Het effect van de inname van een vleesvervanger op spieropbouw in jongere mannen

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON20986

Source
NTR

Brief title
Veggiebolic

Health condition

Muscle protein metabolism

Sponsors and support

Primary sponsor: Maastricht University Medical Centre
Source(s) of monetary or material Support: TIFN

Intervention

Outcome measures

Primary outcome

Primary study parameters include myofibrillar protein synthesis rates, expressed as FSR (%/h), using muscle-protein bound L-[ring-13C6]-phenylalanine enrichments and muscle tissue-free and plasma L-[ring-13C6]-phenylalanine enrichments as precursor.

Secondary outcome

Secondary endpoints will be plasma amino acid concentrations (total amino acid profile), glucose, and insulin concentrations.

Study description

Study objective

H0= Postprandial muscle protein synthesis rates do not differ between the 2 intervention groups (P>0.05)

H1= Postprandial muscle protein synthesis rates differ between the 2 intervention groups (P<0.05)

Study design

Blood and muscle samples will be collected at regular time intervals (bloodsamples every hour, 3 muscle biopsies during the 5h postprandial period).

Intervention

Subjects will either consume 40 g plantbased or animal protein (isonitrogenous amount) in the form of a ready-to-eat product (n = 12 per group).

Contacts

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Eligibility criteria

Inclusion criteria

• Males

• Aged between 18 - 35 years

• Healthy, recreationally active (max 3 days per week performing activities)

• BMI 18.5 – 27.5 kg/m2

Exclusion criteria

• Females

• Diagnosed diabetes

• Wheat allergy

• Celiac disease

• Smoking

• Diagnosed metabolic or intestinal disorders

• A history of neuromuscular problems

• Any medications known to (or may) affect protein metabolism (i.e. corticosteroids, non-steroidal anti-inflammatories, or prescription strength acne medications).

• Participation in structured resistance exercise program

• Previous participation in a 13C amino acid tracer study within the last year

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-05-2017
Enrollment:	24
Type:	Anticipated

Ethics review

Positive opinion

Date:	25-04-2017
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	NL6224

Register	ID
NTR-old	NTR6380
Other	: METC 163055

Study results