

**Appendix 4. Factors associated with knee pain 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
<b>Age</b>				
20-39	101/1194 (8.46)	1.00 (reference)	63/776 (8.12)	1.00 (reference)
40-59	185/1359 (13.61)	<b>1.52 (1.15 to 2.00)</b>	66/646 (10.22)	1.23 (0.84 to 1.81)
>60	85/580 (14.66)	<b>1.99 (1.41 to 2.80)</b>	25/212 (11.79)	1.57 (0.92 to 2.68)
<b>Sex</b>				
male	208/1840 (11.30)	1.00 (reference)	72/723 (9.96)	1.00 (reference)
female	184/1488 (12.37)	1.18 (0.92 to 1.51)	88/998 (8.82)	0.97 (0.68 to 1.38)
<b>BMI</b>				
normal	163/1774 (9.19)	1.00 (reference)	70/981 (7.14)	1.00 (reference)
overweight	142/1063 (13.36)	<b>1.48 (1.12 to 1.95)</b>	56/457 (12.25)	<b>1.70 (1.14 to 2.54)</b>
obese	66/342 (19.30)	<b>2.34 (1.63 to 3.37)</b>	26/190 (13.68)	<b>2.26 (1.36 to 3.75)</b>
<b>Knee injury</b>				
no	157/2613 (6.01)	1.00 (reference)	76/1391 (5.46)	1.00 (reference)
yes	236/744 (31.72)	<b>7.32 (5.77 to 9.28)</b>	84/344 (24.42)	<b>5.34 (3.75 to 7.59)</b>
<b>Knee alignment</b>				
normal	305/2345 (13.00)	1.00 (reference)	123/1272 (9.67)	1.00 (reference)
valgus	27/131 (20.61)	1.54 (0.02 to 2.55)	18/92 (19.57)	<b>2.19 (1.22 to 3.96)</b>
varus	54/273 (19.78)	1.40 (0.96 to 2.03)	17/82 (20.73)	<b>2.34 (1.26 to 4.32)</b>
Finger nodes	43/198 (21.71)	1.38 (0.91 to 2.11)	9/59 (15.25)	1.62 (0.71 to 3.72)
<b>Comorbidities</b>				
none	227/2379 (9.54)	1.00 (reference)	93/1263 (7.36)	1.00 (reference)
1	105/696 (15.09)	<b>1.35 (1.02 to 1.79)</b>	43/336 (12.8)	<b>1.73 (1.14 to 2.62)</b>
2 or more	61/282 (21.63)	<b>1.97 (1.35 to 2.87)</b>	24/136 (17.65)	<b>2.86 (1.63 to 5.01)</b>

(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.)