

Additional file 2 The association between categorical WHR and cancer risk in different tumor types and in adults of different sex.

WHR	All *				Female #				Male #			
	Model 1		Model 3		Model 1		Model 3		Model 1		Model 3	
	HR (95%CI)	P value	HR (95%CI)	P	HR (95%CI)	P value	HR (95%CI)	P value	HR (95%CI)	P value	HR (95%CI)	P value
Head and neck cancer												
Low WHR	ref.		ref.		ref.		ref.		ref.		ref.	
Moderate WHR	1.03(0.86-1.23)	0.749	1.00 (0.83-1.21)	0.987	1.27(0.82-1.97)	0.278	1.18(0.75-1.86)	0.469	1.04 (0.84-1.30)	0.707	0.96(0.77-1.20)	0.742
High WHR	1.03(0.86-1.24)	0.739	1.03(0.82-1.29)	0.797	1.25(0.84-1.86)	0.273	1.14(0.74-1.75)	0.566	1.17(0.88-1.56)	0.284	1.12(0.84-1.50)	0.424
P for trends		0.690		0.819		0.339		0.662		0.289		0.634
Lung cancer												
Low WHR	ref.		ref.		ref.		ref.		ref.		ref.	
Moderate WHR	0.85(0.73-0.99)	0.033	1.00(0.86-1.17)	0.987	1.77(1.07-2.93)	0.027	1.27(0.75-2.13)	0.372	1.01(0.86-1.19)	0.904	0.98(0.83-1.16)	0.786
High WHR	0.72(0.61-0.84)	<0.001	1.04(0.86-1.25)	0.716	1.85(1.16-2.95)	0.010	1.22(0.75-2.01)	0.424	1.08(0.86-1.34)	0.519	1.03(0.82-1.29)	0.801
P for trends		<0.001		0.763		0.018		0.548		0.559		0.946
Digestive system cancer												
Low WHR	ref.		ref.		ref.		ref.		ref.		ref.	
Moderate WHR	1.03(0.91-1.18)	0.617	1.20(1.05-1.37)	0.008	2.41(1.37-4.24)	0.002	1.77(0.99-3.16)	0.054	1.31 (1.14-1.51)	<0.001	1.19 (1.03-1.37)	0.016
High WHR	0.77(0.67-0.90)	0.001	1.19(1.00-1.41)	0.047	2.82(1.66-4.78)	<0.001	1.88(1.08-3.29)	0.026	1.22 (1.00-1.49)	0.048	1.10 (0.90-1.35)	0.346
P for trends		0.004		0.008		<0.001		0.047		<0.001		0.050
Female tumor												
Low WHR	ref.		ref.		ref.		ref.					
Moderate WHR	1.32(0.98-1.77)	0.064	1.15(0.85-1.56)	0.371	1.32(0.98-1.77)	0.064	1.15(0.85-1.56)	0.371				
High WHR	1.50(1.16-1.96)	0.002	1.27(0.96-1.69)	0.097	1.50(1.16-1.96)	0.002	1.27(0.96-1.69)	0.097				
P for trends		0.002		0.089		0.002		0.089				
Other												
Low WHR	ref.		ref.		ref.		ref.		ref.		ref.	
Moderate WHR	1.06 (0.89-1.27)	0.501	1.14 (0.95-1.37)	0.161	1.75(0.98-3.11)	0.057	1.44(0.80-2.60)	0.229	1.25(1.02-1.52)	0.029	1.12(0.92-1.37)	0.271
High WHR	0.85 (0.70-1.03)	0.093	1.10(0.87-1.39)	0.429	1.84(1.08-3.12)	0.025	1.47(0.83-2.59)	0.183	1.11(0.83-1.48)	0.491	1.04(0.78-1.39)	0.802
P for trends		0.204		0.252		0.039		0.244		0.093		0.445

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

*: Model 1: unadjusted; Model 2: adjusted for sex and age; Model 3: adjusted for sex, age, smoking history, drinking status, hs-CRP, FBG, hypertension, diabetes, myocardial infarction, family

income, educational background, physical exercise, and BMI.

#: Model 1: unadjusted; Model 2: adjusted for age; Model 3: adjusted for age, smoking history, drinking status, hs-CRP, FBG, hypertension, diabetes, myocardial infarction, family income, educational background, physical exercise, and BMI.