

Appendix 1. Factors associated with knee OA in Olympians and general population control

	Olympians		Controls	
	Prevalence n (%)	aOR (95% CI) adjusted a, s, b, i	Prevalence n (%)	aOR (95% CI) adjusted a, s, b, i
Age				
20-39	40/1194 (3.35)	1.00 (reference)	17/776 (2.19)	1.00 (reference)
40-59	114/1359 (8.39)	2.44 (1.66 to 3.60)	48/646 (7.43)	3.33 (1.86 to 5.96)
>60	78/580 (13.45)	5.67 (3.66 to 8.79)	26/212 (12.26)	6.68 (3.39 to 13.19)
Sex				
male	113/1840 (6.14)	1.00 (reference)	33/723 (4.56)	1.00 (reference)
female	133/1488 (8.94)	1.88 (1.37 to 2.58)	61/998 (6.11)	1.62 (1.00 to 2.61)
BMI				
normal	112/1774 (6.31)	1.00 (reference)	38/981 (3.87)	1.00 (reference)
overweight	84/1063 (7.90)	1.23 (0.87 to 1.73)	28/457 (6.13)	1.37 (0.79 to 2.38)
obese	36/342 (10.53)	1.67 (1.05 to 2.63)	22/190 (11.58)	3.66 (2.03 to 6.61)
Knee injury				
no	83/2613 (3.18)	1.00 (reference)	45/1391 (3.24)	1.00 (reference)
yes	164/744 (22.04)	9.40 (6.90 to 12.79)	50/344 (14.53)	5.93 (3.71 to 9.48)
Knee alignment				
normal	184/2345 (7.85)	1.00 (reference)	74/1272 (5.82)	1.00 (reference)
valgus	24/131 (18.32)	2.65 (1.51 to 4.64)	9/92 (9.78)	1.70 (0.77 to 3.77)
varus	31/273 (11.36)	1.30 (0.82 to 2.08)	11/82 (13.41)	2.27 (1.02 to 5.05)
Finger nodes	35/198 (17.68)	1.83 (1.13 to 2.95)	8/59 (13.56)	1.72 (0.70 to 4.24)
Comorbidities				
none	120/2379 (5.04)	1.00 (reference)	52/1263 (4.12)	1.00 (reference)
1	75/696 (10.78)	1.79 (1.27 to 2.51)	24/336 (7.14)	1.19 (0.68 to 2.08)
2 or more	52/282 (18.44)	2.71 (1.75 to 4.19)	19/136 (13.97)	2.16 (1.09 to 4.28)

(Values are presented as count (n) and prevalence (%). aOR adjusted a, s, b, i = odds ratio adjusted for confounders age, sex, BMI and injury. BMI = body mass index. Bold denotes statistical significance.)