Sticky Fingers

Alex Maggs describes the development of her company, a mobile children's cookery school, and the enthusiasm of the children from as young as twenty months up to eighteen year olds.

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S ticky Fingers does what it says on the tin. The combination of children and food is enough to worry even the bravest amongst us. It is certainly not a recipe most teachers find themselves looking forward to.

I have a company called Sticky Fingers, a mobile children's cookery school, which I set up about 2 years ago. I was working as a carer with two young children, and was perturbed by the fact that although I lived in a rural area, the children I worked with had very little interest or understanding of food. Although they were interested in tractors and cows, they did not make the connection between those things and the food that eventually ended up on their plates.

Primary and secondary schools

I started doing local cookery lessons in village halls, and from there have moved into working with primary and secondary schools, and other clients such as Surestart, local youth organizations and with children with special needs and behavioral problems.

What I have found, that runs across the board, is a massive enthusiasm from the children. I have yet to meet a child who decides that cooking and food is boring. By taming their impulse to make a mess (nothing beats a 'cleanest workstation' competition with a small prize to make sure that as little as possible gets spilt) and organizing recipes into workable stages, I

Decline in cookery teaching gives cause for concern

A study in 2001 in the UK revealed that parents, who play an important role in teaching their children to cook, were teaching their children in less depth - which was likely to lead to a generation who are less confident and competent in the kitchen. Of respondents who had children old enough to cook, 53% said their children are taught at home, but only 13% said they are taught 'a great deal'. This compares to 28% who said they were taught 'a great deal' by their parents.

The study also showed that schools play only a small role in teaching children to cook, with just 29% saying their child's school teaches their

have managed to cook with children from as young as 20 months up to those leaving school for university.

Food in the classroom

I also take part in Inset days for teachers and have been involved in the Food In Schools organization, doing practical demonstrations on how to bring more food into the classroom. Again I have found enthusiasm, many teachers are very keen to bring more food education into their classrooms, but are unsure of how to do that safely and practically.

Common problems

Some of the common problems seem to be making time for cooking, financial and curriculum constraints and a lack of good recipes. My answer to that is: make sure the recipes are quick (most of my recipes take 10 minutes to make and 20 minutes to cook) spend time developing relationships with local producers who are often very enthusiastic about their product and more than willing to make food donations and offer free tours. Finally fit cooking in across the curriculum where you can, using it to illustrate history, science, literature or geography. What is important is that children get hands on experience of real food.

Food and community

My intention is not to produce a work continues!

generation of 'mini-chefs' and I do not want to put children in white coats and tall hats and teach them to create complicated food. I want children to understand why food is important to them and to their community, and the role it has played in the development of our country. I want them to understand that they must take responsibility for what they put in their bodies, and that what they eat has a direct effect on their behaviour, their concentration and their moods.

Food from the fridge

So often the only experience our children have of cooking is watching their parents unwrap frozen meals, and it would probably sadden you to know that when I ask children where a certain food comes from, they often answer 'the fridge' or 'the supermarket.

Long way to go

I believe that we have a long way to go before we instill in children an appreciation of good food and teach them the skills they need to cook for themselves. However I have seen many good things happening in different schools, from bringing in my after-school cookery clubs and school workshops, to teachers creating vegetable gardens, dinner ladies coming out of the kitchen to talk to children in the classroom, and parents getting involved in running their own cookery clubs. Lets hope the good work continues!

fats and sweets in the 1800s to limiting them following the constraints of the Dietary Guidelines for Americans in the late 1900s.' 'Although "fun" party foods have been presented within the context of nutritious recipes in each time segment, a periphery of cookbooks or sections of cookbooks have focused on high-fat, high-sugar desserts and snacks. "Fun" foods in children's picture books are more likely to be higher in fat, added sugar, and salt. This parallels the dominance of "fun" food snacks sold to the American public... and the emergence of an obesity epidemic among children.'

Hertzler AA. 'Nutrition Trends During 150 Years of Children's Cookbooks', Nutrition Reviews. 2005 Oct;63(10):347-51.

children 'a great deal' or 'a fair amount' about cooking.

However, schools in the North and the Midlands were significantly more likely to teach children about cooking than schools in the South (31% North, 41% Midlands, 12% South). (www.mori.com/polls/2001/nfm13.shtml)

150 years of children's cookbooks

A study, of American cookbooks for children over the last 150 years, suggests they are lacking a modern understanding of health and nutrition and, in some cases, focused on high-fat, high-sugar recipes.

'Many children's cookbooks have followed the nutrition definitions of the era, from promoting

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Young People with health problems their views on how schools can help

 ${f T}$ he Government has identified school as a key setting for reducing health inequalities, but pupils with medical needs are not always supported as well as they would like. Current policies promoting inclusive education means that more children with disabilities and health problems are being educated within mainstream schools. What can teachers do to help such children cope with their condition in order to minimise any impact on their education?

Listening to children and young people who have had experience of a long term health condition can give some clues. This article describes three evidence-based examples of pupils with illness and disability in mainstream school. Their views are discussed in relation to ways in which schools and teachers can contribute to reducing health inequalities. The three examples are:

- · Pupils with disabilities in mainstream schools
- ٠ School children's perceived sources of asthma support
- Website of young people talking about their experiences of cancers

Pupils with disabilities in mainstream schools

A study of 33 children with illnesses and/or disabilities being educated within mainstream secondary schools was carried out as part of a wider research study to assess the impact on school life (Lightfoot, Wright and Sloper, 1999). Interviews carried out with the children showed that, although they had a wide variety of conditions, they had common concerns. One of the most important was absence from school, which could be due to illness, treatment or medical appointments. They were keen to keep absence to a minimum, as pointed out by a 12 year old girl:

" I miss enough of it when I'm really poorly and I just enjoy it when I'm there. So if I've got a bit of headache I don't tell anybody I have off days but I don't' really want to come home."

Many expressed their appreciation of teachers who had helped them to keep up with their education. A variety of ways were highlighted such as sending work home, giving extra work following absence, and having time to explain parts of the curriculum they didn't understand on return to class.

concern to many pupils, for example being excessively tired, or in fear of being knocked over. They felt that teachers could help by being flexible, for example, by allowing the pupil to leave class early in order to safely move around school. The vast majority found PE to be problematic, and a third didn't join in at all. If not taking part pupils liked to be given a constructive alternative activity, such as catching up with work, and were grateful to teachers who allowed them to have a friend with them. They wanted to make their own decision about whether or not to join in a particular session, and were unhappy if they felt they were pushed beyond their capabilities, as illustrated by the following quote by a 14 year old girl with a heart and lung condition:

" He had me running round the field. He had me walking, jogging, running and I said, 'Sir I can't do this, I'm going to be sick...... ' the teachers know but they don't seem to care"

Bullying due to being different was highlighted by over a third, and pupils adopted a variety of coping strategies such as: ignoring, retaliating, or avoiding (staying off school, not wearing glasses or splints in school). They felt teachers could help by intervening in bullying situations, but this didn't always happen, as exemplified here by a 14 year old girl:

" I get picked on, pick, pick, pick, pick and I get called the horriblest names and when I go off crying people go and tell (the deputy head) she doesn't do anything at all. I can't really do anything."

Nearly all the pupils felt they had supportive relationships with individual teachers, usually the Special Educational Needs Teachers. Simple kindnesses, such as acknowledging a pupil's return from absence, or asking how they were feeling, were much appreciated. However, teachers in the same school could have very different approaches, some which appeared to lack any awareness of how the pupil was coping with life at school. For example, a quote from a 16 year old boy:

" The more people who know the less mistakes are made.... Ignorance is the root of all the problems I've had, it's people with a lack of knowledge that have made it difficult."

Mobility problems were a cause of important, for example allowing those with continence problems to access the toilet as required. Essentially, pupils wanted teachers to understand enough about the condition so that appropriate arrangements could be made, "without making fuss".

School children's perceived sources of asthma support

As the most common chronic condition of childhood, asthma provides a suitable model of how schools can support pupils in managing a long-term health problem. The impact on school life for those whose asthma is poorly controlled has been shown, for example in a survey of over 4,000 children from the charity, National Asthma Campaign (NAC, now called Asthma UK). This indicated that around one third missed a week or more of school per year, and a similar proportion missed out on sports lessons (NAC, 1999)

Asthma can, for the vast majority, be effectively controlled with appropriate inhalers. There are national guidelines for treatment, asthma clinics at GP practices, and good patient support information from Asthma UK. Despite this, some asthmatic children do not access the care they need. What can schools and teachers do to reduce this health inequality? Asthma UK has recently updated it's model school asthma policy, in which basic training for all school staff is advocated (www.asthma.org.uk). But, what are the views of pupils? What do they think would help them cope better with their asthma?

Several questions on asthma at school were included as part of a survey of asthmatic children aged 4-17 years, carried out in two contrasting GP populations (Gleeson C, 2005) within the same Primary Care Trust area (PCT). One practice, P1 had a long-standing asthma clinic, the other, P2 did not. A structured questionnaire was completed by 124 from P1 and 107 from P2. In response to the question "If an asthma problem occurred at school who would you ask for help?", the vast majority said they would ask a teacher, but they also felt that teachers needed more information. Respondents identified other staff, including dinner ladies, secretaries and school nurses. Although two thirds had mentioned the school nurse, few were able to say when she was available to them, and some Knowledge of individual needs was | inadvertently named other members staff (such as secretary, lunchtime supervisor, form tutor) as a school nurse.

Children in P2 reported symptoms at a similar level to those published nationally (NAC, 1999 and 2001)), whereas children who had access to the asthma clinic in P1 had less symptoms. They were asked if they would like an asthma nurse to visit their school for review and information, and over half said they would, but a few (less than 20%) would not. When asked what sources they used for asthma information, responses included parents / family, nurses, doctors and leaflets. Very few had used videos or the internet. Children at the two GP practices attended a wide variety of schools, 37 in all.

Website of young people's experience of cancers

In contrast to asthma, children may become ill with rare but serious conditions such as cancers, and they and their families may feel very isolated. This is where a new website, called www.youthhealth.org can help. A charity, called DIPEx, recently added this young person's site to it's adult modules which give personal accounts of health problems and illness. A major strength of DIPEx is that the patient experiences are supplemented by evidence-based information about the illnesses (which is not always the case with medical internet sites). DIPEx thus acts as a reliable resource for families, health professionals and others, such as teachers and social workers who may be supporting a young person over time.

The website, www.youthhealth.org, has video clips and quotes from young people who have been diagnosed with cancer. They describe their feelings about their illness and treatment, including how it affects school life. These descriptions can be hugely helpful to other young people and their families who are going through similar illnesses. They can also provide insight for teachers if they have a young person with cancer in their class. A selection of aspects of school life described by contributors to the site is given below.

The experience of cancer made some determined to make the most of their education, for example:

" Now I know I'm able to do anything I want as long as I work for it."

School absence for a year or more is common for teenagers with cancer, so some disruption to their education is inevitable. Getting back to school was important as it made them feel less isolated and more 'normal', for example:

" She was determined to do well in her GCSEs and found that both schoolwork and art took her mind off her illness."

Despite wanting to do well, some found their school work difficult due to tiredness, lack of concentration or illness during treatment. At times some felt like 'giving up'. Ways in which teachers had helped included being flexible about allowing the pupil to go knowledge and skills of school nurses need

home if tired, sending work home, giving extra lesson to catch up on return from absence, and being given extra time during needs improvement so that consistent exams.

Most found their teachers to be very supportive, but unfortunately not all experiences were positive. For example, one school had presumed that a young man's absence (due to being in hospital for several months) was due to truanting, and his family received a visit from a welfare officer. Bullying was another aspect in which schools sometimes failed to support the pupil:

" ... said she was bullied at school but the headteacher denied it."

Following their cancer experience some young people changed career plans as they wanted to help others, in various capacities, such as in the health professions, in dance therapy, or with cancer charities. A few decided not to return to school at all.

Conclusion

The three examples are from pupils with widely differing health problems. But regardless of seriousness to health, they illustrate common concerns, and common ways in which pupils feel teachers can help. Two main aspects stand out, firstly that they want to participate in school life, and secondly, that some can feel very isolated. A key factor in feeling supported was the individual teacher's knowledge of the individual pupil.

How can teachers be adequately informed so that they can support pupils with medical needs? Written information about their condition is helpful, particularly in specifying what a pupil can do (rather than only what they can't). Confidentiality is a prominent concern of young people, and Lightfoot et al, (1999) found that pupils did not have a consensus view of who should know about their condition, so an individual approach is required.

For long-term conditions like asthma, the National Service Framework gives practical guidance, using scenarios to illustrate how schools and health professionals can work in partnership to meet health needs (Department of Health, (2004a, 2004b). There is also a Model School Asthma Policy, developed by Asthma UK which can be tailored to each school's needs (Asthma UK, March 2006). Implementation of this means that, as a minimum, children should have access to inhalers, avoidable triggers are removed from school, and school staff know what to do if a child has an asthma attack

The guidance documents highlight a key role for school nurses in several ways: participating in setting up a school health policy (including asthma); providing a link with GP practices; ensuring that school staff are trained and updated; supporting individual pupils - for example with written information, and being regularly available at school drop-ins. As a scarce workforce, the

to be utilised as effectively as possible. Linking with GP practices is an area that messages are given across the whole care pathway (Richardson-Todd, 2002). The current Government policies of widening parental choice in education makes this role more challenging, with children attending schools outside local pyramids (as seen in the participants of the asthma survey, Gleeson, 2005).

For asthma, and other long-term conditions, the main aim is to empower the child (and family) to manage their condition, to know how to deal with deterioration and when to seek medical help. The internet is a resource which is currently under-used for patient education - this is perhaps where the school librarian or SENCOs could direct pupils to appropriate sites. The annual surveys of Health Related Behaviour have consistently shown that a proportion (around 10-20%) of pupils feel they have no one to talk to for health or related concerns (Balding, 2005). Accessing evidence-based, reliable internet sites can reduce feelings of being alone with their worries, as is poignantly illustrated on the youthhealthtalk site.

At the launch of www.youthhealth.org it was inspiring to hear a presentation by a young lady who had recovered from cancer as a teenager. She described how, during the treatment stages of her illness, she had felt unable to express her isolation and anxieties with her family or hospital staff, but would have loved to access this kind of website.

Another speaker at the launch was the author Philip Pullman. He talked about the power of stories, saying that people's descriptions of personal experiences represented a kind of human democracy. Being able to hear what the person is going through at a time of fear and uncertainty helps others feel less alone with their illness.

References

Asthma UK, (March 2006). See website for School Policy, p37, www.asthma.org.uk

Balding J. (2005). Young People in 2004. Schools Health Education Unit, Exeter.

DH, 2004a. Asthma - National Service Framework for Children Young People and Maternity Services. publication number 40489. From dh@prolog.uk.com

DH. 2004b. National Service Framework for Children. Young People and Maternity Services, Key Issues for Primary Care, publication number 40620. From dh@prolog.uk.com

Gleeson C. (2005). School children's views of asthma services in two contrasting general practice populations. Primary Health Care Research and Development. 6, 341-437.

Lightfoot J. Wright S and Sloper P. (1999). Supporting pupils in mainstream school with an illness or disability: young people's views.

Child: Care, Health and Development, 25, 4, 267-283. National Asthma Campaign. (1999). Danger Zone - a NAC report on how schools can be made safer for children with asthma.

National Asthma Campaign. (2001). Out in the open - a true picture of asthma in the United Kingdom today. The Asthma Journal Special supplement, 6, 3, 1-14. Richardson-Todd B (2002) GPs: do they know what school nurses do? Primary Health Care, 12, 8 38-41.

Yorkshire Regional Seminar, Managing Long-Term Conditions in Schools, 18th July 2006. The seminar will discuss how to improve outcomes for school children with asthma, diabetes and epilepsy. Research presentations, consumer view, workshops and theatre company will make this a lively and informative day. For details contact Catherine Gleeson, email: c.r.gleeson@talk21.com The authors are based at the Research Institute for Sport and Exercise Sciences and the REACH group at Liverpool John Moores University, UK. For communication email: n.ridgers@ljmu.ac.uk

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The Active City of Liverpool, Active Schools and SportsLinx (A-CLASS) Project.

The A-CLASS Project is a unique multi-disciplinary project, which consists of multi-sports activity coaches who will be responsible for running after school and community sports clubs, and four research coaches who will analyse the effects of these programmes on the physical activity levels of Liverpool school children.

Current physical activity guidelines recommend that children engage in at least one hour of moderate intensity physical activity a day (Biddle et al., 1998). There is concern however that a large number of children lead inactive lifestyles (Biddle et al., 2004). Higher levels of physical activity have been linked to lower risks of developing coronary heart disease (CHD), obesity, strokes, hypertension and osteoporosis (Blair & Connelly, 1996). Therefore, from a public health perspective, the promotion of physical activity to children may benefit future health (Blair & Connelly, 1996).

An ideal environment

Schools are regarded an ideal environment to administer health promoting schemes as children spend a large proportion of their school day there, and a health education infrastructure exists through the formal curriculum. The promotion of physical activity to children has generally occurred through physical education, though there is increasing interest in the role of playtime and its effects on daily activity (Ridgers et al., 2005). However, scant attention has been focused on the role of after school clubs provided by schools, and their contribution to physical activity guidelines and the effects on habitual coaches who will analyse the effects of these

physical activity. Moreover, the social effects of these clubs on children are not widely known.

Enjoy sport

In Liverpool, children report that they enjoy taking part in sport and activity and want to do more. However, increases in obesity levels, seen since 1998, indicate that the development of a city wide sustainable strategy is needed to benefit children. The development of the Active City of Liverpool, Active Schools and SportsLinx (A-CLASS) Project is borne out of this need, as it aims to offer children after school and community sports clubs, therefore increasing the provision of sport and physical activity opportunities across the city with a specific emphasis on children who are less active and/or overweight. The effectiveness of this approach on children's health, motor skill and habitual daily physical activity will also be evaluated.

The A-CLASS Project

The A-CLASS Project is a unique multi-disciplinary project, which consists of multisports activity coaches who will be responsible for running after school and community sports clubs, and four research

programmes on the physical activity levels of Liverpool school children. The project is funded by the Neighbourhood Renewal Fund and Liverpool City Council's SportsLinx Project and conducted by the REACH Group (Research into Exercise, Activity and Children's Health) based at Liverpool John Moores University. The REACH Group are undertaking the research in partnership with Liverpool's School Sport Partnerships (SSP) and Primary Care Trusts.

Four aims

There are four main aims of the A-CLASS Project. These are to:

~ Assess the effects of activity programmes on children's fundamental movement skills (FMS) and playtime behaviour

~ Assess the effects of activity programmes on children's physical activity, health and fitness

~ Track the effects of structured exercise activity programmes on children's habitual physical activity over 2 academic years

~ Provide out of school hours opportunities and support for children to participate in physical activity

Project Overview

Each research coach will be responsible for one area of the project outlined above. Two projects will focus on Year 4 children, and two projects will focus on Year 6 children. These projects will specifically focus on:

- ~ FMS and physical
- self-perceptions (Year 4)

~ Physical activity levels and behaviour during school playtime (2 + 2)

- (Year 4)
- ~ Cardiovascular risk
- factors (Year 6)

~ Bone health and body

composition (Year 6)

One hundred and eighty children will be recruited into the project from Liverpool's four SSPs. Children will be randomly selected from the lower half of the fitness scores obtained by the SportsLinx project in 2004/2005. Participants in each year group will be randomly allocated to one of three groups. Group one's children will receive a structured exercise programme, which will focus on FMS (Year 4) and increasing engagement in high intensity activity (Year 6). Group two will receive a behaviour modification intervention, where participants will be directed towards activity opportunities in the local area and encouraged to decrease sedentary behaviours. Group three will act as the control group.

Four phases

The research programme is divided into four phases and will be conducted over two academic years. These phases are:

~ Phase 1 - Initial measures of habitual physical activity levels, health markers, FMS and playtime activity and behaviour collected

 \sim Phase 2 - Structured exercise programme implemented, with habitual physical activity measures obtained at midpoint and end of programme. Measures of health, FMS and playtime behaviour collected at end of programme.

~ Phase 3 - Measures of habitual physical activity levels, health markers, FMS and playtime activity and behaviour collected recorded at start of second academic year

~ Phase 4 - Structured exercise programme implemented, with habitual physical activity measures obtained at midpoint and end of programme. Measures of health, FMS and playtime behaviour collected at end of programme

Measures taken

Figure 1 (see below) provides a detailed example of the measures that two of the research coaches will undertake and record during each phase of the project. The baseline measures will be taken in January 2006, and the conclusion of the project is anticipated in July 2008.

The advantage of this project is that it offers a unique insight into the effects of promoting physical activity to school-aged children on markers of health, FMS, and its impact on playtime physical activity behaviour. Previous data from the SportsLinx project has illustrated that children's fitness levels are low, body fat scores and BMI's are increasing in both boys and girls, and children participate in low levels of physical activity in and out of school hours (Taylor et al., 2003). This project offers the opportunity to investigate the effects of health promoting strategies and inform future approaches which aim to promote physical activity to schoolchildren.

Identifying the Need for the A-CLASS Project Fundamental Movement Skills (FMS)

FMS are considered the "building blocks for movement. They are the skills which children need to successfully participate in physical activity, games and sport." (NSW Dept. Ed. & Training, 2000, p. 11). The importance of FMS for participation in physical activity is highlighted when examining the reasons given by children for non-participation. Common issues that could be associated with fundamental movement skill deficiency include feelings of incompetence, shame and embarrassment associated with participation, lack of necessary sports skills, and self-consciousness (Biddle et al., 1998).



Studies have shown that children who fail to develop fundamental movement patterns are three times more sedentary than children of the same age (Magill, 1993). Fundamental movement skill competence may therefore be related to diseases and conditions associated with inactivity.

Indeed, overweight boys and girls are less likely to possess high levels of FMS and more likely to possess low levels of FMS (Okely et al., 2004). The teaching of FMS in children is therefore of significant importance, particularly because children who have mastered FMS are more likely to enjoy and be motivated to participate in physical activity. Moreover, failure to master FMS could provide a barrier to physical activity participation in adulthood. Research suggests that children competent in FMS are more likely to have higher levels of self-esteem and confidence, which could have a knock-on effect on other areas of the curriculum in school (NSW Dept. Ed. & Training, 2000).

Playtime

Playtime offers children a unique opportunity to interact with peers, engage in daily physical activity, develop FMS and confidence in their movement (Evans, 1996). Children who do not interact with peers during playtime are likely to report negative social and emotional consequences in adulthood. Furthermore, research suggests that academic performance can benefit from participating in playtime activities (Shephard, 1997). For a more detailed playtime overview, the reader is directed to Ridgers et al (2005).

Previous studies have attempted to increase children's playtime physical activity using games sessions, structured fitness breaks, and playground markings. Physical activity level increases have been reported, yet these studies focused on playtime alone. Dale at al (2000) reported that children who are active during school are more active out of school, yet no empirical research details whether increases specifically in playtime physical activity will benefit out of school hours activity. The A-CLASS project is attempting to answer this question, building on previous work undertaken in the city.

Cardiovascular Risk Factors

Cardiovascular disease (CVD) is one of the most prevalent chronic diseases in Britain, accounting for over 240,000 deaths in 2001 (BHF, 2003). However, physical activity can have a positive preventative impact on CVD (Farrell et al., 1998), as well as providing favourable cholesterol levels, reducing high blood pressure and body weight (Mertens et al., 1998). However, little research has investigated physical activity levels and cardiovascular health risk factors in children. Recent studies, which have begun to document disease risk in the younger generations, have found fatty deposits in the aortas and coronary vessels of children and young adults (Edmundson et al., 1994), and that children with high blood pressure have a greater risk of developing atherosclerosis in adulthood (Li et al., 2004).

Cardiovascular disease in children may not be as advanced as in older populations. Assessment using standard procedures such as body composition, cholesterol level and blood pressure need to be accompanied by more valid and robust in-depth methods necessary to establish early predictors of the disease (Aggoun et al., 2000).

Assessments of heart size and the depositions of fatty streaks in the main arteries can be made through non-invasive procedures. The use of such techniques has provided consistent growing evidence that cardiovascular risk factors are identifiable in childhood and are predictive of future CVD risk but the impact physical activity interventions has on these is limited. The A-CLASS project aims to evaluate the effects of the physical activity interventions on these cardiovascular risk factors.

Bone Health and Body Composition.

The developmental stages experienced during puberty, particularly early puberty, are the most beneficial for accruing optimum bone health and development. Maximal increase in bone density and lean body mass accrual occurs around 13 years in girls and around 15 years in boys (Van der Sluis et al., 2002). Up to 26% of adult total body bone mineral content is accrued during early puberty in girls usually between 10-12 years (Valdimarsson et al., 2005). A high peak bone mass achieved in childhood/young adulthood reduces the occurrence of fracture and physical limitations associated with fractures, and provides a larger reserve for later life (Egan et al., 2004).

Physical activity can have a positive effect on bone density, mass and mean muscle mass (Wang et al., 2005). The more vigorous and dynamic the activity, the more osteogenic it is considered to be (Parker, 1998). Therefore, moderate-to-vigorous physical activity experienced during this age group will have a positive effect on increasing bone mineral density.

Obesity is another modifiable factor that can influence health particularly with children. In Liverpool, one third of Year 5 and Year 7 children were classified as overweight or obese, and obesity in Year 5 boys has increased by 97% since 1998 (Taylor et al., 2003).

In addition to its detrimental effect on health risks regarding type II diabetes and CHD in children, being overweight and inactive also has a negative effect on bone health as it is reported that there is an association with adiposity and lower bone

mass and higher fracture risk (Wang et al., 2005). However, there is little data that details the longer-term effects of physical activity interventions on body composition and bone health. The A-CLASS aims to investigate this in detail, and hopes to develop a sustainable approach to tackling the worrying statistics concerning health in Liverpool's children.

Conclusion

From an education perspective, the A-CLASS project aims to bridge the gap between practice and science. We want to know whether structured or lifestyle programmes have a similar impact on children's physical activity levels. Results from the project will help to formulate effective physical activity interventions in school age children and to assign key messages about effectiveness and sustainability of these programmes. This is crucial as the promotion of physical activity is a public health priority (Blair & Connelly, 1996).

Sustainable interventions that increase children's habitual physical activity, and improve FMS, bone density and cardiovascular risk profiles, children's social experiences, physical self-perceptions and play behaviour are needed, yet the structure, practicality and feasibility of such projects are not know. The A-CLASS project, working in partnership with the city council, SSP, PCTs and schools themselves, may inform future multi-agency projects which aim to benefit the health of children both now and in the future.

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References

Aggoun, Y., Bonnet D., Sidi, D., Girardet, J.P., Brucker, E., Polak, M., Safar, M.E. & Levv, B.I. (2000). Arterial mechanical changes in children with familial hypercholesterolemia. *Atherosclerotic and Thrombolitic Vascular Biology*, 20, 2070-2075

Biddle, S. J. H., Sallis, J. F., & Cavill, N. (1998). Young and Active: Physical Activity Guidelines for Young People in the UK. London: Health Education Authority.

Biddle, S.J.H., Gorely, T. & Stensel, D.J. (2004). Health-enhancing physical activity and sedentary behaviour in children and adolescents. *Journal of Sports Sciences*, 22, 679-701.

Blair, S.N. & Connelly, J.C. (1996). How much physical activity should we do? The case for moderate amounts and intensities of physical activity. *Research Quarterly for Exercise and Sport*, 67, 193-205.

British Heart Foundation, (2003). BHF Coronary Heart Disease Statistics 2003. Sep 2003.

Dale, D., Corbin, B.C. & Dale, K.S. (2000). Restricting opportunities to be active during school recess: do children compensate by increasing physical activity levels after school? Research Quarterly for Exercise and Sport, 71, 240-248.

Edmundson, E,W,. Luton, S, C,. McGraw, S, A,. Kelder, S, H,. Layman, A, K,. Smyth, M, H,. Bachman, K, J,. Pedersen, S, A, & Stone, E, J. (1994). CATCH: Classroom Process Evaluation in a Multicenter Trial. Education Quarterly, 2, S27 - S50.

Egan, E., Redmond, L., Turner, C. & Reilly, T. (2004). Bone mineral density in competitive female sports groups. Journal of Sports Sciences, 23, 115.

Evans, J. (1996). Children's attitudes to recess and changes taking place in Australian primary schools. Research in Education, 56, 49-61.

Farrell, S.W., Kampert, J.B., Kohl, H.W., Barlow, C.E., Macera, C.A., Paffenbarger, R.S. Jr, Gibbon, L.W. &Blair, S.N. (1998). Influences of cardiorespiratory fitness levels and other predictors on cardiovascular disease mortality in men. Medicine and Science in Sports and Exercise, 30, 899-905.

Li, S., Chen, W., Srinivasan, S.R. & Berenson, G.S. (2004). Childhood blood pressure as a predictor of arterial stiffness in young adults: Bogalusa heart study. Hypertension, 43, 541-546.

Magill, R. (1993). Motor Learning Concepts and Applications (4th Ed). Madison, W1: Brown and Benchmark.

New South Wales Department of Education (2000). Get Skilled Get Active. Primary Educator, 6, 26-28.

Okely, T., Booth, M. & Chey, T. (2004). Relationships between Body Composition and Fundamental Movement Skills Among Children and Adolescents. Research Quarterly for Exercise and Sport, 75, 238-247.

Parker, A. W. (1998). Physical activity and skeletal health in children. In K.M. Chan and L.J Micheli, (Eds.), Sports and Children (pp.17-38). Hong Kong: Williams and Wilkins.

Ridgers, N.D., Stratton, G., Curley, J. & White, G. (2005). Liverpool Sporting Playgrounds Project. Education and Health, 23, 50-52.

Shephard, R.J. (1997). Curricular physical activity and academic performance. Pediatric Exercise Science, 9, 113-126.

Taylor, S.R., Stratton, G., Hackett, A.F. & Lamb, L. (2003). Liverpool SportsLinx Project 01-03. Liverpool City Council.

Valdimarsson, O., Sigurdsson, G., Steingrimsdottir, L. & Karlsson, M. K. (2005). Physical activity in post-pubertal period is associated with maintenance of pre-pubertal high bone density - a 5-year follow-up. Scandinavian Journal of Medicine and Sports Science, 15, 280-286.

Van der Sluis, I. M., de Ridder, M. A. J., Boot, A. M., Krenning, E. P. & de Muinck Keizer-Scherama, S. M. P. F. (2002). Reference data for bone density and body composition measured with duel energy x-ray absorptiometery in white children and young adults. Archives of Disease in Childhood, 87, 341-347.

Wang, M. C., Bachrach, L. K., Van Loan, M., Hudes, M., Flegal, K. M. & Crawford, P.B. (2005). The relative contributions of lean tissue mass and fat mass to bone density in young women. Bone, 37, 474-481.

Liverpool 'health mates'

bmates' and mentor younger children in a bid to cut obesity in Liverpool.

More than 300 teenagers aged 16 to 18 will be recruited to provide advice and guidance to 11 year olds who are overweight. The aim is to get them interested in activities that burn calories such as cooking, dancing or exercise. The scheme will also help prepare 6th formers for the world of work, as they will have to meet performance targets in order to receive payment in gift and travel vouchers.

Young People's plan

The scheme is part of a massive drive to improve the health and well being of youngsters, proposed in Liverpool's Children and Young People's plan. Half of 11 year old boys and 40% of 11 year old girls in Liverpool are overweight. 1 in 20 is clinically obese and 1 in 3 do not do enough exercise.

The plan aims to cut the number of overweight or obese kids by a half in the next 3 years, and get all youngsters taking part in 2 hours of exercise per week.

Influence of peers

Councillor Paul Clein, executive member for children's services, said:- "The opinions of young people have formed the basis for this plan. They spoke and we listened. It is a fact that youngsters are far more easily influenced by their peers than by adults. We can use the admiration that they have for older teenagers and influence them in a positive way. We are committed to

and the voluntary sector to improve life for young people, and the plan sets some challenging targets which we have to meet."

Priorities

4 key priorities have been identified as part of the Children and Young People's Plan. They are:

- · Reducing childhood obesity and promoting a culture of physical activity
- · Reducing the risk of abuse, bullying and anti social behaviour
- Improving the achievements of children in care, from ethnic minorities and young carers
- Improving early diagnosis and family support for disabled and special needs children

Council leader Warren Bradley said:-"Today's kids are tomorrow's adults and we must do all we can to give them the best possible start in order to prevent them facing health problems in later life. Overweight youngsters are more likely to be bullied and that can have a knock on effect on their confidence and potential to achieve at school. It is vital we break the couch potato habit and tackle the growing problem of child obesity by finding innovative ways of getting them off out of the house and taking part in physical activity. Our groundbreaking kids' gyms and games consoles on fitness equipment are already enticing youngsters into our Lifestyles leisure centres, and we will build on our success in these areas. Teaching youngsters

th formers are to be paid to act as 'health working with partners in health, the police the importance of eating healthily and getting fit will help them develop habits that last a lifetime."

Free Lifestyles facilities

As part of the plan to reduce obesity, from 1st May 2006, 60,000 youngsters are getting free use of the city's Lifestyles facilities, including swimming and gym facilities after school, at weekends and during school holidays. The city is also pledging to create 50 new activity play areas in school, deliver healthier meals and work with food stores to help parents ensure their children eat healthily.

After school activity

The city council also wants to reduce youth nuisance by 30% through supporting the development of after school activity and providing diversionary activity at libraries and leisure centres. Improved family support and assessment procedures will bring the number of youngsters on the Child Protection Register down by 20%.

Bullying

The plan also proposes that the number of 11 to 15 year olds who are bullied is halved over the next 3 years through the training of anti bullying mentors in schools, extra training for children's services staff and maintaining the Bully Busters helpline.

This article is based on a press release and further updates from Paul Johnston, Broadcast News Officer, Liverpool City Council Newscentre.

Ruth Hunt is the Senior Policy Officer for Stonewall, a political organisation that campaigns for rights for lesbian and gay people in the UK. Dr David Regis is the Research Manager at SHEU. For communication email: david.regis@sheu.org.uk

Ruth Hunt and David Regis

A survey of homophobic bullying in schools

Homophobic bullying is a common aspect of school life, and affects many pupils, regardless of their sexual orientation. Research has been conducted around the extent and effects of homophobic bullying, yet the quantitative evidence for this research has been drawn from lesbian and gay adults talking about their school days. There has been no comprehensive, national survey of lesbian and gay young people at school and their experiences.

Research has been conducted in America, by GLSEN (see below), and the findings of their survey have been used to help demonstrate a need to develop policies to tackle the problem. The survey has provided a means to better assess the needs and experiences of young lesbian and gay people.

There has been no equivalent research in Great Britain. Stonewall therefore is conducting a national survey into the incidence of homophobic bullying in schools in order to shape policy developments to tackle the issue.

How the survey looks

The survey, which is currently in draft form, has five sections, and 50 questions.

Section 1 asks for background information, including region, gender, age,

sexual orientation, type of school, year group, and grades achieved.

Section 2 asks about information about the respondent and whether they strongly agree, agree, neutral, disagree or strongly disagree with a series of statements about school climate.

Section 3 asks about the school in general. It asks whether the school has an explicit anti-homophobia bullying policy, and so on.

Section 4 asks about bullying.

Section 5 asks for equal opportunities information, including ethnicity, disability status, and religion or belief of respondents.

The survey is principally available online but there is also a paper version available. The survey can be accessed at the website www.speakoutonline.org.uk and the survey itself sits on one of SHEU's survey websites.

The questions have been translated into Welsh, and respondents given an option about which language they want to answer in.

The sample

We would like young people who are gay, lesbian, bisexual or not sure about their sexuality to complete this survey whether they have been bullied or not. If everyone

who has not been bullied skips the survey, then our answers will not be so representative; we do recognise that this will be a bias to this part of the research, but this is not the only research we plan to do.

The launch

The survey was launched on Thursday 1st June through press releases, postcards, e-mails and items in magazines.

We would welcome further publicity for the survey, so that as many young people as possible know about it; this article is part of it. Please photocopy this article if you want to.

What's next?

What's next for this study is:

 \sim We will write a report of what we found and its policy implications.

 \sim A copy of the report will be made available on the Stonewall and SHEU websites

 \sim We will send a summary of the research to journalists in mainstream and "pink" media.

~ We will follow up with campaigning and more research about the issue, depending on what we find

USA National School Climate Survey Sheds New Light on Experiences of Lesbian, Gay, Bisexual and Transgender Students

In April 2006, the Gay, Lesbian and Straight Education Network, or GLSEN, announced findings from the 2005 USA National School Climate Survey (NSCS), the only national survey to document the experiences of students who identify as lesbian, gay, bisexual and transgender (LGBT) in America's schools.

"The 2005 National School Climate Survey reveals that anti-LGBT bullying and harassment remain commonplace in America's schools," said GLSEN Founder and Executive Director Kevin Jennings. "On the positive side, it also makes clear that inclusive policies, supportive school staff and student clubs, like Gay-Straight

Alliances, all relate to reduced harassment and higher achieving students."

Some of the findings of the 2005 survey include:

- 75.4% of students heard derogatory remarks such as "faggot" or "dyke" frequently or often at school, and nearly nine out of ten (89.2%) reported hearing "that's so gay" or "you're so gay" - meaning stupid or worthless- frequently or often.
- Over a third (37.8%) of students experienced physical harassment at school on the basis of sexual orientation and more than a quarter (26.1%) on the basis of their gender expression. Nearly one-fifth (17.6%) of students had been physically assaulted

because of their sexual orientation and over a tenth (11.8%) because of their gender expression.

- LGBT students were five times more likely to report having skipped school in the last month because of safety concerns than the general population of students.
- LGBT students who experience more frequent physical harassment were more likely to report they did not plan to go to college. Overall, LGBT students were twice as likely as the general population of students to report they were not planning to pursue any post-secondary education.

For more details visit: www.glsen.org/cgi-bin/iowa/all/news/record/1927.html

Young People into 2006

A unique contemporary archive of young people, this new report provides the answers to over 100 health-related behaviour questions.

Annually since 1986, the Schools Health Education Unit has published the collected Health Related Behaviour Questionnaire results. Data from more than 700,000 pupils between the ages of 8 and 18, have now been recorded since the questionnaire's launch in 1977. More than 5,600 separate school surveys have been carried out, some schools repeating surveys of their pupils on five occasions.

The data banks at SHEU are a unique resource that are consulted by a wide range of groups and individuals including Local Education Authorities, Public Health Authorities, Government Offices, University departments, schools, teachers and other interested individuals.

20th report

The 20th report, 'Young People into 2006' shows figures and graphs from youngsters between the ages of 10 and 15. They tell us about what they do at home, at school, and with their friends. The data have been collected in 2005 from 310 primary and secondary schools across the United Kingdom. The original sample of 37,932 was finally reduced to 17,743 to be much more representative of the country as a whole.

Snap shot

Here are some of the figures from the latest report:

Food and weight

21% of all males and 15% of all females were 'overweight' according to BMI formulae.

56% of 14-15 year old females and 55% of 12-13 year old females 'would like to lose weight'. This compares with 26% of 14-15 year old males and 36% of 12-13 year old males who 'would like to lose weight'.

30% of Year 10 females had 'nothing at all to eat for breakfast this morning' and, of that proportion, 36% had nothing for lunch on the previous day

Less fresh fruit but more vegetables are eaten as pupils get older.

Doctor

Up to 26% of the 12-15 year old females, reported feeling 'quite uneasy' or 'very uneasy' on their last visit to the doctor.

Painkillers

Around 25% of males and 50% of 14-15 year old females report taking painkillers on at least one day during the previous week.

Bullying

38% of 12-13 year old females feel afraid (at least 'sometimes') of going to school because of bullying. Up to 30% of 10-11 year olds (which has been consistent for a number of years) report that they have been scared or upset by an adult stranger. 24% of 10-11 year old females think they have been picked on or bullied because of the way they look.

Weapons

22% of the 14-15 year old males were 'fairly sure' or 'certain' that their friends carried weapons for protection when going out.



Walking

Up to 55% of the sample walk at least some of the way to school.

Homework

More females than males did homework on the evening before the survey, and they tended to spend longer at it. Around 42% of the 12-15 year old males did no homework at all.

Computer

Up to 23% of males spent more than 3 hours on computer games after school 'yesterday' and 78% of 14-15 year old males browse the Internet without adult supervision.

Reading

51% of 10-11 year old females 'read a book for enjoyment' as an after-school activity compared with 20% of 14-15 year old females.

Smoking

Up to 63% of the sample will have smoked by the time they are 14 years old. Young people's own smoking habits are strongly correlated with the number of other people smoking at home. This report shows that up to 52% of 12-15 year olds live in a 'smoky' home and 55% of 14-15 year old females have a close friend who smokes.

Drugs

Up to 57% of the 14-15 year olds are 'fairly sure' or 'certain' that they know a drug user. Up to 17% of 14-15 year olds have mixed drugs and alcohol 'on the same occasion'.

Exercise

Over 86% of the sample report exercising at least once 'last week'. At least 56% of 10-11 year olds think they are 'fit' or 'very fit'. This falls to 28% by the time they reach 14-15 years of age. From 1991 there is an upward trend (10%-22%) of 14-15 year old females that report being unfit.

Worries

'Exams and tests' and 'the way you look' remain the principal worry for females aged 14-15 years. Up to 33% of 10-11 year olds worry about 'family problems'. The greatest concern for 14-15 year old males are 'exams and tests'.

SHEU

'Young People into 2006' is one of a number of publications from SHEU. The 'Trends' series looks at data from 1983 and provides a valuable insight into changes in youngsters' health related behaviour. There will be ten reports in the series covering topics from Food to Smoking and Sex and Relationships. The 'Trends' reports use the accumulated data from the hundreds of school surveys the Schools Health Education Unit support each year.

Annual sample

Since 1986, each annual sample of survey schools represents a different combination of regions within the UK. The annual sample is not a random sample selected for the purposes of providing a nationally representative picture. Our confidence in the representative nature of the data is based on its year on-year consistency and comparison, where possible, with data derived from surveys using carefully selected national samples.

To purchase a copy of the report (£45 incl. p&p) please contact SHEU - Tel. 01392 667272.

Please enquire about the special discount prices for schools.

Young People's health and...

This article is composed of recently reported findings on the Internet about young people, their health and other factors. It is also available on our website as a pdf file with links to relevant websites around the world: www.sheu.org.uk/publications/ehfreearticles.htm

Advertisements for Unhealthy Foods May Explain Link Between Television Viewing and Overweight in Children

Researchers from the Harvard School of Public Health and Children's Hospital, Boston, USA, found that 11-13 year olds who spend more time watching television also eat more of the calorie-dense, low-nutrient foods advertised on television - this is the first time a research team has found evidence for a mechanism explaining that relationship.

www.hsph.harvard.edu/press/releases/press0420200 6.html

Oral sex and condom use among young people in the United Kingdom

Nicole Stone, Bethan Hatherall, Roger Ingham, Juliet McEachran, *Perspectives on Sexual and Reproductive Health*, March, 2006.

"Given the prevalence of oral sex and the lack of knowledge about its risks among young people, it is essential that those charged with teaching youth about sexual issues--whether in schools, in clinics or in homes--be encouraged to broaden the scope of their coverage."

www.findarticles.com/p/articles/mi_m0NNR/is_1_38/ ai_n16119585/print

Health and social inequalities in English adolescents: exploring the importance of school, family and neighbourhood

Antony Morgan, Sally Malam, Jim Muir and Rhiannon Barker

The Health Behaviour in School-aged Children (HBSC) study was established 22 years ago. It is cross-national research conducted by an international network of teams in collaboration with the World Health Organization Regional Office for Europe. The HBSC study is rich in data relating to the social context of adolescent health and health-related behaviour (including information relating to socio-economic status and social networks and feelings of control at school, within the family and among peers). This report presents findings from the 2001/2 English part of the study and involved 6,425 pupils during March to May 2002.

www.nice.org.uk/page.aspx?c=500082&o=303910

Changes in maternal marital status are associated with young adults' cannabis use: evidence from a 21-year follow-up of a birth cohort in Australia

Mohammad R Hayatbakhsh, Jake M Najman, Konrad Jamrozik, Abdullah A Mamun, Gail M Williams, and Rosa Alati. *International Journal of Epidemiology* version published online on April 5, 2006

Relatively little is known about why almost half of young adults in Australia have used cannabis. Because the upwards trend in use of cannabis has been coincident with an increase in marital breakdown, this study examines the relationship between marital status, marital changes, and the onset of cannabis use and involved 3008 mothers and their children up to age 21, between 2001 and 2004 in Brisbane.

Results showed that change in maternal marital status when the child was aged between 5 and 14 years was significantly associated with increased risk of cannabis use.

www.researchaustralia.com.au/files/tennsandpot_03. 04.06.pdf

Prevalence of deliberate self harm and attempted suicide within contemporary Goth youth subculture: longitudinal cohort study

Robert Young, Helen Sweeting, Patrick West. British Medical Journal 13 April 2006

Researchers at the University of Glasgow surveyed 1,258 young people during their final year of primary school (age 11) and again at ages 13, 15, and 19. They found that belonging to the Goth subculture was strongly associated with a lifetime prevalence of self harm (53%) and attempted suicide (47%). http://press.psprings.co.uk/bmj/april/goths.pdf

Black and White Teenagers Show Differences in Nicotine Metabolism

www.nih.gov/news/pr/jan2006/nida-20.htmat adResearch by scientists with the USA NationallikelyInstitute on Drug Abuse, National Institutes ofvictinHealth, suggests that some of the racial and ethnicLongdifferences underlying how adults' bodiesLeadmetabolize nicotine also are at work duringYouradolescence. The findings have implications for thehttp://yitheyaway teenagers of different racial and ethnic/1/74

backgrounds are provided smoking cessation treatments. The study is published in the January 2006 issue of *Ethnicity and Disease*. Adolescent Nicotine metabolism: Ethnoracial differences among dependent smokers. Eric T. Moolchan, Frederick H. Franken, Maria Jaszyna-Gasio www.ishib.org/journal/16-1/ethn-16-01-239ab.pdf

Western ideal of a perfect figure is having a negative effect on Chinese boys and girls

www.eurekalert.org/pub_releases/2006-03/uosc-sfa0 32406.php

Chinese teens who think of themselves as fat, even if they were normal or underweight, are at a greater risk for depression and school-related stress. This is according to a new study reported by lead author Bin Xie, an assistant research professor in the University of Southern California School of Social Work.

Girls who said they were overweight reported an overall grade point average of 3.06 versus 3.20 for other girls, according to the study of nearly 7,000 middle- and high-school students in seven Chinese cities.

The study appears in 2006 in the March issue of the American Journal of Health Behavior. www.ajhb.org/2006/2/02Mar0106Xie.pdf

National Longitudinal Study of USA Adolescent Health

www.nih.gov/news/pr/jan2006/nichd-11.htm

"When they were young teenagers, most of the participants had fairly healthy behaviours." "What's really alarming is how rapidly healthy practices declined by the time the participants reached young adulthood." The study was published, in the January 2006 edition of Archives of Pediatrics & Adolescent Medicine (2006;160:74-81).

On the positive side the study found that participants were less likely to experience feelings of depression at adulthood than when they were adolescents, less likely to have suicidal thoughts, and less likely to be victims or perpetrators of violence.

Longitudinal Trends in Race/Ethnic Disparities in Leading Health Indicators From Adolescence to Young Adulthood.

http://archpedi.ama-assn.org/cgi/content/abstract/160 /1/74