

Exercise and RNA expression in adipose tissue and muscle

No registrations found.

Ethical review	Positive opinion
Status	Other
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON25990

Source

Nationaal Trial Register

Brief title

-

Health condition

Obesity

Sponsors and support

Primary sponsor: Radboud university medical center, department of Physiology

Source(s) of monetary or material Support: Radboud university medical center, department of Physiology

Intervention

Outcome measures

Primary outcome

- RNA expression levels and subsequent pathway analysis in subcutaneous adipose tissue and skeletal muscle

- Change in levels of cytokines, adipokines and myokines

Secondary outcome

- Insulin sensitivity
- Cardiorespiratory fitness
- Body composition

Study description

Study design

Baseline, at 2 and 4 weeks during intervention and at 8-weeks (after cessation of the training period)

Intervention

- training intervention (8 week aerobic exercise training)
- subcutaneous adipose tissue biopsy
- skeletal muscle biopsy
- venous blood sampling
- hyperglycemic euglycemic clamp
- DXA scan
- Maximal cycling test

Contacts

Public

afdeling Fysiologie

Rebecca Verheggen
Philips van der Leijdenlaan 15

Nijmegen
The Netherlands
0243614906
Scientific
afdeling Fysiologie

Rebecca Verheggen
Philips van der Leijdenlaan 15

Nijmegen
The Netherlands
0243614906

Eligibility criteria

Inclusion criteria

- Body mass index of $> 28 \text{ kg/m}^2$
- ≥ 18 years of age
- Mentally able/allowed to give informed consent

Exclusion criteria

General exclusion criteria

- Use of medication interfering with fat metabolism (thiazolidinediones)
- Type 1 or 2 diabetes mellitus
- Nicotine abus
- Use of anticoagulant therapy
- Lidocaine allergy
- Acute myocardial infarction (3-5 days)
- Unstable angina
- Uncontrolled arrhythmias causing symptoms or hemodynamic instability

- Syncope
- Active endocarditis
- Acute myocarditis or pericarditis
- Symptomatic severe aortic stenosis
- Uncontrolled heart failure
- Acute pulmonary embolus or pulmonary infarction
- Thrombosis of lower extremities
- Suspected dissecting aneurysm
- Uncontrolled asthma

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL	
Recruitment status:	Other
Start date (anticipated):	24-03-2015
Enrollment:	20
Type:	Unknown

Ethics review

Positive opinion

Date: 28-01-2016
Application type: First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 42108
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL5630
NTR-old	NTR5737
CCMO	NL50995.091.14
OMON	NL-OMON42108

Study results