**IMPACT OF WHOLE BODY ELECTROMYOSTIMULATION ON VELOCITY, POWER AND BODY COMPOSITION IN POSTMENOPAUSAL WOMEN: A RANDOMIZED CONTROLLED TRIAL**

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As people age, we see a decrease in strength and power, and a consequential increase in sedentary behavior. There is a noticeable decline in explosive capacity which affects climbing stairs, rising from a seated position and recovering from a slip or fall. Menopause exacerbates these issues - the reduction of estrogen production results in increased body fat and decreased muscle; in fact, inactive, postmenopausal females are characterized by the highest percentage of body fat and lowest amount of lean muscle. It has also been shown that frailty, dependency and fall risk all increase with menopause. Overall, ageing and menopause decreases functional capacity and muscle function, which negatively affects an individual's quality of life.

This study took 34 healthy, sedentary, postmenopausal women ages 55-69 and had them complete 20 electrical muscle stimulation training sessions (2 workouts per week for 10 weeks). The objective of this study was to look at the effect of EMS on strength and power and to determine whether or not this technique is suitable for the prevention and treatment of postmenopausal physical deterioration.

This study concluded that quick, EMS workouts performed under the guidance of a trainer, is more appealing and more effective than voluntary exercise, and therefore can reduce the prevalence of sedentary behavior. Across all participants, 10 weeks of EMS training was shown to significantly improve power and velocity. EMS was determined as an effective and suitable exercise modality for postmenopausal women to improve functional fitness, decrease (feelings of) dependence and decrease fall risk, thus improving quality of life.