LOMA - Local Foodstrategies for children and youth in public institutions.

Dorte Ruge
Main professional academic affiliation(s): PhD. Fellow
Department: Department of Environment and planning, 'Mealscience and Public Health Nutrition'
Company: Aalborg University
Address: Lautrupvang 1A, 2750 Ballerup
Country: Denmark
E-mail: dorterug@plan.aau.dk

Keywords: Local food, local foodsystems, re-localisation, local cooking, local learning, organic food, public procurement.

Abstract

‘LOMA - Local foodstrategies for children and youth in public institutions’ is the title of the research project that constitutes this paper for the IFSA conference 2012, WG on ‘Public food Procurement’. The phd project will be conducted in collaboration between Aalborg University and University College Lillebelt from 2011 to 2014. The task of this paper is to present the project, the theoretical framework and some preliminary results from pilot projects in the casestudy.

The research question is: “How can local foodstrategies according to the LOMA principles involving health promotion, food education and social innovation - improve sense of coherence, action competence, health consciousness and healthy lifestyles among children and youth in public institutions and contribute to reduction of social inequality?”

The theoretical platform for the research project is categorised by an integrated and interdisciplinary approach, applying theories on public health promotion, creative public food procurement and the ‘whole-school’ approach as part of a sustainable school food system. The casestudy is taking place in the new secondary school, Nymarkskolen (700 students at secondary level and approximately 90 teachers and staff). The establishment of the new school is part of a municipal policy, aimed at promoting healthy eating habits, sense of coherence and integration between groups of youth with different social backgrounds in order to reduce social inequality.

Moreover re-localisation of foodchains is a focus area within the Agenda 21 strategy on sustainable development of the municipality of Svendborg (Svendborg, 2012). According to this and the health promotion strategy, the local council has made a financial priority to the establishment of a new production kitchen and cantina at the school using the ‘LOMA concept’ as a guideline, including students’ participation in cooking with food from the local area, as part of the health education at Nymarkskolen.

The relation between the phd project ‘Local foodstrategies for children and youth’ and the development project ‘LOMA-Nymarkskolen’ is integrated, dialogic and action oriented. Moreover, an action-research approach is being applied, where researchers are working together with teachers, pedagogical students and municipal staff at developing and researching in central phases of the project. Primarily on the establishment of the new meal system and the connection to curriculum activities. Parallel to this, the phd researcher is registrating, making observations.
and interviews with special regard to processes of ‘empowerment’ and ‘participation’ in the whole ‘community of practice’ represented by the combined development and research project.

At the moment, the project organisation, established around the development project is working hard and successfully on the preparations that consist of quite different efforts: How to implement participatory processes, logistics on food, cooperating with local farmers, internal and external communication, leadership and planning of curriculum activities. Also pilot projects are being conducted in order to test and train certain of these elements before the actual case study is implemented in 2013. In July 2012 preliminary results from the research of the pilot projects will be presented on the 10th European IFSA Symposium.

1.0 Introduction

‘LOMA’ is an abbreviation of the Danish ‘Lokal Mad’ - in English: Local Food. In the context of this research project it covers a set of principles serving as a guideline for a local food system, involving health promotion, food education and social innovation in order to improve students sense of coherence, action competence, health consciousness and healthy lifestyles. The LOMA principles serve to define the ‘setting’ (Jensen, B. 2009) for the health promoting initiative and also to set a direction for the practical arrangements. The implication of the principles for LOMA, is that there must be:

1. A professional kitchen where healthy food (Nordic Nutrition Standards, 2004) is made from ‘fresh produce’ by professional staff. Fresh produce, preferably from local and organic farms.
2. A canteen, where children and youth can sit down and eat the meal together with teachers and staff.
3. A physical space integrated in the kitchen, providing the participation of children and youth in planning, running and preparing meals together with professional staff as part of the curriculum activities in teaching the subjects of Science, Home Economics and Health.
4. An approach, securing healthy workplaces and maximum sustainability and as far as possible minimal negative impact on the environment.
5. A courtesy towards local community being a user of the kitchen facility in a health promoting perspective.

Serving as guideline for the actions and activities, the principles also represent a kind of ‘new theory’, which is agreed on, used and subsequently adjusted by the participants in an action-research approach (cf. Gustavsen, 2001). In the research project the new theory serves as a way for the participants to investigate on how to combine knowledge from different scientific domains in order to reach the objectives. This demands a cross-sectional scientific approach that apart from theories on public health promotion (Green and Tones, 2010) public food procurement (Morgan and Sonnino, 2008) and food education (Kromann, 2009) also integrates theories on case study as a qualitative research method (Flyvbjerg, 2006), action-research (Gustavsen, B. 2009), ‘Communities of practice’ (Wenger E. 1998).

As the research project is in the initial phase, this paper will only present reflections on some of the main aspects: Public health promotion and innovative public procurement. Results of preliminary pilot and action research activities at the ‘LOMA Nymarkskolen’ will be presented at the IFSA conference in July 2012.
2.0 State-of-the-art: Public health promotion and Public Food procurement

2.1 On public health promotion
According to C.E.A. Winslow (1920) public health was "the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals" and this definition is still part of the science, Public Health (PH), as such. The modern version of PH has been defined by the WHO, Ottawa Charter from 1986 where health can encompass "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". In order to achieve the intended results interdisciplinary approaches of epidemiology, biostatistics, environmental health and health service are being some of the subfields. This is made in accordance with central documents from World Health Organisation charters (Tones, 2010 p.17-21) giving the key principles of public health promotion:

1. The involvement of the whole population in the context of everyday life and enabling people to take control of, and have responsibility for their health.
2. Tackling the determinants of health – that is, an upstream approach, which demands the cooperative efforts of a number of different sectors at all levels, from national to local.
3. Utilizing a range of different, but complementary, methods and approaches - from legislation to fiscal measures, organizational change and community development to education and communication
4. Effective public participation, which may require the development of individual and community capacity

Several areas are central to the conceptual work of public health promotion:

- Build healthy public policy
- Create supportive environments
- Strengthen community action
- Develop personal skills
- Reorient health services
- Invest in sustainable policies, actions and infrastructure to address the determinants of health
- Partner and build alliances with public, private, non-governmental and international organizations and civil society to create sustainable actions.

Jackie Green and Keith Tones from Leeds Metropolitan University, have laid the 20th century cornerstone of public health promotion theory by the book ‘Health Promotion – planning and strategies’ that focus on the relations between health policy and health education. In the book this is underlined by an equation, showing the dynamic aspect of the relations:

\[
\text{Public Health promotion} = \text{healthy public policy} \times \text{health education}
\]

Since the statement is an equation it means, that if one of the factors is equal to 0 'the result of health promotion is also equal to 0. Education and training in health is thus a crucial factor and this requires a special focus on health education, which challenges current neo-liberal approaches, that are often mostly in favour of a more individualistic and life-style point of view.

Consequently, the case study can be inserted in the equation:

\[
\text{Public Health promotion} = \text{healthy policy of the school} \times \text{‘LOMA ’}
\]
Health education is in this context covering the adaption of cooking skills and knowledge about healthy food – food education - in order to achieve action competence and health consciousness among the students. Food education will also be part of the health education thorough integration with curriculum activities. Formally, health promotion for children and young people is placed within ‘preventive efforts’ and thus regulated by the Danish Health Act (Sundhedsstyrelsen) and the associated regulation and guidance. The citizen-related prevention activities carried out in the municipal system, has largely focused on ‘lifestyle factors’. This focus is appropriate, since several studies, including a school children study from 2010, shows that the combination of unhealthy eating habits and lack of exercise for many children and adolescents will lead to an unhealthy adulthood and obesity. Municipalities are therefore strongly motivated to strengthen prevention and health promotion efforts in relation to children and adolescents. But there is however, among policy makers and staff, some uncertainty about the methods and actions to be prioritized. A factor contributing to uncertainty may be that a multidisciplinary, cross-sectional health education approach is mandatory (Wistoft 2009).

The research question: ‘How can local food strategies - according to the LOMA principles involving health promotion, food education and social innovation - improve sense of coherence, action competence, health consciousness and healthy lifestyles among children and youth in public institutions and contribute to reduction of social inequality?’ will to a wide extend be answered according to the analytical framework by Green and Tones. However, the notion of ‘the health promoting school’ is also part of the framework, stressing the importance of school as a setting for the health promotion effort. Also the work of Bjarne Bruun Jensen (Jensen, 2009) putting emphasis on democracy and ‘the ability to influence one’s own life and society’, referred to as ‘action competence’ will be included. Apart from this, the inclusive, whole school approach also needs to be taken into consideration, delivering an analytical framework appropriate for cross sectional approach: ‘/.../ a model of School development which attempts to unify different processes and systems and which we call inclusion in action’ (Ekins, 2009). It is interesting to investigate the possibility of defining a ‘health promoting whole school approach’, because in health promotion litterature, healthy food seems to be more prevalent on the level of policy, than on the level of health education. This may be a kind of missing link, because problems with obesity among youth don’t seem to be solved, even if the excellent food policy is in place. Research on the importance of a food education based on participatory approaches as in the ‘LOMA Nymarkskolen’ development project, will contribute to re-establish this link. Moreover, the focus on kitchen as setting for health education through students’ participation in food production for the whole school, is an uncommon scope. This approach also gives rise to another important question: Why is students’ participation more convenient in school meal systems in Denmark than in other countries? Comparing to similar systems in Sweeden, Finland and Scotland this is an interesting difference (East Ayrshire, 2012). Research on the LOMA-Nymarkskolen may give inspiration and valuable information on how to maximize the health promotion effect of a healthy school meal system by applying a participatory as well as a local perspective on cooking, education, food produce, public purchasing. These last remarks on kitchen as setting for health promotion leads to another important domain around the research project: The theories on innovative public procurement.

2.2. Public Food Procurement
Within public health promotion there has, during the last 10 years, been an increased awareness about the effect of public food procurement for children in public institutions. In a worldwide
perspective - remarkable differences concerning principles of catering, cooking and serving food are being applied.

The prerequisite for the existence of a 'public food procurement system' is that children and youth are away from their home for more than 6 hours a day and consequently need to eat food during the day. In some countries (Sweden, England, Finland) this responsibility is seen as a public task, whereas in other countries (Denmark and Norway) the current food provision in schools is based on 'private' lunch packets from home, being rooted in a post-war tradition (Benn, 1996). During the last 5 years the growing epidemic on obesity has brought 'school food' back on top of the public agenda in most rich, western countries, including US, Canada and EU. Because the cost of the diseases that follow the epidemic are very costly for the municipalities, a lot of preventive efforts are being initiated everywhere. In Denmark, The Danish ‘Forebyggelseskommission’ in 2009 recommended an improved preventive effort, including the establishment of healthy meal schemes and (of interest to the current case study at Nymarkskolen) they add: ‘experiences show, that especially meal schemes, where students are participating in preparing the meal are the most successful’ according to health promotion effects. Giving no proposal on how this is going to be implemented, it seems as if the initiative since then has been left over to 'the market' or 'the free initiative'. So far, this approach has had huge and not very successful impact on meal systems in kindergartens and schools (cf. Mikkelsen et al. 2010).

At the moment, there are two major tracks within public food procurement for children and youth in the Scandinavian Countries: a marketdriven approach and an integrated, citizen-driven approach, the latter being representative of the project at LOMA-Nymarkskolen. The complexity of these categories has been explained in the recently conducted IPOPY project, where very informative reports have been made on public food procurement in the participating countries: Norway, Finland, Italy and Denmark (Strassner, 2010). The specific focus on organic food procurement is also interesting, as the sustainability agenda in Denmark and other western countries is strengthening due to climate change, and drinking water pollution from pesticides. Benjamin Nölting, Berlin Institute of Technology (2009) states:

“Healthy nutrition for children and youth is a hot topic in public debates around Europe. Public food procurement for youth can play a crucial role, and some public authorities have acknowledged their responsibility to provide sustainable nutrition. /…/ according to Spigarolo and Donegani, sustainable food for young people should be safe, tasty, nourishing - produced respecting the environment, produced respecting ethical principles and rewarding.”

It may sound as an easy task for public authorities to provide this, but - except for the municipality of Copenhagen, Malmö, East Ayrshire in Scotland and some municipalities in Italy – this is not the case in EU. Roberto Spigarolo (2009) representing 'best practice' on controlled food chains (also including organic food), has been an important inspiration for the thoughts on the LOMA-local food strategies. However, it is Morgan and Sonnino (2007) who are most in accordance, focusing on the local level:

“ The most important vehicle for securing a sustainable school meals service is creative procurement policy, which takes a holistic view of the food chain because it recognizes that production and consumption need to be calibrated at the local level” (2007, p.19)

The application of a creative procurement policy initiates the particular focus on local facilities, being a part of the 'setting' for securing a sustainable school meals service. Results from several
cases in Denmark confirm, that it is hard to achieve the aim of health promotion, food education, social inclusion and reduction of social inequality without the proper setting including the local level, kitchen, canteen, the educational level of staff, the educational link, the local food suppliers and the overall organisation (Mikkelsen et. al 2010). As a consequence of this, this research project is also touching on the scope of creating sustainable local spaces, here understood as the movement for ‘re-localisation’ of food chains in order to promote health and sustainable, local development. The local kitchen and canteen is here seen as opposed to the market-oriented approach with a canteen service, based on external supplies of finished food, some of which have been produced far away – ending up on students’ plate after thousands of ‘food-miles’. Morgan and Morley (2002) point out ways to achieve public health through a sustainable creative strategy of local food which seems to be in accordance with the LOMA principles or theory:

"Work with schools and local farms to develop innovative educational links which help to develop a new food culture, improve diet and provide local marketing opportunities for producers and processors" (p.77)

Tim Crabtree (in Morgan and Morley 2002) has illustrated these relations by a figure on re-localisation of food chains, showing why it is important to work on ‘supply’ as well as ‘demand’ in order to support local, sustainable economies (see figure 1.)

![Figure 1](image)

**Figure 1**

Working according to the LOMA principles, covers ‘supply’ as well as ‘demand’, because the establishment of a production kitchen in a public institution is a way to create demand on local food where there has been none before. Secondly, working with local farmers in order to improve cooperation on growing, processing and distribution is a way to create better conditions for more supply. However, well-known to public institutions within EU countries, the challenge of rules for tender in public procurement is inevitable. Therefore - with regard to demand - it is also
necessary to focus on the barriers and possibilities for purchasing local food as a public institution, within the legal framework. Experiences with local food in a Danish context indicate, that the way public tendering is carried out today, quite often results in big wholesalers winning most contracts within municipalities, regions and state (Ruge, 2011). In Denmark four wholesalers are covering 65% of the whole procurement sector (Denman 2012), where the volume of public procurement is estimated four billion kroner a year. Moreover, often public institutions ask for contractors who can provide food in all categories and this seems to favour the biggest four wholesalers and dis-favour the local dairy, vegetable grower or butcher.

The absence of public demand on local food is devastating for local economies and subsequently also for local communities, facing recession and the mark of ‘peripheral areas’, where families find it hard to make a living, schools are closing down etc. Though, in Wales, Italy and Sweeden there are examples of municipalities having dealt with these challenges in a way that gives local and even local organic producers the role of sub-contractors (Carmarthenshire 2004-2020).

Nevertheless, the prerequisite for this is that the price is right and as ‘lowest price’ often weighs 40-60% in the tendering process in EU countries – smaller farms and producers apparently can’t compete with food prices on the global market. This is due to the fact that the cost of producing and transporting food is so low, that it is possible for wholesalers to buy vegetables far away from the place of consumption and still provide a lower price than prices for similar food from the local (national) market. Only a registration of the CO2 emission from the transportation of food and other environmental ‘costs’ could change this figures (Søgaard, M. 2012). This paradoxical situation is hard to solve – but both EU parliament and EU commission are aware of the situation, which is anything else but ‘sustainable’. This issue is also relevant with regard to the recent policy from the Danish Government, which has the conversion to 60% organic menu in public kitchens as a goal in year 2020 (FVM 2011). If the present ‘conventional’ way of purchasing is not being altered, it may become very hard for local, organic products to become part of this organic adventure (Ruge & Mikkelsen, 2012) Along with the attempts of modernisation of rules for public procurement the EU parliament has proposed that it must be legalised for public purchaser to give priority to sustainability issues (Rühle, 2011):

Procurement should therefore be geared to the criterion of the most economically advantageous tender, taking into account the entire life-cycle costs of the relevant goods, works or services, and the Commission is specifically asked in this regard to develop a methodology for working out life-cycle costs – one that is wider-ranging than the current energy-efficiency-focused methodology, and addresses all sustainability issues. It ought to be made clear, too, that there is a place in technical specifications for criteria based on sustainable and ethically responsible production. (p. 10)

2.3. Kitchens at the center

The LOMA guideline is based on a combination of the whole-school approach, health promotion efforts and innovative public procurement. In this sense, a popular way: kitchen is key, meaning that the importance of having a proper production kitchen must never be underestimated. During the last 10 years production kitchens have almost systematically been removed from public institutions, paving the way for chill-and–cook systems with inbuild dependency on wholesalers and external processors. Supposedly, lower price and achievement of nutritional recommendations are the benefit of this process. But a lot of other benefits have been lost in the samme run – for instance the presence of expertise and competent staff at the institutions, the smell of healthy food made from fresh produce, the possibility of users getting insight in where the food comes from and improved cooking skills by participating. However, a Danish Study from Randers Hospital shows, that it is possible to keep cost down, provided that most of the organic
food is home-made (Sloth B. 2008). Accordingly, it makes good sense to apply a local perspective on cooking, learning, producing food and public purchasing. This is illustrated in Figure 2:

![Diagram showing local cooking, local learning, local farming, and local purchasing leading to re-localisation, health promotion, and action competence (Ruge, 2012)]

3.0 Pilot Project in the casestudy

In the municipality of Svendborg, a recent investigation by the The Preventive Council (2011) has shown, that unhealthy eating habits among school-youth in Svendborg are increasing according to age, accompanied by increase in the consumption of unhealthy food and obesity among boys and girls. The recommendation from the Council is consequently to improve the establishment of health promoting facilities in order to promote healthy eating habits. On this background the ‘LOMA Nymarkskolen’ development project is taking place. The participants in this ‘community of practice (Wenger, E. ,1998) will vary according to the phase of the project.

During the three years it is taking place, students, teachers, kitchen staff, head of school, parents, administrative staff, local farmers and local suppliers will take part. As teaching in Home Economics is not a subject for secondary school, the students’ participating in cooking will be integrated in curriculum activities in science, health education and other subjects. One of the deliveries of the project is to invent and disseminate new teaching modules for this purpose. New educational materials and new LOMA theory will be invented during an action research process with teachers, chefs, researchers and students from University College Lillebelt. When the permanent LOMA meal system is installed in 2013 students will be involved on a regular basis in planning, cooking and serving the food for the whole school and connecting to local farmers. In order to prepare for these grand changes in the whole school, pilot projects are being conducted on various topics. In February 2012 the first one-week LOMA pilot project took place in order to investigate how integration of local food, visits at local farms and producers, local cooking, local learning and curriculum activities in teaching of Science can improve sense of coherence,
actioncompetence, health consciousness and healthy lifestyles among students. The results of this week will be part of my presentation on the IFSA conference in July 2012.

References:


East Eyshire (2012). East Ayrshire Healthy Schoolmeals from local produce.


