

The effect of fibre and acetic acid on blood glucose, gastric emptying and satiety in healthy subjects.

No registrations found.

Ethical review	Not applicable
Status	Suspended
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON28218

Source

Nationaal Trial Register

Brief title

N/A

Health condition

1. Fibres;
2. acetic acid;
3. gastric emptying;
4. blood glucose;
5. satiety;
6. diabetes.

Intervention

Outcome measures

Primary outcome

Our hypothesis was that an intake of intact cereal kernels with vinegar would increase satiety, lower postprandial blood glucose and that this would be explained by a delay in gastric emptying rate.

Secondary outcome

N/A

Study description

Background summary

N/A

Study objective

Dietary fibres and vinegar has been suggested to lower the postprandial blood glucose and insulin response and this may be explained by a delayed gastric emptying.

Study design

N/A

Intervention

Intact structural properties and vinegar has been suggested to lower the postprandial blood glucose and insulin response but the mechanism has not been clear. The aim was to study the effect of vinegar in combination with white wheat bread and bread containing different wheat fibre structures on the postprandial blood glucose response, satiety and the rate of gastric emptying in healthy subjects.

Methods: Fifteen healthy subjects were included and completed the blinded crossover trial. Gastric emptying rate (GER) was measured by standardized real time ultrasonography on the condition that fasting blood glucose was normal. Gastric emptying rate was calculated as the percentage change in the antral cross-sectional area 15 and 90 minutes after ingestion of white wheat, whole wheat kernel or wholemeal wheat bread with vinegar compared to white wheat bread as a reference. Blood glucose measurements were taken and satiety scores were estimated before and at 15, 30, 45, 60, 90 and 120 min after the start of the meal.

Contacts

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Eligibility criteria

Inclusion criteria

Healthy subjects.

Exclusion criteria

Symptoms or a prior history of gastrointestinal disease, abdominal surgery or diabetes mellitus.

Study design

Design

Study type: Interventional
Intervention model: Other

Control: N/A , unknown

Recruitment

NL

Recruitment status:	Suspended
Start date (anticipated):	01-10-2004
Enrollment:	15
Type:	Anticipated

Ethics review

Not applicable
Application type: Not applicable

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	NL1083
NTR-old	NTR1116
Other	:
ISRCTN	ISRCTN wordt niet meer aangevraagd

Study results

Summary results

N/A