Vegan Diets: the short-term effects on daily muscle protein synthesis rates as compared to omnivorous diets in Older adults assessed by D2O.

Gepubliceerd: 22-06-2021 Laatst bijgewerkt: 15-05-2024

The vegan diet will differently affect muscle protein synthesis rates in older adults than the omnivorous diet.

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

Samenvatting

ID

NL-OMON26953

Bron
NTR

Verkorte titel
VD2O-study

Aandoening

Sarcopenia

Ondersteuning

Primaire sponsor: Wageningen University and research
Overige ondersteuning: Rijksoverheid

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Muscle protein synthesis

Toelichting onderzoek

Achtergrond van het onderzoek

A major cause of global environmental change is food production, with animal based food products having the greatest impact on the environment. Therefore, consumers are increasingly encouraged to consume more plant-based foods and lower their consumption of foods from animal origin. However, the consequences of such a transition on muscle mass still remains to be explored. This is of particular importance in the older population, where sarcopenia is highly prevalent. Therefore, we aim to investigate the short-term effect of a vegan diet on daily muscle fractional synthesis rates in comparison to an omnivorous diet in community-dwelling older adults. The study will have a randomized controlled cross-over design and will include healthy older adults, aged 65-79 years.

Doel van het onderzoek

The vegan diet will differently affect muscle protein synthesis rates in older adults than the omnivorous diet.

Onderzoeksopzet

Baseline; 10 days; 20 days

Onderzoeksproduct en/of interventie

Vegan diet

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Aged 65-79 years old; Community-dwelling; BMI 20-35 kg/m2.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Following a vegetarian or vegan diet during the six months prior to the study;
- Following a diet that affects protein intake during the six months prior to the study;
- Participating in a structured exercise training program in the past three months;
- ≥5% of body weight loss during three months before the start of the study;
- Being diagnosed with one of the following: diabetes; renal disease; neurological or neuromuscular disorders; serious cardiovascular diseases; cancer; chronic obstructive lung disease (COPD);
- Chronic use of medication that affects muscle function, e.g. corticosteroids, metformin, insulin;
- The use of the following medicines: acenocoumarol (sintrom); phenprocoumon (marcoumar); dabigatran (pradaxa); apixaban (eliquis); rivaroxaban (xarelto); clopidogrel (plavix); combination of acetylsalicylic acid or carbasalate calcium (ascal) with dipyridamole.
- Allergic or intolerant to any product included in the diets;
- Not willing to stop nutritional supplements, with the exception of supplements on medical advice, and vitamin D;
- Not willing or afraid to give blood or undergo a muscle biopsy during the study;
- Unwilling to eat a vegan and an omnivorous diet for ten days each;
- Not vaccinated for COVID-’19;
- Currently a research participant in another trial or participated in a clinical trial during three months before the start of the measurement period;
- Not being able to understand Dutch;
- Not having a general physician.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Geneesmiddel

Deelname

Nederland

Status:	Werving gestopt
(Verwachte) startdatum:	08-11-2021
Aantal proefpersonen:	24
Type:	Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies

Datum:	22-06-2021
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 51234
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL9542
CCMO	NL76916.028.21
OMON	NL-OMON51234

Resultaten