

1 **Supplementary Table 1: Baseline characteristics of the study subjects.**

Characteristics	Total (n = 12060)	Men (n = 5109)		P value	Women (n = 6951)		P value
		Non-CH D (n=4928)	CHD (n=181)		Non-CH D (n=6812)	CHD (n=139)	
Age (years), n (%)				<0.001			<0.001
20–39	5873 (48.70)	2342 (47.52)	4 (2.21)		3526 (51.76)	1 (0.72)	
40–59	4281 (35.50)	1789 (36.30)	42 (23.20)		2421 (35.54)	29 (20.86)	
60–91	1906 (15.80)	797 (16.17)	135 (74.59)		865 (12.70)	109 (78.42)	
Educational level, n (%)				<0.001			<0.001
High school/below	983 (8.15)	438 (8.89)	42 (23.20)		457 (6.71)	46 (33.09)	
College/undergraduate	6990 (57.96)	2802 (56.86)	123 (67.96)		3975 (58.35)	90 (64.75)	
Postgraduate/above	4087 (33.89)	1688 (34.25)	16 (8.84)		2380 (34.94)	3 (2.16)	
Ethnicity, n (%)				0.121			0.403
Han	11,605 (96.23)	4774 (96.88)	179 (98.90)		6517 (95.67)	135 (97.12)	
Others	455 (3.77)	154 (3.13)	2 (1.10)		295 (4.33)	4 (2.88)	
Occupation, n (%)				<0.001			<0.001
Office workers	4353 (36.09)	1870 (37.95)	24 (13.26)		2453 (42.21)	6 (4.32)	
Professionals	4689 (38.88)	1841 (37.36)	17 (9.39)		2816 (41.34)	15 (10.79)	
Retired	1994 (16.53)	726 (14.73)	134 (74.03)		1018 (14.94)	116 (83.45)	
Others	1024 (8.49)	491 (9.96)	6 (3.31)		525 (7.71)	2 (1.44)	
Marital status, n (%)				<0.001			<0.001
Single	1757 (14.57)	672 (13.64)	2 (1.10)		1081 (15.87)	2 (1.44)	
Currently married	10034 (83.20)	4181 (84.84)	169 (93.37)		5565 (81.69)	119 (85.61)	
Divorced/widowed	269 (2.23)	75 (1.52)	10 (5.52)		166 (2.44)	18 (12.95)	
Tobacco smoking, n (%)				0.342			0.241
Yes	1390	1271	41		75 (1.10)	3 (2.16)	

	(11.53)	(25.79)	(22.65)				
No	10670	3657	140		6737	136	
	(88.47)	(74.21)	(77.35)		(98.90)	(97.84)	
Alcohol consumption, <i>n</i> (%)				0.012			0.826
Yes	2050	1728	47		269	6 (4.32)	
	(17.00)	(35.06)	(25.97)		(3.95)		
No	10010	3200	134		6543	133	
	(83.00)	(64.94)	(74.03)		(96.05)	(95.68)	
Physical exercise, <i>n</i> (%)				0.001			<0.001
Regular	3682	1217	61		2333	71	
	(30.53)	(24.70)	(33.70)		(34.25)	(51.08)	
Sometimes	5163	2049	50		3039	25	
	(42.81)	(41.58)	(27.62)		(44.61)	(17.99)	
No	3215	1662	70		1440	43	
	(26.66)	(33.73)	(38.67)		(21.14)	(30.94)	
Family history of heart disease, <i>n</i> (%)				<0.001			<0.001
Yes	2081	706	67		1241	67	
	(17.26)	(14.33)	(37.02)		(18.22)	(48.20)	
No	9473	4008	104		5292	69	
	(78.55)	(81.33)	(57.46)		(77.69)	(49.64)	
Unaware	506	214	10		279	3 (2.16)	
	(4.20)	(4.34)	(5.52)		(4.10)		
Adiposity index							
BMI (kg/m ²)	24.18 ± 3.57	25.69 ± 3.34	26.36 ± 3.16	0.008	23.01 ± 3.26	25.33 ± 3.90	<0.001
WHR	0.90 ± 0.06	0.92 ± 0.06	0.95 ± 0.07	<0.001	0.88 ± 0.05	0.93 ± 0.06	0.005
BFM (kg)	20.31 ± 6.53	20.91 ± 6.97	23.08 ± 6.62	<0.001	19.72 ± 6.09	23.69 ± 7.10	0.002
PBF (%)	29.92 ± 6.59	26.56 ± 5.96	29.54 ± 5.84	<0.001	32.22 ± 5.93	36.81 ± 6.55	<0.001
VFA (cm ²)	94.42 ± 35.37	96.83 ± 34.24	117.72 ± 33.66	<0.001	91.40 ± 35.42	126.36 ± 40.75	0.008
VBR (cm ² /kg)	4.61 ± 0.78	4.65 ± 0.86	5.16 ± 0.88	<0.001	4.56 ± 0.70	5.32 ± 0.53	0.002

2 BFM, Body fat mass; BMI, Body mass index; CHD, Coronary heart disease; PBF,

3 Percentage of body fat; VBR, Visceral fat area to the body fat mass ratio; VFA,

4 Visceral fat area; WHR, Waist-to-hip ratio.

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7 **Supplementary Table 2: ROC analysis of BMI, WHR, BFM, PBF, VFA, and**
8 **VBR in identifying subjects with CHD by sex.**

Parameters	AUC	P-value	Cutoff value	Sensitivity	Specificity	Youden index
Men						
BMI (kg/m ²)	0.556 (0.515–0.598)	0.01	24.15	76.80	32.37	0.092
WHR	0.628 (0.586–0.670)	<0.01	0.925	68.51	55.28	0.238
BFM (kg)	0.595 (0.555–0.635)	<0.01	19.75	68.51	46.81	0.153
PBF (%)	0.639 (0.599–0.679)	<0.01	26.35	71.82	48.90	0.207
VFA (cm ²)	0.676 (0.638–0.715)	<0.01	103.25	68.51	62.30	0.308
VBR (cm ² /kg)	0.753 (0.724–0.782)	<0.01	4.63	76.80	66.34	0.431
Women						
BMI (kg/m ²)	0.686 (0.638–0.734)	<0.01	23.75	66.91	63.68	0.306
WHR	0.726 (0.683–0.770)	<0.01	0.91	65.47	69.91	0.354
BFM (kg)	0.671 (0.623–0.720)	<0.01	22.55	56.83	71.73	0.286
PBF (%)	0.707 (0.659–0.754)	<0.01	36.85	56.83	78.76	0.356
VFA (cm ²)	0.745 (0.704–0.786)	<0.01	114.65	61.87	76.44	0.383
VBR (cm ² /kg)	0.821 (0.790–0.852)	<0.01	4.84	84.89	65.15	0.500

9 AUC, Area under the ROC curve; BFM, Body fat mass; BMI, Body mass index;
10 CHD, Coronary heart disease; PBF, Percentage of body fat; ROC, Receiver operating
11 characteristic; VBR, Visceral fat area to the body fat mass ratio; VFA, Visceral fat
12 area; WHR, Waist-to-hip ratio.

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