Supplemental Table 1: Final factor loadings for food/beverage items derived in the entire REGARDS population (showing only those with absolute values $>0.15$ for simplicity)

|  | Convenience | Plant- <br> based | Sweets/ <br> Fats | Southern | Alcohol/ Salads |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 100\% fruit juice |  | 0.2529 |  | 0.1663 | -0.1716 |
| Added fats |  |  | 0.3953 | 0.3752 | 0.2533 |
| Beans | 0.3555 | 0.3762 |  |  |  |
| Beer |  | -0.1598 |  |  | 0.2271 |
| Bread |  |  | 0.4708 | 0.3656 |  |
| Bread - Whole Grain |  | 0.3025 | 0.1804 |  |  |
| Butter |  |  | 0.1721 |  | 0.3230 |
| Candy |  |  | 0.4023 |  |  |
| Cereal |  | 0.3804 |  |  | -0.1982 |
| Cereal - High Fiber |  | 0.2366 |  | -0.2546 |  |
| Chinese food | 0.4373 |  |  |  |  |
| Chocolate |  |  | 0.4564 |  |  |
| Coffee |  |  | 0.2171 | -0.1630 | 0.2964 |
| Condiments | 0.2458 |  | 0.3081 |  | 0.2887 |
| Desserts | 0.1974 |  | 0.5340 |  | -0.1666 |
| Eggs and egg dishes |  |  |  | 0.4161 | 0.2911 |
| Fish | 0.2666 | 0.3810 |  |  | 0.2099 |
| Fried food | 0.2428 |  |  | 0.5598 |  |
| Fried potatoes | 0.3705 |  | 0.2759 | 0.1649 |  |
| Fruit |  | 0.5754 |  |  |  |
| Highfat dairy | 0.1777 |  | 0.3727 |  | 0.2143 |
| Liquor |  |  |  |  | 0.3104 |
| Lowfat dairy |  | 0.1998 |  | -0.1865 |  |
| Margarine |  |  | 0.3737 |  |  |
| Mexican dishes | 0.4846 |  |  |  |  |
| Milk alternatives |  | 0.1771 |  |  |  |
| Milk - Highfat |  |  | 0.1829 | 0.2441 |  |
| Milk - Lowfat |  | 0.1649 |  | -0.4170 |  |
| Miscellaneous sugar |  |  | 0.5377 | 0.1890 |  |
| Mixed dishes with meat | 0.6136 |  |  |  |  |
| Organ meat | 0.1736 |  |  | 0.4719 |  |
| Pasta dishes | 0.5937 |  | 0.1660 |  |  |
| Pizza | 0.4547 | -0.1765 | 0.2046 |  |  |
| Potatoes | 0.3649 |  | 0.2616 |  |  |
| Poultry | 0.2863 | 0.3149 |  |  |  |
| Processed meats | 0.2526 |  | 0.2575 | 0.4476 | 0.2160 |
| Red meat | 0.4476 |  | 0.1755 | 0.2562 | 0.2593 |


| Refined grains | 0.3050 | 0.1736 | 0.2044 | 0.2038 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Salad dressing/sauces |  | 0.3042 |  |  | 0.5508 |
| Salty snacks | 0.3239 |  | 0.3040 |  | 0.1858 |
| Seeds, nuts |  | 0.2646 | 0.1907 |  | 0.2403 |
| Shell fish | 0.2755 |  |  | 0.2366 |  |
| Soda | 0.4388 | -0.2265 |  | 0.3172 |  |
| Soup |  |  | 0.3853 |  | -0.1528 |
| Sugar-sweetened beverages | 0.1881 |  | 0.3105 |  |  |
| Sweet breakfast foods |  | 0.5881 |  |  |  |
| Tea |  | 0.4068 |  |  | -0.1732 |
| Vegetable - cruciferous | 0.1572 | 0.4936 |  | -0.2193 | 0.4760 |
| Vegetable - dark yellow |  | 0.4795 |  |  | 0.2674 |
| Vegetable - green leafy | 0.3533 | 0.3172 |  |  | -0.2530 |
| Vegetable - other |  | 0.3168 |  |  | 0.3618 |
| Vegetable - tomato |  | 0.3140 |  | -0.2470 |  |
| Vegetable mixed dishes |  |  |  |  |  |
| Water |  |  |  |  |  |
| Wine |  |  |  |  |  |
| Yogurt |  |  |  |  |  |

Supplemental Table 2. Descriptive statistics of the REGARDS study population (2003-2007), subset with dietary data, and subset with dietary and SES data (analytic sample)

|  |  | Entire <br> REGARDS <br> Cohort | Dietary Data <br> Available* | Dietary \& SES Data <br> Available (Analytic <br> Sample) |
| :---: | :--- | ---: | ---: | ---: |
|  |  | $\mathrm{n}=30,183$ | $\mathrm{n}=21,636$ | $\mathrm{n}=17,062$ |
| Age (avg., std. dev.) | $64.8(9.4)$ | $64.9(9.3)$ | $64.7(9.3)$ |  |
| Race $^{1}$ | Black | $41.5 \%$ | $33.6 \%$ | $34.6 \%$ |
| Sex | Female | $55.1 \%$ | $55.9 \%$ | $54.4 \%$ |
|  | Stroke Belt | $34.6 \%$ | $34.4 \%$ | $33.9 \%$ |
| Region $^{2}$ | Buckle | $20.9 \%$ | $21.9 \%$ | $21.3 \%$ |
|  | Non-Stroke Belt | $44.5 \%$ | $43.8 \%$ | $44.8 \%$ |

1. A significant difference ( $\mathrm{p}<0.05$ ) was observed in the percentage of the samples that were black between both the entire REGARDS cohort and the sample with dietary data available, and also between the entire REGARDS cohort and the sample with both dietary and SES data available.
2. A significant difference ( $\mathrm{p}<0.05$ ) was observed in the percentage of the samples residing in the designated regions between only the entire REGARDS cohort and the sample with dietary data available.
*From the entire REGARDS cohort, 8,546 were either missing FFQ data altogether, had more than $15 \%$ missing data on the FFQ, or had implausible reported energy intakes ( $<3,347$ or $>20,920 \mathrm{~kJ} / \mathrm{d}$ in men and $<2,092$ or $>18,828 \mathrm{~kJ} / \mathrm{d}$ in women)

Chi-squared tests were performed for all categorical variables, and Student's T-test for continuous variables.

Supplemental Table 3: Logistic regression of dietary patterns vs. SES indicators in the REGARDS study population (2003-2007, $\mathrm{n}=16,666$ )

|  | Convenience | Plant-based | Sweets/Fats | Southern | Alcohol/Salads |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Household Income |  |  |  |  |  |
| $\leq \$ 20 \mathrm{~K}$ | Ref | Ref | Ref | Ref | Ref |
| $\$ 20 \mathrm{~K}-\$ 34 \mathrm{~K}$ | $0.97(0.88,1.07)$ | $0.92(0.83,1.02)$ | $0.98(0.89,1.08)$ | $0.79(0.7,0.88)$ | $1.38(1.25,1.53)$ |
| $\$ 35 \mathrm{~K}-\$ 74 \mathrm{~K}$ | $1.01(0.92,1.12)$ | $0.96(0.87,1.07)$ | $0.98(0.89,1.09)$ | $0.66(0.59,0.73)$ | $1.81(1.63,2.02)$ |
| $\$ 75 \mathrm{k}+$ | $1.14(1.01,1.29)$ | $0.96(0.85,1.08)$ | $0.73(0.65,0.82)$ | $0.52(0.45,0.59)$ | $2.70(2.38,3.07)$ |
| Personal Education |  |  |  |  |  |
| <High school | Ref | Ref | Ref | Ref | Ref |
| High school | $1.12(0.98,1.27)$ | $1.11(0.98,1.25)$ | $0.96(0.85,1.08)$ | $0.81(0.7,0.93)$ | $1.25(1.09,1.42)$ |
| Some college | $1.14(1.00,1.30)$ | $1.23(1.08,1.39)$ | $0.92(0.81,1.04)$ | $0.66(0.57,0.77)$ | $1.42(1.24,1.62)$ |
| College+ | $1.30(1.14,1.48)$ | $1.67(1.46,1.90)$ | $0.80(0.71,0.91)$ | $0.49(0.43,0.57)$ | $1.71(1.49,1.96)$ |
| Community SES ${ }^{1}$ |  |  |  |  |  |
| Quartile 1 | Ref | Ref | Ref | Ref | Ref |
| Quartile 2 | $1.09(1.00,1.20)$ | $1.12(1.03,1.23)$ | $0.96(0.88,1.05)$ | $0.76(0.69,0.84)$ | $1.29(1.17,1.41)$ |
| Quartile 3 | $1.22(1.11,1.34)$ | $1.16(1.06,1.27)$ | $0.88(0.8,0.96)$ | $0.57(0.51,0.63)$ | $1.51(1.37,1.66)$ |
| Quartile 4 | $1.29(1.17,1.43)$ | $1.40(1.27,1.55)$ | $0.64(0.58,0.71)$ | $0.40(0.36,0.45)$ | $2.19(1.98,2.43)$ |

1. Community SES z-scores were obtained using the 6-component method developed by Anna Diez-Roux, then stratified into quartiles. Components included: median household income, median value of housing units, percentage of households with interest, dividend, or rental income, percentage of adults who completed high school, percentage of adults who completed college, and percentage of residents employed in executive, managerial, or professional occupations
*Effects differ statistically by race ( p -value $<0.05$ ); see Table 4 . Odds ratios and confidence intervals are given where p-values not indicated.

Covariates for income models include: age, sex, race, smoking status, BMI category, hours of screen time (a proxy for physical inactivity), region, and education; Covariates for education models include: age, sex, race, smoking status, BMI category, hours of screen time (a proxy for physical inactivity), region, and income; Covariates for community SES models include age, sex, race, smoking status, BMI category, hours of screen time (a proxy for physical inactivity), and region

Supplemental Table 4: Logistic regressions of dietary patterns vs. SES indicators by race: High vs. low SES indicator and adherence to dietary patterns in the REGARDS study population (2003-2007, $n=16,666$ )

|  |  | Convenience | Plant-based | Sweets/Fats | Southern | Alcohol/Salads |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Household Income | Black | $1.13(0.91,1.42)$ | $1.04(0.83,1.30)$ | $0.82(0.66,1.03)$ | $0.54(0.42,0.69)$ | $2.01(1.60,2.53)$ |
| ( $\$ 75 \mathrm{~K}+$ vs. $\leq \$ 20 \mathrm{~K})$ | White | $1.15(0.98,1.35)$ | $0.92(0.79,1.08)$ | $0.71(0.61,0.82)$ | $0.52(0.44,0.61)$ | $3.11(2.65,3.64)$ |
| (pinteraction in overall model) |  | 0.6262 | 0.6083 | 0.3855 | 0.3633 | $0.0296^{*}$ |
| Individual Education | Black | $1.13(0.92,1.38)$ | $1.35(1.11,1.63)$ | $0.94(0.78,1.13)$ | $0.43(0.34,0.55)$ | $1.58(1.28,1.95)$ |
| (College+ vs. <High School) | White | $1.45(1.21,1.74)$ | $1.96(1.63,2.36)$ | $0.72(0.60,0.86)$ | $0.53(0.44,0.64)$ | $1.80(1.50,2.16)$ |
| (pinteraction in overall model) |  | 0.1388 | $0.0007^{*}$ | $0.0454^{*}$ | 0.6756 | 0.1012 |
| Community SES ${ }^{1}$ | Black | $1.09(0.89,1.34)$ | $1.32(1.07,1.62)$ | $0.56(0.45,0.69)$ | $0.44(0.35,0.55)$ | $1.90(1.55,2.34)$ |
| (Quartile 4 vs. Quartile 1) | White | $1.39(1.22,1.58)$ | $1.47(1.29,1.67)$ | $0.66(0.59,0.75)$ | $0.39(0.34,0.45)$ | $2.29(2.01,2.60)$ |
| (pinteraction in overall model) |  | $0.0059^{*}$ | 0.4133 | 0.2894 | 0.5852 | 0.3631 |

1. Community SES z-scores were obtained using the 6-component method developed by Anna Diez-Roux, then stratified into quartiles. Components included: median household income, median value of housing units, percentage of households with interest, dividend, or rental income, percentage of adults who completed high school, percentage of adults who completed college, and percentage of residents employed in executive, managerial, or professional occupations
*Statistically significant association of the interaction of race*SES indicator with adherence to the given dietary pattern in the overall model ( $\mathrm{p}<0.05$ ). Odds ratios and confidence intervals are given where p -values not indicated. Interaction models for individual SES are for race*income or race*education, respectively. Covariates for these interaction models include: age, sex, race, region, education, income, and the other interaction term. Interaction models for community SES are race*community SES and covariates include age, sex, race, region, and community SES.

Covariates for income models include: age, sex, race, smoking status, BMI category, hours of screen time (a proxy for physical inactivity), region, and education; Covariates for education models include: age, sex, race, smoking status, BMI category, hours of screen time (a proxy for physical inactivity), region, and income; Covariates for community level SES models include: age, sex, race, smoking status, BMI category, hours of screen time (a proxy for physical inactivity), and region

