

## Effects of Electrical Muscle Stimulation on Core Muscle Activation and Physical Performance in Non-Athletic Adults

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This study looked at whether or not EMS had a positive effect on non-athletic adults, specifically, its effect on core muscle activation. Core strength is extremely important, yet it is often only acknowledged by individuals who are chasing a specific aesthetic. It is common that, unless someone has goals of achieving a 6-pack, the core does not receive the love that it deserves in workout regimens. Building strength in your core is crucial as it is a main player in stability and balance – which prevents falls and improves performance (even if just performance of basic function), and further mitigates risk of falls and other injury, as well as chronic back and hip pain.

39 individuals between the ages of 20 and 25 participated in this study. They were split into 2 groups, 1 was assigned to traditional strength training only, the other was assigned to traditional strength training plus electrical muscle stimulation. Both groups trained for 30 minutes, 3x a week for 8 weeks; the EMS group also partook in sessions that stimulated bilateral abdominals, glute medius and hip adductor muscles.

At the end of the study protocol, those leading the study measured muscle thickness, physical performance and body composition in all participants. Results showed more efficient contraction and greater (contracted) muscle thickness (which attributes to greater strength) in the strength training plus electrical muscle stimulation group concluding that EMS is safe and reasonable as a method of improving physical fitness in non-athletic yet healthy adults.