

Difference in digestion and absorption of milk proteins

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The following hypothesis will be investigated: - Casein ingested as calcium-caseinate results in a more rapid digestion and absorption, and subsequent whole body net protein balance, as compared to the ingestion of micellar casein. - The ingestion...

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

Samenvatting

ID

NL-OMON29333

Bron

Nationaal Trial Register

Aandoening

protein digestion and absorption
milk proteins
whole-body protein synthesis
eiwitvertering
melkeiwitten
eiwitsynthese

Ondersteuning

Primaire sponsor: Maastricht University

Overige ondersteuning: Maastricht University

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Toelichting onderzoek

Doel van het onderzoek

The following hypothesis will be investigated:

- Casein ingested as calcium-caseinate results in a more rapid digestion and absorption, and subsequent whole body net protein balance, as compared to the ingestion of micellar casein.
- The ingestion of a calcium-caseinate solution will result in a more rapid digestion and absorption, and subsequent whole body net protein balance, as compared to the ingestion of calcium-caseinate fibers.

Onderzoeksopzet

blood samples will be taken immediately before ingestion of the protein supplement ($t=0$), and at timepoints: 15, 30, 45, 60, 90, 120, 150, 180, 210, 240, 300 and 360 min.

Onderzoeksproduct en/of interventie

each subject will participate in one trial, randomly assigned. Intervention consists of the ingestion of an intrinsically labeled protein supplement: micellar casein, calcium caseinate, or caseinate fibers, whereafter regular blood samples are taken.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Males
- Aged between 18-35 years
- Healthy, recreationally active (participating in recreational sports activities ;Ü 3 times per week)
- BMI < 25 kg/m²
- No physical limitations (i.e. able to perform all activities associated with daily living in an independent manner).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Female
- Smoking
- Allergies to milk proteins
- Musculoskeletal disorders
- Use of any medications known to affect protein metabolism (i.e. corticosteroids, non-steroidal anti-inflammatories, or prescribed acne medications).

- Participation in any structured regular exercise program
- Chronic use of gastric acid suppressing medication or anti-coagulants
- Unstable weight over the last three months
- Pathologies of the gastrointestinal tract

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Actieve controle groep

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-09-2015
Aantal proefpersonen:	45
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies	
Datum:	03-06-2015
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 44783
Bron: ToetsingOnline

Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL5110
NTR-old	NTR5242
CCMO	NL52798.068.15
OMON	NL-OMON44783

Resultaten