

## Ginger Helps Muscle Pain After Exercise

By Greg Arnold, DC, CSCS, June 18, 2010, abstracted from "Ginger (*Zingiber officinale*) Reduces Muscle Pain Caused by Eccentric Exercise" printed online in the *Journal of Pain*

Link - <http://www.nowfoods.com/079764.htm>

Complementary and Alternative Medicine (CAM) is a group of diverse medical and health care systems, practices, and products that are considered outside of conventional medical practices of medical or osteopathic doctors though it is frequently used in conjunction with conventional medicine. Some forms of CAM include acupuncture, chiropractic, ayurvedic medicine, massage, naturopathy, homeopathy, and diet-based therapy (1).

In the United States, approximately 38 percent of adults (about 4 in 10) and approximately 12 percent of children (about 1 in 9) are using some form of CAM (1). As previously mentioned, diet therapy is a characteristic of CAM, with one of the 10 most popular common natural products being ginger (2). It is ginger's strong anti-inflammatory properties that have shown it useful for knee pain (3) and digestive health (4).

Now a new study (5) has found that ginger may help with muscle pain after exercise. In the study, 34 patients were given ginger capsules composed of 2 grams of ginger that contained the following anti-inflammatory components per gram of ginger (4.1 mg 6-gingerol, 1.9 mg 10-gingerol, and 2.2 6-shogaol) or placebo for 11 days, during which they underwent specific strength tests. The patients then filled out surveys reporting their muscle soreness 1, 2, and 3 days after the exercises. They used a Visual Analog Scale to rate their soreness on a line between 0 (no pain) and 100 mm (worst pain).

The researchers found that 1 day after the exercises, those in the ginger group had 27% less muscle soreness compared to the placebo group (27 vs. 37 mm on the VAS). After 2 days, it was 18% (27 vs. 33 mm), after 3 days, 12% (15 vs. 17 mm). When looking at the blood samples, those in the placebo group had inflammatory protein levels (called PGE2) that were 19% lower 2 days after the exercises (145 vs. 180 picograms/milliliter). The researchers believed that this decrease in inflammation was a main contributor to the decreased pain in the ginger group.

For the researchers, "This study demonstrates that daily consumption of...ginger resulted in moderate-to-large reductions in muscle pain following exercise-induced muscle injury" and that these results "further demonstrate ginger's effectiveness as a pain reliever."

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### Reference:

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