

BY MELANIE LUKAS, ANNE-KRISTIN LØES,  
BENJAMIN NÖLTING AND CAROLA STRASSNER

## How to increase organic food consumption in schools



# School meals

Eating habits are established at an early stage of life. So, children and youth should be a special target group for promoting sustainable consumption and healthy nutrition. One example is school meal systems which can be utilized to promote better eating habits for a lifetime.

Table 1:

## Variations in key criteria between countries



	ITALY	FINLAND	GERMANY	NORWAY	DENMARK
Inhabitants (2010, Eurostat), millions	60.3	5.4	81.8	4.9	5.5
GDP per capita in € (2007, Eurostat) and relative GDP, Italy = 100	25 900 100	34 000 131	29 500 114	60 400 233	41 700 161
Organically managed agricultural land, share of total, % (2009)	8.7	7.3	5.6	5.5	5.9
Number of organic producers (2009)	43 029	4 087	21 047	2 851	2 694
Share of organic products in the food market, % (2009)	3.0	1.0	3.4	1.3	7.2
Average user price for a complete school meal, in €	3.86	0	2.43	4.39	2.93
Willingness to pay for a complete school meal = Average user price in € cent * 100/ GDP per capita	1.49	0	0.82	0.73	0.70

The iPOPY “innovative Public Organic food Procurement for Youth” study (2007-2010) was a research project conducted in Italy, Denmark, Finland, Norway and Germany.

### Highly different school meal systems

The project discovered that the arrangements for providing school meals vary considerably between countries, as do user payments. These differences are partly explained by history, social policy traditions, national food culture and habits and the existing infrastructure. These factors in turn affect the use of organic food in school meals. We found a weak link between the proportion of organic farmland in a country and organic consumption (Table 1). Norway, Denmark and Finland have about the same proportion of converted farmland, but Denmark has a far higher per capita level of consumption of organic food (the highest in Europe). While wealthy countries Finland and Norway have a far lower organic market share. The willingness to pay for school meals and quality food also varies substantially and is much higher in Italy, and somewhat higher in Germany, than in the Nordic countries.

### Five main scales of variation

We identified five important categories to compare the use of organic ingredients in school meals, that we considered to be the most relevant for characterizing school food systems and the potential for increasing their usage of organic food:

- Type of school food service
- Level of public financing
- Political involvement in school food in general
- Level of specific support for using organic ingredients
- The existence of an organic food supply that is adapted to school food service

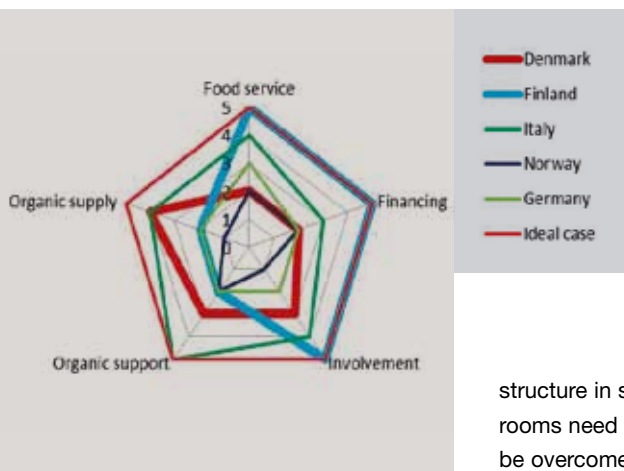
Each of these categories can be scaled from very low or unfavourable conditions for increasing the use of organic ingredients in school meals, to very high or favourable conditions. The most favourable conditions would be when complete meals are served daily, with no user payment, a high degree of public involvement in the school meals system, a high level of public commitment to the use of organic ingredients and a well developed organic market with supply chains specifically adapted to the need of school kitchens.

Of the countries studied, Italy has the highest consumption of organic food in school meals. This country has a highly developed school meal service, with a warm lunch served daily to all pupils up to 13 years who are in school for a full day. There is a significant user payment, but also significant public financial support for infrastructure and staff. On the other hand, there are hardly any national guidelines for school food. This has led some Italian regions to set out guidelines supporting the use of certified food products. Organic produce is the main category of certified products prioritized for school meals, but local specialties and integrated food production are also included. Hence, the proportion of organic food used in Italian school meals has reached a very high level - of up to 40% organic food.

Finland has an excellent school meal system, with complete meals served daily to all pupils up to 18 years and no user payment. The system is supported by strong public bodies and is highly professional, with menus being nutritionally calculated. There is a high level of trust in regional (Finnish) and conventional food, and the proportion of organic produce

Figure 1:

## Opportunities and constraints for increasing organic consumption in schools



used is low. However, there is an ambitious national sustainability plan that includes the goal of serving sustainable food at least twice per week by 2015. Sustainable food is understood in this context as being organic, vegetarian or seasonal. This public goal might prove to be an efficient tool to increase the currently low share of organic produce in school meals. In Norway and Denmark, the normal school meal is a lunch box supplemented by subscription schemes for drinks (milk, fruit juice) and fruits. In Denmark there is significant interest in developing food serving systems, for instance in Copenhagen where the “EAT school food project” serves a high share of organic food. Many Danish municipalities are working hard to ensure a high share of organic food in public procurement, including school canteens. However, the food serving systems are usually based on user payment, and it is a big challenge to change the eating traditions in schools. The lunch break is usually short, there may be no facilities for eating and a warm meal is not (yet) a part of the school culture.

We assigned rankings (1-5) to the five relevant characteristics influencing organic food consumption in school meals (above). For example, a school food system with “complete meals” gets a

high rank, because these systems provide more food during school hours. The pentagon in figure 1 illustrates the “ideal” situation for increasing organic consumption in school meals. We then overlaid the results for each country against this ideal situation, illustrating the potentials of some countries (e.g. Finland), the achievements of others countries (e.g. Italy) and the challenges facing others (Norway, Denmark, Germany).

### Policy, guidelines, traditions and attitudes

Increasing or introducing organic food into school meal systems requires more than simply replacing conventional ingredients with organic ones. Such a move needs to be supported by a clear political will to prioritize organic food, including support for supply chains to adapt to the needs of school catering. Political goals and municipal guidelines that prioritize the public procurement of organic food have proven very useful in increasing the consumption of organic food. Individual schools generally do not have the capacity or knowledge to implement school meal systems without professional guidance. So, political and administrative support at all levels is one of the most important preconditions. Obstacles, such as a lack of funding, personnel resources, appropriate supply chains and the infra-

structure in schools’ kitchens and dining rooms need highly coordinated efforts to be overcome. School food systems are complex and involve many actors and stakeholders. Communication, cooperation and professionalism are important elements in creating change. People’s values and attitudes are a key factor in promoting organic food

### Learning about organic, healthy and sustainable nutrition

None of the school curricula in the iPOPY countries cover organic food or production methods, although all the countries emphasise that it is important to include sustainability and sustainable development in the school curricula. Organic food could be a valuable topic in teaching about sustainability. Food production and consumption could be described, discussed and experienced, in school gardens, farm visits, home economics (cooking) and school meals. Our research showed that pupils were interested and most positive towards organic food when this topic was integrated within several parts of the school’s activities. Other studies have shown that schools with a dedicated food and nutrition policy that aim to serve healthy food and establish healthy habits (e.g. encouraging physical activities), were also more positive in their attitude towards the inclusion of organic food in their meals. This suggests that healthy, sustainable and organic food all pull in the same direction and are mutually complementary. ■