# Pre-sleep feeding to increase daily protein intake in patients during hospitalisation

Published: 03-04-2020 Last updated: 10-04-2024

To assess the efficacy of pre-sleep protein feeding strategies to effectively increase daily protein and energy intake during hospitalization

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

# Summary

### ID

NL-OMON55166

**Source** ToetsingOnline

#### **Brief title**

Pre-sleep feeding to increase daily protein intake during hospitalization

### Condition

Other condition

**Synonym** energy- and protein intake

#### **Health condition**

to assess the efficacy of pre-sleep protein feeding strategies to effectively increase daily protein and energy intake during hospitalization

#### **Research involving**

Human

### **Sponsors and support**

**Primary sponsor:** Universiteit Maastricht **Source(s) of monetary or material Support:** Ministerie van OC&W,Friesland Campina,TKI/Health~Holland

### Intervention

Keyword: hospitalization, pre-sleep snack, protein

### **Outcome measures**

#### **Primary outcome**

total protein intake (g, g·kg body mass-1·day-1) during hospitalization

#### Secondary outcome

(total) energy intake (kJ), protein distribution, hunger, habitual food intake,

physical activity, grip strength.

# **Study description**

#### **Background summary**

Hospitalization is generally accompanied by substantial changes in food intake. Low levels of energy and protein intake results in accelerated loss of lean body mass and muscle strength. Various strategies can be applied to increase protein intake during hospitalization, such as providing more protein-rich foods, fortifying meals and/or food products, supplementation with oral nutritional supplements (ONS), and/or providing well-timed snacks. The pre-sleep moment has emerged as a novel window of opportunity to increase daily protein intake. However, it remains to be established whether pre-sleep protein feeding represents an effective strategy to increase overall daily protein intake during hospitalization.

#### **Study objective**

To assess the efficacy of pre-sleep protein feeding strategies to effectively increase daily protein and energy intake during hospitalization

#### Study design

randomized intervention trial

### Intervention

Participants will be randomized to the cheese intervention group (CHEESE, n=50), or the standard care group (CON, n=50). Patients in the CHEESE will receive 30 g protein prior to sleep. The CON group will receive standard care and do not receive a pre-sleep snack. Patients in the CHEESE group will receive the snack every evening during their hospital stay. Total protein intake, protein distribution, hunger, handgrip strength, habitual food intake, and physical activity, will be assessed during the hospital stay.

### Study burden and risks

The burden and risks involved in participating in this trial are small. A benefit is that when patients are randomized to one of the intervention groups, they will receive a pre-sleep snack. A potential burden can be that a research will provide them with a hunger questionnaire every morning before breakfast. Patients will not be restricted to consume snacks and drinks during their hospital stay

# Contacts

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# **Trial sites**

### **Listed location countries**

Netherlands

# **Eligibility criteria**

### Age

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

### **Inclusion criteria**

Admitted to MUMC+
 18-90 y
 Expected hospital stay at least 2 days

### **Exclusion criteria**

- Receiving enteral nutrition
  Receiving parenteral nutrition
  Dislike cheese
  Use of MAO-inhibitors
- 5) Low sodium diet
- 6) \*NPO\* (nil per os) policy

# Study design

# Design

Primary purpose: Other	
Masking:	Open (masking not used)
Allocation:	Randomized controlled trial
Intervention model:	Parallel
Study type:	Interventional

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	07-07-2021
Enrollment:	100

### Actual

# **Ethics review**

Approved WMO Date:	03-04-2020
Application type:	First submission
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)
Approved WMO Date:	20-01-2021
Application type:	Amendment
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)
Approved WMO	
Date:	30-07-2021
Application type:	Amendment
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
ССМО	NL71830.068.19
Other	Protocol will be registered at NTR after approval by METC