Nottinghamshire Framework for Action on Tackling Excess Weight

2013-2018

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Developed by the Nottinghamshire Obesity Integrated Commissioning Group

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Abbreviations:

BMI	Body Mass Index
CCG	Clinical Commissioning Group
CG	Clinical Guideline
JSNA	Joint Strategic Needs Assessment
NCMP	National Child Measurement Programme
NICE	National Institute of Clinical Excellence
NCC	Nottinghamshire County Council
PCT	Primary Care Trust
PH	Public Health
WHO	World Health Organisation

Executive Summary

Excess weight is a complex yet common issue, and needs to be tackled on a number of levels. The challenge for Nottinghamshire, is to ***tackle*** elements of the environment that are 'obesity promoting' as well as providing people with the ***support*** and ***motivation*** to improve their diet and physical activity levels to enable them to be a healthy weight.

The term excess weight refers to when weight gain, in the form of fat, has reached a point which affects a person's health. Essentially, excess weight occurs as a result of energy imbalance. This imbalance occurs, when energy from food and drink consumption is greater than the energy expenditure through the body's metabolism and physical activity, over long periods of time, resulting in the accumulation of excess body fat.

Excess weight threatens the health and wellbeing of individuals and places a national financial burden in term of health and social care costs, on employers through lost productivity and on families because of the increasing burden on long-term chronic disability. Obesity shortens life expectancy by 9 years and is estimated to be responsible for about 30,000 deaths per year. It also increases the risk of many diseases including diabetes, cancer and heart disease.

Current trends relating to excess weight in Nottinghamshire are:

Children

- There has been a **significant decrease** in excess weight (overweight and obesity) prevalence rate in reception for England between 2006/07 and 2011/12.
- The prevalence of excess weight in children appears to be higher in more deprived areas than in the least deprived areas.
- For Nottinghamshire there has been a **significant decrease** in excess weight (overweight and obesity) prevalence rate in reception between 2006/07 and 2011/12. This is mirrored in Rushcliffe, Mansfield and Ashfield.
- Nottinghamshire has a **significantly lower rate** of excess weight in reception than the England rate. This is mirrored in Rushcliffe and Ashfield.
- There has been a **significant increase** in excess weight (overweight and obesity) prevalence rates in Year 6 for England between 2006/07 and 2011/12. In Nottinghamshire there has been no significant change in excess weight in Year 6 between 2006/07 and 2011/12. This is mirrored across all Nottinghamshire Districts.

Adults

- The estimated prevalence of adult obesity at a ward level appears higher in more deprived areas than in the least deprived areas.
- Ashfield has the highest level of estimated adult obesity rate and is significantly higher than England
- Rushcliffe has a significantly lower level of estimated adult obesity rate than England and all other districts are not significantly different from the England average.

The prevention of weight gain, beginning in childhood offers the most effective means of achieving healthy weight in the population. However, for those individuals who are already overweight or obese appropriate support through community based weight management interventions is needed.

Given the evidence base and the complexity and interrelationships of the causes of excess weight, the following approaches need to be taken:

- A **broad multifaceted partnership approach** that supports the whole population and which recognises that weight can be influenced by a broad variety of environmental, community, family and individual factors. This involves creating communities, neighbourhoods and services that support people in maintaining a healthy weight.
- A **targeted approach** providing community based lifestyle interventions for people most as risk of becoming overweight or obese, intervening early and recognising the importance of influencing the family
- A **specialist approach** providing weight management services for people already overweight or obese.

The identified gaps and areas that need to be addressed in Nottinghamshire include:

- Having accessible and acceptable evidence-based obesity prevention and weight management services for children, young people, adults and families so that the obesity care pathways that have previously been developed and agreed can be implemented across the whole of Nottinghamshire.
- Ensuring that those individuals at increased risk of suffering from excess weight are able to access appropriate services.
- Ensuring that front-line health professionals have the skills to work with parents and adults to raise the issue of excess weight, assess and signpost to local services (linked to *making every contact count*)
- Developing a pathway and service for pregnant women who are overweight/obese
- Supporting high quality consistent evaluation of weight management, physical activity and dietary interventions in order to improve the evidence base.
- Making effective links to the delivery of the NHS Health Check programme which started in Nottinghamshire in 2010. The programme provides adults aged 40 to 74 with a health check once every five years, aiming to identify those at highest risk of heart disease, stroke, type 2 diabetes and kidney disease. Evaluation of the programme shows that adults who were at high-risk of developing a long-term conditions, such as diabetes, who had a health check were given advice, but referrals to services, such as weight management and nutrition services was low.
- Ensuring that resources are aligned to areas of highest need, acknowledging that pockets of deprivation exist in even the most affluent of areas
- Identifying ways in which we can make the most of the assets that we do have – for example how Environmental Health Officers, Neighbourhood Wardens, planning departments and others can support work to tackle excess weight.

This framework provides the delivery mechanism for the Nottinghamshire Health and Wellbeing Strategy to tackle excess weight and aims to reverse the rising prevalence of excess weight in the population of Nottinghamshire, developing a downward trend in both children and adults. It provides a co-ordinated and comprehensive approach through the prevention, identification, treatment and management of excess weight. A plan is set out to support individuals across the life-course through working in and with communities, taking an evidence-based approach, building upon existing successes and creating new opportunities to meet gaps in local need to tackle excess weight. In delivering this ambition for Nottinghamshire we will ensure that partner agencies work together, align resources, deliver effective services, provide value for money and improve the experience and outcomes for people who use these services.

1. Introduction

In 2009, partners from across Nottinghamshire came together, through the Nottinghamshire Partnership to develop its 'Healthy Weight, Healthy Nottinghamshire Strategy 2009 - 2011' and associated action plan. This set out a response for tackling the increasing prevalence of excess weight (overweight and obesity) across Nottinghamshire. Since the 2009 strategy much has changed nationally:

- a new Coalition Government
- the Health and Social Care Act (2012)
- a new Public Health White Paper (Healthy Lives, Healthy People)
- a new Public Health Outcomes Framework
- a new national obesity strategy (Healthy Lives, Healthy People: a call to action on obesity in England).

This national obesity strategy adopts a life-course approach and stresses the need to address the wider determinants of health. It outlines the growing epidemic of obesity and draws attention to the significant health and economic impact excess weight has at an individual and population level.

Locally, the changes include:

- The development of a Health and Wellbeing Board and associated Health and Wellbeing strategy (Our Strategy for Health and Wellbeing: Priorities for 2012 -13)
- A new Obesity Integrated Commissioning Group with its function, membership and accountability set up in alignment with the Health and Wellbeing Board
- Nottinghamshire County Council (from April 2013) being responsible for obesity interventions, locally led nutrition initiatives and increasing levels of physical activity. Ensuring the effective commissioning and delivery of the National Childhood Measurement Programme (NCMP) is also one of the five mandatory functions

These changes have presented an ideal opportunity to review and develop a *'Nottinghamshire Framework for Tackling Excess Weight*', builds on both the guidance provided by '*Healthy Lives, Healthy People: a call to action on obesity*' and on the work of the previous '*Healthy Weight, Healthy Nottinghamshire Strategy 2009 – 2011'* and associated action plan.

Excess weight develops over time and once it has developed, it is difficult to treat. The prevention of weight gain, beginning in childhood offers the most effective means of achieving healthy weight in the population. However, for those individuals who are already overweight or obese appropriate support through community based weight management interventions is needed. This framework provides the delivery mechanism for the Nottinghamshire Health and Wellbeing Strategy to tackle excess weight and aims to reverse the rising prevalence of excess weight in the population of Nottinghamshire, developing a downward trend in both children and adults. It provides a co-ordinated and comprehensive approach through the prevention, identification, treatment and management of excess weight. A plan is set out to support individuals across the life-course through working in and with communities, taking an evidence-based approach, building upon existing successes and creating new opportunities to meet gaps in local need to tackle excess weight.

Excess weight cannot be tackled by one organisation alone and a strong partnership of key commissioning organisations will be required to implement this framework and associated action plan successfully. This role is fulfilled by the Obesity Integrated Commissioning Group.

2. What is excess weight?

The term excess weight refers to when weight gain, in the form of fat, has reached a point which affects a person's health.

Adults

In adults there are two main methods of assessing weight and its impact on health: Body Mass Index (BMI) and waist circumference. BMI is defined as weight in kilograms divided by the square if the height in metres (kg/m2).

Table 1: World Health Organisation (WHO, 2004) BMI classification system for adults

BMI range (kg/m^2)	Classification
< 18.5	Underweight
18.5 - 24.9	Healthy weight
25 - 29.9	Overweight
30 - 39.9	Obese
> 40	Morbidly obese

N.B. It is important to note that BMI is not always an accurate measure of body fat and/or fat distribution. This is particularly the case in muscular individuals.

Excess weight in adults is described as having a BMI over 25 (Table 1). For Asian (South Asian and Chinese), black African and African-Caribbean populations NICE (2013)[1] recommends that lower thresholds (23kg/m^2 to indicate increased risk and 27.5kg/m^2 to indicate high risk) be used to trigger action to prevent type 2 diabetes.

Waist circumference is used to assess abdominal fat mass or central fat distribution. These are linked to a higher risk of diseases such as Type 2 diabetes and coronary heart disease. NICE (2006) recommend a combination of BMI waist circumference to assess increased health risks from obesity in individuals with a BMI of less than 35kg/m^2 (Table 2). Health risks are very high for those with a BMI of 35kg/m^2 or more regardless of waist circumference.

Table 2: Waist Circumference thresholds as a measure of central obesity with increased health risk[1]

European	Men	≥ 94cm (37 inches)
	Women	≥ 80cm (31.5 inches)
South Asians, Chinese, Japanese, ethnic south and central Americans	Men	≥ 90cm (35 inches)
	Women	≥ 80cm (31.5 inches)
Sub-Saharan Africans, Eastern Mediterranean and middle east (Arab) populations	Use European data until more specific data are available	

[1] NICE (2013) Assessing body mass index and waist circumference thresholds for intervening to prevent ill health and premature death among adults from black, Asian and other minority ethnic groups in the UK. PH46 http://guidance.nice.org.uk/PH46

Children

In children NICE (2006)[2] recommend the use of BMI (adjusted for age and gender) to measure overweight and obesity in children (2-18 years). The measurement needs to take into account the different growth patterns among boys and girls at each age and therefore a universal categorisation cannot be used to define obesity as is the case in adults. It is important to note that different growth charts and cut offs are used for:

- individual children in a clinical situation
- population measurements to establish the prevalence of obesity and overweight.

Individual children

For the assessment and monitoring of individual children the 91st percentile is used as the cut off for overweight and the 98th percentile as the cut off for obese.

Population - The National Child Measurement Programme (NCMP)

For screening the population the UK national BMI percentile is used where overweight is between the 85th - 95th percentile and obesity is above the 95th percentile. Most epidemiological studies use this standard definition for comparative purposes.

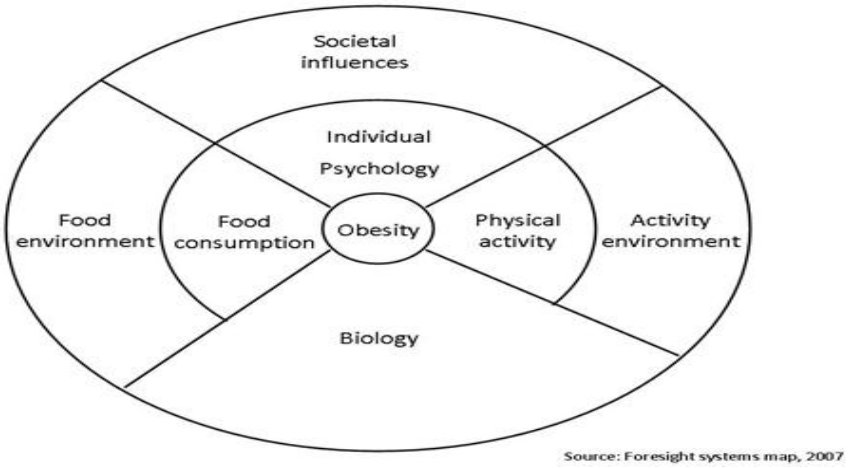
[2] NICE (2006) Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children CG43. Available from: http://guidance.nice.org.uk/CG43

3. What causes excess weight?

Essentially, excess weight occurs as a result of energy imbalance. This imbalance occurs, when energy from food and drink consumption is greater than the energy expenditure through the body's metabolism and physical activity, over long periods of time, resulting in the accumulation of excess body fat. The cause of the energy imbalance is multi-factorial and is influenced by a number of direct and indirect factors. The Foresight report (2007)[3] presented an obesity system map with energy imbalance at its centre, surrounded by over 100 variables that have a direct or indirect influence on energy balance.
The full obesity system map has been simplified and divided into 7 predominant themes (Figure 1):

- **Biology**: an individual's starting point - the influence of genetics and ill health;
- **Activity environment**: the influence of the environment on an individual's activity behaviour for example a decision to cycle to work may be influenced by road safety, air pollution or provision of a cycle shelter and showers;
- **Physical Activity**: the type, frequency and intensity of activities an individual carries out, such as cycling vigorously to work every day;
- **Societal influences**: the impact of society, for example the influence of the media, education, peer pressure or culture;
- **Individual psychology**: for example a person's individual psychological drive for particular foods and consumption patterns, or physical activity patterns or preferences;
- **Food environment**: the influence of the food environment on an individual's food choices, for example a decision to eat more fruit and vegetables may be influenced by the availability and quality of fruit and vegetables near home;
- **Food consumption**: the quality, quantity (portion sizes) and frequency (snacking patterns) of an individual's diet.

Figure 1 Simplified Foresight obesity map



[3] Butland et al (2007) Foresight: Tackling Obesities: Future Choices – Project Report. London: Government Office for Science.

Excess weight and diet

Good nutrition is vital to good health. Whilst many people in England eat well, a large number do not, particularly among the more disadvantaged and vulnerable in society. In particular, a significant proportion of the population consumes more than the recommended amount of fat, saturated fat, salt and sugar. Such poor nutrition is a major cause of ill health and premature death in England. About one third of cancers can be attributed to poor diet and nutrition. Eating at least 5 portions of a variety of fruit and vegetables each day can reduce the risk of death from chronic disease, stroke and cancer by up to 20%. Current guidelines recommend that adults and children aim to eat five or more portions of fruit and vegetables each day.

Patterns of food consumption: the quality, quantity (portion sizes) and frequency (snacking patterns) of an individual's diet can influence excess weight prevalence rates. The largest economic burden to the NHS is due to poor diet and much of this is due to excess weight[4] . The new national obesity strategy[5] suggests that a reduction in energy intake of 100Kcals per person per day on average would correct the energy imbalance at a national level and also lead to a moderate degree of weight loss without increasing the risk of nutritional deficiencies.

Excess weight and physical activity

Physical inactivity is a critical public health issue. Improving physical activity levels has the potential to improve both physical and mental health. Lack of physical activity is associated with increasing risks to health, including heart disease, diabetes, cancer, obesity and musculoskeletal conditions such as osteoporosis. Heart disease, stroke and cancer are the major causes of death in England, accounting for almost 60% of premature deaths. The benefits of regular physical activity are well evidenced. In 2011, new physical activity guidelines covering early years; children and young people; adults; and older adults were produced[6].

Excess weight and alcohol

There is no clear causal relationship between alcohol consumption and excess weight. However, there are associations between the two influenced by a number of factors including lifestyle, genetic and social factors. Alcohol accounts for nearly 10% of calorie intake amongst adults who drink[7] and there is a lack of public awareness about the calorific content of alcoholic drinks. Alcohol lacks most essential nutrients and vitamins.

[4] Scarborough P et al (2011) The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: an update to 2006-07 costs. Journal of Public Health doi:10.1093/pubmed/fdr033

[5] Department of Health (2011) Healthy Lives, Healthy People: A call to action on obesity in England. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/134840/dh_130487.pdf.pdf

[6] Department of Health (2011) Start Active, Stay Active: a report on physical activity from the four home countries' Chief Medical Officers

[7] Bates, B & Lennox A (2009) National diet and nutrition survey: headline results from year 1 of the rolling programme (2008/2009) London: Food Standards Agency.

4. Why is excess weight a priority?

Excess weight threatens the health and wellbeing of individuals and places a national financial burden in term of health and social care costs, on employers through lost productivity and on families because of the increasing burden on long-term chronic disability[8].

Obesity shortens life expectancy by 9 years[9] and is estimated to be responsible for about 30,000 deaths per year. It also increases the risk of many diseases including diabetes, cancer and heart disease.

Compared with a healthy man an obese man is:

- Five times more likely to develop type 2 diabetes
- Three times more likely to develop colon cancer
- More than two and a half times more likely to develop high blood pressure.

Compared with a healthy woman an obese woman is:

- Almost thirteen times more likely to develop type 2 diabetes
- Three times more likely to have a heart attack
- More than four times more likely to develop high blood pressure.

Being overweight or obese in childhood can have an impact on both short and long term physical and mental health. The emotional and psychological effects of being overweight are often seen as the most immediate and most serious by parents and children themselves. They include teasing and bullying; low self-esteem and poor body image; anxiety and depression with anxiety and depression being 3-4 times more prevalent in obese children[10].

Maternal obesity increases childhood obesity and infant mortality as well as impacting on the mother's immediate (complications of pregnancy) and future health[11] .

Children who are overweight and obese are more likely to become obese adults; and are therefore at higher risk of adult obesity health related risks. Although many of the most serious consequences may not become apparent until adulthood, the effects of excess weight – for example, raised blood pressure, fatty changes to the blood vessels and hormonal and chemical changes such as raised cholesterol and metabolic syndrome can be seen in obese children and adolescents. Some obesity-related conditions can develop during childhood. Type 2 diabetes, previously considered an adult disease, has increased dramatically in overweight children as young as five.

Weight loss can improve physical, psychological and social health. Even small changes can have a positive impact on the overall health and wellbeing of individuals by increasing mobility, energy and confidence. There is good evidence to suggest that a moderate weight loss of 5-10% of body weight in obese individuals is associated with a reduction in blood pressure and a reduced risk of developing Type 2 diabetes and coronary heart disease.

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[8] Butland et al (2007) Foresight: Tackling Obesities: Future Choices – Project Report. London: Government Office for Science.

[9] National Audit Office (2001) Tackling obesity in England. London. The Stationary Office http://www.nao.org.uk/report/tackling-obesity-in-england/

[10] Hill AJ (2005) The psychosocial consequences of childhood obesity. The Psychologist,18 280-283

[11] Centre for Maternal and Child Enquiries (CMACE) 2010. Maternal obesity in the UK: Findings from a national project. London.

The effects of excess weight are not only felt by individuals but also financially by the state. There is also a strong economic argument for investing in measures to reduce excess weight as it places significant burdens on the NHS and wider public services. The House of Commons Health Select Committee (2002) estimated that the total annual cost of obesity and overweight for England in 2002 was nearly £7 billion. This total includes direct costs of treatment, the cost of dependence on state benefits, and indirect costs such as loss of earnings and reduced productivity including an annual total of 45,000 lost working years. The NHS costs alone linked to excess weight equated to 2.3%-2.6% of total NHS expenditure (2001/2002). It is estimated that by 2050, the cost to the NHS of excess weight could rise to £9.7 billion, with the wider cost to society being £49.9 billion[12]. The social care requirements of very obese individuals are costly and include housing adaptations and carer provision.

[12] Butland et al (2007) Foresight: Tackling Obesities: Future Choices – Project Report. London: Government Office for Science.

5. Who is at risk of excess weight?

The burden of obesity is uneven across our communities, with certain groups being more at risk e.g. lower socio-economic and socially disadvantaged groups, particularly women. Data on the prevalence of obesity in different ethnic groups is limited because national surveys tend to sample only relatively small numbers from minority groups. However, according to The Health Survey for England (2007), obesity is currently greatest in the Caucasian and Bangladeshi populations[13] .

Other groups of people at risk includes people with physical disabilities (particularly in terms of mobility which makes exercise difficult), people with learning difficulties, people diagnosed with a severe and enduring mental illness, particularly schizophrenia or bipolar disease and older people.

There are also key stages when people are more likely to put on weight[14], and include;

- Men in their late 30s
- Women entering long-term relationships
- Women during and after pregnancy
- Women at menopause
- People giving up smoking
- People who retire
- People suffering psychological problems such as stress and depression

It is critical to ensure that strands of work to tackle excess weight meet the needs of these 'at risk' groups and key stages within the life course.

[13] Butland et al (2007) Foresight: Tackling Obesities: Future Choices – Project Report. London: Government Office for Science.
[14] Butland et al (2007) Foresight: Tackling Obesities: Future Choices – Project Report. London: Government Office for Science.

6. What is the picture in Nottinghamshire?

The Joint Strategic Needs Assessment (JSNA) is the process that identifies current and future health and wellbeing needs for the local population. The Nottinghamshire JSNA includes information relating to the challenge of obesity including diet and physical activity and should be accessed for the most up to date information for both children and adults http://www.nottinghamshire.gov.uk/thecouncil/plans/strategydevelopment/joint-strategic-needs-assessment/.

A summary of the current trends relating to excess weight is given below:

Children

- In Nottinghamshire, there has been a **significant decrease** in excess weight (overweight and obesity) prevalence rate in reception between 2006/07 and 2011/12. This is mirrored in Rushcliffe, Mansfield and Ashfield.
- Nottinghamshire has a **significantly lower rate** of excess weight in reception than the England rate. This is mirrored in Rushcliffe and Ashfield.
- There has been a **significant increase** in excess weight (overweight and obesity) prevalence rates in Year 6 for England between 2006/07 and 2011/12. In Nottinghamshire there has been no significant change in excess weight in Year 6 between 2006/07 and 2011/12. This is mirrored across all Nottinghamshire Districts.
- The prevalence of excess weight in children appears to be higher in more deprived areas than in the least deprived areas.

Adults

- The estimated prevalence of adult obesity at a ward level appears higher in more deprived areas than in the least deprived areas.
- Ashfield has the highest level of estimated adult obesity rate and is significantly higher than England
- Rushcliffe has a significantly lower level of estimated adult obesity rate than England and all other districts are not significantly different from the England average.

Fruit and vegetable consumption

- The estimated consumption of five portions of fruit and vegetables each day is lowest in Ashfield whilst the highest estimated consumption is in Rushcliffe.

Physical activity in adults

- There has been a **significant increase** in physical activity levels in Nottinghamshire between 2005/06 and 2010/12. This is mirrored in in Newark and Sherwood; however there has been a **significant decrease** in Rushcliffe during this time period.
- Adults who live in Newark and Sherwood and Rushcliffe have the highest rates of physical activity. Rates are lowest in adults who live in Mansfield.

7. What does the evidence recommend in tackling excess weight?

Given the evidence base and the complexity and interrelationships of the causes of excess weight, the following approaches need to be taken:

- A **broad multifaceted partnership approach** that supports the whole population and which recognises that weight can be influenced by a broad variety of environmental, community, family and individual factors. This involves creating communities, neighbourhoods and services that support people in maintaining a healthy weight.
- A **targeted approach** providing community based lifestyle interventions for people most as risk of becoming overweight or obese, intervening early and recognising the importance of influencing the family
- A **specialist approach** providing weight management services for people already overweight or obese.

NICE has produced a number of guidance documents in relation to the reduction of obesity. This guidance is used to inform our local strategic approach, and shape the services that our population receive. Guidance related to obesity, diet and physical activity includes:

- Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children (2006) CG43
- Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community based exercise programmes for walking and cycling (2006) PH02
- Behaviour change (2007) PH07
- Physical activity and the environment (2008) PH08
- Maternal and child nutrition (2008) PH11
- Promoting physical activity in the workplace (2008) PH13
- Promoting physical activity in children and young people (2009) PH17
- Prevention of cardiovascular disease (2010) PH25
- Weight management before, during and after pregnancy (2010) PH27
- Preventing type 2 diabetes – population and community interventions (2011) PH35
- Walking and cycling (2012) PH41
- Obesity: working with local communities (2012) PH42
- Assessing body mass index and waist circumference thresholds for intervening to prevent ill health and premature death among adults from black, Asian and other minority ethnic groups in the UK (2013) PH46

The evidence suggests that significant effective action to prevent excess weight at a population level targeting elements of the environment that are ‘obesity promoting’ as well as improving the nutrition and physical activity of individuals.

The briefing paper for commissioners on 'Preventing Childhood Obesity through Lifestyle Change Interventions'[15] found limited evidence of effective approaches to preventing child obesity, but did contain some recommendations:

- Programmes should be multicomponent interventions, ideally addressing diet and physical activity together and should involve family and peer support where possible using behavioural programmes at changing diet and physical activity patterns.

The National Obesity Observatory publications 'Treating Adult Obesity through Lifestyle Change Interventions'[16] and 'Treating Child Obesity through Lifestyle Change Interventions'[17] summarise the systematic reviews of effective treatments undertaken by NICE and Cochrane Collaboration. NOO concludes that while 'there is sufficient evidence to justify well-targeted action on obesity,' the evidence base 'tends to lack detail on the effectiveness of specific approaches or individual programmes, with the result that guidance tends to be somewhat general in nature'. Accordingly, when commissioning weight management services, it may 'be difficult to demonstrate the effectiveness of a specific intervention within a short timescale given the complex interplay of different environmental, biological and social determinants'. The NOO summary details a range of lifestyle (non-drug, non-surgical) interventions that are effective. These include:

- The importance of multi-component tailored interventions. These should focus on diet and physical activity together rather than attempting to modify either diet or physical activity alone.
- Physical activity component: interventions should focus on activities that fit easily into people's everyday lives and are tailored to people's individual preferences and circumstances
- Diet: interventions should aim to improve diet and reduce energy intake and should bring together a number of components such as dietary modification, targeted advice, family involvement and goal setting.
- Behavioural component: interventions for adults should include strategies tailored to the needs of the individual including self-monitoring or behaviour and progress, stimulus control and goal setting.
- Commercial and community based weight management programmes should only be commissioned if they follow best practice. They should help people assess their weight and decide on a realistic healthy target weight (people should aim to lose 5-10% of their original weight)
- There is good evidence for the effectiveness of brief interventions in primary care in promoting physical activity and these may be useful components of any co-ordinated obesity prevention intervention.

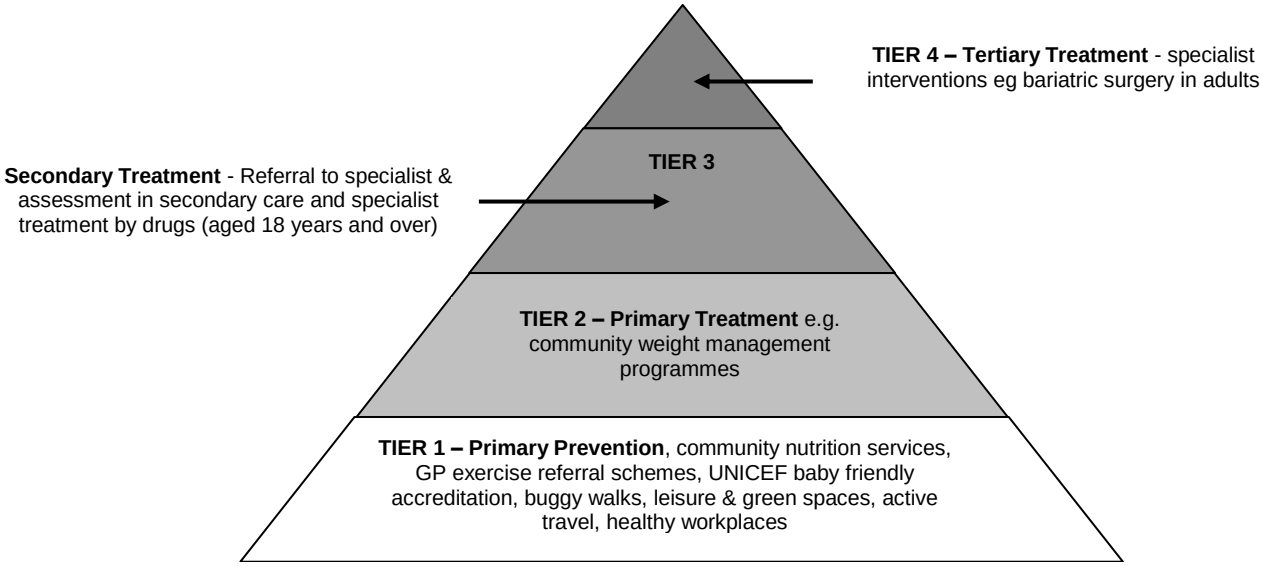
NICE is currently developing guidance on managing overweight and obesity in children and young people through lifestyle weight management services and managing overweight and obesity in adults through lifestyle weight management services.

[15] National Obesity Observatory (2009) Preventing Childhood Obesity through Lifestyle Change Interventions.
[16] Cavill N & Ells L (2010) Treating adult obesity through lifestyle change interventions: a briefing paper for commissioners. National Obesity Observatory
[17] Ells L & Cavill N (2009) Treating childhood obesity through lifestyle changes interventions: a briefing paper for commissioners. National Obesity Observatory

8. What is the model in place in Nottinghamshire?

The Nottinghamshire prevention and management of excess weight model consists of four tiers (Figure 2):

Figure 2: Nottinghamshire Prevention and Management of Excess Weight Model



- ***Tier 1*** focuses on the prevention of excess weight for the wider population, with an emphasis on those who are more at risk e.g. lower socio-economic and socially disadvantaged groups, particularly women, people with physical disabilities, people with learning difficulties, people diagnosed with a severe and enduring mental illness and older people. The whole population prevention activity provides the opportunity to make the greatest contribution to longer term changes in the numbers or individuals who are overweight or obese. Excess weight develops over time and once it has developed, it is difficult to treat. The prevention of weight gain, beginning in childhood offers the most effective means of achieving healthy weight in the population. This activity will create environments which actively promote and encourage a healthy weight and address the factors that contribute to an 'obesity promoting' environment. Changes in the physical and built environment are required as well as universal services to maximise the potential for breastfeeding, physical activity and healthy eating. It is essential that partner organisations work together to contribute to have an impact at this level.
- ***Tier 2*** focuses on the provision of community weight management services for those who are already overweight or obese. By targeting these interventions will help to reduce inequalities in excess weight rates between groups and will ensure best use of resources.
- ***Tier 3*** focuses on the provision of a specialist multidisciplinary weight management service for those with severe and complex obesity. This tier includes the use of anti-obesity drugs which should only be considered in adults aged 18 years and over after dietary, exercise and behavioural approaches have been started and evaluated.
- ***Tier 4*** focuses on the provision of weight loss (bariatric) surgery for adults defined as morbidly obese, when all other measures have failed. In the East Midlands, people must have a BMI of 50 kg/m² and above may be eligible for surgery. Estimates indicate 64 people per year across Nottinghamshire will have this intervention. NHS England is now responsible for the commissioning of bariatric surgery.

9. What have we already done?

Due to there being two Primary Care Trusts (PCTs) in Nottinghamshire, Nottinghamshire County and Bassetlaw, services and interventions to support the Healthy Weight Healthy Nottinghamshire strategy 2009-2011 were commissioned, delivered and performance managed separately. Most of the focus was on interventions in Tiers 1 and 2 of the Nottinghamshire Prevention and Management of Excess Weight model (Figure 2). The activities/interventions delivered between 2009 -2011 in Nottinghamshire are given in Table 4. Theses are linked to the five strategic themes of the 2009-2011 strategy.

Table 3: Activities and interventions that took place across the county in support of the 2009 – 2011 strategic themes

Theme	Activity
1. To support a healthy weight in children through healthy eating and physical activity	Play strategies in districts
	National Child Measurement Programme
	Healthy Schools Programme - in the county, 92% of schools have 'Gold' status, which is the equivalent of the National Healthy Schools Standard. The approach taken includes; developing policy and practice in healthy eating, physical activity, Personal, Social Health and Economic and emotional health and wellbeing.
	'Start to Play' programme in all Children's Centre County
	School travel plans
	Implementation of the national Healthy Start programme
	Social Marketing projects working with schools delivered by Community Nutrition teams.
	Bassetlaw Change 4 Life 0-11 year olds
2. To promote healthier food choices for adults and children in a range of settings	UNICEF Baby Friendly Initiative
	Healthy tuck shops in schools through Community Nutrition teams
	Promoting the 5 A DAY message through Community Nutrition teams
	Change 4 Life branding promoted in all areas
3. To ensure the physical activity is encouraged throughout life	'Raise the Issue' of weight & obesity (Brief Intervention Training) in order to support people to achieve and maintain healthy weight.
	Buggy walks – countywide through districts councils/ NCC
	District Council Physical activity strategies and plans
	Through the Local Transport Plan, a programme of cycling and walking network improvements has taken place.
4. To encourage healthier workplaces	EatWell4Life healthy eating workplace courses
	Workplace travel plans
5. To maintain and develop access to advice and support on diet, weight and physical activity for adults and children.	**Diet**
	Community nutrition service in NHS Nottinghamshire County districts – delivering a variety of adult and children programmes e.g. Big Cook, Little Cooks, Fun with Food Workshops, weaning cafes/ babies that lunch.
	Evaluation of NHS Nottinghamshire Community Nutrition services completed
	Children's Centre staff trained to deliver basic healthy eating messages, raise awareness of simple healthy eating messages with all, and develop resources.
	Physical activity
	District exercise referral schemes
	Evaluation of NHS Nottinghamshire County exercise referrals schemes undertaken
	Let's Get Moving pilot in Bassetlaw – exercise referral scheme for young people.
	Weight management
	Adult and children's care pathways in place
	Community Weight Management service (ZEST) in place in Bassetlaw
	A Weight Management Local Enhanced Service in place in Bassetlaw
	Inneraktiv pilot – 12 week weight management for young people in Bassetlaw

10. What outcomes are we trying to achieve?

Nationally, the Government has set two new national ambitions[18]:

- *A sustained downward trend in the level of excess weight in children by 2020*
- *A downward trend in the level of excess weight averaged across all adults by 2020*

This framework provides the delivery mechanism for the Nottinghamshire Health and Wellbeing Strategy to tackle excess weight and aims to reverse the rising prevalence of excess weight in the population of Nottinghamshire, developing a downward trend in both children and adults. In delivering this ambition for Nottinghamshire we will ensure that partner agencies work together, align resources, deliver effective services, provide value for money and improve the experience and outcomes for people who use these services.

The following indicators relating to adult and childhood obesity within the Public Health Outcomes Framework[19] are supported by this strategy:

Domain 1: Improving the wider determinants of health

- Utilisation of green space for exercise/health reasons (from the Monitor of Engagement with the National Environment Survey).

Domain 2: Health Improvement

- Breastfeeding (Maternity and Children's Services Secondary Uses Data Set will become data source for this)
- Excess weight in 4-5 and 10-11 years olds (from the National Child Measurement Programme).
- Excess weight in adults (Health Survey for England will provide national data and Active People's Survey for local authority data)
- Diet (Questions to be added to the Active People's Survey around 5 A DAY)
- Proportion of physically active and inactive adults (from Active People Survey).

The Nottinghamshire Local Outcomes Framework (LOF) is currently in development and will underpin how the Health and Wellbeing Board assesses the effectiveness of the health and wellbeing strategy of which excess weight is a priority. The LOF is a subset of the indicators contained in the outcome frameworks for Public Health, NHS and Adult Social Care. A level of aspiration will be expected, however this has not yet been set for reducing excess weight.

[18] Department of Health (2011) Healthy Lives, Healthy People: A call to action on obesity in England. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/134840/dh_130487.pdf.pdf

[19] Department of Health (2012) Healthy Lives Healthy People: Improving outcomes and supporting transparency. Part 1: A public health outcomes framework for England, 2013 – 16 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/151873/dh_132559.pdf.pdf

11. What will we do?

Excess weight is a complex yet common issue, and needs to be tackled on a number of levels. The challenge for Nottinghamshire, is to ***tackle*** elements of the environment that are 'obesity promoting' as well as providing people with the ***support*** and ***motivation*** to improve their diet and physical activity levels to enable them to be a healthy weight.

The identified gaps and areas that need to be addressed locally include:

- Having accessible and acceptable evidence-based obesity prevention and weight management services for children, young people, adults and families so that the obesity care pathways that have previously been developed and agreed can be implemented across the whole of Nottinghamshire.
- Ensuring that those individuals at increased risk of suffering from excess weight are able to access appropriate services.
- Ensuring that front-line health professionals have the skills to work with parents and adults to raise the issue of excess weight, assess and signpost to local services (linked to *making every contact count*)
- Developing a pathway and service for pregnant women who are overweight/obese
- Supporting high quality consistent evaluation of weight management, physical activity and dietary interventions in order to improve the evidence base.
- Making effective links to the delivery of the NHS Health Check programme which started in Nottinghamshire in 2010. The programme provides adults aged 40 to 74 with a health check once every five years, aiming to identify those at highest risk of heart disease, stroke, type 2 diabetes and kidney disease. Evaluation of the programme shows that adults who were at high-risk of developing a long-term conditions, such as diabetes, who had a health check were given advice, but referrals to services, such as weight management and nutrition services was low.
- Ensuring that resources are aligned to areas of highest need, acknowledging that pockets of deprivation exist in even the most affluent of areas
- Identifying ways in which we can make the most of the assets that we do have – for example how Environmental Health Officers, Neighbourhood Wardens, planning departments and others can support work to tackle excess weight.

12. What are our integrated commissioning principles?

The partnership agencies will commission and/or deliver services in a way which is consistent with the following principles:

- Commissioning decisions will be guided by available evidence based practice of what works.
- Early intervention and prevention approaches along with weight management service provision (including provision for those with severe and complicated obesity), will be considered in all commissioning and decommissioning decisions.
- Service development and provision should be sensitive to the protected characteristics of individuals and groups. These are age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex and sexual orientation.
- Services provided should reflect the level of assessed need within available resources.
- Service users and the public should have the opportunity to express their views, be consulted about service development and be involved in decisions which affect them, and see evidence that their views are taken into account.
- Services should be provided in safe environments by trained and competent staff and volunteers.
- The safeguarding of children and young people and vulnerable adults will always be considered.
- Services should be provided in a fair, open and transparent way, and be performance managed to demonstrate impact.
- Resources will be focused on providing quality and value for money.
- Resources will actively be targeted at groups and localities at greatest risk with the aim of reducing health inequalities.
- The Standard Evaluation Frameworks for weight management interventions, dietary interventions and physical activity interventions will be used to guide the evaluation of all commissioned services.

The Integrated Commissioning Group has agreed the following list of priorities. This is supported by an action plan included in Appendix 1.

Integrated Commissioning Priorities:

1. To support a healthy weight in children though healthy eating and physical activity

- People trying to conceive and expectant parents have access to information and education about nutrition and physical activity
- The majority of mothers breast feed and delay weaning to 6 months
- All children and young people children grow up with a healthy weight by eating well and being active.

2. To promote healthier food choices in a range of settings

- Children and young people have access to healthier food choices in pre-school settings, schools and colleges.
- Adults have access to healthier food choices in the workplace
- Healthier food choices can be accessed in local communities

3. To ensure that physical activity is encouraged throughout life

- Pre-school, school age and young adults are encouraged to play and be physically active.
- Children and families have access to safe facilities for play and physical activity in their locality, particularly in areas of deprivation.
- Adults are encouraged to be physically active and have access to opportunities and facilities.
- Active transport is promoted

4. To maintain and develop access to advice and support on diet, weight and physical activity for adults and children

- The workforce (public, private and voluntary) in local communities has the knowledge, skills and confidence to work with parents and adults to raise the issue of obesity, *'making every contact count'.*
- Personalised support for both adults and children with excess weight can be accessed across all Nottinghamshire districts

13. How will we know we have made a difference?

The implementation and monitoring of this strategy and supporting action plan will be overseen by the Nottinghamshire Obesity Integrated Commissioning Group (ICG) which will meet quarterly to track progress against the agreed performance measures and timelines. In addition the ICG will annually review childhood and adult excess weight rates. Priorities will be set on an annual basis and the action plan refreshed to reflect these.

The Obesity ICG group is made up of a broad range of senior strategic representatives from County Council, District/Borough Council, Clinical Commissioning Groups (CCG's) and includes both a diet and physical activity expert. All commissioning partners will be asked to provide performance information to this group on a regular basis to measure progress regarding implementation of the action plan and more critically information regarding the impact of services and interventions which will be used to inform future joint planning, commissioning and decommissioning. The group is accountable to the Health and Wellbeing Implementation Group to which it will report to every 6 months through their performance management system.