

Table 5 Proposed cut-off points based on the highest sensitivity and specificity values of anthropometric indices to classify overweight and obesity, based on body mass index level, in male students aged 12–14 years

Ethnicity	WC			WHpR			WHtR			NC		
	Optimal threshold	Sensitivity	Specificity	Optimal threshold	Sensitivity	Specificity	Optimal threshold	Sensitivity	Specificity	Optimal threshold	Sensitivity	Specificity
Arab												
Overweight	69.85	0.81	0.80	0.83	0.75	0.64	0.46	0.9	0.87	30.75	0.61	0.80
Obesity	77.30	0.94	0.95	0.86	0.71	0.74	0.49	0.94	0.93	31.75	0.83	0.88
Kurdish												
Overweight	75.20	0.98	0.80	0.91	0.75	0.74	0.49	0.91	0.92	31.75	0.89	0.70
Obesity	85.50	0.96	0.91	0.92	0.86	0.81	0.53	0.96	0.91	32.75	1.00	0.77
Sistani and Baluchi												
Overweight	72.5	0.82	0.80	0.87	0.71	0.65	0.48	0.88	0.89	31.75	0.88	0.83
Obesity	78.50	0.83	0.91	0.84	0.67	0.50	0.50	0.83	0.93	32.80	1.00	0.91
Turkish												
Overweight	72.50	0.63	0.59	0.81	0.61	0.32	0.46	0.65	0.66	31.50	0.65	0.60
Obesity	72.50	0.80	0.56	0.84	0.77	0.50	0.46	0.80	0.63	31.50	0.73	0.55
Turkman												
Overweight	75.55	0.94	0.89	0.87	0.79	0.75	0.47	0.90	0.88	30.95	0.98	0.57
Obesity	82.50	1.00	0.94	0.88	0.82	0.76	0.50	0.96	0.89	31.4	0.96	0.65
Total sample												
Overweight	72.75	0.82	0.76	0.88	0.60	0.69	0.46	0.84	0.81	30.95	0.85	0.61
Obesity	77.55	0.88	0.85	0.88	0.70	0.69	0.49	0.88	0.87	31.55	0.87	0.71

WC = waist circumference; WHpR = waist-to-height ratio; WHtR = waist-to-hip ratio; NC = neck circumference.