



The role of physical structures in implementing the Norwegian guidelines for healthy school meals

Asle Holthe^{a,*}, Torill Larsen^b, Oddrun Samdal^c

^a Faculty of Education, Bergen University College, 5096 Bergen, Norway

^b Betanien Deaconal University College, 5045 Fyllingsdalen, Norway

^c Research Centre for Health Promotion, Faculty of Psychology, University of Bergen, 5020 Bergen, Norway

ARTICLE INFO

Article history:

Received 22 April 2009

Received in revised form

4 September 2009

Accepted 4 September 2009

Keywords:

Policy adoption

Implementation

Physical structures

School meals

Case study

ABSTRACT

Drawing on a multiple case design, this study examines the role of physical structures in the implementation of national guidelines for healthy school meals at three Norwegian schools. Findings suggest that the degree of implementation of the guidelines was influenced by types of consumer product, facilities in buildings and regulation of access to neighbourhood facilities. Further, lack of adequate canteen facilities influenced the selection of food on offer, food safety and capacity. Students seeking an alternative to the traditional packed lunch were generally forced to eat their lunch away from the school.

© 2009 Elsevier Ltd. All rights reserved.

Background

Because children and adolescents eat at least one of their daily meals at school, school meals represent a considerable part of their overall diet. Facilitating healthy food and beverages in schools is therefore important (Norwegian Ministries, 2007). School-based interventions that effectively promote healthy eating have the potential to improve students' diet quality and thus prevent them from becoming overweight (Veugelers and Fitzgerald, 2005). Furthermore, healthy eating may enhance academic performance (Story et al., 2006). A review study found that breakfast consumption may improve cognitive function related to memory, test grades and school attendance (Ramperaud et al., 2005). Moreover, dietary adequacy and variety are identified as specific aspects of diet quality important to academic performance, and this emphasizes the importance of nutrition not only at breakfast but throughout the day (Florence et al., 2008).

International organizations have therefore encouraged governments to adopt policies that support healthy eating at school and limit the availability of products high in salt, sugar and fats (World Health Organization, 2002). When the Norwegian government developed a national policy for healthy eating at school in 2001,

they built on the Norwegian tradition for school lunches whereby students in elementary and secondary schools bring their own lunch (usually sandwiches) to school and most schools provide only milk and yoghurt through a subscription scheme. Traditionally Norwegian schools have focused on healthy eating through the national curriculum and by promoting national campaigns that address families' responsibility for packed lunches. The national guidelines may be seen as a policy shift in response to the aims of the "new" public health movement, which seeks to reduce health risk in everyday life by promoting the individual internalization of health-related behaviours by making environmental changes that stimulate desired behaviours (Brown and Duncan, 2002; Collins et al., 2006). According to Brown and Duncan (2002) such public health guidelines represent new forms of governance, regulation and social control of how individuals should conduct their lives. The school is a place with structures and systems that provide opportunities for integration of new knowledge and skills into the curriculum (Collins et al., 2006). However, implementing national guidelines for healthy school meals may involve changing the physical structures at schools rather than the curriculum.

At the time of the policy's introduction, few primary or secondary schools had canteens. Under the new policy, however, secondary schools are encouraged to have canteens (The Norwegian Directorate for Health and Social Affairs, 2005). The guidelines address schools' responsibility to ensure sufficient time for and supervision of school meals. Further, the guidelines encourage

* Corresponding author. Tel.: +47 55 58 78 45; fax: +47 55 58 58 09.

E-mail addresses: Asle.Holthe@hib.no (A. Holthe), Torill.Larsen@Betanien.no (T. Larsen), Oddrun.Samdal@psyhp.uib.no (O. Samdal).

schools to offer fruit, vegetables, low-fat milk and sandwiches for purchase by those who do not bring a packed lunch, and to ensure the availability of cold drinking water, and discourage schools from offering carbonated drinks, diluted juices, crisps, sweets, cakes and buns on a daily basis. Previous research has identified that environmental factors are highly influential on the impact of interventions aiming at promoting healthy eating in schools (Story et al., 2006; Sallis and Glanz, 2006; Cohen et al., 2000). The fact that Norwegian schools have no or a very short history of offering food to students through canteens may therefore limit the possibility of implementing the national guidelines for school meals. The aim of this paper is therefore to examine how the physical structures in schools have influenced implementation of Norwegian national guidelines for healthy school meals.

The role of the environment for healthy eating in school

Ecological models for healthy behaviour view behaviour as being affected by and affecting the environment (McLeroy et al., 1988; Sallis and Owen, 2002), and interventions that manipulate physical structures for healthy meals at schools may positively influence healthy eating among students (Brown and Duncan, 2002; Wechsler et al., 2000). Physical structures refer to the physical characteristics of structures or products (Cohen et al., 2000) that inherently either reduce or increase opportunities for healthy eating at school, and include consumer products, buildings and the physical layout of neighbourhoods.

Consumer products such as food and beverages offered at schools may increase opportunities for healthy eating by ensuring students have easy access to healthy foods, and by limiting the availability of unhealthy foods at school (Nordic Council of Ministers, 2006; Wechsler et al., 2000; Bere et al., 2005). The Norwegian guidelines for healthy school meals focus on nutrition quality, as they encourage schools to offer healthy foods and discourage the provision of unhealthy food. However, food and beverages can also be brought from home or purchased outside school for consumption at school, and the national guidelines do not include recommendations for these circumstances.

Individuals and groups using buildings on a daily basis are affected by the buildings in various ways, such as the availability of space for different functions, relationships among spaces, aesthetics and symbolism (Zimring et al., 2005) and by the school's regulatory power (Collins et al., 2006). Traditionally, Norwegian students have eaten their lunches in their classroom, and there has been no space for a canteen. However, changes to physical features in a school such as establishing a canteen, and changes in school regulations such as allowing students to be indoors during breaks, may result in a less-structured pattern of movement and a wider range of activities, and thus change the demand for food and beverages at school.

The national guidelines address schools, not the nutrition environment in the neighbourhood. In the community nutrition environment, stores and restaurants are the most frequent food outlets. Convenience foods and restaurant meals are typically higher in energy and fat and lower in valuable nutrients than meals prepared at home (Glanz et al., 2005). Collins et al. (2006) claim that schools have the ability to influence off-site behaviour, and thus schools are spaces of regulation where the concerns of health and neighbourhood are linked. Schools may influence students' diet by imparting healthy messages and encouraging healthy eating, or by their regulatory power. Previous research suggests that students at schools with an open-campus policy were more likely to eat lunch at a fast-food restaurant or convenience store than students at schools with closed-campus policies (Neumark-Sztainer et al., 2005). Students were also less

likely to consume soft drinks at school in those schools located further away from shops selling soft drinks or where school regulations prohibited sale and consumption of soft drinks and candy (Bere et al., 2008).

In the present study we draw on the work of Cohen et al. (2000) to investigate how physical structures represented by (i) type of consumer products, (ii) availability of facilities in buildings, and (iii) access to neighbourhood facilities have contributed to the availability of food and beverages in accordance with the national guidelines for healthy school meals. The current study was part of a larger evaluation of the Norwegian nationwide project *Physical activity and healthy school meals*.

Methods

Design and selection criteria

The study design is based on multiple case studies. Due to the exploratory nature of the study, case studies constitute an appropriate methodology (Yin, 2003). Moreover, qualitative case studies allow the study of phenomena in their context. The sample consists of three schools selected from 183 project schools, of which 31 project schools were secondary schools, participating in the national project *Physical activity and healthy school meals* (for a complete description of the sample see Haug et al., 2008). Previous research has indicated that the proportion of students bringing their own lunch to school decreases when students transfer from primary to secondary schools (Øverby and Andersen, 2002), and smaller schools tend to participate more often than larger schools in the Norwegian fruit subscription scheme (Bere et al., 2005). Therefore, the case schools were selected from a sample of secondary schools (grades 8–10) with at least 250 students.

Other selection criteria were: (i) inclusion of the project in the school's policy plan, as previous research has suggested that formalizing an initiative as a common strategy in the school's policy plan can have a positive effect on teachers' motivation and commitment to implementation (Fullan and Huberman, 1992; Huberman and Miles, 1984; Larsen and Samdal, 2007); (ii) the presence of a project group, as previous research has found that involvement of stakeholders in the implementation is likely to increase their motivation and ownership (Fullan and Huberman, 1992; Durlak and DuPre, 2008); and (iii) barriers to healthy school meals reported in a baseline survey, because environmental conditions may act as barriers to health promotion behaviour (Green and Kreuter, 2005). Three schools met these criteria, and they all agreed to participate in the case study. The study was approved as being in accordance with the requirements of the Privacy Ombudsman for Research at the Norwegian Social Science Services. All participants were given written information about the case study and informed about their rights as participants before the interviews. All participants gave their consent to participate in the study and for the interviews to be audiotaped.

Presenting the cases

The three case schools are presented below. To ensure anonymity of schools student numbers and population sizes are provided as intervals.

School A, with 351–400 students, is located in a town with a population of 50–100,000. The school's implementation intentions were to establish and run a canteen supplying simple healthy food 3 days a week, and to increase the length of the lunch break to 45 min. During implementation, the school established a canteen

Download English Version:

<https://daneshyari.com/en/article/1048679>

Download Persian Version:

<https://daneshyari.com/article/1048679>

[Daneshyari.com](https://daneshyari.com)