

Supplemental Material S1. rating standard for health-related physical health

The physical fitness monitoring program comprises five categories of assessment: body composition, cardiorespiratory fitness, muscular strength, muscular endurance, and flexibility. Participants are categorised into three age groups, with the assessment criteria for each group detailed in the table below.

components	Indicators		
	20-39	40-59	60-69
body composition	BMI; chest circumference; waist circumference; hip circumference		
cardiorespiratory fitness	stair index; vital capacity		vital capacity
muscular strength	grip strength; back strength; vertical jump	grip strength; back strength	grip strength
muscular endurance	sit-up	/	/
flexibility	sit-and-reach; choice reaction time; eye-closed unilateral stance time	sit-and-reach; choice reaction time; eye-closed unilateral stance time	sit-and-reach; choice reaction time; eye-closed unilateral stance time

Assessment is conducted through individual scoring and comprehensive rating. Individual scoring comprises height and weight assessment, as well as other individual indicator scores, using a five-point scale. Physical fitness was comprehensively evaluated based on the sum of individual scores of multiple testing indicators, where any indicator receives no score, no comprehensive rating is assigned. The results of the comprehensive rating were then divided into qualified (i.e., excellent, good, and pass) and unqualified. The grading criteria for participants across different age groups are as follows:

Grade	Physical Fitness Scores		
	20-39 year-olds	40-59 year-olds	60-69 year-olds
Excellent	>33	>26	>23

Good	30-33	24-26	21-23
Pass	23-29	18-23	15-20
Unqualified	<23	<18	<15

Supplemental Table S1. The relationship between physical fitness, BMI, waist circumference and blood pressure of women in Tibet.

Indicators		n	Physical fitness scores			Unqualified	
			$\bar{x} \pm s$	F/t	p	OR (95%CI)	p
BMI	ISD					1.20(1.16~1.24)	0.00
	Normal	968	23.85±5.07	107.05	0.00	1.00	
	Thin	62	21.73±4.95**			4.47(2.49~8.02)	0.00
	Overweight	490	21.56±5.04**			2.13(1.58~2.86)	0.00
	Obese	216	17.33±4.35***▲▲			10.41(7.21~15.02)	0.00
WC	ISD					1.04(1.03~1.05)	0.00
	Normal	1209	23.28±5.25	11.73	0.00	1.00	
	Abdominal obesity	527	20.09±5.12**			2.01(1.56~2.60)	0.00
Blood pressure	Normal	1270	23.10±5.19	44.79	0.00	1.00	
	ISH	47	21.70±6.34			1.11(0.53~2.32)	0.79
	IDH	307	20.74±5.32**			0.91(0.66~1.26)	0.58
	SDH	112	17.98±4.70***▲▲			1.24(0.77~1.98)	0.38

Compared with normal BMI, normal waist circumference, normal blood pressure group, *indicates $p<0.05$, ** indicates $p<0.01$; compared with thin, ISH group, # indicates $p<0.05$, ## indicates $p<0.01$; compared with overweight, IDH group, ▲ indicates $p<0.05$, ▲▲ indicates $p<0.01$.