# Personalised advice for healthy muscles

No registrations found.

**Ethical review** Positive opinion **Status** Recruiting

Health condition type

Study type Interventional

## **Summary**

#### ID

NL-OMON22064

Source

NTR

**Brief title** 

PAM

#### **Health condition**

Compliance, diet and lifestyle advice, muscle health, physical performance, handgrip strength, sedentary behaviour, quality of life, metabolic health

### **Sponsors and support**

**Primary sponsor: TNO** 

Utrechtseweg 48 3704 HE Zeist

**Source(s) of monetary or material Support:** Ministry of Economic Affairs (EZ)

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

Every time participants receive diet and lifestyle advice (week 5, 8 and 11), they are asked to formulate implementation intentions describing when and how they plan to implement the received advice. After a three-week period, prior to receiving new advice, participants will be asked to score the degree of compliance with the implementation intention they formulated

on a 7-points Likert scale (very low-very high). By monitoring the degree of compliance during the intervention period, both trends within individuals and between groups can be observed.

#### **Secondary outcome**

Measures of muscle health status including physical performance, handgrip strength, sedentary behaviour, quality of life, parameters of metabolic health status, protein and lipid profiles in responses to a challenge test, parameters of glycaemic control and patient specific complaints will be measured both at baseline and at the end to identify the degree of variation in this population.

## **Study description**

#### **Study objective**

In the current pilot-study, we will focus on demonstrating whether personalisation improves compliance with diet and lifestyle advice in a population of community-dwelling seniors. This advice will be based on personal preference, genotype, phenotype and measures of personal muscle health status as well as socio-psychological factors. These data will be combined in decision trees leading to optimal, personalised advice that is expected to give higher compliance with positive effects on muscle health.

#### Study design

Baseline measures: 14/09/2015 - 24/09/2015

Intervention period (9 wks): 12/10/2015 - 13/12/2015

End measures: 14/12/2015 - 18/12/2015

#### Intervention

During the nine-week intervention period, every three weeks participants will receive diet and lifestyle advice with personalised content and communicated in personalised form. Content of the advice will be personalised based on cut-off scores on personal health measures (i.e. parameters of metabolic health, genetic variation (SNP), nutrient intake, anthropometry, physical activity and patient specific complaints) and the form will be modified based on socio-psychological factors (i.e. freedom of choice, self-efficacy, implementation intentions).

### **Contacts**

#### **Public**

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#### Scientific

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## **Eligibility criteria**

#### Inclusion criteria

In order to be eligible to participate in this study, subjects must meet all of the following criteria:

- -They are  $\geq$  60 years old (the eldest subjects will be included preferably)
- -They perform sedentary behaviour for  $\geq 10$  h per day as assessed by the Sedentary Behaviour Questionnaire (Visser and Koster 2013) (subjects with the highest sedentary score will be included
- -They are considered healthy as assessed by the Health and Lifestyle questionnaire
- -They have a BMI of 20-30 kg/m2:
- -They are able and willing to use self-monitoring devices (activity tracker and digital food

diary)

-They have a desktop or laptop with internet access at home

#### **Exclusion criteria**

Potential subjects who meet any of the following criteria will be excluded from participation in this study:

- -They use medication known for its effects on blood glucose, cholesterol or insulin
- -They have a history of medical or surgical events that may significantly affect the study outcome, including physical limitations, cardio-vascular events or cerebro-vascular accident as assessed by the Health and Lifestyle questionnaire'
- -They are rehabilitating
- -They have a pacemaker
- -They are currently suffering from diabetes type I or type II as determined by the general practitioner
- -They follow a specific diet (e.g. slimming diet or medically prescribed diet)

## Study design

### **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: N/A, unknown

#### Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 14-09-2015

Enrollment: 60

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 11-09-2015

Application type: First submission

## **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

NTR-new NL5389 NTR-old NTR5490

Other METC nr: 15/12

## **Study results**