



Figure S1. Proportions of the participants in different physical activity level groups across the age categories.

Table S1. Age at menarche among participants ($n = 1081$).

Age at menarche	Number of participants	Proportion of participants
9	2	0.2%
10	15	1.4%
11	113	10.5%
12	261	24.1%
13	377	34.9%
14	192	17.8%
15	81	7.5%
16	30	2.8%
17	8	0.7%
18	1	0.1%
19	1	0.1%

Table S2. Proportion (n) of the participants reporting fractures, musculoskeletal disorders/symptoms, and anorexia nervosa diagnosis according to physical activity (PA) level at the age of 13–16.

	Competitive sport ($n = 136$)	Regular PA ($n = 689$)	No exercise ($n = 163$)	p -value
Fracture	17.6% (24)	15.5% (107)	17.2% (28)	0.761
Musculoskeletal disorder/symptom	43.4% (59)	37.4% (258)	31.9% (52)	0.123
Anorexia nervosa	0.7% (1)	0.6% (4)	0.0% (0)	0.641

Data are presented as percentages (frequencies).

Table S3. Proportion (n) of the participants reporting fractures, musculoskeletal disorders/symptoms, and anorexia nervosa diagnosis according to age at menarche (AAM) groups.

	AAM ≤ 12 ($n = 391$)	AAM = 13 ($n = 377$)	AAM ≥ 14 ($n = 313$)	p -value
Fracture	16.6% (65)	17.2% (65)	14.4% (45)	0.571
Musculoskeletal disorder/symptom	36.6% (143)	37.9% (143)	38.0% (119)	0.901
Anorexia nervosa	0.0% (0) ^a	0.5% (2) ^b	1.3% (4)	0.069

Data are presented as percentages (frequencies). ^a $n = 390$; ^b $n = 376$.