

Table 3 - Associations between the amount of fat in the lumbar multifidus muscles and LBP in 40 year-old men (n=199) and women (n=213).

Fat infiltration	Unadjusted		Adjusted*	
	LBP year	LBP ever	LBP year	LBP ever
Men and women				
Any	1.7 (1.1-2.6)	2.6 (1.5-4.4)	1.8 (1.2-2.8)	2.9 (1.5-5.5)
Slight (grades 1 vs. 0)	1.5 (0.9-2.5)	2.5 (1.4-4.7)	1.6 (0.9 -2.8)	2.9 (1.5 -5.5)
Severe (grades 2 vs. 0)	3.6 (1.4-9.7)	7.2 (1.6-32.4)	4.1 (1.5 -11.2)	9.2 (2.0-43.2)
Severe (grades 2 vs. 1)	2.5 (1.0-6.1)	2.8 (0.7-12.2)	2.5 (1.0-6.4)	3.2 (0.7-14.1)
Men				
Any	1.4 (0.9–2.5)	2.8 (1.4–5.9)	1.5 (0.8–2.6)	3.0 (1.4–6.4)
Slight (grades 1 vs. 0)	1.6 (0.8–3.0)	3.1 (1.4–6.4)	1.7 (0.9 –3.3)	3.4 (1.5 –7.7)
Severe (grades 2 vs. 0)	1.9 (0.5–6.6)	5.7 (0.7–46.9)	1.7 (0.5 –6.2)	5.7 (0.7–48.0)
Severe (grades 2 vs. 1)	1.2 (0.4–4.0)	1.9 (0.2–15.2)	1.0 (0.3–3.5)	1.7 (0.2–14.2)
Women				
Any	2.4 (1.3–4.5)	2.7 (1.2–6.1)	2.8 (1.4–5.7)	3.2 (1.3–7.9)
Slight (grades 1 vs. 0)	1.6 (0.6–4.1)	2.4 (0.8–6.8)	1.7 (0.7–4.5)	2.7 (0.9–8.1)
Severe (grades 2 vs. 0)	8.3 (1.5–44.5)	9.2 (1.0–84.3)	11.6 (2.0– 66.7)**	15.1 (1.5–154.3)**
Severe (grades 2 vs. 1)	5.1 (1.1–22.4)	3.8 (0.5–29.7)	6.7 (1.4–30.8)	5.7 (0.7–46.9)

Data are expressed as odds ratios (95% confidence intervals).

*Adjusted for BMI, physical activity, physical workload, and hours participating in sports;

** time in sports, and body weight remained significant in multivariate analyses.

LBP, lower back pain; LBP ever, had ever experienced lower back pain; LBP year, had experienced lower back pain in previous year.