.79 (0.35, 1.75) | 0.95 (0.67, 1.34) | 1.29 (0.92, 1.79) |
| Quthing | 1.15 (0.58, 2.28) | 1.24 (0.61, 2.50) | 0.90 (0.60, 1.35) | 1.19 (0.82, 1.74) |
| Qacha's-Nek | 1.11 (0.56, 2.20) | 1.06 (0.52, 2.19) | 0.91 (0.62, 1.33) | 1.28 (0.86, 1.92) |
| Mokhotlong | 0.81 (0.36, 1.83) | 0.75 (0.31, 1.81) | 0.44 (0.31, 0.62) | 0.74 (0.51, 1.08) |
| Thaba Tseka | 1.12 (0.57, 2.20) | 1.25 (0.61, 2.56) | 0.54 (0.36, 0.81) | 0.79 (0.53, 1.20) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.87 (0.36, 9.76) | 1.00 (0.20, 4.99) | 1.27 (0.52, 3.08) | 1.35 (0.55, 3.31) |
| Secondary | 1.85 (0.35, 9.70) | 0.67 (0.12, 3.63) | 1.33 (0.53, 3.33) | 1.76 (0.70, 4.43) |
| Higher | 1.68 (0.26, 10.8) | 0.63 (0.09, 4.19) | 2.31 (0.90, 5.92) | 1.78 (0.69, 4.61) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.99 (0.52, 1.87) | 0.94 (0.45, 1.96) | 1.88 (1.38, 2.55) | 1.80 (1.31, 2.47) |
| Middle | 0.82 (0.45, 1.51) | 0.73 (0.35, 1.50) | 2.32 (1.75, 3.06) | 2.16 (1.55, 3.00) |
| Richer | 0.76 (0.41, 1.40) | 0.58 (0.26, 1.29) | 2.87 (2.14, 3.86) | 2.76 (1.92, 3.97) |
| Richest | 1.09 (0.58, 2.03) | 0.65 (0.23, 1.86) | 3.75 (2.84, 4.96) | 3.65 (2.42, 5.51) |

| | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 0.75 (0.46, 1.22) | 0.82 (0.48, 1.41) | 1.54 (1.20, 1.97) | 1.02 (0.76, 1.36) |
| Exposed to two media sources | 1.07 (0.64, 1.78) | 1.16 (0.63, 2.13) | 2.01 (1.54, 2.61) | 1.10 (0.79, 1.52) |
| Exposed to three media sources | 1.10 (0.61, 1.98) | 1.07 (0.49, 2.35) | 1.99 (1.51, 2.61) | 1.13 (0.77, 1.64) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.53 (0.31, 0.91) | 0.85 (0.45, 1.58) | 1.59 (1.32, 1.92) | 1.21 (0.97, 1.50) |

Overall Model Fit: $F_{(74, 306)} = 6.81$, $P=0.0000$.

**Table S68:** Unadjusted and adjusted relative risk ratio, of underweight and overweight/obesity among women of child-bearing age in Eswatini.

| VARIABLES | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) | Unadjusted RRR (95% CI) | Adjusted RRR (95% CI) |
| **Age** | | | | |
| 15-19 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 20-24 | 0.54 (0.32, 0.92) | 0.82 (0.44, 1.53) | 1.99 (1.62, 2.46) | 1.46 (1.13, 1.90) |
| 25-29 | 0.36 (0.16, 0.79) | 0.80 (0.27, 2.33) | 3.38 (2.74, 4.18) | 2.06 (1.54, 2.75) |
| 30-34 | 0.29 (0.12, 0.71) | 0.77 (0.25, 2.38) | 5.68 (4.53, 7.11) | 3.10 (2.18, 4.40) |
| 35-39 | 0.70 (0.30, 1.66) | 2.05 (0.68, 6.23) | 7.99 (6.28, 10.2) | 4.39 (3.08, 6.26) |
| 40-44 | 0.48 (0.18, 1.28) | 1.54 (0.40, 6.00) | 10.6 (7.88, 14.3) | 5.81 (3.68, 9.17) |
| 45-49 | 0.50 (0.20, 1.28) | 1.42 (0.47, 4.32) | 8.20 (6.25, 10.7) | 4.89 (3.29, 7.26) |
| **Religion** | | | | |
| Catholics (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Other Christians | 0.59 (0.28, 1.23) | 0.59 (0.28, 1.26) | 1.10 (0.79, 1.53) | 1.38 (0.99, 1.92) |
| Traditionalists | 0.80 (0.09, 7.47) | 0.74 (0.07, 8.35) | 0.63 (0.28, 1.41) | 0.73 (0.34, 1.58) |
| No Religion | 0.66 (0.20, 2.17) | 0.67 (0.20, 2.30) | 1.01 (0.62, 1.63) | 1.07 (0.67, 1.70) |
| **Parity** | | | | |
| 0 (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 0.67 (0.40, 1.10) | 0.98 (0.55, 1.74) | 2.22 (1.83, 2.70) | 1.53 (1.20, 1.94) |
| 2 | 0.35 (0.17, 0.71) | 0.59 (0.26, 1.35) | 3.07 (2.49, 3.79) | 1.62 (1.24, 2.12) |
| 3 | 0.67 (0.33, 1.34) | 1.12 (0.44, 2.82) | 4.28 (3.32, 5.51) | 1.79 (1.27, 2.53) |
| 4 | 0.33 (0.09, 1.29) | 0.48 (0.12, 1.96) | 5.64 (4.28, 7.43) | 2.19 (1.49, 3.21) |
| 5 | 0.17 (0.02, 1.22) | 0.21 (0.03, 1.76) | 6.72 (4.84, 9.34) | 2.35 (1.56, 3.55) |
| 6+ | 0.37 (0.15, 0.92) | 0.37 (0.10, 1.38) | 6.66 (5.41, 8.19) | 2.40 (1.66, 3.48) |
| **Marital Status** | | | | |
| Single (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Married | 0.30 (0.17, 0.54) | 0.41 (0.21, 0.78) | 2.85 (2.47, 3.28) | 1.08 (0.88, 1.31) |
| Formerly Married | 0.92 (0.45, 1.91) | 1.14 (0.48, 2.71) | 3.20 (2.60, 3.95) | 0.99 (0.77, 1.28) |
| **Residential Setting** | | | | |
| Rural (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Urban | 1.10 (0.74, 1.64) | 1.49 (0.88, 2.54) | 1.30 (1.11, 1.52) | 0.85 (0.70, 1.05) |
| **Region** | | | | |
| Hhohho (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Manzini | 1.82 (1.00, 3.31) | 1.59 (0.86, 2.95) | 1.02 (0.85, 1.21) | 1.10 (0.90, 1.34) |
| Shiselweni | 1.76 (0.96, 3.22) | 1.52 (0.80, 2.88) | 0.93 (0.78, 1.11) | 1.19 (0.99, 1.44) |
| Lubombo | 1.75 (0.94, 3.28) | 1.59 (0.87, 2.93) | 0.88 (0.72, 1.07) | 1.01 (0.81, 1.27) |
| **Level of Education** | | | | |
| No Education (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Primary | 1.15 (0.56, 2.36) | 0.76 (0.36, 1.62) | 0.81 (0.62, 1.05) | 1.18 (0.86, 1.62) |
| Secondary | 0.94 (0.47, 1.87) | 0.57 (0.26, 1.27) | 0.88 (0.70, 1.11) | 1.36 (1.00, 1.86) |
| Higher | 0.44 (0.14, 1.44) | 0.38 (0.11, 1.40) | 1.64 (1.19, 2.26) | 1.11 (0.72, 1.72) |
| **Wealth Quintile** | | | | |
| Poorest (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Poorer | 0.94 (0.57, 1.55) | 0.88 (0.53, 1.48) | 1.25 (1.00, 1.57) | 1.28 (0.97, 1.68) |
| Middle | 0.70 (0.40, 1.24) | 0.67 (0.36, 1.26) | 1.40 (1.10, 1.79) | 1.52 (1.11, 2.07) |
| Richer | 0.78 (0.48, 1.27) | 0.66 (0.35, 1.24) | 1.74 (1.38, 2.19) | 2.02 (1.47, 2.77) |
| Richest | 0.73 (0.44, 1.22) | 0.63 (0.28, 1.45) | 2.23 (1.76, 2.82) | 2.55 (1.79, 3.63) |
| **Occupation** | | | | |
| Not Working (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Nonmanual | 0.40 (0.24, 0.67) | 0.49 (0.29, 0.83) | 2.46 (2.15, 2.82) | 1.23 (1.03, 1.47) |
| Manual | 0.84 (0.34, 2.06) | 0.90 (0.33, 2.43) | 2.33 (1.75, 3.11) | 1.21 (0.91, 1.60) |
| Agricultural | 0.11 (0.02, 0.48) | 0.10 (0.02, 0.48) | 1.78 (1.30, 2.43) | 1.00 (0.73, 1.36) |

|  | UNDERWEIGHT | | OVERWEIGHT/OBESITY | |
|---|---|---|---|---|
| **Media Exposure** | | | | |
| Not Exposed (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Exposed to one media source | 1.30 (0.71, 2.39) | 1.29 (0.67, 2.46) | 0.99 (0.77, 1.27) | 1.07 (0.80, 1.43) |
| Exposed to two media sources | 0.97 (0.51, 1.83) | 0.93 (0.45, 1.92) | 1.07 (0.85, 1.34) | 1.16 (0.85, 1.57) |
| Exposed to three media sources | 1.11 (0.60, 2.03) | 1.21 (0.54, 2.67) | 1.35 (1.06, 1.71) | 1.30 (0.91, 1.86) |
| **Hormonal Contraceptive Use** | | | | |
| No (Reference) | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 0.43 (0.22, 0.86) | 0.72 (0.35, 1.47) | 1.46 (1.22, 1.74) | 1.14 (0.94, 1.38) |

Overall Model Fit: $F_{(70, 70)} = 13.75$, $P=0.0000$.