

Good vibrations reduce muscle aches

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The Myovolt technology in action. Credit: Massey University

New research from Massey University's College of Health shows wearable vibration technology can reduce muscle aches and pain after strenuous exercise, benefiting those suffering from tired and sore bodies.

The Myovolt technology is a wearable device, worn on a specific body

region. Due to its ease of use and self-application, it can reduce signs and symptoms of exercise-induced muscle soreness.

Dr Darryl Cochrane, from the School of Sport, Exercise and Nutrition, has been working with New Zealand-based company Myovolt Limited during the research and development stages, and carried out extensive research including clinical trials at Massey University's Manawātū campus.

"Following [strenuous exercise](#) with three 15-minute daily exposures of the Myovolt, our findings show a reduction in muscle soreness and creatine kinase [a blood marker of muscle damage], as well as improved range of motion, suggesting it has an important role in recovery. This is great news for gym-goers, fitness freaks and athletes who want to accelerate their recovery," Dr Cochrane says.

It is well known that ageing can influence performance, and it has been reported that muscle strength starts to decline at approximately 25 years of age. Muscular power is also more susceptible to deterioration as we age. "For the older athlete, our research has shown that an acute 10-minute exposure of the Myovolt increased [muscle](#) power and may be an alternative warm-up immediately prior to high intensity activities," Dr Cochrane says.

Myovolt is the brainchild of wearable technology expert Steve Leftly, who has developed other performance-enhancing electronic fabrics for elite athletes, including the Australian and Great Britain Olympic Cycling teams.

"The research carried out by Darryl's team at Massey has been pivotal in validating the physiological effects and onward benefits of using Myovolt. His published research highlights this new area of Wearable Localised Vibration for new uses in the sports recovery and muscular

pain relief markets. We are looking forward to the next phase of studies at Massey looking at additional medical benefits of wearable vibration," Mr Leftly says.

More information: Darryl J. Cochrane. Effectiveness of using wearable vibration therapy to alleviate muscle soreness, *European Journal of Applied Physiology* (2017). [DOI: 10.1007/s00421-017-3551-y](https://doi.org/10.1007/s00421-017-3551-y)

Provided by Massey University

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