

fit for the future

How healthy and active are our children?



It is difficult for anyone to ignore the messages about the danger to children's long-term health from burgers, chips, sweets, crisps and other foods classified as high in fat, salt or sugar. But how aware are we of the very real health dangers of children not being sufficiently physically active?

We know the startling statistics – the proportion of overweight and obese children in the UK has been increasing in recent decades, even amongst the pre school population¹. Approximately one-third of children aged 2 to 15 in the UK are overweight or obese². These figures are set to rise unless we take action now to prevent a future obesity epidemic.

The Government's high profile Change4Life programme in England; Scotland's 'Take Life On, One Step at a Time' campaign; Northern Ireland's 'Get a life, get active' campaign and Wales's 'Health Challenge'; initiatives to limit advertising of food and drink aimed at children; the 5 A Day programme to increase the amount of fruit and vegetables we consume; and even Jamie Oliver's School Dinners campaign have all turned the spotlight onto the key role diet plays in maintaining long term health.

These initiatives have been really valuable in highlighting the role of a healthy diet. Many do include messages about the need to exercise. But they are only tackling part of the problem.

The Chartered Society of Physiotherapy (CSP) says there is growing evidence that many parents are unaware of the vital role physical activity plays in maintaining wellbeing and preventing children from becoming overweight. While many factors contribute to obesity the simple reality is that overweight and obesity can result when calories from food and drink are not used up with the help of regular physical activity. According to the Department of Health report, 'Healthy Weight, Healthy Lives: Consumer insight summary'³: "Where

messages about diet and activity are combined, diet messages dominate, and the activity component is ignored, regardless of the order in which messages are presented." Add to this the fact that parents often misunderstand and overestimate how much children are exercising; and are uncertain of how much physical activity children actually need. The reality is children and young people should be physically active for one hour (60 minutes) every day. Exercise not only burns calories, it confers other important health benefits such as a 50 per cent reduction in the chance of developing coronary heart disease, stroke and Type 2 diabetes⁴. It also instils good habits from a young age, which can then be carried on into a healthy adulthood.

Children usually want to be active, but CSP is concerned that there is not enough opportunity or encouragement.

CSP's "Move for Health" campaign is designed to encourage families to build more physical activity into their daily lives.

CSP is calling on parents and teachers to help:

- > Increase the amount of physical activity children undertake every day – to improve their quality of life,
- > Develop healthy lifestyle habits for the whole family that will stay with their children into adulthood and help prevent life threatening diseases in the future.

CSP has reviewed a number of research studies, reports and policy initiatives to produce this report. This report examines the causes and implications of reduced physical activity amongst children. It considers the barriers and offers practical solutions to empower parents to increase the fitness levels of their children. It calls on all of us to understand the importance of diet and exercise as part of a balanced healthy lifestyle. Above all it is a wake-up call to show that much more needs to be done to support and encourage families to be more active – before many of today's children face an unfit future.

The rise and impact of obesity amongst children

“The total cost of dealing with obesity related illnesses is set to spiral with estimates suggesting the NHS will be spending £19.5 billion by 2015 and £21.5 billion by 2025”.⁵

Diets high in fat and sugar, combined with a lack of physical exercise, have contributed to a dramatic rise in the last 10 years in the numbers of children who are overweight or obese.

England

- > In England alone, the proportion of girls [aged 2 to 15] who were obese increased from 12.0% to 16.1% between 1995 and 2007⁶.
- > The proportion of boys [aged 2 to 15] who were obese rose from 10.9% to 16.8% in the same period⁶.

Scotland

- > In Scotland in 2007/08, 20.0% of children aged between 5 and 6 were classified as overweight or obese⁷.

Wales

- > In Wales 22% of 15 year-old boys and 17% of 15 year old girls are overweight or obese⁸.

Northern Ireland

- > In Northern Ireland, 18% of boys aged 2-15 years are overweight and 20% obese, whilst 16% of girls are overweight and 15% obese in the same age group⁹.

UK

- > According to a BBC report, research conducted by University College London showed the number of children in the UK being prescribed weight-loss drugs increased 15-fold between 1999 and 2006¹⁰.
- > The cost of dealing with obesity related illnesses is set to spiral with estimates suggesting the NHS will be spending £19.5 billion by 2015 and up to £21.5 billion by 2025⁵.

Obesity is linked to lack of exercise

The positive effect of physical activity in helping to maintain a healthy weight in adults is well understood. According to a review from the NICE Public Health Collaborating Centre, physical activity improves the health of children, notably helping to prevent overweight, obesity and Type 2 diabetes, as well as improving skeletal health and mental well being²².

Obesity is linked to low income

There is evidence that obesity is more prevalent amongst lower income groups.

- > According to the Government report ‘Foresight – Tackling Obesities: Future Choices’ 28% of men and 25% of women in lower income groups were obese compared to 18% of men and 10% of women in higher income groups⁵.
- > In Scotland, children [between 5 and 6 years old] living in the most deprived areas were most likely to be classified as overweight, obese and severely obese; 21.7% are overweight, including 9.2% obese and 4.5% severely obese⁷.

Levels of obesity and physical activity can vary by ethnic group

Levels of physical activity amongst children can vary by ethnic group. A recent study (Child Heart Health Study in England¹¹) revealed that British South Asian children are less active than black African-Caribbean and white European children of the same age. Researchers suggest that this may account for higher levels of heart and circulatory disease and Type 2 diabetes amongst the South Asian population.

- > British South Asian children were found to be the least active and spent more time in sedentary activities and less time in moderate and vigorous activity.
- > Only 54% of British South Asian children undertook moderate physical activity at least 60 minutes a day.
- > This compared with 70% of white European children and 69% of Black African Caribbean children.

CSP understands this is the first study to accurately assess ethnic differences in levels of activity amongst children. It shows that UK children of South Asian origin are less active overall than other children living in the UK. There will be a range of cultural and other factors which influence understanding and behaviours among different groups within the population. Increasing levels of physical activity in children of South Asian origin may be particularly important in helping to maintain their health in the longer term.

What is obesity?

Body Mass Index (BMI) is one of the most widely used methods for measuring obesity. BMI is calculated by dividing an individual's weight (in kilograms) by their height (in metres) squared and gives an indication of whether weight is in proportion to height. There is a BMI threshold for each age above which a child is considered overweight or obese

The impact of obesity on health

“Obesity and lack of exercise are linked to an increased risk of breast cancer amongst young girls”.

Obesity has been proven to contribute to many life-threatening diseases such as cancer, heart disease and diabetes. It also seriously affects people's quality of life with reduced mobility, shortness of breath and chronic back pain amongst the side effects.

- > The chance of developing type 2 diabetes can be 20–80 times higher for obese people⁵
- > Stroke, endometrial and kidney cancer as well osteoarthritis are more common among obese people⁵
- > According to media reports, obesity and lack of exercise have been linked to an increased risk of breast cancer amongst girls [aged 0 to 13]¹².

Role and benefits of regular physical activity

“Regular exercise can reduce your chances of developing coronary heart disease, stroke and diabetes by up to 50%”⁴.

While poor diets contribute to the obesity epidemic, a lack of physical activity compounds the dangers children face for their long-term well being. Exercise not only burns calories, it confers a host of other health and psychological benefits.

- > Exercise helps children maximize their bone development, which reduces the chance of osteoporosis in later life.
- > Ensuring children are physically active on a regular basis instills good habits, which can be carried on into adulthood thus reducing the likelihood of adult obesity and other obesity related illnesses.
- > Regular physical activity helps reduce the chances of developing coronary heart disease, stroke and type 2 diabetes by as much as 50 per cent.
- > Physically active people have a 40 to 50 per cent lower risk of developing colon cancer.
- > Exercise contributes to psychological wellbeing and lessens the chances of suffering from clinical depression⁴.

How much time should children spend being physically active?

“Children should aim to be physically active at a moderate intensity for one hour a day”²¹.

The Chartered Society of Physiotherapy recommends that children and young people should have at least one hour of moderate intensity physical exercise every day. (Moderate intensity means that children should be out of breath for some of the time). Exercise should be varied to enable children to use different muscles, improve their bone health and develop flexibility. Physical activity can involve planned sports activities at school but also includes play during school breaks or at home; walking to and from school, swimming or games.

How much physical activity are children actually doing?

“About one-third of boys and one-third to a half of girls report activity levels that may compromise their health”⁴.

A Public Service Agreement, shared by the Department for Children, Schools and Families and the Department for Culture, Media and Sport, was agreed in 2004 to increase the percentage of school children in England who spend a minimum of two hours each week on high quality PE and sport.

- > The latest figures show that the proportion of children taking part in at least 2 hours a week of PE and sport at school in England rose from 62% in 2003/04 to 90% in 2007/08⁶.
- > While this is a really positive step it does not demonstrate that children are currently achieving the optimum one hour of moderate physical activity each day. The Chief Medical Officer's report (England) 'At least five a week – Evidence on the impact of physical activity and its relationship to health' stated: “About one-third of boys and one-third to a half of girls report activity levels that may compromise their health”⁴.
- > In another study, an even greater number of children were not exercising enough with only 2.5% achieving more than 60 minutes of moderate to vigorous physical activity daily¹³.
- > In a study of Welsh children only 37% of girls and 46% of boys at aged 11 were exercising one hour every day. This dropped to only 18% of girls and 39% of boys at 15 years⁸.

Parents can overestimate how much their children are exercising

Parents can misunderstand and sometimes significantly overestimate how much actual time their children spend being physically active. It can be easy to confuse high energy levels with

high levels of activity. According to research conducted at Newcastle and Glasgow universities:

- > Parents reported their children as being moderately to vigorously physically active for an average of 146 minutes a day but researchers found the reality was the children were physically active for 24 minutes a day¹⁴.
- > According to parents 83% of boys and 56% of girls complied with the recommended daily amounts of moderate to vigorous physical activity but in reality only 3% of boys and 2% of girls actually did¹⁴.

Many parents are unaware of the importance and health benefits of exercise

“83 per cent of parents did not know that a lack of physical activity during childhood could lead to a higher risk of cancer later on in life”¹⁵.

Many schools are now providing about 2 hours a week of PE, sports or other physical activity for children. But children need an hour of physical activity every day. This makes it all the more important that parents and children understand not only the role of regular physical activity but the amount they should be enjoying. CSP knows it can be a real challenge to find the time and opportunity to be active as a family, with busy working lives and sometimes a paucity of safe places to be physically active.

It appears that both parents and children are unaware of why and how much they should exercise. According to a report from the British Heart Foundation, Cancer Research UK and Diabetes UK:

- > 83 per cent of parents did not know that

a lack of physical activity during childhood could lead to a higher risk of cancer later on in life

- > half of parents were unaware of the link between physical inactivity and Type 2 diabetes and
- > one in five parents (18 per cent) did not know that it could increase the risk of heart disease¹⁵.

Amongst children there is also a lack of awareness of how much exercise they should undertake

When asked how much they should be exercising only one in 10 children aged 11-15 suggested they should be exercising for an hour a day¹⁶.

What is lack of exercise costing us?

"Lack of exercise is costing us £10.7 billion annually"⁴

The latest estimates indicate that physical inactivity, including the costs of treating chronic diseases such as coronary heart disease and diabetes in England, costs the taxpayer £8.2 billion annually. When you factor in the additional costs of obesity – and treating associated health problems – this figure rises to £10.7 billion⁴.

Are children exercising less than in the past?

Changes in lifestyle and leisure choices over recent decades have made it less likely that children will exercise for 60 minutes each day.

- > The growth in sedentary leisure activities such as watching TV and DVDs as well as playing computer games mean that children spend less time than in the past playing in a physically active way.
- > There is growing evidence that parents

are reluctant to let their children play independently outside of the home because they fear for their safety⁴.

- > According to the Department of Transport, the proportion of children traveling to school by car has almost doubled over the past 20 years, yet many live close enough to school to walk¹⁷.

Parents and teachers can do more to encourage children to be active

It would appear that a lack of understanding about the importance of physical activity among parents is contributing to insufficient activity among children. There are many other significant factors that can contribute – including lack of access to affordable safe facilities for physical activity, low incomes, and busy lives.

According to the Department of Health report 'Healthy Weight, Healthy Lives: Consumer Insight Summary'³:

- > Some parents are actively encouraging their children to be sedentary so that they can spend quality time with them or as a means of restraining their boisterous behaviour.
- > Out of school activities are often seen as expensive and as depriving parents of time while they transport their children to and from sessions.
- > There is also an indication that some parents, especially mothers who have body-image issues, do not want to exercise themselves and so do not encourage their children to get involved in physical activities.
- > Low income families – and families without gardens or without access to space for activities – face further limited opportunities to be active.

According to a report from University College London quoted in the Daily Mail, children allowed out without adults were found to be more active and burnt more calories than their constantly supervised peers¹⁸.

Ironically children who are obese are more likely to say that they would like to do more physical activity than those with normal weight (71% compared with 57% for boys, 84% compared with 71% for girls)¹⁶.

Now and the future

England

The Government has introduced a number of initiatives as part of its Physical Education, School Sport and Club Links Strategy (a joint DCSF and DCMS initiative) and The Children's Plan (www.dcsf.gov.uk/childrensplan) to encourage children to exercise more. Parents will need to be encouraged to take advantage of these new out-of-school opportunities for their children to be more physically active.

- > More than 200 local authorities are now offering free swimming for the under 16s as part of a swimming initiative set up by the Department for Culture Media and Sport¹⁹.
- > As part of the Physical Education and Sports Strategy, children will be able to experience a wider range of different sports and dance activities through Sport Unlimited – the youth sports programme which provides funding to local communities via the county sports partnerships network.
- > A national competition framework will be set up so that children can enjoy competitive sport as individuals or as part of a team
- > Younger children will be able to enjoy better play facilities with a £235 million investment, as part of The Children's Plan, to improve local play facilities.
- > By 2010 all schools should have school travel plans encouraging pupils to walk or cycle to school as part of the Travelling to School plan from the Department of Transport²⁰.

Scotland

- > As part of its 'Healthier Scotland' project, the Scottish Government is running the 'Take Life On, One Step at a Time' campaign. It promotes the message that to maintain a healthy lifestyle, we need to eat healthily and be more active. Their website <http://www.takelifeon.co.uk/index.html> gives lots of tips on becoming more physically active at next to no cost and also provides inspiration on how to get kids eating more healthily.

Northern Ireland

- > The Public Health Agency in Northern Ireland is running the 'Get a life, get active' campaign. The initiative stresses that physical activity is especially important for children if they are to grow into healthy adults. The website <http://www.getalifegetactive.com/active-families> gives parents more information on how to support children becoming more active.

Wales

- > The Welsh Assembly Government is running the 'Health Challenge' Wales campaign. It signposts members of the public to information or activity to help them improve their own health. It also engages with organisations to look after the health of their staff and customers (<http://wales.gov.uk/hcwswebsite/healthchallenge>).

Help our children be fit for the future – CSP calls for more action

CSP is a partner in the Change4Life initiative in England, has contributed to initiatives such as the Physical Education, School Sport and Club Links Strategy and The Children's Plan 24, and is an active partner in programmes in Scotland, Wales and Northern Ireland, which are all designed to improve physical activity levels among children.

In addition, CSP is calling for:

- 1 **Better understanding about the health and activity of children at a local level**
Local organisations can better understand how fit and active children actually are by tracking the health and activity levels of children at a local level. Currently Community Health Profiles in England are used to inform health planning but only track how much Physical Education children take part in at school rather than how much time they are exercising over the whole week.



More robust data would enable more tailored planning and service delivery to improve the health and physical activity levels of children.

2 Greater awareness of the lifetime role and benefits of exercise.

While many of the initiatives outlined in the National Physical Education, School Sports and Club Links Strategy will see a welcome rise in structured physical activity levels, parents and children themselves need to be aware of the value and opportunities for building unstructured physical activity into everyday life as a lifestyle and health choice. Local and health authorities, trusts and boards can help raise awareness as well as improve access to facilities and services.

CSP has produced a new leaflet “Fit for the Future”, which has tips and advice from physiotherapists to help families build more physical activity into their daily lives.

3 Schools and teachers can build on success and do more.

CSP is calling on schools to make their facilities available outside of school hours to encourage greater take up of opportunities for physical activity amongst children.

4 Plan developments with children’s health in mind

CSP suggests that before public money is spent on any new development (either buildings or natural environment) – or where public authorities have a role in the process – the threats and opportunities should be considered in terms of children’s health and opportunities for physical activity. So all those who have a role in determining or regulating developments and schemes or spending public monies on any initiative could carry out a ‘child health impact assessment’.

This could prevent the reduction of opportunities for play/activity and further encourage planners and developers to create opportunities for play or physical activity within any new development – for example

public buildings, or shopping areas. In 2008, NICE produced guidance on promoting and creating built or natural environments that encourage and support physical activity²³. CSP would like to see greater provision of more safe playing and sporting opportunities for children, and more emphasis on the consideration of the particular impact of potential developments on children's physical activity.

5 More opportunities for safe, active play

Parents quite naturally want to be sure that children are safe both at home and outside in their local community. For example, children may be less likely to cycle or walk to school than in the past. CSP would like to see more opportunities created for children to get out and be active safely.

6 More effort to tackle poverty

Initiatives such as the Westminster Government's proposed Child Poverty Bill (which aims abolish child poverty and break the cycle of poverty for future generations) have a key role to play in addressing health inequalities and poor health overall. CSP would like to see cross party commitment to eliminating child poverty in terms of easy access to affordable space to play.

Local and health authorities, health trusts and boards can work together to ensure that families have easy and safe access to outdoor spaces and affordable facilities where children can be active

Parents can check their local authority leisure website to find out what facilities are nearby and what activities are offered for free.

Move for Health is a partner of 'Change4Life' – the England initiative to help everyone eat well, move more and live longer. Visit www.nhs.uk/change4life or call 0300 123 4567 for more information. In Wales CSP's 'Move for Health' campaign is in support of 'Health Challenge Wales'. In Scotland "Move for Health" supports the 'Take Life On, One Step at a Time' campaign, and in Northern Ireland 'Move for Health' supports the 'Get a life, get active' campaign.

What will help families be more active?

With more support – parents can create more opportunities for children to be sufficiently physically active each day. The leaflet 'Fit for the Future' from the Chartered Society of Physiotherapy offers a range of suggestions for parents to enjoy daily and weekly physical activities together with their children. For example:

- > Going for a swim together
- > Playing Frisbee in the park
- > Planning a weekly walk
- > Using stairs where possible rather than the escalator
- > Getting off the bus a stop or two earlier

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The Chartered Society of Physiotherapy is the professional, educational and trade union body for
the United Kingdom's 48,000 chartered physiotherapists, physiotherapy students and assistants



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