

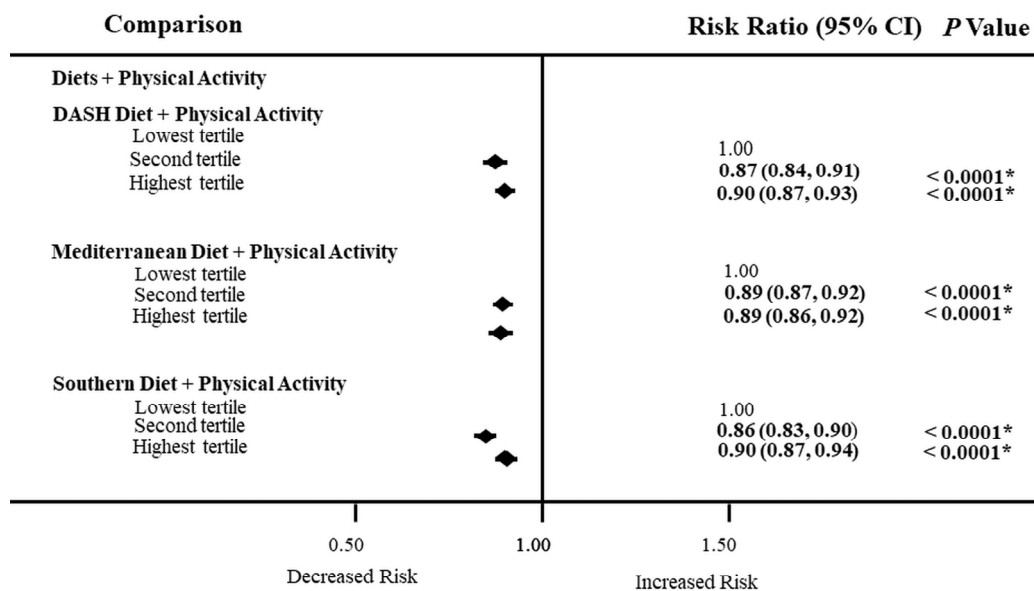
Supplemental Materials

Table S1. Characteristics of diet forms used by the seven NHLBI Care studies.

Study	Diet Form	Items	Exam Year Used
ARIC	FFQ	semi-quantitative 66-item	1987-Exam 1
CARDIA	Diet history	102 questions	1989-Exam 1
CHS	Diet history	96 questions	1998-Exam 1
FHS OFFSPRING	FFQ	semi-quantitative 88-items	1983-Exam 3
FHS GENX 3	FFQ	semi-quantitative 88-items	2002-Exam 2
MESA	FFQ	semi-quantitative 153-items	2010-Exam 5
WHI	FFQ	semi-quantitative 145-items	2005-Exam 1

Abbreviations: NHLBI, National Heart, Lung, and Blood Institute; Care, Candidate Gene Association Resource; ARIC, Atherosclerosis Risk in Communities study,²⁸ CARDIA, Coronary Artery Risk Development in Young Adults Study,³² CHS, Cardiovascular Heart Study,³³ FHS, Framingham Heart Study Offspring and GENX 3 studies,³⁰ MESA, Multi-Ethnic Study of Atherosclerosis Study,²⁹ and Women's Health Initiative study (WHI).³¹

European Americans



African Americans

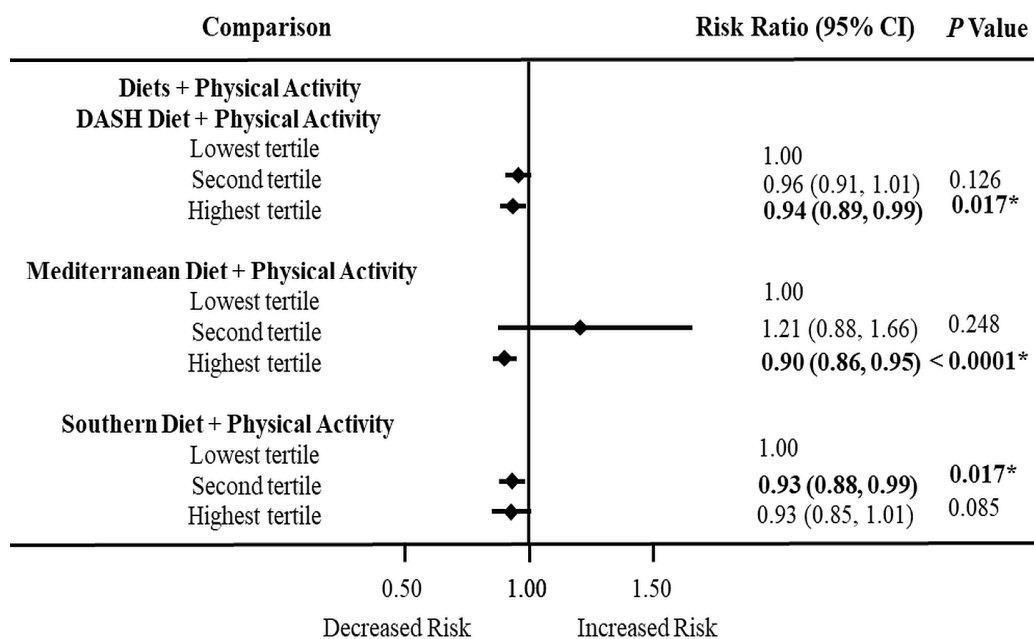


Figure S1. Association between dietary patterns and physical activity by ancestry.

Abbreviations: DASH, Dietary Approached to Stop High Blood Pressure.

Bold indicates p values that were statistically significant at $p < 0.05$.

*Bonferroni adjustment for multiple testing ($p < 0.05/2 = < 0.025$).

PRS: Atherosclerotic Atherosclerosis cardiovascular disease status was regressed against an interaction term composed of each dietary scores and physical activity adjusting for a covariate propensity score composed of age, sex, current cigarette smoking status, and current drinking status.
Dietary pattern scores were computed using KMeans cluster, then converted to Z scores.
Physical activity was recoded as high/low by evaluating its functional form in each dataset.

Table S2. Genes shared between ancestries for European Americans and African Americans.

ABHD17AP4
ADAMTS7
BAK1
BCRP5
CCDC74BP1
CRKL
DPYSL2
EGFR
HLA-DPB2
LZTR1
PI4KA
PI4KAP2
POM121L4P
RPS18
SERPIND1
SMPD4P1
SNAP29
TMEM191A

Table S3. Top pathways of 18 overlapped genes between ancestries for European Americans and African Americans in the WikiPathway.

Term	<i>P</i> Value	Adjusted <i>P</i> Value	Genes
22Q11 2 Copy Number Variation Syndrome WP4657	6.499 ⁻¹⁰	5.459 ⁻⁸	SERPIND1;PI4KA;LZTR1;SNAP29;EGFR;CRKL
Photodynamic Therapy Induced AP 1 Survival Signaling WP3611	9.134 ⁻⁴	0.038	BAK1;EGFR
Endometrial Cancer WP4155	0.001	0.040	BAK1;EGFR
Non Small Cell Lung Cancer WP4255	0.002	0.040	BAK1;EGFR
Pancreatic Adenocarcinoma Pathway WP4263	0.003	0.041	BAK1;EGFR
ErbB Signaling Pathway WP673	0.003	0.041	EGFR;CRKL
TCA Cycle Nutrient Use And Invasiveness Of Ovarian Cancer WP2868	0.004	0.054	EGFR

Breast Cancer Pathway WP4262	0.008	0.082	BAK1;EGFR
EGF EGFR Signaling Pathway WP437	0.009	0.082	EGFR;CRKL

Adjusted p value used the Benjamini-Hochberg formula to adjust for false discovery rate.⁵¹