Short term effect of added fibre on energy intake.

No registrations found.

Ethical review Positive opinion **Status**

Recruitment stopped

Health condition type -

Interventional **Study type**

Summary

ID

NL-OMON26601

Source

NTR

Health condition

eating behaviour

Sponsors and support

Primary sponsor: Wageningen University, Division of Human Nutrition

Source(s) of monetary or material Support: Carbohydrate Competence Centre

Intervention

Outcome measures

Primary outcome

The primary study parameter is energy intake at the ad libitum lunch.

Secondary outcome

Secondary parameters are subjective feelings of satiety, gastric emptying rate, and blood glucose levels.

Study description

Background summary

It is known that some dietary fibres are beneficial for health, and some are associated with body weight management. A lot of fibre(mixtures) are not studied and their application is often limited. However, these fibres may have beneficial effects in humans, e.g. on satiety and energy intake.

Study objective

We hypothesize that in this short term study the testproducts with added fibre will increase satiety, slower gastric emptying, will give a later blood glucose peak and that it will decrease energy intake when compared to the controlproduct.

Study design

Every subject will visit the laboratory 6 times:

Once for an information and screening meeting and five times for the five testsessions. Subjects will have one testsession a week with in each session:

- 1. An ad libitum lunch after eating the testproduct;
- 2. Appetite questionnaire: At baseline and multiple times after eating the testproduct;
- 3. Breath sample collection: At basline and multiple times after eating the testproduct;
- 4. Measure of bloodglucose concentration: At baseline and multiple times after eating the testproduct.

Intervention

After a standard breakfast at home subjects will eat the testproduct (with added fibre or the controlproduct). There are 5 different testproducts: the type of testproduct (solid mueslibar/liquid yoghurt) and the dose of fibre (0 or 10g in the mueslibar and 0, 5 or 10g in the yoghurt) varies. Before each test session (baseline) and multiple times after eating the testproduct, subjects rate their appetite, blood glucose concentration will be measured and breath samples will be collected. Following this an ad libitum lunch is offered to the subjects.

Contacts

Public

PO Box 8129

Anne Wijlens
Wageningen 6700 EV
The Netherlands
+31 (0)317 489369
Scientific
PO Box 8129
Anne Wijlens
Wageningen 6700 EV
The Netherlands
+31 (0)317 489369

Eligibility criteria

Inclusion criteria

1. Age: 18-40 y;

2. BMI: 18.5- 25.0 kg/m2;

3. Healthy as judged by the participant himself;

4. Having signed the informed consent form.

Exclusion criteria

- 1. Smoking or drug abuse;
- 2. Pregnant or lactating women;
- 3. Gastro-intestinal diseases (e.g. irritable bowel syndrome, inflammatory bowel disease);
- 4. Diabetes, thyroid diseases or any other endocrine disorders;
- 5. Using an energy restricted diet during the last 2 months;
- 6. Using an dietary fibre supplement;
- 7. Weight gain or loss of > 5kg body weight in the last 2 months;
- 8. Lack of appetite for any reason;
- 9. Restraint eating DEBQ score \geq 2.89 for men, and \geq 3.39 for women;

- 10. Hypersensitivity or food allergy for products used in this study;
- 11. Antibiotic use < 2 months before the study;
- 12. Using medication other than birth control, paracetamol, acetylsalicylic acid, hay fever, asthma;
- 13. Thesis students or employees of the Division of Human Nutrition;
- 14. Having participated to the ProVe or FLiTS Studies;
- 15. Having a blood glucose concentration lower/higher than 4.0 8.0mmol/l.

Study design

Design

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: Placebo

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 16-09-2012

Enrollment: 32

Type: Actual

Ethics review

Positive opinion

Date: 20-08-2012

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 NL3437 NTR-old NTR3588

Other METC Wageningen / CCMO : 12/13 / NL40470.081.12;

ISRCTN wordt niet meer aangevraagd.

Study results

Summary results

N/A