

Effect of dietary proteins on blood pressure

No registrations found.

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

Summary

ID

NL-OMON26458

Source

NTR

Brief title

ProPres

Health condition

high blood pressure, overweight, dietary proteins and carbohydrates
hoge bloeddruk, overgewicht, voedingseiwitten en -koolhydraten

Sponsors and support

Primary sponsor: NUTRIM

Maastricht University
Maastricht

The Netherlands

Source(s) of monetary or material Support: Top Institute Food & Nutrition

Wageningen

The Netherlands

Intervention

Outcome measures

Primary outcome

Change in office and 24-h ambulatory blood pressure after 4 weeks intervention

Secondary outcome

Acute postprandial effects on cardiac output, renal blood flow, forearm blood flow, endothelial function, sympathetic nervous system activity, renal function, ACE activity

Change in acute postprandial effects on cardiac output, renal blood flow, forearm blood flow, endothelial function, sympathetic nervous system activity, renal function, ACE activity after 4 weeks intervention

Study description

Background summary

This trial will investigate the blood pressure lowering effect of dietary proteins and explore its underlying mechanism of action.

Study objective

Lowering of daily carbohydrate intake by 10% of total energy intake and isocaloric replacement by protein intake during 4 weeks will significantly reduce office and ambulatory blood pressure in overweight subjects with prehypertension or grade 1 hypertension.

Study design

Baseline, 4 weeks intervention

Intervention

Carbohydrate (maltodextrine) supplementation vs protein (mixture of dietary proteins) supplementation, 10% of total energy intake, isocaloric

Contacts

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Eligibility criteria

Inclusion criteria

1. Men and women
2. BMI 25-30 kg/m²
3. High normal or untreated grade 1 hypertension (systolic blood pressure 130-159 mmHg, diastolic blood pressure 85-99 mmHg)
4. Age 20-65 years

Exclusion criteria

1. Smokers
2. Food allergies
3. Unwillingness to stop use of dietary supplements (except those provided in the study)
4. Use of prescription medication
5. Recent history of or current dieting
6. Gastrointestinal problems
7. Plasma creatinine < 60 mmol/L

8. Presence of urinary protein (stick test)

9. Fasting glucose > 7 mmol/L

10. At randomisation: average blood pressure of visits 1 and 2 outside inclusion range for blood pressure

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Active

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-09-2008
Enrollment:	150
Type:	Anticipated

Ethics review

Positive opinion	
Date:	30-06-2008
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	NL1313
NTR-old	NTR1362
Other	MEC : 08-3-041
ISRCTN	ISRCTN wordt niet meer aangevraagd

Study results

Summary results

N/A