

Changes in Physical Fitness After 12 Weeks of Structured Concurrent Exercise Training, High Intensity Interval Training, or Whole-Body Electromyostimulation Training in Sedentary Middle-Aged Adults: A Randomized Controlled Trial

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Cardiovascular fitness (V_{O2max}) and muscular strength are two key indicators of health. Research has shown an inverse relationship between both variables and heart health, cancers and all-cause mortality. Physical movement and exercise has been proven to fight chronic disease, improve overall fitness and improve mood, thus increasing quality of life.

This study compared the changes in fitness level of 89 healthy, sedentary adults, ranging in age from about 49 to 58 years old. Upper, core and lower body muscle groups were tested after completing fitness regimens composed of either traditional HIIT workouts or workouts delivered by a whole body EMS system. Everyone participated in 2 workouts per week for 12 weeks. It was found that V_{O2max} , upper and lower body strength and core strength were all improved in both cases, with slightly higher improvement seen in those individuals who's experimental exercise design involved WB-EMS.

Another important takeaway is as simple as this – a structured exercise program, regardless of the modality, will improve physical fitness.

The WB-EMS group saw minimally higher levels of improvement as compared with the HIIT (without WB-EMS) - while this may not seem like much, it does prove that EMS improves fitness level as well as, if not a bit better than, a classic HIIT workout. Additionally, this study shows us that some kind of structured and planned routine is important in encouraging consistency and engagement, therefore allowing an individual to see the results they strive for. All that said, a Manduu membership will provide clients with a routine to follow and a quick, effective workout – without all the impact and sweat that is inevitable in today's common HIIT workouts.