**ONLINE SUPPLMENTAL MATERIAL**

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| **Table S1. Average share of red meat (in kilograms) in mixed dishes by dish type**  |
| **Mixed dish type** | **Mean red meat share** | **95% Confidence Interval** | **Number of food items per category** |
| Meat mixed dishes | 32.02% | 31.02%, 33.02% | 2,302 |
| Rice mixed dishes | 16.50% | 10.36%, 22.64% | 46 |
| Pasta mixed dishes, excluding macaroni and cheese | 13.33% | 13.02%, 13.65% | 1176 |
| Turnovers and other grain-based items | 26.42% | 25.38%, 27.46% | 363 |
| Fried rice and lo/chow mein | 11.05% | 10.37%, 11.74% | 327 |
| Stir-fry and soy-based sauce mixtures | 38.77% | 36.15%, 41.40% | 146 |
| Egg rolls, dumplings, sushi | 23.28% | 22.35%, 24.22% | 242 |
| Burritos and tacos | 29.20% | 28.78%, 29.63% | 1,716 |
| Nachos | 26.42% | 24.30%, 28.53% | 108 |
| Other Mexican mixed dishes | 26.12% | 24.88%, 27.36% | 415 |
| Pizza | 7.61% | 7.49%, 7.73% | 2,078 |
| Hamburgers | 48.17% | 47.97%, 48.36% | 3,888 |
| Frankfurter sandwiches | 36.64% | 36.56%, 36.71% | 180 |
| Egg/breakfast sandwiches | 19.88% | 19.18%, 20.58% | 1,638 |
| Other sandwiches  | 42.50% | 41.93%, 43.08% | 2,410 |
| Soup | 25.97% | 23.48%, 28.46% | 277 |
| **TOTAL** | **17,312** |

Table S2. FoodAPS household average weekly calorie-adjusted purchase of macronutrients per household by red meat spending share quintile.1

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Red meat spending share quintiles** | **Carbohydrates (grams, g)** | **Added sugar (g)** | **Total fat (g)** | **Mono-unsaturated fat (g)** | **Poly-unsaturated fat (g)** | **Saturated fat (g)** | **Protein (g)** | **Cholesterol (milligrams, mg)** |
| Q1  | 131.942 | 9.19 | 36.30 | 12.61 | 9.17 | 11.67 | 34.30 | 109.05 |
|  | (127.80 - 136.07) | (8.27 - 10.11) | (34.73 - 37.88) | (12.06 - 13.16) | (8.48 - 9.87) | (10.96 - 12.38) | (32.74 - 35.86) | (101.51 - 116.59) |
| Q2 | 126.10 | 8.76 | 39.50 | 14.16 | 9.24 | 12.96 | 34.95 | 119.37 |
|  | (122.61 - 129.60) | (7.98 - 9.53) | (38.29 - 40.71) | (13.57 - 14.75) | (8.84 - 9.64) | (12.25 - 13.67) | (33.58 - 36.33) | (111.64 - 127.11) |
| Q3 | 124.30 | 9.05 | 39.47 | 14.13 | 9.25 | 12.87 | 36.21 | 122.94 |
|  | (120.74 - 127.87) | (8.53 - 9.57) | (38.21 - 40.73) | (13.59 - 14.67) | (8.70 - 9.80) | (12.52 - 13.21) | (35.16 - 37.26) | (117.47 - 128.40) |
| Q4 | 120.75 | 8.79 | 40.38 | 14.66 | 9.03 | 13.33 | 37.47 | 129.95 |
|  | (118.12 - 123.37) | (8.25 - 9.33) | (39.37 - 41.39) | (14.19 - 15.12) | (8.55 - 9.50) | (12.90 - 13.77) | (36.22 - 38.72) | (120.75 - 139.14) |
| Q5 | 110.77 | 8.13 | 42.92 | 15.87 | 9.28 | 14.10 | 42.61 | 155.23 |
|  | (107.60 - 113.94) | (7.62 - 8.63) | (41.78 - 44.05) | (15.43 - 16.30) | (8.85 - 9.71) | (13.56 - 14.64) | (40.61 - 44.61) | (145.22 - 165.23) |
|  |  |  |  |  |  |  |  |  |
| Observations | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 |
| F Statistic  | 441.19 | 64.99 | 884.81 | 760.78 | 98.99 | 450.79 | 116.90 | 95.12 |
| P value3 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |

1Food item-level nutrient data were attached to household food purchase and acquisition data and are from the National Household Food Acquisition and Purchase Survey (FoodAPS); Q, quintile.
4Survey weight adjusted multiple linear regression used to compute calorie-adjusted average weekly purchase of nutrients; 95% CIs in parenthesis with Bonferroni correction to account for multiple comparisons (all such values).
3Based on survey-weight adjusted Analysis of Variance (ANOVA) F-test.

Table S3. FoodAPS household average calorie-adjusted purchase of micronutrients by red meat spending share quintile.1

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Red meat spending share quintiles** | **magnesium (mg)** | **Zinc (mg)** | **Sodium (mg)** | **Vitamin B6 (milligrams, mg)** | **Vitamin K (micrograms, mcg)** | **Vitamin A (micrograms, mcg)** | **Vitamin C (mg)** | **Vitamin D (mcg)** | **Vitamin E (mg)** | **Choline (mg)** |
| Q1  | 161.832 | 4.29 | 2,409.14 | 0.99 | 80.73 | 353.45 | 52.83 | 2.66 | 4.40 | 155.48 |
|  | (137.28 - 186.39) | (4.13 - 4.45) | (400.83 - 4,417.44) | (0.92 - 1.06) | (65.82 - 95.65) | (327.34 - 379.55) | (43.88 - 61.79) | (2.20 - 3.13) | (4.06 - 4.75) | (133.18 - 177.78) |
| Q2 | 134.23 | 4.60 | 2,673.99 | 0.93 | 67.12 | 347.76 | 45.26 | 2.13 | 4.00 | 141.79 |
|  | (129.03 - 139.43) | (4.48 - 4.73) | (721.60 - 4,626.39) | (0.89 - 0.98) | (56.79 - 77.45) | (318.92 - 376.59) | (40.84 - 49.68) | (1.89 - 2.36) | (3.85 - 4.15) | (135.43 - 148.15) |
| Q3 | 131.03 | 4.85 | 1,808.82 | 0.99 | 59.82 | 317.43 | 38.98 | 2.12 | 3.92 | 147.82 |
|  | (124.69 - 137.37) | (4.66 - 5.04) | (1,535.57 - 2,082.08) | (0.86 - 1.12) | (52.57 - 67.06) | (286.77 - 348.09) | (34.95 - 43.02) | (1.93 - 2.31) | (3.74 - 4.11) | (143.22 - 152.42) |
| Q4 | 126.25 | 5.19 | 1,845.94 | 0.95 | 57.70 | 286.89 | 36.11 | 2.12 | 3.65 | 153.06 |
|  | (121.15 - 131.36) | (4.98 - 5.40) | (1,610.46 - 2,081.42) | (0.89 - 1.01) | (50.24 - 65.15) | (263.18 - 310.59) | (31.91 - 40.31) | (1.91 - 2.33) | (3.50 - 3.81) | (146.60 - 159.51) |
| Q5 | 123.04 | 6.19 | 1,828.39 | 1.04 | 52.42 | 270.93 | 33.58 | 1.95 | 3.55 | 177.98 |
|  | (117.85 - 128.24) | (5.94 - 6.43) | (1,688.30 - 1,968.48) | (1.00 - 1.08) | (47.76 - 57.07) | (249.95 - 291.92) | (30.55 - 36.62) | (1.77 - 2.13) | (3.39 - 3.71) | (169.17 - 186.79) |
|  |  |  |  |  |  |  |  |  |  |  |
| Observations | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 | 4,706 |
| F Statistic  | 291.96 | 106.66 | 68.77 | 95.77 | 61.93 | 164.05 | 109.34 | 219.85 | 208.28 | 165.50 |
| P value3 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |

1Food item-level nutrient data were attached to household food purchase and acquisition data and are from the National Household Food Acquisition and Purchase Survey (FoodAPS); Q, quintile.

4Survey weight adjusted multiple linear regression used to compute calorie-adjusted average weekly purchase of nutrients; 95% CIs in parenthesis with Bonferroni correction to account for multiple comparisons (all such values).

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