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# FITNESS

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Healthy ALTERNATIVES to Sugar  
and ARTIFICIAL SWEETENERS



# Q & A

BY MATT BRZYCKI

## DOES WATERMELON JUICE HELP RELIEVE MUSCULAR SORENESS?

**A.** Research continues to investigate a wide range of substances that have the potential to relieve or reduce muscular soreness. One of the latest aspirants is watermelon juice.

Watermelons are among the few natural foods that contain citrulline, an amino acid with anti-inflammatory and antioxidant properties. In theory, then, citrulline could be a way to treat muscular soreness.

In one study, seven male students (average age 22.7) of Sport Sciences at the University of Murcia (Spain) did eight 30-second intervals of intense exertion on a stationary bicycle with one minute of rest between each interval. This was done on three different occasions separated by five days. One hour prior to each occasion, the subjects ingested one of the following beverages: natural watermelon juice (with 1.17 grams of citrulline), enriched watermelon juice (with an additional 4.83 grams of citrulline) or a placebo (a drink infused with fruit flavored plants and sugar).

The subjects reported significantly less muscular soreness 24 hours post-activity after drinking the natural and enriched watermelon juices. This must be interpreted with caution, however, since the study had a small number of subjects and the muscular soreness was self-reported.

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## DO CLIENTS HAVE A PREFERENCE FOR MALE OR FEMALE TRAINERS?

**A.** The benefits of supervised workouts are widely known. But how much does gender come into play?

Researchers at Southampton Solent University in the United Kingdom had 402 male and female students (aged 18 to 28) complete a questionnaire. The questions were preceded by a narrative that described either a male ("Daniel") or female ("Sophie") trainer. In both versions, the narrative noted that the trainer had an undergraduate degree in Applied Sports Science and was a former competitive athlete and certified personal trainer.

The students randomly selected either the male or female version of the questionnaire. From there, researchers separated the completed questionnaires into four groups based on the gender of the student and gender of the fictional trainer.

The study found that women rated trainers (both male and female) higher than men. Overall, female trainers were ranked higher, according to both sexes.

Also, both men and women indicated that having a trainer of the opposite gender might make it more difficult to concentrate. Regardless, neither men nor women objected to having a trainer of the same gender or specified a preference for a trainer of the same gender.

## IS WHOLE-BODY VIBRATION TRAINING SAFE?

**A.** Fitness enthusiasts continue to clamor for the "latest and greatest." In order to accommodate their demands, fitness facilities are eager to offer new activities. Notably whole-body vibration (WBV) is becoming increasingly popular.

In a study conducted by researchers in the Department of Biomedical Engineering at Stony Brook University (New York), six subjects (average age 24.1) were exposed to vibration from three commercially available WBV devices that varied in frequency and intensity.

Two of the devices delivered vibrations well above the acceptable threshold for safety. In fact, the levels weren't safe for *seconds* of daily exposure let alone the minutes that such devices are often used. Of greatest concern were the vibrations transmitted to the head, which could be likened to a series of sub-concussive forces to the brain.

Limiting exposure to vibration has long been recognized in the workplace. Those concerns must also be considered in the fitness facility.

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