INTERACTION OF EXERCISE AND FISH OIL ON POSTPRANDIAL LIPEMIA

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ABSTRACT

PURPOSE: The purpose of the study was to examine the interaction of fish oil and exercise in attenuating PPL after a high fat meal and inflammation induced by exercise.

METHODS: Previously sedentary subjects were randomly assigned to one of two treatment groups: n-3FA supplementation alone (FO, n=10) or n-3FA supplementation plus exercise training (FO + ExTr, n=12). Both groups consumed 4 g/d n-3FA, while exercise training consisted of 45 min/d, 5d/wk of exercise on treadmill. Subject performed PPL and an acute exercise PPL (Ex-PPL) before and after four weeks of treatment. RESULTS: Both treatments significantly attenuated the PPL response measured as total TG-AUC. There was no significant main effect for group or group by week interaction. There were no significant changes of CRP, IL-6, and sICAM-1 after treatment. CONCLUSION: Exercise training has no interference or additive effects on n-3FA in attenuating PPL. N-3FA does not attenuate inflammation.