

# Dietary proteins and blood pressure-related mechanisms.

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON20220

### Source

Nationaal Trial Register

### Brief title

AAPRES

### Health condition

Hypertension  
High blood pressure  
Proteins  
Hoge bloeddruk  
Hypertensie  
Eiwitten

## Sponsors and support

**Primary sponsor:** Maastricht University

**Source(s) of monetary or material Support:** TI Food and Nutrition

## Intervention

## Outcome measures

### Primary outcome

Acute TPR response (derived according to the equation;  $MAP = CO \times TPR$ ) on each clinical investigation day during first 4 hours after consumption of supplements. Mean Arterial Pressure (MAP) and Cardiac Output (CO) will be measured.

### **Secondary outcome**

Acute responses on renal sodium excretion, vasodilating factors and vascular function changes on each clinical investigation day during first four hours after consumption of supplements.

## **Study description**

### **Background summary**

AAPRES is a human intervention study with a randomized crossover design that investigates the acute effects of several dietary proteins on blood pressure-related mechanisms.

### **Study objective**

Different dietary proteins have a different effect on blood pressure-related mechanisms.

### **Study design**

6 clinical investigation days with 1 week wash-out on which every hour postprandial measurements will be performed.

### **Intervention**

First 2 weeks weight maintaining standardized diet (15 en% protein, 30 en% fat and 55 en% carbohydrates). Next 6 weeks weekly clinical investigation days on which the acute postprandial effects of different types of protein supplements and different types of carbohydrate supplements will be investigated.

## **Contacts**

### **Public**

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## Eligibility criteria

### Inclusion criteria

1. Men and women;
2. BMI 25-35 kg/m<sup>2</sup>;
3. High normal BP or untreated grade 1 hypertension (SBP 130-159 mm Hg and/or DBP 85-99 mm Hg);
4. Age between 20 - 70 years;
5. No smoking;
6. Stable weight in last 3 months (+/- 2 kg).

### Exclusion criteria

1. Presence of urinary protein;
2. eGFR < 60 ml/min/1.73 m<sup>2</sup>;
3. Fasting glucose > 7 mmol/l;
4. Use of prescription medication that could influence BP or vascular function;
5. Gastrointestinal, cardiovascular, pulmonary, liver or renal disease;
6. Food allergies, a special diet or vegetarian;
7. Unwillingness to stop use of vitamin or dietary supplements.

## Study design

### Design

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

### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-01-2011
Enrollment:	50
Type:	Anticipated

## Ethics review

Positive opinion	
Date:	07-12-2010
Application type:	First submission

## Study registrations

### Followed up by the following (possibly more current) registration

ID: 36655  
Bron: ToetsingOnline  
Titel:

### Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
NTR-new	NL2560
NTR-old	NTR2678
CCMO	NL34527.068.10
ISRCTN	ISRCTN wordt niet meer aangevraagd.
OMON	NL-OMON36655

## Study results

### Summary results

N/A