

Breakfast clubs and school fruit schemes

Key messages

- Poor diet in childhood is associated with poor child and adult health.
- Missing breakfast may have adverse health effects in the long term, and adverse educational and social effects in the short term.
- Eating breakfast has been associated with improved academic outcomes, improved concentration, increased school attendance, decreased school lateness and improved mood at school.
- Breakfast schemes can provide a safe place for children to meet their friends before school.

Introduction

Breakfast clubs and fruit schemes are designed to provide free or subsidised healthy food through school-based initiatives. Breakfast clubs run before school and usually incorporate a child-care element. Fruit schemes provide fresh fruit daily in school to targeted groups of children in class or at playtime, or for all children through fruit tuck shops.

Children's diets may also be supplemented through the distribution of milk to primary school children, or the provision of nutritionally sound school meals.

Providers of breakfast clubs may choose to focus on nutritional, educational, social and/or child-care needs of the participating children. In this *Highlight*, however, the main focus is on breakfast clubs' potential benefits to children's nutrition.

Why are breakfast clubs and fruit schemes important?

Both obesity and nutrient deficiency have been identified as problems amongst children in the UK.¹ Children's food intake has been found to be high in fats and sugars and low in fruit and vegetables.^{2,3} In a survey of 10 and 11 year olds 5 per cent reported having no breakfast that day, 3 per cent just a drink, and a further 9-13 per cent just crisps or chocolates. Breakfast skipping has been known to increase in teenage years, particularly among girls as a result of dieting and dissatisfaction with body shape or weight.^{4,5,6} One survey found that 21 per cent of 15 and 16 year old girls reported eating no breakfast, a further 19 per cent just a drink and 15 per cent having no lunch the day before.⁴ Other studies have found that up to 60 per cent of girls in the age group 11-18 years report themselves to be on "slimming diets".⁶

The negative impact of missing breakfast has been well established in adults^{7,8} and short-term fasting is reported to affect cognition, memory, concentration and behaviour in school.^{9,10}

Diet-related disease patterns may be set in childhood or before⁹ and healthy eating in childhood may protect against adult heart disease.¹¹ Surveys have found that dietary deficiencies show a social class gradient. The lowest income households consume less fresh fruit and vegetables, skimmed milk, fish, fruit juices and breakfast cereals than all-household averages.¹² This is thought to result from less access to cheap quality food in poorer areas. Families with children and households with lower incomes spend a greater proportion of their income on food than the better off.^{12,13} Interventions that relieve food poverty have the potential to reduce inequalities in diet and expenditure among the poorest families.¹¹

Benefits of breakfast clubs

During 1999/2000, 253 breakfast clubs were allocated funding under the Department of Health pilot scheme.¹⁴ The evaluation reported on average 6 per cent of the secondary pupils were using a scheme and children of working or studying parents were more likely to attend, as were children of parents reporting emotional stress and children with social or behavioural difficulties.¹⁴

There is a body of evidence supporting the importance of breakfast in the diet of children in the developed world.^{5,10,15,16} A review of the results of 16 studies examining breakfast fasting and cognition found that missing breakfast is associated with poor performance on memory tasks. The review included studies from around the world and concluded that breakfast schemes were associated with better school attendance and performance.¹⁰ The strength of the

effect is, however, uncertain as some studies have found improvements in well-nourished children^{17,18} while others have not.^{19,20} Also, areas where school attendance is very low may overestimate the attendance effects of providing breakfast in areas where most children routinely attend school. Much of the research has concentrated on children in the age group 9-12, but in developed countries it may be that adolescents are most at risk of voluntarily skipping breakfast.⁵

In a UK pilot evaluation of breakfast clubs, teachers associated improvements with the initiative.¹⁴ Participants found that the schemes accommodated social settings and thereby improved relationships between staff and pupils, and across age groups.^{14,21} Increased self-esteem and sense of independence were also widely reported. Fruit was often given out in class in the format of "circle time" when children had the chance to sit together and talk as a group.²¹ Parents identified breakfast clubs as a safe source of childcare, and felt that attending breakfast clubs improved their morning routines and provided children with extra choice of food items.²² Schools reported that children were happy to eat the fruit provided and did not find the organisation of distribution to be overburdensome.²¹

The social aspect of a breakfast club may encourage teenage girls to eat breakfast as an Australian study of adolescents found that those who ate with others were less likely to miss meals.⁵

Policy and practice implications

If food supplementation schemes are to reduce health inequalities they need to reach out to those in greatest need. Some UK clubs have managed to attract children from disadvantaged backgrounds without stigmatising the children. Success has been attributed to an inclusive approach and hard work on the part of teaching staff, parent volunteers and other service providers to ensure that 'joining the club' (as opposed to 'attending a school-based service') was seen as a positive choice for those attending and their families.^{14,22}

The low uptake of free school meals in the UK is thought to be partly caused by stigma associated with targeting.²³ Factors affecting attendance can vary between age groups and children who are voluntarily missing meals may be more difficult to reach.⁵ Examples of good practice have been reported in this area.^{14,22,24} In the US where free provision for all is available in some areas, payment is thought to be a barrier to use.¹⁴ UK pilot schemes have been divided on whether this increases or decreases uptake.²⁵ Concern has been raised by providers about the sustainability of universal free provision,¹⁴ but when charges were introduced parents reported this as a barrier.²²

In the past, some clubs have felt that pursuing a strong healthy eating message from the outset could discourage children from accessing the club. Sometimes, when promoting the club, the social or care aspect has been emphasised, rather than potential benefits from healthy food.²²

Cost-benefit of breakfast clubs

Improving diet by improving health may result in a net cost saving to government. A US study of food supplementation for pregnant mothers on low incomes tracked infant health in the first 60 days of life. Overall more money was saved in health expenditure than was spent during the mother's pregnancy.^{26,27} However, evidence of cost benefit is rare since improvements are unlikely to occur short-term.

Some studies have found that because resource benefits tend to be used in addition to existing home budgets, they are more effective at achieving outcomes for children than cash-in-hand.²⁶ This 'additional' benefit may be less valuable where a free meal is a substitute for home provision,²⁸ but larger if there is little or no home provision (for example, fruit schemes).

Setting up breakfast clubs

Attention to food storage, waste disposal, insurance issues and number of support staff is important in order to meet government regulations.²⁹ Most breakfast schemes are run by out-of-school children's clubs and funding costs vary widely.³⁰ The free provision schemes piloted by the Department of Health received an average grant of £2,500 for the school year 1999/2000, but this is probably an underestimate as many clubs obtained additional funding elsewhere.¹⁴ Estimates from the national evaluation of breakfast clubs found that the average cost of implementing and providing a club was £9,494 over two school years for a club based in a primary school and £9,728 over two school years for a club based in a secondary school.³¹

Education Action Zones (EAZ), Health Action Zones (HAZ) and Healthy Schools programmes have all been involved in the development of breakfast schemes. Securing funding for schemes has been found to be time consuming and a disincentive to running clubs.^{14,25}

Costs per pupil are likely to be higher in small schools because of economies of scale. While volunteers keep costs low, training is an issue when ensuring quality of care.^{14,22} The use of a play-worker may be important, since keeping children occupied once breakfast is over has been an important issue in UK pilot studies.^{14,32}

The National School Fruit Scheme (NSFS) aims to provide a free piece of fruit for all children in infants' schools (aged 4-6 years) by 2004.³³ In pilot schemes, this fruit has been predominantly distributed directly to children in class. There has also been a growth in subsidised fruit tuck shops for older children. Combining these schemes, and/or breakfast schemes could be an efficient method for delivering food to the whole school population.

A breakfast club can be evaluated by observing changes before and after the scheme, preferably compared with another school not providing a scheme.³⁴ Absence, lateness, meal skipping, concentration in lessons or school results can be assessed. The views of the parents and children involved are important including the reasons why children, schools or parents use, or do not use, the scheme.

Conclusion

There is evidence that the diet of British school children is inadequate, with insufficient consumption of fresh fruit, vegetables or dietary fibre. Breakfast-skipping is a common problem, particularly in adolescent girls. Poor diet is associated with poor health in childhood and beyond. More immediately, being hungry is unpleasant, and being poorly nourished is likely to affect school achievement.

Breakfast can play an important role in reducing dietary deficiencies, and breakfast schemes may improve school outcomes. Providing a nutritious breakfast for children or supplementing their daily diet with fruit are interventions which are not yet proven in the UK, but they have the potential to make a significant impact on children's health and well-being.

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Further Resources

Set up, evaluation and funding: <http://www.breakfast-club.co.uk/> or Tel 020 8709 9900.

Evaluation: <http://www.breakfastclubs.net/>

Department of Health <http://www.doh.gov.uk>

New Policy Institute <http://www.npi.org.uk> Tel 020 7721 8421

Sustained Food and Farming Alliance (promotes the Grab 5! programme which provide ideas for schools to increase fruit and vegetable consumption) http://www.sustainweb.org/grab5_index.shtm

Child Poverty Action Group <http://www.cpag.org.uk> Tel 020 7837 7979

School Nutrition Action Groups

<http://www.healthedtrust.com/pages/snag.htm> or Health Education Trust, 18 High Street, Broom, Alcester, Warwickshire B50 4HJ

British Dietetic Association (Gimme5 campaign to increase consumption of fruit and vegetables) <http://www.bda.uk.com/faw01.html> Tel 0121 200 8080

Kids' Clubs Network <http://www.kidsclubs.co.uk/> Tel 020 7512 2100

This Highlight has been produced from What Works for Children's evidence nugget on breakfast clubs and fruit schemes, which is a longer, more detailed document, available at www.whatworksforchildren.org.uk

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