Cycling with arms and legs.

No registrations found.

Ethical review Positive opinion

Status Pending

Health condition type

Study type Interventional

Summary

ID

NL-OMON26883

Source

Nationaal Trial Register

Health condition

N.A.

Sponsors and support

Primary sponsor: Maastricht University

Source(s) of monetary or material Support: This study does not receive any funding.

Intervention

Outcome measures

Primary outcome

The difference in total power output, in percentage, between the regular cycling test and the combined arm- and leg cycling test will be the primary outcome of this study.

Secondary outcome

Secondary outcomes are differences in cycling efficiency, heart rate, muscle activity, oxygen uptake and rated perceived exertion.

Study description

Study objective

The primary objective of this study is to determine whether adding arm-propulsion to regular cycling, increases the total power output (arms and legs).

The secondary objectives of this study are to determine differences in cycling efficiency (Work (Joule)/millilitre O2), heart rate, muscle activation, VO2, and rated perceived exertion (RPE) between regular cycling and combined arm- and leg cycling.

Study design

After approval by MEC, inclusion will start. For each subject the trial will last approximately two weeks.

Intervention

The intervention in this study is cycling with additional arm propulsion. The control intervention is regular cycling, with only leg propulsion.

Contacts

Public

Bob Ramakers P.O. box 616

Maastricht 6200 MD The Netherlands 0031639882070

Scientific

Bob Ramakers P.O. box 616

Maastricht 6200 MD The Netherlands 0031639882070

Eligibility criteria

Inclusion criteria

- Men and women aged 18 35 years.
- -19 kg/m2 < BMI < 25 kg/m2.
- Able to read and understand Dutch.
- Playing sport/exercising.
- Informed consent (IC).

Exclusion criteria

- Hypertension.
- (Previous) cardiovascular disease.
- (Previous) respiratory disease.
- Diabetes mellitus.
- Other assessed physical impairments that reduce performance during cycling.
- Performance of strenuous physical activity before the tests.
- Any condition that according to the researchers would interfere with the tests.

Study design

Design

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 06-04-2015

Enrollment: 18

Type: Anticipated

Ethics review

Positive opinion

Date: 20-03-2015

Application type: First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 42125

Bron: ToetsingOnline

Titel:

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

NTR-new NL4863 NTR-old NTR5108

CCMO NL52388.068.15 OMON NL-OMON42125

Study results