

# Effect of a diabetes-specific oral nutritional supplement (ONS) vs. standard ONS on the postprandial glucose response in adults with type 2 diabetes with (risk of) malnutrition.

No registrations found.

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

## Summary

### ID

NL-OMON24556

### Source

Nationaal Trial Register

### Brief title

CareFull

### Health condition

Diabetes Mellitus type 2

## Sponsors and support

**Primary sponsor:** Danone Research - Centre for Specialised Nutrition

**Source(s) of monetary or material Support:** Danone Research - Centre for Specialised Nutrition

## Intervention

## Outcome measures

### Primary outcome

4-hour postprandial blood glucose response after consumption of diabetes-specific or standard ONS (iAUC0-4h).

### Secondary outcome

1. 4-hour postprandial responses after consumption of diabetes-specific or standard ONS:
  - A. Blood glucose levels (iAUC0-4h) (serving size);
  - B. Blood insulin levels (iAUC0-4h);
  - C. Blood glucagon levels (iAUC0-4h).
2. Postprandial peak blood glucose, insulin and glucagon levels;
3. Postprandial delta peak blood glucose, insulin and glucagon levels.

## Study description

### Background summary

In this study the effect of a diabetes-specific oral nutritional supplement (ONS) on the 4-hour postprandial glucose response will be compared to a standard ONS in adults with type 2 diabetes with (risk of) malnutrition.

### Study objective

Diabetes specific oral nutritional supplement has an improved 4-hour postprandial glucose response compared to standard oral nutritional supplement.

### Study design

Screening, Baseline, Day 1, Day 2, Day 3, Follow up.

### Intervention

Duration of intervention: 3 days.

Intervention group: A high-energy, high-protein diabetes-specific ONS.

Control group: An isocaloric high-energy, high-protein ONS.

## Contacts

### Public

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### Scientific

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## Eligibility criteria

### Inclusion criteria

1. Age  $\geq$  18 yrs;
2. (At risk of) malnourishment, based on the presence of one or more of the following criteria:
  - A.  $\geq$  5% involuntary weight loss in the last month, or;
  - B.  $\geq$  10% involuntary weight loss in the last 6 months, or;
  - C. Serum albumin  $<$  35 g/L, or;
  - D. Age  $\geq$  70 yrs and body mass index (BMI)  $<$  21.0 kg/m<sup>2</sup>, or;
  - D. Age  $<$  70 yrs and BMI  $<$  18.5 kg/m<sup>2</sup>, or;
  - E. Age  $\geq$  65 yrs and Short Mini Nutritional Assessment (MNA) score  $\leq$  11.

3. Diagnosis of type 2 diabetes for at least six months;
4. On stable (20%) anti-hyperglycaemic therapy (oral medication and/or insulin) for at least 1 month prior to study entry;
5. Willingness and ability to comply with the study protocol, including: An overnight fast (at least 10 hours) at each study day.
6. Written informed consent.

## **Exclusion criteria**

1. Any gastrointestinal disease that interferes with bowel function and nutritional intake (i.e. diabetes related diarrhoea secondary to neuropathy, diarrhoea due to chronic inflammatory bowel disease, gastroparesis);
2. Any known severe disease, i.e.:
  - A. Heart failure (New York Heart Association (NYHA) class IV);
  - B. Kidney disease (Chronic Kidney Disease (CKD)  $\geq$  stage 4);
  - C. Hepatic disease (transaminases  $>$  5 times upper limit of normal);
  - D. Severe anemia (hemoglobin  $<$ 8 g/dl or 5 mmol/L).
3. (Metabolic) disorders interfering with stable glucose metabolism (i.e. uncontrolled thyroid and/or adrenal disease, or interfering malignant diseases);
4. Concurrent condition /treatment that interferes with stable glucose metabolism (i.e. immediately post-operative);
5. Major infections (requiring antibiotics) within 3 weeks prior to study entry;
6. Concomitant therapy with systemic glucocorticoids within 2 weeks prior to study entry;
7. Pregnant female;
8. Requirement of a fibre-free diet;
9. Intolerance or allergy to dairy or other ingredients of the study products;
10. Alcohol intake of  $>$  21 units per week for men and  $>$  14 units per week for women;
11. Swallowing disorders making consumption of an oral nutritional supplement impossible;

12. Parenteral feeding / tube feeding;

13. Investigators' uncertainty about the willingness or ability of the subject to comply with the protocol requirements;

14. Participation in any other studies involving investigational or marketed products concomitantly or within 4 weeks prior to entry into the study.

## Study design

### Design

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

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	05-12-2012
Enrollment:	20
Type:	Anticipated

## Ethics review

Positive opinion	
Date:	04-12-2012
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	NL3576
NTR-old	NTR3734
Other	Danone Research : Dia.6.C/A
ISRCTN	ISRCTN wordt niet meer aangevraagd.

## Study results

### Summary results

N/A