

**Table S1** Fat fraction and muscle volumes by sex and age category

Variable	Muscle	Sex	Total	18–29 years	30–39 years	40–49 years	50–70 years
Fat fraction (%)	Erector spinae muscle (N=90)	Male	7.3 (5.6, 10.5)	5.7 (4.9, 7.5)	5.8 (4.7, 6.9)	10.5 (7.7, 14.9)	10.6 (8.5, 12.4)
		Female	8.8 (7.0, 10.2)	5.6 (5.2, 8.4)	8.8 (5.9, 9.1)	9.1 (8.4, 10.2)	14.7 (10.0, 17.1)
	Multifidus muscle (N=90)	Male	8.6 (6.5, 13.0)	7.1 (5.6, 10.7)	6.8 (6.2, 8.2)	12.5 (11.2, 17.1)	12.7 (9.0, 20.0)
		Female	13.2 (7.9, 17.6)	8.0 (6.6, 9.9)	8.9 (7.0, 13.5)	16.8 (14.0, 17.3)	21.5 (20.4, 25.8)
	Psoas muscle (N=90)	Male	6.2 (5.2, 8.0)	5.7 (4.8, 5.8)	5.6 (5.2, 6.2)	7.3 (5.6, 8.7)	8.8 (6.7, 9.7)
		Female	5.9 (5.2, 6.9)	5.2 (4.7, 6.0)	5.4 (5.1, 5.6)	6.3 (6.0, 7.1)	8.7 (6.8, 10.5)
Total muscle volume (cm <sup>3</sup> )	Erector spinae muscle (N=90)	Male	706 (594, 735)	594 (569, 720)	718 (675, 750)	660 (581, 727)	706 (618, 828)
		Female	430 (401, 474)	397 (358.5, 463.5)	452 (414, 490)	431 (408, 464)	408 (365, 488)
	Multifidus muscle (N=90)	Male	237 (199, 266)	232 (194, 265)	251 (232, 284)	239 (199, 259)	232 (193, 292)
		Female	188 (157, 213)	178 (139, 206)	184.5 (157, 217)	188 (162, 207)	205 (187, 234)
	Psoas muscle (N=90)	Male	484 (400, 539)	502 (409, 563)	558 (486, 626)	461 (393, 505)	445 (376, 464)
		Female	271 (229, 314)	284 (235, 300)	329 (229, 391)	252 (227, 280)	241 (217, 274)
Functional muscle volume (cm <sup>3</sup> )	Erector spinae muscle (N=90)	Male	596 (527, 686)	578 (523, 679)	673 (623, 714)	591 (507, 675)	615 (527, 754)
		Female	385 (348, 428)	357 (334, 441)	418 (383, 448)	392 (374, 414)	347 (328, 371)
	Multifidus muscle (N=90)	Male	206 (184, 236)	201 (184, 236)	228 (217, 261)	197 (177, 228)	185 (175, 254)
		Female	160 (134, 187)	164 (127, 190)	169 (139, 194)	156 (145, 171)	162 (138, 171)
	Psoas muscle (N=90)	Male	441 (378, 514)	473 (382, 534)	527 (459, 588)	433 (357, 468)	400 (345, 421)
		Female	245 (215, 292)	267 (224, 289)	309 (218, 369)	236 (209, 263)	218 (206, 244)

Data are expressed as median (25th percentile, 75th percentile). N, number of individuals.