Supplementary

Table S1 Associations of TyG-WHtR with all-cause and CVD-related mortality after exclusion of participants who died within 2 years of follow-up

TyG-WHtR	Model 1		Model 2		Model 3	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Outcome: all-cause mortality						
Q1	Reference	–	Reference	–	Reference	–
Q2	1.24 (1.03–1.49)	0.02	0.91 (0.78–1.08)	0.28	1.01 (0.82–1.25)	0.91
Q3	1.41 (1.21–1.64)	<0.001	1.02 (0.87–1.19)	0.81	1.15 (0.91–1.45)	0.25
Q4	1.52 (1.29–1.80)	<0.001	1.25 (1.04–1.50)	0.02	1.36 (1.00–1.84)	0.05
Outcome: cardiovascular-related mortality						
Q1	Reference	–	Reference	–	Reference	–
Q2	1.37 (0.97–1.92)	0.07	0.99 (0.70–1.39)	0.94	1.05 (0.71–1.54)	0.81
Q3	1.80 (1.34–2.42)	<0.001	1.29 (0.95–1.75)	0.10	1.29 (0.86–1.95)	0.22
Q4	1.83 (1.38–2.43)	<0.001	1.55 (1.14–2.1)	0.005	1.38 (0.88–2.15)	0.16

Model 1 was unadjusted; Model 2 was adjusted for sex, age, race, education level, and family income-to-poverty ratio; Model 3 was further adjusted for smoking status, drinking status, hypertension, BMI, eGFR, HbA1c, TC, HDL-C, uric acid, and BUN. The results are presented as the HR and 95% CI. BMI, body mass index; BUN, blood urea nitrogen; CI, confidence interval; CVD, cardiovascular disease; eGFR, estimated glomerular filtration rate; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; HR, hazard ratio; TC, total cholesterol; TyG-WHtR, triglyceride-glucose combined with waist-to-height ratio.

Table S2 Associations of TyG-WHtR with all-cause and CVD-related mortality after exclusion of participants who had a history of CVD at baseline

TyG-WHtR	Model 1		Model 2		Model 3	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Outcome: all-cause mortality						
Q1	Reference	–	Reference	–	Reference	–
Q2	1.10 (0.88–1.37)	0.40	0.84 (0.69–1.03)	0.09	0.97 (0.77–1.22)	0.81
Q3	1.21 (0.99–1.48)	0.06	0.92 (0.76–1.12)	0.40	1.10 (0.86–1.41)	0.44
Q4	1.36 (1.1–1.69)	0.005	1.16 (0.93–1.45)	0.18	1.36 (0.97–1.89)	0.07
Outcome: CVD-related mortality						
Q1	Reference	–	Reference	–	Reference	–
Q2	1.09 (0.74–1.61)	0.66	0.82 (0.57–1.19)	0.30	0.95 (0.63–1.44)	0.82
Q3	1.55 (1.06–2.27)	0.02	1.19 (0.82–1.73)	0.36	1.37 (0.84–2.23)	0.21
Q4	1.64 (1.08–2.49)	0.02	1.44 (0.91–2.28)	0.12	1.56 (0.88–2.76)	0.13

Model 1 was unadjusted; Model 2 was adjusted for sex, age, race, education level, and family income-to-poverty ratio; Model 3 was further adjusted for smoking status, drinking status, hypertension, BMI, eGFR, HbA1c, TC, HDL-C, uric acid, and BUN. The results are presented as the HR and 95% CI. BMI, body mass index; BUN, blood urea nitrogen; CI, confidence interval; CVD, cardiovascular disease; eGFR, estimated glomerular filtration rate; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; HR, hazard ratio; TC, total cholesterol; TyG-WHtR, triglyceride-glucose combined with waist-to-height ratio.

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Table S3 Associations of TyG-WHtR with all-cause and CVD-related mortality after exclusion of participants who had a history of malignant neoplasm at baseline

TyG-WHtR	Model 1		Model 2		Model 3	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Outcome: all-cause mortality						
Q1	Reference	–	Reference	–	Reference	–
Q2	1.29 (1.05–1.58)	0.02	0.96 (0.79–1.17)	0.70	1.14 (0.9–1.44)	0.28
Q3	1.40 (1.19–1.66)	<0.001	1.01 (0.85–1.21)	0.88	1.22 (0.94–1.58)	0.13
Q4	1.67 (1.36–2.04)	<0.001	1.34 (1.09–1.64)	0.005	1.50 (1.11–2.04)	0.009
Outcome: CVD-related mortality						
Q1	Reference	–	Reference	–	Reference	–
Q2	1.35 (0.91–1.99)	0.14	0.99 (0.66–1.46)	0.95	1.13 (0.74–1.74)	0.58
Q3	1.58 (1.17–2.13)	0.003	1.14 (0.84–1.54)	0.42	1.22 (0.78–1.9)	0.38
Q4	1.77 (1.28–2.44)	<0.001	1.47 (1.06–2.02)	0.02	1.33 (0.82–2.16)	0.25

Model 1 was unadjusted; Model 2 was adjusted for sex, age, race, education level, and family income-to-poverty ratio; Model 3 was further adjusted for smoking status, drinking status, hypertension, BMI, eGFR, HbA1c, TC, HDL-C, uric acid, and BUN. The results are presented as HR and 95% CI. BMI, body mass index; BUN, blood urea nitrogen; CI, confidence interval; CVD, cardiovascular disease; eGFR, estimated glomerular filtration rate; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; HR, hazard ratio; TC, total cholesterol; TyG-WHtR, triglyceride-glucose combined with waist-to-height ratio.

Table S4 Associations of TyG-WHtR with all-cause and CVD-related mortality after exclusion of participants who did not use hypoglycemic drugs or insulin

TyG-WHtR	Model 1		Model 2		Model 3	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Outcome: all-cause mortality						
Q1	Reference	–	Reference	–	Reference	–
Q2	1.13 (0.93–1.36)	0.21	0.86 (0.73–1.03)	0.11	1.00 (0.8–1.23)	0.97
Q3	1.30 (1.09–1.54)	0.003	0.98 (0.82–1.17)	0.79	1.17 (0.92–1.5)	0.20
Q4	1.30 (1.08–1.55)	0.005	1.12 (0.92–1.36)	0.26	1.36 (1.01–1.84)	0.043
Outcome: CVD-related mortality						
Q1	Reference	–	Reference	–	Reference	–
Q2	1.12 (0.77–1.62)	0.56	0.85 (0.59–1.22)	0.37	0.93 (0.60–1.43)	0.74
Q3	1.58 (1.09–2.28)	0.01	1.19 (0.82–1.74)	0.36	1.26 (0.75–2.12)	0.39
Q4	1.42 (0.99–2.02)	0.055	1.28 (0.89–1.84)	0.18	1.27 (0.75–2.12)	0.37

Model 1 was unadjusted; Model 2 was adjusted for sex, age, race, education level, and family income-to-poverty ratio; Model 3 was further adjusted for smoking status, drinking status, hypertension, BMI, eGFR, HbA1c, TC, HDL-C, uric acid, and BUN. The results are presented as the HR and 95% CI. BMI, body mass index; BUN, blood urea nitrogen; CI, confidence interval; CVD, cardiovascular disease; eGFR, estimated glomerular filtration rate; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; HR, hazard ratio; TC, total cholesterol; TyG-WHtR, triglyceride-glucose combined with waist-to-height ratio.

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