4 May 2004

Report to the City Council

Children's Nutrition – Obesity

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Preface

By Councillor Bryan Nott
Chair, Health Overview and Scrutiny Committee

And Councillor Jilly Bermingham
Chair of the Review Panel, Children's Nutrition-Obesity

Obesity in children has been the subject of considerable political and public media concern over the past year. It is undoubtedly one of the major contemporary problems of the developed world. This scrutiny review provides a foundation for action to improve children's nutrition, diet and levels of physical activity in our city.

We are pleased that the Committee secured the input of a range of professionals both in the NHS and the City Council in order to explore the factors that lead to obesity in children and to consider what steps need to be taken to improve health outcomes for young people.

The topic of Children's Nutrition – Obesity continues two themes that began in 2003 with our review of 'Children's Nutrition - Mothers Who Wish to Breastfeed' and the scrutiny review of 'Sport, Leisure & Health' which examined the role of physical activity in promoting and protecting the health of both children and adults. Those reviews and the actions which have followed – e.g. the provision of free swimming lessons for children, illustrate the potential impact for health scrutiny to make a difference in health issues that affect and concern the people of Birmingham.

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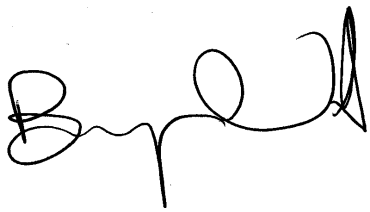
We would like to thank all those who contributed to the review and enabled the Committee to gather evidence from a fresh perspective. In particular we would like to thank Councillors Jon Hunt and Fergus Robinson for their time and assistance in examining this important issue. We must also acknowledge the contributions made by our NHS colleagues and all the parents, school nurses and school governors who attended the stakeholder event. The diverse input of views contained in this report will ensure that the outcomes are equally diverse and far reaching.



Councillor Bryan Nott **Councillor Jilly Bermingham**

1: Summary and Recommendations

1.1 Birmingham, like the rest of the UK, is experiencing a public health epidemic of childhood obesity. Obesity among children aged two to four almost doubled between 1989 and 1998, from 5% to 9%. Among those aged six to fifteen, rates of obesity trebled from 5% in 1990 to 16% in 2001. Conservative estimates predict that if these trends continue, by 2020, one in three adults, one in five boys and one in three girls will be obese.

1.2 Of the 977,087 people living in Birmingham (2001 census), it is estimated that over half the adult population (374,970) of Birmingham is overweight and 18% are clinically obese, that is 135,750 adults. Of the 158,920 children aged 5-15 years living in Birmingham, 39,530 are estimated to be overweight (24.9%) and 19,890 clinically obese (12.5%).

1.3 Obesity is a condition in which body fat stores are enlarged to an extent that impairs health. In scientific terms, obesity is the result of “deranged energy balance”, i.e. when energy intake exceeds energy expenditure causing excess fat or “adipose tissue” to be formed and stored. Poor diet and insufficient physical activity lie at the heart of the obesity problem.

1.4 Childhood obesity predisposes to adult obesity: about 50% of obese children become obese adults. Obesity at 13 yrs is predictive of adult obesity. Normal weight adults who were obese children continue to carry an increased health risk, especially that of cardiovascular disease. Adult obesity reduces life expectancy by 8-10 years, mainly through premature death due to cardiovascular disease or complications of diabetes. In Birmingham an estimated 495 deaths per year are attributable to obesity.

1.5 Patterns of obesity lead to a ‘health divide’ between different social classes and ethnic groups. 14% of people from professional groups are obese, compared to 28% of women and 19% of men from manual groups. Levels of obesity are higher in Black Caribbean and Pakistani women (50% and 25% higher respectively). Around 30% of the Birmingham population are from non-white ethnic minority communities compared to 9% nationally and so there is greater risk of ill health related to obesity in our population.

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1.6 Childhood obesity is a disease with potentially devastating consequences, the most important of which are poor mental health, cardiovascular disease and type 2 diabetes mellitus. Health consequences of adult obesity include an increased risk of heart attacks and strokes, type 2 (non insulin dependent) diabetes, breast, endometrial and colorectal cancers and high blood pressure (hypertension).

1.7 The social and mental health consequences of obesity, especially for children, are social isolation, bullying and peer problems. Obesity in childhood and adolescence is associated with poor self-esteem, being perceived as unattractive, depression, disordered eating, bulimia and body dissatisfaction.

1.8 The World Health Organisation (WHO) estimates that 58% of type 2 diabetes, 21% of heart disease and between 8-42% of certain cancers are attributable to excess body fat.

1.9 Deaths linked to obesity shorten life by 9 years on average. The estimated human costs for England include a loss of 18 million sick days a year, 30 000 deaths per year resulting in 40,000 lost years of working life.

1.10 It is estimated that, in England, there is a financial impact on the NHS of approximately £0.5 billion in treatment costs and approximately £2 billion on the economy.

1.11 In Birmingham, it is also estimated that reducing the prevalence of obesity by 5% could save 25 lives each year, and reducing obesity by 25% could save 124 lives a year.

1.12 Reasons for the increase in childhood obesity include:

<u>Poor diet</u>

- snacking and over reliance on fast food and processed foods which are high in salt, sugar and fat
- predominance of a “cafeteria culture” in many of our schools and access to vending machines providing energy-dense foods and snacks
- low intake of fruit and vegetables in many children
- poor knowledge amongst children about nutrition, food skills and what constitutes a healthy diet
- over-marketing and advertising of fatty and sugary foods
- poor access to healthy food and retail outlets selling fresh fruit

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and vegetables

Decline of physical activity

- an increase in sedentary behaviour (e.g. watching TV) in children
- fewer children walking or cycling to school
- less curriculum time spent on physical activity (PE) and sports
- poor access to or less use of parks and recreational areas and facilities

1.13 Tackling childhood obesity requires action in a number of areas - behaviour, dietary intake, physical activity, and the wider environments to which children are exposed.

1.14 The broad conclusions of the review group are that:

- Current measures to tackle obesity in the City are failing. At present there is no coherent pan-Birmingham inter-agency approach to tackling obesity. Policy-making and strategic planning are not sufficiently integrated between the NHS and local government and a bold approach and strong leadership are required if the health of Birmingham's children is to be protected.
- The evidence base of effective interventions for preventing and treating obesity in children is weak: many aspects of the management of childhood obesity have either not been subject to systematic evaluation or have limited robust evidence of support. Much research is needed to clarify what works for whom and in what circumstances, but currently there is sufficient guidance to permit the development of sensible service models.
- Treating childhood obesity is difficult and services are not well developed. Current utilisation of the community nutrition and dietetic service for children is low in relation to need.
- The current arrangements for surveillance monitoring childhood obesity prevalence in Birmingham are unsatisfactory and urgent action is required to put in place information systems required to support needs-based planning and to monitor the impact of interventions.
- Potentially, schools are important social as well as health promoting environments for children and young people. Schools should be part of the solution to control the childhood obesity epidemic, not part of the problem.

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- Food manufacturers' marketing strategies include incentives for schools to promote their products by offering schools resources in the form of equipment, books, and income from vending machines. These products are often energy dense and high in fat, sugar and salt, for example items such as crisps, confectionery and fizzy drinks.

- Currently the LEA has not issued policy guidance to help schools make a judgement on what are acceptable ways to generate income and what is expected of them as organisations responsible for protecting and promoting the health of children.

- The governance of local schools may also fail children, as the quality of nutritional or physical activity opportunities provided is not scrutinised adequately by many school governing bodies. Currently there is little school governor training to help governors examine how the school environment impacts on children's health and well being.

- The importance of food poverty and its impact on rising obesity prevalence in those who are socio-economically disadvantaged cannot be underestimated. Of particular concern is the inability of some high-need groups to access affordable high quality fresh fruit and vegetables, and the transformation of neighbourhoods, where once a diversity of small retailers provided for local food needs, into areas characterised by food retail outlets selling takeaways, junk food, and long shelf-life energy-dense processed foods high in salt, fat or sugar. A joined-up approach is needed to develop local retailing strategies for tackling food poverty and lack of access to healthy eating opportunities.

1.15 Whilst the Committee has uncovered the depth of the problem and identified many the issues that need to be tackled, there is much work that needs to be done to explore, negotiate and commission interventions for reducing obesity in the City. The Committee therefore recommends that:

	Recommendation	**Responsibility**	**Completion Date**
R1:	A pan-Birmingham Children's Nutrition Task Force be established responsible to the Cabinet Member for Social Care and Health (in her capacity as Chair of the Children and Young Person's Strategic Partnership), to develop a City-wide action plan for responding to the growing problem of childhood obesity. The Task Force should be established along the lines of the proposed Terms of Reference attached at Appendix 8.	Cabinet Member for Social Care and Health	Task Force to be established by October 2004
R2	A dedicated lead officer, jointly funded by the City Council and the Primary Care Trusts and reporting to the Cabinet Member for Social Care and Health, be appointed in the first	Cabinet Member for Social Care and Health	December 2004

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	instance for a year, to ensure that real progress is made on this issue including the pursuit of interventions outlined in appendix 9.		
R3	An interim report be presented to the Birmingham Health Partnership before the end of the calendar year providing a fully costed action plan including detailed actions which have already been put in place.	Cabinet Member for Social Care and Health	December 2004
R4	All the PCTs in Birmingham • explore the feasibility of collecting: data on children's universal height, weight and BMI at reception year, year 7 and if possible year 11, or on a school population basis; • ensure that data generated by capturing children's universal height, weight and BMI is entered and fully utilised by the Child Health Surveillance System (CHSS); • ensure that BMI, height and weight information from the CHSS is made available to school nurses, head teachers and parents; • ensure that the health needs of obese children are identified and they and their families are offered appropriate help and support.	Chief Executives of the 4 Birmingham PCTs	December 2004
R5	The City Council works in conjunction with Birmingham's 4 Directors of Public Health to develop and disseminate to schools, advice and guidelines on • Food and drink in schools; • Commercial sponsorship; advertising and promotion in schools; • Physical activity in schools.	Cabinet Member for Education and Lifelong Learning	December 2004
R6	The City Council undertakes a review of the Health Education Unit, and works in conjunction with Birmingham's 4 Directors of Public Health, in examining the potential public health role of school nurses.	Cabinet Member for Education and Lifelong Learning	December 2004
R7	The City Council ensures that school governors receive training to better facilitate the effective execution of their governance function including • Proper consideration of how the school environment impacts on children's health and well-being; • The school's responsibilities for protecting the health of children; • Adopting a whole-school approach to combating obesity including issues as set out in section 4.5.4	Cabinet Member for Education and Lifelong Learning	December 2004

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	and 4.6.9 of this report.		
R8	Progress towards achievement of these recommendations be reported to the Health Overview and Scrutiny Committee by December 2004. Subsequent progress reports will be scheduled by the Committee thereafter, until all recommendations are implemented.	Cabinet Member for Social Care and Health	December 2004

2: Introduction

2.1 Reason for the Review

2.1.1 This review was initiated by the Health Overview and Scrutiny Committee in July 2003 in order to assess the level of obesity and its health consequences for children and adolescents in the City.

2.1.2 The main objectives of the review were :

- To identify local factors which are contributing to a rise in obesity and which could be avoided.
- To map the impact of national policies and local programmes to promote healthy eating in settings managed by the public sector e.g. nurseries, schools, leisure centres, hospitals.
- To explore, from a community perspective, social and economic barriers to maintaining normal body weight.
- To explore what services are available for families with children who are overweight or obese.

2.2 Terms of Reference

2.2.1 The Terms of Reference and a project plan for the review are attached at Appendix 1.

2.3 Membership

2.3.1 A review panel of members from the main Health Overview and Scrutiny Committee carried out the review. Members of the review panel were:

- Councillor Jilly Bermingham (Chair)
- Councillor Jon Hunt
- Councillor Fergus Robinson

2.3.2 Members of the Health Overview and Scrutiny Committee were:

- Councillor Bryan Nott (Chair)
- Councillor Margaret Sparrey (Vice Chair)
- Councillor Susan Axford
- Councillor Reverend Richard Bashford
- Councillor Jilly Bermingham
- Councillor Jerry Evans
- Councillor Jon Hunt
- Councillor Ansar Ali Khan
- Councillor Shaukat Ali Khan
- Councillor Chaman Lal
- Councillor Jagdip Rai
- Councillor Fergus Robinson

2.3.3 The review panel received expertise advice and support from Cynthia Bower (Chief Executive, South Birmingham PCT), Eleanor McGee (the City's "5 a day Co-ordinator", Eastern PCT) and Sue Meredith (Paediatric Nutritionist, Birmingham Children's Services).

2.3.4 Officer support for the review panel's work was provided by Dr. Edwina Affie, (Public Health, South Birmingham PCT and Lead officer for the review) and Namita Srivastava (Scrutiny Office). Additional guidance and advice was provided by the Committee's Link Officer, Dr Jacky Chambers.

2.4 Methodology

2.4.1 In producing its findings, the Committee drew on information obtained through the following sources:

- National policy documents and local strategies
- Literature reviews, health surveys, research papers and academic studies
- Data and statistical information
- Presentations and evidence from expert witnesses
- Consultation and contributions from parents and key stakeholders

2.4.2 A comprehensive breakdown of the methodology used by the Committee including documentary evidence, reports and full list of data sources is provided in Appendix 2.

2.5 Critique of Methodology

2.5.1 In undertaking this review, the Committee was limited both in terms of time and resources. As a result, it focussed largely on those matters that could be realistically influenced at a local level.

2.5.2 Tackling childhood obesity is the responsibility of organisations beyond the NHS and the City Council. Issues such as media, marketing and food labelling were therefore not covered in any great depth.

2.5.3 Finally, the absence of hard data and statistics on the prevalence of childhood obesity at a local level was a major gap and one which the Committee addressed by using robust estimates and modelling techniques supplied by Senior Information Specialists at South Birmingham PCT.

2.6 What is Obesity?

2.6.1 Obesity is a condition in which body fat stores are enlarged to an extent that impairs health[1]. In scientific terms, obesity is the result of "deranged energy balance" i.e. when energy intake exceeds energy expenditure causing excess fat or "adipose tissue" to be formed and stored. Poor diet and insufficient physical activity lie at the heart of the obesity problem.

2.6.2 Childhood obesity is a disease with potentially devastating consequences, the most important of which are poor mental health, cardiovascular disease and type 2 diabetes mellitus. The first cases of obesity-related type 2 diabetes in white children were reported[2] in 2002, a worrying trend. This phenomenon is likely to be increasingly common in children of both white and ethnic minority groups, in particular those from South Asian and Black Caribbean communities.

2.6.3 Childhood obesity predisposes to adult obesity; about 50% of obese children become obese adults. Obesity at 13 yrs is predictive of adult obesity[3]. Normal weight adults who were obese children

[1] Garrow and Summerbell. Health Care Needs Assessment. Series 3. www.hcns.radcliffe-oxford.com/obesity.html

[2] Drake et al Type 2 Diabetes in obese white children. Archives of Disease in Childhood 2002; 86: 207-208

[3] Wright et al Implications of Childhood Obesity for Adult Health: findings from thousand families cohort study BMJ 2001; 232:1280-1284

continue to carry an increased health risk, especially that of cardiovascular disease. Adult obesity reduces life expectancy by 8-10 years mainly through premature death due to cardiovascular disease or complications of diabetes[4]. In Birmingham an estimated 495 deaths per year are attributable to obesity.

2.6.4 "Body Mass Index" (BMI) is used as a tool to measure obesity. (BMI: weight in kilograms divided by the square of height in metres: kg/m2). For adults, obesity is defined as BMI greater than 30. BMI greater than or equal to 25 is classed as overweight. For children and young people (those under 18 years) BMI is not a static measurement and varies from birth to adulthood and between the sexes.

2.7 Identifying the Scale of the Problem

2.7.1 The Committee received documentary evidence which indicates that there is a national epidemic of obesity in both adult and childhood populations. In the UK, obesity among children aged two to four almost doubled between 1989 and 1998, from 5% to 9%. Among those aged six to 15, rates of obesity trebled from 5% in 1990 to 16% in 2001. Conservative estimates predict that if these trends continue, by 2020 one-third of adults, a fifth of boys and a third of girls will be obese[5].

2.7.2 The Committee was not able to examine hard, systematically-collected data about levels of childhood obesity in Birmingham because information systems to support monitoring and surveillance of this very important public health problem are not sufficiently developed. Some data, such as the age, height and weight of Reception and Year 7 children, is collected by school nurses. However, these statistics are not utilised as part of routine child health surveillance or transferred to other databases to study patterns of diseases in the population. The Committee considered this to be a lost opportunity to utilise a valuable and already collected data source. The Committee further believes that it is vital that local data on childhood obesity prevalence is collected and analysed, both to monitor the size of the problem and also to estimate the impact of actions to reduce obesity on population health.

2.7.3 However, the Committee also heard evidence from Dr Richard Wilson, Senior Information Specialist at South Birmingham Primary Care Trust. Dr Wilson used 2001 census population figures and obesity prevalence data from the most recent Health Survey for

[4] Annual report of the Chief Medical Officer 2002

[5] Storing Up Problems: The medical case for a slimmer nation Report of a working party of the Royal College of Physicians, Royal College of Paediatrics and Child Health and the Faculty of Public Health Medicine

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England to prepare local estimates of the number of overweight and obese children and adults in Birmingham and to model the impact of this problem on population health.

2.7.4 In a projected population of 977,087 people, his estimates suggest that

- Over half the adult population of Birmingham is overweight (374,970) and 18.1% are clinically obese, that is 135,740 adults.
- Of the 158,920 children aged 5-15 years living in Birmingham, 39,530 are overweight (24.9%) and 19,890 are clinically obese (12.5%).

2.7.5 These estimates only take into account population differences in age, gender and ethnicity, but not social class and are therefore likely to underestimate the numbers for Birmingham.

2.7.6 Some 30% of the Birmingham population are from non-white ethnic minorities compared to 9% nationally and obesity is more common in Black Caribbean and Pakistani communities. With the overall threat of risk from obesity related ill health being greater for this City, the Committee believes this should be closely monitored at a City-wide level.

2.7.7 Figure 1 provides estimated data (broken down by age and gender), for obese and overweight children in each PCT area in Birmingham. Figure 2 shows estimates for obesity prevalence for people aged 16 or over in each PCT area. Figures 3 and 4 show obesity prevalence by ethnicity.

2.7.8 Additional local estimates of the growing problem of obesity in school children was also provided by school nurses, paediatricians an dieticians.

Fig. 1: Childhood obesity estimates for Birmingham

		South PCT	HoB(T) PCT	North PCT	East PCT	All Birmingham PCTs
Males						
	Age					
Overweight	5 to 7	1646	1567	747	1100	5059
	8 to 9	1213	1080	571	810	3674
	10 to 14	3284	2912	1554	2092	9842
	15	774	747	364	511	2395
Obese	5 to 7	718	683	326	480	2206
	8 to 9	608	541	286	405	1840

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	10 to 14	1535	1361	726	978	4600
	15	386	372	181	255	1194
Females						
	Age					
Overweight	5 to 7	1307	1310	596	863	4076
	8 to 9	924	843	436	607	2810
	10 to 14	3319	2808	1520	2098	9745
	15	643	579	285	418	1925
Obese	5 to 7	691	692	315	456	2154
	8 to 9	538	491	254	353	1637
	10 to 14	1738	1471	796	1099	5103
	15	386	348	171	251	1156

Source: Heartstats.org.uk, (HSE 1009) Health Survey for England data. Children defined as overweight if their BMI was above the 85th centile of the Body Mass Index reference curves for the UK, and obese if above the 95th centile.

Fig 2: Obesity Estimates: Prevalence across Birmingham and by PCT

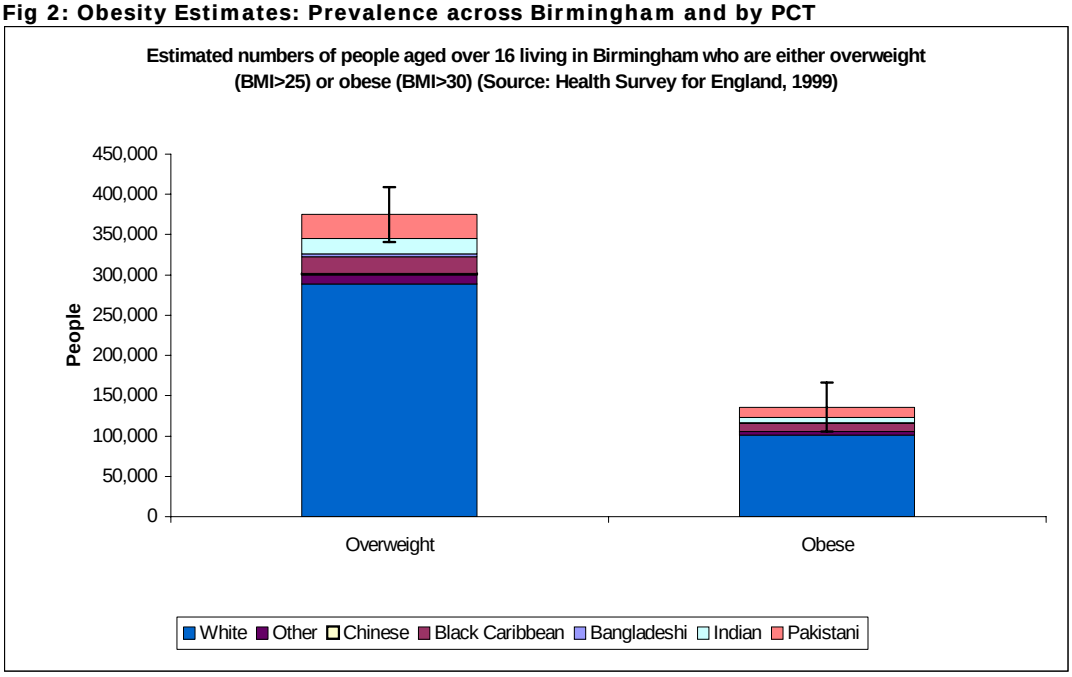

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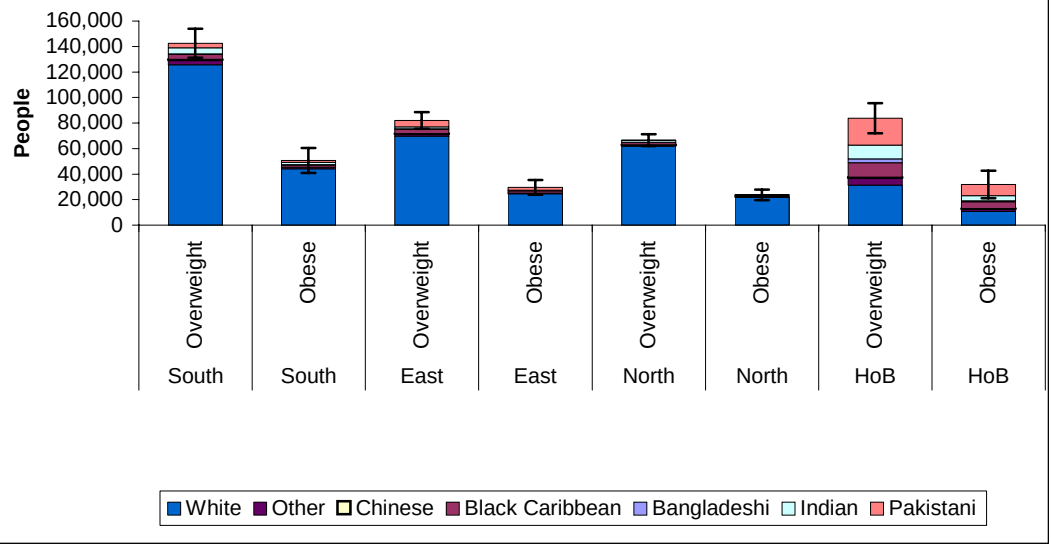
Fig 3: Estimates of obesity by ethnicity in Birmingham (adults)

	Overweight (no.)	Overweight (%pop)	Obese (no.)	Obese (%pop)
Bangladeshi	3634	29.4	904	7.3
Black Caribbean	20559	55.1	9684	26.0
Chinese	1261	29.1	212	4.9
Indian	18586	44.7	6668	16.0
Other	12073	37.8	4245	13.3
Pakistani	30103	46.5	12596	19.4
White	288755	51.9	101436	18.2
Overall	374971	50.1	135745	18.1

Source: 1999 Health Survey for England, 2001 Census

Fig 4: Estimated numbers of people aged over 16 living by Primary Care Trust who are either overweight (BMI>25) or obese (BMI>30) by ethnic group (Source: Health Survey for England, 1999)



2.8 Consequences and Health Impacts of Childhood Obesity

2.8.1 The Committee considered expert studies[6] which show that up to half of obese children become obese adults and go on to have higher morbidity and mortality compared with the general adult population.

2.8.2 The World Health Organisation (WHO) estimates that 58% of type 2 diabetes, 21% of heart disease and between 8-42% of certain cancers are attributable to excess body fat.

2.8.3 The health consequences of adult obesity include an increased risk of:

- Heart attacks and strokes
- Type 2 (non insulin dependent) diabetes
- Breast, endometrial and colorectal cancers
- High blood pressure (hypertension)
- Gallstones
- Joint and mobility problems (osteoarthritis)
- Reproductive disorders and complications in pregnancy
- Sleep apnoea
- Breathing problems
- Lower back pain
- Low self-esteem, depression and social isolation

2.8.4 The physical health consequences of childhood obesity are:

- Increased blood pressure
- Fatty lipid profiles
- Heart muscle enlargement
- Disturbed sugar (glucose) metabolism
- Increased risk of type 2 diabetes mellitus

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[6] Gunnell DJ, Frankel SJ, Nanchahal K, Peters TJ, Davey Smith G. Childhood obesity and adult cardiovascular mortality: a 57-y follow-up study based on the Boyd Orr cohort. Am.J.Clinical Nutrition 1998;67:1111.
Dietz WH. Childhood Weight Affects Adult Morbidity and Mortality. The Journal of Nutrition 1998; 128:411S.
Mossberg HO. 40-year follow-up of overweight children. Lancet 1989;2:491-3.
Must A, Jacques PF, Dallal GE, Bajema CJ, Dietz WH. Long-term morbidity and mortality of overweight adolescents. A follow-up of the Harvard Growth Study of 1922 to 1935. N.Engl.J.Med. 1992;327:1350.

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2.8.5 The social and mental health consequences of obesity, especially for children, are social isolation, bullying and peer problems. Obesity in childhood and adolescence is associated with poor self-esteem, being perceived as unattractive, depression, disordered eating, bulimia and body dissatisfaction.

2.8.6 Studies in the UK and USA have also shown that obese adolescent women have lower educational attainment, lower incomes and are less likely to marry than those not overweight.[7]

2.8.7 Recent research shows that teachers underestimate the IQ of overweight children more than those of normal weight, and that health professionals have strong negative views towards overweight people, even if they deny them consciously.[8]

2.8.8 The Committee further learnt that patterns of obesity lead to a 'health divide' between different social classes and ethnic groups. 14% of people from professional groups are obese compared to 28% of women and 19% of men from manual groups. Levels of obesity are higher in Black Caribbean and Pakistani women (50% and 25% higher respectively)[9].

2.8.9 Type 2 diabetes, hypertension, central obesity and increased insulin resistance[10] are more common among South Asians in the UK[11] and contribute to an insulin resistance syndrome[12] with higher death rates from heart disease.

2.8.10 The high prevalence of insulin resistance in South Asians is detectable in childhood[13]. The Committee heard that Birmingham paediatricians had reported type 2 diabetes in a series of local children of South Asian ethnicity, characterised by obesity and insulin resistance[14], a picture which is also occurring nationally.[15]

2.8.11 Evidence is also emerging that a 'health divide' is developing in

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[7] Garrow and Campbell Health Needs Assessment. Obesity. 3rd series. www.hcna.radcliffe-oxford.com/obesity.html

[8] Professor Wardle – Response to question 189 Health Select Committee on Obesity 2003

[9] Health Survey for England 1999

[10] McKeigue PM, Shah B, Marmot MG. Relation of central obesity and insulin resistance with high diabetes prevalence and cardiovascular risk in South Asians. Lancet 1991; 337:382-6.

[11] Whitty CJ, Brunner EJ, Shipley MJ, Hemingway H, Marmot MG. Differences in biological risk factors for cardiovascular disease between three ethnic groups in the Whitehall II study. Atherosclerosis 1999;142:279-86.

[12] Reaven GM. Banting lecture 1988. Role of insulin resistance in human disease. Diabetes 1988;37:1595.

[13] Whincup PH, Gilg JA, Papacosta O, Seymour C, Miller GJ, Alberti KGMM et al. Early evidence of ethnic differences in cardiovascular risk: cross sectional comparison of British South Asian and white children. BMJ 2002;324:635

[14] Ehtisham S, Barrett TG, Shaw NJ. Type 2 diabetes mellitus in UK children--an emerging problem. Diabet Med 2000;17:867-71

[15] Ehtisham S, H, tersley AT , Dunger DB, and Barrett, T. G. First UK survey of paediatric type 2 diabetes and MODY. Archives of Disease in Childhood . 2003

children[16], with higher rates of obesity in children from deprived households. The Committee was concerned to hear that no local data on childhood obesity by social class is currently collected.

2.8.12 Finally the Committee was told that deaths linked to obesity shorten life by nine years on average. The estimated human costs for England include a loss of 18 million sick days a year, 30,000 deaths per year resulting in 40,000 lost years of working life.

2.8.13 It is estimated that, in England, there is a financial impact on the NHS of approximately £0.5 billion in treatment costs and approximately £2 billion on the economy.

2.8.14 Figure 5 summarises the estimated burden (number of deaths) each year of diseases in Birmingham which could be attributable to obesity.

Fig 5: Estimated obesity related mortality in Birmingham per annum

No of obese children in Birmingham	19890
Total no of children in Birmingham	158918
Ratio obese to not obese	0.13
So if 50% of obese children go on to be obese in adulthood	
Ratio of children going on to be obese adults	0.06
No of deaths attributable to obesity in Birmingham in 2003	
Angina	1
Breast cancer	6
Colorectal cancer	11
Endometrial cancer	3
Myocardial infarction	264
Stroke	204
Type 2 diabetes	6
Grand Total of deaths due to obesity	**495**
Therefore deaths related to childhood obesity per annum	**31**

Source: Health Survey for England 1999

[16] Kinra et al Deprivation and childhood obesity: a cross sectional study of 20,973 children in Plymouth, UK J Epidemiol Community Health 2000; 54: 456 - 460

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Oral Health and Obesity

2.8.15 Another further consequence of poor diet leading to obesity is poor oral health and dental decay. The National Diet and Nutrition Survey found that more than half (53%) of 4 to 18 year-olds have dental decay in their primary or permanent teeth.

2.8.16 A major cause of decay is the consumption of 'Non-Milk Extrinsic' (NME) sugars – those which are not found in milk or unprocessed fruit. Large amounts of NME sugars are commonly added to the processed foods and soft drinks which are marketed to children. The greatest tooth decay is found among those who consume sugar most frequently. The use of refined starches in foods such as biscuits and breakfast cereals may also play a part in dental decay, as they form a sticky paste around the teeth. The combination of NME sugars and refined starches may be especially damaging.

2.8.17 Oral health is also a health inequalities issue. The incidence of tooth decay is reported to have risen by 50% in some parts of the country, due not only to dietary differences between income groups but also to the unavailability of NHS services in some areas, and the inability of those on low incomes to afford private dentistry services.

2.8.18 Fluoridation of the Birmingham water supply helps to protect children's teeth and benefits the dental health of those living in socially deprived households. Despite this, poor dental health continues to be seen in areas of poverty and social deprivation. In the more affluent North Birmingham wards less than 10% of 5 yr olds have active decay, whereas in the poorer wards of Aston, Washwood Health and Nechells this rises to 35%.

2.8.19 Muslim children are also at higher risk of dental decay. Research in Birmingham investigated why Muslim children suffer from more dental decay. This pointed to high levels of sugar consumption, particularly sweetened drinks at bed-time, the use of sugar when weaning, confusion as to what constitutes healthy drinks and misinformation about when tooth decay begins.

2.8.20 In respect of the concerns regarding tooth decay, the Committee sought assurances that PCTs would ensure that the opportunities for both promoting oral health and tackling obesity afforded by the new contracts for general dental services would not be missed.

Obesity and Eating Disorders

2.8.21 The relationship between childhood obesity and eating disorders is not well understood. Risk factors for eating disorders include impaired emotional development, identity problems, distorted body image, pathological relationships with food and poor self-esteem.

2.8.22 In his evidence to the Health Select Committee on Obesity, Professor Lacey, Royal College of Psychiatrists, describes "a

significant subgroup within the obese population who eat by means of binge-eating and who have clinical features very similar to bulimia nervosa" (an eating disorder).

2.8.23 This group benefit from psychological therapies and their obesity is primarily related to mental ill health. The development of bulimia nervosa is influenced by

- parental obesity
- childhood obesity
- critical comments by family about shape, weight or eating
- early menarche
- parental psychiatric disorder and problems

2.8.24 An Australian survey[17] found a high prevalence of disordered eating behaviours (33%), unhealthy dieting practices (57%) and distorted body image (12%) in children and adolescents. Correlates of these behaviours are obesity/overweight status, low self-esteem, depression, suicidal tendencies and substance misuse.

[17] Grigg et al, Disordered eating and unhealthy weight reduction practices in adolescent females, Journal: preventive medicine 1996; 25 (6): 748-756

3: Understanding the Causes of Obesity

3.1.1 Obesity results from a 'deranged' energy balance whereby energy intake exceeds energy expenditure. The steep rise in levels of obesity over the past 20 years indicates that there have been major changes in our environment during this time. The type and quality of food that we eat, much less use of our own energy to move about, a more sedentary way of life overall, poor diet and insufficient physical activity lie at the heart of the obesity problem[18].

3.2 Genetic Changes

3.2.1 In our evolutionary past, being able to store excess food was essential for survival during times when food supplies were uncertain. In times of food security, the body's ability to store and accumulate fat has serious consequences for health and chronic diseases.

3.2.2 Certain individuals appear to be particularly predisposed to obesity, which in turn appears to be related to at least 250 obesity-associated genes and perinatal factors. A few rare medical obesity syndromes have been identified. These syndromes include: Prader-Willi, Bardet-Biedl, Cohen and Alstrom syndromes[19] - but these only account for a very small fraction of human obesity.

3.3 Changes in Children's Diets and Food Culture

3.3.1 The Committee was presented with information from the National Diet & Nutrition Survey (2000) which examined diets of school-aged children aged 4-18 years. This survey showed that dietary patterns have changed, with higher intakes of energy-dense micronutrient-poor foods - particularly processed foods, often high in fat, sugar and salt. The most commonly consumed foods were white bread, savoury snacks, biscuits, potatoes and chocolate confectionery.

[18] Ravussin E,.Swinburn BA. Pathophysiology of Obesity. Lancet 1992;340:404-8.

[19] Ebbeling et al Childhood Obesity: Public Health Crisis, common sense cure Lancet 2002, 360:

3.3.2 Non-milk extrinsic sugars (NMES) were found to exceed Government recommendations, the largest sources being soft drinks, sugar, preserves and confectionery.

3.3.3 The Committee heard that there has been a modest increase in energy intake between 1995 and 2001/2 [20].

3.3.4 Eating out, especially in fast food outlets, is now common and portion sizes are significantly larger than in the 1970s. "Supersizing" of fast-food and snacks make it easier for people to overeat - for example, someone eating a large fast food meal (double cheeseburger, french fries, soft drink plus a dessert) would need to run a marathon in order to burn off the energy in it[21].

3.3.5 A cafeteria 'fast food' culture is commonplace in many secondary schools. Similarly, 'grazing' (i.e. the pattern of eating and snacking throughout the day, often on the move) is replacing more traditional 'sit down' family dinners.

3.3.6 A large amount of energy can also be taken in by consuming soft drinks and the body does not respond in the same way to energy taken in this form as it does to solid food. The consumption of soft sweet drinks at meal times contributes to excess energy intake and to the rising trends in obesity[22].

3.4 Fruit and Vegetable Consumption in Children

3.4.1 The Committee was given figures[23] showing that intake of fruit and vegetables is relatively low in many children. Although, in general, average vitamin intakes exceed recommendations, there is evidence of low intake of some minerals in adolescents, especially girls. Consumption of fruit and vegetables is important, as it helps to protect people against heart disease and other chronic diseases.

3.4.2 In terms of fruit and vegetable intake:

- 4% of 4–6 year-olds eat five portions of fruit and vegetables (400g). The average consumption is two portions per day (170g).
- 20% of 4-6 year olds eat no fruit and 50% drink no fruit juice.
- 60% of 4-6 year olds eat no leafy green vegetables.

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[20] National Food Survey in 1995 estimated national average energy intake to be 1780 kcal. This had risen to 1895 in the 2001/2 Expenditure and Food Survey

[21] Ebbeling et al Childhood obesity: public health crisis, common sense cure Lancet 2002, 360: 473-82

[22] BMA Report on Adolescent Health 2003

[23] National diet and nutrition survey 2000 (ONS)

3.5 Water Consumption and Children's Health

3.5.1 Water consumption is a vital part of children's diets. However, many do not consume sufficient amounts of water to maintain adequate hydration. This can lead to serious health problems.

3.5.2 Dehydration in children results in poor concentration, lethargy, sluggishness, fatigue, irritability, diminished mental performance, headaches and diminished physical and sports performance, thereby adversely affecting a child's capacity to learn.

3.5.3 One of the features related to reduced levels of water intake during the school day is the avoidance of using school toilets. A UK Schools Council Survey found that 62% of boys and 35% of girls avoided drinking and using school toilets. Their reasons included lack of cleanliness, locks on doors not working, toilets blocked or overflowing, absence of hot water, absence of towels or dryers, no lighting or ventilation and misuse of toilets, e.g. bullying, smoking etc..

3.5.4 Avoiding using the toilet also has adverse health consequences including dehydration, bladder and kidney infections, renal scarring, constipation, and bed-wetting.

3.5.5 The Committee was concerned to hear that, unlike staff toilets - which must by law be kept clean, have hand washing/drying facilities and conform to Health and Safety standards - children's toilets in school can be in any condition as long as there are enough of them.

3.6 Food Knowledge and Skills

3.6.1 The Committee heard that research conducted by the Foods Standards Agency (FSA) and the Department for Education and Skills (DfES) found that 14-16 year olds had knowledge of what constitutes a healthy diet but did not critically assess their own diet. Young people did not tend to check nutritional labelling or assess the nutritional content of the foods they had chosen for themselves.[24]

3.6.2 Young people's cooking skills are poor and they are not learning food skills in the home from their families. The national curriculum does not give children the knowledge and skills to budget, buy or prepare food for healthy eating. The following survey results illustrate the problem:

[24] Food Standards Agency (2003) Food Standards Agency role in school based initiatives. London: Consumer Committee Meeting 18 June 2003

Fig 6: Food skills in children

Which of these things can you do yourself?' (7-15 yrs)[25]

Skill	% with these skills
Play computer games	93
Use a music centre or CD	77
Programme a video to record on TV	61
Heat up a pizza in a microwave	60
Make a cake	54
Cook a jacket potato in the oven	38

What do you think is a cookery skill?[26]	***% Agreeing***
Making a sandwich	36%
Making toast	31%
Opening cereal boxes	0%
Cooking chips	11%
Cake mixes from a packet	9%
Cooking eggs	9%
Cooking a pizza	7%

3.7 Food Advertising and Promotion Targeted at Children

3.7.1 The review of research on the effects of food promotion to children[27], commissioned by the Food Standards Agency in 2003, concluded:

- There is a lot of food advertising to children.
- The advertised diet is less healthy than the recommended one.
- Children enjoy and engage with food promotion.
- Food promotion is having an effect, particularly on children's preferences, purchasing behaviour and consumption.
- This effect is independent of other factors and operates at both a brand and category level.

3.7.2 The Committee was concerned to hear that in 1999 the food industry were estimated to have spent in excess of £0.3 billion in promoting unhealthy food products[28]. These are processed foods

[25] Source: NFA/DoH/BBCGF / MORI 1993 (question 1)

[26] The Good 1998 Food Foundation survey

[27] Review of research on the effects of food promotion to children Final Report Prepared for the Food Standards Agency by Gerard Hastings, Martine Stead, Laura McDermott, Alasdair Forsyth, Anne Marie MacKintosh, Mike Rayner, Christine Godfrey, Martin Caraher and Kathryn Angus

[28] Advertising Association's Yearbook 2000. Market data from Haynet Marketing,

which contain high levels of fat and/or sugar and/or salt and include confectionery, crisps and savoury snacks, soft drinks and other so-called 'fast' or pre-prepared 'convenience' foods.

3.7.3 Children are persistently exposed to commercial messages promoting these foods in a variety of formats: on television and radio, on the Internet, at the cinema, in comics and magazines, on packaging and even at school.

3.7.4 "TV Dinners" - a report examining the nature and extent of food advertising during children's TV programmes[29] - showed that between 95% and 99% of the food advertising during children's programming is for fatty and/or sugary and/or salty foods.

3.7.5 The Committee was concerned to learn that fatty and sugary foods are advertised in proportions up to 11 times higher than that recommended in official dietary guidelines, whilst fruit and vegetables are usually not advertised at all. In addition, adverts for unhealthy foods are shown with much greater frequency during children's television compared with adult viewing periods.

3.7.6 For every £1 the Health Education Authority used to spend on promoting healthy diets there is about £800 being spent by the food industry encouraging us to eat their products, 95% of which encourage weight gain rather than a healthy diet.[30]

3.8 Childhood Poverty and Diet

3.8.1 Child poverty is a significant issue for Birmingham. Figure 7 shows the high levels of child poverty in Birmingham. 18 Wards have more than 50% of children living in families claiming means tested benefits and this is reflected in the high proportion of children in Birmingham entitled to free school meals (50% compared to 17% in England overall).

3.8.2 Those on low incomes have poorer diets and are twice as likely to be sedentary than the most affluent groups.

3.8.3 Those on low incomes eat less well, often face worse access with a poorer quality/range and suffer more diet-related ill health.

3.8.4 There are inequalities in the dietary experience of children, particularly with respect to health-protecting micronutrients.

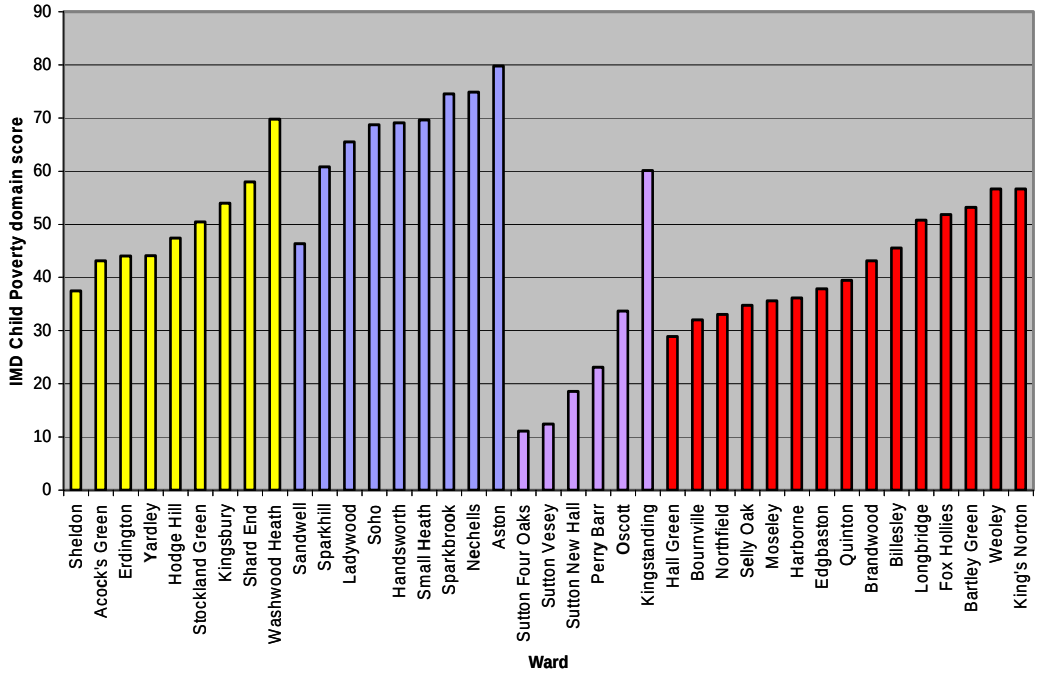
(www.marketing.haynet.com, original source AC Nielson) shows that in the year ending April 2000, industry spent £71m advertising the top ten selling soft drinks. The same source shows that £47m was expended on advertising the top ten selling confectionery lines and the advertising spend for the top ten selling crisps and snack products was £21m.

[29] Sustain, (2001), TV Dinners – What's being served up by the advertisers?, Sustain: The alliance for better food and farming, London.

[30] Food Commission. Expert testimony of Mr Tim Lobstein Health Select Committee on Obesity 17th July 2003

Compared to affluent groups, those who are poor have significantly lower intakes of many vitamins and minerals. Low intake of Zinc, Calcium, Magnesium in boys, and Iron, Iodine, Copper in girls from low income households has also been identified.

Figure 7 IMD Child poverty domain by Birmingham ward grouped by PCT



3.9 Children's Levels of Physical Activity

3.9.1 Children's levels of physical activity have declined[31]. By age 15 only 36% of girls and 71% of boys engage in physical activity for at least 30 minutes on most days. Overall, participation rates have declined with age after the age of about eight to 10. The decline was steeper among girls.

3.9.2 Between 1994 and 1999 the proportion of children who had two or more hours of Physical Education (PE) timetable in their curriculum had dropped from 46% to 33%. 50% of teenagers do no PE at school.

[31] Health Survey for England 2001

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3.9.3 The marked rise in obesity prevalence has coincided with a decrease in physical activity and a rise in sedentary behaviour in children. Factors contributing to this include:

- Increased car ownership and greater use of cars
- Decreased levels of walking as a means of transport
- Increase in number of energy saving devices e.g. escalators, lifts
- Reduction in the amount of physical education and sport carried out at school and at home
- Increased time watching TV, playing computer games, surfing the internet and using the telephone
- Loss of school playing fields
- Lack of a safe environment in which to walk or cycle to school or for physical play at home
- Parents spending less time playing with their children and being more reluctant to let children play outdoors
- Transport policies that favour driving above cycling or walking

3.9.4 Physical activity is influenced by:

- Biological factors (age, gender, obesity and fitness levels)
- Psycho-social factors (enjoyment, motivation, competence, control and autonomy, confidence, self efficacy, positive attitudes, knowledge, definition of personal goals, perceptions of benefits)
- Social and culture factors (parental influences and influence of significant of others, peer modelling, and support, socio-economic status, influence of mass media)
- Physical factors (weather, season, days of the week, access to activity, type of activity, the manner in which it is promoted and television viewing habits)

3.9.5 The Committee received information that children from poorer backgrounds participate less in sport. Participation rates in sport among 11 to 15 year-old girls of social class I and II was 63 per cent in 1997; by contrast, the participation rate among girls in social class IV and V was 47 %.

3.9.6 In relation to adolescent girls, the transition from primary to secondary school in young women is associated with the reduction in the amount of physical activity undertaken both in and out of school.

3.9.7 The risks of not taking part in sport or being physically active are higher in

- Children who have a poor relationship with their PE teacher;
- Children with parents holding negative attitudes towards physical activity and who do not regularly participate in activity themselves;
- Children with physical disabilities including obese children.

3.9.8 Appendix 3 summarises some of the factors which affect children's participation in physical activity.

3.10 Food Poverty

3.10.1 Food poverty is an inability or uncertainty to acquire or eat adequate quality or sufficient quantity of food in socially acceptable ways. Food security and entitlement requires that people:

- Have access to food, e.g. Enough money, be able to reach shops, buy and stock healthy foods at affordable prices etc;
- Enjoy the choice, e.g. Able to buy food that is safe, necessary and appropriate both for a healthy life and for the culture they live in;
- Be free from anxiety about whether they will be able to eat properly.

3.10.2 The 2002-03 Expenditure and Food Survey reported that household spending in the UK averaged £406 per week, with the lowest income groups spending £135 and the highest ten per cent £883. Food purchases contributed £40 to weekly expenditure, £10 of which went on meat, £5 on fresh fruit and vegetables and £2 on chocolate and confectionery.

3.10.3 Further research also suggests that insufficient resources are being spent generally on food to meet healthy guidelines and that low-income families spend even less on food. Poor people spend least on food but the highest proportion income-richer households spend more on fruit a week than poorest spend on all food.

3.10.4 The minimum wage and social assistance are often insufficient to maintain a healthy diet. Healthier food costs more. The Food

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Commission found that replacing a regular basket of food with the healthier food basket cost 51% more. The 'healthy food basket' often costs more where poor people live than where the richer live, supporting the belief that the rich eat better. Eating a high fat, sugar and salt diet is cheaper than eating a healthy diet.

3.10.5 In terms of food security, Appendix 4 [32] highlights the relatively lower consumption of fruit, vegetables and non-processed cuts of red meat in the poorer households compared to richer homes.

3.10.6 Food poverty is further exacerbated by the circumstances that poorer families experience. For example, many low-income families are "time poor", balancing their time with caring responsibilities, shift working, being a lone parent, etc.. Many others are in debt, paying high rates of interest, rent, council tax, fuel bills, coping with children's needs. These costs and considerations may take priority and food is the 'flexible item' both in terms of budget and time. People seem to focus on providing what is filling, acceptable and reasonable and cannot afford to make mistakes.

3.10.7 Poorer people may also have little equipment for storing/cooking food and there may be a lack of many basic necessities.

3.10.8 Smaller, qualitative surveys show that in low income families:

- children may go hungry - some eat nothing all day
- children's tastes dominate food choice
- such children and young people grow up in a culture of food that is monotonous, less likely to contribute to good health and often boring
- food is never a pleasure to shop for, to prepare, to cook, to eat or to share

3.10.9 The Committee heard that stigma from 'free food' may deter uptake of interventions targeted at low-income groups - for example, free school meals are not taken up by 20% of children[33].

3.10.10 Birmingham's Direct Services Division is currently a provider for 20 breakfast clubs in the City, with an average uptake of only 20% (range from 12%- 29%).

3.10.11 Research conducted by the Child Poverty Action Group has revealed that failure to take up food benefits in school is associated with:

- Fears by parents that children will be stigmatised or will be embarrassed to be receiving Free School Meals

[32] Chart provided by Liz Dowler, Warwick University from Nelson et al 2003

[33] Child Action Poverty Group Filling the Gap: Free School Meals, nutrition and poverty

(FSM)

- Free tickets or token systems operating in some schools readily identifies children
- Quality and choice of food on offer and the conditions in which the school lunch is eaten discourage take up, particularly in secondary schools where cafeteria-type food services, often crowded eating areas and queuing for food deter pupils from eating there
- The perceived value of the free meal rarely permits pupils to eat a well-balanced meal. In schools where there is no hot meal service, parents believe their own packed lunch is better
- Not all parents are aware of their entitlement to FSM and fail to apply; others may be deterred because of unfamiliarity with the application system of schools

3.11 Access to Healthy Food

3.11.1 The Committee had concerns that access to affordable, high quality fresh fruit and vegetables is not uniform across the City. Many shops and services have vanished from where poor people live, meaning that locally there may be little choice.

3.11.2 The "Measuring access to healthy food in Sandwell" project identified a deprived and unhealthy area and completed a full census of all food retailers[34]. The project found:

- large networks of streets and estates where there are no shops selling fresh fruit and/or vegetables;
- large networks of streets and estates where the fruit and vegetables that are available in local shops are expensive;
- inexpensive, good quality food, including fresh fruit and vegetables, is available in shops in small, concentrated shopping areas but the majority of people would have to travel by car or by public transport;
- small retailers struggle to survive, especially if they try to offer 'healthy' food and perishable goods, against competition from larger stores.

3.11.3 The Committee heard that the patterns of retail provision in certain neighbourhoods in Birmingham are also changing. Where once there may have been many small retail shops providing a range of fresh food, fruit and vegetables, some areas had become

[34] Dowler, Donkin, Blair, Rex, Grundy, Turner 1999; 2000; 2001

increasingly dominated by food retailers selling takeaways, junk food and long shelf-life, energy dense, processed foods high in salt, fat and sugar.

3.11.4 In 1961 there were 116,000 independent grocers in the UK: by 1997 this had decreased to 20,900[35]. This decline parallels the development of out of town shopping centres, the emergence of five supermarket chains as the dominant shapers of food provision infrastructure in the UK and a decrease in walking as a mode of transport for shopping trips as car journeys grow to predominate.

3.11.5 The change in the pattern of retailing has profoundly influenced individual behaviour and contributed to the development of more "obesogenic" environments, i.e. those that sustain and maintain obesity.

3.11.6 The Committee considered the evidence of Dr Pat Saunders (University of Birmingham) whose study had been commissioned by Birmingham Health Authority and who had more recently worked with South Birmingham PCT and the City's Environmental and Consumer Services Department to collate data on all retailers selling fresh fruit and vegetables in Birmingham (see Appendix 5). The key findings of this mapping study are:

- Most people in Birmingham appear to live within a 15-minute walk of any fruit and vegetable retailer (94% of the population). However, only 23.5% and 50% live within 15 minutes of an 'average' or 'good' retailer respectively. 12.5 % of the population only have access to a 'poor' retailer. The southwest, eastern fringe and far north of the City appear to be particularly poorly served.
- Some areas have disproportionately more 'poor' shops than other areas (particularly the south-western part of the City) suggesting that even where shops are conveniently located, the foods may not be that accessible in terms of value, range and/or quality.

3.11.7 The extent to which access to supermarkets helps to address food poverty and to meet health needs can be questioned. Examination of the New Consumer Marketing Categories[36], on which commercial decisions on where best to site new supermarket developments are made, suggests that council estates with high levels of deprivation are the least attractive areas for development. It seems unlikely that supermarket development will help to address food poverty issues in areas of highest need.

3.11.8 Figure 8 shows in order of development priority, supermarket-

[35] Environment Select Comm.1999 2nd report: Environmental Impact of Supermarket Competition
[36] CACI, The Grocer, Nov 8 2003, p 17

marketing categories.

Fig 8: New Consumer Marketing Categories

- Wealthy Achievers, suburbia
- Affluent Greys, rural communities
- Affluent Executives, family areas
- Well-off Workers, family areas
- Better-off Execs, Inner City
- Comfortable Middle-Agers, Mature home owning areas
- Skilled Workers, home owning areas
- White-Collar Workers, better-off multi-ethnic areas
- Older People, less prosperous areas
- Council Estate Residents, high unemployment
- Council Estate Residents, greatest hardship

Source: CACI, The Grocer, Nov 8 2003, p17

3.11.9 Finally, the Committee believed that for those people without cars, living in council estates with high levels of deprivation and without local shops offering a range of affordable fresh food, the opportunities to choose and consume healthy food are much less and the barriers greater. Buying unhealthy foods may not be due to ignorance but simply be seen as being easier and less expensive under these circumstances.

4: Local Factors and Obesity

4.1 The NHS

4.1.1 The causes of childhood obesity lie chiefly outside the control of the NHS. NHS professionals and organisations have an important role in raising awareness and promoting activities to tackle obesity. However, the evidence base of effective interventions for preventing and treating obesity in children is weak: many aspects of the management of childhood obesity have either not been subject to systematic evaluation or have limited robust evidence of support.[37] Much research is needed to clarify what works for whom and in what circumstances, but currently there is sufficient guidance to permit the development of sensible service models.

4.1.2 Treating childhood obesity is difficult and services are not well developed. Current utilisation of the community nutrition and dietetic service for children is low in relation to need. Primary Care Trusts (PCTs) are currently in the process of developing obesity strategies for their populations.

4.1.3 The 'School Nurse' community raised with the Committee their concerns about the growing numbers of school children they see who are overweight or obese and the psychological damage that this causes to their emotional development. They identified problems of distorted body image, pathological relationships with food, poor self esteem (all risk factors for eating disorders) and said that provision of psychological services for children with eating disorders is insufficient to meet need or demand.

4.1.4 The current arrangements for surveillance monitoring of childhood obesity prevalence in Birmingham are unsatisfactory and urgent action is required to put in place information systems required to support needs-based planning and to monitor the impact of interventions.

4.1.5 Action to tackle obesity in the NHS is currently undertaken through the NHS Plan[38], the National Service Frameworks for Coronary

[37] SIGN Guidelines on childhood obesity 2003

[38] The NHS Plan emphasises: Reform of the welfare foods programme to use the resources more effectively to ensure children in poverty have access to a healthy diet; Increased support for breast

Heart Disease, Cancer and the 5-A Day Programme[39]. In the near future the National Service Frameworks will also include Children.

4.1.6 The NHS has responsibilities to provide services for the prevention, treatment and care of children with obesity, as well as to improve the health of the population and reduce health inequalities. The four Birmingham Primary Care Trusts (South Birmingham PCT, Heart of Birmingham (Teaching) PCT, Eastern Birmingham PCT and North Birmingham PCT) and four Hospital Trusts (Good Hope Hospital, Birmingham Children's Hospital, Heartlands Hospital and City Hospital) provide services through

- primary care (GP surgeries) across the city
- a city-wide community nutrition and dietetics service (part of Birmingham Children's NHS services)
- specialist clinics in the four Hospital Trusts

4.1.7 No information is available to determine how many obese or overweight children are seen each year in general practice. However, almost 20,000 children are estimated to be clinically obese in Birmingham. The number of children who are in receipt of primary care-based weight-management interventions is not known but the figures are probably very small. The City's community nutrition and dietetics service and specialist hospital clinics also see only a tiny fraction of the obese child population. Current demand for these specialist services is not very high. The Birmingham PCTs are currently considering the development of strategies for tackling obesity.

4.2 School Nurses

4.2.1 School nurses are very important health professionals working in schools and they play a valuable public health role. They contribute to National Healthy School Standard (NHSS) activity by facilitating pupil focus groups in their caseload schools. Each school nurse 'looks after' a cluster of schools, usually one or two secondary schools plus six or seven primary schools. They are employed by the four Birmingham PCTs and are line-managed through the PCT primary care directorates.

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feeding and parenting; Work with industry to increase provision and access to fruit and vegetables with local initiatives including food co-operatives; Hospital nutrition policy to improve the outcome of care for patients

[39] The national Five-a-day programme targets actions to improve the amount of fruit and vegetables people eat. The Programme's main strands are: The National School Fruit Scheme: will entitle every child aged 4-6 in infant schools to a free piece of fruit each school day as a national campaign to improve the diet of children; Five-a-day community initiatives: to improve people's access to and awareness of fruit and vegetables to make it easier for them to eat more; Communications programme: to increase awareness of health benefits of fruit and vegetables; Work with food industry: to improve people's access to fruit and vegetables.

4.2.2 Their ability to undertake health promotion in schools is severely restricted by the demands placed on them by their immunisation service provider role and the high numbers of children with complex needs that they care for in individual schools (e.g. child protection, mental health and medical needs).

4.2.3 Historically, there has been little investment in the development of health promotion and public health skills amongst school nurses, nor an expansion of their numbers to reflect demographic changes. Of the 35 school nurses managed by South Birmingham PCT, only two have received public health training through a course and learning set run in 2002. A substantial number do not possess specialist qualifications in school nursing.

4.2.4 The LEA's Health Education Unit presented the Committee with results of a recent survey that found that 55% of school nurses wanted to do more health promotion work. Nurses can develop and be recognised for their health promotion skills by taking the Certification of Community Nurses to support Personal, Social, Health Education (PSHE). This is a professional development programme for school and other community nurses, but uptake is poor.

4.2.5 Schools are responding to capacity problems in the school nursing service by directly employing school nurses. However, some schools are making direct appointments to these roles when the individuals appointed may not be even clinically trained let alone trained in public health or health promotion.

4.3 Public Health Professionals

4.3.1 Public Health Specialists are in short supply. Each of the four Birmingham PCTs has its own Public Health Department, each led by a Director of Public Health. These Public Health teams have at most one or two other specialists. The capacity actively to lead and implement public health programmes in the school setting is very limited. One programme, the HOMER programme, (currently trying to improve diet and physical opportunities in South Birmingham secondary schools), has managed to recruit seven secondary schools: however, the present organisational and professional barriers hamper progress.

4.3.2 The Committee were of the view that there was an urgent need for schools to work with NHS health professionals to ensure that the health needs of obese children are identified and that they and their families are offered appropriate help.

4.3.3 School nurses, health promotion and public health specialists are key professionals, but current structural arrangements are impeding effective practice and the professional development of the

wider public health workforce needed to combat childhood obesity. A review of school health is urgently required, including an examination of the potential public health role of school nurses.

4.4 Local Authorities

4.4.1 Local authorities have a major part to play in tackling obesity across a wide range of their functions including trade, housing, education, employment, retailing, regeneration, transport, spatial planning, welfare, health and sport.

4.4.2 Potentially, schools are both an important social as well as a health-promoting environment for children and young people.

4.4.3 Although schools could be part of the solution to control the childhood obesity epidemic, there is much evidence to suggest that many schools are also part of the problem. Food manufacturers' marketing strategies include giving incentives schools to promote their products by offering schools resources in the form of equipment, books, and income from vending machines. These products are often energy dense, high fat, high sugar, and high salt items such as crisps, confectionery, and fizzy drinks.

4.4.4 Birmingham LEA has not issued policy guidance to help schools make a judgement on what are acceptable ways to generate income and what is expected of them as organisations responsible for protecting and promoting the health of children. Efforts to disseminate good practice in schools – for example, the provision of cooled water dispensers or teaching health nutrition education as part of the curriculum - need to be strengthened.

4.4.5 The Committee heard that many school governing bodies do not take a particular interest in the quality and opportunities provided by their school for healthy eating and physical activity. School governors are not trained to examine the extent to which their school is contributing to "obesogenic environments" (i.e. environments which encourage and maintain obesity) or to challenge poor practice.

4.4.6 In the Committee's view, school governors should receive training which helps them to understand how the school environment impacts on children's health and well-being and the school's responsibilities for protecting and promoting the health of children. School governing bodies should also establish a 'link governor' whose role it should be to liaise with their school and take a special interest on diet and physical activity issues in that school.

4.4.7 Interestingly, one school governor providing evidence for the review stated that when he raised concerns about the health impacts of vending machines in the school, the Head Teacher made

it clear that income generation was a more important priority than health concerns over childhood obesity. It is understood that some schools can generate income of around £15,000 a year from a single vending machine. In contrast there were also examples of schools which had secured funding for water dispensers, after-school activities and school travel plans.

4.4.8 National education policy has led to a decline in teaching food skills in the classroom. The effects of deregulating the school meal service in the 1980s, the lack of regulation and enforcement of the nutritional school meal standards and the low amount of money spent on school meals have combined to produce a situation where opportunities to eat healthy snacks and school meals or receive nutrition education as part of the school curriculum are very variable.

4.4.9 The missed opportunity to provide children with a healthy diet and basic nutritional requirements is particularly important for children from low-income families. 22% of parents rely on a school meal to provide a balanced diet and 60% say that the school meal plays a vital role in their child's diet[40]. School meals are the only hot meal received by one in four children[41]. Currently, nationally one in five school children are eligible to receive a free school meal, but 20% of those entitled do not take them up - largely due to stigma.

4.4.10 The Committee acknowledged that the City was involved in various partnership arrangements for looking at children's health and promoting physical activity. In particular, these include the Children's and Young Person's Strategic Partnership and the Birmingham Health Partnership.

4.4.11 The Birmingham Health Partnership had been instrumental in the allocation of NRF funding for a programme of free swimming for under 16s during school holidays.

4.4.12 The Children's and Young Person's Strategic Partnership was currently in the process of finalising a Children's Strategy for the City.

4.4.13 Whilst both groups had the potential to focus on children's health, the Committee considered that their remits were broad and wide ranging which sometimes resulted in issues like children's nutrition and physical activity competing against other priorities such as child protection.

[40] The 1999 Local Authority Caterers Association Survey

[41] Child Action Poverty Group. www.capg.org.uk

4.5 Catering in Birmingham Schools

4.5.1 Currently in Birmingham there are 171,682 pupils in the city's schools. Of the school population, 50% are entitled to free school meals, reflecting the high proportion of children still living in relative poverty in our City[42]. However, only half the children entitled to free school meals take this up. Out of 461 schools in the City, Direct Services Division manages 414. The remainder are either self-operated or have been contracted out to private companies. Other contractors include Sodexho, CMC Ltd, Scholarest, Redcliffe, First in Catering and Catering Alliance.

4.5.2 The school population served by Direct Services is approximately 140,205 pupils. There are also 24 Community Day Nurseries within the city, which cater for 540 children from 0-5 years and operate throughout the year for working parents.

4.5.3 In hearing evidence from officers from the LEA's Direct Services Division, school nurses and teachers, a number of concerns were highlighted to the Committee. These included:

- Spending on fruit and vegetables by children is considerably lower than their spending on confectionery and sweet carbonated drinks (140% higher) and junk food (214% higher). These figures do not include cola drink sales.
- Direct Services currently provides a pre-school breakfast service in 87 schools, but confectionery and/or crisps are sold at breakfast time in 24 out of 87 schools (28%). In one school, crisps at breakfast time are sold 'on behalf of the school'. It is also possible for children to choose to have 'full English breakfasts' potentially every day in 16 out of 87 schools. This pattern of breakfast food provision is also seen in canteens serviced by other caterers.
- Vending machines are a feature of many secondary schools and healthy vending or fruit tuck shops are not currently commonplace.
- The service counter does not reflect healthy eating messages – considerably more surface area is devoted to junk food than salad, fruit or vegetables.
- Healthy options are rarely marketed sufficiently and may be unattractive or poor tasting because of poor presentation or preparation.
- There is a marked variation in the quality of service provision between schools.
- The food cost across the sectors is around 50p per

[42] South Birmingham Health Profile 2003. Department of Public Health. South Birmingham PCT.

meal in Birmingham, 33% of the cost of a school meal.

- 120 schools are without a kitchen. Food is transported each day in containers and obviously degenerates in the meantime. There have been funds identified to install regeneration ovens into schools to cook meals from frozen, which would be an improvement.
- At present, catering staff do not receive education or training on healthy catering service provision from appropriate public health professionals and/or public health nutritionists. This is the case both at college and during in-service training.
- There is no quality assurance of school meal services based on 'healthy eating': no food service has its monthly menus examined or its pattern of food group delivery assessed by anyone able to make a professional judgement as to the nutritional or health value of what is being provided. Some catering managers ask the local school nurse about menus and healthy food provision - even though this group of health professionals has no accredited specialist knowledge or expertise in this area.

4.5.4 The Committee was concerned that there was no "whole school approach" to combating obesity and that the LEA should make efforts to improve this. Examples of good practice which need wider adoption as school policy include:

- Breakfast provision of cereal, toast, fruit, milk, fruit juice, with opportunities for subsequent physical activity
- Fruit tuck shops and vending machines providing healthy food
- Elimination of vending machines dispensing energy dense, high fat, high sugar, high salt products
- School meals which limit choice of energy dense, high fat, high sugar, high salt foods and actively promote fruit and vegetable consumption
- Easy access to drinking water, the enhanced provision of water dispensers and encouragement to drink frequently
- The teaching of food and cooking skills to children
- More curriculum time on physical activity, as well as providing access to a wide range of physical activity opportunities for children and young people
- Initiatives to encourage active play

- After-school clubs for cooking, physical activity and growing fruit and vegetables/gardening skills
- Upgrading of facilities to ensure toilets and changing rooms are clean, safe, attractive and give pupils a sense of privacy
- Ensuring the dining room environment is conducive to healthy eating and the enhancement of the social aspects of food
- Use of school facilities to encourage families to participate in health enhancing physical activity and food initiatives

4.6 Health Promotion

4.6.1 The National Healthy School Standard (NHSS) has had limited success in improving diet and physical activity in Birmingham schools. Participation is substantially better in primary schools than secondary schools, where the weak nutritional standards do little to prevent the high prevalence of a food culture based on the consumption of junk fast food. The choice permitted in the NHSS programme means that a school can gain the award having done nothing to tackle poor nutrition or insufficient physical activity provision. Figure 9 summarises the take-up by schools of the NHSS.

4.6.2 This shows that, to date, 6 out of 461 schools have been awarded the NHSS award through tackling both diet and physical activity. Uptake is very poor in secondary schools and the NHSS as an 'anti-obesity' intervention for Birmingham secondary schools is not working.

Fig 9: Birmingham Healthy School Standards (HSS) as at 16/12/03 JH

	South PCT	East PCT	North PCT	HoB(T) PCT	Pan B'ham
Awarded HSS award through tackling diet + nutrition					
• No. of Primary Schools	16	5	7	9	37
• No. of Secondary Schools	5	1	0	2	8
Total	**21**	**6**	**7**	**11**	**45**
Awarded HSS award through tackling Physical Activity (PA)					
• No. of Primary Schools	3	1	2	3	9
• No. of Secondary Schools	0	0	0	0	0
Total	**3**	**1**	**2**	**3**	**9**
Awarded HSS award through tackling both diet + nutrition & PA					
• No. of Primary Schools	1	0	3	2	6
• No. of Secondary Schools	0	0	0	0	0

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Total	**1**	**0**	**3**	**2**	**6**
Currently Working towards HSS award by tackling diet & nutrition					
• No. of Primary Schools	19	3	7	3	32
• No. of Secondary Schools	1	0	0	2	3
Total	**20**	**3**	**7**	**15**	**45**
Currently Working towards HSS award by tackling PA					
• No. of Primary Schools	5	2	2	8	17
• No. of Secondary Schools	0	0	0	0	0
Total	**5**	**2**	**2**	**8**	**17**
Currently Working towards HSS award through tackling both diet & nutrition and physical activity					
• No. of Primary Schools	2	1	0	3	6
• No. of Secondary Schools	1	0	0	0	1
Total	**3**	**1**	**0**	**3**	**7**
All schools with Healthy Eating and Physical Activity year 1-4					
• No. of Primary School targets	3	1	3	5	12
• No. of Secondary School targets	1	0	0	0	1
Total	**4**	**1**	**3**	**5**	**13**
TOTAL number of schools involved in healthy schools year 1-4					
* Figures include special schools in South, all age special in primary	75	24	31	47	187
TOTAL year 5 schools (setting targets by April 2004)	47	26	7	21	101
TOTAL all years 1-5	**122**	**50**	**38**	**68**	**288**

4.6.3 Implementing the NHSS is one of the work areas of the LEA's Health Education Unit (HEU). However, the unit is entirely self-funded through its work with schools. This dependency on schools to buy-in the service and generate income limits the amount of proactive work that the Unit can undertake.

4.6.4 The Committee believes that tackling 'obesogenic' school environments is a responsibility wider than the remit of the Health Education Unit. It is a difficult task and one that requires an aligned, co-ordinated public health workforce operating in schools. The current arrangements for health promotion in schools are unsatisfactory, in that the professionals attempting to deliver the interventions are split across sectors, organisations and directorates to the detriment of effective practice. Funding and accountability arrangements exacerbate the problem, and the growing trend of schools as autonomous independent bodies creates challenges for agencies that, instead of being able to conduct business with a single LEA, are now required to engage with potentially 461 schools. A review of the Health Education Unit and the resources made available to it to promote children's health in Birmingham is urgently required.

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4.6.5 Furthermore, the Committee considered that there was an urgent need for the LEA and the four Directors of Public Health to work together to develop and disseminate to schools, advice and guidelines on a range of matters including

- food and drink in schools
- commercial sponsorship such as advertising and promotion in schools
- and physical activity

4.6.6 The Committee also believed that senior catering managers in the LEA's Direct Services Division needed to work with public health specialists, NHS dieticians and the Health Education Unit to develop appropriate training and education programmes for catering staff to address the knowledge, attitudes, skills and behaviours required by a "best practice, healthy eating" school meals service.

4.6.7 In terms of school governance, the Committee agreed that school governing bodies need to play a more pro-active role in assessing and ensuring that their schools complied with recommended healthy eating standards.

4.6.8 The LEA has a role to play in ensuring school governors receive training to facilitate better the effective execution of their governance function, including proper consideration of how the school environment impacts on children's health and well being, the school's responsibilities for protecting the health of children and adopting a whole-school approach to combating obesity. The latter point involves those issues outlined at paragraph 4.5.4 of this report.

4.6.9 Other ways that school governors can make a difference are by ensuring they only contract with catering organisations that are committed to providing a "healthy eating school food service", and identifying a "link governor" whose role it would be to liaise with their school nurse and take a special interest in diet and physical activity issues.

4.6.10 Such initiatives should help to bring clarity to local governance processes in schools and would serve to establish a vision of what should be in place, and what needs to be done to ensure children can benefit from school based nutritional and physical activity opportunities.

4.6.11 The Committee were pleased to hear that there were opportunities for looking at children's health and the role of health services in schools through the newly emerging 'Children's Centres' and 'Extended Schools'.

4.7 Physical Activity and Sport

4.7.1 Children's levels of physical activity have declined: by age 15 only 36% of girls and 71% of boys engage in physical activity for at least 30 minutes on most days. Those who are poor participate less in sports and leisure activities. Only 33% of children get the recommended two hours of PE per week in school[43], [44].

4.7.2 Birmingham Leisure Services has worked with the health community to bring a number of programmes to the people of Birmingham, and these contribute to improvements in physical activity levels and health[45]. There is an ongoing programme of specialist sports coaching, complementing current schools sports initiatives, which particularly targets children and young people. Some of these activities include

- Free swimming (e.g. free passes for existing card holders, half-term Learn to Swim programme, half-term recreational/fun swimming sessions, free Strokes course, voucher scheme for targeted areas of the City)
- Walk 2000
- Passport to Leisure
- Teenage lifestyle clinic

4.7.3 The Committee was pleased to hear that recently implemented walking programmes in parks were beginning to result in real weight loss in participants. Programmes involving tennis and netball targeted the training of women as coaches and umpires and also included a focus on healthy eating. Whilst there had been some problems with the "Exercise on Prescription" Scheme in some Wards, there was a flexible approach to providing services and ensuring a diverse range of culturally sensitive activities.

4.7.4 Other developments included programmes to encourage rowing in secondary schools that had not achieved specialist sports status and holding annual 'activity days' in schools to encourage the take-up of non-competitive physical activities.

4.7.5 The Committee heard that many of these activities were funded through the Neighbourhood Renewal Fund (NRF) and that securing sustained mainstream funding was a challenge for these programmes. Furthermore, the nature of the funding regimes often meant that there were disparities of provision in different parts of the City.

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[43] Sport England Survey on Young People and Sport 1999;

[44] The National diet and nutrition survey; young people aged 4 – 18 years 2000.

[45] Birmingham Local Authority Scrutiny Review – Sport, Leisure & Health, June 2003

4.7.6 There was some concern about the lack of data on the proportion of children (from the city's population base) that were involved in organised leisure activities. The Committee considered that further work on raising children's physical activity, working in partnership with schools and the health community, needs to be undertaken if the current low level of physical activity in children is to be reversed, particularly in groups who are difficult to engage.

4.7.7 Because uptake of leisure services for physical activity is less in lower socio-economic groups, girls and ethnic minority groups - and because obesity prevalence is higher in these groups - the Committee believes that special efforts need to be made to ensure programmes are accessed and used by these particularly high need groups.

4.7.8 In addressing this, the Committee expects the Council's Leisure Services Department to work more closely with Public Health professionals in order to ensure programmes targeting children and their families from these groups respond appropriately to need, take account of best practice and tackle barriers to engagement such as cost, transport and timing of activities.

4.7.9 As part of this programme, Leisure Services should also look to develop their work programme with schools in efforts to offer a greater range of low cost after-school physical activity opportunities for children and their families as well as physical activity programmes to complement breakfast clubs.

4.7.10 A further major area of concern which also needs to be addressed is the lack of healthy eating and food policy in leisure centres and other City Council Leisure Services provision, e.g. vending machines supplying energy dense, high fat, high sugar and high salt products.

4.8 Economic Development and Planning

4.8.1 Directors of Planning, Economic Development, Transport and Public Health have an important role to play in helping Birmingham tackle obesity. The importance of food poverty and its impact on rising obesity prevalence in those who are socio-economically disadvantaged cannot be underestimated.

4.8.2 National directives such as Planning Policy Guidance (6 and 13), Report of the Policy Action Team (PAT13): Improving Shopping Access, the Strategy for Sustainable Farming and Food, and Making the Connections: Final Report on Transport and Social Exclusion (Social Exclusion Unit) give responsibility and powers to Directors of Planning, Transport and Public Health to address food poverty.

4.8.3 The Committee believes that the City's Planning, Economic

Development, Transport and Public Health Services are not currently working together actively to pursue these policies and to develop local retailing strategies for tackling food poverty and lack of access to healthy eating opportunities. There seems to be a particular lack of engagement of Public Health, partly due to capacity within Public Health departments and also to do with a lack of clarity around collaboration. As a result the Committee considered that greater co-ordination was needed so that officers from Planning, Economic Development, Transport and Public Health professionals could work together to address food poverty and to map and tackle lack of access to healthy affordable food in certain neighbourhoods.

4.8.4 Health Impact Assessments are an important tool to assist planning and development for areas of high need, poor health, socio-economic deprivation and poor supply of services (both commercial and public sector). However, officers from the City's Economic Development Department confirmed that, whilst these Impact Assessments were useful, they were currently not being used. Instead other initiatives were being explored to incentivise businesses in local centres which had the potential for health promotion and health improvement. Regeneration initiatives such as training, employment and job creation within ethnic catering businesses could incorporate healthy eating issues. Whilst these measures may tackle health inequalities generally, the Committee believed the Economic Development Department should use Health Impact Assessments to evaluate neighbourhood development options where the following issues are of concern:

- deprived neighbourhoods lacking access to healthy affordable food, especially fruit and vegetables
- deprived neighbourhoods where physical activity opportunities for children are limited
- school neighbourhoods where there is a high concentration of retail outlets selling energy dense food products to children

4.8.5 Furthermore, the Committee suggested that a subsidised grocery van delivery service targeting high need areas could be piloted through the use of regeneration funds.

4.8.6 In terms of the inability of some high-need groups to access affordable high quality fresh fruit and vegetables and the other issues mentioned in section 3.11 of this report, officers from the Planning Department stated that they were not aware of the work of Dr. Pat Saunders (University of Birmingham)/ Birmingham Health Authority, about poor access to retail outlets providing high quality and affordable fruit and vegetable provision. However, consultants were currently in the process of completing a study assessing the provision of food stores and identifying food "deserts" in the City.

4.8.7 The Committee heard evidence from the City's Planning

Department that planning policy guidelines are in place (e.g. around restaurants, bars and hot food outlets) which seek to control the location of facilities. Efforts are made to locate such facilities in shopping areas and away from residential areas and that Planning guidance covers the cumulative impact of such developments, e.g. in terms of highway safety and traffic problems, other amenities, noise disturbance, etc..

4.8.8 The Committee was further informed that where market forces were operating, there were no planning regulations to stop, for example, a greengrocer going out of business and changing into a newsagent. If businesses don't thrive, shops remain empty and add to the deprivation and economic instability of an area. Regeneration initiatives can promote healthy food outlets but could not prevent the development of unhealthy food shops.

4.8.9 The Committee appreciated the pull of market forces in making junk food more profitable to sell than fresh fruit and vegetables; fruit and vegetables are perishable goods with a short shelf life whilst junk food is full of preservatives thereby increasing its shelf life. However, the question was raised as to the potential for lowering the business rates for shops selling healthy food. The Committee was informed that Sandwell Metropolitan Borough Council had taken steps to ensure the continued provision of food shops in certain neighbourhoods. Officers from Planning stated that they were not aware of any such incentive schemes for healthy food outlets and that the Government policy was largely about deregulation.

4.8.10 The Committee was of the view that this matter needed further exploration and considered that in deprived areas lacking retail facilities, development of neighbourhood retailing should be encouraged through assessing needs, consulting with local people, developing local retail strategies, improving business support for small retailers and easing their business burdens.

4.8.11 Furthermore, where there is high need, Local Strategic Partnerships should support local shops/local food networks, local food initiatives and strengthen local markets which are part of Birmingham's history.

4.9 Transport Initiatives

4.9.1 The Committee heard how local transportation and planning policies have the ability to create safer conditions for physical activity (such as walking and cycling), reduce social isolation and improve access to local facilities. Walking and cycling can provide a convenient form of exercise for children but in the last 15 years the number of children walking and cycling to school has declined.

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4.9.2 Between 1986 and 2001 the proportion of children walking to school in the West Midlands fell from 60% to 50%, while over the same period the number being driven to school has risen from 16% to 25%. Nationally just 2% of secondary school pupils currently cycle, compared with 5% in 1989/91. The West Midlands Transportation Surveys for 2001 indicate that in Birmingham primary schools, 54% of children walk, 1% cycle, 37% travel by car and 8% travel by bus/coach. Only 36% of secondary school children walk to school and 0% cycle, 15% travel by car and 46% by bus.

4.9.3 The Committee noted the advice of Dr Chris Spencer-Jones, Director of Public Health, South Birmingham PCT, that it was important to get primary school children to walk to school safely and for this habit to be developed early. However, congestion by cars around schools is a problem often causing schools to become a site for accidents. "Park and Stride" initiatives were being publicised, but it was difficult to displace car usage.

4.9.4 In terms of bicycle usage, the Committee heard that there was virtually no cycling to school in the City. In a recent survey undertaken by the Transportation Services, bicycle ownership was high but usage was low. 25% of children said they would like to cycle to school but were concerned about the lack of storage facilities and safety issues. The Committee considered that further work was needed in this area, particularly the development and funding of School Travel Plans.

4.9.5 Regarding road safety, this is often a cause of concern for parents. However, the number of pedestrian casualties in Birmingham has fallen. In 2002 there were 430 child pedestrian casualties; this is the lowest for ten years and continues a downward trend. There were 61 pedal cyclist casualties in 2002; again this is the lowest figure for ten years and continues the downward trend. Other barriers include the inability to recruit and retain lollipop men/women and the need to address "road awareness" in areas of high deprivation where accident rates are often four or five times higher than elsewhere.

4.9.6 The Committee acknowledged that there are a number of initiatives with which the City's Transport Department have been involved. The Safer Travel to School Programme, School Travel Plans, Cycling Strategy, Walking Strategy and the Road Safety Programme are all currently being implemented in Birmingham. Some progress is being made towards achieving targets for increasing the number of children walking to school and the number of people using bicycles for their journeys. Further details on each of these initiatives are provided in Appendix 6.

4.9.7 The Committee also acknowledged that opportunities for partnership-working on area-based initiatives were being explored by Council departments. These had the potential to impact upon

obesity and include Healthy Living Centres, Sure Start, Children's Fund, Healthy Schools Programme, New Deal for Communities, Sports Action Zones, Education Action Zones and Neighbourhood Renewal.

4.9.8 Issues about continuation of funding or time-limited projects hampered progress in some areas - for example, funding to support some aspects of the School Travel Plan ends in April 2004 and it was unclear how this work will continue.

4.10 Parents' Views

4.10.1 As part of the review, the Committee held a stakeholder event for parents, school nurses and school governors. A summary of issues highlighted is provided in Appendix 7. Whilst many of the views expressed at the stakeholder event are already covered in various sections of this report, additional information includes concerns regarding:

- The relationship between the development of obesity and risk factors for eating disorders (impaired emotional development, identity problems, distorted body image, pathological relationships with food, poor self esteem)
- The use of food as 'reward' even in the school setting
- Ice cream vans sitting outside school gates
- Mixed messages being conveyed in schools, particularly concerning the commercialisation of schools such as advertising and promotion of confectionery and crisps, food in schools not being healthy, and lack of curriculum time for physical activity
- Bullying and stigmatisation of obese children and their withdrawal from participation in sport, shopping and other forms of social engagement
- Perceived increase in the prevalence of obesity in children, with more girls being affected than boys
- The need to investigate levels of obesity in children from black and ethnic minority communities and worries about the 'stereotyping' of ethnic diets
- School nurses not feeling sufficiently equipped to deal with obesity and lack of care pathways offering community based approaches
- The emphasis in schools on 'educating' children and parents compared to the relative lack of importance placed on equipping children with life skills and

changing the 'obesogenic' environment

- Behaviour in children affected by food, particularly perception that high fat, high sugar foods adversely impacted on behaviour
- Lack of guidance in what should be in school packed lunches
- Too little time to eat lunch and culture of snacking
- The need for a 'vending machine' audit of schools and other institutions
- Training of PE sports teachers in health matters and the way in which sport was taught in schools

5: Tackling Obesity

5.1 Potential Health Gains from Tackling Obesity

5.1.1 Obesity has serious complications, is difficult and expensive to treat and reduces life expectancy by 8-10 years. Prevention is better than cure, but even modest weight loss (10kg in 100 kg person with co-morbidities) is associated with health benefits[46]: Figure 10 illustrates health benefits associated with weight loss.

Fig 10: Potential health gains from 10kg weight loss

Mortality	20-25% fall in overall mortality 30-40% fall in diabetes related deaths 40-50% fall in obesity related cancer deaths
Blood pressure	Fall in high blood pressure
Diabetes	Up to 50% fall in fasting blood glucose Reduces risk of developing diabetes by over 50% and improvements in blood lipids

[46] Prodigy Guidelines on Obesity Management

5.1.2 Given the current level and trends in obesity, preventing and treating childhood and adult obesity may have significant population health and economic benefits. Figure 11 shows the estimated impact on mortality rates if the prevalence of obesity was reduced.

Fig 11: Estimated mortality reductions in Birmingham by obesity prevalence reduction
A reduction in the Birmingham obesity prevalence of: 1%, will save 5 lives a year 5% will save 25 lives a year 10%, will save 49 lives a year 25%, will save 124 lives a year 50%, will save 247 lives a year
Source: Dr. Richard Wilson, Senior Information Specialist South Birmingham PCT.

5.2 Potential Health Gains from Improving Physical Activity Levels

5.2.1 There are potential health benefits independent of weight reduction associated with increasing physical activity (and indeed healthy eating) as shown in Figure 12.

Fig 12: The benefits of moderate physical exercise

Physical benefits:

- Decreased risk of heart disease, stroke and hypertension
- Helps control weight and therefore obesity and diabetes
- Improves bone health
- Enhances immune system and reduces risk of colon cancer

Psychological Benefits:

- Enhanced psychological well being
- Reduced symptoms of depression and anxiety and
- Increase self-esteem
- May also enhance social and moral development as patterns behaviour often established in early life e.g. Not participating in regular physical activity in childhood may be less likely to engage in physical activity in adulthood

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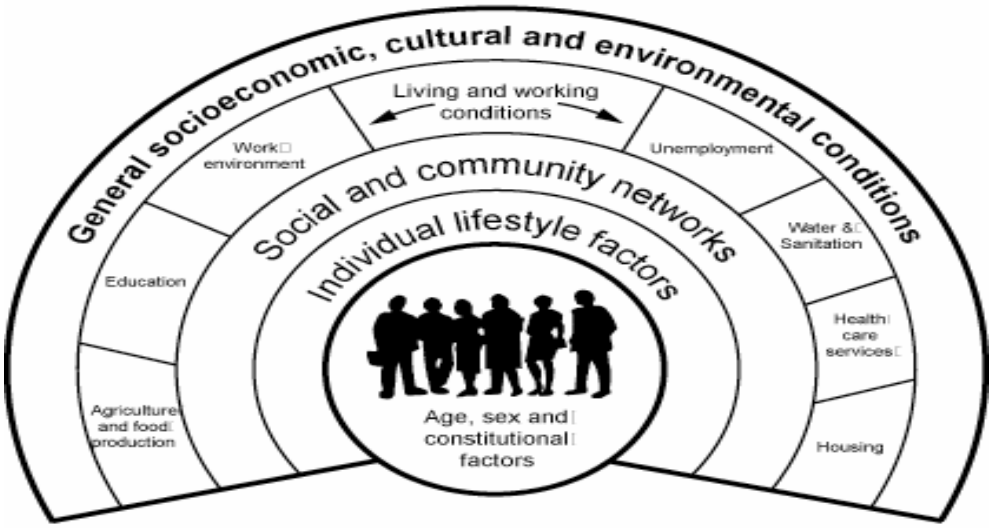
5.3 Facilitating Change – Strategic Direction

5.3.1 Tackling childhood obesity is extremely challenging and requires changes at multiple levels of society. Rather than focusing solely on personal behaviour, a blend of individual and environmental strategies is required. Each child is part of a social network comprising family, friends, colleagues, and acquaintances. Each layer of social structure (whether individual, interpersonal, organisational, community, or societal) affects the others above and below it, from the inside outward or the outside inward. Change one level and multiple levels may experience change. Figure 13 below illustrates this 'socio-environmental model of health[47].



5.3.2 Each level of social structure calls for a blend of intervention strategies and methods. For interventions to be most successful, many levels of social structure must be supportive of the change.

5.3.3 The most effective and comprehensive interventions occur when individual and environmental strategies are directed at several levels of social structure simultaneously.

5.3.4 There is increasing recognition of the dynamic interplay that exists between individuals and their environments. Although lifestyle choices are ultimately personal decisions, they are made within a complex mix of social and environmental influences which affect health behaviours by making healthier lifestyle options more readily accessible, affordable, comfortable, and safe[48]. Research has shown that behaviour change is more likely to endure when both the

[47] Dahlgren & Whitehead. Policies and strategies to promote social equity in health. Stokholm: Institute of future Studies 1991

[48] Green LW, McAllister AL. Macro-intervention to support health behavior: some theoretical perspectives and practical reflections. Health Education Quarterly 1984;11:322–339.

individual and the environment undergo change simultaneously.[49]

5.3.5 Together, the two approaches create synergy, having a far greater influence on individuals, organisations, communities and society as a whole than either individual or environmental strategies could effect alone.

5.3.6 Therefore, interventions that address not only individual intentions and skills, but also the social and physical environmental context of a desired behaviour, considering as well all social networks and organisations that share that environment, have the potential for population-wide impact[50].

5.3.7 At a strategic level, WHO recommends that the following are pre-cursors for effective action:

- Leadership
- Effective communication
- Functioning alliances and partnerships
- Enabling environments that support options for change

5.3.8 An enabling environment is defined as one that encompasses a wide frame of reference, from the environment at school and in the community, to transport policies, urban design policies, and the availability of a healthy diet. Furthermore, it requires supportive legislative, regulatory and fiscal policies to be in place.

5.3.9 WHO suggests that unless there is an enabling context, the potential for change will be minimal. The ideal is an environment that not only promotes but also supports and protects healthy living, making it possible, for example, to bicycle or walk to school, to buy fresh fruits and vegetables. It is one that supports people to make informed choices and take effective action.

5.3.10 Examples from available research suggest that such enabling environments do have lower obesity rates[51]. For instance, in Finland (North Karelia), through the use of regulated markets, age-adjusted mortality rates of people suffering from Chronic Heart Disease dramatically dropped between 1970 and 1995. Analysis of the three main risk factors (smoking, hypertension and raised plasma cholesterol) indicates that dietary change accounted for the larger part of the substantial decline. The part played by medication and surgery was very small. Dietary change was

[49] Lasater T, Abrams D, Artz L, et al. Lay volunteer delivery of a community-based cardiovascular risk factor change program: the Pawtucket Experiment. In: Behavioral health: a handbook of health enhancement and disease prevention edited by J.D. Matarazzo, S.M. Weiss, and J.A. Herd. New York: Wiley, 1984; 1166–1170.

[50] Stokals D. Translating social ecological theory into guidelines for community health promotion. American Journal of Health Promotion 1996;10(4):282–298.

[51] Supplied by Dr Martin Caraher from JP Morgan, 2003

achieved through community action and the pressure of consumer demand on the food market. All children receive a 'healthy' free school meal.

5.3.11 The Republic of Korea has maintained its traditional high-vegetable diet despite major socio-economic changes. Rates of chronic diseases, levels of fat intake and obesity prevalence are lower than other industrialised countries with similar economic development.

5.3.12 In his report 'Tackling Health Inequalities', Acheson makes recommendation for policies to address health related behaviours associated with risk factors for obesity[52]. These include, for example:

- The development of health-promoting schools
- Measures to improve the nutrition provided at school, including: the promotion of school food policies; the development of budgeting and cooking skills; the preservation of free school meal entitlement; the provision of free school fruit; and the restriction of less healthy food
- Policies which will increase the availability and accessibility of foodstuffs to supply an adequate and affordable diet
- Policies to ensure adequate retail provision of food to those who are disadvantaged
- Policies which reduce the salt content of processed foods
- Policies which improve the health and nutrition of women of child-bearing age and their children with priority given to the elimination of food poverty and the prevention and reduction of obesity
- Measures to encourage walking and cycling as forms of transport and to ensure the safe separation of pedestrians and cyclists from motor vehicles and
- Policies which promote moderate intensity exercise, including further provision of cycling and walking routes to school, and other environmental modifications aimed at the safe separation of pedestrians and cyclists from motor vehicles; and safer opportunities for leisure

5.3.13 The Wanless report[53] further suggests principles of behaviour change and that successful change depends on a person

[52] Independent Inquiry into Inequalities in Health Report. Acheson. 1998

[53] Wanless report 2004 Securing Good Health for the Whole Population – after Ishbein, Ajzen, Bandurs, Becker 1991

- believing they can be successful and having a positive attitude;
- having a strong intention to address their obesity;
- feeling that acting to reduce their weight is consistent with their self image;
- having the skills and understanding to know how to lose weight, e.g. what foods to eat and how to cook different foods;
- feeling there is more societal pressure to reduce energy intake and increase exercise rather than to eat unhealthily and do little physical activity;
- living in an environment where there are few barriers to engagement with a healthier lifestyle e.g. easy access to affordable high quality fruit and vegetables and opportunities for preferred physical activity.

5.4 Local Initiatives and Interventions That Work

5.4.1 The Committee heard that the evidence base of effective interventions for preventing and treating obesity in children is weak: many aspects of the management of childhood obesity have either not been subject to systematic evaluation or have limited robust evidence of support[54].

5.4.2 Much research is needed to clarify what works for whom and in what circumstances, but currently there is sufficient guidance to permit the development of sensible service models based on the following:

- School, family and societal interventions should be considered for the prevention of obesity in children.
- Early intervention in children's lives is crucial for the promotion of good nutrition and exercise.
- Interventions combining diet, physical activity and behaviour/psychological therapies achieve more success than diet alone or physical activity alone or behaviour therapy alone.
- Increase in activity through lifestyle changes and exercise, reduction in energy intake and reduction in sedentary behaviour should be considered for the treatment of obesity.
- Family support is needed for treatment to succeed and family-based, multi-faceted behaviour

[54] SIGN Guidelines on childhood obesity 2003

modification programmes may be effective.

- The most successful approach to promoting healthy eating and physical activity in school is to take a 'whole school approach' using multifaceted school-based interventions with an integrated curriculum involving nutrition, physical activity and cooking.
- School-based health promotion may be effective in changing knowledge, attitudes, skills and behaviour.

5.4.3 The Committee heard that there is no evidence that drug treatment is effective in treating obesity in children.

5.4.4 Some interventions from across the country that appear to have had an impact are detailed in the next section.

Provision of Breakfast Clubs

5.4.5 Children who do not have breakfast are more likely to suffer from impaired memory and attention span, and are less likely to process information[55]. Participation in school breakfast programmes can improve students' standardised test scores and reduce their rates of absence and tardiness[56]. In Lambeth, Education Action Zone breakfast clubs improved behaviour and the learning environment so much that support assistants were no longer needed in classrooms.[57]

Co-ordination of Policy, Service Delivery and Organisation in Schools

5.4.6 The Local Education Authorities in London have issued guidelines on school food which schools have found very helpful. Hybrid posts, such as nurses working as school assistants have helped to bridge the gap between services, as do school visits by primary care practitioners and mental health promotion in schools.

Provision of Drinking Water in Schools

5.4.7 Community initiatives, such as Yorkshire "Water's Cool" Schools where free water coolers are put in schools, have been successful in promoting the consumption of healthy drinks as opposed to high-sugar and artificial drinks. Schemes with bottles for water carrying and water coolers have worked through improving access to water and promoting regular water intake throughout the day.

Tackling Obesity in Schools

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[55] Simeon et al Effect of missing breakfast on the cognitive functions of school children of different nutritional status. American Journal of Clinical Nutrition 49 1989 p 646-653

[56] Meyers AF et al, School breakfast Program and school performance. American Journal of Diseases of Children 1989; 143:1234-9

[57] Kings Fund: Linking Children's Health and Education, Report by Fional Campbell on behalf of the London Health Commission

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5.4.8 St Leonard's Church of England Primary School in Padiham have used initiatives such as the improvement of the physical environment, introduction of a breakfast club offering healthy breakfasts, healthy snack clubs, making water freely available with encouragement to drink, introduction of physical activity into the lessons with every class beginning with a five-minute aerobic session, introduction of brain breaks during lessons, yoga type exercises after lunch, ensured two hours PE per week for every child and multi-sport playground markings with peer buddies to encourage participation in playtime physical activity. Improvements have included better behaviour; higher levels of self-esteem and improved SATS tests in children.

Improving Food in Schools

5.4.9 St Peter's Primary School, Nottinghamshire and St Aidan's Secondary School in Harrogate have revolutionised their school food service by serving delicious healthy meals, using whole school approaches and locally sourced food. Uptake of school meals has increased in both schools.

5.4.10 Also "Food Dudes", a project developed by Bangor Food Research Group, has increased the amount of fresh fruit and vegetable consumption in primary schools using a whole school package.

PCT Obesity and Nutrition Programme

5.4.11 Newcastle PCT established a specialist weight management service funded by NRF. Essential components include the establishment of multidisciplinary teams involving a manager, fitness instructor, psychologist, dietician and community nutrition assistant, together with administration support. Three levels of service are offered depending on BMI and associated co-morbidity. Evaluation of clients at one year demonstrated sustained physical activity and weight loss with a reported increase in self-esteem and confidence.

Sandwell Community Foods

5.4.12 This Beacon status food co-operative project now includes weekly delivery of fresh fruit and vegetables to private homes, school tuck shops, nursing homes and the YMCA.

5.4.13 Sandwell has also pioneered food access mapping and have a number of food projects addressing food insecurity and deprivation. The Greets Green project includes a census of local food shops, food access mapping, a local retails forum and the development of a local retail strategy to address health needs.

Free School Meals, Breakfasts, Swimming

5.4.14 For the first time in 56 years, free school meals, pre-school breakfasts and teatime snacks will be given to every primary school in Hull regardless of parental income. The City has a pupil

population of 23,000 primary aged children.

5.4.15 Wales will be offering free pre-school breakfasts to all primary school children from 2004. Wales also opened its leisure centres to children for free swimming during the summer holidays, and experienced dramatic increases in children taking up these physical activity opportunities.

Local Procurement

5.4.16 Powys local procurement initiative found that locally sourced nutritious food

- helped to deliver important health benefits, especially for the young and the sick, as part of an integral part of public sector catering in schools and hospitals
- helped the local economy retain a larger share of the retail price within the community compared to global food systems, delivering potential economic benefits to the locality
- lowered food miles and reduced CO2 emissions producing significant environmental benefits

5.4.17 The initiative promoted a better dialogue between producers and consumers, laying the basis for a better understanding between town and country, and these social benefits help to re-connect the food chain.

5.4.18 Recently Shropshire County Council has become the first county in the West Midlands to take on a Government initiative designed to get locally produced food into the public sector.

5.5 Facilitating Change – Developing a Local Response

5.5.1 The Committee's overall view is that tackling childhood obesity is extremely challenging and requires actions at many levels of society. Current measures to tackle obesity in the City are failing and attempts at managing the issues are disjointed and lack cohesion at a strategic level. There is an urgent need for a city-wide multi-agency approach, both in terms of developing a policy, directing action and monitoring interventions.

5.5.2 Policy confusion evident at the national level is mirrored at local level; policy-making and strategic planning are not sufficiently integrated between the NHS and local government to control the estimated trends in obesity. A bold approach and strong leadership are required if the health of Birmingham's children is to be protected.

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5.5.3 The Committee therefore believes that a pan-Birmingham Children's Nutrition Task Force should be established with responsibility for providing strategic leadership and overall co-ordination of city-wide interventions for tackling the threat of overweight and obesity.

5.5.4 The membership of such a group should encompass (as a core) the Cabinet Member for Social Care and Health, the Cabinet Member for Education and Lifelong Learning, the Strategic Directors or Chief Officers with responsibility for Social Care and Health, Education, Planning, Economic Development, Leisure Services, Environmental Health and Transport and the Directors of Public Health.

5.5.5 The purpose of the Task Force would be to

- provide strategic leadership for driving forward the city's agenda for tackling childhood obesity;
- maintain an overview and co-ordination role with regards to obesity-related interventions;
- ensure inter-agency services are fulfilling their responsibilities for tackling obesity in the City.

5.5.6 Some of the key responsibilities of the Task Force should include, for example:

- encouraging the development of city-wide strategies for tackling the threat of overweight and obesity and to oversee the implementation of these strategies by responsible agencies;
- ensuring that the development and implementation of policies, strategies and services for tackling children's obesity give special consideration to looked-after children, children living in poverty and children with special needs;
- undertaking surveillance and monitoring of interventions intended to tackle childhood obesity and their outcomes/impacts;
- ensuring that responsible agencies (e.g. PCTs) are collecting and widely disseminating information on obesity prevalence by age, sex, socio-economic group and ethnicity;
- ensuring that responsible agencies are undertaking geographical mapping and monitoring of food poverty and access to health enhancing food, such as fresh fruit and vegetables;
- encouraging and promoting the development of models of best practice;
- lobbying international and national policy makers on childhood obesity issues.

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5.5.7 Detailed terms of reference proposed for the Task Force are outlined in Appendix 8.

5.5.8 The Committee also considers that the work of the Task Force would need to be underpinned with resources to explore and negotiate a range of important interventions across partner agencies. It is therefore considered appropriate that a lead officer with professional expertise in obesity should be appointed to undertake specific tasks and activities for tackling obesity.

5.5.9 Some possible areas for intervention include:

- exploratory work with PCTs, such as the development of local strategies for tackling obesity in each PCT area and the commissioning of obesity services and monitoring of their impact on local populations;
- working with PCTs around the establishment of appropriate training programmes for doctors, nurses and other health professionals;
- working with the LEA and schools to develop and promote school-based strategies or interventions for tackling obesity, improving healthy eating and increasing levels of physical activity. This would include the development of appropriate training for school governors to facilitate better the effective execution of their governance function;
- working with the LEA and Head Teachers to use and disseminate data provided to them via the CHSS, for example, by ensuring that the school's annual report, includes profiles on pupils'
  - BMI, weight, height;
  - average time spent on physical activity of moderate intensity each day;
  - proportion of money spent on healthy food compared to confectionery, high sugar drinks and junk food;
- working with Leisure service to establish pilot projects of best practice which link healthy eating and physical activity, including programmes offering a greater range of low-cost after-school physical opportunities for children and their families.

5.5.10 A detailed list of activities and interventions for the appointed lead officer is provided at Appendix 9.

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6: Conclusions

6.1.1 Overall the Committee's conclusions are that current measures to tackle obesity in the City are failing. At present there is no coherent pan-Birmingham inter-agency approach to tackling obesity. Policy-making and strategic planning are not sufficiently integrated between the NHS and local government and a bold approach and strong leadership are required if the health of Birmingham's children is to be protected.

6.1.2 The evidence base of effective interventions for preventing and treating obesity in children is weak: many aspects of the management of childhood obesity have either not been subject to systematic evaluation or have limited robust evidence of support. Much research is needed to clarify what works for whom and in what circumstances, but currently there is sufficient guidance to permit the development of sensible service models.

6.1.3 Treating childhood obesity is difficult and services are not well developed. Current utilisation of the community nutrition and dietetic service for children is low in relation to need.

6.1.4 The current arrangements for surveillance monitoring of childhood obesity prevalence in Birmingham are unsatisfactory and urgent action is required to put in place information systems required to support needs-based planning and to monitor the impact of interventions.

6.1.5 Potentially, schools are both potent social as well as health promoting environments for children and young people. Schools should be part of the solution to control the childhood obesity epidemic: however, there is much research to suggest that many schools are also part of the problem.

6.1.6 Food manufacturers' marketing strategies include incentives for schools to promote their products by offering schools resources in the form of equipment, books, and income from vending machines. These products are often energy dense and high in fat, sugar and salt - for example, items such as crisps, confectionery, and fizzy drinks.

6.1.7 Currently the LEA has not issued policy guidance to help schools make a judgement on what are acceptable ways to generate income and what is expected of them as organisations responsible for protecting and promoting the health of children.

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6.1.8 Local school governance arrangements may fail children, as the quality of nutritional or physical activity opportunities locally provided is not scrutinised sufficiently by school governing bodies. Currently there is little school governor training to help governors examine how the school environment impacts on children's health and well being.

6.1.9 The importance of food poverty and its impact on rising obesity prevalence in those who are socio-economically disadvantaged cannot be underestimated. Of particular concern is the inability of some high-need groups to access affordable high quality fresh fruit and vegetables, and the transformation of neighbourhoods, where once a diversity of small retailers provided for local food needs, into areas characterised by food retail outlets selling takeaways, junk food, and long shelf-life energy-dense processed foods high in salt, fat or sugar. A joined-up approach is needed to develop local retailing strategies for tackling food poverty and lack of access to healthy eating opportunities.

6.1.10 Whilst the Committee has uncovered the depth of the problem and identified many of the issues that need to be tackled, there is much work that needs to be done to explore, negotiate and commission interventions for reducing obesity in the City. The Committee therefore recommends that:

	Recommendation	**Responsibility**	**Completion Date**
R1:	A pan-Birmingham Children's Nutrition Task Force be established responsible to the Cabinet Member for Social Care and Health (in her capacity as Chair of the Children and Young Person's Strategic Partnership), to develop a City-wide action plan for responding to the growing problem of childhood obesity. The Task Force should be established along the lines of the proposed Terms of Reference attached at Appendix 8.	Cabinet Member for Social Care and Health	Task Force to be established by October 2004
R2	A dedicated lead officer, jointly funded by the City Council and the Primary Care Trusts and reporting to the Cabinet Member for Social Care and Health, be appointed in the first instance for a year, to ensure that real progress is made on this issue including the pursuit of interventions outlined in appendix 9.	Cabinet Member for Social Care and Health	December 2004
R3	An interim report be presented to the Birmingham Health Partnership before the end of the calendar year providing a fully costed action plan including detailed actions which have already been put in place.	Cabinet Member for Social Care and Health	December 2004
R4	All the PCTs in Birmingham • explore the feasibility of collecting: data on children's universal height, weight and BMI at reception year,	Chief Executives of the 4 Birmingham PCTs	December 2004

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	year 7 and if possible year 11, or on a school population basis; • ensure that data generated by capturing children's universal height, weight and BMI is entered and fully utilised by the Child Health Surveillance System (CHSS); • ensure that BMI, height and weight information from the CHSS is made available to school nurses, head teachers and parents; • ensure that the health needs of obese children are identified and they and their families are offered appropriate help and support.		
R5	The City Council works in conjunction with Birmingham's 4 Directors of Public Health to develop and disseminate to schools, advice and guidelines on • Food and drink in schools; • Commercial sponsorship, advertising and promotion in schools; • Physical activity in schools.	Cabinet Member for Education and Lifelong Learning	December 2004
R6	The City Council undertakes a review of the Health Education Unit, and works in conjunction with Birmingham's 4 Directors of Public Health, in examining the potential public health role of school nurses.	Cabinet Member for Education and Lifelong Learning	December 2004
R7	The City Council ensures that school governors receive training to better facilitate the effective execution of their governance function including • Proper consideration of how the school environment impacts on children's health and well-being; • The school's responsibilities for protecting the health of children; • Adopting a whole-school approach to combating obesity including issues as set out in section 4.5.4 and 4.6.9 of this report.	Cabinet Member for Education and Lifelong Learning	December 2004
R8	Progress towards achievement of these recommendations be reported to the Health Overview and Scrutiny Committee by December 2004. Subsequent progress reports will be scheduled by the Committee thereafter, until all recommendations are implemented.	Cabinet Member for Social Care and Health	December 2004

Appendix 1: Terms of Reference

A	Subject of review	Children's Nutrition – Obesity
	Overview and Scrutiny Committee	Health Overview and Scrutiny Committee
B	Reason for review	To identify what steps are being taken by different agencies including the NHS and the City Council to address the problem of childhood obesity.
C	Objectives of review, including outcomes	• To assess the level of obesity and its health consequences for children and adolescents in the City • To identify local factors which are contributing to a rise in obesity and which could be avoided • To map the impact of national policies and local programmes to promote healthy eating in settings managed by the public sector e.g. nurseries, schools, leisure centres, hospitals • To explore, from a community perspective, social and economic barriers to maintaining normal body weight • To explore what services are available for families with children who are overweight or obese
D	Lead Member(s)	Cllrs Jilly Bermingham (Chair), Jon Hunt and Fergus Robinson
E	Lead Review Officer	Dr. Edwina Affie, South Birmingham PCT with support from Namita Srivastava (scrutiny office) and guidance from Dr Jacky Chambers and Narinder Saggu.
F	Relevant Executive Member / Decision Maker	• Councillor Susanna McCorry (Social Care and Health) • Councillor Catharine Grundy (Education and Lifelong Learning • Councillor Ian Ward (Sport, Leisure and Culture) • Chief Executives of PCTs and NHS Trusts
G	Council departments expected to contribute	• Education (Citiserve, Early Years, Health Education Unit, Education Welfare) • Leisure Services • Policy Development (Children's and Young Persons' Strategic Partnership)
H	External organisations expected to contribute	• Institute of Public Health (Birmingham) • PCTs • NHS Trusts • Community dieticians • Dental Health • Public Health network • British Diabetic Association
I	Anticipated date of report to Overview and Scrutiny Committee	
J	Estimated Number of Working Days to Conduct Review	February/ March (subject to resources)
	Per Member	5 meetings

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	Officers	14 days
K	Anticipated call on Scrutiny Budget	Non anticipated

Signed:

(By Chair on behalf of Overview and Scrutiny Committee)

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Date Agreed:

(By Overview and Scrutiny Committee)

.....

Approved:

(Chairman, Co-ordinating Overview and Scrutiny Committee)

.....

Date Approved:

(By Co-ordinating Overview and Scrutiny Committee)

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Scrutiny review : Children's Nutrition - Obesity

Draft project plan

Key objective

To identify what steps are being taken by different agencies including the NHS and City Council to address the problem of childhood obesity.

Objective	Tasks	Timescales	Responsibility
STAGE 1 : Preparation			
	Agree project lead, core membership and support arrangements for working group. Finalise and agree project plan, including meeting schedule. Assemble comparative information on children's nutritional state in Birmingham e.g. lifestyle survey, estimates of numbers overweight children, school entry data. Produce list of programmes, initiatives and services which are relevant. Review project plan in light of above. Identify any gaps in local information.	By mid August By September 23rd By September 12th	Link Officer - Dr Chambers Health Committee Dr Chambers/Chairman Edwina Affie / Namita Srivastava Edwina Affie /Namita Srivasatava
STAGE 2 : Understanding policy relevance			
	Summarise key policy documents / reviews undertaken and local data (e.g. oral health strategy, South PCTs review; Inst of PH research on "food deserts in Birmingham "; York Effectiveness Review, RCGPs, Faculty of PHM etc). Invite local experts to provide evidence on policy and practice, barriers and opportunities to prevent continued rise in obesity. Present key findings and highlight main issues for scrutiny to main committee.	Sept 12th October 22nd	Edwina Affie /Namita Srivasatava Edwina Affie /J Chambers
STAGE 3 : Parents and children's views on obesity , the promotion of healthy eating and local factors which are contributing to rise in obesity, including opportunities for physical recreation and balanced diet			
	Visits or meetings with local parents /user groups e.g. via Food Net, PTAs, school governors - summarise findings. "Open house " invitation to comment and provide input via local councillors, media, lay reps on ward subcommittees, and relevant voluntary	Sept- Oct October 15th	Edwina Affie /Darren view group Chairman /Edwina Affie /Press office

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	organisations, community leaders. 5 Case studies of specific children who have become obese - interviews with parents and adolescents.		
	Obtain evidence from head teachers , HEU and Citiserve , BCC education dept and dental public health consultant (RH).	By October 31st	
STAGE 3 : Mapping implementation of national and local programmes			
	Presentations by FOOD NET project, Citiserve, and lead DPH (South PCT :CSJ) and Dental PH consultant. Written submission on services available and from PCTs, DPHs , NHS Trusts (with children's services) and PEC leads for children. NB Also include children with special needs e.g. learning difficulties LAChildren. Analysis of NRF and Sure Start regeneration programmes for projects and investment relevant to children's nutrition/ tackling obesity.	November meeting 26th Letter to be sent out by 2nd October - return by November 2nd By November 5th	Qs and guidance : Edwina Affie Chairman /Edwina Affie Namita Srivastava
STAGE 4 : ANALYSIS OF FINDINGS AND REPORT WRITING			
	Analysis of findings pulling out key themes, issues and major gaps in current strategy /programme / services. Produce outline report with initial recommendations. Review and discussion by working group and main Committee. Finalise draft report and send out to participants in review for comments on omissions, accuracy etc. Prepare final report for agreement by full committee.	December meeting	Edwina Affie with support from NS /DR
STAGE 5 : PUBLICATIO N AND DISSEMINATION OF FINAL REPORT	Schedule final report for council Invite Comments from PCTs, Cabinet (Education /Leisure /Strategic Development). Arrange press release and media coverage. Produce flyer and overheads on review findings and recommendation for presentation at various forums/ officer groups.	February council	Lorraine Donovan Patrick Heath Edwina Affie + Chair

Appendix 2: Methodology

Objective	Method	Evidence used
Defining the issues and policy context	Reviewing government websites for policy impacting on obesity Review of major reports on obesity	**Policy review** – policy impacting on obesity – Appendix 10 Major Reports Chief Medical Officer Annual Report 2003 – Chapter on obesity Review of evidence on food promotion to children, commissioned by the Food Standards Agency International Obesity Task Force – Obesity National Audit Office – Report on Obesity US Surgeon Call to Action WHO report – Obesity (executive summary) WHO report on diet, nutrition and chronic disease BMA Board of Science & Education report on Adolescent Health (draft 2003) Children and Young People – the importance of physical activity. December 2001. A paper published in the context of the European Heart Health Initiative Promoting Healthy Eating and Physical Activity for a Healthier Nation. Division of Nutrition and Physical Activity, National Centre for Chronic Disease Prevention & Health Promotion, Centres for Disease Control and Prevention Garrow and Summerbell. Obesity Health Care Needs Assessment. Series 3. **www.hcns.radcliffe-oxford.com/obesity.html** Storing Up Problems: The medical case for a slimmer nation Report of a working party of the Royal College of Physicians, Royal College of Paediatrics and Child Health and the Faculty of Public Health Medicine 2004
Characterising the epidemiology of childhood obesity	Extracting data and information from national surveys	Surveys Health Survey for England 1997-2001 (DoH) National Nutrition and diet survey: young people aged 4 to 18 years 2000 (ONS) Young people and health: health behaviour in school aged children 1995 and 1997 (HDA)

Objective	Method	Evidence used
	Modelling obesity prevalence in Birmingham children using Health Survey for England data + estimating health gain Analysis performed by Dr Richard Wilson, Senior Information Specialist, South Birmingham PCT	Health Needs of school age children 2000 (DfES & DoH) Young and Active? Young people and health enhancing physical activity – evidence and implications 1998 (HDA) Physical activity 'at our time' 2000 (HDA) **Obesity Statistics** Tables Obesity prevalence in children for Birmingham Obesity prevalence in adults for Birmingham Obesity related mortality for Birmingham Potential for health gain: reduction in obesity prevalence in children and adults – impact on mortality for Birmingham
Ascertaining what works in tackling childhood obesity: examining the evidence base of preventing and treating obesity in children	Literature review – review of systematic reviews, reviews of reviews and evidence based clinical guidelines for managing childhood obesity	Evidence based Guidelines and Reviews of Reviews Management of obesity in children and young people – A national clinical guideline. Scottish Intercollegiate Guidelines Network. April 2003. The management of obesity & overweight. An analysis of reviews of diet, physical activity and behavioural approaches. Evidence briefing. Health Development Agency. October 2003 Ebbeling et al Childhood obesity: public-health crisis, common sense cure Lancet 2002, 360: 473-82 Systematic Reviews Campbell K et al. Interventions for preventing obesity in children. Cochrane Review. Issue 3, 2003. Summerbell et al. Interventions for treating obesity in children. Protocol for a Cochrane Review. CD et al. 2003. Health promoting schools and health promotion in schools: two systematic reviews. Health Technology Assessment, NHS R&D HTA Programme. HTA 1999; vol.3: no.22. Health promotion interventions to promote healthy eating in the general population: a review. Health promotion effectiveness reviews. HEA 1997. LeMura LM, Maziekas MT Factors that alter body fat, body mass, and fat-free mass in paediatric obesity.. Med.Sci.Sports Exerc. Vol.34, No.3 pp487-496, 2002. Pratt BM & Woolfenden SR Interventions for preventing eating disorders in children and

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Objective	Method	Evidence used
		adolescents. Cochrane Review. Issue 1, 2003.
Learning from other scrutiny reviews on obesity	Review of evidence presented to health select committee on obesity, currently being conducted in UK parliament	Evidence presented available at: http://www.parliament.the-stationery-office.co.uk/pa/cm200203/cmselect/cmhealth/uc755-i/uc75502.htm http://www.parliament.the-stationery-office.co.uk/pa/cm200304/cmselect/cmhealth/uc23-i/uc2302.htm
Evaluating what NHS and BCC services are doing to try and tackle childhood obesity	Collecting expert testimony (1) NHS Dr Edwina Affie (South Birmingham PCT, Department of Public Health) Dr Ros Hamburger (Heart of Birmingham PCT, Consultant in Dental Public Health) Dr Tim Barrett (Birmingham Children's Hospital, Consultant paediatric endocrinologist) Dr Ann Aukett (Director Children's Services (NHS), Birmingham) Ms Eleanor Magee, Dietician, East Birmingham PCT	Papers & presentations Childhood obesity: an overview of the epidemiology, evidence and issues – paper and presentation Patterns of oral health in Birmingham children – presentation Rising prevalence of obesity related type 2 diabetes and childhood obesity referrals + peer reviewed papers to support Dr Barrett's evidence: Ehtisham et al. Prevalence of type 2 diabetes in children in Birmingham Letter in BMJ 2001:322:1428 Drake et al Type 2 diabetes in obese white children Archives of Disease in Childhood 2002; 86:207-708 Dyer First cases of type 2 diabetes found in white UK teenagers BMJ 2002; 324: 506 **Supplementary material:** Oral Health Strategy for Birmingham – Taking Oral Health into the 21st Century (Birmingham Health Authority 1999) Young Children's diet: An enquiry into Muslim Asian families' attitudes and practices. Malik & Williams. Leeds University & Birmingham Health Authority 1999 The Health & Social Care Bill and its impact on dentistry. Feema Francis, Heart of Birmingham PCT 2003 Paper: Summary of current community obesity treatment services for children in Birmingham. Eleanor Magee & Sue Meredith South Birmingham PCT Commissioning Directorate – Summary of current acute trust treatment services for children in Birmingham. Provided by Michael Dewsbury
	Collecting expert testimony (2) Leisure Services BCC	**Presentation** Promoting physical activity for children

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Objective	Method	Evidence used
	Ray Davies, Assistant Director Leisure Services BCC Maggie Packwood, Leisure Centre Manager	**Supplementary material:** Birmingham Sports & Physical Activity Draft Strategy February 2004 Sport, Leisure and Health. Scrutiny review report to BCC. July 2003
	Collecting expert testimony (3) Academic Experts - policy Joe Harvey, Health Education Trust Dr Elizabeth Dowler, Warwick University Dr Martin Caraher, City University Dr Pat Saunders, Health Protection Agency & University of Birmingham	Presentations – Dr Saunders – Mapping access to healthy diet in Birmingham Dr Dowler – Food and Poverty: challenges and opportunities Dr Caraher – From global to local – making it happen: Food Policy **Supplementary material:** Nutrition and diets in Lone-parent families in London. Dowler & Calvert 1995 Poverty Bites, Food, Health and Poor Families. Dowler et al. CAPG 2001 Relationship between deprivation and childhood obesity: Kinra et al, 2000, J.Epid.Comm.Hlth 54, 456-60 Mapping access to fresh fruit and vegetables in Birmingham – Appendix 5
	Collecting expert testimony (4) Education Services BCC Health Education Unit, Birmingham City Council Education Service: Martin Donovan, Phil Barnett, Naomi Molesworth Nigel Baker (NUT) Birmingham City Council Direct Services Division: Catering School Meals: Sheila Walker, Nigel Sandland	Presentations and Papers Birmingham Healthy Schools Standard – presentation + Table of NHSS uptake for diet + physical activity themes Paper from Birmingham NUT: Comments from Birmingham NUT on the issue of obesity for BCC Health Overview and Scrutiny Committee Paper from BCC Direct Services + additional evidence requested by committee on policy and procedures, quality systems, training Supplementary material Review of research on the effects of food promotion to children. A report for the Food Standards Agency. University of Strathclyde. September 2003 Food for Life. Healthy, local, organic school meals, published by Soil Association The Sodexho School Meals & Lifestyle Survey 2002 School meals in the 21st century. A Unison Report Food and Nutrition in UK Schools. British Nutrition Foundation. 2003 Filling the Gap. Free school meals, nutrition and poverty. Will McMahon, Tim Marsh.

Objective	Method	Evidence used
		Child Action Poverty Group Guidelines for school and community programs to promote lifelong physical activity among young people. CDC. MMWR. March 7, 1997/Vol.48/No.RR-6 Guidelines for school health programs to promote lifelong healthy eating. CDC. MMWR. June 14,1996/Vol.45/No.RR-9. Influence of supplementary vitamins, minerals and essential fatty acids on the antisocial behaviour of young adult prisoners. C Bernard Gesch et al. British Journal of Psychiatry (2002), 181, 22-28. Do food additives cause hyperactivity and behaviour problems in a geographically defined population of 3-year-olds? Food Standards Agency. Synthetic food colouring and behaviour: a dose response effect in double blind, placebo-controlled, repeated-measures study. Rowe KS, Rowe KJ. Antecedent exercise in the treatment of disruptive behaviour: A meta-analytic review (structured abstract). Allison DB, Faith MS, Franklin RD. Clinical Psychology Science & Practice. 1995. 2(3). 279-304. Healthy school lunches for students in secondary schools. Guidance for school caterers on implementing national nutritional standards. DfEE 2002. Healthy school lunches for pupils in primary schools. Guidance for school caterers on implementing national nutritional standards. DfEE 2002. Healthy school lunches for pupils in nursery schools/units. Guidance for school caterers on implementing national nutritional standards. DfEE 2002.
	Collecting expert testimony (5) Planning, Transport, Economic Development BCC Planning BCC: Emrys Jones Transportation BCC: Tim Hickey, Helen Jenkins, Graham Lennard Economic Development BCC: Peter Vincent Public Health SBPCT: Dr Chris Spencer Jones	**Paper**: Briefing note to Members of the Health Overview & Scrutiny Committee: Contribution from Development Directorate, Transportation Strategy **Supplementary material:** Farming and Food: a sustainable future, Report on the Policy Commission on the future of farming and food: Government Strategy for Sustainable Farming & Food Improving Shopping Access for People Living in Deprived Neighbourhoods. Report of Policy Action Team 13. Social Exclusion Unit. 1999 Making Connections: transport & social exclusion - SEU Report 2003 Small Firms Loan Guarantee extended to retail Phoenix Fund - prioritising retail disadvantaged areas Planning policy guidelines – ODPM Small Retailers in Deprived Areas initiative (Home Office)

Children's Nutrition - Obesity

Objective	Method	Evidence used
		Food projects and how they work (1999) McGlone, Dobson, Dowler & Nelson, York: JRF
Determining what other stakeholders have to say about it, and their particular concerns / suggestions	Eliciting the views of parents and school nurses – workshop to ascertain Parents: What are the major barriers to your child/children eating healthily? Do you have any examples from your child's school, home, and other leisure activities? Do you experience difficulties in encouraging your child/children to undertake physical exercise? Why is this? Was/Is your child obese? What are the issues in preventing/ treating the problem? School Nurses: How much of a problem is obesity in your school? What are the problems obese children face? What is your school doing to try and tackle obesity and have you been involved in any anti-obesity initiatives? Describe the current state of food provision in your school? Both parents & school nurses: In what ways can we improve the situation around preventing and treating obesity for our children in all areas of their lives - at school and at home?	Feedback from stakeholder event

Children's Nutrition - Obesity

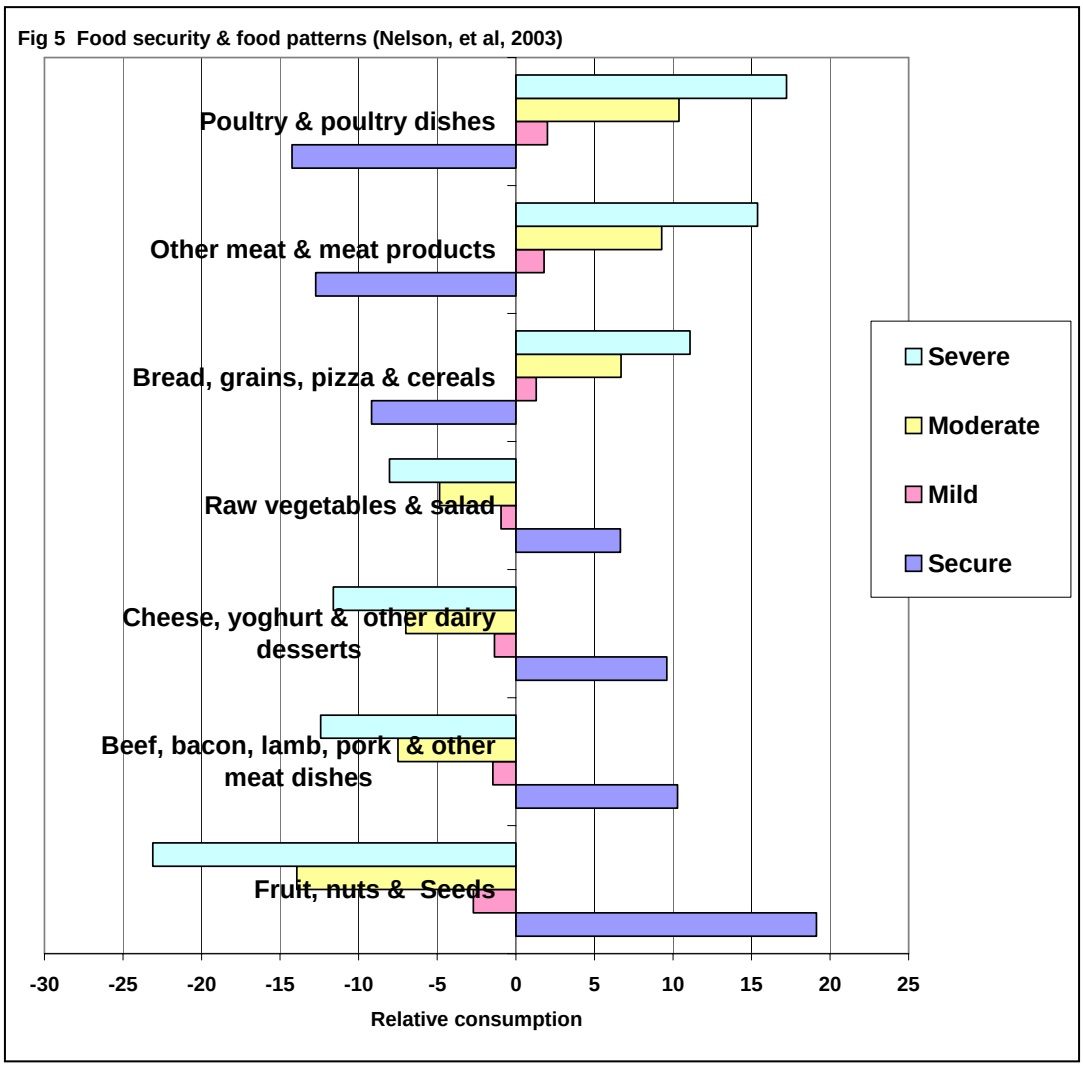
Objective	Method	Evidence used
	Collecting selected newspaper articles on issues impacting on childhood obesity.	
Analysing the evidence collected	Analysis of evidence to define: Health needs – epidemiology of childhood obesity (definitions, prevalence, risk factors, trends, aetiology) Consequences of childhood obesity Health gains in obesity prevention for Birmingham Interventions to tackle obesity Current NHS and BCC services – evaluation of what's currently happening in Birmingham Corporate needs assessment – the views of parents, school nurses, and media coverage	
Writing report and making recommendations	Lead review officer drafts report on behalf of scrutiny review committee Review and amendment of draft report by scrutiny review committee Report formally sent to relevant Executive / Chief Officers to check factual accuracy/ practicality of recommendations Report considered and approved at full Committee	
Publication and dissemination of final report	Schedule final report for council Invite Comments from PCTs, Cabinet (Education /Leisure /Strategic Development) Arrange press release and media coverage Produce flyer and overheads on review findings and recommendation for presentation at various forums/ officer groups	

Appendix 3: Physical activity in children

KEY POINTS: PHYSICAL ACTIVITY IN CHILDREN	
GAPS	Available services
	Access: • Transport • Opening times • Cost • Safety
	Knowledge / awareness of available services
	Supervision
VARIARIATION in participation	Gender
	Age
	PE teacher / style
	Parents, peers, teachers
	Urban vs rural
	Socio-economic status
	Ethnicity
	Biology / Ill health
BARRIERS	**FACILITATORS**
Low motivation	Enjoyment
Immaturity	Social aspects
Lack of self-consciousness / confidence	Positive influence of parents
Poor body image	Team sports (boys)
Poor peer image	Single sex PE
No choice / no consultation	Choice & consultation
Poor relationship with PE teachers	Good PE teacher – pupil relations
Lack of time	Enough time
Onerous homework / coursework	
Too expensive	Cheaper activities
Cost of transport	Availability of affordable transport
Lack of public transport	Provision of social facilities
Lack of safety	Supervision available
Poor provision of facilities or provision of non-desired facilities	Provision of desired activities / facilities e.g. Basketball, dancing

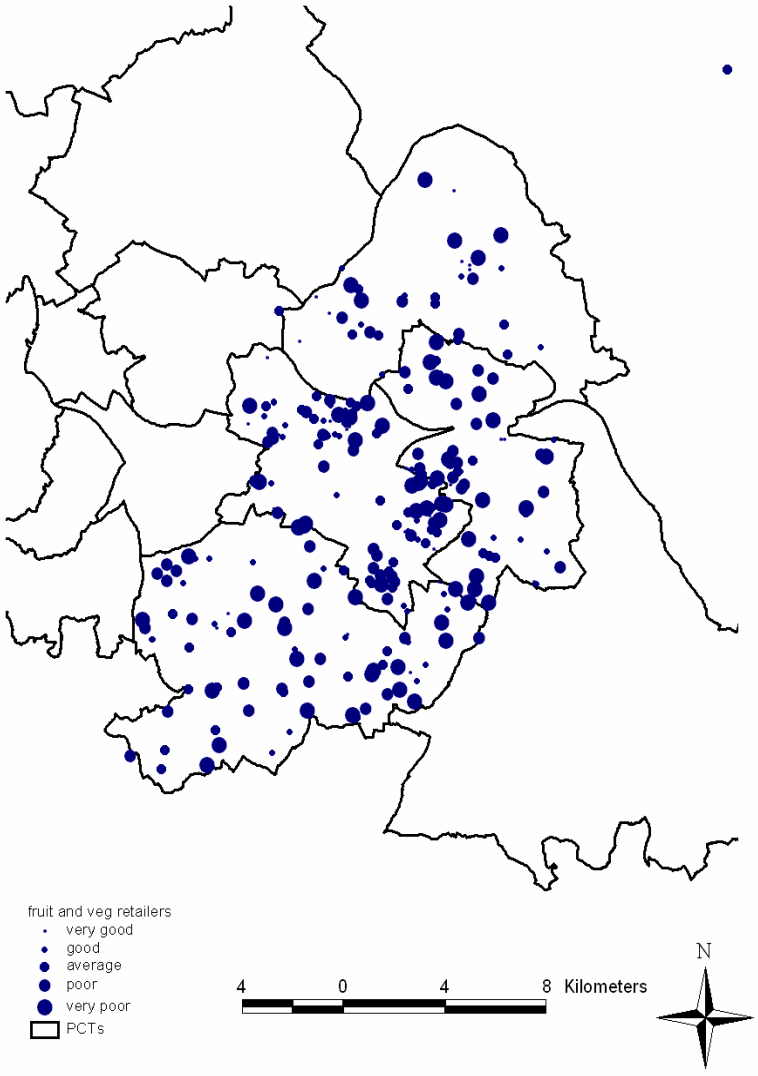
Appendix 4: Food security and food patterns in Birmingham

Fig 5 Food security & food patterns (Nelson, et al, 2003)



Appendix 5: Mapping access to fresh fruit and vegetables in Birmingham

Map 1 Distribution of Access Index Birmingham 2003



Appendix 6: Briefing note on Transport issues in Birmingham

Contribution from Development Directorate, Transportation Strategy for meeting on 19th November 2003

1. Background issues and information

Walking and cycling can provide a convenient form of exercise. In the last fifteen years the number of children walking and cycling to school has declined. Between 1986 and 2001 the proportion of children walking to school in the West Midlands fell from 60% to 50%, while over the same period the number being driven to school has risen from 16% to 25%. Nationally just 2% of secondary school pupils currently cycle compared with 5% in 1989/91. The West Midlands Transportation Surveys for 2001 indicate that in Birmingham primary schools, 54% of children walk, 1% cycle, 37% travel by car and 8% travel by bus/coach. Only 36% of secondary school children walk to school and 0% cycle, 15% travel by car and 46% by bus.

Road safety is often a cause of concern for parents, however the number of pedestrian casualties in Birmingham has fallen. In 2002 there were 430 child pedestrian casualties, this is the lowest for ten years and continues a downward trend. There were 61 pedal cyclist casualties in 2002, again this is the lowest figure for ten years and continues the downward trend.

2. Transportation policies

Local transportation and planning policies have the ability to create safer conditions for physical activity, such as walking and cycling, reduce social isolation and improve access to local facilities.

The following documents are relevant to this briefing note and will be referred to below:

- West Midlands Local Transport Plan (LTP) - 2003
- Specific Policies
  - -Safer Travel to School – 1998
  - -Cycling Strategy - 1998
  - -Walking Strategy – 2003

3. West Midlands Local Transport Plan

The West Midlands former Health Authorities were involved with the Local Transport Plan consultation process in 2000 at local and regional level. The Health and Environment Forum, one of the three principal groups to be making submissions to the LTP, included health representatives from its inception in the autumn of 1999.

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One of the major objectives expressed in the LTP is to improve the health of the local community. Walking and cycling provide a convenient opportunity for adults and children to be physically active. Walking is free and it can be done anywhere.

For the new 2003 LTP, public health practitioners, based in the new primary Care Trusts (PCTs) with specific interests in the relationship between transport and health have contributed to the consultation process and are working in partnership with their respective Local Authorities. There was concern about the lack of safe walking and cycling opportunities, and it was recommended that resources should be directed at increasing uptake of these transport modes.

4. Safer Routes to School Programme and School Travel Plans

The objectives of the Safer Travel to School strategy relating to obesity in children are:

-improve the safety of children travelling to and from schools
-encourage travel to school by other means than by car

The Safer Routes to School Programme involves working with schools to introduce physical measures in conjunction with education and training, to improve safety and encourage travel by healthier and more sustainable modes. A particular emphasis is placed on the development of school travel plans, which set out a strategy to increase the level of walking, cycling and public transport journeys to school. This programme links not only into the LTP safety objectives, but also with the walking, cycling and public transport strategies in promoting sustainable transport and reducing car use. 13 Safer Route to School schemes are due for completion in 2003/2004.

One approach taken by Birmingham City Council to help schools produce a ***School Travel Plan*** is to encourage the use of the Young TransNet website, which is supported by the DfT. This is an Internet tool for young people to study the environmental impact of travel plans, the site allows children to take part in surveys and engage in debates on sustainable transport issues. The site includes a computer wizard to help schools develop their own Travel Plan.

There are currently 62 Birmingham Schools registered on the Young TransNet site, 22 of which have already surveyed their pupils about travelling to school. These surveys will form the basis of their Travel Plan.

New plans to boost cycling, walking and bus travel to school were announced in September 2003 by the Education and Transport Secretaries. An action plan has been developed called “Travelling to School”. Schools and Local Authorities are asked to work together to put in place school travel plans over the next few years. These should cover safer routes to school, road crossings, local speed restrictions, dedicated cycleways, secure cycle storage, sufficient locker space and improved public transport provision.

In the City’s case the existing three year funding for the School Travel plan officer comes to an end in April 2004. This additional funding should mean that

the officer support can be continued. There is also an allocation of £5,000 for a typical primary school and £10,000 for a typical secondary school, through the Department for Education and Science (DfES) capital programme, to help schools upgrade travel facilities within school sites identified within the travel plans (such as bike storage facilities) the grant will be paid in the financial year following completion of the school travel plan. It is hoped that this will be an incentive for schools to write travel plan documents.

5. Cycling Strategy

The cycling strategy sets targets for increasing cycle use generally. The main objective relating to children is:

- To maximise the role of cycling as a transport mode for a variety of trip purposes, particularly cycling to work and school, in order to reach the City Council's target of increasing cycle trips to 5% of all journeys by 2005 and to enhance the quality and equity of life in Birmingham.

2003/4 cycling activities include:

- **New cycling (and walking) trails**
  -North Birmingham Route – Final link to Sutton Park to be constructed in 2003/4
  -Rea Valley Millennium Route signing - comprehensive resigning exercise with direction and destination signing
  -Sheldon Country Park – 1km path between Sheldon and Marston Green (station) approved for 2003/4 construction

- **Cycling and walking map** - In preparation, to be published early 2004

6. Walking Strategy

The Walking Strategy sets out a series of actions focused on key journey types and policy areas that will be pursued to assist in achieving transport and health objectives. The Walking Strategy targets which relate directly to obesity and children are:

- To increase the number of school children walking to school through school travel plans and similar initiatives, year on year.
- To increase the number of people involved in the walk 2000 Health Walks Programme with the aim of having a route in each ward by 2007.

Walking for leisure schemes are important because they promote physical activity, 2003/4 activities include:

- **City Centre Trails Strategy** - Proposals being developed for themed city centre trails.
- **Countryside and Right of Way Act** - New Rights of Way officers appointed and Rights of Way Improvement Plan to be prepared to meet the needs of today's disabled users, walkers, cyclists and equestrians. Local Access Forum created to offer independent advice on Rights of Way matters.

Leisure Services have developed the Walk 2000 Health Walks Programme and there are already 15 routes in place with 21 groups using the routes.

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Transportation is providing funding for additional routes in 2003/4.

Safety is important in encouraging walking and cycling and a number of area safety schemes are underway, these include:

- **Subway removal** - 6/7 removals in 2003/4
- **Street lighting** – improvements across the city
- **Highway safety schemes**- 3 area wide safety schemes and 20 local safety schemes

7. Road Safety (pedestrian training) Programme
There are a number of areas of road safety which involves children actively taking part in a form of physical exercise. These areas are:-

Pedestrian Training
The pedestrian training is practical training in how to use roads safely. It is offer to all primary schools in Birmingham and is aimed at year 2 children, approximately 10 schools per year receive training. Pedestrian training can be the first walking journey to school some children make and can play a part in encouraging children to walk to school and that leads to beneficial effects on health.

This involves three, 1 hour sessions, the first session is held in the classroom and the children are taught the importance of holding hands and when they can walk independently, safe people to cross with, safe places to cross and the green cross code.

The 2nd and 3rd sessions are carried out on planned routes around the local roads, here children develop their vocabulary, observation and decision making skills in small groups with a trained adult helper.

Discussion and observation on the road help children recognise hazards and safer crossing places.

Walk to School Programme
Walk to School is an annual event that aims to encourage parents to leave their cars at home. The national walk to school is a week long campaign.

In Birmingham, children take part in Walk on Wednesdays throughout the summer term, these journeys offer potentially one of the greatest periods of physical activity of the day. 92 schools took part in the 2003 campaign (80 in 2002).

This year Road Safety Education worked with Travel West Midlands to run a number of initiatives to encourage parents to leave their cars at home on Wednesday's. This project included children writing a short story explaining why their parents should travel on the bus, there was a prize of a day saver pass for the child and parent.

Birmingham City Council also offers schools a range of resources to help educate children in the benefits of walking and 'Theatre in Education' road safety education is available (undertaken in 10 schools).

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Walking Buses
A walking bus is a parent/school – supported project for trained adults to escort a number of children to and from school. There are currently sixteen walking buses operating in Birmingham.

Cycle Training Programme
Two types of courses are offered, cycle sense and cycle awareness, they are available to all primary schools in Birmingham and are aimed at year 5/6. Over 2000 pupils have received cycle training.

8. Future work
The important links between sustainable travel and health have been recognised and Transportation are keen to work together with Health and Education to promote health, walking and cycling initiatives.

Following the recent announcement by the Education and Transport Secretaries giving details of new plans to boost walking, cycling, and bus travel to school. The School Travel Plan Co-ordinators are working with Education to promote School Travel Plans. Following meetings with representative from Health Education Standards, “Implementing a School Travel Plan” is a target in the Healthy Schools Initiative.

Appendix 7: Summary of stakeholder workshop

PARENTS

Nutrition

- Sweets/crisps given at school
  - By teachers
  - Other children
  - As reward
  - Indiscriminate (allergies)
  - Readily available
  - Grandparents/carers
  - Becomes addiction
- Case for education - give healthy option
- Don't buy them/keep them in the house
- Stop tuck shop at school - found children stopped off at shops
- Sweets forbidden on school premises - worked?
- Ice cream van outside gate
- Vending machines
- Collecting vouchers on crisps/chocolate
- Schools lead parents or parents lead schools?
- Children go hungry - if ban unhealthy food?
- Use marketing tools on healthy food
- Free fruit in school helped
- Tell children what alternative is
- School lunches
- Kids don't know how to eat unhealthy food
- Help children find different ways to manage kids in the broader sense

Physical Activity

- Fear of letting kids out
- Need organised activity?
- Exercise or sport?
- Walking sidelined
- Competitive sport vs other fun
- Child obese - stigmatised in sport
- PE crushed out of curriculum
- Role of PE teachers - mindset excludes 'tubby', aggravate problem
- Training of staff

Experience of child obesity

- Genetic predisposition
- Sweets with carers

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- Stopped going shopping - painful experience
- Wouldn't go swimming
- Vicious cycle of inactivity
- As a parent how do you cope with watching this happen?
- Emotional support
- Role of peers - self-esteem
- Reinforcement around losing weight
- Don't want kids to get complex
- Self-esteem important
- Confusion between healthy eating and being thin
- Up to date education

What helps?

- Looking at food and how it will help
- Never accepting stigma
- Emotional support
- Ethnic diets - not stereotyping
- Need to look at alternative methods of cooking - make families happy about diets
- Depends on how food is cooked
- What is food for - messages
- Encourage physical activity
- Discourage snacking
- Teach kids to cook
- Limitations on what can teach kids in food technology
- Dental hygiene

Tensions

- Sport?
- OK to be fat? Value people
- Social environment the problem
- What is fat?

SCHOOL NURSES

How much of a problem is obesity in your schools?

- 4/18 pupils (18 pupils in classes)
- School nurses don't regularly see all pupils, but believe more children obese now than previously
- Girls suffer more than lads - reluctant to undress in front of others. May even claim to be fat when not
- Distorted body image
- Bullying of fat children
- Occasionally 'small/thin' children are those picked on

Schools with high proportion of BME children

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- Cultural practices? Food rewards
- ?May be a greater proportion of obese children in BME - need to study
- ?Different patterns of physical activity

Do you think educational attainment is affected by obesity?

- ?Yes as affects self esteem

What is your school trying to do to tackle the problem?

- Vending machines - contribute to the problem and to school budget Required policy change
- Lower standards for nutritional content of school meals - cost cutting
- Healthy schools initiative - tend to tackle water not food, as feel unable to influence, fewest schools take up food
- In infant junior - pupils say food is good
  - Bournville - pupils say food poor
- Fruit in schools
- Lunch hour squeezed
- Position of food in school curriculum squeezed out
- Main contact by school nurses at reception and Y7 - measure height/weight/dietary advice, otherwise rely on referral by teachers/parents - try to follow up
- Immunisation - Y8
- Issues - pulling children out of class to measure
  - already conscious of size
  - don't want to pull out of school
- Drop in session in school lunch hour - stopped in some
- School nurses don't feel equipped to deal with obesity
- Providing lunch is not the same as teaching messages!
- GP/Practice Nurse
- If identified - referred to CMO to eliminate physical causes
- Need to educate parents also re need - parents can take it personally - don't appreciate 'danger' or don't want to change
- Heights/Weights not recorded anywhere
- Tried to implement 'healthy tuck' day - parents complained!
- Working groups - trying to tackle food in school - Kings Norton/Primrose Hill
- Experience of school meal - eating out of tray
  - noisy, not inviting
  - don't drink water out of jugs!
  - £2.20 cost
  - really put off
- Healthy Heart Roadshow
- Educational approach only
- Easy to approach some schools, others very difficult
- Lack of training for catering staff - stopped - replaced by video
- Impact of nutrition on behaviour noted in afternoons, less attention, more aggression

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- Shorter lunchtimes -shorter afternoons so children can go home earlier. Bulk of teaching in morning as learning may be compromised in afternoon
- Unusual for staff to sit to eat with children - lack of time
- Many don't eat breakfast
- Breakfast clubs - what they provide variable
- Hydration
- Secondary schools - vending machines - unsure how many - one school gained £10-15K per year!

<u>In what ways can we improve the situation re obesity?</u>

- Train catering staff
- Longer lunches - not enough time to eat (shortened due to bad behaviour, children going out of school)
- More education of parents and children
- Coherence between education and what really happens
- Audit of schools and other institutions used by children re vending machines, income re vending machines
- Commercial organisations getting into school
- Media - classroom discussion re influences
- School prospectus
- Guidance re lunch boxes - how to do in a not 'Big Brother' way
- Ideas for simple quick healthy meals
- More encouragement to take part in exercise - more choice for pupils
- Curbing snacks
- Peer pressure 'culture of cool'
- Ban on advertising in school
- Economic and social constraints for families
- Early years work
- Response of school if an obese child is identified (obesity pathway)

Appendix 8: Proposed Terms of Reference for the Children's Nutrition Task Force

Purpose of Group

- To provide strategic leadership for driving forward the City's agenda for tackling childhood obesity
- To maintain an overview and co-ordination role as regards to obesity-related interventions
- To ensure inter-agency services are fulfilling their responsibilities for tackling obesity in the city

Membership

The membership of such a group should encompass, as a core

- The Cabinet Members for Social Care and Health and Education and Lifelong Learning
- The Strategic Directors or Chief Officers with responsibility for Social Care and Health, Education, Planning, Economic Development, Leisure Services, Environmental Health and Transport
- The Directors of Public Health

Responsibilities

- To encourage the development of citywide strategies for tackling the threat of overweight and obesity and to oversee the implementation of these strategies by responsible agencies;
- To ensure that the development and implementation of policies, strategies and services for tackling children's obesity give special consideration to looked after children, children living in poverty and children with special needs;
- To undertake surveillance and monitoring of interventions intended to tackle childhood obesity and their outcomes /impacts;
- To ensure that responsible agencies (e.g. PCTs) are

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collecting and widely disseminating information on obesity prevalence by age, sex, socio-economic group and ethnicity;

- To ensure that responsible agencies are undertaking geographical mapping and monitoring of food poverty and access to health enhancing food, such as fresh fruit and vegetables;
- To encourage and promote the development of models of best practice;
- To lobby international and national policy makers on childhood obesity issues;
- To work with inter-agency partners to secure funding and commission research for advancing the evidence base of:
  - childhood obesity interventions with particular emphasis on effectiveness and cost-effectiveness;
  - service delivery and organisation of childhood obesity interventions;
  - the relationship between eating disorders, mental health and childhood obesity.

Appendix 9: Proposed activities and tasks for the Lead Officer – Children's Nutrition

The activities below are considered to be important interventions for reducing obesity and encouraging healthy eating/ healthy lifestyle choices for children in the City. The interventions should form part of the potential work to be undertaken by the appointed Lead Officer.

Work to be pursued/ explored with PCTs

- Development of local strategies for tackling obesity in each PCT area;
- Commissioning of obesity services and monitoring of their impact on local populations;
- Establishment appropriate training programmes for doctors, nurses and other health professionals;
- Development and promotion of oral health programmes and ensuring appropriate links between obesity interventions and Dental Public Health.

Work to be pursued/ explored with the LEA and Schools

- Development and promotion of school-based strategies or interventions for tackling obesity, improving healthy eating and increasing levels of physical activity
- Encouraging Head Teachers to use and disseminate data provided to them via the CHSS, for example, by ensuring that the school's annual report, includes profiles on pupils'
  - BMI, weight, height;
  - Average time spent on physical activity of moderate intensity each day;
  - Proportion of money spent on healthy food compared to confectionery, high sugar drinks and junk food.
- In conjunction with Public Health specialists, school nurses and

community dieticians, and the Health Education Unit, ensuring the development of specific training and education programmes for catering staff, which address the knowledge, attitudes, skills and behaviour required by a 'best practice healthy eating' school food service.

- Ensuring the development of appropriate training for school governors to better facilitate the effective execution of their governance function including
  - proper consideration of how the school environment impacts on children's health and well-being;
  - the school's responsibilities for protecting the health of children;
  - Adopting a whole-school approach to combating obesity.

- Working with the LEA to consider options for ensuring school governing bodies
  - only contract with school catering organisations that are committed to providing a 'healthy eating' school food service;
  - establish a 'link governor' whose role will be to liaise with their school nurse and take a special interest on diet and physical activity issues.
- Undertaking a feasibility study to consider the provision of free breakfasts, school meals and fruit to all pupils or as many pupils as possible in the City in line with best practice emerging across the country.
- Working with the LEA to improve water consumption in school children and exploring ways to address any barriers around this including use of toilet facilities.

Work to be pursued/ explored with Leisure Services

Development of a healthy eating and food policy so that the Council's leisure facilities and physical activity programmes encourage the consumption of health enhancing food and drink, particularly fresh fruit and vegetables and discourage the consumption of energy dense, high fat, high sugar, high salt products;

- Establishment of pilot projects of best practice which link healthy eating and physical activity;
- Ensuring programmes are accessed and utilised by high need groups by ensuring that they are based on best practice and tackle barriers to engagement e.g. costs, transport and scheduling;
- Development of work programmes with schools offering a greater range of low cost after school physical opportunities for children and their families as well as physical activity programmes to complement breakfast clubs.

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Work to be pursued/ explored with Planning

Identification of appropriate methods and approaches for

- addressing food poverty and tackling lack of access to healthy affordable food;
- developing neighbourhood retailing strategies in deprived areas lacking retail facilities in consultation with local people;
- supporting local shops/local food networks, local food initiatives and strengthening local markets which are part of Birmingham's history;
- piloting a subsidised grocery van delivery service targeting high need areas.

Work to be pursued/ explored with Economic Development

The use of health impact assessment to evaluate neighbourhood development options where the following issues are of concern:

- deprived neighbourhoods lacking access to healthy affordable food especially fruit and vegetables;
- deprived neighbourhoods where physical activity opportunities for children are limited;
- school neighbourhoods where there is a high concentration of retail outlets selling energy dense food products to children.

Work to be pursued/ explored with Transportation

To ensure that Transportation continues to actively work with all schools in the City to ensure a consistent and city-wide approach so that

- more children walk and cycle to school;
- School Transport Plans actively address barriers to children's participation including issues of safety and lack of facilities such as cycle sheds and showers.