The Effects Of Ginger Supplementation On Delayed Onset Muscle Soreness

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Abstract

Six untrained males volunteered to participate in this study. The participants received two treatments; for one treatment, they received 2 grams of ginger (GIN) in a capsule; the other treatment was a glucose tablet, which served as the placebo (PLA). The variables measured in this study were the time the participant was able to perform the exercise, pain level using the 10 point visual analog scale (VAS), range of motion (ROM) of the ankle, and muscle circumference (MC) of the calf. The participants performed a 1 hour and 48 minute running exercise until they were fatigued or no longer able to continue. Once they completed the exercise, the final time was recorded.

Methods (cont’d)

The pain level, ROM, and muscle circumference were taken before, immediately after, 24-hours and 48-hours after the exercise test. After the subjects completed the measurements for their first treatment, they came in four days later for their second treatment. An activity log was recorded during the 24-hour and 48-hour post-exercise meetings. This study used ANOVA with repeated measures and values were analyzed with SPSS version 25. The alpha level for significance was set to \( p \leq 0.05 \).

Results (cont’d)

The results of this study do not support the claim that the use of ginger prior to exercise will reduce the effects of DOMS.

Conclusions

The results of this study do not support the claim that the use of ginger prior to exercise will reduce the effects of DOMS after eccentric exercise. These findings may be due to a lack of dosage and time. Previously, it was found that a dosage of 4 grams a day for a total of 5 days prior to the exercise test resulted in reduced recovery time from DOMS. These results also may have been due to a low level of muscle soreness that was induced. It was found that when a significant amount of soreness is present, the ginger was more likely to reduce DOMS.