The effect of protein status on food preferences and intake.

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The protein status of an individual effects food preferences and intake. If the protein status is high, choice and intake of high-protein foods will be decreased. If the protein status is low, choice and intake of high-protein foods will be...

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON28076

Bron
NTR

Verkorte titel
ProTime

Aandoening

Eating behaviour

Ondersteuning

Primaire sponsor: Wageningen University, Division of Human Nutrition
Overige ondersteuning: Technologiestichting STW (Stichting Technische Wetenschappen)

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The difference in protein intake (g) during a 2-day ad libitum-phase following the two interventions.

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale:

It has been posed that protein intake is tightly regulated in the human body. It has been shown that when subjects have eaten high-protein meals, a significantly greater reduction is seen in liking for high-protein food than for high-carbohydrate foods. In our previous research, we did not observe this effect within one meal. Animal and human studies suggest that energy and macronutrient balance are regulated over a longer period of time.

Objective:

To determine the effect of protein status on food preferences and intake.

Study design:

The study will consist of two 14-day fully controlled dietary interventions that involve consumption of individualized, isoenergetic menus providing either 0.5 g protein/kg BW/day (low protein diet), or 2.0 g protein/kg BW/day (high protein diet), using a randomized crossover design. The interventions will be followed by a 2-day ad libitum-phase, where protein intake (g) will be measured. Both interventions will be preceded by 2 days on which subjects eat a normal protein diet. The interventions will be separated by a minimum of 1 week washout.

Study population:

The study population will consist of 40 apparently healthy, unrestrained volunteers between the age of 18 and 35 with a normal weight.

Main study parameters/endpoints:

Our main outcome measurement is the difference between protein intake (g) during the 2-day ad libitum-phase following the two interventions.

Doel van het onderzoek

The protein status of an individual effects food preferences and intake. If the protein status is high, choice and intake of high-protein foods will be decreased. If the protein status is low, choice and intake of high-protein foods will be increased.

Onderzoeksopzet

Every participant will visit the laboratory every day during the intervention periods.

Onderzoeksproduct en/of interventie

Two 14-day fully controlled intervention periods differing in dietary protein intake. These interventions involve consumption of individualized, iso-energetic menus providing either 0.5 g protein/kg bodyweight/day (low protein diet) or 2.0 g protein/kg bodyweight/day (high protein diet).

Contactpersonen

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Age: 18-35 years;

2. BMI: 20.0 - 25.0 kg/m2;

3. Healthy (as judged by the participant).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Restraint eating (men: score > 2.25; women: score > 2.80);

2. Lack of appetite;

3. Having difficulties with swallowing/eating;

4. Usage of a energy restricted diet during the last two months;

5. Weight loss or weight gain of 5 kg or more during the last two months;

6. Stomach or bowel diseases;

7. Kidney disorders;

8. Diabetes, thyroid disease, other endocrine disorders;

9. Prevalent cardiovascular disease;

10. A systolic blood pressure of ≥ 160 mmHg at screening;

11. Usage of daily medication other than birth control pills;

12. For women: pregnant or lactating;

13. Being a vegetarian;

14. Being allergic/intolerant for products under study;

15. Having participated in studies that have used the LFPQ: RiceTime, LunchTime, Smaak-

Geur¯, SenSation, and ProStudy, or current participation in other research from the division of human nutrition (WUR).

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Gerandomiseerd
Blindering:	Enkelblind
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	27-09-2010
Aantal proefpersonen:	40
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	01-09-2010
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL2384
NTR-old	NTR2491
Ander register	MEC Wageningen / ABR : 10/09 / 32871.081.10 ;
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Resultaten

Samenvatting resultaten
N/A