

## Summary

An unhealthy diet is one of the major risk factors for the chronic diseases that account for the largest share of the burden of disease in Sweden. It is therefore important that children establish healthy dietary habits at a young age. School meals, which in Sweden are provided for free to all children regardless of their parent's income, can play a large roll in this.

This report is based on data that was registered by schools using the tool SkolmatSverige [School Food Sweden]. This web-based tool, which has been available for all primary schools since the spring of 2012, helps schools to evaluate school meal quality in each of six domains; food choice and provision, nutritional adequacy, safe and hygienic food, service and the pedagogic lunch, environmental impact, as well as organisation and policy.

The data was registered between August 2013 and July 2014. It comes from 624 primary schools (approximately 13 per cent of all schools that school year) in 126 (of 290) municipalities. The schools that used the tool that year differed however from all schools: they were more often larger, municipally run, from the Eastern region of Sweden and from municipalities with or near cities and large towns than schools in general. (We have previously published a similar national survey with data registered from 560 schools during the 2012/13 school year, and the characteristics of these schools was comparable.)

### Improvements

The biggest improvements seen between the school year 2012/2013 and 2013/2014 was in the area of nutritional quality, which improved significantly. The reasons are likely a combination of many developments, including increased awareness of the school law introduced in 2011 requiring school lunches to be nutritious, updated national guidelines for school meals which came in 2013, large-scale efforts to educate school meal staff on the new law, and diverse projects that have been run in recent years. In addition to these, we can see that schools who used SkolmatSverige's tool (which includes an evaluation phase followed by automatic feedback) improved their nutritional quality significantly. When a school had used the tool once, the likelihood that the school's subsequent answers were in line with nutritional recommendations was more than twice as high. In addition to improving their own results, schools that used the tool on a subsequent occasion also met the nutritional requirements to a greater degree than schools that had used it only once.

While the development is of course positive, nutritional quality is just one aspect of a good school meal. Other important aspects that the tool covers are service and the pedagogic lunch, environmental impact and organisation and policy. As with previous years, fewer schools chose to evaluate these areas and the results do not differ much from the previous survey (2012/13).

A brief summary of each of the domains follows:

**Choice** In the majority of schools (61 %) children had at least two main dishes to choose from daily, and in approximately half of the schools (56 %) a vegetarian main dish was offered to all (not just vegetarians) 4-5 days of the week. Both of these have increased significantly since the previous survey (2012/13). Very many schools followed the guideline about not serving sweet drinks or cakes/biscuits at lunch, as well as offering a good salad buffet daily. Other meals such as breakfast and snacks were commonly served, in seven and nine out of ten schools, respectively. Only three of ten schools had a cafeteria/tuck shop but it was common that the choice often included sweetened or salty products.

**Nutritional adequacy** More than twice as many schools reached School Food Sweden's nutritional standards compared to the year before (2012/13). The instrument judges if the menu served during the previous four weeks is likely to reach the Nordic Nutritional

Recommendations for four nutrients (fibre, iron, vitamin D and fat quality) of importance in the diets of Swedish children. The recommendations for iron and fibre were met by a clear majority of schools whereas fewer met vitamin D and fat quality. The number reaching vitamin D and fat quality had however increased significantly since the previous survey.

**Safe food/special dietary requirements** Almost all schools had clear routines for ensuring that the food served was safe. Special dietary requirements for medical reasons were very common and many schools had good routines for handling these. In one out of five schools however not all the staff whose responsibility included special diets had received the recommended training in this, and some schools lacked routines for following up and rectifying problems with any incidents that might arise (15 %), or for the reporting of incidents (12 %). Two out of five schools lacked routines to encourage children to wash their hands before eating lunch.

**Service and the pedagogic lunch** The majority of schools scheduled lunches so that each child's lunch break started at approximately the same time every day and was at least 25 minutes long. The guideline to not serve lunch before 11 am was followed by one in three schools. Approximately half of the schools reported that noise-reduction measures were not needed in the school restaurant/dining hall. Four out of ten said they surveyed what children thought about the school meals with the help of a questionnaire. Few schools integrated school meals into the school day by involving the kitchen and its staff in pedagogical activities. Nine out of ten schools had "pedagogical lunches" and three out of four schools had clear guidelines for what this encompassed.

**Environmental impact** Over a third of schools had a written policy for how food waste should be reduced and three out of five measured production waste and/or plate waste. Two-thirds of schools said that all fish served came from sustainable stocks (MSC- or KRAV-certified [Swedish equivalent]). The foods that were most likely to be organic were milk, flour, eggs, minced beef and butter.

**Organisation and policy** Four out of five schools had a kitchen manager. This was most likely to be a woman, and the majority had a vocational training in the field of catering. Just over half of the schools had a written policy for school meals. Approximately half of the schools measured uptake and/or consumption of lunch daily but one third never did this.

In summary, we can conclude that nutritional quality has improved but that school meal quality could be also improved in the other domains. One of the aims of School Food Sweden is to help schools with their tasks of quality assurance and continual development and we hope that more schools will discover the benefits of evaluating and prioritising the other quality domains. After all, the improvements in nutritional quality seen are based on the menu or the planned food. It is equally important that efforts are made to encourage the children to eat the school meal as intended.

There are many stakeholders who influence and who are themselves affected by school meals: decision makers, school managers, municipal catering managers, school meal staff, teachers, parents and children, and all of these must be involved in the discourse somehow. Our hope is that the data that School Food Sweden generates is used at national, local and school level as the basis for identifying areas of priority that can lead to sound decisions and policies for good school meals.