

Additional file 8 The association between WHR and cancer-special mortality in all population and adults of different BMI and sex.

WHR	Crude HR (95%CI)	Crude P value	Adjusted HR (95%CI)	Adjusted P value	P for interaction
All BMI					0.01
BMI(<18.5 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.08(0.46-2.54)	0.852	1.47 (0.52-4.14)	0.464	
High WHR	1.50(0.73-3.07)	0.267	2.31 (0.96-5.56)	0.062	
P for trends		0.289		0.057	
BMI(≥18.5 and <24 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	0.69(0.57-0.83)	<0.001	1.00(0.82-1.21)	0.967	
High WHR	0.64(0.53-0.77)	<0.001	1.18(0.95-1.47)	0.142	
P for trends		<0.001		0.213	
BMI(≥24 and <28 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	0.81(0.68-0.95)	0.01	1.05(0.89-1.25)	0.539	
High WHR	0.67(0.56-0.81)	<0.001	1.26(1.02-1.57)	0.033	
P for trends		<0.001		0.047	
BMI(≥28kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	0.96(0.78-1.19)	0.715	1.06(0.85-1.32)	0.605	
High WHR	0.69(0.55-0.87)	0.002	1.13(0.84-1.52)	0.435	
P for trends		0.003		0.408	
female					0.442
Low WHR	ref.		ref.		
Moderate WHR	1.13(0.74-1.71)	0.582	1.01(0.65-1.56)	0.968	
High WHR	1.69(1.16-2.46)	0.006	1.40 (0.94-2.10)	0.1	
P for trends		0.001		0.021	
BMI(<18.5 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	4.71(1.44-15.44)	0.01	7.93(2.74-22.93)	<0.001	
High WHR	1.67(0.51-5.48)	0.396	2.18(0.75-6.33)	0.151	
P for trends		0.99		0.053	
BMI(≥18.5 and <24 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.19(0.66-2.14)	0.562	1.10(0.59-2.05)	0.754	
High WHR	1.59(0.94-2.7)	0.084	1.41(0.80-2.48)	0.236	
P for trends		0.065		0.204	
BMI(≥24 and <28 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	0.71(0.32-1.56)	0.39	0.83(0.36-1.90)	0.664	
High WHR	1.59(0.80-3.18)	0.188	1.85(0.87-3.94)	0.110	
P for trends		0.007		0.005	
BMI(≥28kg/m ²)					

Low WHR	ref.		ref.		
Moderate WHR	1.04(0.31-3.5)	0.956	0.88(0.24-3.24)	0.853	
High WHR	0.96(0.3-3.07)	0.941	0.94(0.28-3.19)	0.919	
P for trends		0.798		0.929	
male					0.006
Low WHR	ref.		ref.		
Moderate WHR	1.08(0.97-1.21)	0.166	1.07(0.95-1.20)	0.242	
High WHR	1.16(0.99-1.35)	0.061	1.14(0.98-1.33)	0.098	
P for trends		0.027		0.055	
BMI(<18.5 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	0.99(0.36-2.77)	0.992	1.11(0.30-4.07)	0.875	
High WHR	1.38(0.62-3.06)	0.434	2.75 (1.05-7.22)	0.04	
P for trends		0.477		0.059	
BMI(≥18.5 and <24 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.03(0.83-1.26)	0.815	0.99 (0.80-1.23)	0.955	
High WHR	1.24(0.97-1.59)	0.089	1.15(0.89-1.49)	0.27	
P for trends		0.126		0.372	
BMI(≥24 and <28 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.18 (0.99-1.40)	0.063	1.13(0.95-1.35)	0.164	
High WHR	1.06(0.82-1.37)	0.658	1.06(0.82-1.38)	0.642	
P for trends		0.183		0.269	
BMI(≥28kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.11(0.88-1.39)	0.373	1.03(0.82-1.31)	0.777	
High WHR	1.21(0.88-1.68)	0.244	1.16(0.83-1.63)	0.385	
P for trends		0.173		0.407	

Notes: WHR, waist-to-hip ratio; BMI, body mass index; FBG, fasting blood glucose; hsCRP, high sensitivity C reactive protein.

Adjusted for age, smoking history, drinking status, hs-CRP, FBG, hypertension, diabetes, myocardial infarction, family income, educational background, physical exercise.