Abstract

Clin J Sport Med. 2009 Mar;19(2):115-9.

The effects of ingestion of omega-3 fatty acids on perceived pain and external symptoms of delayed onset muscle soreness in untrained men.

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OBJECTIVE: The purpose of this study was to examine the effect of ingestion of omega-3 on perceived pain and external symptoms of delayed onset muscle soreness after eccentric exercise in knee extensors.

DESIGN: A randomized, double-blinded, repeated measures design was used for this study.

SETTING: The study was performed in the Exercise Physiology Laboratory at the Faculty of Humanities of Urmia University.

PARTICIPANTS: Twenty-seven men, who had not participated in any training program 60 days before their participation in this study, were recruited. All subjects finished the study.

INTERVENTIONS: Knee range of motion (ROM), perceived pain, and thigh circumference of the right leg were taken before, immediately, and after 24 and 48 hours after an eccentric exercise. Subjects were assigned to one of the experimental (1.8 g/d omega-3), placebo (R.P. Scherer), or control groups.

MAIN OUTCOME MEASURES: Subjects self-reported the perceived pain level of the lower limbs using the Talag mentally corrected scale. Thigh circumference was measured by using a Gulick anthropometric tape. Knee ROM was determined by using a Jamar goniometer.

RESULTS: No differences among treatments were observed for pain and ROM before, immediately, and 24 hours after the exercise. However, observed differences in perceived pain and ROM were obvious at 48 hours postexercise. In the case of thigh circumference, differences were at 24 and 48 hours postexercise, and there was no difference before and immediately after exercise.

CONCLUSIONS: Ingestion of omega-3 can be effective in ameliorating delayed onset muscle soreness induced by eccentric exercise.

PMID: 19451765