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*In a new study, strength training elderly women taking 2 grams of fish oil/day improved muscle strength and function more than those who trained without supplementation.*

## FISH-OIL SUPPLEMENTATION AUGMENTS THE BENEFITS OF STRENGTH TRAINING IN ELDERLY WOMEN

**A**ging results in a general decrease in muscle strength and function among most adults. This effect can be lessened or reversed by strength training. Previous research has shown that fish oil, rich in omega-3 fatty acids, plays a role in the plasma membrane and cell function of muscles.

In a new study published online in the *American Journal of Clinical Nutrition*, researchers investigated the long-term effect of fish oil supplementation and strength training on the muscle strength and capacity of older women.

The participants included 45 women with an average age of 64 years that were assigned randomly to one of 3 groups. One group performed strength training only (ST group) for 90 days, the other groups performed the same strength-training program and received fish oil supplementation (2 g/day) for 90 days (ST90 group) or for 150 d (ST150 group) The ST150 group was supplemented 60 days before training. Muscle strength and functional capacity were evaluated before and after the training period.

No differences in the pre-training period were found between groups for any of the variables. The peak muscle strength for all muscles (knee flexor and extensor, plantar and dorsiflexor) increased from pre- to posttraining in all groups. However, the effect was greater in the ST90 and ST150 groups than in the ST group. A measure of muscle activation was also improved between the pre- and post-training periods only in the supplemented groups. Chair-rising performance in the fish oil groups was better than in the ST group.

The current study showed that fish oil supplementation in addition to strength training resulted in greater improvements in muscle strength and function than strength training alone.

*Cintia LN Rodacki et al. Fish-oil supplementation enhances the effects of strength training in elderly women. First published January 4, 2012, doi: 10.3945/ajcn.111.021915 Am J Clin Nutr February 2012 ajcn.021915.*