

Les Mills Lab: LES MILLS SPRINT study



Introduction

High-Intensity Interval Training (HIIT) elicits more significant health benefits than standard moderate-intensity exercise programs. Previous research utilized weight-bearing protocols with varying foci of strength, plyometric and speed training however these modalities are not feasible for individuals who cannot perform impact activities.

Rationale

A HIIT program that does not involve heavy weight training, plyometric exercises, or impact forces is appealing to many active adults. A HIIT program on an indoor bike could potentially provide an alternative with the same physiological benefits as a typical HIIT protocol.

Hypothesis

That a HIIT-based cycling program (LES MILLS SPRINT™) will elicit greater oxygen consumption and leg strength, with accompanying lower body fat, blood pressure, cholesterol, triglycerides, and fasting glucose, compared to a volume-matched control.

Methods

Thirty six active adults aged 26-60 years were involved in the study. Eighteen participants did not change their existing exercise program, the other 18 replaced one hour of cardiovascular training session with two, 30 minute HIIT cycling sessions. Both groups had an equal weekly training volume.

Measurements of body composition, blood pressure, cardiovascular fitness, strength and blood profile were taken before and after the six week protocol.

Results

The LES MILLS SPRINT intervention was effective in reducing body fat mass, blood pressure, total cholesterol and triglyceride concentration while enhancing cardiovascular fitness, lean body mass, glucose intolerance and strength.

Conclusion

The results show that replacing just one session of moderate-intensity exercise with two HIIT classes per week for six weeks significantly improves the health, fitness and strength of physically active adults.

A link to the published abstract in the Journal of Fitness Research is available [here](#).