

Exercise Participation and Indicators of Skeletal Muscle Health in Women with Hypothyroidism

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ABSTRACT

Women with hypothyroidism report undesirable skeletal muscle symptoms at rest and during exercise. The severity of skeletal muscle symptoms may influence an individual's willingness and capacity to exercise. **PURPOSE:** This study aimed to determine the relationship between exercise and skeletal muscle symptoms at rest and during exercise in women with hypothyroidism. **METHODS:** An online survey was completed by female participants diagnosed with hypothyroidism currently undergoing prescribed thyroid hormone treatment (n=580). Participants responded to questions related to basal muscle symptoms (MS), and muscle pain (MP) and fatigue (MF) experienced during exercise. Participants reported the type of exercise they performed, including: no exercise (NE), cardiovascular/aerobic (CV), resistance training (RT), or cardiovascular and resistance training (CVRT). Frequency of exercise and recovery time from exercise were also reported. **RESULTS:** Participants performing CVRT reported significantly lower MS at rest compared to CV ($P<0.05$), RT ($P<0.05$) and NE ($P<0.001$). There was an association between MP and the type of exercise performed ($P<0.05$). MF was also associated with the type of exercise performed ($P<0.001$). **CONCLUSION:** Results from this study indicate performing CVRT may improve skeletal muscle symptoms in women with hypothyroidism.