

## Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1.** Detailed food resource definitions based on 8-digit Standard Industrial Classification (SIC) codes

<b>Food Resource Type</b>	<b>SIC</b>	<b>SIC definition</b>
Fast food restaurants	58120307	Fast-food restaurant, chain
	58120601	Pizzeria, chain
Supermarkets	54110100	Supermarkets
	54110101	Supermarkets, chain
	54110102	Supermarkets, >100,000 feet <sup>2</sup> (hypermarket)
	54110103	Supermarkets, independent
	54110104	Supermarkets, 55,000 - 65,000 feet <sup>2</sup> (superstore)
Grocery stores	54110105	Supermarkets, 66,000 - 99,000 feet <sup>2</sup>
	54110000	Grocery stores
	54119900	Grocery stores, not otherwise classified
	54119903	Direct selling frozen food providers
	54119904	Grocery stores, chain
	54119905	Grocery stores, independent
	53999903	Country general stores

**eTable 2.** Scoring of the 2005 Diet Quality Index (DQI) components<sup>a</sup>

Recommendation	Scoring Criteria	Points	
Keep total fat intake between 20 and 35% of total energy	>40% or <15%	0	
	36-40% or 15-19%	5	
	≤35% and ≥20%	10	
Reduce saturated fat intake to less than 10% of total energy	>13%	0	
	11-13%	5	
	≤10%	10	
Reduce cholesterol intake to less than 300 mg daily	>400mg	0	
	300-400mg	5	
	≤300mg	10	
Choose foods and beverages that limit intake of added sugars <sup>b</sup>	Based on population distribution of intake of added sugars and sweetened beverages	0-5 6-8 9-10	
	<b>% of rec. servings</b>	≤50	0
		60-80	5
≥90		10	
2-5 servings of fruits <sup>c</sup>	<b>% of rec. servings</b>	≤50	0-5
		60-80	6-8
		≥90	9-10
2-8 servings of vegetables <sup>c</sup>	<b>% of rec. servings</b>	≤50	0-5
		60-80	6-8
		≥90	9-10
1.5-5 servings of whole grains <sup>c</sup> ; at least half of the grains consumed should be whole grains <sup>d</sup>	<b>% of rec. serv.</b>	<b>% whole grains</b>	
	≤50 (0-2.5pts)	≤25 (0-2.5pts)	0-5
	60-80 (3-4pts)	30-40 (3-4pts)	6-8
	≥90 (4.5-5pts)	≥45 (4.5-5pts)	9-10
Consume a variety of nutrient-dense foods <sup>e</sup>	Dietary Diversity score (means)	0-10	
Limit sodium and alcohol consumption <sup>f</sup>	Dietary Moderation (means)	0-10	

<sup>a</sup>The 2005 DQI is based on the 2005 Dietary Guidelines for Americans.

<sup>b</sup>Calculated quintiles of intake of added sugars from foods and beverages. Highest points assigned to participants in lowest quintiles.

<sup>c</sup>Recommended number of servings based on the USDA Food Guide and vary according to reported energy intake.

<sup>d</sup>Operationalized as two separate recommendations (5 points each) and then summed: meeting recommended whole grain servings and ≥50% of grains consumed as whole grains.

<sup>e</sup>Higher scores represent more variety in the diet within and among the basic food groups.

<sup>f</sup>Higher scores represent lower intake of sodium (≤1500mg for Blacks, ≤2300mg for Whites) and moderation in consumption of alcohol (2 servings/day for men, 1 serving/day for women).

**eTable 3.** Neighborhood-level food resource availability<sup>a</sup> and poverty of the Coronary Artery Risk Development in Young Adults (CARDIA) Study, 1985-2000, by exam year and sex [mean (standard error)]

	Males				Females			
	Year 0	Year 7	Year 10	Year 15	Year 0	Year 7	Year 10	Year 15
Fast food restaurant availability	-- <sup>b</sup>	n=1,772	n=1,742	n=1,468	-- <sup>b</sup>	n=2,094	n=2,121	n=1,778
<1 km	-- <sup>b</sup>	1.4 (13.0)	1.3 (3.5)	1.4 (3.0)	-- <sup>b</sup>	1.0 (2.4)	1.6 (7.4)	1.4 (5.7)
1-2.9 km	-- <sup>b</sup>	1.2 (1.1)	1.4 (1.7)	1.4 (1.5)	-- <sup>b</sup>	1.1 (1.0)	1.4 (1.3)	1.3 (1.5)
3-4.9 km	-- <sup>b</sup>	1.1 (0.7)	1.4 (1.1)	1.4 (1.0)	-- <sup>b</sup>	1.0 (0.7)	1.3 (1.0)	1.3 (1.0)
5-8 km	-- <sup>b</sup>	1.0 (0.5)	1.3 (0.8)	1.3 (0.7)	-- <sup>b</sup>	1.0 (0.5)	1.3 (0.8)	1.3 (0.8)
Supermarket availability	n=2,208	n=1,713	-- <sup>b</sup>	-- <sup>b</sup>	n=2,671	n=2,060	-- <sup>b</sup>	-- <sup>b</sup>
<1 km	1.2 (4.0) <sup>c</sup>	4.9 (11.7)	-- <sup>b</sup>	-- <sup>b</sup>	1.6 (7.7)	5.0 (11.9)	-- <sup>b</sup>	-- <sup>b</sup>
1-2.9 km	1.3 (2.0) <sup>c</sup>	5.4 (6.8)	-- <sup>b</sup>	-- <sup>b</sup>	1.6 (2.3)	5.5 (11.4)	-- <sup>b</sup>	-- <sup>b</sup>
3-4.9 km	1.3 (1.9) <sup>c</sup>	5.1 (3.8)	-- <sup>b</sup>	-- <sup>b</sup>	1.5 (2.1)	5.3 (5.3)	-- <sup>b</sup>	-- <sup>b</sup>
5-8 km	1.4 (2.0) <sup>c</sup>	5.4 (3.3)	-- <sup>b</sup>	-- <sup>b</sup>	1.7 (2.2)	5.4 (3.3)	-- <sup>b</sup>	-- <sup>b</sup>
Grocery store availability	n=2,208	n=1,713	-- <sup>b</sup>	-- <sup>b</sup>	n=2,671	n=2,060	-- <sup>b</sup>	-- <sup>b</sup>
<1 km	4.8 (43.4)	3.5 (13.3)	-- <sup>b</sup>	-- <sup>b</sup>	3.7 (2.8)	3.1 (3.8)	-- <sup>b</sup>	-- <sup>b</sup>
1-2.9 km	3.7 (1.3)	3.2 (2.1)	-- <sup>b</sup>	-- <sup>b</sup>	3.7 (1.3)	3.2 (2.0)	-- <sup>b</sup>	-- <sup>b</sup>
3-4.9 km	3.5 (1.3)	3.1 (1.6)	-- <sup>b</sup>	-- <sup>b</sup>	3.6 (1.3)	3.2 (1.6)	-- <sup>b</sup>	-- <sup>b</sup>
5-8 km	3.4 (1.1)	2.9 (1.3)	-- <sup>b</sup>	-- <sup>b</sup>	3.4 (1.1)	2.9 (1.4)	-- <sup>b</sup>	-- <sup>b</sup>
Percent below 150% of federal poverty level	29.2 (17.2)	25.2 (18.3)	21.3 (17.4)	20.1 (15.7)	29.8 (17.3)	25.5 (18.0)	21.8 (17.0)	21.2 (16.0)

<sup>a</sup>Fast food restaurant and grocery store availability is counts per 10,000 population; supermarket availability is counts per 100,000 population

<sup>b</sup>Not examined in this exam year

<sup>c</sup>Significantly different by sex, within year (p<0.05)

**eTable 4.** Estimated effects<sup>a</sup> of fast food availability within concentric areas around residential locations on weekly frequency of fast food consumption, by individual-level income [coefficient (95% CI)]

Distance from residence	Low income (\$2.5-17.6k) <sup>b</sup> n=677	Medium income (\$20.3-89.4) <sup>b</sup> n=3,348	High income (\$90.7-150.3) <sup>b</sup> n=957	interaction p-value <sup>c</sup>
<b>Men</b>				
<1 km	<b>0.13 (0.01, 0.26)<sup>d</sup></b>	-0.02 (-0.07, 0.02) <sup>d</sup>	0.09 (-0.00, 0.18) <sup>de</sup>	0.01
1 to 2.9 km	<b>0.34 (0.16, 0.51)<sup>de</sup></b>	<b>0.08 (0.01, 0.15)<sup>d</sup></b>	0.01 (-0.13, 0.16) <sup>d</sup>	0.01
3 to 4.9 km	-0.12 (-0.36, 0.13) <sup>df</sup>	0.06 (-0.03, 0.15) <sup>d</sup>	<b>-0.18 (-0.36, -0.00)<sup>df</sup></b>	0.03
5 to 8 km	0.02 (-0.27, 0.30) <sup>d</sup>	0.07 (-0.06, 0.19) <sup>d</sup>	0.13 (-0.09, 0.36) <sup>d</sup>	0.80
<b>Women</b>				
<1 km	-0.03 (-0.14, 0.09) <sup>d</sup>	-0.05 (-0.10, 0.01) <sup>de</sup>	-0.06 (-0.19, 0.08) <sup>d</sup>	0.94
1 to 2.9 km	-0.17 (-0.36, 0.02) <sup>d</sup>	0.01 (-0.07, 0.10) <sup>d</sup>	<b>-0.25 (-0.45, -0.05)<sup>d</sup></b>	0.02
3 to 4.9 km	0.13 (-0.09, 0.34) <sup>d</sup>	<b>0.12 (0.01, 0.22)<sup>df</sup></b>	<b>-0.27 (-0.52, -0.01)<sup>d</sup></b>	0.02
5 to 8 km	0.27 (-0.01, 0.54) <sup>d</sup>	0.01 (-0.12, 0.14) <sup>d</sup>	-0.12 (-0.42, 0.17) <sup>d</sup>	0.12

<sup>a</sup>Estimated using fixed effects Poisson regression modeling fast food consumption (times per week) as a function of fast food restaurant density (fast food restaurant counts per 10,000 population) in the areas within 1k and between 1 and 3k, 3 and 5k, and 5 and 8k of each Coronary Artery Risk Development in Young Adults (CARDIA) Study (1985-2000) respondent's home, adjusting for time-varying age, income, marital status, children in household and percent of persons below 150% of federal poverty level; race, education, and study center are time invariant and therefore omitted from fixed effects models. Income-specific estimates were obtained from models containing income interactions with fast food restaurant density within each neighborhood area. Coefficients can be interpreted as percent change in fast food consumption expected from a 1% change in fast food restaurant availability. Bold font indicates statistical significance (p<0.05)

<sup>b</sup>Inflated to 2000 U.S. dollars, reported in \$1,000's. Differing superscript letters indicate statistical significance (Bonferroni corrected, p<0.0008) among estimates, within sex and income. Counts (n) indicate number of person-year observations.

<sup>c</sup>tested at p<0.10 level

<sup>d-f</sup>Differing superscript letters indicate statistical significance (p<0.05) among estimates, within sex and income

**eTable 5.** Estimated effects<sup>a</sup> of grocery store availability within concentric areas around residential locations on diet quality, by individual-level income [coefficient (95% CI)]

Distance from residence	Low income (\$2.5-17.6k) <sup>b</sup> n=478	Medium income (\$20.3-89.4) <sup>b</sup> n=2,703	High income (\$90.7-150.3) <sup>b</sup> n=740	interaction p-value <sup>c</sup>
<b>Men</b>				
<1 km	-0.03 (-2.68, 2.62) <sup>d</sup>	0.41 (-0.57, 1.39) <sup>d</sup>	0.12 (-1.97, 2.20) <sup>d</sup>	0.93
1 to 2.9 km	<b>4.96 (0.79, 9.12)<sup>de</sup></b>	-1.39 (-3.30, 0.52) <sup>d</sup>	-2.04 (-6.07, 1.99) <sup>d</sup>	0.02
3 to 4.9 km	<b>-7.75 (-13.40, -2.11)<sup>df</sup></b>	0.71 (-1.69, 3.10) <sup>d</sup>	0.83 (-4.07, 5.73) <sup>d</sup>	0.02
5 to 8 km	<b>8.01 (1.18, 14.85)<sup>de</sup></b>	-1.57 (-4.24, 1.10) <sup>d</sup>	-0.45 (-6.30, 5.40) <sup>d</sup>	0.03
<b>Women</b>				
<1 km	-0.14 (-2.16, 1.89) <sup>d</sup>	-0.24 (-1.29, 0.81) <sup>d</sup>	-1.08 (-3.14, 0.97) <sup>d</sup>	0.74
1 to 2.9 km	2.26 (-1.51, 6.03) <sup>d</sup>	0.55 (-1.28, 2.37) <sup>d</sup>	<b>-4.68 (-8.59, -0.77)<sup>d</sup></b>	0.02
3 to 4.9 km	-0.71 (-5.71, 4.28) <sup>d</sup>	-2.05 (-4.36, 0.26) <sup>d</sup>	1.82 (-2.96, 6.60) <sup>d</sup>	0.34
5 to 8 km	0.31 (-5.39, 6.00) <sup>d</sup>	0.10 (-2.51, 2.72) <sup>d</sup>	-1.69 (-6.77, 3.39) <sup>d</sup>	0.80

<sup>a</sup>Estimated using fixed effects linear regression modeling diet quality index as a function of grocery store density (grocery store counts per 10,000 population) in the areas within 1k and between 1 and 3k, 3 and 5k, and 5 and 8k of each Coronary Artery Risk Development in Young Adults (CARDIA) Study (1985-2000) respondent's home, adjusting for time-varying age, income, marital status, children in household and percent of persons below 150% of federal poverty level; race, education, and study center are time invariant and therefore omitted from fixed effects models. Income-specific estimates were obtained from models containing income interactions with grocery store density within each neighborhood area. Coefficients can be interpreted as change in DQI expected from a 1% change in grocery store density. Bold font indicates statistical significance (p<0.05)

<sup>b</sup>Inflated to 2000 U.S. dollars, reported in \$1,000's. Differing superscript letters indicate statistical significance (p<0.05) among estimates, within sex and income. Counts (n) indicate number of person-year observations.

<sup>c</sup>Tested at p<0.10 level

<sup>d-f</sup>Differing superscript letters indicate statistical significance (p<0.05) among estimates, within sex and income

**eTable 6.** Alternative model specifications: estimated effects<sup>a</sup> of fast food availability within concentric areas around residential locations on weekly frequency of fast food consumption, by individual-level income [coefficient (95% CI)]

Distance from residence	Low income (\$2.5-17.6k) <sup>b</sup> n=677	Medium income (\$20.3-89.4) <sup>b</sup> n=3,348	High income (\$90.7-150.3) <sup>b</sup> n=957	Interaction p-value <sup>c</sup>
<b>Men</b>				
Alternative Model 1: Random effects (p=0.16 <sup>d</sup> )				
<1 km	0.10 (-0.01, 0.21) <sup>e</sup>	-0.02 (-0.07, 0.02) <sup>e</sup>	<b>0.10 (0.01, 0.18)<sup>e</sup></b>	0.01
1 to 2.9 km	<b>0.29 (0.13, 0.45)<sup>ef</sup></b>	<b>0.07 (0.00, 0.13)<sup>e</sup></b>	0.02 (-0.11, 0.15) <sup>e</sup>	0.02
3 to 4.9 km	-0.17 (-0.40, 0.05) <sup>eg</sup>	0.05 (-0.03, 0.13) <sup>e</sup>	-0.13 (-0.29, 0.03) <sup>e</sup>	0.04
5 to 8 km	0.15 (-0.10, 0.40) <sup>e</sup>	0.06 (-0.05, 0.17) <sup>e</sup>	0.13 (-0.07, 0.33) <sup>e</sup>	0.69
Alternative Model 2: Fixed effects, non-nested buffers				
<1 km	0.10 (-0.02, 0.22)	-0.02 (-0.07, 0.03)	<b>0.09 (0.00, 0.18)</b>	0.02
<3 km	<b>0.38 (0.18, 0.57)</b>	0.08 (-0.00, 0.15)	0.10 (-0.06, 0.25)	0.02
<5 km	0.25 (-0.04, 0.54)	0.09 (-0.02, 0.20)	-0.09 (-0.31, 0.13)	0.17
<8 km	0.26 (-0.11, 0.63)	0.12 (-0.02, 0.27)	0.14 (-0.15, 0.42)	0.77
<b>Women</b>				
Alternative Model 1: Random effects (p=0.0001 <sup>d</sup> )				
<1 km	0.01 (-0.09, 0.11) <sup>e</sup>	-0.04 (-0.08, 0.01) <sup>ef</sup>	-0.05 (-0.17, 0.07) <sup>e</sup>	0.65
1 to 2.9 km	-0.13 (-0.30, 0.04) <sup>e</sup>	0.02 (-0.05, 0.10) <sup>e</sup>	-0.17 (-0.34, 0.01) <sup>e</sup>	0.05
3 to 4.9 km	0.06 (-0.13, 0.25) <sup>e</sup>	<b>0.11 (0.02, 0.20)<sup>eg</sup></b>	-0.09 (-0.31, 0.12) <sup>e</sup>	0.24
5 to 8 km	0.17 (-0.07, 0.41) <sup>e</sup>	0.03 (-0.09, 0.14) <sup>e</sup>	0.03 (-0.21, 0.28) <sup>e</sup>	0.56
Alternative Model 2: Fixed effects, non-nested buffers				
<1 km	-0.03 (-0.14, 0.09)	-0.04 (-0.10, 0.01)	-0.08 (-0.21, 0.06)	0.87
<3 km	-0.16 (-0.35, 0.04)	0.01 (-0.08, 0.09)	<b>-0.28 (-0.49, -0.06)</b>	0.02
<5 km	0.01 (-0.22, 0.24)	0.10 (-0.02, 0.22)	<b>-0.52 (-0.83, -0.22)</b>	0.001
<8 km	0.12 (-0.17, 0.40)	0.07 (-0.09, 0.23)	<b>-0.74 (-1.14, -0.34)</b>	0.001

<sup>a</sup>Estimated using random or fixed effects Poisson regression modeling fast food consumption (times per week) as a function of fast food restaurant density (fast food restaurant counts per 10,000 population) in the areas within 1k and between 1 and 3k, 3 and 5k, and 5 and 8k (or within 1k, 3k, 5k, and 8k in Model 2) of each Coronary Artery Risk Development in Young Adults (CARDIA) Study (1985-2000) respondent's home, adjusting for time-varying age, income, marital status, children in household and percent of persons below 150% of federal poverty level; race, education, and study center are time invariant and therefore omitted from fixed effects models but included in random effects models. Income-specific estimates were obtained from models containing income interactions with fast food restaurant density within each neighborhood area. Bold font indicates statistical significance (p<0.05)

<sup>b</sup>Inflated to 2000 U.S. dollars, reported in \$1,000's. Differing superscript letters indicate statistical significance (Bonferroni corrected, p<0.0008) among estimates, within sex and income. Counts (n) indicate number of person-year observations.

<sup>c</sup>Tested at p<0.10 level

<sup>d</sup>Hausman specification test; p<0.05 indicates systematic bias with respect to the independent variables

<sup>e-g</sup>Differing superscript letters indicate statistical significance (p<0.05) among estimates, within sex and income. Estimates for non-nested buffers (Model 2) were not formally compared because they were estimated in separate models.

**eTable 7.** Alternative model specifications: Estimated effects<sup>a</sup> of supermarket availability within concentric areas around residential locations on diet quality and meeting fruit and vegetable recommendations

Distance from residence	Supermarkets		Grocery Stores	
	Diet Quality [coefficient (95% CI)]	Meets Fruit & Vegetable Recommendations [OR (95% CI)]	Meets Fruit & Vegetable Recommendations [OR (95% CI)]	Meets Fruit & Vegetable Recommendations [OR (95% CI)]
<b>Men (n=3,921)</b>				
Alternative Model 1: Random effects	(p<0.0001 <sup>b</sup> )	(p=0.45 <sup>b</sup> )	(p=0.38 <sup>b</sup> )	
<1 km	<b>0.49 (0.08, 0.91)</b>	1.05 (0.87, 1.26)	0.94 (0.68, 1.29)	
1 to 2.9 km	0.34 (-0.26, 0.94)	<b>1.37 (1.02, 1.85)</b>	0.95 (0.51, 1.76)	
3 to 4.9 km	0.44 (-0.29, 1.17)	1.05 (0.73, 1.50)	0.84 (0.41, 1.75)	
5 to 8 km	<b>1.22 (0.41, 2.03)</b>	0.87 (0.58, 1.29)	1.64 (0.68, 3.94)	
Alternative Model 2: Fixed effects, non-nested buffers				
<1 km	-0.05 (-0.60, 0.49)	1.11 (0.84, 1.48)	0.99 (0.64, 1.53)	
<3 km	-0.28 (-1.07, 0.51)	<b>1.84 (1.16, 2.90)</b>	0.95 (0.44, 2.09)	
<5 km	0.02 (-0.94, 0.97)	<b>1.81 (1.04, 3.15)</b>	0.84 (0.32, 2.23)	
<8 km	0.44 (-0.66, 1.54)	1.42 (0.82, 2.48)	0.70 (0.22, 2.24)	
<b>Women (n=4,731)</b>				
Alternative Model 1: Random effects	(p<0.0001 <sup>b</sup> )	(p=0.33 <sup>b</sup> )	(p=0.19 <sup>b</sup> )	
<1 km	0.26 (-0.13, 0.65)	0.99 (0.87, 1.11)	1.03 (0.84, 1.26)	
1 to 2.9 km	0.28 (-0.31, 0.88)	0.91 (0.75, 1.09)	1.38 (0.95, 2.00)	
3 to 4.9 km	0.02 (-0.65, 0.70)	0.82 (0.66, 1.02)	0.79 (0.50, 1.24)	
5 to 8 km	<b>1.08 (0.34, 1.83)</b>	1.17 (0.93, 1.49)	0.84 (0.51, 1.38)	
Alternative Model 2: Fixed effects, non-nested buffers				
<1 km	-0.20 (-0.71, 0.31)	0.93 (0.79, 1.11)	0.91 (0.66, 1.24)	
<3 km	-0.33 (-1.09, 0.44)	0.81 (0.62, 1.07)	0.76 (0.44, 1.29)	
<5 km	-0.42 (-1.35, 0.50)	0.85 (0.61, 1.20)	0.60 (0.31, 1.17)	
<8 km	0.01 (-1.03, 1.05)	1.05 (0.73, 1.51)	0.73 (0.36, 1.49)	

<sup>a</sup>Estimated using random or fixed effects linear or logistic regression modeling diet quality index or compliance with fruit and vegetable recommendations, respectively, as a function of supermarket or grocery store density (supermarket counts per 100,000 population, grocery store counts per 10,000 population) in the areas within 1k and between 1 and 3k, 3 and 5k, and 5 and 8k (or within 1k, 3k, 5k, and 8k in Model 2) of each Coronary Artery Risk Development in Young Adults (CARDIA) Study (1985-2000) respondent's home, adjusting for time-varying age, income, marital status, children in household and percent of persons below 150% of federal poverty level; race, education, and study center are time invariant and therefore omitted from fixed effects models but included in random effects models. Coefficients can be interpreted as change in DQI expected from a 1% change in food store density; odds ratios can be interpreted as increased odds of meeting fruit and vegetable recommendations expected from a 1% change in food store density. Bold font indicates statistical significance (p<0.05). Model 1 estimates were not significantly different from each other within sex; estimates for non-nested buffers (Model 2) were not formally compared because they were estimated in separate models. Counts (n) indicate number of person-year observations.

<sup>b</sup>Hausman specification test; p<0.05 indicates systematic bias with respect to the independent variables

**eTable 8.** Alternative model specifications: Estimated effects<sup>a</sup> of grocery store availability within concentric areas around residential locations on diet quality, by individual-level income [coefficient (95% CI)]

Distance from residence	Low income (\$2.5-17.6k) <sup>b</sup> n=478	Medium income (\$20.3-89.4) <sup>b</sup> n=2,703	High income (\$90.7-150.3) <sup>b</sup> n=740	interaction p- value <sup>c</sup>
<b>Men</b>				
Alternative Model 1: Random effects (p<0.0001 <sup>d</sup> )				
<1 km	0.54 (-1.45, 2.53)	0.07 (-0.66, 0.80)	-0.49 (-2.07, 1.10)	0.71
1 to 2.9 km	2.70 (-0.57, 5.97)	-0.41 (-1.87, 1.04)	0.49 (-2.50, 3.48)	0.22
3 to 4.9 km	<b>-4.54 (-8.87, -0.20)</b>	0.53 (-1.25, 2.31)	-0.84 (-4.45, 2.76)	0.10
5 to 8 km	5.02 (-0.16, 10.19)	-1.99 (-4.02, 0.05)	-1.44 (-5.52, 2.63)	0.04
Alternative Model 2: Fixed effects, non-nested buffers				
<1 km	0.90 (-1.35, 3.14)	0.18 (-0.75, 1.12)	-0.14 (-1.96, 1.68)	0.77
<3 km	3.38 (-0.10, 6.87)	-1.00 (-2.70, 0.70)	-1.78 (-5.12, 1.57)	0.06
<5 km	2.11 (-2.07, 6.29)	-0.53 (-2.70, 1.64)	-1.02 (-5.04, 3.01)	0.49
<8 km	3.02 (-2.07, 8.11)	-1.20 (-3.85, 1.45)	-0.83 (-5.40, 3.73)	0.33
<b>Women</b>				
Alternative Model 1: Random effects(p<0.0001 <sup>d</sup> )				
<1 km	0.08 (-1.44, 1.59)	-0.09 (-0.85, 0.67)	-0.28 (-1.90, 1.34)	0.95
1 to 2.9 km	-0.66 (-3.65, 2.34)	0.23 (-1.18, 1.65)	-0.74 (-3.79, 2.31)	0.77
3 to 4.9 km	2.58 (-1.41, 6.56)	-0.62 (-2.34, 1.10)	1.08 (-2.49, 4.64)	0.29
5 to 8 km	-2.10 (-6.31, 2.11)	<b>-2.76 (-4.67, -0.85)</b>	<b>-4.29 (-8.07, -0.52)</b>	0.70
Alternative Model 2: Fixed effects, non-nested buffers				
<1 km	0.54 (-1.26, 2.34)	-0.29 (-1.29, 0.70)	<b>-2.17 (-4.03, -0.31)</b>	0.09
<3 km	1.67 (-1.29, 4.64)	-0.54 (-2.20, 1.12)	<b>-5.68 (-8.93, -2.43)</b>	0.002
<5 km	1.77 (-1.94, 5.48)	-1.64 (-3.70, 0.42)	<b>-6.15 (-10.37, -1.92)</b>	0.02
<8 km	1.51 (-3.04, 6.07)	-1.88 (-4.33, 0.58)	<b>-5.51 (-10.28, -0.75)</b>	0.10

<sup>a</sup>Estimated using random or fixed effects linear regression modeling diet quality index as a function of grocery store density (grocery store counts per 10,000 population) in the areas within 1k and between 1 and 3k, 3 and 5k, and 5 and 8k (or within 1k, 3k, 5k, and 8k in Model 2) of each Coronary Artery Risk Development in Young Adults (CARDIA) Study (1985-2000) respondent's home, adjusting for time-varying age, income, marital status, children in household and percent of persons below 150% of federal poverty level; race, education, and study center are time invariant and therefore omitted from fixed effects models but included in random effects models. Income-specific estimates were obtained from models containing income interactions with grocery store density within each neighborhood area. Coefficients can be interpreted as change in DQI expected from a 1% change in grocery store density. Bold font indicates statistical significance (p<0.05).

<sup>b</sup>Inflated to 2000 U.S. dollars, reported in \$1,000's. Model 1 estimates were not significantly different from each other within sex and income; estimates for non-nested buffers (Model 2) were not formally compared because they were estimated in separate models. Counts (n) indicate number of person-year observations.

<sup>c</sup>Tested at p<0.10 level

<sup>d</sup>Hausman specification test; p<0.05 indicates systematic bias with respect to the independent variables