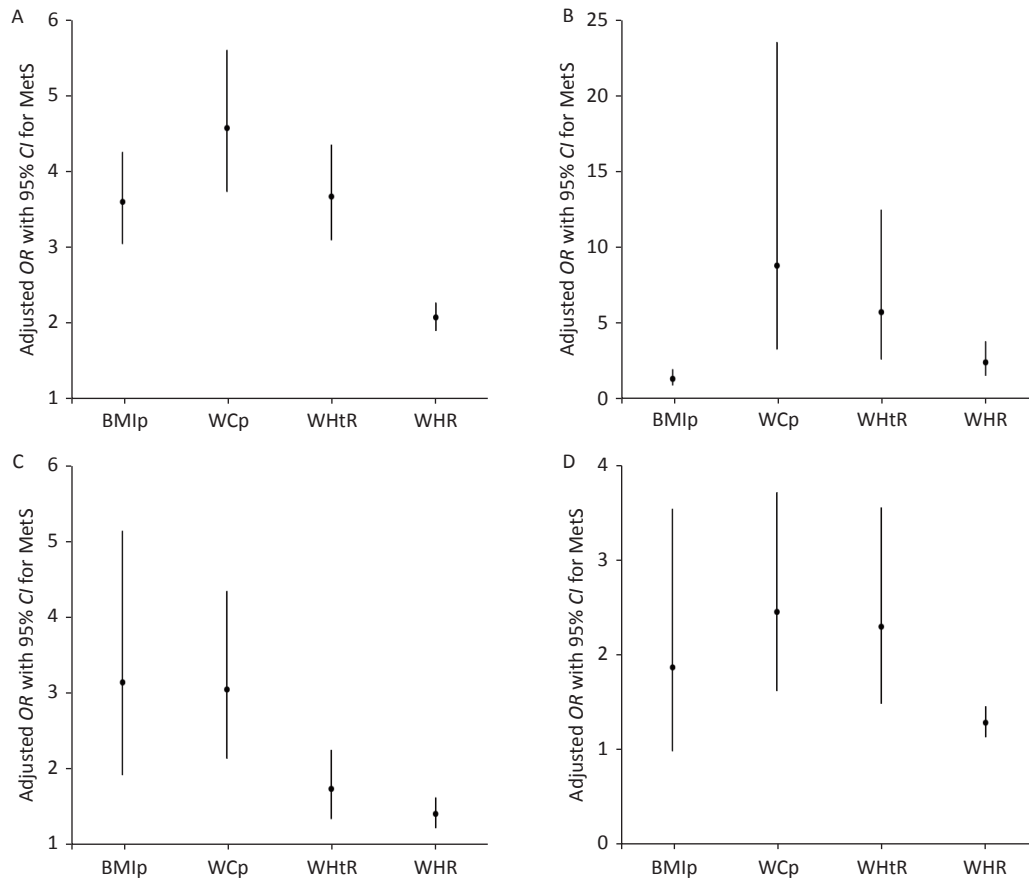


**Supplementary Figure S1.** The receiver operating characteristic (ROC) curves of four anthropometric indices for screening metabolic syndrome: (A) model for the total sample, (B) model for normal group, (C) model for overweight group, and (D) model for obese group. The small circle on each ROC curve means the cut-off point. BMI: body mass index, WC: waist circumference.



**Supplementary Figure S2.** Adjusted odds ratios for metabolic syndrome for one decile increase in anthropometric variables. All the models are adjusted for age, sex, ethnicity, region, and home location: (A) model for the total sample, (B) model for normal group, (C) model for overweight group, and (D) model for obese group. BMIp: body mass index percentile, WCp: waist circumference percentile, WHtR: waist-height ratio, WHR: waist-hip ratio.

**Supplementary Table S1.** The sex-age-adjusted AUCs and 95% confidence intervals of anthropometric indices for MetS and the components stratified by nutritional status

Indices	MetS	Central obesity	Low HDL	High TG	Hyperglycemia	Elevated BP
Total sample						
BMI percentile	0.93 (0.92–0.94)	0.95 (0.94–0.96)	0.60 (0.58–0.61)	0.70 (0.68–0.72)	0.59 (0.56–0.63)	0.74 (0.71–0.76)
WC percentile	0.94 (0.93–0.95)	0.99 (0.98–0.99)	0.60 (0.59–0.62)	0.70 (0.67–0.72)	0.59 (0.56–0.62)	0.73 (0.70–0.75)
Waist-height ratio	0.93 (0.92–0.94)	0.97 (0.97–0.97)	0.60 (0.59–0.62)	0.70 (0.67–0.72)	0.57 (0.54–0.60)	0.68 (0.66–0.71)
Waist-hip ratio	0.88 (0.86–0.90)	0.89 (0.88–0.90)	0.57 (0.55–0.58)	0.65 (0.62–0.67)	0.55 (0.52–0.59)	0.62 (0.59–0.65)
Normal group						
BMI percentile	0.70 (0.50–0.90)	0.82 (0.80–0.85)	0.52 (0.50–0.53)	0.59 (0.55–0.62)	0.54 (0.50–0.58)	0.59 (0.55–0.63)
WC percentile	0.98 (0.97–0.99)	0.98 (0.98–0.99)	0.53 (0.51–0.55)	0.58 (0.54–0.61)	0.54 (0.50–0.58)	0.59 (0.54–0.63)
Waist-height ratio	0.98 (0.96–0.99)	0.95 (0.94–0.96)	0.51 (0.49–0.53)	0.57 (0.54–0.61)	0.51 (0.47–0.55)	0.51 (0.46–0.55)
Waist-hip ratio	0.92 (0.88–0.97)	0.91 (0.90–0.92)*	0.51 (0.49–0.53)*	0.52 (0.48–0.55)	0.51 (0.47–0.55)	0.52 (0.48–0.56)
Overweight group						
BMI percentile	0.69 (0.63–0.74)	0.73 (0.70–0.75)	0.57 (0.54–0.61)	0.58 (0.53–0.63)	0.50 (0.43–0.58)	0.54 (0.48–0.61)
WC percentile	0.77 (0.73–0.81)	0.97 (0.96–0.98)*	0.58 (0.54–0.62)	0.59 (0.55–0.64)	0.55 (0.48–0.63)	0.50 (0.44–0.55)
Waist-height ratio	0.68 (0.62–0.74)	0.85 (0.83–0.87)	0.57 (0.54–0.61)	0.57 (0.52–0.62)	0.55 (0.47–0.63)	0.56 (0.50–0.62)
Waist-hip ratio	0.70 (0.64–0.76)	0.81 (0.79–0.84)	0.57 (0.53–0.60)	0.58 (0.53–0.63)	0.55 (0.47–0.62)	0.58 (0.52–0.63)
Obese group						
BMI percentile	0.67 (0.62–0.72)	0.78 (0.70–0.85)	0.65 (0.61–0.70)	0.62 (0.57–0.66)	0.51 (0.43–0.59)	0.65 (0.60–0.70)
WC percentile	0.62 (0.56–0.68)	0.88 (0.80–0.97)	0.58 (0.51–0.65)	0.59 (0.54–0.63)	0.51 (0.44–0.58)	0.62 (0.56–0.68)
Waist-height ratio	0.62 (0.57–0.67)	0.93 (0.90–0.96)	0.59 (0.55–0.63)	0.60 (0.56–0.64)	0.50 (0.44–0.57)	0.57 (0.52–0.62)
Waist-hip ratio	0.62 (0.58–0.66)	0.88 (0.83–0.93)	0.59 (0.55–0.63)	0.60 (0.56–0.64)	0.54 (0.48–0.61)	0.56 (0.51–0.61)

**Note.** AUC: area under receiver operating characteristic curve, MetS: metabolic syndrome, BMI: body mass index, WC: waist circumference, HDL: high-density lipoprotein cholesterol, TG: triglyceride, BP: blood pressure. \*The adjusted AUCs were significantly different from unadjusted values in Table 3 and Table 4.