

23rd of May, Symposium S 15:
Beyond School Meal Programs –
a foodscape approach to school based behavioral nutrition.

**ADDRESSING HEALTH PROMOTION THROUGH AN
INTEGRATED 'WHOLE SCHOOL' APPROACH TO EATING
IN SECONDARY SCHOOL
- RESULTS FROM THE LOMA-NYMARKSKOLEN
CASESTUDY.**

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Introduction:

This study applies an interdisciplinary theoretical framework:

Democratic health education (WHO 1986)

Sense of coherence and quality of life

(Antonovsky 1987)

Communities of practice (Wenger 2000)

Public Health Promotion = health policy x health education

(Green and Tones 2010)

Health Promoting Schools framework, IVAC model

(Jensen and Simovska 2009)

Foodscape studies

(Mikkelsen et. al 2011)

Introduction

- **Food scape studies...**

**“The institutional foodscape is the physical, organisational and socio-cultural space in which clients/guests encounter meals, food and food related issues, including health-related messages”
(Mikkelsen et. al. Images of foodscapes 2011)**

- **School food scapes...**

‘Protected spaces’ – arenas for promoting healthier eating habits among students’



Fig. 1 Illustration of the LOMA school food scape

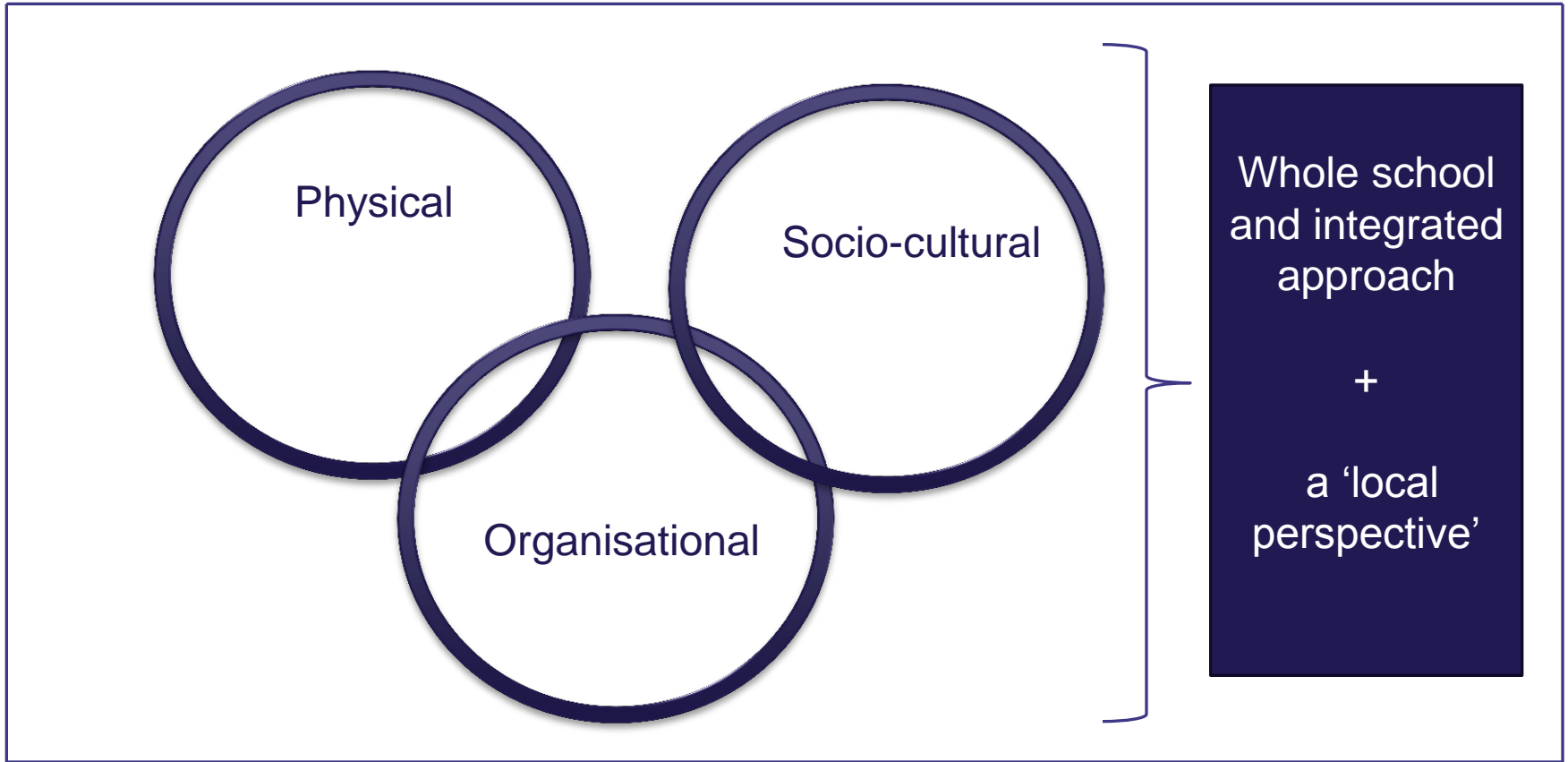


Fig. 1 Illustration of the LOMA school food scape

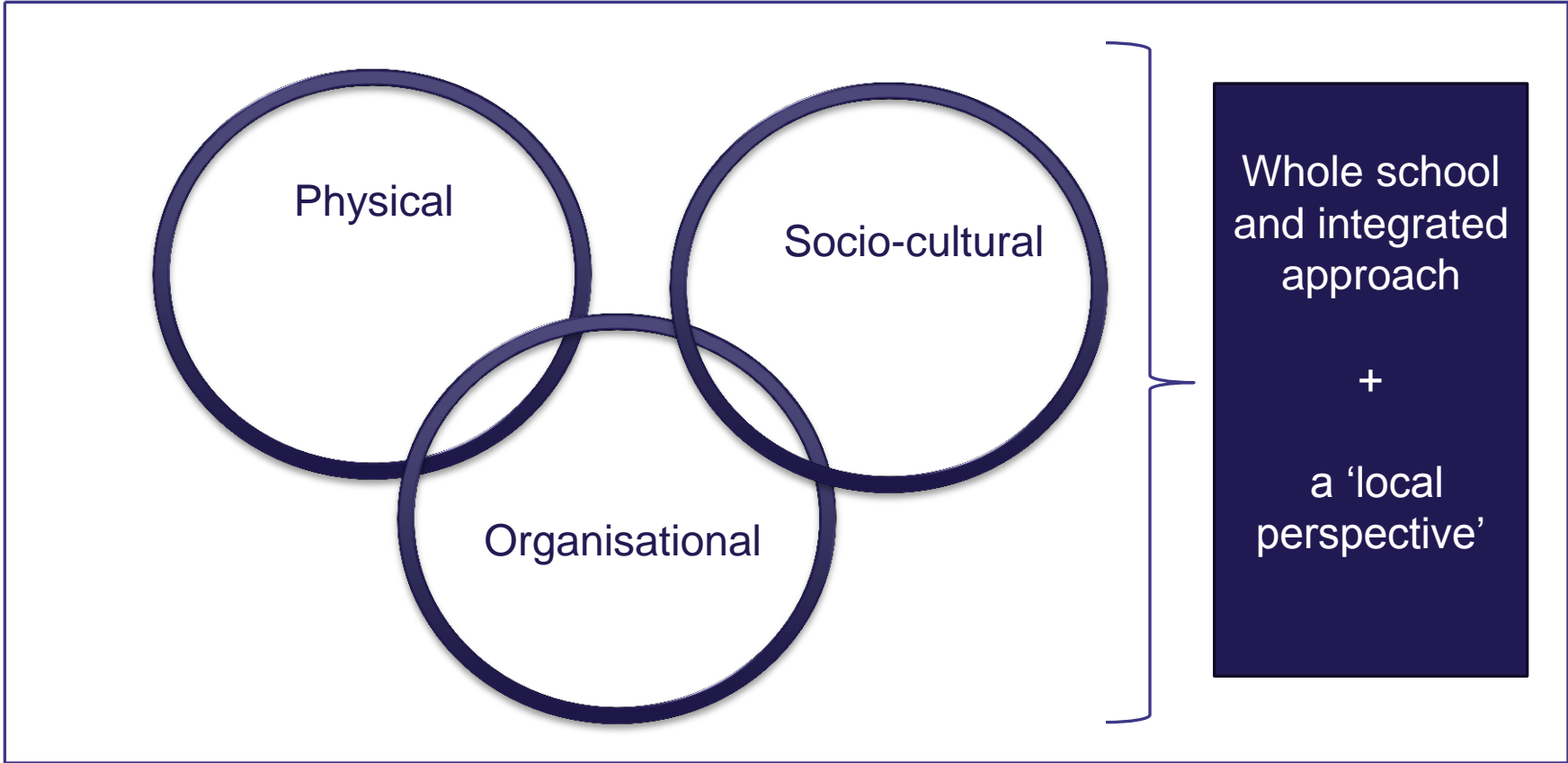


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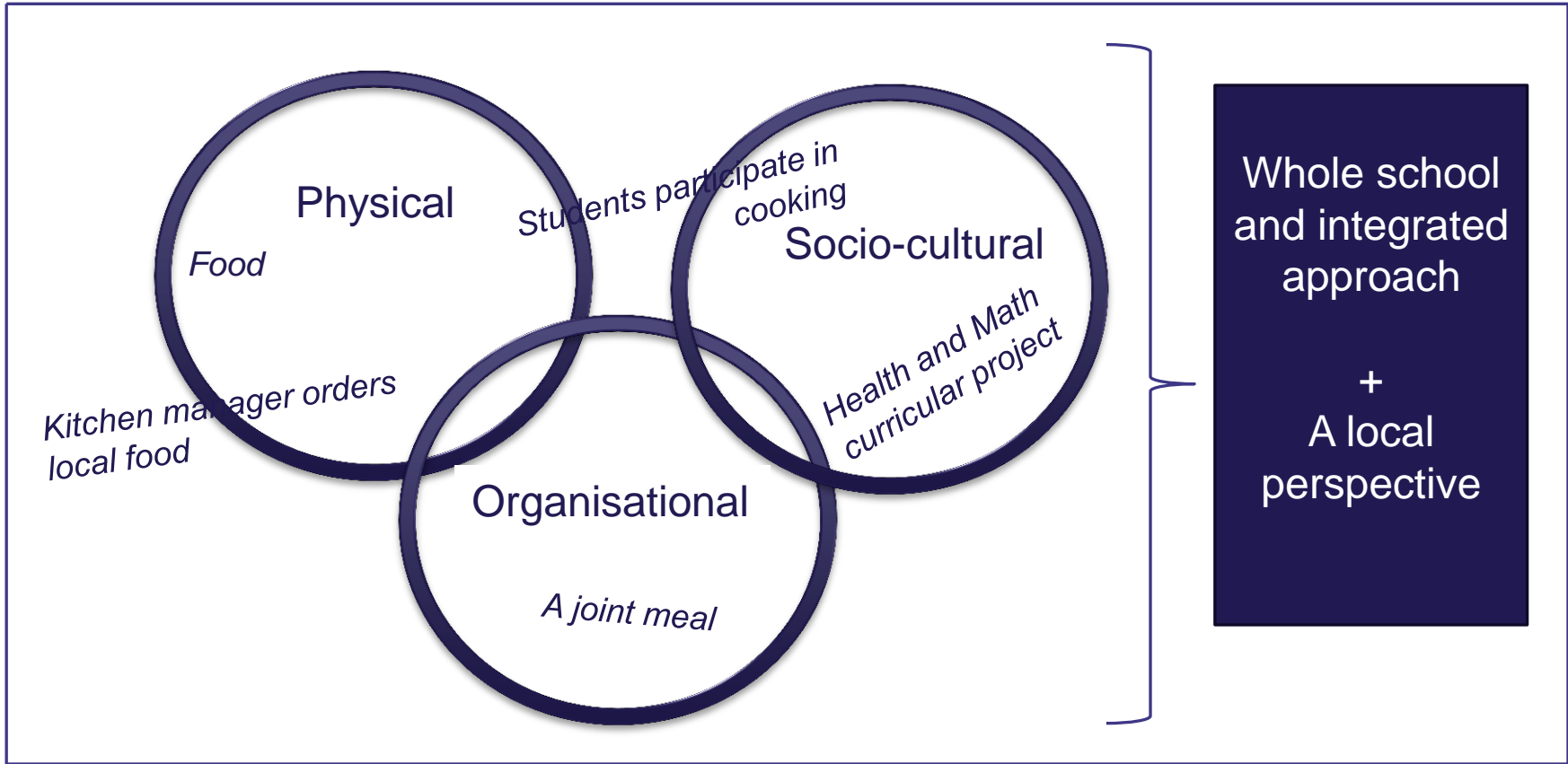
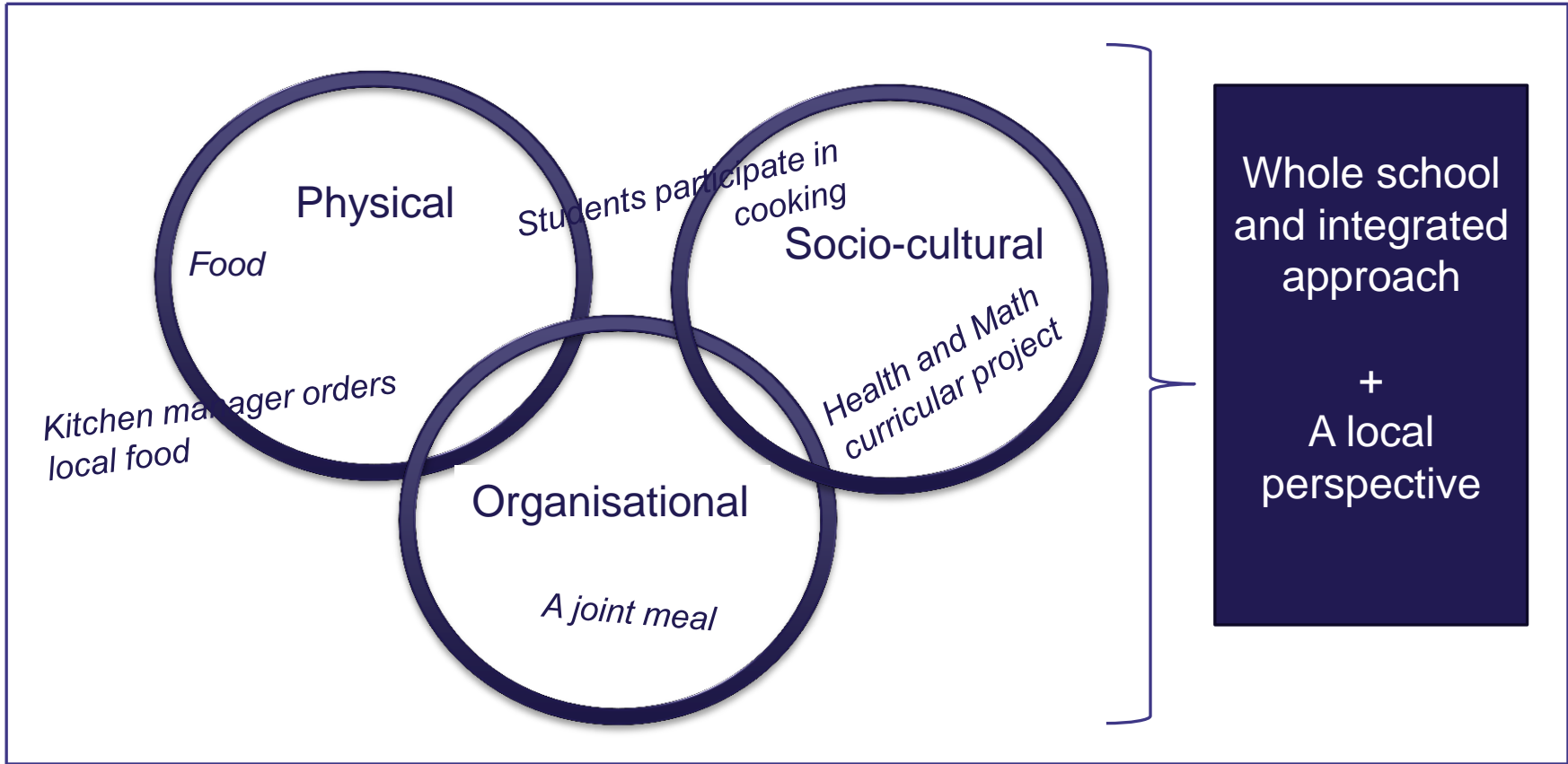


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The intervention

The hypothesis was that the LOMA (**Lokal Mad**) intervention would contribute to promote health by improving:


1. Students' health related action competences (knowledge and insight, motivation, practical and social skills)
2. Healthier eating habits
3. 'Quality of life' and 'sense of coherence'

In addition to contribute to

4. Sustainable local food production and consumption
5. Educational links between school and local producers



The LOMA charter:

- 1. School food must be healthy according to NNR and made from scratch**
- 2. Students participate in planning and cooking together with professionals as part of curriculum. The kitchen is designed in a way that supports this.**
- 3. The production kitchen has professional equipment in order to recruit and retain professional staff.**
- 4. Food is sourced from local producers if possible (preferably organic).**
- 5. LOMA aim to be sustainable in terms of energy, water consumption and as a workplace.**
- 6. LOMA can be established  existing or new buildings.**



- **Students plan, cook, present, serve, clean up – enjoy!**
- **250 meals a day**
- **Weekly shifts**



I en LOMA-uge vil eleverne dels have hele dage sammen med nogle kammerater, og de vil have undervisning i sundhed eller temaer fra et eller flere af skolens fag. Undervisningen i køkkenet foregår ved, at eleverne sammen med køkkenpersonalet og nogle kammerater indgår i den daglige produktion af skolemad til hele skolen. Den øvrige undervisning varetages af klassens faste lærere.

En vigtig del af LOMA-tanken er, at måltidet bliver en god anledning til at dyrke fællesskabet. Derfor spiser alle elever hver dag sammen med deres klassekammerater og en lærer – både dem, der vælger selv at have maden med og dem, der vælger at købe LOMA-maden.



- **Students and teachers shared a joint meal each day.**
- **Either food from LOMA kitchen or packed lunch from home**



Methods

Design

A single-case study design. Action research approach involved teachers, students and administrative staff.

Data collection - via mixed methods

- Focus group interviews
- Single person interviews
- Video
- Photo
- Documents (e.g. students work and own evaluations)
- Questionnaire on students intranet
- Online survey in quasi-experimental pilot study (pre-post, control)

Time	Field events			Methods for capturing data about events
2011	New school structure. New Policy.	Implementation of policy, Nymarkskolen as secondary school.	Decision on applying the LOMA concept. Project organisation, with Community of Practice: 'LOMA-CoP' including Staff, teachers and researchers.	Initiating case study, qualitative methods. single-case study.
2012	Investment	Re-building of school.	Pilot projects for 6th, 7th and 8th grade in order to test and train the programme.	Observations. Interviews with students. Video, documents. Questionnaire.
2013-2014	Investment and cost of operation.	Re-building of school finished by September.	October 21st : Inauguration of programme. LOMA part of everyday life in the school.	Quasi-experimental pilot study. Interviews with students, teachers and staff. Dissemination.



Methods - analysis

Qualitative data

- Analysed according to time series and themes
- Selected data organised and analysed by Nvivo10 software

Quantitative data from pilot intervention study

- Analysed by STATA



Results

1	2	3
<p>Students' health related action competences</p>	<p>Students' healthier eating habits at school</p>	<p>'Quality of life' and 'sense of coherence' at school</p>
<p>Knowledge about vegetables and insight in production of healthy food.</p>	<p>App. 30% more students (app.80% in total) eat lunch after the implementation of LOMA.</p>	<p>Students and teachers report that LOMA has improved the school 'ethos' by adding a sense of coherence and meaningfulness.</p>
<p>Motivation to consume healthy food. Practical cooking skills Experience with real life cooperation Having influence as social skill.</p>	<p>Teachers and students report improved concentration and motivation for learning in afternoon lessons.</p>	<p>Improved relations between students. Improved relations between students and teachers through food activities.</p>
<p>Critical thinking in terms of e.g. quality and price and sustainability.</p>	<p>Less shopping of competitive foods in the supermarket.</p>	



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Contributed to local food production and consumption

- Municipal contracts for public food procurement facilitated cooperation with local producers.
- LOMA made a public demand on local products and supported workplaces in local agri- and horticulture.
- Organic share app. 50%.

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Established educational links between school and local producers

- Municipal contracts included the establishment of educational links, that facilitated excursions and training modules for students.
- Local producers should visit the school as guest teachers in terms of instructions for preparation and processing of food.

Discussions – some implications for practice ?

Student participation

Students active participation in LOMA was a prerequisite for the development of health related action competences.

In the future program teachers need more training and methodological support in order to facilitate these participatory approaches (IVAC)

Students healthier eating habits

Students' parents paid for LOMA food or a packed lunch.

Some students neither brought a packed lunch nor paid for LOMA food.

In the future program reasons for this must be investigated and clarified in order to combat inequality in health.

Quality of life and sense of coherence

Students and teachers liked to eat together

Sometimes logistical challenges took too much time during the joint lunch break. In the future program these challenges might be reduced.

Discussions – some implications for research ?

The food scape approach

Seems useful for a multicomponent, school health program like LOMA – especially in combination with the health promoting schools framework.

The findings indicate, that research in LOMA school foodscapes demand qualitative ‘in-depth’ as well as quantitative data, to understand the complex mechanisms.

Deployment of the learning potential in the LOMA program?

Teachers are key-persons and must be supported to comply with the demands.

More research is needed in terms of specifying the LOMA curriculum for teacher education at university college level.



This talk...

Presented some of the results from the case study of the LOMA-Local Food program at Nymarkskolen in Svendborg.

Applied a food scape and interdisciplinary approach

Discussed some implications for practice and research.

- Finally concludes that

More interventions and further research is needed in order to investigate to which extent the mechanisms identified in the first LOMA intervention can be transferred to other school food scapes and generate similar health related outcomes.

Thanks for your attention !

Acknowledgements

Thanks to Local Council of the Municipality of Svendborg, to Helle Hansen, Head of Department of Children and Youth, Birgit Villebro, Headmaster of Nymarkskolen, Carsten Rasmussen, Head of Department, Rikke Thrane coordinating teacher, Mette Larsen teacher, Lotte Vett teacher, Camilla Suna, kitchen Manager, students at Nymarkskolen, Peter Nansen Head of Team Procurement, Skiftekaer farm, Culinary Southfünen. Anette Thybo, Head of Research and Innovation, UCL. Professor, Bjarne Bruun Jensen, Steno Center.

Links:

Ruge, D., & Mikkelsen, B. E. (2013). Local public food strategies as a social innovation: early insights from the LOMA-Nymarkskolen case study. Acta Agriculturae Scandinavica, Section B–Soil & Plant Science, 63(sup1), 56-65.

Video about a LOMA pilot project for 6th grade students at [you tube](#)

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