Middlesbrough Council

Middlesbrough moving forward

AGENDA ITEM: 5

HEALTH SCRUTINY PANEL

11 MAY 2010

CHILDHOOD OBESITY – DRAFT FINAL REPORT

PURPOSE OF THE REPORT

1. To present the collected evidence to the Panel for consideration.

RECOMMENDATIONS

2. That the Panel notes the evidence outlined below and considers the conclusions and recommendations it may wish to make.

CONSIDERATION OF REPORT

3. The Panel was keen to consider the topic of Childhood Obesity and how the topic is currently impacting on Middlesbrough. In addition, the Panel was interested to hear how local health services currently seek to address the challenge and hear about what could be done in the future to continue efforts to tackle and prevent childhood obesity.

4. In addition to the activity of the local NHS and traditional children centred services, the Panel was particularly interested in considering wider determinants to Childhood Obesity. With that in mind, the Panel spoke to the Head of Transport & Design Services and the Director of Regeneration, around the question

"To what extent does the Transport Infrastructure and Built Environment of the town assist in tackling and preventing childhood obesity".

5. In response to a number of questions put by the Panel in advance of the meeting, a paper was supplied by the Director of Public Health, highlighting a number of key issues for the Panel's attention.

6. The Panel heard that Childhood obesity is an important public health issue. There has been a significant amount of policy development from both

Departments of Health and Children, Families and Schools in recent years to highlight and propose approaches to address the issue.

7. The Panel was advised that prevention and treatment of obesity and overweight in children and young people is important. Obese children are at significantly greater risk of becoming or remaining obese in adult life. The risks associated with this include early onset diabetes, cardiovascular disease, hypertension, some cancers as well as mental health problems and stigma associated with being overweight.

8. In response to a query, it was confirmed that the risk is cumulative. This means that the longer a person remains overweight and obese, the greater the risk.

Defining Obesity and Overweight in children and young people

9. The Panel was advised that Calculating obesity and overweight in adults is relatively straightforward. The body mass index is a commonly used measure and calculated as the weight (kg) divided by the height (in metres squared). A body mass index (BMI) of 25 to 29.9 is considered overweight. A BMI of 30 or more is considered obese.

10. The Panel heard that this calculation is not appropriate for children since their height and weight varies according to both age and sex. Standardised growth charts are used to calculate the proportion of children and young people (at any given age and sex) that are above a defined cut-off measurement (referred to as the percentile).

11. If a child is where this is less than the 2nd percentile, they are considered to be underweight; if they are between the 85th and 95th percentile, they are considered to be overweight; if they lie above the 95th percentile they are considered to be obese.

12. The Panel was interested to receive information pertaining to the current estimates of childhood obesity in Middlesbrough. The Panel heard that the local NHS does not routinely measure every child’s height and weight in Middlesbrough and therefore estimate the current prevalence of obesity and overweight across the population using a number of different data sources.

13. Local estimates can be derived from national data sources and applied to our local population (e.g. Department of Health toolkit or Health Survey for England data).

14. In addition, every year, as part of the National Child Measurement Programme (NCMP), the height and weight of children in Reception Year and Year 6 are measured. From these data we can calculate the (age and sex-specific) prevalence of obesity and overweight across these two year groups and apply them to the rest of the school population. Table 1 provides estimates of the

number and proportion of children that are overweight or obese in the Tees area.

`Table 1: Number of children, aged 1 to 15 years, in Tees PCTs who are obese and overweight, using mid-year 2005 population data and prevalence rates from three different sources of data

PCT (total population aged 0-15) [1]	Number and % Obese			Number and % Overweight	
	DoH toolkit rates applied to local population[2] (% of population)	HSE 2006 rates applied to local population[3] (% of population)	Based on reception and year 6 monitoring[4] (% of population)	HSE 2006 rates applied to local population[2] (% of population)	Based on reception and year 6 monitoring[3] (% of population)
Hartlepool (18,646)	3,416 (18)	2,628 (14)	3,227 (17)	2,231 (12)	2,347 (13)
Middlesbrough (28,440)	5,203 (18)	3,943 (14)	4,904 (17)	3,356 (12)	4,904 (17)
Redcar and Cleveland (26,864)	4,934 (18)	3,819 (14)	3,959 (15)	3,223 (12)	3,551 (13)
Stockton (37,635)	6,900 (18)	5,323 (14)	6,193 (16)	4,509 (12)	5,508 (15)
Total (111,585)	20,453 (18)	15,713 (14)	18,283 (16)	13,319 (12)	16,310 (15)

15. The Panel was presented with the following data from the National Childhood Measurement Programme for Middlesbrough, which is shown in the following figure. Latest figures for 2008/09 (not yet validated by the NCMP programme) have been overlain on top of data from the previous three years. Local estimates can be derived from national data sources and applied to our local

1 Population figures from Tees Public Health Intelligence Service; source ONS, Population Estimates Unit, April 2005

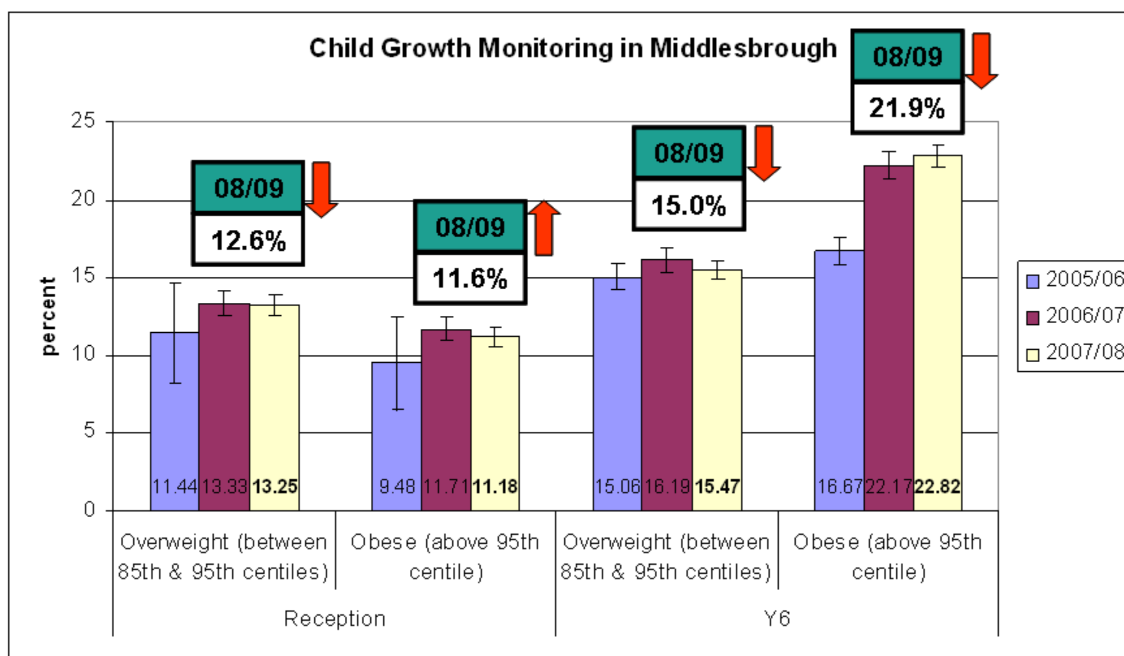
2 The UK National BMI percentile classification defines obesity as a BMI of more than the 95th centile. Overweight is a BMI of between the 85th and 95th centile of the UK 1990 reference chart for age and sex. The formulae in this column are based on the Health Survey for England 2006 taken from the Department of Health's toolkit, page 93.

3 From Health Survey for England 2006, volume 2.Categories are independent, i.e. overweight does not include those who are obese. Overweight was defined as ≥85th ,95th UK National BMI percentile; obese was defined as ≥95th UK National BMI percentile http://www.ic.nhs.uk/webfiles/publications/HSE06/HSE06_VOL2.pdf

4 Data from Tees Public Health Intelligence Service based on National Child Measurement Programme in reception and year 6. 95th centile

population (e.g. Department of Health toolkit or Health Survey for England data).

Figure 1: Proportion (%) of children in Reception Year and Year 6 overweight and obese in Middlesbrough, 2005/06 – 2008/09, NCMP data.



16. Whilst the NCMP measures a different cohort of children each year, The Panel noted that current prevalence of obesity and overweight in Year 6 children has fallen, overweight in Reception has fallen and obesity in Reception Year risen slightly.

17. The Panel was advised that from these estimates, a number of issues can be highlighted:

- Despite different methods to calculate prevalence rates, all methods broadly agree on the proportion of children overweight or obese.
- The rate for obesity among school age children in reception year is 11.6% in Middlesbrough compared to 9.9% in England as a whole.
- The rate for obesity among school age children in Year 6 is 21.9% in Middlesbrough compared to 17.5% in England as a whole.
- During the current school year, for the first time, each child's parent will be sent a letter telling them if their child is underweight, normal weight, overweight or very overweight.

18. It was confirmed to the Panel that parental obesity remains the most important risk factor for childhood obesity. The Panel was shown Table 2, which provides comparative data for rates of overweight and obesity in adults across the Tees area.

Table 2: Number of adults, aged 16 years and over, in Tees PCTs who are obese and overweight[5], using mid-year 2005 population data[6]

PCT (total population aged 16 and over) [7,8]	BMI 25 to <30 (% of population)	BMI > 30 (% of population)	BMI > 40 (% of population)	BMI>30<40 (% of population)
Hartlepool (71,320)	26,843 (38)	17,177 (24)	1,426 (2)	15,753 (22)
Middlesbrough (109,200)	40,455 (37)	25,553 (23)	2,127 (2)	23,426 (21)
Redcar and Cleveland (111,760)	42,399 (38)	27,185 (24)	2,253 (2)	24,932 (22)
Stockton (148,980)	55,980 (38)	35,686 (24)	2,995 (2)	32,691 (22)
Total (441,260)	165,678 (38)	105,601 (24)	8,800 (2)	96,801 (22)

19. In summary, the prevalence of adult obesity (BMI >30) is estimated to be around a quarter of the population which is similar across the Tees area. Indeed, the Panel heard that being overweight and obese is quickly becoming the ‘norm’ for many adults, children and young people.

20. As a Health Scrutiny Panel, Members were most interested in the notional impact such statistics have on the local NHS and the use of resources. The Panel was advised that the total cost to the NHS of overweight and obesity (i.e. the treatment of obesity and its consequences) was estimated in 2001 at £2 billion, and the total impact on employment may be as much as £10 billion.

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5 Overweight is BMI >25; Obese is BMI >30; Morbidly Obese is BMI >40

6 Estimate from Department of Health Ready Reckoner, (http://www.fph.org.uk/resources/AtoZ/toolkit_obesity/obesity_reckoner.asp), based on health survey for England 2006. Both sources are the same. (http://www.ic.nhs.uk/webfiles/publications/opan08/Statistics%20on%20obesity%2C%20physical%20activity%20and%20diet%20January%202008%20tables%20FINAL%20.xls#'2.1'!A1)

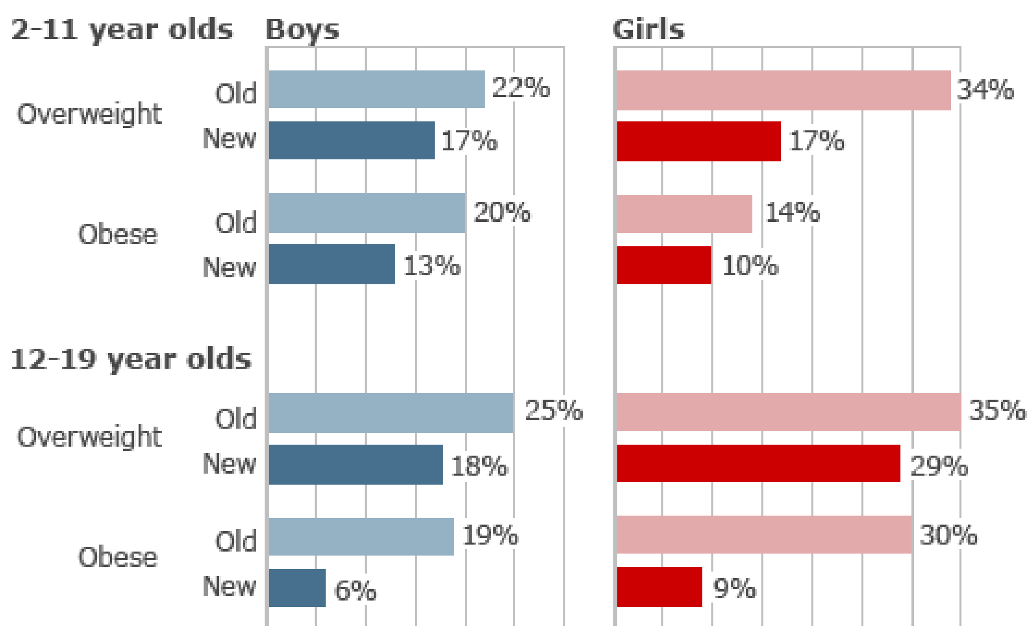
7 Population figures from Tees PCTs Public Health Intelligence - source ONS, Population Estimates Unit, April 2005

8 4/5 of 15 to 19 age group as health check figures in band of 15 to 19.

21. The Panel was referred to one of the most definitive reports on the impact of obesity in adults and children (Foresight Report, 2008) which estimated that by 2050, the cost to the NHS could rise to £9.7 billion and the wider cost to society being £49.9 billion. Foresight also estimated that if current trends continued, by 2050 rates of obesity in adults and children would reach 90% and 60% respectively.

22. It was confirmed to the Panel that the estimates for future impact have been revised downwards (marginally) following a recent report conducted by the National Heart Foundation. The study team reviewed trends over time and estimated that the *rate of increase of obesity* is unlikely to be as fast as previously predicted. Obesity rates are still predicted to rise however albeit more slowly (see Figure 2).

Figure 2: Modelling of future trends in obesity and overweight for children and young people by 2020, National Heart Foundation.



23. Having received data pertaining to the national picture, the Panel was interested to hear about the action taken in Middlesbrough to address the concern.

24. The Panel heard that services to tackle childhood obesity can be divided into three tiers, each describing a different approach to treatment of intervention.

25. Tier 3 services are hospital-based and comprise specialist (paediatric) input to managing obesity in children with significant weight problems and/or significant co-morbidities. Capacity for these services is limited and the criteria for referral would be (deliberately) focused.

26. Tier 2 services are treatment oriented and offer a holistic approach to helping children lose weight. Services are currently commissioned by the PCT and focus on the age-group 7-13. Additional treatment services for younger and older children are currently being commissioned. Capacity for these services (relative to need) would still be limited but eligibility criteria less restricted compared with Tier 3 services.

27. Tier 1 services encompass the broad approaches that help maintain and achieve a healthy weight and encourage healthy food choices. They will help overweight children to lose weight but would broadly be considered as preventative services. Given the scale of the obesity problem, Tier 1 (universal) services must be a priority. An example of the types of Tier 1 services would include the following:

- School-based activities to encourage healthy diet and physical activity
- Curriculum-based learning to develop cooking skills
- Council leisure services provided for young people and children
- Club-based sporting activities as well as school-based sports
- Cycling initiatives
- Services provided by third-sector organisations

28. The Panel was advised that there is also the need to ensure suitable provision of family-based interventions. Parental obesity remains the most important determinant of childhood obesity and ‘treatment’ offered to children and young people must recognise the important contribution of the family environment.

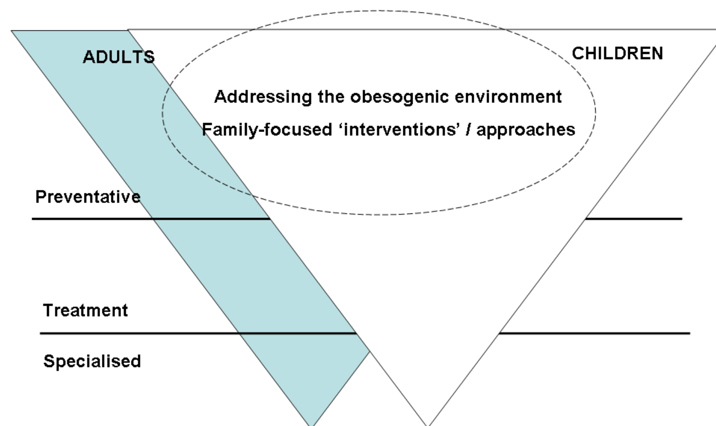
Obesogenic Environments

29. The Panel learned that in recent years, a growing field of research has focused on the wider determinants of obesity and include the important contribution of the built environment, urban planning and design, transport policy as well as food policy and the influence of media. All these factors have a significant influence on our ability as individuals to make healthy food choices or become more physically active.

30. The Panel was interested to hear that the need to work across policy areas such as urban planning, design, and transport is now very clear and recognised in all the major policy documents aimed at addressing the obesity epidemic.

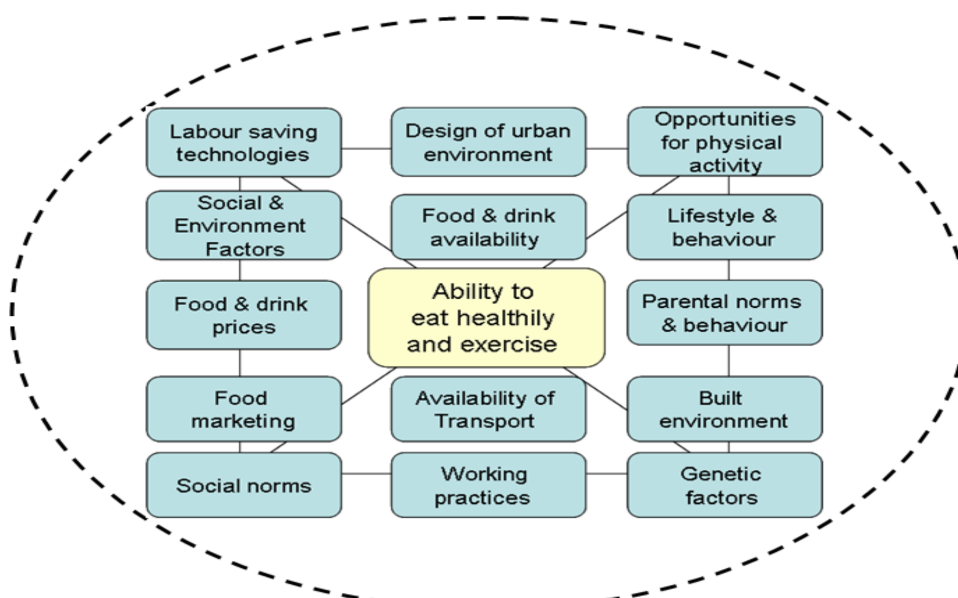
31. A conceptualised model of how we could tackle obesity and overweight in adults and children is shown in the following diagram. This model turns the ‘traditional’ triangular approach to services on its head, recognising the priority that needs to be given to developing comprehensive universal services and policies at Tier 1 to provide a population-based approach to creating an environment conducive to making healthy food choices and physical activity easier.

Figure 3: Proposed model for service delivery aimed at creating a 'healthy' environment that supports individuals and families to make healthy food choices and become more physically active [P.Heywood]



32. The Panel was reminded about the Middlesbrough Healthy Town programme. Middlesbrough went through a competitive bidding process involving more than 140 other towns in England to become one of 9 designated healthy towns. This attracted a significant amount of new investment (£4.5m) matched against existing resources to test and evaluate different approaches to making regular physical activity and healthy food choices easier. It was confirmed Middlesbrough's approach aims to develop approaches that address the wider determinants of the obesogenic environment, which is conceptualised in the figure below (Figure 4).

Figure 4: The obesogenic environment – examples of the wider determinants that influence individual choices around healthy eating and physical activity.



33. Middlesbrough’s programme has integrated social marketing approaches to influencing behaviour and focused on four major themes:

- Urban farming
- Youth and community engagement
- Enhancing the physical environment
- Active travel

34. The Panel heard that in November 2009, a Department of Health National Support Team visited Middlesbrough and focused its review on childhood obesity. During the four-day visit, the National Support Team conducted more than 25 interviews with key stakeholders and partners and reported back to local partners with an overview of their assessment and a set of recommendations. Middlesbrough Council’s lead member for Public Health and Sport was closely involved with the inspection process.

35. In summary, the Panel heard that tackling obesity and overweight remains a significant challenge. Whilst the scale of the problem remains vast, the evidence base for effective interventions preventing obesity remains very limited.

36. It was confirmed to the Panel that a single solution will not solve the problem and, as highlighted by the NST team, an integrated approach from all partners is required. The NST team also recognised that the majority of the levers of change to the obesity environment lie outside the immediate control of the local NHS.

37. It was said that at a very basic level, obesity and overweight is caused by an energy imbalance between the amount of energy consumed and the amount of energy expended. The Panel was advised that whilst this simple ‘energy equation’ is correct, the reality is that our individual choices are strongly patterned by a wide range of powerful socio-cultural determinants that influences the way we eat, move about and propensity to become increasingly sedentary.

Evidence from 25th February 2010
Director of Regeneration and Head of Transport & Deign Services

38. Following on from the evidence submitted by the Director of Public Health for Middlesbrough, the Panel was interested to consider wider determinants in health and specifically, the question of

"To what extent does the Transport Infrastructure and Built Environment of the town assist in tackling and preventing childhood obesity".

39. The Panel heard from the Director of Regeneration, who highlighted the key issues around the extent to which the Built Environment assisted in tackling and preventing childhood obesity as outlined in a paper submitted to the Panel.

40. The Panel heard that it had raised an interesting question, which was very much at the forefront of current urban policy thought. The Panel was advised that historically, the issue of planning connecting with public health, was strongly associated with unfit housing. Still, in recent decades there been an increased focus on the links between the environment and physical activity. The Panel heard that such a focus examined how the layout of towns, cities and buildings could influence opportunities to be physically active, particularly as part of everyday life.

41. The Panel learned that overall plan making and development control processes were heavily governed by national planning regulations and guidance. Although the creation of healthy environments was a central principle of the planning system and was embedded in National Planning Policy Statements, it was acknowledged that there was very little specific reference to planning as a means of obesity reduction.

42. Reference was made to Middlesbrough's adopted Core Strategy which sets out the principle elements of the planning framework for the Town and identified the priorities the Council would seek to address through the planning system. The Panel was advised that improving health is identified as a priority to be addressed through the planning system and has influence over the policies that guided development within the Town. It was said that Core Strategy policy CS4 (Sustainable Development) actively supported development being located so that services and facilities were accessible on foot, bicycle or public transport thus reducing the reliance on the car. The panel heard that the fairly recently development of Coulby Newham provided a good example of integrated pedestrian routes and good access to schools and facilities.

43. The Panel heard that the Local Development Framework sought to protect and enhance the Town's open spaces and utilise them as environmental assets for recreation. It was said that preparation had commenced on the Environment Development Plan Document (DPD) which identified areas for protection in relation to a number of areas such as allotments, playing-pitches, green corridors/wedges, primary open space, trees foot paths/cycleways and verges.

44. In addition, the Panel heard that a key aim of the Environment DPD was the creation of a network of open spaces that were successfully integrated with the built environment. The Middlesbrough's Urban Green Initiative is a substantial, inter-connected network of open spaces of approximately 440

hectares within the centre of the built-up area of the town. Such a framework would includes

- an assessment of the priorities and requirements for sport, leisure, health and bio-diversity within the strategic open space network;

- identify ways to encourage people into an underused area, looking in particular at access points, cycleway footpath networks and permeability to achieve a wider usage and catchment.

45. At the Panel's suggestion, it was acknowledged that such aspirations would need commitment of both capital and ongoing revenue resources in order to create and manage an area that people would want to use. Issues around anti-social behaviour in such areas were considered to be crucial in terms of encouraging further use of such facilities.

46. There was acknowledgement that deprivation was an issue closely associated with obesity. The Town's programme of physical regeneration was regarded as helping to achieve improved public health. Reference was made to the Council's and its partner's programme of housing market renewal schemes and Area Regeneration Frameworks (ARF) which provided a strategy for the regeneration of areas such as Grove Hill. The proposals within the ARF indirectly helped achieve improved public health by means of its strategic objectives, which included the establishment of an environment, which was attractive, safe and well used by all. Another example was provided in respect of the comprehensive regeneration programme at of Whinney Banks, which included a significant area of upgraded open space and a new combined Health and Community Centre.

47. The Panel heard about Development Briefs, which provided an opportunity for planning to influence and guide the future development of a specific site. It was, however, pointed out that a number of sites were economically difficult to develop and financial obligations needed to be considered carefully so as not to undermine development. It was confirmed that as part of a granting of planning permission, voluntary legal requirements could be entered into with developers/landowners known as planning contributions.

48. Specific reference was made to the development brief prepared in respect of the Swedish Mission Field site, which included a contribution towards a package of highway safety measures and improvements/maintenance towards the sport facility provision at Mill Hill. Another similar example was given as the future development of Ladgate Lane, which included contributions to be sought on improvements and landscaping of the Marton West Beck corridor and off-site contributions to local sport and recreational facilities and/or a local town park within walking distance of the development site.

49. The Panel heard that Development Control was the element of the planning system through which the Council regulated land use and new buildings. As part of such a process, the development control service gave advice and

information about planning through pre-application meetings which provided opportunities for planning officers to influence design and help create an attractive, safe and easily accessible environment.

50. The Panel was advised that perceptions of safety was a key factor in encouraging outdoor activity and it was important to ensure that areas were well managed in order to encourage use. It was also acknowledged that perceptions around the fear of crime especially with regard to the siting of open spaces and footpaths near to dwellings were a concern for many residents.

51. As part of a granting of planning permission voluntary legal agreements could be entered into with developers/landowners known as planning contributions. The Council as Local Planning Authority had sought planning contributions associated with public health improvements and the reduction in obesity.

52. It was reiterated to the Panel that at a national planning policy level, there was little specific reference to planning and its connection with the goal to reduce obesity. It was also indicated that there were very few examples of best practice in terms of utilising planning powers as a means of obesity reduction. The Panel heard about the London Boroughs of Barking & Dagenham and Waltham Forest, which had used planning powers to address the health impacts of hot food takeaways. This has been done by producing Supplementary Planning Documents which identified hot food takeaway exclusion zones (including 400m from the boundary of a primary or secondary school) and the introduction of a levy for every new takeaway.

53. The Panel commented on current issues around local shopping areas where certain businesses had found it increasingly difficult to compete with major supermarkets. The Panel heard that the nature of local retail businesses had changed in recent years with an increasing number of hot food takeaways, moving into business premises. The Panel commented on certain shopping areas, which had a significant number of hot food takeaways where planning applications had been refused, but had subsequently been approved following a planning appeal.

54. The Panel emphasised the need for careful consideration to be given to the siting of play areas and for such facilities to be well managed. It was pointed out that problems associated with such facilities were a constant source of complaint to Ward Councillors in certain areas.

55. The Panel felt that given the extent to which development control processes were driven by national planning regulations and guidance, the Panel considered that there appeared to be a tenuous link with the management of the Built Environment and its impact on tackling and preventing childhood obesity.

56. The Panel also took evidence from the Head of Transport & Design Services, who highlighted the key areas relating to the extent to which transport assisted in tackling obesity.

57. The Panel heard that the encouragement of what was now called ‘Active Travelling’ continued to form one of the most important elements of the Local Transport Plan and would continue to do so in the future. The Healthy Towns Initiative also had an active travel theme focused on developing active and sustainable travel especially amongst young people. The panel heard that such developments were complimented by a range of road safety education training and publicity campaigns, which were targeted at vulnerable groups and young people, to ensure that they were equipped to deal with the demands of moving safely around the Town.

58. The Panel heard about a number of key initiatives, which were currently ongoing, as examples of how active lifestyle could be encouraged amongst young people thus reducing the likelihood of childhood obesity. Such initiatives included the following: -

- Safer Routes to School – working with selected schools to develop schemes to remove barriers to movement on foot and by cycle to encourage the number of pupils to have a more active lifestyle;

- Walk to School Week – every year the Road Safety Team supported the National Walk to School Week and provided all 42 primary schools with resources to allow participation in the scheme;

- Walk Once a Week Initiative had involved 25 schools in 2009 and encouraged pupils to walk more regularly with those who had achieved certain targets receiving gold, silver or bronze stickers to recognise their achievement;

- School Gate Parking Campaigns in an endeavour to tackle dangerous and inappropriate parking outside schools combined with pedestrian training schemes where children were taught three main skills regarding the recognition of dangerous roadside locations to enhance young people’s confidence in terms of dealing with every day road situations and help lead more active lifestyles;

- On Road Cycle Training – targeted at year 5 and 6 pupils to allow them to become more skilful and aware of how to cope with situations on the road ;

- Walking Buses Initiative – currently involved four schools and children walking along an agreed route accompanied by at least two adults who took the role of driver and conductor in terms of organising the children and was generally viewed as improving school attendance as peer pressure;

- Park and Stride –currently involved seven schools and assisted parents who lived too far away to make the whole journey to school on foot but would like to park safely in agreed private car parks and considerately and walk to school with their children for at least a short distance;

- Incentivised Bike Schemes one of the projects of the Healthy Towns Initiative, which included the provision of, subsidised bikes to school pupils to assist in their take up of a healthy option for travelling to school.

59. The Panel was also advised of 20 mph and Traffic Calming Zones. Out of the 500km of roads in the Town there were approximately 95km, which had either traffic calming or a 20-mph to slow the speed of vehicles.

60. The panel enquired about pilot schemes of blanket application of 20-mph zones elsewhere in the country, which had achieved very positive results with reduced accidents. It was hoped that similar benefits were identified in terms of more walking and cycling because of the perception of enhanced levels of safety within an area. The Panel was advised that the Council was currently examining sources of funding to introduce a similar arrangement within residential areas.

61. In commenting on the benefits of the various projects, the Panel felt that that in overall terms it involved a change of culture and would take some time for the impact of such changes to be reflected.

62. The Panel expressed the view that whilst there was support for the national drivers of policies, it was considered that there needed to be a greater opportunity for local discretion to use resources for the benefit of and to tackle particular local circumstances.

63. In conclusion, the Panel felt that the use of health impact assessments should be reinforced when appropriate development programmes are considered, which is something that the Panel has recommended previously.

Conclusions

64. The Panel is asked to consider the Conclusions it would like to make.

Recommendations

65. The Panel is asked to consider whether it would like to make any recommendations.

BACKGROUND PAPERS

66. Please see the Agenda and Supporting Papers for the Panel meetings on 9 December 2009 and 25 February 2010.

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