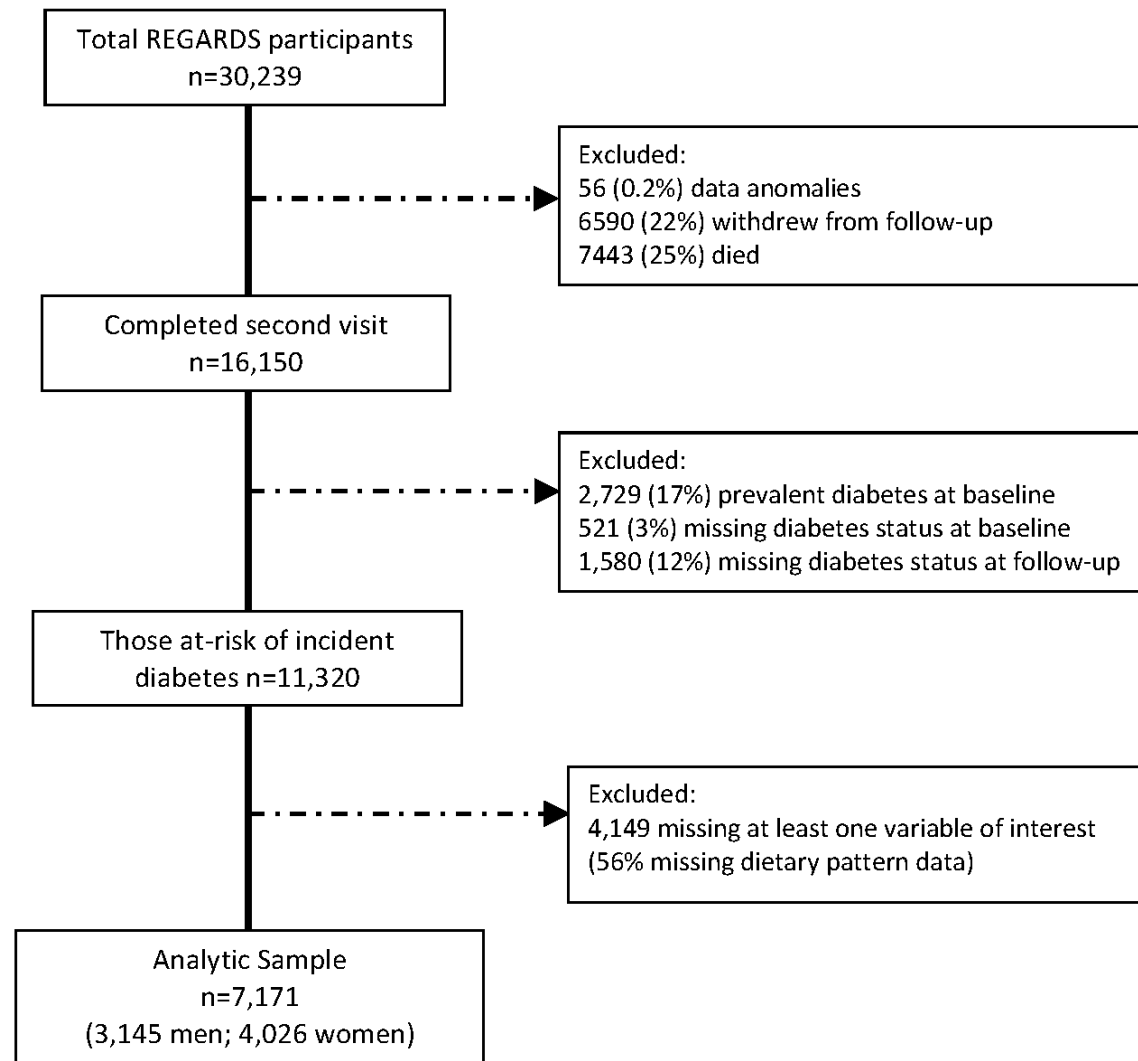**Appendix**
Sex Differences in Factors Contributing to the Racial Disparity in Diabetes Risk
Carson et al.

Appendix Figure 1. Inclusion criteria, the REGARDS Study 2003–2016.

REGARDS, REasons for Geographic and Racial Differences in Stroke.

Appendix
Sex Differences in Factors Contributing to the Racial Disparity in Diabetes Risk
Carson et al.

Appendix Table 1. Risk Ratios for Diabetes for Black Adults Versus White Adults Using Inverse Probability Weighting (IPW)

Model[a]	Women		Men	
	IPW: Adjusted risk ratio (95% CI)	IPW: % Change in β[b] (95% CI[c])	IPW: Adjusted risk ratio (95% CI)	IPW: % Change in β[b] (95% CI[c])
Model 1: Adjusted for age and prediabetes	2.16 (1.64, 2.83)	ref	1.25 (0.97, 1.59)	ref
Model 2: Adjusted for Model 1 + demographics	1.90 (1.43, 2.52)	**16.5 (1.2, 32.3)**	1.17 (0.91, 1.50)	30.3 (−14.4, 63.0)
Model 3: Adjusted for Model 1 + anthropometrics	1.68 (1.28, 2.20)	**32.8 (20.5, 47.1)**	1.19 (0.92, 1.55)	20.0 (−26.2, 42.4)
Model 4: Adjusted for Model 1 + lifestyle factors	2.06 (1.57, 2.70)	5.9 (−5.7, 16.9)	1.19 (0.92, 1.53)	22.9 (−24.6, 52.7)
Model 5: Adjusted for Model 1 + dietary factors	2.16 (1.48, 3.17)	−0.4 (−36.0, 37.8)	1.21 (0.86, 1.72)	11.6 (−98.6, 169.9)
Model 6: Adjusted for Model 1 + neighborhood factors	1.93 (1.36, 2.74)	14.2 (−13.2, 44.4)	1.13 (0.86, 1.50)	43.9 (−60.0, 103.9)
Model 7: Adjusted for Model 1 + psychosocial factors	1.93 (1.36, 2.74)	4.2 (−3.9, 12.5)	1.19 (0.93, 1.54)	19.2 (−17.9, 48.1)
Model 8: Adjusted for Model 1 + clinical factors	2.61 (1.93, 3.51)	−24.6 (−47.1, −7.3)	1.40 (1.09, 1.82)	−54.5 (−113, −4.0)
Model 9: Adjusted for Model 1 + demographics + anthropometrics + lifestyle + dietary + neighborhood + psychosocial + clinical factors	1.94 (1.25, 3.00)	13.9 (−58.0, 68.5)	1.35 (0.89, 2.03)	−35.9 (−279.0, 133.6)

Note: Boldface indicates statistical significance ($p<0.05$).

[a]Demographics include education, income, marital status, and health insurance; Anthropometrics include BMI and waist circumference; Lifestyle factors include current smoking, alcohol use, and physical activity; Dietary factors include Mediterranean diet score, 5 dietary patterns, and total energy intake; Neighborhood factors include geographic region, urbanicity, and neighborhood socioeconomic environment; Psychosocial factors include depressive symptoms, perceived stress, mental component score, and physical component score; Clinical factors include systolic blood pressure, antihypertensive medication use, chronic kidney disease, ratio of triglycerides to high-density lipoprotein cholesterol, and statin use. Quadratic terms included for age, BMI, and waist circumference.

[b]Calculated as the difference in the β coefficient for the race variable in the reference model (adjusted for age and prediabetes) and a model further adjusted for each group of variables.

[c]Bootstrapped CI.

Appendix
Sex Differences in Factors Contributing to the Racial Disparity in Diabetes Risk
Carson et al.

Appendix Figure 2. Correlation of results from original analysis versus inverse probability weighting (IPW) by sex.
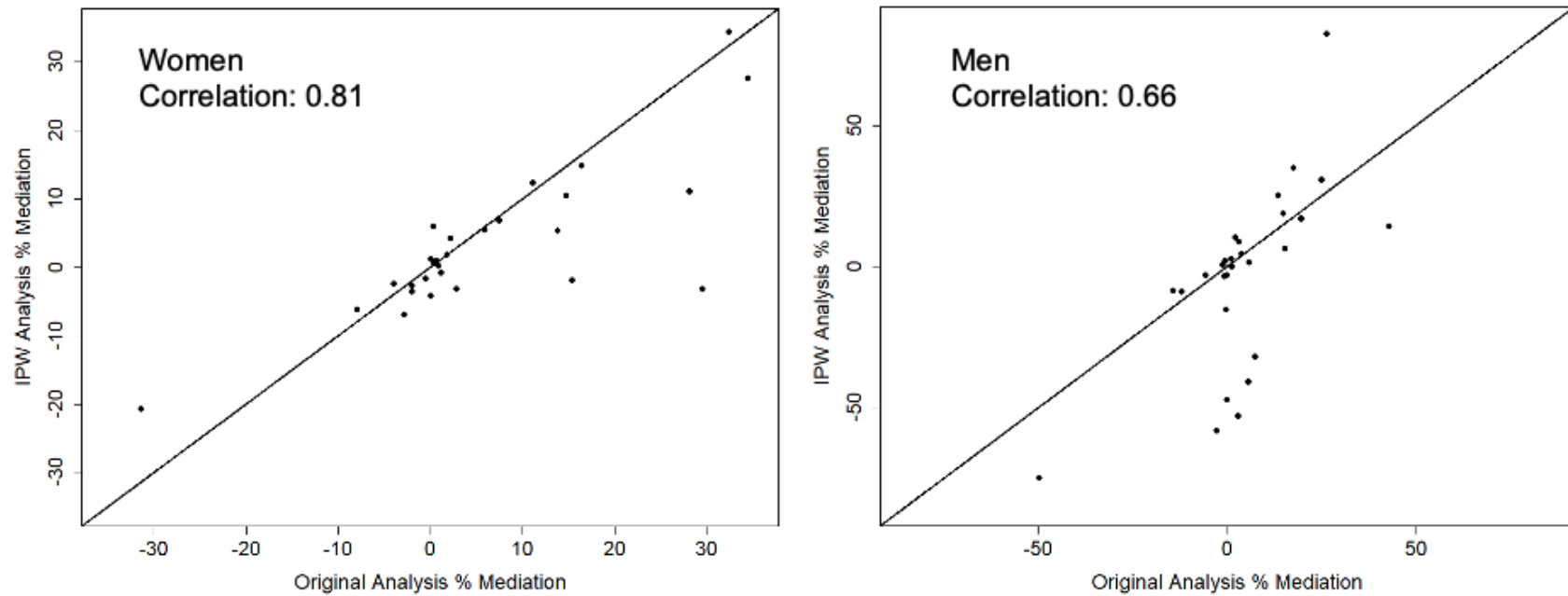
Appendix
Sex Differences in Factors Contributing to the Racial Disparity in Diabetes Risk
Carson et al.

Appendix Table 2. Participants Characteristics for Those Included and Excluded From Analyses, the REGARDS Study

Characteristics	Included N=7,171	Excluded for missing other covariates N=1,835	Excluded for missing diet variables N=2,314
Demographics			
Black, %	27.3	26.0	54.4
Female, %	56.1	57.9	52.8
Age, years, mean (SD)	63.3 (8.4)	62.8 (8.6)	62.4 (8.7)
Education, %			
Less than high school	5.1	7.0	12.0
High school graduate	22.3	23.2	23.8
Some college	25.8	27.9	25.8
College graduate	46.8	41.9	38.4
Annual household income, %			
<$20,000	9.6	11.8	16.2
$20,000–<$35,000	21.1	21.9	21.5
$35,000–<$75,000	35.2	32.7	31.8
≥$75,000	23.9	21.2	19.6
Refused	10.1	12.5	10.9
Married, %	67.7	66.4	58.6
Has health insurance, %	95.0	94.7	92.5
Anthropometrics			
BMI (kg/m^2), mean (SD)	28.4 (5.6)	28.6 (5.6)	29.3 (5.8)
Waist circumference (cm), mean (SD)	93.0 (14.5)	93.6 (15.2)	95.1 (14.0)
Lifestyle factors			
Current smoking, %	10.4	12.1	13.0
Alcohol consumption, %			
Heavy	5.3	5.2	3.7
Moderate	41.8	39.5	33.3
None	52.9	55.3	63.0
Physical activity frequency, %			
≥4 times per week	32.1	32.0	30.5
1–3 times per week	40.8	37.0	37.8
None	27.1	31.0	31.7
Dietary factors			
Mediterranean diet score, mean (SD)	4.52 (1.72)	4.40 (1.70)	–
Alcohol/salads dietary pattern, mean (SD)	0.10 (1.01)	0.12 (1.03)	–
Convenience dietary pattern, mean (SD)	0.08 (0.99)	0.07 (1.00)	–
Plant-based dietary pattern, mean (SD)	0.01 (1.01)	0.02 (1.00)	–
Southern dietary pattern, mean (SD)	−0.19 (0.95)	−0.07 (1.01)	–

Appendix
Sex Differences in Factors Contributing to the Racial Disparity in Diabetes Risk
Carson et al.

Sweets/fats dietary pattern, mean (SD)	0.01 (0.99)	0.02 (1.01)	–
Neighborhood factors			
Geographic region			
Northeast	7.0	6.9	7.5
Midwest	16.3	14.7	13.7
South	65.6	67.0	66.2
West	11.1	11.4	12.6
Urbanicity, %			
Rural	12.6	14.1	8.9
Mixed	12.9	11.6	8.6
Urban	74.5	74.3	82.5
Neighborhood socioeconomic environment, mean (SD)	1.39 (5.67)	1.02 (5.80)	0.00 (5.58)
Psychosocial factors			
Depressive symptoms, mean (SD)	0.81 (1.66)	1.04 (2.00)	1.13 (1.99)
Perceived stress scale, mean (SD)	2.79 (2.66)	3.03 (2.79)	3.41 (2.95)
Mental component score, mean (SD)	54.8 (7.4)	54.6 (7.8)	53.8 (8.3)
Physical component score, mean (SD)	49.2 (9.0)	48.7 (9.4)	48.1 (9.9)
Clinical factors			
Systolic blood pressure (mm Hg), mean (SD)	124.2 (15.2)	125.3 (14.9)	126.3 (15.8)
Antihypertensive medication use, %	43.4	41.6	48.8
Chronic kidney disease, %	12.0	12.9	14.4
Triglycerides: HDL cholesterol ratio, mean (SD)	2.66 (1.97)	3.27 (5.50)	2.90 (3.51)
Statin use, %	28.4	26.5	24.9
Prediabetes, %	21.1	21.5	23.5

REGARDS, REasons for Geographic and Racial Differences in Stroke; HDL, high-density lipoprotein.

Appendix
Sex Differences in Factors Contributing to the Racial Disparity in Diabetes Risk
Carson et al.

Appendix Table 3. Risk Ratios for Diabetes for Black Adults Versus White Adults, Including Those Missing Dietary Data

Model[a]	Women		Men	
	Adjusted risk ratio (95% CI)	**% Change in β[b] (95% CI[c])**	**Adjusted risk ratio (95% CI)**	**% Change in β[b] (95% CI[c])**
Model 1: Adjusted for age and prediabetes	1.74 (1.50, 2.01)	ref	1.38 (1.18, 1.62)	ref
Model 2: Adjusted for Model 1 + demographics	1.57 (1.35, 1.84)	**17.9 (8.3, 27.8)**	1.30 (1.10, 1.53)	**18.3 (2.2, 36.2)**
Model 3: Adjusted for Model 1 + anthropometrics	1.47 (1.27, 1.70)	**30.5 (23.1, 39.2)**	1.34 (1.14, 1.59)	7.9 (−4.9, 20.7)
Model 4: Adjusted for Model 1 + lifestyle factors	1.63 (1.40, 1.90)	**11.3 (4.8, 18.2)**	1.31 (1.11, 1.54)	**17.0 (4.1, 28.7)**
Model 5: Adjusted for Model 1 + dietary factors				
Model 6: Adjusted for Model 1 + neighborhood factors	1.54 (1.26, 1.89)	22.4 (−2.2, 48.3)	1.31 (1.04, 1.63)	7.6 (−33.8, 52.4)
Model 7: Adjusted for Model 1 + psychosocial factors	1.68 (1.45, 1.95)	**6.1 (2.2, 10.5)**	1.37 (1.17, 1.61)	1.6 (−7.1, 10.8)
Model 8: Adjusted for Model 1 + clinical factors	1.92 (1.59, 2.30)	**−16.7 (−45.6, −6.5)**	1.48 (1.19, 1.84)	**−36.0 (−71.7, −11.4)**
Model 9: Adjusted for Model 1 + demographics + anthropometrics + lifestyle + neighborhood + psychosocial + clinical factors	1.54 (1.24, 1.92)	22.1 (−14.0, 59.3)	1.40 (1.10, 1.79)	−17.6 (−80.0, 52.3)

Note: Boldface indicates statistical significance ($p<0.05$).

[a]Demographics include education, income, marital status, and health insurance; Anthropometrics include BMI and waist circumference; Lifestyle factors include current smoking, alcohol use, and physical activity; Neighborhood factors include geographic region, urbanicity, and neighborhood socioeconomic environment; Psychosocial factors include depressive symptoms, perceived stress, mental component score, and physical component score; Clinical factors include systolic blood pressure, antihypertensive medication use, chronic kidney disease, ratio of triglycerides to high-density lipoprotein cholesterol, and statin use. Quadratic terms included for age, BMI, and waist circumference.

[b]Calculated as the difference in the β coefficient for the race variable in the reference model (adjusted for age and prediabetes) and a model further adjusted for each group of variables.

[c]Bootstrapped CI.