

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

NTR

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

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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