

Supplementary Table 1. Cross-sectional area of Type I and Type II fibers in soleus muscle of groups studied (n=5 rats [10 muscles] per group).

Fiber type	Control	IM	14 days after cast removal		
			FA	SS	CS
Type I (μm^2)	3172.4±869.9 (1988.2-4755.6)	2345.4±897.1*** (1113.5-3826.5)	2817.3±1052.3***,### (1239.8-4555.4)	2704.7±828.4***,###,††† (1574.6-4280.8)	3000.6±1031.4***,###,†,§§§ (1587.0-4800.4)
Type II (μm^2)	1976.3±519.2 (1285.5-2963.3)	1164.8±401.9*** (635.5-1875.0)	2144.3±851.6***,### (926.3-3745.2)	1915.6±613.8*,###,††† (1155.7-3256.7)	2562.9±813.0***,###,†††,§§ (1450.9-4121.8)

Values shown as mean ± SD (95 % confidence interval). IM: 4-week cast immobilization; FA: 4-week cast immobilization followed by free ambulation (free cage activity) for 14 days; SS: static stretching performed 6 times/week; CS: cyclic stretching performed 6 times/week. Data were analyzed with the Kruskal-Wallis test followed by a Dunn-Bonferroni *post hoc* test for all pairwise multiple comparisons. * $P<0.05$, *** $P<0.001$ vs. control group; ### $P<0.001$ vs. IM group; † $P<0.05$, ††† $P<0.001$ vs. FA group; §§§ $P<0.001$ vs. SS group.

Supplementary Table 2. Number of necrotic muscle fibers/total muscle fibers in soleus muscles in groups studied.

	Control (5 rats, 5 muscles)	IM (5 rats, 5 muscles)	7 days after cast removal		
			FA (5 rats, 5 muscles)	SS (4 rats, 4 muscles)	CS (5 rats, 5 muscles)
Necrotic muscle fibers/total muscle fibers (%)	1/8131 (0.01)	31/8957 (0.34)**	201/6528 (2.99)**,###	73/6112 (1.18)**,###,††	42/7456 (0.56)**,††,§§

Values shown as number of necrotic muscle fibers/total muscle fibers (%). IM: 4-week cast immobilization; FA: 4-week cast immobilization followed by free ambulation (free cage activity) for 7 days; SS: static stretching performed 6 times/week; CS: cyclic stretching performed 6 times/week. Group comparisons were performed with a chi-square test with Bonferroni correction. ** $P<0.01$ vs. control group; ## $P<0.01$ vs. IM group; †† $P<0.01$ vs. FA group; §§ $P<0.01$ vs. SS group.