

Organic meals as environmental commitment An example from Trondheim municipality

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Author's Background

Liv Solemdal, M.Sc. in soil sciences. Adviser, organic food and farming since 1996. Has worked with introducing organic foods in large households, and held a lot of courses and lectures for different groups of consumers.

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Summary

Experiences from Trondheim municipality confirm that it is easier to introduce organic food in schools and kindergartens when it is part of a larger environmental commitment. In Trondheim, school and kindergarten staff, as well as parents, are offered courses in healthy and sustainable eating and cooking. Purchasing organic food becomes more meaningful and motivating when it is part of a commitment for a better environment, healthier diet and a part of children's education. When children are involved in preparing healthy meals with environmentally sound food choices, including local, organic and seasonal foods, they learn with all their senses. Such a practical approach is useful in education for sustainable development.

Background

The Norwegian government aims for 15 % organic food production and consumption within 2020. While 5,1 percent of agricultural land is organically managed, the consumption of organic food accounts for only 1,1 percent of total food consumption (NAA, 2013). It seems that in Norway organic in itself does not give enough motivation for consumers to choose this quality, in spite of the fact that premium prices for organic products have declined significantly in recent years.

National and regional studies have revealed that the food children eat during the day in kindergarten and school was neither enough nor of sufficient quality (Sosial- og helsedirektoratet 2005, Fylkesmannen i Sør-Trøndelag 2007). To improve the situation national health authorities in 2007 made guidelines for food and meals in kindergartens (Sosial- og helsedirektoratet 2007). This includes guidelines for the meal itself and the nutritional content of food served in kindergartens. The guidelines helped to draw attention to diet and many kindergartens decided to start preparing meals at least one day every week and serve fruit and vegetables daily. A national survey has confirmed that a stronger focus on proper and adequate food in kindergartens has improved the situation (Helsedirektoratet 2012). Children in kindergartens and schools in Norway normally bring a packed lunch from home, and pedagogical personnel have initially shown some resistance to having to prepare food.

Main chapter

Trondheim municipality has been attending the project "Children's Green City" (<http://www.trondheim.kommune.no/gronnbarneby>) for ten years. This project, originally organized by the Norwegian state, aims to inspire, motivate and support schools and kindergartens in their work for sustainable development, using creative ways of meeting the environmental challenges. In Trondheim, the project has gained great confidence among politicians and municipal employees. The municipality has decided that all public schools and kindergartens shall be certified by the international certification scheme Green Flag (or Eco-Schools), operated by Foundation for Environmental Education. Green Flag is a program for environmental management and certification, designed to implement sustainable development education in schools and kindergartens. Trondheim municipality also encouraged private entities to attend Green Flag. More than 200 units in Trondheim are participating in the scheme, encompassing 27 000 children and young people. The concept implies that each kindergarten and school every year selects a topic for environmental commitment to work with throughout the year. All topics should include a variety of activities to engage the children, and the school / kindergarten has to report on the work and evaluate the degree of achievement to receive the annual re-certification.

"Children's Green City" in Trondheim, which manages and assists schools and kindergartens according to the Green Flag certification scheme, was among the first to put nutrition on the list of relevant environmental topics. Including organic, local and/or vegetarian food and meals in the environmental perspective of food production and consumption

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adds an extra dimension to the certification scheme. A proper diet should be understood as a sum of sustainable food choices, nutritional quality of the meal, and the facilitation of good meals (Saxe et al. 2013). The importance of integrating organic food in sustainable nutrition concepts when the aim is to increase organic consumption is confirmed by Løes and Nölting (2011). Norwegian nutritionists have proposed a guideline with ten suggestions for achieving a sustainable diet (Nymoene et al. 2009). According to this guideline a sustainable menu includes organic ingredients; increased use of plant products such as grain, legumes, vegetables and fruit; less meat; more seasonal foods; fair trade food; fish from sustainable stocks and efforts to reduce food waste.

Since 2008, Trondheim municipality has arranged courses and training in healthy and sustainable nutrition for 100-200 employees in kindergartens and schools every year. Improving knowledge has proven to inspire and involve the staff, making their work more meaningful. They learn to make food from scratch using real ingredients and less artificial additives as well as discuss the environmental impacts of production methods and food choices. Information materials are being produced for all staff. Since 2011 evening courses for parents have also been offered to provide information on healthy and sustainable food choices with an emphasis on training in practical cooking.

When organic foods are considered to be a self-evident part of a comprehensive environmental education, support and motivation grows among the staff, children and parents. A survey done in 2012 (Trondheim municipality, unpublished), shows that half of the kindergartens in Trondheim are using organic milk on daily basis, even if this means a premium price which parents have to pay. Many nurseries started their environmental commitment with composting and recycling as annual topics in the Green Flag certification scheme. To grow food by using their own compost was a natural continuation and the next topic to work with. Finally, products from the garden were taken to the kitchen and prepared for lunch together with the children. To follow the food chain in this way creates curiosity and increased interest in food production among children, their parents and the staff, and in addition it motivates everybody to minimize food waste. Mikkola and Roos (2010) have shown that educational plans for schools in different countries include a commitment to sustainable development, and that education for sustainable development will profit from a more hands on and experiential approach. The same may apply for kindergartens.

A few kindergartens in Trondheim municipality are using a larger share of organic food. Bakklandet barnehage, received in 2013 an environmental award from Trondheim municipality because of their efforts for a better and more sustainable nutrition. The share of organic purchases is more than 50 % and they buy organic vegetables from local farmers, in addition to activities related to food such as composting and growing herbs and vegetables. The kindergarten is an inspiration to others and shows that it is possible to achieve what you really want. It is also an important signal to others that the municipality values such efforts.

Core messages and conclusions

Collaborating with environmental initiatives, such as Eco-Schools, can be part of a broader approach to educate and inspire young people to work for a sustainable future. Organic food can play a central role in such efforts while at the same time fulfilling existing educational frameworks. When children participate in different activities related to food, such as composting, growing food in school garden and preparing meals, they learn by doing, thereby making the concept of sustainable development understandable.

A participative process, in which children, parents and staff are involved, is inspiring and motivating.

References

Fylkesmannen i Sør-Trøndelag (2007): En kartlegging av mat og Måltider i SFO i Sør-Trøndelag 2007, p 20.

Helsedirektoratet (2012): Måltider, fysisk aktivitet og miljørettet helsevern i barnehagen. En undersøkelse blant styrere og pedagogiske ledere, www.helsedirektoratet.no, 82p

Løes A, K & B Nölting (2011): Increasing organic consumption through school meals – lessons learned in the iPOPY project. *Org. Agr.* (2011) 1:91 – 110

Norwegian Agricultural Authority (2013): Produksjon og omsetning av økologiske landbruksvarer, Rapport for 2013. Rapport nr 12/2013, 119p

Nymoene L L, Bere E, Haugen M & H M Meltzer (2009): Kosthold og bærekraftig utvikling – hvordan kan vi som fagfolk bidra til at befolkningen spiser mer miljøvennlig? *Norsk Tidsskrift for Ernæring*, 2009:2

Roos G & M Mikkola (2010): Education about organic food and sustainability in Denmark, Finland, Italy and Norway. Project report no. 9 – 2010. SIFO, www.sifo.no, 137p

Saxe H, Larsen T M & L Mogensen (2013): The global warming potential of two healthy Nordic diets Compared with the average Danish diet. *Climate Change*, Volume 116, Issue 2, 249 -262

Sosial- og helsedirektoratet (2005): Mat og måltider i barnehagen – en undersøkelse blant styrere og pedagogiske ledere, Sosial- og helsedirektoratet, Oslo

Sosial- og helsedirektoratet (2007): Retningslinjer for mat- og måltider i barnehagen.

<http://helsedirektoratet.no/publikasjoner/retningslinjer-for-mat-og-maltider-i-barnehagen/Publikasjoner/retningslinjer-for-mat-og-maltider-i-barnehagen.pdf>