Supplementary Online Content

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eTable 1. Definitions of Ideal, Intermediate, and Poor Cardiovascular Health Metrics for Adults

Goal/Metrics	AHA definitions of Cardiovascular health metrics*	Definitions for prevalence and trends analyses or nearest match in NHANES 1988-1994, 1999-2004, and 2005-2010			NHANES III Linked Mortality File (through 2006) analyses
		NHANES III (1988-1994)	NHANES 1999-2004	NHANES 2005-2010	
Smoking status					
Ideal	Never or quit >12 months ago	NHANES III did not ask the time since quitting smoking. For the ideal category of smoking status, we included the participants who self-reported never smoking for consistent estimates across the surveys.	NHANES 1999-2004 asked the time since quitting smoking. To be consistent with NHANES III estimate, we included the participants who self-reported never smoking for the ideal category of smoking status.	NHANES 2005-2010 asked the time since quitting smoking. To be consistent with NHANES III estimate, we included the participants who self-reported never smoking for the ideal category of smoking status.	NHANES 1999-2004 and 2005-2010 estimates indicated that only about 3% former smokers had quit <12 months ago, so we used the definition of current smoking vs. others in the association study.
Intermediate	Former or quit ≤ 12 months	For intermediate category of smoking status, we included all former smokers.	We included all former smokers for the intermediate category of smoking status. However, among former smokers, only 2.9% (95% CI 2.4-3.5) had quit smoking <12 months.	We included all former smokers for the intermediate category of smoking status. However, among former smokers, only 3.0% (95% CI 2.7-3.5) had quit smoking <12 months.	-
Poor	Current smoking	Current smoking	Current smoking	Current smoking	-
Body mass index (BMI)					
Ideal	<25 kg/m^2	<25 kg/m^2 (BMI is calculated as weight in kilograms divided by height in meters squared)	<25 kg/m^2 (BMI is calculated as weight in kilograms divided by height in meters squared)	<25 kg/m^2 (BMI is calculated as weight in kilograms divided by height in meters squared)	BMI <25 vs. ≥25
Intermediate	25–29.9 kg/m^2	25–29.9 kg/m^2	25–29.9 kg/m^2	25–29.9 kg/m^2	-
Poor	≥30.0 kg/m^2	≥30.0 kg/m^2	≥30.0 kg/m^2	≥30.0 kg/m^2	-
Physical activity					
Ideal	150+ min/wk moderate or 75+ min/wk vigorous or 150+ min/wk	NHANES III did not ask the duration of physical activities. We used the following definition to	150+ min/wk moderate or 75+ min/wk vigorous or 150+ min/wk moderate + vigorous. Physical	150+ min/wk moderate or 75+ min/wk vigorous or 150+ min/wk moderate + vigorous for NHANES	Physical activities with 3<METS <6 and engaged in ≥5 times/wk or physical

	moderate + vigorous	classify participants as physically active: physical activities with 3≤METS <6 and engaged in ≥5 times/wk or physical activities with METS ≥6 and 3.0 times/wk.[15]. Physical activities included walking, jogging or running, bicycling, swimming, aerobics or aerobic dancing, other dancing, calisthenics, gardening or yard work, and other sports.	activities included walking, jogging or running, bicycling, swimming, aerobics or aerobic dancing, other dancing, calisthenics, gardening or yard work, and other sports.	2005-2006. The physical activity questionnaires changed substantially after NHANES 2007-2008; thus, we restricted our Trend analyses to data from NHANES 1999-2004 and 2005-2006 for consistency. Physical activities included walking, jogging or running, bicycling, swimming, aerobics or aerobic dancing, other dancing, calisthenics, gardening or yard work, and other sports.	activities with METS ≥6 and 3.0 times/wk. vs. others
Intermediate	1–149 min/wk moderate or 1–74 min/wk vigorous or 1–149 min/wk moderate + vigorous	The difference between physically active and none physical activity was taken as intermediate.	1–149 min/wk moderate or 1–74 min/wk vigorous or 1–149 min/wk moderate + vigorous.	1–149 min/wk moderate or 1–74 min/wk vigorous or 1–149 min/wk moderate + vigorous for NHANES 2005-2006.	-
Poor	None	None	None	None	-
Healthy diet score					
Ideal	4–5 Components	-	-	-	-
Intermediate	2–3 Components	AHA's healthy diet score ranges from 0-5 and is calculated from sum of the following components, one point each for the consumption of fruits and vegetables (≥4.5 cups/day), fish (≥two 3.5-oz servings/week), fiber-rich whole grains (≥ three 1-oz-equivalent servings/day), sodium (<1500 mg/d), and sugar-sweetened beverages (≤36-oz/week). We estimated the healthy diet	FFQ was administrated in NHANES 2003-2004 only. FFQ in NHANES 2003-2004 was developed by the National Cancer Institute (NCI) with a 124 foods and beverage items and used a "past 12 months" reference period. The methods of estimating healthy diet score is the same as in NHANES III. For Trend analyses, we dichotomized the score as <2 vs. ≥2 components	FFQ was administrated in NHANES 2005-2006 only. FFQ in NHANES 2003-2004 was developed by the National Cancer Institute (NCI) with a 124 food and beverage items and used a "past 12 months" reference period. The methods of estimating healthy diet score is the same as in NHANES III. For Trend analyses, we dichotomized the score as <2 vs. ≥2 components due to the paucity of	Healthy diet score ≥2 vs. <2 components

		score based on the Food Frequency Questionnaire (FFQ) for all the dietary elements, with the exception of sodium. We assumed that the reported consumption of one serving of fruit or vegetables was one cup; one serving of fish, 3.5-oz; one serving of whole grains, 1-oz equivalent of whole grains; and one serving of sugar sweetened beverages, 12-oz. For fruits and vegetable consumption, we excluded white potatoes, French fries, citrus and other fruit juice, and hot red chili peppers. For sodium intake, we used the National Cancer Institute methodology to estimate the usual intakes of sodium.[18] NHANES III FFQ used a "past month" reference period. For trend and association analyses, we dichotomized the score as <2 vs. ≥2 components due to the paucity of participants with a score ≥4 (<1.0%).	due to the paucity of participants with a score ≥4 (<1.0%).	participants with a score ≥4 (<1.0%).	
Poor	0–1 Components	FFQ <2 components	FFQ <2 components	FFQ <2 components	FFQ <2 components
Total cholesterol					
Ideal[a]	<200 mg/dL	<200 mg/dL	<200 mg/dL	<200 mg/dL	Total cholesterol <200 vs. ≥200 mg/dL
Intermediate	200–239 mg/dL or treated to goal	200–239 mg/dL or treated to goal	200–239 mg/dL or treated to goal	200–239 mg/dL or treated to goal	-
Poor	≥240 mg/dL	≥240 mg/dL	≥240 mg/dL	≥240 mg/dL	-

Blood pressure					
Ideal[a]	SBP<120/DBP<80 mmHg	SBP<120/DBP<80 mmHg	SBP<120/DBP<80 mmHg	SBP<120/DBP<80 mmHg	SBP<120/DBP<80 mmHg vs. SBP≥120/DBP≥80 mmHg
Intermediate	SBP 120–139 or DBP 80–89 mmHg or treated to goal	SBP 120–139 or DBP 80–89 mmHg or treated to goal	SBP 120–139 or DBP 80–89 mmHg or treated to goal	SBP 120–139 or DBP 80–89 mmHg or treated to goal	-
Poor	SBP ≥140 or DBP ≥90 mm Hg	SBP ≥140 or DBP ≥90 mmHg	SBP ≥140 or DBP ≥90 mmHg	SBP ≥140 or DBP ≥90 mmHg	-
Fasting plasma glucose					
Ideal	<100 mg/dL	Fasting glucose was available for a sub-sample of NHANES III participants (n=6939). <100 mg/dL	Fasting glucose was available for a sub-sample of NHANES 1999-2004 participants (n=5635). <100 mg/dL	Fasting glucose was available for a sub-sample of NHANES 2005-2010 participants (n=4124). <100 mg/dL	We used hemoglobin A1c <5.7% as an approximation to <100mg/dL fasting glucose.[b] A1c <5.7% vs. A1c ≥5.7%
Intermediate	100–125 mg/dL or treated to goal	100–125 mg/dL or treated to goal	100–125 mg/dL or treated to goal	100–125 mg/dL or treated to goal	-
Poor	≥126 mg/dL	≥126 mg/dL	≥126 mg/dL	≥126 mg/dL	-

[a.] untreated values, ie, no hypertension or high cholesterol levels.

[b.] American Diabetes Association. Standards of medical care in diabetes -2010. *Diabetes Care* 2010;33 Suppl 1:S11-61.

eTable 2. Adjusted Hazard Ratios (HRs) of All-Cause and CVD Mortality by Cardiovascular Health Metrics and Age Group, NHANES III (1988-1994) Linked Mortality File (Through 2006)

Characteristics	Number of cardiovascular health metrics						p-value for trends[b]	Adjusted PAF (95% CI)[c]
	0-1	2	3	4	5	6+		
All-cause mortality								
Age < 60 years								
All deaths	46	122	184	174	83	38		
Number of participants								
Total person yrs	3507	12401	27189	39934	36484	18798		
HR adjusted for age, sex & race-ethnicity only	1.0	0.59 (0.33 - 1.06)	0.52 (0.31 - 0.87)	0.38 (0.25 - 0.59)	0.23 (0.13 - 0.43)	0.20 (0.11 - 0.38)	<0.001	
Fully-adjusted HR[a]	1.0	0.65 (0.38 - 1.11)	0.57 (0.35 - 0.95)	0.44 (0.29 - 0.67)	0.30 (0.17 - 0.54)	0.29 (0.16 - 0.52)	<0.001	61.4 (5.0-88.1)
Age ≥ 60 years								
All deaths	107	323	527	544	287	84		
Number of participants								
Total person yrs	2003	6217	10590	10782	6307	2579		
HR adjusted for age, sex & race-ethnicity only	1.0	0.62 (0.47 - 0.80)	0.49 (0.37 - 0.65)	0.39 (0.29 - 0.52)	0.40 (0.30 - 0.53)	0.23 (0.16 - 0.32)	<0.001	
Fully-adjusted HR[a]	1.0	0.63 (0.48 - 0.82)	0.50 (0.38 - 0.67)	0.41 (0.30 - 0.54)	0.41 (0.31 - 0.56)	0.24 (0.18 - 0.34)	<0.001	54.9 (3.4-83.4)
CVD mortality								
Age < 60 years								
CVD deaths	18	53	63	31	13	3		
Number of participants								
Total person yrs	3507	12401	27189	39934	36484	18798		
HR adjusted for age, sex & race-ethnicity only	1.0	0.77 (0.41 - 1.47)	0.49 (0.25 - 0.96)	0.19 (0.09 - 0.39)	0.09 (0.03 - 0.25)	0.03 (0.01 - 0.13)	<0.001	
Fully-adjusted HR[a]	1.0	0.88 (0.48 - 1.60)	0.58 (0.27 - 1.21)	0.23 (0.10 - 0.53)	0.12 (0.04 - 0.37)	0.04 (0.01 - 0.23)	<0.001	89.5 (7.0-99.2)
Age < 60 years								
CVD deaths	52	145	225	261	119	43		

Characteristics	Number of cardiovascular health metrics						p-value for trends[b]	Adjusted PAF (95% CI)[c]
	0-1	2	3	4	5	6+		
Number of participants								
Total person yrs	2003	6217	10590	10782	6307	2579		
HR adjusted for age, sex & race-ethnicity only	1.0	0.64 (0.44 - 0.92)	0.43 (0.30 - 0.62)	0.40 (0.29 - 0.55)	0.34 (0.21 - 0.53)	0.23 (0.13 - 0.43)	<0.001	
Fully-adjusted HR[a]	1.0	0.67 (0.46 - 0.96)	0.46 (0.32 - 0.66)	0.43 (0.31 - 0.60)	0.35 (0.22 - 0.57)	0.25 (0.14 - 0.46)	<0.001	43.6 (0.1-83.4)

a. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, family history of CVD, smoking status, physical activity, BMI, health diet score, total cholesterol, blood pressure, and hemoglobin A1c.

b. *P*-value for Trends across the categories of cardiovascular health metrics based on Satterthwaite adjusted F-test; *P*-values for number of cardiovascular health metrics by age group interactions were 0.487 and 0.016 for the multivariable-adjusted models of all-cause and CVD mortality, respectively, based on Satterthwaite adjusted F-test; all tests two-tailed.

c. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, and family history of CVD and cardiovascular health metrics.

eTable 3. Adjusted Hazard Ratios (HRs) of All-Cause and CVD Mortality by Cardiovascular Health Metrics and Sex, NHANES III (1988-1994) Linked Mortality File (Through 2006)

	Number of cardiovascular health metrics						p-value for trends[b]	Adjusted full PAF[c]
Characteristics	**0-1**	**2**	**3**	**4**	**5**	**6+**		
All-cause mortality								
Male								
All deaths	61	212	390	385	225	76		
Number of participants								
Total person yrs	2667	8906	19298	25309	18856	9038		
HR adjusted for age, sex & race-ethnicity only	1.0	0.77 (0.43 - 1.38)	0.70 (0.43 – 1.14)	0.48 (0.28 - 0.82)	0.49 (0.29 - 0.82)	0.34 (0.19 - 0.59)	<0.001	
Fully-adjusted HR[a]	1.0	0.82 (0.46 - 1.45)	0.75 (0.46 – 1.20)	0.53 (0.32 - 0.89)	0.56 (0.34 - 0.92)	0.42 (0.24 - 0.72)	<0.001	53.6 (0.0-83.8)
Female								
All deaths	27	96	148	148	80	27		
Number of participants								
Total person yrs	2667	8906	19298	25309	18856	9038		
HR adjusted for age, sex & race-ethnicity only	1.0	1.17 (0.68 - 2.01)	0.74 (0.42 - 1.30)	0.55 (0.35 - 0.87)	0.44 (0.29 - 0.67)	0.23 (0.12 - 0.44)	<0.001	
Fully-adjusted HR[a]	1.0	1.27 (0.73 - 2.22)	0.81 (0.46 - 1.43)	0.62 (0.39 - 0.99)	0.51 (0.32 - 0.80)	0.31 (0.16 - 0.59)	<0.001	63.4 (17.1-86.8)
CVD mortality								
Male								
CVD deaths	92	233	321	333	145	46		
Number of participants								
Total person yrs	2843	9712	18481	25408	23935	12339		
HR adjusted for age, sex & race-ethnicity only	1.0	0.55 (0.41 - 0.74)	0.44 (0.33 - 0.59)	0.41 (0.30 - 0.57)	0.33 (0.23 - 0.46)	0.19 (0.12 - 0.32)	<0.001	
Fully-adjusted HR[a]	1.0	0.57 (0.43 - 0.75)	0.46 (0.35 - 0.61)	0.43 (0.32 - 0.59)	0.35 (0.25 - 0.49)	0.22 (0.13 - 0.36)	<0.001	67.9 (0.0-94.5)

Characteristics	Number of cardiovascular health metrics						p-value for trends[b]	Adjusted full PAF[c]
	0-1	2	3	4	5	6+		
Female								
CVD deaths	43	102	140	144	52	19		
Number of participants								
Total person yrs	2843	9712	18481	25408	23935	12339		
HR adjusted for age, sex & race-ethnicity only	1.0	0.48 (0.32 - 0.72)	0.37 (0.24 - 0.57)	0.31 (0.20 - 0.48)	0.23 (0.13 - 0.41)	0.15 (0.07 - 0.33)	<0.001	
Fully-adjusted HR[a]	1.0	0.51 (0.34 - 0.76)	0.39 (0.27 - 0.58)	0.32 (0.21 - 0.50)	0.24 (0.13 - 0.43)	0.16 (0.07 - 0.36)	<0.001	64.1 (0.1-92.5)

a. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, family history of CVD, smoking status, physical activity, BMI, health diet score, total cholesterol, blood pressure, and hemoglobin A1C.

b. *P*-value for Trends across the categories of cardiovascular health metrics based on Satterthwaite adjusted F-test; *P*-values for number of cardiovascular health metrics by sex interactions were 0.321 and 0.344 for the multivariable-adjusted models of all-cause and CVD mortality, respectively, based on Satterthwaite adjusted F-test; all tests two-tailed.

c. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, and family history of CVD and cardiovascular health metrics.

eTable 4. Adjusted Hazard Ratios (HRs) of All-Cause and CVD Mortality by Number of Cardiovascular Health Metrics Met and Race/Ethnicity, NHANES III (1988-1994) Linked Mortality File (Through 2006)

	Number of cardiovascular health metrics						p-value for trends[b]	Adjusted PAF (95% CI)[c]
Characteristics	**0-1**	**2**	**3**	**4**	**5**	**6+**		
All-cause mortality								
Non-Hispanic white								
All deaths	54	198	338	402	246	91		
Number of participants								
Total person yrs	1558	5981	13875	19938	16666	10077		
HR adjusted for age, sex & race-ethnicity only	1.0	0.65 (0.47 - 0.90)	0.54 (0.40 - 0.75)	0.42 (0.32 - 0.56)	0.38 (0.28 - 0.52)	0.25 (0.18 - 0.35)	<0.001	
Fully-adjusted HR[a]	1.0	0.68 (0.49 - 0.93)	0.58 (0.42 - 0.80)	0.46 (0.35 - 0.60)	0.43 (0.32 - 0.57)	0.29 (0.22 - 0.40)	<0.001	59.6 (23.3-81.0)
Non-Hispanic black								
All deaths	26	96	133	181	97	40		
Number of participants								
Total person yrs	1558	5981	13875	19938	16666	10077		
HR adjusted for age, sex & race-ethnicity only	1.0	0.71 (0.50 - 1.01)	0.47 (0.33 - 0.69)	0.38 (0.27 - 0.54)	0.30 (0.20 - 0.45)	0.18 (0.11 - 0.29)	<0.001	
Fully-adjusted HR[a]	1.0	0.76 (0.53 - 1.08)	0.52 (0.36 - 0.76)	0.43 (0.30 - 0.60)	0.33 (0.21 - 0.52)	0.22 (0.13 - 0.36)	<0.001	68.0 (16.4-90.4)
Mexican American								
All deaths	61	147	198	156	51	15		
Number of participants								
Total person yrs	2392	6606	11784	13411	9863	4821		
HR adjusted for age, sex & race-ethnicity only	1.0	0.82 (0.58 - 1.16)	0.66 (0.47 - 0.93)	0.65 (0.47 - 0.91)	0.40 (0.25 - 0.64)	0.36 (0.19 - 0.67)	<0.001	
Fully-adjusted HR[b]	1.0	0.85 (0.61 - 1.18)	0.70 (0.49 - 0.99)	0.69 (0.50 - 0.96)	0.44 (0.28 - 0.71)	0.41 (0.22 - 0.75)	0.0016	63.3 (15.1-87.2)
CVD mortality								
Non-Hispanic white								

Characteristics	Number of cardiovascular health metrics						p-value for trends [b]	Adjusted PAF (95% CI) [c]
	0-1	2	3	4	5	6+		
CVD deaths	30	57	84	56	13	2		
Number of participants								
Total person yrs	2392	6606	11784	13411	9863	4821		
HR adjusted for age, sex & race-ethnicity only	1.0	0.64 (0.42 - 0.99)	0.56 (0.38 - 0.84)	0.47 (0.32 - 0.69)	0.22 (0.12 - 0.40)	0.12 (0.02 - 0.62)	0.001	
Fully-adjusted HR[a]	1.0	0.66 (0.41 - 1.05)	0.61 (0.40 - 0.92)	0.52 (0.34 - 0.78)	0.24 (0.13 - 0.43)	0.12 (0.02 - 0.63)	0.003	71.2 (0.1-94.6)
Non-Hispanic black								
CVD deaths	35	91	161	143	60	16		
Number of participants								
Total person yrs	1403	5385	10963	15393	14144	5319		
HR adjusted for age, sex & race-ethnicity only	1.0	0.67 (0.45 - 1.01)	0.70 (0.45 - 1.11)	0.48 (0.30 - 0.77)	0.43 (0.26 - 0.70)	0.50 (0.28 - 0.90)	0.009	
Fully-adjusted HR[a]	1.0	0.70 (0.47 - 1.06)	0.72 (0.46 - 1.13)	0.51 (0.32 - 0.82)	0.46 (0.28 - 0.77)	0.64 (0.34 - 1.19)	0.026	50.0 (0.0-94.5)
Mexican American								
CVD deaths	13	41	65	49	19	4		
Number of participants								
Total person yrs	1403	5385	10963	15393	14144	5319		
HR adjusted for age, sex & race-ethnicity only	1.0	1.02 (0.41 - 2.51)	0.94 (0.41 - 2.16)	0.35 (0.15 - 0.80)	0.36 (0.14 - 0.92)	0.19 (0.04 - 0.84)	<0.001	
Fully-adjusted HR[a]	1.0	1.04 (0.42 - 2.56)	0.95 (0.41 - 2.19)	0.36 (0.16 - 0.84)	0.37 (0.14 - 0.97)	0.23 (0.05 - 0.97)	<0.001	79.6 (0.0-98.9)

a. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, family history of CVD, smoking status, physical activity, BMI, health diet score, total cholesterol, blood pressure, and hemoglobin A1C.

b. *P*-value for Trends across the categories of cardiovascular health metrics score based on Satterthwaite adjusted F-test. ; *P*-values for number of cardiovascular health metrics met by race/ethnicity interactions were 0.312 and 0.527 for the multivariable-adjusted models of all-cause and CVD mortality, respectively, based on Satterthwaite adjusted F-test; all tests two-tailed.

c. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, and family history of CVD and cardiovascular health metrics.

eTable 5. Adjusted Hazard Ratios (HRs) of All-Cause and CVD Mortality by Cardiovascular Health Metrics and Educational Attainment, NHANES III (1988-1994) Linked Mortality File (Through 2006)

	Number of cardiovascular health metrics						p-value for trends[b]	Adjusted PAF (95% CI)[c]
Characteristics	**0-1**	**2**	**3**	**4**	**5**	**6+**		
All-cause mortality								
<12 years of school								
All deaths	105	264	419	409	170	46		
Number of participants								
Total person yrs	3052	9483	16882	19883	13372	3940		
HR adjusted for age, sex & race-ethnicity only	1.0	0.54 (0.40 - 0.72)	0.53 (0.40 - 0.71)	0.42 (0.31 - 0.57)	0.36 (0.26 - 0.51)	0.23 (0.15 - 0.34)	<0.001	
Fully-adjusted HR[a]	1.0	0.54 (0.40 - 0.73)	0.53 (0.40 - 0.71)	0.43 (0.31 - 0.58)	0.36 (0.26 - 0.51)	0.23 (0.15 - 0.36)	<0.001	61.4 (19.2-84.5)
≥12 years of school								
All deaths	48	121	169	166	64	19		
Number of participants								
Total person yrs	3052	9483	16882	19883	13372	3940		
HR adjusted for age, sex & race-ethnicity only	1.0	0.68 (0.39 - 1.19)	0.55 (0.30 - 0.99)	0.48 (0.24 - 0.97)	0.33 (0.18 - 0.63)	0.22 (0.09 - 0.55)	0.005	
Fully-adjusted HR[a]	1.0	0.71 (0.40 - 1.24)	0.56 (0.31 - 1.00)	0.51 (0.25 - 1.03)	0.34 (0.18 - 0.65)	0.23 (0.09 - 0.58)	0.007	50.5 (0.0-85.1)
CVD mortality								
<12 years of school								
CVD deaths	48	181	292	309	200	76		
Number of participants								
Total person yrs	2458	9135	20897	30833	29420	17538		
HR adjusted for age, sex & race-ethnicity only	1.0	0.85 (0.48 - 1.52)	0.65 (0.40 - 1.06)	0.55 (0.35 - 0.84)	0.51 (0.31 - 0.83)	0.34 (0.20 - 0.56)	<0.001	
Fully-adjusted HR[a]	1.0	0.71 (0.05 - 1.58)	0.69 (0.42 - 1.14)	0.57 (0.37 - 0.88)	0.54 (0.33 - 0.88)	0.37 (0.22 - 0.61)	<0.001	54.8 (11.7-80.5)

Characteristics	Number of cardiovascular health metrics						p-value for trends[b]	Adjusted PAF (95% CI)[c]
	0-1	2	3	4	5	6+		
<12 years of school								
CVD deaths	22	77	119	126	68	27		
Number of participants								
Total person yrs	2458	9135	20897	30833	29420	17538		
HR adjusted for age, sex & race-ethnicity only	1.0	0.78 (0.38 - 1.58)	0.49 (0.25 - 0.97)	0.36 (0.18 - 0.70)	0.30 (0.16 - 0.57)	0.18 (0.09 - 0.36)	<0.001	
Fully-adjusted HR[a]	1.0	0.83 (0.40 - 1.69)	0.55 (0.27 - 1.11)	0.39 (0.20 - 0.78)	0.33 (0.17 - 0.64)	0.21 (0.10 - 0.43)	<0.001	76.3 (13.2-95.4)

a. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, family history of CVD, smoking status, physical activity, BMI, health diet score, total cholesterol, blood pressure, and hemoglobin A1C.

b. *P*-value for Trends across the categories of cardiovascular health metrics profile based on Satterthwaite adjusted F-test. *P*-values for number of cardiovascular health metrics by educational attainment interactions were 0.446 and 0.818 for the multivariable-adjusted models of all-cause and CVD mortality, respectively, based on Satterthwaite adjusted F-test; all tests two-tailed.

c. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, and family history of CVD and cardiovascular health metrics.

eTable 6. Adjusted Hazard Ratios (HRs) of All-Cancer Mortality by Cardiovascular Health Metrics, NHANES III (1988-1994) Linked Mortality File (Through 2006)

	Number of cardiovascular health metrics						p-value for trends[b]	Adjusted PAF (95% CI)[c]
Characteristics	**0-1**	**2**	**3**	**4**	**5**	**6+**		
All-cause mortality								
All deaths	84	180	189	106	60	17		
Number of participants	1236	2608	3370	3081	2060	957		
Total person yrs	15894	34666	45515	43030	29397	13851		
HR adjusted for age, sex & race-ethnicity only	1.0	0.99 (0.66 – 1.48)	0.88 (0.58 – 1.33)	0.56 (0.33 - 0.95)	0.81 (0.50 – 1.29)	0.54 (0.27 – 1.08)	0.050	
Fully-adjusted HR[a]	1.0	1.01 (0.68 – 1.52)	0.90 (0.59 – 1.36)	0.59 (0.34 - 0.99)	0.87 (0.55 – 1.38)	0.60 (0.29 – 1.25)	0.098	44.3 (0.0-76.0)

a. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, family history of CVD, smoking status, physical activity, BMI, health diet score, total cholesterol, blood pressure, and hemoglobin A1c.

b. *P*-value for Trends across the categories of cardiovascular health metrics based on Satterthwaite adjusted F-test; all tests two-tailed.

c. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, and family history of CVD and cardiovascular health metrics.

eTable 7. Weighted Prevalence, Adjusted Hazard Ratios (HRs) and Population-Attributable Fractions (PAFs) (95% Confidence Intervals) for Cardiovascular Health Metrics and Risk of All-Cause and CVD Mortality With BMI Classified as <30 vs ≥30 and Total Cholesterol as <240 vs ≥240 mg/dL, NHANES III (1988-1994) Linked Mortality File (Through 2006)

Cardiovascular health metrics	Cases/participants	Weighted prevalence (95% CI)	HR adjusted for age, sex and race/ethnicity only (95% CI)	Fully adjusted HR (95% CI)[a]	Adjusted PAF (95% CI)[b]
	All-cause mortality				
Current smoking					
Yes	691/3542	28.8 (27.1 – 30.5)	1.0	1.0	-
No	1982/9770	71.2 (69.5 – 72.9)	0.46 (0.40 - 0.52)	0.49 (0.42 - 0.57)	24.8 (18.3-31.1)
Physical activity					
No	1722/8316	57.9 (55.5 – 60.3)	1.0	1.0	-
Yes	951/4996	42.1 (39.7 – 44.7)	0.79 (0.74 - 0.86)	0.85 (0.77 - 0.93)	10.1 (2.1-17.9)
BMI					
≥30	655/3439	22.2 (20.8 – 23.6)	1.0	1.0	-
<30	2018/9873	77.8 (76.4 – 79.2)	0.85 (0.74 - 0.97)	0.88 (0.77 - 0.99)	1.5 (0-6.8)
Healthy diet score					
<2 components	1919/10245	74.2 (72.6 – 75.8)	1.0	1.0	-
≥2 components	754/3067	25.8 (24.2 – 27.4)	0.83 (0.73 - 0.95)	0.94 (0.83 - 1.07)	1.4 (0.0-14.8)
Total serum cholesterol, mg/dL					
≥240	808/2775	20.1 (18.9 – 21.3)	1.0	1.0	
<240	1865/10537	79.9 (78.7 – 81.1)	1.04 (0.92 - 1.17)	1.06 (0.94 - 1.18)	n/a
Blood pressure, mmHg					
≥120/≥80	2297/7947	54.2 (52.3 – 56.1)	1.0	1.0	-
<120/<80	376/5365	45.8 (43.9 – 47.7)	0.79 (0.66 - 0.94)	0.81 (0.68 - 0.95)	28.5 (18.1-38.3)
Hemoglobin A1c, %					
≥5.7%	1144/3233	15.8 (14.2 – 17.4)	1.0	1.0	-
<5.7%	1529/10079	84.2 (82.6 – 85.8)	0.69 (0.63 - 0.75)	0.73 (0.67 - 0.80)	10.1 (6.2-14.7)
Current smoking	CVD mortality				
Yes	229/3542	28.8 (27.1 – 30.5)	1.0	1.0	-
No	856/9770	71.2 (69.5 – 72.9)	0.46 (0.38 - 0.57)	0.50 (0.39 - 0.64)	14.3 (5.8-22.7)
Physical activity					
No	718/8316	57.9 (55.5 – 60.3)			-
Yes	367/4996	42.1 (39.7 – 44.7)	0.74 (0.63 - 0.87)	0.77 (0.65 - 0.92)	11.4 (1.0-21.7)
BMI					

Cardiovascular health metrics	Cases/participants	Weighted prevalence (95% CI)	HR adjusted for age, sex and race/ethnicity only (95% CI)	Fully adjusted HR (95% CI)[a]	Adjusted PAF (95% CI)[b]
≥30	277/3439	22.2 (20.8 – 23.6)	1.0	1.0	-
<30	808/9873	77.8 (76.4 – 79.2)	0.77 (0.60 - 0.99)	0.82 (0.65 - 1.05)	1.2 (0-9.0)
Healthy diet score					
<2 components	763/10245	74.2 (72.6 – 75.8)			-
≥2 components	322/3067	25.8 (24.2 – 27.4)	0.74 (0.60 - 0.90)	0.82 (0.67 - 1.02)	13.2 (3.5 -29.3)
Total serum cholesterol, mg/dL					
≥240	379/2775	20.1 (18.9 – 21.3)	1.0	1.0	-
<240	706/10537	79.9 (78.7 – 81.1)	0.82 (0.68 - 0.97)	0.83 (0.71 - 0.98)	3.7 (0-9.0)
Blood pressure, mmHg					
≥120/≥80	981/7947	54.2 (52.3 – 56.1)			
<120/<80	104/5365	45.8 (43.9 – 47.7)	0.61 (0.45 - 0.83)	0.64 (0.47 - 0.86)	39.2 (25.0 -51.8)
Hemoglobin A1c, %					
≥5.7%	497/3233	15.8 (14.2 – 17.4)			-
<5.7%	588/10079	84.2 (82.6 – 85.8)	0.66 (0.54 - 0.80)	0.71 (0.58 - 0.86)	8.2 (2.1 -14.3)
Current smoking			**IHD mortality**		
Yes	120/3542	28.8 (27.1 – 30.5)	1.0	1.0	-
No	456/9770	71.2 (69.5 – 72.9)	0.42 (0.32 - 0.56)	0.48 (0.35 - 0.66)	18.0 (8.1-27.6)
Physical activity					
No	377/8316	57.9 (55.5 – 60.3)			-
Yes	199/4996	42.1 (39.7 – 44.7)	0.76 (0.61 - 0.94)	0.83 (0.65 - 1.06)	6.5 (0.0-21.0)
BMI					
≥30	142/3439	22.2 (20.8 – 23.6)	1.0	1.0	-
<30	434/9873	77.8 (76.4 – 79.2)	0.71 (0.52 - 0.96)	0.74 (0.54 - 1.01)	5.7 (0-15.9)
Healthy diet score					
<2 components	412/10245	74.2 (72.6 – 75.8)			-
≥2 components	164/3067	25.8 (24.2 – 27.4)	0.65 (0.48 - 0.87)	0.74 (0.55 - 0.98)	20.7 (1.3 -38.6)
Total serum cholesterol, mg/dL					
≥240	198/2775	20.1 (18.9 – 21.3)	1.0	1.0	-
<240	378/10537	79.9 (78.7 – 81.1)	0.81 (0.62 - 1.06)	0.83 (0.66 - 1.05)	3.7 (0.0 – 10.8)
Blood pressure, mmHg					
≥120/≥80	518/7947	54.2 (52.3 – 56.1)			
<120/<80	58/5365	45.8 (43.9 – 47.7)	0.66 (0.38 - 1.12)	0.67 (0.39 - 1.13)	31.7 (5.9 -53.6)
Hemoglobin A1c, %					
≥5.7%	262/3233	15.8 (14.2 – 17.4)			

Cardiovascular health metrics	Cases/participants	Weighted prevalence (95% CI)	HR adjusted for age, sex and race/ethnicity only (95% CI)	Fully adjusted HR (95% CI)[a]	Adjusted PAF (95% CI)[b]
<5.7%	314/10079	84.2 (82.6 – 85.8)	0.66 (0.51 - 0.85)	0.71 (0.55 - 0.90)	6.6 (0.1 -13.4)

a. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, family history of CVD, smoking status, physical activity, BMI, healthy diet score, total cholesterol, blood pressure, and hemoglobin A1c.

b. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, family history of CVD, smoking status, physical activity, BMI, healthy diet score, total cholesterol, blood pressure, and hemoglobin A1c. The negative values of the lower 95% CI of the PAF were rounded to zero.

eTable 8. Adjusted Hazard Ratios (HRs) of All-Cause, CVD, and IHD Mortality by Cardiovascular Health Metrics With BMI Classified as <30 vs ≥30 and Total Cholesterol as <240 vs ≥240 mg/dL, NHANES III (1988-1994) Linked Mortality File (Through 2006)

Characteristics	Number of cardiovascular health metrics[a]						p-value for trends[c]	Adjusted PAF (95% CI)[d]
	0-1	2	3	4	5	6+		
All-cause mortality								
All deaths	141	430	718	776	441	167		
Number of participants	410	1347	2755	3738	3259	1803		
Total person yrs	5197	17448	36666	51076	26037	25928		
HR adjusted for age, sex & race-ethnicity only	1.0	0.69 (0.51 - 0.93)	0.56 (0.43 - 0.74)	0.47 (0.36 - 0.62)	0.40 (0.30 - 0.54)	0.29 (0.22 - 0.39)	<0.001	
Fully-adjusted HR[b]	1.0	0.72 (0.54 - 0.96)	0.60 (0.45 - 0.79)	0.51 (0.39 - 0.65)	0.45 (0.33 - 0.60)	0.35 (0.26 - 0.46)	<0.001	59.5 (34.0-76.8)
CVD mortality								
CVD deaths	66	189	293	315	162	60		
Number of participants	410	1347	2755	3738	3259	1803		
Total person yrs	5197	17448	36666	51076	26037	25928		
HR adjusted for age, sex & race-ethnicity only	1.0	0.67 (0.50 - 0.89)	0.48 (0.36 - 0.65)	0.38 (0.29 - 0.50)	0.31 (0.22 - 0.43)	0.18 (0.12 - 0.28)	<0.001	
Fully-adjusted HR[b]	1.0	0.70 (0.52 - 0.93)	0.52 (0.38 - 0.70)	0.41 (0.31 - 0.54)	0.33 (0.23 - 0.47)	0.21 (0.13 - 0.33)	<0.001	64.9 (16.4-88.1)

Characteristics	Number of cardiovascular health metrics[a]						p-value for trends[c]	Adjusted PAF (95% CI)[d]
	0-1	2	3	4	5	6+		
IHD mortality								
IHD deaths	30	108	153	163	87	35		
Number of participants	410	1347	2755	3738	3259	1803		
Total person yrs	5197	17448	36666	51076	26037	25928		
HR adjusted for age, sex & race-ethnicity only	1.0	0.66 (0.45 - 0.95)	0.43 (0.31 - 0.62)	0.32 (0.23 - 0.46)	0.28 (0.18 - 0.43)	0.16 (0.09 - 0.28)	<0.001	
Fully-adjusted HR[b]	1.0	0.68 (0.48 - 0.97)	0.46 (0.32 - 0.65)	0.35 (0.25 - 0.49)	0.30 (0.19 - 0.48)	0.19 (0.10 - 0.34)	0.0019	65.7 (2.2-91.4)

a. BMI was classified as <30 vs. ≥30 and total cholesterol was classified as <240 vs. ≥240mg/dL.

b. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, family history of CVD, smoking status, physical activity, BMI, healthy eating index, total cholesterol, blood pressure, and hemoglobin A1C.

c. *P*-value for trends across the categories of cardiovascular health metrics profile based on Satterthwaite adjusted F-test; all tests two-tailed.

d. Adjusted for age, sex, race/ethnicity, educational attainment, alcohol intake, and family history of CVD and all seven cardiovascular health metrics were considered together in estimating the PAF.

eTable 9. Baseline Characteristics by Number of Cardiovascular Health Metrics, NHANES III (1988-1994) Linked Mortality File (Through 2006)

Characteristics[b]	No. of participants	Total weighted prevalence	Number of cardiovascular health metrics[a]								p-value
			0[c]	1	2	3	4	5	6	7[c]	
No. of participants	13,312		154	1082	2608	3370	3081	2060	821	136	
Total: % (95% CI)			0.8 (0.6-1.2)	6.4 (5.8-7.0)	15.8 (14.7-17.0)	24.4 (23.3-25.5)	23.7 (22.6 - 24.7)	18.2 (16.9 - 19.6)	8.9 (8.0 - 9.9)	1.8 (1.3 – 2.4)	<0.001
Age: mean (95% CI)	13,312	43.4 (42.5 - 44.3)	52.5 (49.4 - 55.7)	51.0 (49.7 – 52.2)	49.3 (48.1 - 50.6)	45.9 (44.7 - 47.0)	41.7 (40.5 - 42.8)	38.2 (37.1 – 39.4)	36.5 (35.1 – 38.0)	37.1 (34.7 - 39.5)	<0.001
Gender: % (95% CI)											
Male	6382	49.6 (48.5 - 50.6)	55.8 (43.1 - 68.1)	55.8 (50.8 – 60.7)	52.6 (49.5 - 55.7)	53.3 (50.6 – 55.9)	52.0 (49.1 - 55.0)	45.0 (42.2 - 47.8)	36.5 (32.3 - 41.1)	25.7 (17.4 - 36.1)	
Female	6930	50.4 (49.4 - 51.5)	44.1 (31.9 – 57.0)	44.2 (39.3 - 49.2)	47.4 (44.3 - 50.5)	46.7 (44.1 – 49.4)	48.0 (45.1 - 50.9)	55.0 (52.2 - 57.8)	63.5 (59.0 – 67.8)	74.3 (63.9 - 82.6)	<0.001
Race/Ethnicity: % (95% CI)											
Non-Hispanic White	5296	76.4 (73.8 - 78.8)	63.7 (49.1 - 76.2)	74.2 (70.5 - 77.7)	75.0 (71.2 – 78.5)	76.5 (73.6 - 79.2)	76.2 (73.3 – 78.8)	75.9 (71.5 - 79.9)	80.0 (74.8 – 80.4)	87.1 (81.9 – 91.0)	
Non-Hispanic Black	3679	10.5 (9.3 - 11.7)	21.8 (14.0 – 32.2)	16.1 (13.5 – 19.0)	13.2 (11.2 – 15.0)	10.3 (8.9 - 11.7)	10.5 (9.1 – 12.0)	8.6 (7.5 - 9.8)	6.6 (5.1 - 8.5)	3.4 (2.0 - 5.7)	
Mexican American	3786	5.3 (4.5 - 6.2)	5.8 (3.7 – 9.2)	4.9 (4.0 - 5.9)	6.3 (5.3 - 7.4)	5.3 (4.5 - 6.3)	5.6 (4.6 - 6.9)	5.3 (4.1 - 6.8)	3.4 (2.6 - 4.4)	2.7 (1.7 - 4.2)	
Other	551	7.9 (6.4 - 9.8)	8.7 (2.3 - 27.5)	4.8 (3.0 - 7.8)	5.5 (3.5 – 8.6)	7.9 (6.1 - 10.2)	7.3 (6.3 - 9.5)	10.2 (7.3 - 14.3)	10.0 (6.4 - 15.3)	6.9 (3.5 – 13.0)	<0.001
Years of education: % (95% CI)											
0 – 11	5261	23.6 (21.7 - 25.7)	44.1 (29.0 - 60.4)	38.0 (32.0 – 44.3)	32.4 (29.1 - 36.0)	26.5 (23.8 – 29.3)	23.3 (20.6 – 26.3)	16.3 (13.8 - 19.1)	7.7 (5.1 - 11.6)	4.15 (1.7 - 9.9)	

Characteristics[b]	No. of participants	Total weighted prevalence	Number of cardiovascular health metrics[a]								p-value
			0[c]	1	2	3	4	5	6	7[c]	
12 - 15	6362	55.2 (53.4 - 57.0)	54.4 (37.9 - 70.0)	52.3 (46.8 - 57.7)	55.2 (52.0 - 58.4)	58.1 (55.2 – 61.0)	55.5 (51.9 - 59.1)	53.7 (50.2 - 57.2)	53.5 (48.6 - 58.3)	46.5 (33.5 - 59.9)	
≥16	1689	21.2 (19.4 - 23.0)	1.5 (0.5 – 4.1)	9.8 (7.0 - 13.5)	12.4 (10.2 - 14.9)	15.5 (13.0 - 18.3)	21.1 (18.8 - 23.7)	30.0 (26.6 - 33.7)	38.8 (33.0 – 44.9)	49.4 (37.7 – 61.2)	<0.001
Alcohol intake (drinks/wk): % (95% CI)[d]											
None	2582	20.6 (18.3 – 23.1)	21.5 (10.3 - 39.5)	19.5 (15.0 - 24.9)	24.7 (21.4 – 28.3)	20.9 (17.2 - 25.1)	19.5 (16.3 - 23.1)	20.8 (17.6 - 24.4)	18.3 (14.2 – 23.1)	12.9 (6.6 - 23.8)	
<3/per week	2928	39.3 (37.1 - 41.5)	19.5 (12.0 - 30.3)	35.0 (29.0 - 41.5)	33.6 (30.3 - 37.1)	35.8 (32.4 - 39.4)	38.5 (34.4 - 42.9)	42.4 (38.2 - 46.6)	52.1 (46.6 - 57.6)	52.4 (40.5 - 64.1)	
≥3/per week	3156	40.1 (37.6 - 42.7)	59.0 (42.0 – 74.0)	45.5 (38.8 - 52.4)	41.7 (37.7 - 45.8)	43.3 (38.9 – 47.8)	42.0 (38.0 - 46.1)	36.8 (33.0 - 40.9)	29.6 (24.2 - 35.6)	34.7 (23.8 – 47.4)	<0.001
Family history of CVD: % (95% CI)											
Yes	1112	10.3 (9.4 - 11.3)	10.0 (4.9 – 19.3)	15.0 (12.8 – 17.6)	11.1 (9.0 – 13.4)	11.3 (9.5 – 13.3)	10.0 (8.3 - 12.1)	8.7 (6.7 – 11.2)	7.9 (5.5 - 11.2)	7.3 (2.7 – 18.2)	
No	12200	89.7 (88.7 - 90.6)	90.0 (80.7 - 95.1)	85.0 (82.4 - 87.2)	88.9 (86.6 – 91.0)	88.7 (86.7 - 90.5)	90.0 (87.9 - 91.7)	91.3 (88.8 - 93.3)	92.1 (88.8 - 94.5)	92.7 (81.8 - 97.3)	0.005
Cardiovascular health-factors											
Current smoking: Number and % (95% CI)											
Number of participants	9770		0	548	1717	2475	2358	1760	776	136	
Yes (%)		71.2 (69.5 - 72.9)	0	40.5 (35.4 - 45.9)	60.3 (56.7 - 63.8)	68.3 (65.5 – 72.2)	71.4 (67.9 - 74.7)	83.7 (80.6 - 86.4)	93.4 (90.9 - 95.3)	100.0	
Number of participants	3542		154	534	891	895	723	300	45	0	

Characteristics[b]	No. of participants	Total weighted prevalence	Number of cardiovascular health metrics[a]								p-value
			0[c]	1	2	3	4	5	6	7[c]	
No (%)		28.8 (27.1 - 30.6)	100	59.5 (54.1 – 64.6)	39.7 (36.2 – 43.3)	31.1 (27.8 - 34.5)	28.6 (25.3 – 32.1)	16.3 (13.6 – 19.4)	6.6 (4.7 - 9.1)	-	<0.001
Physical activity: number and % (95% CI)											
Number of participants	4996		0	60	448	1071	1393	1171	717	136	
Yes (%)		42.1 (39.7 – 44.5)	0	5.4 (3.7 – 7.8)	16.2 (13.5 - 19.2)	32.1 (29.1 - 35.2)	47.0 (44.1 - 50.0)	58.7 (55.1 - 62.2)	87.0 (82.5 – 90.4)	100	
Number of participants	8316		154	1022	2160	2299	1688	889	104	0	
No (%)		57.9 (55.5 - 60.3)	100.0	94.6 (92.2 – 96.3)	83.5 (80.8 - 86.5)	67.9 (64.9 - 70.9)	53.0 (50.0 – 55.9)	41.3 (37.8 - 44.9)	13.0 (9.6 - 17.5)	0	<0.001
BMI: number and % (95% CI)											
Number of participants	5152		0	65	343	907	1482	1491	728	136	
<25		44.1 (42.4 - 45.9)	0	5.8 (4.3 - 7.9)	12.9 (10.9 - 15.2)	26.5 (23.9 - 29.4)	50.5 (47.2 – 53.9)	73.9 (70.7 - 76.9)	90.1 (86.3 - 92.9)	100	<0.001
Number of participants	8160		154	1017	2265	2463	1599	569	93	0	
≥25		55.9 (54.1- 57.6)	100	94.2 (92.1- 95.7)	87.1 (84.8- 89.1)	73.5 (70.6- 76.2)	49.5 (46.2- 52.8)	26.1 (23.1- 29.3)	9.9 (7.1- 13.7)	0	
Healthy diet score: number and % (95% CI)											
Number of participants	3067		0	41	328	675	764	693	430	136	
≥2 components		25.8 (24.3 – 27.4)	0	3.1 (1.6 - 6.1)	11.7 (10.1 - 13.6)	19.8 (17.4 - 22.5)	24.7 (22.4 - 27.2)	34.7 (31.1 - 38.5)	55.7 (50.6 - 60.6)	100	<0.001
Number of participants	10245		154	1041	2280	2695	2317	1367	391	0	

Characteristics[b]	No. of participants	Total weighted prevalence	Number of cardiovascular health metrics[a]								p-value
			0[c]	1	2	3	4	5	6	7[c]	
<2 components		74.2 (72.6 – 75.7)	100	96.9 (93.9–98.4)	88.3 (86.4–89.9)	80.2 (77.6–82.6)	75.3 (72.9–77.6)	65.3 (61.6–68.9)	44.4 (39.4–49.5)	0	<0.001
Total serum cholesterol, (mg/dL): number and % (95% CI)											
Number of participants	6481		0	81	569	1403	1886	1662	744	136	
<200mg/dL		49.7 (48.0 – 51.5)	0	5.7 (4.2 – 7.9)	17.3 (14.7- 20.2)	37.5 (34.8- 40.2)	58.5 (55.5-61.5)	77.3 (74.9-79.6)	87.0 (83.2-90.0)	100	
Number of participants	6831		154	1001	2039	1967	1195	398	77	0	
≥200mg/dL		50.3 (48.5-52.0)	100	94.3 (92.1-95.9)	82.7 (79.8-85.3)	62.5 (59.8-65.2)	41.5 (38.5-44.5)	22.7 (20.4-25.1)	13.0 (10.0-16.8)	0	<0.001
Blood pressure (mmHg): Number and % (95% CI)											
Number of participants	5365		0	37	342	954	1636	1534	726	136	
<120/80 mmHg		45.8 (43.9-47.7)	0	4.9 (3.1-7.5)	14.6 (12.1-17.4)	30.5 (27.4-33.8)	53.2 (50.6-55.9)	74.1 (71.1-76.9)	88.0 (84.0-91.2)	100	
Number of participants	7947		154	1045	2266	2416	1445	526	95	0	
≥120/80 mmHg		54.2 (52.3-56.1)	100	95.1 (92.5-96.9)	85.5 (82.6-87.9)	69.5 (66.2-72.7)	46.8 (44.1-49.4)	25.9 (23.1-28.9)	12.0 (8.9-16.0)	0	<0.001
Hemoglobin A1c (%): number and % (95% CI)											
Number of participants	10079		0	250	1469	2627	2805	1989	805	136	
<5.7%		84.2 (82.5 - 85.8)	0	34.5 (28.9- 40.5)	67.1 (63.7 - 70.3)	84.7 (82.2- 86.9)	94.6 (93.5- 95.5)	97.5 (96.4- 98.3)	98.9 (97.3- 99.5)	100	
Number of participants	3233		154	832	1139	745	276	71	16	0	
≥5.7%		15.8 (14.2- 17.5)	100	65.5 (59.5- 71.1)	32.9 (29.7- 36.3)	15.3 (13.1- 17.8)	5.4 (4.5- 6.5)	2.5 (1.7- 3.6)	1.2 (0.5- 2.7)	0	<0.001

[a] Mean and percentage (%) presented by number of cardiovascular health metrics met.

[b] For the continuous variables (e.g., age and BMI), p-value for difference across the CV health-factor categories. For categorical variables (e.g., race-ethnicity), we presented χ^2 test. All tests were two-tailed and based on Satterthwaite adjusted F-test.

[c] For all categorical variables among the participants with zero or seven cardiovascular health metrics, the relative standard error (RSE), defined as the ratio of the standard error of the estimate divided by the estimate multiplied by 100, were >30% indicating the unreliable estimates (National Center for Health Statistics. ANALYTIC AND REPORTING GUIDELINES: The Third National Health and Nutrition Examination Survey. Hyattsville, Maryland: U.S. Department of Health and Human Services, Public Health Service, CDC; 1996).

[d] Approximately 35% of participants had missing information on frequency and amount of alcohol consumed in the past 12 months; we couldn't calculate the average drinks per week for those participants. However, the distributions of missing data were similar by the number of cardiovascular health metrics met; so we included those with missing information on frequency and amount of alcohol consumed as a category in the multivariable analyses.