# The effects of protein supplementation on glucose homeostasis in type 2 diabetes

Published: 05-12-2006 Last updated: 20-05-2024

Investigate the optimal dose of such an insulinotropic mixture.

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Glucose metabolism disorders (incl diabetes mellitus)

Study type Interventional

# **Summary**

## ID

NL-OMON30023

#### Source

**ToetsingOnline** 

#### **Brief title**

Protein supplementation and glucose homeostasis

## **Condition**

Glucose metabolism disorders (incl diabetes mellitus)

## **Synonym**

non-insulin dependent diabetes, Type 2 diabetes

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Universiteit Maastricht

Source(s) of monetary or material Support: Ministerie van OC&W,DSM Food Specialties

## Intervention

**Keyword:** Glucose homeostasis, Insulin, Protein, Type 2 diabetes

## **Outcome measures**

## **Primary outcome**

Glucose and insulin homeostase.

## **Secondary outcome**

Plasma amino acid profiles

# **Study description**

## **Background summary**

The inulinotropic effects of protein hydrolysate/amino acid ingestion have been shown to regulate blood glucose homeostasis in both type 2 diabetes patients and normoglycemic controls

## **Study objective**

Investigate the optimal dose of such an insulinotropic mixture.

## Study design

4h dose-response study in which three different mixtures will be compared to a placebo.

#### Intervention

Consumption of a protein/aminio acid mixture

## Study burden and risks

4, 4 hour tests in which blood (8mL) will be sampled every 30 min via a venous catheter

Risks as the result of participation in this experiment are minimal. At the

2 - The effects of protein supplementation on glucose homeostasis in type 2 diabetes 4-05-2025

site of the catheter a hematoma could occur. The ingested protein beverages contain proteins which are part of the normal diet and are therefore harmless.

## **Contacts**

## **Public**

Universiteit Maastricht

postbus 616 6200 MD, Maastricht Nederland **Scientific** 

Universiteit Maastricht

postbus 616 6200 MD, Maastricht Nederland

# **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adults (18-64 years) Elderly (65 years and older)

## **Inclusion criteria**

Longstanding (>5 yrs) type 2 diabetes Age between 40 and 70 yrs Oral blood glucose lowering medication

## **Exclusion criteria**

# Study design

## **Design**

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-03-2007

Enrollment: 30

Type: Actual

## Medical products/devices used

Registration: No

# **Ethics review**

Approved WMO

Date: 05-12-2006

Application type: First submission

Review commission: METC academisch ziekenhuis Maastricht/Universiteit

Maastricht, METC azM/UM (Maastricht)

# **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

CCMO NL13600.068.06