

De effecten van 4 weken training en eiwitsupplementen op spierkracht, spiermassa en conditie in een ongetrainde 55+ populatie

Gepubliceerd: 16-02-2016 Laatste bijgewerkt: 18-08-2022

Short-term exercise and protein supplementation enhances muscle strength, mass and physical fitness in a group of untrained men and women aged 55-75 years.

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON22231

Bron

NTR

Verkorte titel

STEP

Aandoening

low muscle strength, low muscle mass, low physical fitness, sarcopenia, aging process

Ondersteuning

Primaire sponsor: Ziekenhuis Gelderse Vallei

Overige ondersteuning: This research is part of the Eat2Move project and supported by a grant from the Province of Gelderland.

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The primary outcome of this study is the change in isometric quadriceps strength (Biodex).

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale and objective:

The aging process and physical inactivity are both clearly linked to low muscle mass, muscle strength and physical fitness. Long-term exercise programs in combination with protein supplementation show improvements in muscle function. However, in some circumstances such as prior surgery, time available to improve person's muscle function and physical fitness is limited to a few weeks. Therefore, the present study aims to investigate whether an improvement in muscle strength, muscle mass and physical fitness can be achieved within 4 weeks of exercise and protein supplementation in a group of untrained men and women aged 55-75 years.

Study design:

Single group repeated measures design.

Study population:

18 untrained men and women aged 55 to 75 years who do not meet the Dutch Norm for Health-enhancing Physical Activity ('Nederlandse Norm Gezond Bewegen').

Intervention:

4 weeks of exercise and protein supplementation

Main study parameters:

Changes in quadriceps strength, quadriceps muscle mass, handgrip strength, power of the lower limb, physical fitness, habitual physical activity and daily protein intake. Parameters are assessed at baseline, 2 weeks and 4 weeks.

Doel van het onderzoek

Short-term exercise and protein supplementation enhances muscle strength, mass and physical fitness in a group of untrained men and women aged 55-75 years.

Onderzoeksopzet

Parameters are assessed at baseline, 2 weeks and 4 weeks.

Onderzoeksproduct en/of interventie

All subjects will receive a 4 week intervention program consisting of:

- 1) an exercise program (combination of resistance and aerobic exercises during supervised exercise sessions, and a home-based advice)
- 2) protein supplementation.

Contactpersonen

Publiek

Ziekenhuis Gelderse Vallei - Afdeling Fysiotherapie

Margot de Regt
Postbus 902

Ede 6710 HN
The Netherlands
T: 0318-434383

Wetenschappelijk

Ziekenhuis Gelderse Vallei - Afdeling Fysiotherapie

Margot de Regt
Postbus 902

Ede 6710 HN
The Netherlands
T: 0318-434383

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Aged 55 to 75 years.
- Not meeting the Dutch Norm for Health-enhancing Physical Activity ('Nederlandse Norm Gezond Bewegen').
- No participation in any structured or regular exercise training programs for the last 3 months.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Allergic or sensitive for milk proteins, or lactose intolerant.
- Diagnosed with renal insufficiency.
- On a diet which affects protein intake (i.e. advices of an increase, decrease or type of protein (intake)).
- Having known contraindications for exercise.
- Diagnosed with cancer for which currently treated.
- Having a contraindication to MRI scanning (including, but not limited to):
 - o pacemakers and defibrillators
 - o intraorbital or intraocular metallic fragments
 - o ferromagnetic implants
 - o claustrophobia
- Participation in another intervention trial.
- Unable to understand Dutch.

Onderzoekopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-03-2016
Aantal proefpersonen:	18
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies	
Datum:	16-02-2016
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL5595

Register

NTR-old

Ander register

ID

NTR5701

: METC-WU (15/35)

Resultaten