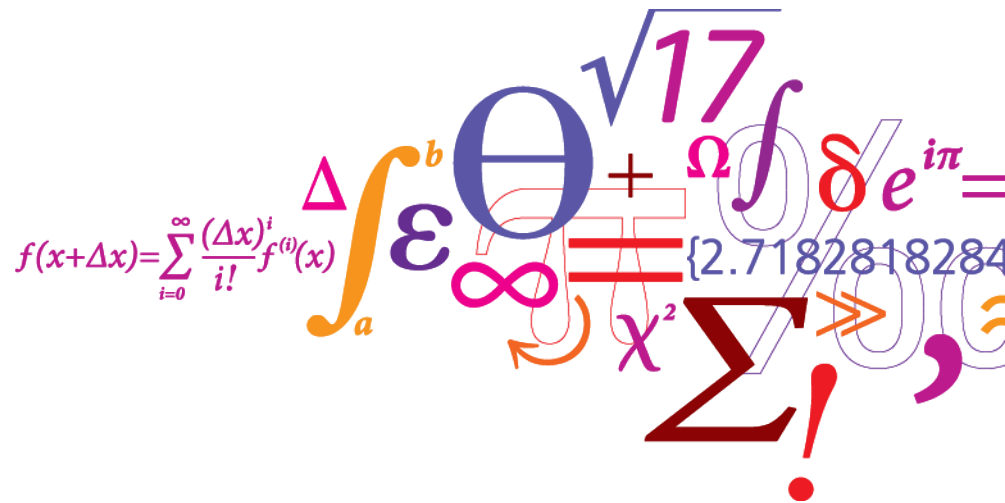


How to Assess the Diet Among Students at Danish Schools for Vocational Education?

Implications for the design of the study

Charlotte Lehmann

Academic Employee at DTU Food



Spisvel

Aiming to increase the availability of healthier and more sustainable alternative to traditional fast food 'on the move'.

Divided into two work packages



Spisvel - Innovation

- Development of tasteful, healthier, and sustainable alternatives to current fast food
- The meals must meet the keyhole labelled criteria
- Collaboration with McDonald's, 7-eleven, gas stations among others



Fotos: Spisvel Folder

Spisvel – Impact Measurements in McDonald's

- Over 2000 participants completed a questionnaire survey
- Before, after, follow-up on introduction of keyhole labelled products
- Background data, position and preferences on fast food and intake, waste and price



Kære deltager

Mange tak fordi du vil deltage i denne undersøgelse, som indgår i samarbejdsprojektet "Spisvel" mellem forskningsinstitutioner og virksomheder i Danmark. Alle svar behandles fortroligt. Formålet er at få viden om køb af fastfood og kundernes holdninger og ønsker til fastfood.

Hvis du spørgsmål til undersøgelsen eller til spørgeskemaet er du meget velkommen til at kontakte os her på restauranten eller kontakto forsker Anne Dahl Lassen på dette telefonnummer: 35 88 74 19 eller mail: ada@food.dtu.dk.

A. Først lidt om dig selv og dine vaner i forhold til køb af fastfood/take-away

A.1. Er du mand eller kvinde? Kvinde Mand

A.2. Hvor gammel er du? _____ år

A.3. Hvor bor du? (angiv kommune): _____

A.4. Hvor tit spiser du (sæt ét kryds ved hver linje)

	3 gange om ugen eller oftere	2-4 gange om ugen	1-2 gange om ugen	0-3 gange om ugen	Ca. 1 gang om måned eller sjældnere	Ca. hver anden måned	Aldrig
Fastfood/take-away i alt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fastfood/take-away fra en burger/hamburgerkæde (fx McDonald's)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fastfood/kæde: chovy, delfinere som mad, der er klar til at blive spist, når man køber det. Det kan være steg, friture eller mod oven på kebab eller en pizza, for eksempel pizza, pasta, burger, salat, supper, pizza, sandwich eller smør brød.

B. De næste spørgsmål omhandler det måltid du netop har spist

Kort afstændt

Jeg gik i fart forbi

Det eneste tilgængelige spisested

Rimelig i pris

God kvalitet

Lidt af lunde alternativer

Hurtigt og nemt at spise

Hyggeligt sted/god atmosfære

For at være sammen med venner/familie

Effektiv betjening/ingen kø

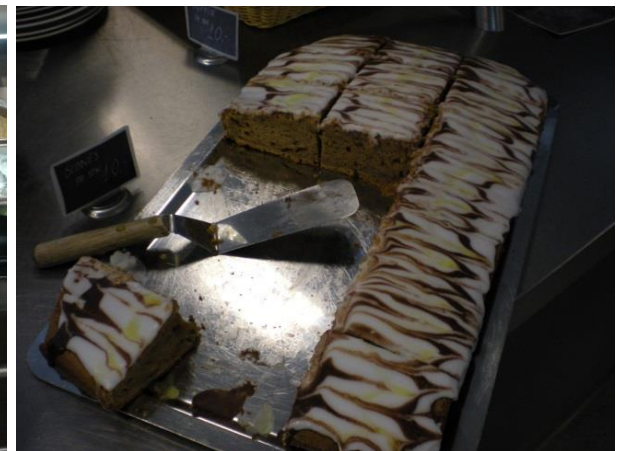
Ingen special grund

Andet: _____



Spisvel – Impact Measurements in Vocational College

- Social disparities exist in quality of food according to fx. education level^{1,2}
- It is difficult to approach the young short educated men¹
- School with canteen that was going to be keyhole certified and a control
- Aim: Food behaviour and keyhole label effect



1. Groth et al. 2014
2. Groth et al. 2001

Method

- Recipes
- Recruitment
- Emails (welcome and information)
- Lunch with registration
- Participant registration of food in WebDash (each evening)
- Possible reminder
- Online questionnaire survey
- Possible follow-up call
- Data extraction and connection

Generation of Data



Recruitment of Participants

- Flyer
- Poster
- Physical registration
- Contact persons on the schools
- Registration by phone or email
- Incitement, but no focus on health

Kan jeg deltage?
Ja hvis du:

- Er min. 15 år
- Er elev på EUC Nord
- Er på skolen mandag til torsdag d. 24.-27. marts
- Køber/får mad fra kantinen én eller flere gange om ugen

Hvad kræver det af mig?

- Notere online hvad du spiser i 4 dage d. 24.-27. marts
- Besvare et kort spørgeskema online

Hvad får jeg ud af at deltage?

- **Gratis** mad i kantinen de 4 dage* (gavekort til skolehjemselever)
- Deltagelse i lodtrækningen om en iPad mini!

Det er frivilligt at deltage.
Tilmeldingen sker efter først til mølle princippet.

Scan QR-koden for direkte adgang til kontaktoplysninger

*Du kan vælge mellem forskellige menuer i kantinen, mellem kl. 11:15 - 13:15. Tilbuddet er personligt og kan ikke ombyttes til penge eller videregives til andre.

Ønsker du at deltage eller har du spørgsmål kan du enten:

- Sende en e-mail til: spisvel@food.dtu.dk
- Ringe til os på telefon: 42 87 17 50 (hverdage mellem 8.30-15 og 19-20)
- Eller finde os i kantinen d. 19. og 20. marts - iført DTU-trøjer

Michelle, Charlotte, Katja og Sarah fra SpisVel projektet



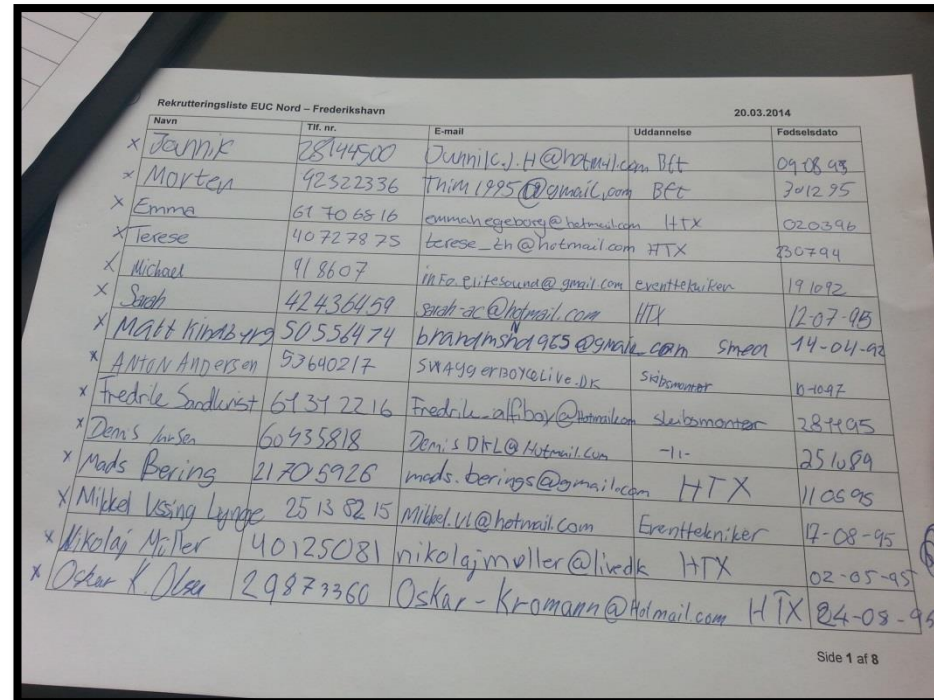
Experiences and Problems - Recruitment

Pros

- Physical registration gave the best contact
- Phone number is essential to contact the participants

Cons

- Problems with deciphering of the handwriting
- Differences in involvement from the schools lead to different levels of effort to get participants
- Information of schema and presence at the measuring week was difficult to obtain



Navn	TH. nr.	E-mail	Uddannelse	Fødselsdato
x Jannik	28144500	Jannik.J.H@hotmail.com	Bft	09-08-93
x Morten	92522336	Thim1995@gmail.com	Bft	30-12-95
x Emma	61706816	emmanegetberg@hotmail.com	HTX	02-03-96
x Terese	40727875	terese_2h@hotmail.com	HTX	23-07-94
x Michael	918607	mfo.eitescund@gmail.com	eventtekniker	19-09-92
x Sarah	42436459	sarah-ar@hotmail.com	HTX	12-07-95
x Matt Klumborg	50558474	brandmspr965@gmail.com	smør	14-04-92
x Anton Andersen	53640217	SWA99er130k@live.dk	slåbomvær	0-10-97
x Fredrik Sandqvist	61312216	Fredrik_alfbay@hotmail.com	slåbomvær	28-11-95
x Dennis Hansen	60435818	Dennis.DHL@hotmail.com	-1-	25-10-89
x Mads Berings	21705926	mads.berings@gmail.com	HTX	11-06-95
x Mikkel Vissing Lyng	25138215	Mikkel.VL@hotmail.com	Eventtekniker	17-08-95
x Nikolaj Müller	40125081	nikolajmuller@live.dk	HTX	02-05-95
x Oskar K. Oskar	29873360	Oskar-Kromann@hotmail.com	HTX	24-08-95

Interaction Systems

- Standardised welcome mail – Description of project and a declaration of consent
- WebDash – Sending videos, password, user ID and reminders
- Online Survey – customised link and reminder
- Reminds – Email system from WebDash and survey, group and individual SMS, and a physical reminder



Experiences and Problems – Interaction systems

Pros:

- Physical reminder generates accountability
- SMS reminder gives communication at eye level
- Email is a good communication strategy, when information level is high

Cons:

- New designed program gave some unpredictability compromising the professional perception
- SMS communication on individual level is time consuming



Data collection

1. Students chooses lunch (within some limits)
2. Their food was registered and the received a sticker with ID on plate
3. Photography of plate with weight
4. Photography of waste with weight
5. Photography of empty plate with weight (control)





Experience and Problems – Photo Data Collection

Pros:

- People were willing to return their waste

Cons:

- Aberration from normal patterns
- Line – due to space and method limitations
- Attending the lunch each day



WebDash - Modifications

Developed to 9-11 year olds - Modified to fit adolescents

Potato salad with meatball



Open sandwich



Cake



Pasta salad



Potatoes



Sandwich



Experience and Problems – Madloggen

Pros

- Photo based program – No weight

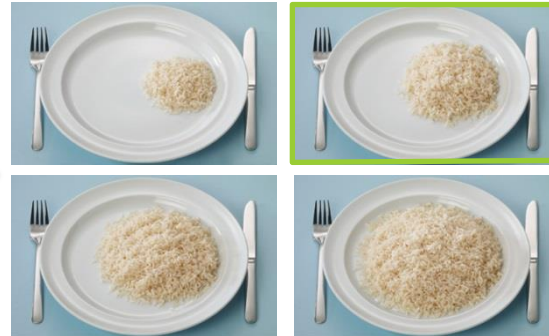
Cons

- No introduction - Only online videos
- Forgetting to fill in
- Over or under registration due to
 - Forgetting
 - Wrong estimation



Data Extraction and Quality

The canteen: Rice



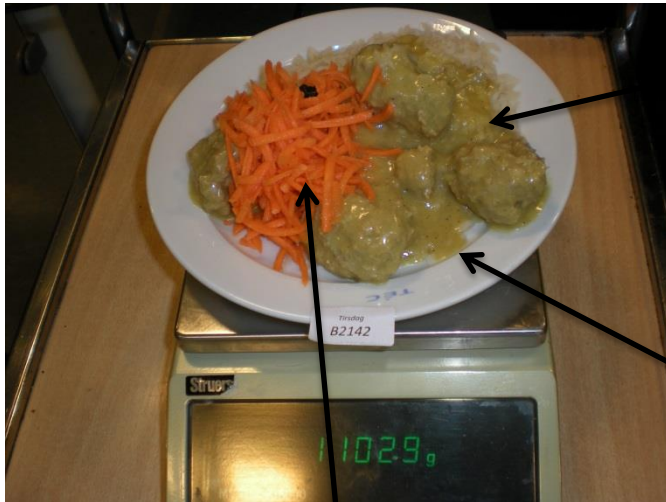
110g

The canteen: Meatballs in curry

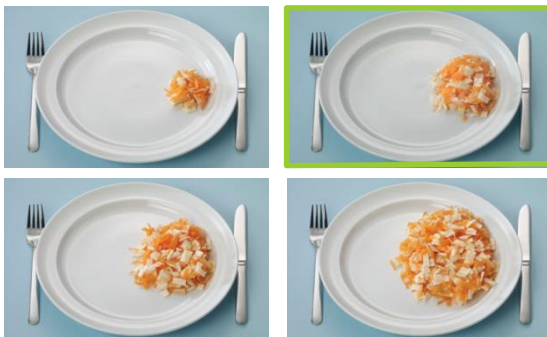


130g

Meatballs in curry sauce



The canteen: Shredded carrots



40g

Plate: ~600g
 Food eaten: ~500g
 Food registered: 280g

Experience and Problems – The Design

Pros

- The programs made it easy to participate
- Photo documentation made it possible to verify method
- Physical presence to gain mutual confidence
- Knowledge on how to approach the target group and on their food behaviour

Cons

- Drop-out rate
- Missing registration – day and food level
- Missing introductory meeting
- Programs only worked on computer
- No pilot

Thank You for Your Time!

