The effect of choice-offering on children's vegetable consumption

Submission date	Recruitment status	Prospectively registered	
02/06/2009	No longer recruiting	☐ Protocol	
Registration date	Overall study status	Statistical analysis plan	
31/07/2009	Completed	[X] Results	
Last Edited	Condition category	Individual participant data	
25/01/2010	Nutritional, Metabolic, Endocrine		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

ABR form NL 25334.081.08

Study information

Scientific Title

The effect of choice-offering on children's vegetable consumption: a between-subject randomised controlled trial

Acronym

KIK-study

Study objectives

We hypothesise that children's vegetable liking and consumption will be higher in the choice-offering condition compared to the no-choice condition.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The Medical Ethical Committee of Wageningen University approved on the 16th December 2008 (ref: 08/20)

Study design

Multicentre between-subject three-arm randomised controlled trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Healthy eating in children and related health status

Interventions

Three treatments during a dinner situation:

- 1. No-choice condition: the child is not allowed to choose; the child is randomly assigned one of the two target vegetables
- 2. Choice-condition: the child is allowed to choose which of the two target vegetables he or she wants to eat for dinner
- 3. Variety-condition: the child receives both target vegetables for dinner

Duration of treatment per participant for each arm/condition = 1 day; no follow-up.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Vegetable consumption: consumption will be assessed by subtracting the amount of vegetable left on the plate from the pre-weight, measured after the intervention (post-treatment).

Key secondary outcome(s))

1. Liking of the vegetables: the children will make a preference rank order for various vegetables, with the use of three categories (smileys) of liking. This preference rank-order will be performed twice. The first time is before the start of the study at school, in order to select the target vegetables. The second rank-order will be performed at the Restaurant of the Future,

after the meal, to assess how the offering of the vegetables influences the pleasantness of the vegetables. We focus on the vegetable that the child ate (choose self versus no choice), but also for the vegetable that the child had seen but was not allowed to eat (choose self versus no choice). Measured before and after the intervention (pre + post- treatment).

- 2. Perceived choice and autonomy: to be able to check if the children experienced more choice when they were in a choice condition, we will ask the children and their parents a few questions related to choice and autonomy (Based on Intrinsic Motivation Inventory). Measured after the intervention (post-treatment).
- 3. Intrinsic motivation, reactance and experience of meal context: various questions will be asked to understand the process of reactance, the whole meal experience and children's intrinsic motivation. For the children, these questions will be very simple and concrete, so they can answer them reliably. The answers of the parents may help us understand how the child and his /her parent experienced the situation (Based on Intrinsic Motivation Inventory). Measured after the intervention (post-treatment).
- 4. Consumption of the other meal components: the consumption of potatoes and meat can influence children's vegetable consumption. Consumption will be measured by weighing before and after the meal. Measured after the intervention (post-treatment).
- 5. Parental consumption: we will measure parental consumption of potatoes, meat and vegetables as a measure of modelling: do parent and child eat similar portions? Do they finish the same items on the plate? Measured after the intervention (post-treatment).

Completion date

06/03/2009

Eligibility

Key inclusion criteria

- 1. Healthy children aged 4 6 years old (girls and boys) and their parents
- 2. Children whose parents signed an informed consent
- 3. Parents who gave their consent to participate

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Lower age limit

4 years

Upper age limit

6 years

Sex

All

Key exclusion criteria

- 1. Children without signed informed consent of their parents
- 2. Children with vegetable allergy
- 3. Children who refuse to eat target vegetables of the study

Date of first enrolment

05/01/2009

Date of final enrolment

06/03/2009

Locations

Countries of recruitment

Netherlands

Study participating centre Wageningen University

Wageningen Netherlands 6700 EV

Sponsor information

Organisation

Wageningen University (Netherlands)

ROR

https://ror.org/04qw24q55

Funder(s)

Funder type

University/education

Funder Name

Wageningen University (Netherlands) - Graduate Schools VLAG and Graduate School Mansholt

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summaryNot provided at time of registration

Study outputs

Output type	Details	Date created Date added	Peer reviewed?	Patient-facing?
Results article	results	01/02/2010	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	i No	Yes