Supplemental material

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Supplemental Table 1. P-values for effect modification by sex on the associations between obesity measures and age group in cross-sectionally analysis.

Anthropometric Measures	P-value for effect modification by sex
BMI	0.917
WC	0.869
WHtR	0.815
WHR	0.691

The sex*age group interaction term was included in linear regression models adjusting for sex, education, physical activity, smoking status, alcohol consumption, and nutritional intake. BMI=body mass index; WC=waist circumference; WHtR=waist-to-height ratio; WHR=waist-to-hip ratio.

Supplemental Table 2. P-values for effect modification by sex on the associations between obesity measures and aging in each age group in longitudinal analysis.

Anthropometric Measures	25-<45 yrs.	45-<55 yrs.	55-<65 yrs.	65-<75 yrs.	75+ yrs.
BMI	0.929	0.160	0.475	0.726	0.281
WC	0.657	0.050	0.157	0.792	0.100
WHtR	0.604	0.051	0.139	0.418	0.187
WHR	0.007	0.534	0.082	0.119	0.602

The sex*follow-up time interaction term was included in mixed effects models with random intercept and random slope were used to test aging effect. Models were adjusted for covariates including education, physical activity, smoking status, alcohol consumption, and nutritional intake. BMI=body mass index; WC=waist circumference; WHtR=waist-to-height ratio; WHR=waist-to-hip ratio; yrs.= years.