

Childhood Obesity

What do we mean by overweight and obesity?

“Overweight” and “obesity” are terms used to describe increasing degrees of body fatness, defined in terms of Body Mass Index (BMI) - a person’s weight in kilograms divided by the square of their height in metres (kg/m^2). BMI is used because it broadly correlates with the proportion of fat within the body.

It can be difficult to assess whether a child is overweight or obese. Children come in all shapes and sizes, and grow at different rates. How big a child is depends on three key things: the shape they inherit from their parents, what they eat and how active they are. A child’s BMI will change over time because they are growing, and will be different for boys and girls. Hence charts exist for both, to take account of gender, growth and age, and in the UK, the 1990 UK Growth Reference Charts are used in doctors’ surgeries, clinics and schools.

Obesity results from an imbalance of energy (calories) in, from food and drinks, and energy (calories) out, from metabolism and physical activity. There is also a link between parental obesity and childhood obesity, with studies showing a doubling of obesity if one parent is overweight or obese and a tripling if both parents are.

Why should we address childhood obesity?

Childhood obesity can result in a number of health problems during childhood and can put children at risk of developing serious health problems as adults. Obesity increases the risk of developing cardiovascular risk factors including high blood pressure (hypertension), high levels of some blood fats and poor blood glucose (sugar) control. It is also linked to asthma, sleep problems, type 2 diabetes and polycystic ovarian syndrome in girls.

Coping with being overweight isn’t a problem for some children, but for others, it can be traumatic. Being overweight can be a cause of bullying, and some overweight children feel embarrassed about changing for, and taking part, in games and school activities. Prevention and effective management of childhood obesity is important – particularly if tackled early – because research has shown that an obese child has between a 40-70% chance of becoming an obese adult.

It is estimated that the annual cost to NHS Bristol of diseases related to obesity was £111.6 million in 2007 (Foresight, 2007)¹. These costs are predicted to increase to £115.8 million in 2010 and to £123.9 million by 2015. The rising costs are associated with significant increases in the incidence of stroke, coronary heart disease and particularly type 2 diabetes.

What is the picture in Bristol?

The most recent data from the National Child Measurement Programme (NCMP) for 2008/09 and from the Health Survey for England (HSE) for 2007 suggests that, as a nation, we are seeing some success in halting the relentless rise in childhood obesity.

However, the national and Bristol data indicates that the incidence of childhood overweight and obesity is still too high. It is estimated that 16,000 children and young people in Bristol are obese and that a further 11,000 are overweight. Currently 17.9% of children in year 6 are obese.

Bristol National Child Measurement Programme (NCMP) Data

	2006/2007	2007/2008	2008/2009
Reception % obese	9.7%	10.3%	10.4%
Reception % coverage	89%	85%	93%
Year 6 % obese	15.2%	19.4%	17.9%
Year 6 % coverage	43.8%	85%	93%

Source: ²NCMP, see www.ncmp.ic.nhs.uk

In Reception, almost a quarter (24.8%) of the children measured, were either overweight or obese. In Year 6, this rate was nearly one in three (33%). The percentage of obese children in Year 6 (17.9%) is nearly double that of Reception (10.4%). The percentage of overweight children is higher in Year 6 (15.2%) than in Reception (14.4%).

The 2007/08 NCMP data has been mapped by ward and suggests a strong relationship between deprivation and obesity prevalence for children in Reception and Year 6 in Bristol. Areas with higher concentrations of particular ethnic profiles would be expected to have higher rates of child obesity. Obesity prevalence is also significantly higher in urban areas than in rural areas.

The 2008/09 results will be used to support targeted weight management work in Bristol. The plan is to develop referral pathways to enable effective interventions.

What are we doing about it?

The ambition in Bristol is to reverse the rising trend in childhood obesity in the city by 2012/13. This is being tackled in three ways:

- preventing obesity through encouraging healthy eating from an early age,
- encouraging physical activity in daily life,
- treating children who are overweight and obese.

This means not only targeting children, but also their families and all those who provide services that impact on children's lifestyles.

For most overweight children, lifestyle change is the best approach, not only for the child, but for the whole family. Eating a balanced and varied diet, (low in fat and sugar and rich in fruits and vegetables), in addition to being more active, are the two most important factors to help manage a child's weight. The aim is usually to keep weight steady – rather than lose weight while the child continues to grow. Making lifestyle changes requires effort and careful planning, but it's something the whole family can benefit from.

For some older children, or those who are very overweight, the aim might be to lose some weight. These children may need some more specialist support. Bristol's Mind Exercise Nutrition and Do It! (MEND) Programme enables overweight children aged 7-13 and their families, access to fun, effective and practical lifestyle solutions to achieving a healthy weight. 203 children have been referred to date with high levels of engagement from BME groups. Further programmes are scheduled for January 2010³.



What are we doing about it? (continued)

A consultant led childhood obesity multidisciplinary clinic has been running at the Bristol Children's Hospital for eight years. This involves a consultant paediatrician, a paediatric dietician and a health and exercise specialist. The emphasis is on life-style behaviour change to achieve weight maintenance or weight loss as appropriate.

Childhood nutrition guidelines for pre-conception, conception and children 0-5 years are currently being written and training on these will be given to child minders, health visitors and managers of Children's Centres. The pre-school years are an ideal time to establish the foundation for a healthy lifestyle and work to support parents to encourage good nutrition during early years is an investment for the health of our population in the future. Bristol is piloting a Healthy Early Years Programme working with 10 Children's Centre staff to develop active travel policies and provide nutrition training, notably on the importance of breastfeeding and good weaning practices.

Babies who are breastfed have a smaller chance of being obese and developing diabetes when they are older. There are a number of initiatives in Bristol to increase the initiation, duration and exclusivity of breastfeeding. Bristol will be the first city in the UK to receive full UNICEF Breastfeeding BFI (Baby Friendly Initiative) status both in the community and within the Bristol hospitals. A Peer Support Service currently assists mothers by providing peer supporters in the wards with the lowest breastfeeding rates. Over 200 premises are now 'Breastfeeding Welcome' including leisure centres and libraries, as well as cafes and restaurants. A family support project for breastfeeding mothers has been set up in the 12 wards with below average breastfeeding initiation rates. Many peer supporters have been trained and over 30 supporters are currently active in supporting local mothers.

Bristol's Healthy Schools programme

(www.bristolhealthyschools.org.uk) provides a comprehensive package of support through the schools. The 'Transforming Food in Schools Project' has led to improvements in the quality of school meals. As part of the 'Million Meals Campaign' initiated by the School Food Trust, schools across Bristol are aiming to promote school lunches and to increase the uptake. It is hoped that pupils who usually bring in packed lunches to school will all be given the opportunity to try a school lunch. Each school is taking this school meal campaign forward in their own way. Examples include: competitions to win a school meal, taster sessions for pupils and parents, subsidised lunches and much more. Schools are running this as part of a whole school approach to nutrition developed through the National Healthy Schools Programme.



For electronic copy of this factsheet, visit: www.bristol.gov.uk/healthfactsheets.
For more information about health topics in Bristol, visit: www.bristol.gov.uk/health or
email: health@bristol.gov.uk.

References and Resources

¹Tackling Obesities: Future Choices, [Foresight, 2007]

²National Child Measurement Programme: England, 2008/09 school year December 2009

³For more information on MEND visit Bristol City Council website at www.bristol.gov.uk/mend

For more information about Bristol's Healthy Weight, Food and Health and Physical Activity Strategies, go to:

www.bristol.nhs.uk/PublicHealth/Reports/public_health_strategies

For information about diet, visit these websites:

- The Food Standards Agency: www.eatwell.gov.uk
- The British Dietetic Association: www.bda.uk.com
- The British Nutrition Foundation: www.nutrition.org
- Teen Weight Wise: www.teenweightwise.com

For further information about healthy eating for children visit:

- The Food Standards Agency: www.eatwell.co.uk
- The British Nutrition Foundation: www.nutrition.org.uk

For tips on healthy lifestyles for children and families, go to: www.nhs.uk/change4life

For more information about the benefits of breastfeeding and infant nutrition, visit:

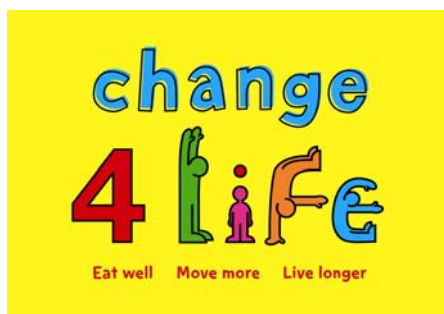
<http://www.nhs.uk/conditions/breastfeeding/>

There are many organisations involved in supporting schools with the whole process of healthier food provision. Please visit the following websites for further information and support:

- The School Food Trust : www.schoolfoodtrust.org.uk
- The Food Standards Agency: www.eatwell.gov.uk
- Food in Schools: www.foodinschools.org
- Wired for Health: www.wiredforhealth.gov.uk

Local Authority Caterers Association, go to: www.laca.co.uk

Food Standards Agency Recipes, visit: www.food.gov.uk/healthiereating/bus/recipes



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