# A randomised controlled trial on the effects of an individual tailored lifestyle intervention to minimise the cardiovascular disease risk of individuals with Familial Hypercholesterolemia (FH)

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The study aims at examining the effect of an individual tailored lifestyle intervention to reduce the cardiovascular disease risk in people with FH.Secundary, the study aims at promoting a healthy lifestyle (no smoking, proper nutritional pattern,...

**Ethical review** Approved WMO **Status** Recruiting

Health condition type Cardiac disorders, signs and symptoms NEC

**Study type** Interventional

## **Summary**

#### ID

NL-OMON33700

#### Source

ToetsingOnline

#### **Brief title**

The PRO-FIT study

## **Condition**

- Cardiac disorders, signs and symptoms NEC
- Metabolic and nutritional disorders congenital

## **Synonym**

Type III hyperlipidemia

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Vrije Universiteit Medisch Centrum

Source(s) of monetary or material Support: ZonMw-Preventie

## Intervention

**Keyword:** Cardiovascular disease risk, Familial Hypercholesterolemia, Lifestyle

## **Outcome measures**

## **Primary outcome**

1. LDL cholesterol

## **Secondary outcome**

- 2. Biological cardiovascular risk indicators: blood pressure, glucose, body mass index (BMI), waist circumference, triglycerides, LDL cholesterol, blood total cholesterol (TC), HDL cholesterol and TC/HDL ratio.
- 3. Lifestyle intentions and behaviours (non-smoking, > 30 minutes of daily physical activity, a prudent nutritional pattern, and compliance to FH-related medication);
- 4. Psychological correlates and determinants of a healthy lifestyle: motivational factors (attitude, self-efficacy, social influences) and awareness factors (knowledge, cues to action, risk perception)?;

# **Study description**

## **Background summary**

Cardiovascular disease (CVD) has the highest burden in disability adjusted life years (DALYs) in the Netherlands5. FH is characterized by an elevated risk of developing cardiovascular disease. Worldwide, no in-depth intervention is known on the promotion of a healthy lifestyle within this risk population. Until now, attention has mainly been focussed on the effectiveness of pharmaceutical

interventions instead of achieving a relevant lifestyle improvement4. Given the high a priori CVD risk of people with FH and proven effects of lifestyle interventions in other high-risk groups the absolute risk reduction that can be gained is much larger than in the general population.

## Study objective

The study aims at examining the effect of an individual tailored lifestyle intervention to reduce the cardiovascular disease risk in people with FH. Secundary, the study aims at promoting a healthy lifestyle (no smoking, proper nutritional pattern, sufficient physical activity, adherence to medication) in people with FH.

## Study design

The study is a randomised controlled trial. 400 people who are notificated of their positive FH-status, are randomly assigned to either the intervention (n=200) or control group (n=200).

#### Intervention

The intervention consists of counselling a health lifestyle which is a combination of web-based counselling, face-to-face counselling (1 session), brochures and telephone booster sessions (3 sessions). Face-to-face counselling will take place at the participant\*s home. The control group will not receive this intervention.

## Study burden and risks

The intervention (including all intervention components) will cost approximately 135 minutes, as calculated in section E2 of this form. We expect the participants, who are just notificated of their FH status, have a higher intrinsic motivation to change their lifestyle. Thereby, the type of behaviour to change is dependent on their personal situation (tailored counselling) and that\*s why we expect the participants to be motivated to cooperate.

Measurements and questionnaires will also take time (approximately 130 minutes, see section E2 of this form) but do not pose a risk to the participants.

Benefits for the participants include gained knowledge about behavioural change with regard to the risk of premature CVD. Additionally, increased physical activity has a beneficial effect on psychological wellbeing.

## **Contacts**

## **Public**

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# **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adults (18-64 years) Elderly (65 years and older)

## Inclusion criteria

People are included if\*

- -FH is diagnosed by standard StOEH procedures between january 2007 and march 2009
- -aged 18-70 years old
- -living in 150 km radius of Amsterdam
- -sufficiently fluent in Dutch
- -given informed consent
- -being able to be moderately physically active

## **Exclusion criteria**

# Study design

## **Design**

Study type: Interventional

Intervention model: Other

Allocation: Randomized controlled trial

Masking: Open (masking not used)

**Primary purpose:** Prevention

## Recruitment

NL

Recruitment status: Recruiting

Start date (anticipated): 26-01-2009

Enrollment: 400

Type: Actual

## **Ethics review**

Approved WMO

Date: 27-08-2008

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 23-03-2010

Application type: Amendment

Review commission: METC Amsterdam UMC

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

# In other registers

Register ID

CCMO NL23932.029.08