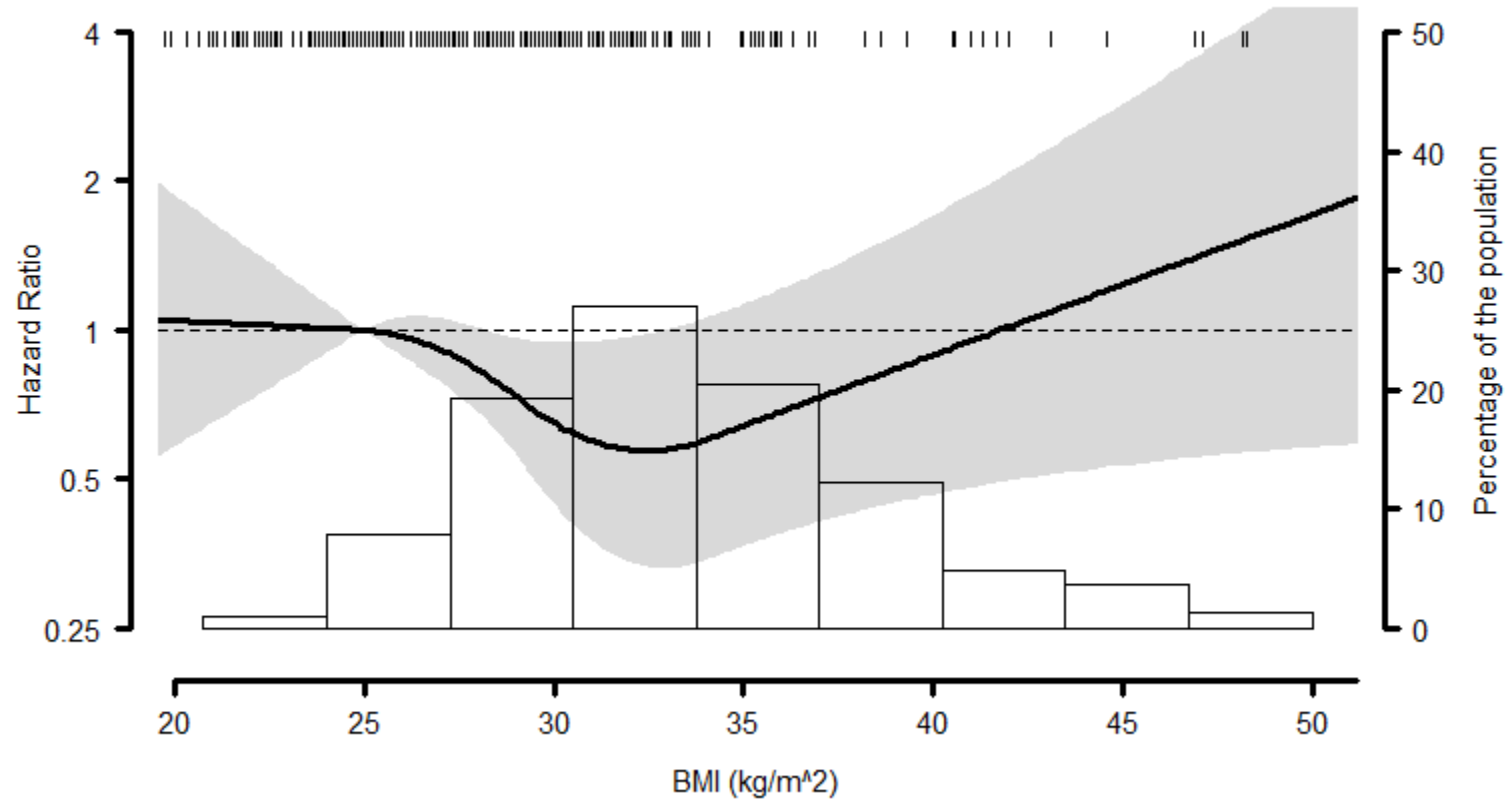
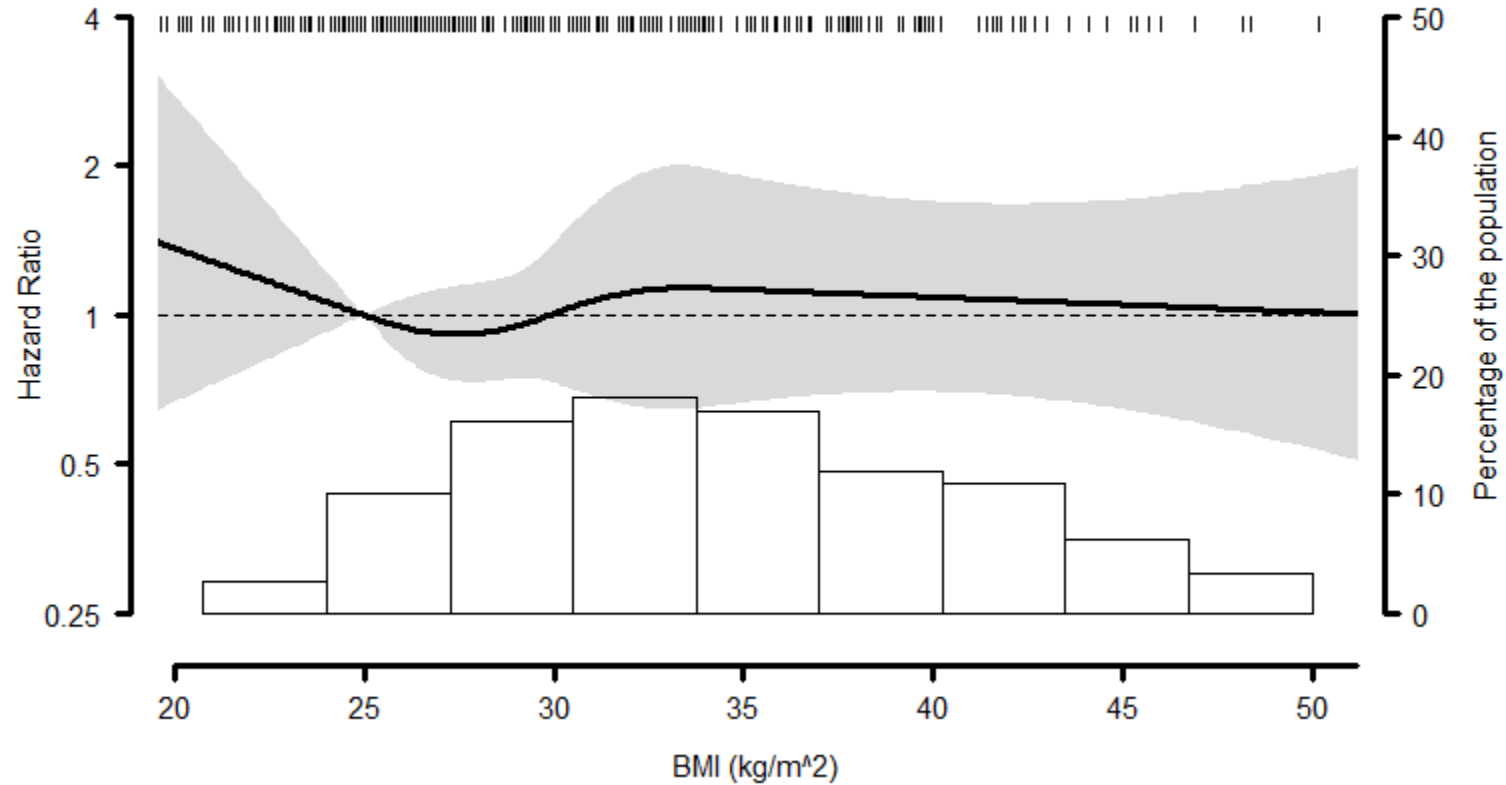


Supplementary Figure S1. Adjusted Relative Hazard of All-Cause Mortality Associated With Body Mass Index Among Men. Gray Shading Represents 95% Confidence Interval; Tick Marks Indicate Deaths; Background Histogram of Body Mass Index Displayed on the Right Axis.



Supplementary Figure S2. Adjusted Relative Hazard of All-Cause Mortality Associated With Body Mass Index Among Women. Gray Shading Represents 95% Confidence Interval; Tick Marks Indicate Deaths; Background Histogram of Body Mass Index Displayed on the Right Axis.



Supplementary Table S1. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality Associated With BMI Category, Separately for Diagnosed and Undiagnosed Diabetes

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
Diagnosed diabetes				
Number of deaths	104	194	100	66
Mortality rate (SE)*	48 (7.4)	35 (3.7)	35 (5.3)	21 (3.7)
Hazard ratios				
Unadjusted	1.00	0.73 (0.51-1.05)	0.75 (0.51-1.10)	0.45 (0.31-0.67)
Multivariable adjusted 1†	1.00	0.64 (0.42-0.99)	0.86 (0.56-1.33)	0.73 (0.47-1.13)
Multivariable adjusted 2‡	1.00	0.77 (0.49-1.20)	0.96 (0.64-1.45)	0.93 (0.58-1.50)
Undiagnosed diabetes				
Number of deaths	47	73	51	33
Mortality rate (SE)*	32 (6.6)	29 (5.4)	20 (4.4)	17 (4.7)
Hazard ratios				
Unadjusted	1.00	0.88 (0.52-1.50)	0.61 (0.33-1.11)	0.52 (0.27-1.02)
Multivariable adjusted 1†	1.00	0.87 (0.50-1.54)	0.76 (0.41-1.39)	1.04 (0.52-2.11)
Multivariable adjusted 2‡	1.00	0.97 (0.54-1.73)	0.75 (0.37-1.52)	1.39 (0.68-2.85)

SE, standard error

\*Per 1000 person-years

†Adjusted for age, race-ethnicity, sex

‡Adjusted for age, race-ethnicity, sex, smoking status, education, income, diabetes duration

Supplementary Table S2. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
Lowest Tertile of A1c (<5.9%)				
Number of deaths	25	55	22	19
Mortality rate (SE)*	18 (4.8)	26 (5.4)	20 (6.0)	12 (2.6)
Hazard ratios				
Unadjusted	1.00	1.50 (0.78-2.87)	1.16 (0.54-2.50)	0.66 (0.34-1.27)
Multivariable adjusted 1†	1.00	1.35 (0.69-2.66)	1.09 (0.54-2.18)	1.11 (0.54-2.30)
Multivariable adjusted 2‡	1.00	1.46 (0.64-3.33)	1.30 (0.48-3.50)	1.40 (0.51-3.86)
Middle Tertile of A1c (5.9-7.0%)				
Number of deaths	42	96	45	38
Mortality rate (SE)*	57 (12.5)	37 (6.0)	26 (5.0)	24 (6.5)
Hazard ratios				
Unadjusted	1.00	0.61 (0.34-1.10)	0.43 (0.22-0.86)	0.43 (0.22-0.85)
Multivariable adjusted 1†	1.00	0.79 (0.51-1.22)	0.81 (0.44-1.51)	1.11 (0.63-1.95)
Multivariable adjusted 2‡	1.00	0.94 (0.55-1.60)	0.84 (0.42-1.66)	1.04 (0.57-1.89)
Highest Tertile of A1c (≥7.1%)				
Number of deaths	80	113	77	38
Mortality rate (SE)*	69 (11.5)	34 (4.7)	32 (5.6)	23 (4.8)
Hazard ratios				
Unadjusted	1.00	0.48 (0.31-0.73)	0.45 (0.28-0.72)	0.32 (0.19-0.53)
Multivariable adjusted 1†	1.00	0.44 (0.27-0.70)	0.54 (0.34-0.86)	0.52 (0.29-0.94)
Multivariable adjusted 2‡	1.00	0.56 (0.35-0.88)	0.68 (0.41-1.14)	0.79 (0.43-1.46)

SE, standard error

\*Per 1000 person-years

†Adjusted for age, race-ethnicity, sex

‡Adjusted for age, race-ethnicity, sex, smoking status, education, income, diabetes duration

Supplementary Table S3. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality Stratified by Diabetes Medication Status

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
Not taking diabetes medications				
Number of deaths	72	106	71	45
Mortality rate (SE)*	30 (4.9)	26 (4.4)	22 (3.7)	16 (3.8)
Hazard ratios				
Unadjusted	1.00	0.85 (0.54-1.33)	0.71 (0.45-1.14)	0.53 (0.30-0.95)
Multivariable adjusted 1†	1.00	0.85 (0.54-1.35)	0.84 (0.50-1.39)	1.05 (0.57-1.93)
Multivariable adjusted 2‡	1.00	0.98 (0.56-1.71)	0.86 (0.45-1.64)	1.16 (0.67-2.00)
Taking only oral medications				
Number of deaths	45	95	41	31
Mortality rate (SE)*	55 (11.2)	35 (4.0)	31 (6.2)	24 (4.8)
Hazard ratios				
Unadjusted	1.00	0.63 (0.39-1.00)	0.54 (0.30-0.96)	0.43 (0.23-0.81)
Multivariable adjusted 1†	1.00	0.50 (0.31-0.80)	0.74 (0.44-1.24)	0.75 (0.39-1.44)
Multivariable adjusted 2‡	1.00	0.60 (0.36-1.02)	0.85 (0.51-1.43)	1.07 (0.55-2.09)
Taking insulin§				
Number of deaths	34	63	38	22
Mortality rate (SE)*	97 (33.9)	66 (10.6)	50 (9.5)	23 (7.8)
Hazard ratios				
Unadjusted	1.00	0.70 (0.32-1.49)	0.51 (0.23-1.11)	0.24 (0.10-0.57)
Multivariable adjusted 1†	1.00	0.59 (0.32-1.09)	0.48 (0.24-0.97)	0.30 (0.15-0.59)
Multivariable adjusted 2‡	1.00	0.79 (0.27-2.33)	0.67 (0.23-1.93)	0.48 (0.16-1.43)

SE, standard error

\*Per 1000 person-years

†Adjusted for age, race-ethnicity, sex

‡Adjusted for age, race-ethnicity, sex, smoking status, education, income, diabetes duration

§Some participants also taking oral medications

Supplementary Table S4. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality Associated With Body Mass Index Category Stratified by High Blood Pressure

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
<b>No Hypertension</b>				
Number of deaths	58	83	47	17
Mortality rate (SE)*	35 (6.1)	21 (4.5)	17 (4.0)	10 (3.1)
<b>Hazard ratios</b>				
Unadjusted	1.00	0.60 (0.33-1.11)	0.49 (0.29-0.81)	0.27 (0.13-0.57)
Multivariable adjusted 1†	1.00	0.45 (0.28-0.72)	0.41 (0.22-0.76)	0.36 (0.19-0.68)
Multivariable adjusted 2‡	1.00	0.55 (0.30-1.01)	0.50 (0.24-1.06)	0.53 (0.23-1.23)
<b>Hypertension</b>				
Number of deaths	92	183	104	81
Mortality rate (SE)*	48 (11.2)	42 (5.7)	34 (5.1)	26 (4.4)
<b>Hazard ratios</b>				
Unadjusted	1.00	0.89 (0.54-1.48)	0.70 (0.43-1.14)	0.56 (0.32-0.98)
Multivariable adjusted 1†	1.00	1.01 (0.60-1.69)	1.23 (0.74-2.02)	1.35 (0.83-2.22)
Multivariable adjusted 2‡	1.00	1.05 (0.65-1.70)	1.14 (0.62-2.10)	1.41 (0.91-2.19)

SE, standard error

\*Per 1000 person-years

†Adjusted for age, race-ethnicity, sex

‡Adjusted for age, race-ethnicity, sex, smoking status, education, income, diabetes duration

Supplementary Table S5. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality Associated With Body Mass Index Category Stratified by Total Cholesterol Level

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
Total cholesterol <200 mg/dL				
Number of deaths	58	94	50	35
Mortality rate (SE)*	40 (10.1)	35 (6.1)	23 (5.7)	15 (3.4)
Hazard ratios				
Unadjusted	1.00	0.89 (0.48-1.62)	0.58 (0.31-1.08)	0.39 (0.19-0.79)
Multivariable adjusted 1†	1.00	0.76 (0.45-1.29)	0.70 (0.43-1.16)	0.91 (0.48-1.75)
Multivariable adjusted 2‡	1.00	1.11 (0.64-1.91)	1.09 (0.60-1.97)	1.22 (0.62-2.39)
Total cholesterol ≥200 mg/dL				
Number of deaths	81	165	95	57
Mortality rate (SE)*	38 (7.7)	30 (4.0)	28 (4.3)	21 (3.9)
Hazard ratios				
Unadjusted	1.00	0.79 (0.51-1.24)	0.75 (0.45-1.24)	0.54 (0.32-0.92)
Multivariable adjusted 1†	1.00	0.78 (0.48-1.26)	0.85 (0.50-1.47)	0.89 (0.51-1.56)
Multivariable adjusted 2‡	1.00	0.77 (0.49-1.23)	0.71 (0.38-1.32)	0.98 (0.58-1.65)

SE, standard error

\*Per 1000 person-years

†Adjusted for age, race-ethnicity, sex

‡Adjusted for age, race-ethnicity, sex, smoking status, education, income, diabetes duration

Supplementary Table S6. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality by Age at Study Baseline

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
Age 20-44 years				
Number of deaths	9	9	7	7
Mortality rate	14 (7.5)	8 (6.4)	4 (1.7)	5 (2.4)
Hazard ratios				
Unadjusted	1.00	0.55 (0.10-3.14)	0.27 (0.06-1.18)	0.35 (0.08-1.51)
Multivariable adjusted 1†	1.00	0.39 (0.10-1.48)	0.08 (0.01-0.60)	0.13 (0.02-0.68)
Multivariable adjusted 2‡	1.00	0.29 (0.12-0.68)	0.03 (0.00-0.26)	0.08 (0.02-0.27)
Age 45-64 years				
Number of deaths	33	73	57	39
Mortality rate	22 (5.4)	16 (3.1)	21 (4.6)	16 (4.1)
Hazard ratios				
Unadjusted	1.00	0.74 (0.40-1.38)	0.97 (0.49-1.89)	0.76 (0.34-1.70)
Multivariable adjusted 1†	1.00	0.70 (0.39-1.26)	0.91 (0.46-1.81)	0.78 (0.36-1.67)
Multivariable adjusted 2‡	1.00	0.79 (0.40-1.56)	0.88 (0.46-1.71)	1.01 (0.52-1.99)
Age ≥65 years				
Number of deaths	109	185	87	53
Mortality rate	89 (17.8)	65 (7.1)	57 (9.1)	70 (8.8)
Hazard ratios				
Unadjusted	1.00	0.68 (0.42-1.11)	0.58 (0.33-1.03)	0.77 (0.45-1.33)
Multivariable adjusted 1†	1.00	0.70 (0.43-1.16)	0.59 (0.32-1.07)	0.77 (0.45-1.32)
Multivariable adjusted 2‡	1.00	0.73 (0.45-1.17)	0.58 (0.34-1.00)	0.68 (0.44-1.06)

†Adjusted for race-ethnicity, sex

‡Adjusted for race-ethnicity, sex, smoking status, education, income, diabetes duration



Supplementary Table S7. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality by Smoking Status

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
Current smokers				
Number of deaths	40	48	25	16
Mortality rate	57 (12.6)	31 (8.6)	34 (10.2)	19 (7.2)
Hazard ratios				
Unadjusted	1.00	0.56 (0.26-1.19)	0.60 (0.30-1.20)	0.35 (0.15-0.83)
Multivariable adjusted 1†	1.00	0.73 (0.37-1.46)	0.65 (0.31-1.35)	0.73 (0.34-1.54)
Multivariable adjusted 2‡	1.00	0.69 (0.28-1.71)	0.64 (0.30-1.36)	0.73 (0.32-1.63)
Former smokers				
Number of deaths	49	103	63	36
Mortality rate	51 (13.1)	34 (4.4)	26 (4.5)	23 (5.6)
Hazard ratios				
Unadjusted	1.00	0.67 (0.37-1.20)	0.51 (0.27-0.94)	0.44 (0.22-0.88)
Multivariable adjusted 1†	1.00	0.71 (0.38-1.32)	0.62 (0.32-1.18)	0.93 (0.47-1.83)
Multivariable adjusted 2‡	1.00	0.64 (0.37-1.12)	0.70 (0.39-1.25)	0.97 (0.50-1.87)
Never smokers				
Number of deaths	62	116	63	47
Mortality rate	25 (5.8)	30 (4.1)	22 (4.6)	17 (3.4)
Hazard ratios				
Unadjusted	1.00	1.24 (0.72-2.16)	0.90 (0.49-1.67)	0.70 (0.40-1.24)
Multivariable adjusted 1†	1.00	1.10 (0.63-1.92)	1.40 (0.75-2.62)	1.44 (0.83-2.52)
Multivariable adjusted 2‡	1.00	1.05 (0.62-1.80)	1.51 (0.80-2.85)	1.28 (0.70-2.31)

†Adjusted for age, race-ethnicity, sex

‡Adjusted for age, race-ethnicity, sex, education, income, diabetes duration

Supplementary Table S8. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality Among Never Smokers Without Previously Diagnosed Diabetes

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
Number of deaths	15	32	18	11
Mortality rate (SE)†	17 (6.9)	30 (6.7)	16 (5.2)	14 (6.7)
Hazard ratios				
Unadjusted	1.00	1.83 (0.66-5.08)	0.97 (0.32-2.91)	0.85 (0.35-2.08)
Multivariable adjusted 1‡	1.00	1.38 (0.56-3.38)	1.70 (0.45-6.41)	1.81 (0.54-6.08)
Multivariable adjusted 2§	1.00	1.47 (0.49-4.43)	2.14 (0.54-8.47)	1.98 (0.54-7.32)

†Adjusted for age, race-ethnicity, sex

‡Adjusted for age, race-ethnicity, sex, smoking status, education, income

Supplementary Table S9. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality, Including All Participants (i.e., Without Excluding First 2 Years of Follow-Up, People With a History of CVD or Cancer, and People With Likely Type 1 DM)

	18.5-24.9 kg/m <sup>2</sup>	25-29.9 kg/m <sup>2</sup>	30-34.9 kg/m <sup>2</sup>	≥35 kg/m <sup>2</sup>
Number of deaths	310	501	288	186
Mortality rate (SE)†	54 (5.1)	43 (3.3)	36 (3.1)	27 (2.9)
Hazard ratios				
Unadjusted	1.00	0.81 (0.64-1.01)	0.68 (0.54-0.87)	0.51 (0.38-0.70)
Multivariable adjusted*	1.00	0.78 (0.60-1.01)	0.80 (0.60-1.06)	0.84 (0.62-1.14)
Multivariable adjusted†	1.00	0.83 (0.65-1.06)	0.88 (0.66-1.16)	0.93 (0.70-1.25)

†Adjusted for age, race-ethnicity, sex

‡Adjusted for age, race-ethnicity, sex, smoking status, education, income, diabetes duration

Supplementary Table S10. Hazards Ratio (95% Confidence Interval) of All-Cause Mortality Associated with Sex-Specific\* Quartile of Waist Circumference, by Age

	Quartile 1	Quartile 2	Quartile 3	Quartile 4
<b>Men</b>				
Number of deaths	103	79	65	62
Mortality rate (SE)†	32 (5.4)	35 (7.7)	26 (4.2)	25 (4.7)
<b>Hazard ratios</b>				
Unadjusted	1.00	1.07 (0.64-1.80)	0.80 (0.46-1.37)	0.75 (0.46-1.25)
Multivariable adjusted 1‡	1.00	1.01 (0.56-1.82)	0.80 (0.47-1.36)	0.92 (0.53-1.58)
Multivariable adjusted 2§	1.00	1.11 (0.68-1.80)	0.88 (0.51-1.54)	1.02 (0.57-1.84)
<b>Women</b>				
Number of deaths	70	106	85	49
Mortality rate (SE)†	25 (5.2)	29 (5.2)	30 (4.6)	22 (4.7)
<b>Hazard ratios</b>				
Unadjusted	1.00	1.18 (0.75-1.85)	1.22 (0.72-2.07)	0.92 (0.48-1.76)
Multivariable adjusted 1‡	1.00	0.85 (0.50-1.46)	0.91 (0.52-1.58)	1.12 (0.59-2.13)
Multivariable adjusted 2§	1.00	0.98 (0.57-1.67)	1.23 (0.75-2.02)	1.23 (0.67-2.27)

SE, standard error

\*For men: <98.0 cm, 98.0-105.1 cm, 105.2-113.8 cm, and  $\geq$ 113.9 cm; for women: <90.4 cm, 90.4-100.8 cm, 100.9-111.5 cm, and  $\geq$ 111.6 cm

†Per 1000 person-years

‡Adjusted for age, race-ethnicity, sex

§Adjusted for age, race-ethnicity, sex, smoking status, education, income, diabetes duration

Supplementary Table S11. – Hazards Ratio (95% Confidence Interval) of All-Cause Mortality Associated With Combined BMI and Waist Circumference Disease Risk

	Combined BMI and waist circumference disease risk				
	Lowest risk	Increased risk	High risk	Very high risk	Extremely high risk
Number of deaths	151	76	176	202	38
Mortality rate (SE)*	41 (5.6)	29 (4.5)	32 (4.5)	24 (2.4)	17 (3.8)
Hazard ratios					
Unadjusted	1.00	0.74 (0.49-1.11)	0.77 (0.55-1.09)	0.60 (0.45-0.80)	0.43 (0.26-0.70)
Multivariable adjusted 1†	1.00	0.89 (0.56-1.41)	0.70 (0.48-1.02)	0.79 (0.55-1.14)	0.86 (0.51-1.45)
Multivariable adjusted 2‡	1.00	0.99 (0.63-1.56)	0.79 (0.54-1.15)	0.95 (0.66-1.38)	0.87 (0.51-1.51)

SE, standard error

\*Per 1000 person-years

†Adjusted for age, race-ethnicity, sex, smoking status, education, income, diabetes duration

Lowest risk: BMI 18.5-24.9 kg/m<sup>2</sup>; Increased risk: 25-29.9 kg/m<sup>2</sup> and low WC; High risk: 25-29.9 kg/m<sup>2</sup> and high WC or 30-34.9 kg/m<sup>2</sup> and low WC; Very high risk: 30-34.9 kg/m<sup>2</sup> and high WC or 35-39.9 kg/m<sup>2</sup> and low WC; Extremely high risk: BMI ≥40 kg/m<sup>2</sup>; high WC defined as >102 cm for men and >88 cm for women