
Flensburg, 14th October 2003

Strasbourg: 20th and 21st November 2003

The European forum on eating at school – making healthy choices

Ines Heindl: Is there a healthy school meal? (Talk)

Introduction

The title of my talk, given by the organizers, was an almost overwhelming task. The form of the question is reminiscent of the other tricky one: "Is there a God?" If the answer to the question in the title of my paper was "yes", I could give you the recipe and we could all go home now. But as there are several possibilities of looking at it, I shall try to give an answer by applying various criteria in order to evaluate a number of different concepts of food and eating systems that are already in existence at our schools.

Nutrition education and its importance

Nutrition – what people eat – is known to be one of the key factors influencing health. If people eat healthily, they can avoid many preventable diseases and can live longer lives with fewer illnesses. Many European countries have attempted to introduce campaigns for healthier eating, and there is widespread concern about the trend towards a fast-food culture in which traditional styles of eating and cooking are declining (Dixey et al. 1999).

Whereas health professionals can clearly see the relationship between diet and health, most people`s diet and food preferences are determined more by social, economic, climatic and geographical factors and by religion and customs than by concern for health. In Europe`s rich cultural diversity food and eating are powerful expressions of cultural and social identity, and this is a factor that must be taken into account in any attempt to encourage people to eat healthily. Even in Europe many people do not have enough money to provide themselves and their families with a healthy diet. Nutrition education, therefore, needs to consider all these issues, including the cultural and financial ones (Dixey et al. 1999).

In order to be effective, nutrition education must

- be personally relevant;
- be clearly understandable;
- use food and meals rather than nutrients as a conceptual basis;
- be consistent in its dietary messages;
- take into account people`s perception of relative risks;

- emphasize the benefits of change;
- address the barriers of making dietary changes.

Nutrition and health for young people

Main health problems for adults in the European Union are obesity, cardiovascular diseases and cancer. The Kiel Obesity Prevention Study (KOPS), one of the most important research projects in Germany, which started in 1996 and will end 2009, is looking at obesity in childhood. First results clearly reveal the following facts (Müller et al. 2001; Müller 2002; Danielzik 2003):

- Compared to results of 1978, 23% of the 5 to 7-year-old children and 40% of the 9 to 11-year-old children are overweight.
- Those children are more often found in families with obese parents, low income and a low social status (school-leaving certificates of their parents). Obese children try to avoid physical activities more often than other children.
- Children with low interest in physical activities from families with a low social status spend more time in front of television, videos, computers and tend to prefer fast food, snacks, cheap, fat sausages, sweets, fizzy drinks etc. Beyond this there is no general connection between the quality of nutrition and obesity.
- The organisers of Kiel Prevention Study are not satisfied with simply presenting these new research data. Professor Müller and his team also offer support programmes to schools and families and evaluate acceptance and efficacy. After 5 years of intervention there are obvious signs of success in the schools concerned, but families with obese children seem to take only marginal interest in this project. Just 20% of all the parents the Kiel project tried to get involved are participating and willing to cooperate.

According to Professor Müller and the WHO, obesity starting in childhood is – at present – the most urgent health problem (“obesity epidemic”). Prevention programmes seem to highlight the fact that interventions may have an influence on the incidence of obesity, but not on its persistence. It has, moreover, become evident that the crisis of our health system is an unrecognised crisis of our education system.

Germany after PISA

The health and nutrition problems in Germany can be connected to the changing situation in schools after PISA. The Germans fairly quickly responded to the bad results compared to other European countries, mainly Finland, as part of the PISA-Study. Not only schools but also parents were made responsible for the lack of education, missing support of children to develop strategies for life-long learning. The German school system is, by and large, one of half-time schools, which is now supposed to be turned into one of all-day schools. The German federal government offers an investment programme with a target of 10.000 all-day schools. At first glance the new concepts seem to be considering everything for better learning conditions. The facilities for healthy meals in all-day schools, however, are often considered to be purely organisational problems, a view taken by school authorities and sometimes by heads, too. Financial considerations are prevalent, and it is often the cheapest offers from caterers that are accepted.

Even at the time of the predominantly half-day school system in Germany it did not seem legitimate to adopt the view that the school was responsible only for feeding childrens` minds, or put differently: German schools only provided food for thought. Young people and teachers who stay and work at school all day long can expect ideas and concepts that include both mind and body as well as social and cultural issues. School-related projects on Health Promotion (European Network of Health Promoting Schools) all around Europe are already in existence: so nobody has to start from scratch.

The school-based nutrition education guide “Healthy eating for young people in Europe“ (Dixey et al. 1999) consists of a planned and sequential core curriculum. What is offered to children, either within the classroom or as part of the whole school experience, needs to be planned and coordinated appropriate to their developmental stages. This is a sound educational principle, but health education and nutrition education are often not coordinated across school. The idea of a spiral curriculum, as part of the guide, involves repeating and extending the work on a topic in a dialectical fashion as children develop.

A health- promoting school concerned with nutrition education would be expected to (Stockley 1993):

- have nutrition teaching that is provided by adequate resources;
- develop a statement of policy about nutrition education;
- focus on enjoyment of food;
- promote training for staff – teachers, caterers and cleaners – in healthy eating;
- provide comfortable surroundings in which children and staff can enjoy eating;
- enable healthy choices if food is provided at the school;
- involve parents and the wider community;
- be explicitly concerned that no child is hungry while at school and that poor nutrition does not affect learning;
- coordinate all aspects of nutrition education to ensure efficient use of resources and to minimize contradictory messages;
- ensure that all staff are committed to the goals of the health-promoting school and be explicitly concerned about the health and wellbeing of both pupils and staff.

The Netherlands, Portugal and Spain have implemented this guide through materials and policies. Since legislation and administration in the field of education predominantly fall within the purview of the individual German states, the process of implementation takes longer, but a promising start has been made (Heindl 2003).

“Meals at school should be balanced in nutrients”

Demands for wholesome meals at school led to recommendations for rules and regulations in Germany, but not every local government has transformed them yet into policies. Lower Saxony and Saxony-Anhalt have implemented specific regulations, North Rhine-Westphalia formulated recommendations on brakes and meals at schools, as a right for pupils and staff.

The German Society of Nutrition (DGE) set up a working group of experts on nutrition in schools, with specific instructions to focus on eating times, food and nutrition quality at school. Two recent publications on nutrition in all-day schools demonstrate the urgency (Heseker et al. 2003a,b) of supporting recommendations.

The expert group distinguishes between different catering systems, as there are:

- Freshly prepared meals by a kitchen staff at school, responsibility of different authorities (also parent organizations);
- Distribution system (preparation of meals in an external kitchen);
- Processing or regeneration system (i.e. Cook and Chill-Food);
- A mixture of different systems (i.e. externally pre-prepared main courses completed by salads and deserts at school);
- Extended food choices at kiosks;
- Fast food systems (i.e. fast food restaurants supply meals);
- Cold meals systems.

Furthermore the expert group comments on these different systems to make it possible for schools to make informed decisions. As might have been expected, freshly prepared food at school has all the advantages of a wholesome meal, because of its sensual, nutritional and social values: Attractive meals within attractive surroundings, flexible response to the wishes of the customers, no restriction on the choice of food for those who prepare the meals, daily communication between kitchen staff, teachers and pupils. But it is also known that quality is not the only factor one has to take into account, and often there seem to be economic reasons against freshly prepared food in schools. Carefully prepared fresh food also needs a qualified kitchen staff. When comparing the different possible catering systems, acceptable compromises between hot and cold meals should be made on the basis of demands for the physical, mental, intellectual and social efficiency of pupils, teachers and other members of staff. The criteria for these demands are:

- Sensual quality: smell, taste, consistency, colour etc. of meals;
- Nutritional quality: ratio of nutrients for a wholesome and healthy nutrition ;
- Learning processes: positively affected by wholesome food;
- Messages: compatibility with both classroom and general school issues;
- Decision making: promoting healthy choices when considering different offers;
- Eating atmosphere: enjoyable meals, pleasant eating places;
- Participation: influence on the catering system by the customers.

Aesthetic and cultural issues of a healthy school meal

Young children can learn to enjoy almost every food, hot and spicy food, bland healthy food, fast food, depending on what people around them eat (Schlosser 2002). The different cultures of the world support the view that meals that are supposed to set the standards have to be sensually attractive to children and should be enjoyed in a positive atmosphere. The human sense of smell is still not fully understood and can greatly be affected by psychological factors and expectations. The colour of food can determine the perception of its taste. The mind filters out the overwhelming majority of aromas that surround us, focusing intently on some, ignoring others. People can get accustomed to bad smells or good smells. A smell can suddenly evoke a long forgotten moment. The flavours of childhood food seem to leave an indelible mark, and adults often return to them, sometimes without knowing why. These “comfort foods” become a source of pleasure and reassurance (Hirschfelder 2001), a fact fast food chains work hard to promote.

Childhood memories of “Happy Meals” can translate into a chance for parents and school catering. Why not try to learn from fast food restaurants? Their success is mainly built on

product binding through flavour, typical combination of foods in an unconventional atmosphere and added values (toys, games etc.). Kindergarten children and primary school kids in particular want to know what their meals consist of, and they take a keen interest in foods, smells, tastes and consistencies. Sensual education through food and meals at school would create those happy memories in a socially positive atmosphere.

Bibliography and further reading

Danielzik, S. (2003). Epidemiologie von Übergewicht und Adipositas bei Kindern in Kiel: Daten der ersten Querschnittuntersuchung der Kieler Adipositas-Präventionsstudie (Kiel Obesity Prevention Study). Universität Kiel: Dissertation

Dixey, R., I. Heindl, I. Loureiro, C. Pérez-Rodrigo, J. Snel und Petra Warnking (1999) : Healthy eating for young people in Europe – a school-based nutrition education guide. WHO

Heindl, Ines (2003): Studienbuch Ernährungsbildung – Ein europäisches Konzept zur schulischen Gesundheitsförderung (Study book Nutrition Education – a European concept of Health Promotion at school). Bad Heilbrunn: Klinkhardt Verlag

Heseker, H., S. Beer, K. Schlegel-Matthies, I. Heindl und B. Methfessel (2003a): Ernährung in der Ganztagschule. Teil 1: Notwendigkeit und Problematik von Schulverpflegung. In: Ernährungsumschau 50 (3), Seite B9-12

Heseker, H., S. Beer, K. Schlegel-Matthies, I. Heindl und B. Methfessel (2003b): Ernährung in der Ganztagschule. Teil 2: Institutionalisierung und Möglichkeiten von Schulverpflegung. In: Ernährungsumschau 50 (4), Seite B13-16

Hirschfelder, G. (2001): Europäische Esskultur – Geschichte der Ernährung von der Steinzeit bis heute. Frankfurt: Campus Verlag

Müller, M.J., M. Mast und K. Langnäse (2001): Werden wir eine Gesellschaft der Dicken? Münchner Medizinische Wochenschrift 28, Seite 863-867

Müller, J. (2002): Wie erfolgreich ist Ernährungserziehung im Vor- und Grundschulalter? Tagungsband zum 5. aid-Forum. aid Special, Seite 27-28

Murcott, A. (2003): Food and Culture. In: P.S. Belton and T. Belton (Eds.) (2003): Food, Science and Society – Exploring the gap between expert advice and individual behaviour. Berlin: Springer Verlag, Seite 21-53

Schlosser, E. (2002): Fast Food Nation – the dark side of the all-american meal. New York: Perennial edition

Stockley, L. (1993): The promotion of healthier eating: a basis for action. London: Health Education Authority
