

NORTHAMPTONSHIRE PARTNERSHIP HEALTHY WEIGHT HEALTHY LIVES STRATEGY

Working in partnership to reduce obesity and support
healthy living across Northamptonshire



2010-2014

THE NORTHAMPTONSHIRE PARTNERSHIP

The Northamptonshire Partnership is made up of agencies across the public sector all working together to deliver better outcomes for residents using their services in Northamptonshire. It is the overarching partnership for the county and provides leadership and direction for collaborative working in Northamptonshire and facing out into the wider region and beyond. The Partnership's vision is to have a county that is recognised by everybody as a successful place where people and communities want to do well, where they take up new ideas and trends, but also celebrate history, heritage and local identity. It will be a county where people will want to invest, work and enjoy life.

FOREWORD



Our ambition is for Northamptonshire to become the Fittest County in the country and we intend to commit significant energy and resources to achieve it. With the 2010 World Cup about to start and the Olympics coming in 2012 there has never been a better time to publicise and promote the benefits of a healthier lifestyle, improved diet, more exercise and responsible approach to alcohol consumption.

Recently obesity has become a worryingly acceptable norm in our society but it is more than just an inconvenient part of people's lifestyles – it is the cause of a range of chronic diseases such as type II diabetes, cancer, stroke and heart disease. On average an obese person is likely to die on average 9 to 11 years earlier than someone at a healthy weight.

It may surprise many people to know that adult obesity levels in Northamptonshire are significantly higher than the average for England (25.5% locally compared to the national average of 22.5%). For example, in Corby, where I also serve as Chief Executive of the Borough Council, this figure is even higher with 30% or nearly 1 in 3 of the adult population classed as obese. These are alarming figures that demand significant action.

The cost of tackling health problems arising from obesity is also a major drain on the resources of the NHS and other public bodies in Northamptonshire. The annual cost of treating illnesses related to obesity in the County is estimated at £60m. By improving lifestyles and reducing obesity we shall free up funding that can be re-invested to make Northamptonshire a healthier, more attractive place to live. We can all contribute by making a conscious effort to eat a little less fast or convenience food, take a little more exercise, drink a little less alcohol and aim for a much better quality of life. In my view there could be no better legacy in 2012 than a healthier, fitter county. If we can top that off with local medalists then so much the better in terms of creating role models and inspiring an even bigger response.

Best wishes.

Yours sincerely



Chris Mallender

**Chair of the Northamptonshire Partnership Health and Well-being Board
and Chief Executive Corby Borough Council**

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EXECUTIVE SUMMARY

Background

In response to the Government's drive to address the rising prevalence of obesity, Northamptonshire has developed a Healthy Weight, Healthy Lives Strategy for the County.

The prime purpose of this strategy is to

1. Reduce obesity prevalence in the County through preventative measures.
2. Ensure there is adequate support for those who already have weight problems.
3. Encourage healthy lifestyles in the population as a whole.

Tackling increasing obesity has been identified as a national government priority, with the UK now having one of the highest levels of obesity in Europe. Excess weight and obesity can have serious detrimental effect upon the health of an individual in the form of increased risk of a range of chronic illnesses. These include type II diabetes, coronary heart disease, stroke and some cancers. The cost of treating illnesses relating to obesity in England has been estimated to be £4.2B (2007) rising to £6.3B by 2015 (6).

The Northamptonshire Healthy Weight Healthy Lives Strategy has five themes, drawing on the evidence base for effective actions for tackling obesity developed as part of the Government's over-arching Healthy Weight Healthy Lives Strategy 2008 (4), whilst adapting the goals and principles to meet local needs in Northamptonshire:

Northamptonshire Healthy Weight Healthy Lives Strategy Themes

Theme 1: Children: Healthy Growth Healthy Weight – ensuring measures are in place to help *prevent* children and young from becoming overweight or obese in the first place, through healthy nutrition and lifestyles from birth to adulthood.

Theme 2: Promoting Healthier Food Choices – reducing the consumption of foods that are high in fat, sugar and salt and increasing the consumption of fruit and vegetables.

Theme 3: Building Physical Activity into our Lives – increasing physical activity in adults and children as part of everyday lives and providing support for adults or children who are overweight or obese to become more active.

Theme 4: Creating Incentives for Better Health – providing individuals with information, opportunity and incentive to adopt healthy lifestyles and take responsibility for their own health and well-being.

Theme 5: Personalised Advice and Support – developing services and support to meet the needs of adults and children who are already overweight or obese.

Themes 1-4 are aimed at preventing obesity in adults and children and Theme 5 will provide support to those who are already overweight or obese. Whilst the over-arching theme of this strategy is to reduce obesity prevalence, it is important to recognise that the strategy has wider-reaching benefits in terms of supporting healthy lifestyles in general.

Recognising the diversity of factors that can impact on the prevalence of obesity, the Strategy has been developed with a range of partner organisations whom are able to influence and take action to target obesity. These include representation from Primary Care, Community Services, Local Authorities, Food Standards Agency and the Sports and Physical Activity Sector (a full list is provided at Appendix 1).

Implementation

A number of initiatives have been developed under each Theme to deliver the key objectives of the Strategy. A Theme Lead has been identified for each work area and a delivery group established from across the partner organisations. The delivery group will be responsible for leading the implementation of the initiatives of that theme.

Progress will be reported to the Health and Well-being Board of the Northamptonshire Partnership, whom will be responsible for agreeing priorities for implementation, help identifying funding and agreeing appropriate partnerships to deliver the strategy.

1. PURPOSE OF THIS STRATEGY

In response to the Government's drive to the rising prevalence of obesity, NHS Northamptonshire has developed, in partnership, a Healthy Weight Healthy Lives Strategy for the County.

The prime purpose of this strategy is to:

4. Reduce obesity prevalence in the County through preventative measures.
5. Ensure there is adequate support for those who already have weight problems.
6. Encourage healthy lifestyles in the population as a whole.

2. NATIONAL CONTEXT

Tackling increasing obesity has been identified as a national government priority, with the UK now having one of the highest levels of obesity in Europe. Approximately two thirds of adults and a third of children are now either overweight or obese in the UK. The Government's Office for Science's Foresight report predicts that without clear action, almost nine in ten adults and two thirds of children could be overweight or obese by 2050 (6).

Developed countries have become "obesogenic environments" characterised by the readily available and high consumption of calorie dense foods, coupled with increasingly sedentary lifestyles. The resultant symptom of such modern lifestyles is the increasing prevalence of obesity (29). Excess weight has severe detrimental effects upon the individual in the form of increased risk of a range of chronic illnesses including cancers, diabetes, coronary heart disease and psychosocial issues.

The cost of treating illnesses relating to obesity in England has been estimated to be £4.2B (2007) rising to £6.3B by 2015 (6). In addition to increased healthcare costs, obesity has further detrimental effects upon society, through reduced economic productivity. Studies have reported a strong relationship between body mass index, decreased physical functioning and a reduction in overall work productivity (8). The health and social impacts of obesity are imposing additional and unnecessary economic burden. The wider costs to society due to obesity are estimated to rise to £50 billion by 2050 in England alone (6).

In response to the rising prevalence of overweight and obesity in England the Government launched Healthy Weight Healthy Lives: Cross Government Strategy for England in 2008 (4). The strategy aims to ensure that everyone is able to achieve or maintain a healthy weight by encouraging and supporting people to have healthier diets and become more physically active. As well as providing support to help overweight or obese people to achieve and maintain a healthy weight. Based on evidence provided by the Government's Office for Science's Foresight report (6), the strategy highlights five key themes for tackling excess weight:

1. **Children: Healthy Growth Healthy Weight** – early prevention of weight problems to avoid the ‘conveyor belt’ in to adulthood.
2. **Promoting Healthier Food Choices** – reducing the consumption of foods that are high in fat, sugar and salt and increasing the consumption of fruit and vegetables.
3. **Building Physical Activity into our Lives** – getting people moving as a normal part of their day.
4. **Creating Incentives for Better Health** – increasing the understanding and value people place on the long term impact of decisions.
5. **Personalised Advice and Support** – complementing preventive care with treatment for those who already have weight problems.

3. LOCAL CONTEXT

This Northamptonshire Healthy Weight Healthy Lives Strategy supports the government’s ambition to be “the first major country to reverse the rising tide of obesity and overweight in the population by ensuring that all individuals are able to maintain a healthy weight” (10).

3.1 OBESITY PREVALENCE IN NORTHAMPTONSHIRE

Adult Obesity prevalence in Northamptonshire (25.5%) is considerably higher than in England (22.5%), with all districts in Northamptonshire having a higher proportion of obese individuals than the national average. Northamptonshire falls within the 4th quintile of performing PCTs in respect of overall obesity prevalence (Figure 1).

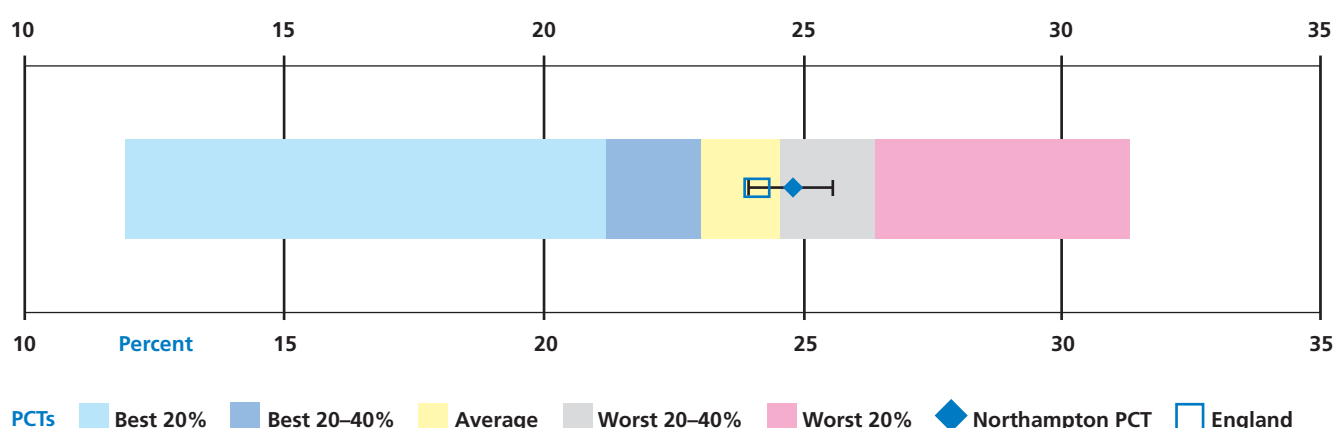


Figure 1: 2003-2005 model-based estimated prevalence of obese (BMI over 30) adults (aged 16 years or over) by Northamptonshire PCT benchmarked against other PCTs.

NORTHAMPTONSHIRE PARTNERSHIP OBESITY STRATEGY

There is some variation in obesity levels throughout the County with higher prevalence in areas of urban deprivation and lower levels in rural areas. Corby, an area of significant socio-economic deprivation has the highest levels of obesity (30.4%) in the County, higher than the regional and England average (Figure 2).

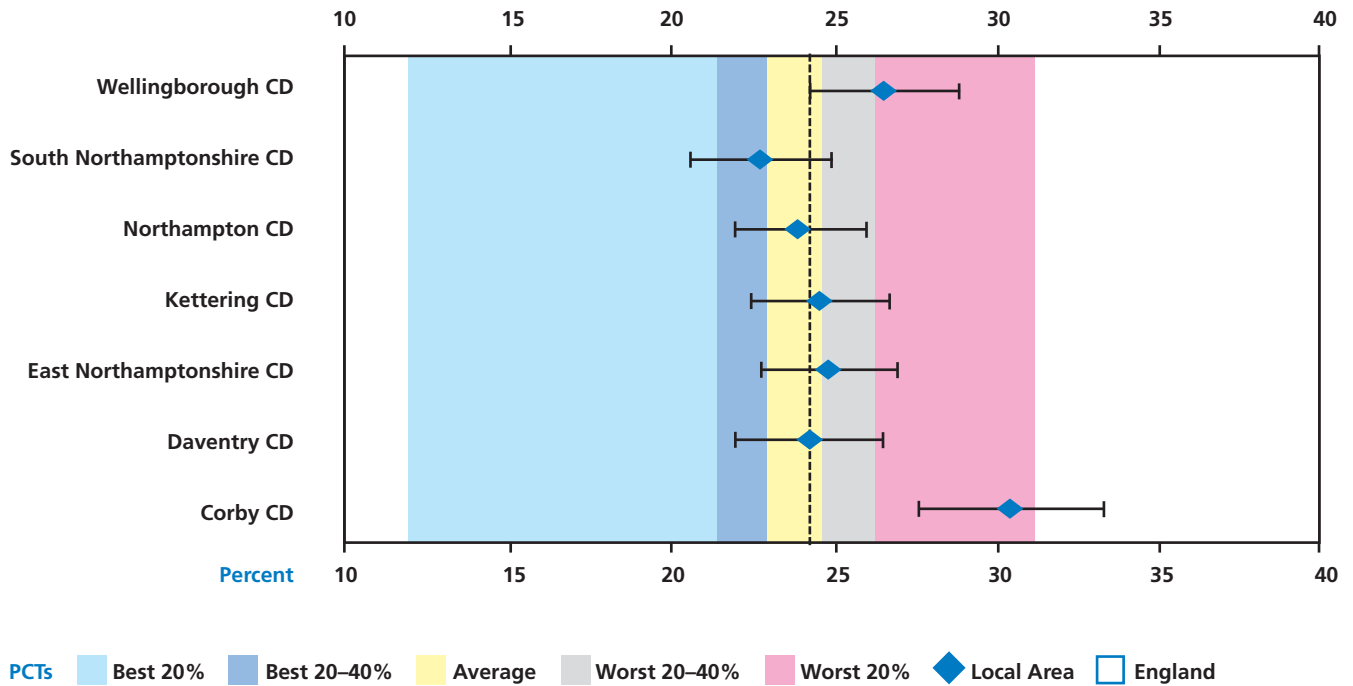


Figure 2: 2003-2005 model-based estimated prevalence of obese (BMI over 30) adults (aged 16 years or over) by Northamptonshire local authority benchmarked against other local authorities. (Data has been derived using model based estimates of obesity prevalence - Health Survey for England.)

Childhood Obesity - The prevalence of childhood obesity throughout England is assessed annually as part of the Governments National Child Measurement Programme (NCMP). This measures the number of children who are overweight or obese in Reception Year (4-5 yr olds) and Year 6 (10-11 yr olds).

Childhood Obesity Targets

Northamptonshire has two Local Area Agreement targets for childhood obesity. Performance against these targets is assessed annually as part of the NCMP:

NI 55: Obesity in primary school age children in Reception Year

NI56: Obesity in primary school age children in Year 6

Childhood obesity prevalence in Northamptonshire

Childhood obesity prevalence in Northamptonshire is below the England average but high when compared to international benchmarks. Results for the NCMP in Northamptonshire for the *school year 2008-2009* are given in Table 1 and 2. Key results are that:

- 8.3% of Reception Year children in Northamptonshire are obese, significantly lower than that for England (9.6%) and the East Midlands (9.1%).
- The obesity prevalence target (NI55) for reception year was 8.5%, meaning that the target was achieved.
- 17.8% of children in Year 6 are obese, significantly lower than that for England (18.3%) and on par with the East Midlands (17.8%).
- The obesity prevalence target (NI56) for year 6 was 17.5%, meaning that the actual prevalence was 0.3% higher than the target.
- The increase in childhood obesity levels between Reception Year and Year 6 mirrors the trend in England as a whole, where 9.6% of Reception Year and 18.3% of Year 6 children are obese.
- The prevalence of obese children in Reception Year in Northamptonshire has increased by 1.0% from 7.3% in 2007/08. However the prevalence is still lower the 2006/07 (9.2%).
- The prevalence of obese children in Year 6 for Northamptonshire has increased by 0.9% from 16.9% in 2007/08 and 3.2% from 2006/07.

Reception Year

Primary Care Trust	Underweight		Healthy Weight		Overweight		Obese		Number of Children Measured
	Prevalence	±	Prevalence	±	Prevalence	±	Prevalence	±	
East & North Hertfordshire	0.9%	0.2%	77.4%	1.1%	13.2%	0.9%	8.5%	0.7%	5476
Bedfordshire PCT	0.5%	0.2%	77.1%	1.3%	13.5%	1.0%	8.9%	0.9%	4153
Northampton PCT	2.3%	0.4%	78.2%	1.0%	11.2%	0.7%	8.3%	0.7%	6884
Warrington PCT	0.6%	0.3%	77.6%	1.7%	13.4%	1.4%	8.4%	1.1%	2248
Warwickshire PCT	0.7%	0.2%	79.5%	1.1%	12.3%	0.9%	7.5%	0.7%	5116
East Midlands	1.2%	0.1%	76.6%	0.4%	13.0%	0.3%	9.1%	0.3%	41194
England	1.0%	0.0%	76.2%	0.1%	13.2%	0.1%	9.6%	0.1%	506169

Table 1: The outcome of the National Child Measurement Programme in Reception year 2008-09 in Northamptonshire compared against its statistical neighbours, East Midlands and England.

Year 6

Primary Care Trust	Underweight		Healthy Weight		Overweight		Obese		Number of Children Measured
	Prevalence	±	Prevalence	±	Prevalence	±	Prevalence	±	
East & North Hertfordshire	1.4%	0.3%	69.4%	1.2%	14.2%	0.9%	15.0%	0.9%	5535
Bedfordshire PCT	0.6%	0.2%	68.8%	1.4%	14.0%	1.1%	16.6%	1.1%	4176
Northampton PCT	1.0%	0.2%	66.7%	1.1%	14.6%	0.8%	17.8%	0.9%	6915
Warrington PCT	0.7%	0.4%	69.5%	1.9%	12.7%	1.4%	17.1%	1.6%	2168
Warwickshire PCT	1.1%	0.3%	68.7%	1.3%	15.1%	1.0%	15.1%	1.0%	4584
East Midlands	1.3%	0.1%	66.4%	0.4%	14.4%	0.3%	17.9%	0.4%	42544
England	1.3%	0.0%	66.1%	0.1%	14.3%	0.1%	18.3%	0.1%	497680

Table 2: The outcome of the National Child Measurement Programme in Year 6, 2008-2009 in Northamptonshire compared against its statistical neighbours, East Midlands and England.

4. DEFINING OBESITY

Adult Obesity can be defined as when a person is carrying excess body fat for their height. A person is considered obese if they have a Body Mass Index (BMI) of 30 or greater, this is a measurement of body mass (weight) in kilograms divided by height in meters squared (30). Raised BMI has long been associated with increased risk of cardiovascular disease. More recently however, the distribution of body fat has been demonstrated to be an independent risk factor for cardiometabolic disease. Waist circumference is easy to measure and reflects the visceral adipose tissue, the larger the waist circumference the greater the risk of type 2 diabetes, dyslipidaemia and heart disease. Waist circumference may be used alone, in combination with BMI or in a waist-to-height ratio WHR (waist in centimeters divided by height in centimeters). A ratio of greater than 0.5 indicates a high risk. WHR may be useful in predicting those at risk of cardiometabolic disease in the absence of obesity or raised waist circumference (9, 20). Table 3 provides the classification of obesity according to BMI. Table 4 shows how Body Mass Index and waist circumference relate to risk of cardiovascular disease (18). The global increases in childhood obesity accompany an increased risk of developing chronic disease. In England the National Child Measurement Programme is now in its fourth year and remains one of the largest surveillance programmes internationally. Currently 10.4% of boys and 8.8% of girls (average 9.6%) in Reception Year (aged 4-5 years) and 20% of boys and 16.6% of girls (average 18.3%) in Year 6 (aged 10-11 years) are classified as obese according to the British 1990 population monitoring definition of obesity (=95th centile) (16).

Classification	BMI (kg/m ²)
Healthy weight	18.5–24.9
Overweight	25–29.9
Obesity I (Obese)	30–34.9
Obesity II (Clinically obese)	35–39.9
	40 or more

Table 3: Classification of obesity according to Body Mass Index (NICE Guidance 2006)

Assessment of the health risks associated with overweight and obesity in adults should be based on BMI and waist circumference as follows:

BMI classification	Waist circumference		
	Low	High	Very high
Overweight	No increased risk	Increased risk	High risk
Obese	Increased risk	High risk	Very high risk

For men, waist circumference of less than 94 cm is low, 94–102 cm is high and more than 102 cm is very high.
 For women, waist circumference of less than 80 cm is low, 80–88 cm is high and more than 88 cm is very high.

Table 4: Risk of Associated Disease According to BMI and Waist Size (NICE Guidance 2006)

Obesity in children or adolescents is not measured in the same way as adults, a measurement called the “percentile of body mass” is used. The weight status of children and adolescents (aged 12-19) is measured with reference to gender-specific growth charts. A child can be defined as overweight and obese by looking at their standardised BMI:

- For clinical use, obese children are those with a BMI \geq 98th centile of the UK 1990 reference chart for age and sex.
- For clinical use, overweight children are those with a BMI \geq 91st centile of the 1990 reference chart for age and sex.

5. WHY IS OBESITY ON THE INCREASE?

Put simply, increased weight occurs when energy intake from food and drink is greater than energy expenditure through the body’s metabolism and physical activity. This energy imbalance results in the accumulation of excess body fat and weight gain over time (4).

The reason for the rise in obesity levels over recent decades was examined extensively as part of the Government’s Office for Science’s Foresight report 2007 (6). Over the last 50 years, we have come to live in an increasingly ‘obesogenic’ environment, where high fat, calorie dense foods are readily available and we live more sedentary lifestyles due to technological change. Overall, we consume more energy in the form of food and drink and expend less in the form of physical activity, resulting in weight gain.

Obesity is, in most cases, a preventable condition and strategies that either reduce energy intake through healthy eating or increase energy expenditure through increased levels of physical activity are key to achieving and maintaining a healthy weight. Nevertheless, evidence from the Foresight report (6) found that there are many complex behavioural, societal and environmental factors that have developed in recent decades that combine to make healthy lifestyle choices difficult, contributing to the fundamental causes of excess weight and obesity.

The multi-factorial causes of obesity include genetic, dietary and lifestyle variables. Although genetic factors may predispose an individual to becoming obese, the growing rates of obesity over recent times cannot be attributed to genetic factors alone, as it has occurred in too short a time period; the modern obesogenic environment has a decisive role in this concerning trend.

Common mental health disorders such as depression and anxiety have also been found to be strongly linked to an increased risk for obesity; individuals are less likely to be physically active or eat healthily. The link between excess weight and poor mental health is said to become more prominent as individuals increase age (12). This is supported by data provided by the Association of Public Health Observatories 2007, that individuals with mental health problems are twice as likely to report experiencing long term illnesses and disability associated with 'lifestyle' disease such as obesity and smoking (1).

The factors that contribute to obesity can be summarised in to seven cross-cutting themes that embrace over 100 different causal factors [1]:

- **Biology:** the influence of genetics and ill health;
- **Activity Environment:** the influence of the environment on an individual's activity behaviour, for example the provision of safe cycling or walking routes to work;
- **Physical Activity:** the type, time, frequency and intensity of activities an individual carries out, such as walking, running or organised exercise;
- **Societal influences:** the impact of society, for example the influence of the media, education, peer pressure or culture;
- **Individual psychology:** a person's individual psychological drive to be physically active or for particular foods and consumption patterns;
- **Food environment:** the influence of the food availability on an individual's food choices, for example, availability of healthy food choices in the work place or the cost of fruit and vegetables;
- **Food consumption:** the quality, quantity (portion sizes) and frequency (snacking patterns) of an individual's diet.

Contrary to popular belief, medical problems cause less than 1% of cases of obesity. Conditions such as Cushing's syndrome (an overproduction of corticosteroids) and hypothyroidism (under active thyroid) are rare causes of weight gain (2).

In summary, rising levels of obesity are due to a complex mixture of behavioural, societal and environmental changes in recent decades that have impacted on the ability to balance energy intake and energy expenditure. The purpose of the Governments Healthy Weight Healthy Lives Strategy, developed in response to the Foresight findings, is to help tackle the environmental, societal and behavioural factors that contribute to weight gain and obesity.

The Foresight report (6) also recognised that there are critical points in the life-course of an individual that can influence behaviour in relation to physical activity and eating habits (see Appendix 2), such as during pre-school years or when becoming a parent. By recognising this, interventions may be tailored accordingly. There is no identifiable point where an intervention is singularly successful, but continuous sustained progress towards positive behaviours throughout life is important.

6. HEALTH CONSEQUENCES OF EXCESS WEIGHT AND OBESITY

Excess weight and obesity place a considerable burden on health and can result in reduced quality of life and mortality. Both increase the risk of a number of serious illnesses including stroke, coronary heart disease, type II diabetes and some forms of cancer. Along with smoking, obesity represents the largest reversible risk factors for these chronic conditions. The health risks associated with obesity (13) include:

Hypertension, whilst this may be symptom free, it can lead to many complications, and increases the risk of serious conditions such as coronary heart disease, vascular disease, stroke and kidney disease. Based on population studies, risk estimates indicate that at least two-thirds of the prevalence of hypertension can be directly attributed to obesity (15).

Type II Diabetes is inextricably linked with obesity; complications such as foot ulceration, nephropathy, retinopathy and heart disease, as well as being serious risks for patients, they are very costly to treat.

Coronary Heart Disease; overweight and obese people particularly with a high waist circumference have a greater risk of developing CHD and heart attack, even independent of other risk factors. Excess weight increases the heart's work. It also raises blood pressure, blood cholesterol and triglyceride levels, and lowers HDL ("good") cholesterol levels increasing the risk of CHD.

Stroke is associated with obesity both through cardiovascular risk factors and as an independent risk factor- waist circumference to height ratio (WHR) has been found to be of particular importance, those with abdominal obesity have up to double the risk of stroke compared with those with normal WHR (23).

Dyslipidemia; This is an imbalance in the cholesterol levels, with increased LDL (bad cholesterol) and decreased HDL (good cholesterol), the result is a potential acceleration in atherosclerosis and subsequent thrombosis/ myocardial infarction (heart attack).

Gallbladder Disease; Obesity is a major risk factor for gallstones, especially in women. Obesity can cause the liver to overproduce cholesterol, which is delivered into the bile causing it to become supersaturated. Increased cholesterol reduces gallbladder emptying and can lead to gallstones and infection. Ironically "crash diets" and weight loss surgery are also associated with gallbladder disease—the liver secretes extra cholesterol into bile, which can cause gallstones.

Cancer - Research states that obesity can increase the risk of various cancers including colon, breast, endometrial, cervical, ovarian and gallbladder cancers (10).

Osteoarthritis - Excess weight places increased stress on joints, and limits mobility, both of which can lead to osteoarthritis. Evidence suggests that metabolic factors mediate the effect of obesity on joints as well as mechanical factors. Obesity confers an increase in up to nine times the risk of developing osteoarthritis compared with non obese (3).

Low back pain

Sleep apnoea and respiratory problems

Increased complications for mother and baby during pregnancy and delivery.

Psychological ill health - In addition to these physical conditions, being overweight or obese is known to be linked to psychological ill health. Individual's are more likely to develop a negative self image, lowered self esteem and are at higher risk of depression (17, 25, 26, 28).

The risk of illness associated with obesity increases the higher the individuals BMI. Table 5 shows the estimated increased risk for the men and women for which obesity is a causal factor (27).

Disease	Relative Risk – Women	Relative Risk – Men
Type 2 Diabetes*	12.7	5.2
Hypertension	4.2	2.6
Myocardial Infarction	3.2	1.5
Cancer of the Colon	2.7	3.0
Angina	1.8	1.8
Gall Bladder Diseases	1.8	1.8
Ovarian Cancer	1.7	-
Osteoarthritis	1.4	1.9
Stroke	1.3	1.3

*Non-insulin dependent diabetes mellitus (NIDDM)

Note: The BMI range for the obese and non-obese groups used to estimate relative risk varies between studies, which limits the comparability of these data.

Table 3: Estimated increase risk for the obese of developing associated diseases, taken from international studies (National Audit Office 2001).

Overall diseases associated with Obesity reduce life expectancy, with severely obese individuals likely to die on average 11 years earlier than someone with a healthy weight (7).

In adults the consequences of overweight and obesity have led to clinical depression with rates of anxiety and depression being three or four times higher among obese individuals than those of a healthy weight (11). For children, research has shown that almost all obese children have experiences of teasing social exclusion, discrimination and prejudice (22). Addressing obesity will have wide-reaching benefits in terms of contributing to good physical and mental health and well-being in adults and children.

7. NORTHAMPTONSHIRE HEALTHY WEIGHT HEALTHY LIVES STRATEGY: THEMES AND OBJECTIVES

The prime purpose of this strategy is to:

1. Reduce obesity prevalence in the County through preventative measures.
2. Ensure there is adequate support for those who already have weight problems.
3. Encourage healthy lifestyles in the population as a whole.

Drawing on the evidence base for effective actions for tackling obesity developed as part of the Government's Strategy Healthy Weight, Healthy Lives 2008 (4), the Northamptonshire Healthy Weight Healthy Lives Strategy reflects the five themes outlined in the government strategy, whilst adapting the goals and principles to meet local needs in

Northamptonshire. This strategy will ensure the implementation of consistent, effective evidence-based services and programmes across Northamptonshire.

Northamptonshire Healthy Weight Healthy Lives Strategy Themes:

1. Children: Healthy Growth Healthy Weight
2. Promoting Healthier Food Choices
3. Building Physical Activity into our Lives
4. Creating Incentives for Better Health
5. Personalised Advice and Support

Themes 1-4 are aimed at preventing obesity in adults and children and Theme 5 will provide support to those who are already overweight or obese. Although Theme 1 specifically focuses on tackling obesity during childhood development, all the themes address obesity in children and young people, as well as adults.

Recognising the range and diversity of factors that impact on weight, the Strategy has been developed with a range of partner organisations that are able to influence and take action to target obesity. These include representation from Primary Care, Community Services, Local Authorities, Food Standards Agency and the Sports and Physical Activity Sector (a full list is provided at Appendix 1).

Whilst the over-arching theme of this strategy is to reduce obesity prevalence, many of the initiatives in the strategy support healthy living in general. Healthy nutrition and adequate levels of physical activity are important for children and adults whether they are a healthy weight, underweight or overweight. Therefore it is important to recognise the wider-reaching advantages of the strategy for adults and children in terms of supporting healthy lifestyles in addition to reducing obesity prevalence.

Whilst recognising that poor mental health can be linked to excess weight and obesity (12), this strategy does not explicitly address improving mental health, which forms part of the Mental Health work stream of NHS Northamptonshire.

An overview of each of the five **Themes** of the Healthy Weight Strategy is provided below together with **Key Objectives** for each of the Themes.

7.1 THEME 1: CHILDREN: HEALTHY GROWTH AND HEALTHY WEIGHT

The aim of this theme is to support the government's ambition *"that by 2020 to reverse the trend in rising obesity & overweight among children and reduce it back to the 2000 levels"* by ensuring that all children and young people have access to a healthy start in life.

The work under this theme will ensure measures are in place to help prevent children from becoming overweight or obese in the first place. The likelihood of developing obesity is influenced right from birth by lifestyle factors such as whether a baby is breast-fed, diet and activity levels during childhood. The theme will adopt a 'life course' approach which focuses on positively influencing lifestyle factors to ensure healthy nutrition and growth at all stages of development from pregnancy through to adolescence, thereby preventing children becoming overweight or obese.

Evidence shows that breastfeeding, introducing children to healthy foods early in development, limiting the amounts of high fat and sugar foods consumed, controlling portion size and ensuring children are physically active all help to prevent children becoming overweight or obese (4).

Much of the early influence on the healthy development of children is provided by mothers and families. Evidence shows that obese mothers are more likely to have obese children. This is due to the quantity and quality of food offered to the child and eating behaviours such as 'snacking' on foods of poor nutritional value (4). The theme will address the 'whole family' to ensure that parents have the knowledge, confidence and means to adopt healthier lifestyles for themselves and their children. Similarly, childcare settings and schools play an equivocal role in impacting early development. Initiatives will be put in place to ensure that children receive healthy nutrition in childcare, school or other community settings.

Policies such as encouraging breast-feeding and ensuring healthy nutrition throughout childhood are important whether children are a healthy weight, underweight or overweight. Therefore in addition to help preventing obesity, this theme supports the wider agenda of providing children with a healthy start in life.

For the purpose of this strategy an infant is defined 6 mths-2yrs; early years is defined as 2-4yrs; a 'child' is defined as 5 yrs up to the age of 19yrs, or up to 25 yrs with special educational needs.

OBJECTIVES

Pre-conception and Pregnancy:	
PCAP1	Ensure that women are aware of the importance of a healthy diet at pre-conception and during pregnancy and have knowledge of how to eat healthily.
PCAP2	Provide support for overweight/obese pregnant women to make healthier eating choices for themselves and families.
Breast feeding and Infant Nutrition	
BFIN1	Increase the number women who breast-feed; encouraging breastfeeding as the norm for babies; supporting exclusive breast-feeding for the first 6 months of an infant's life; and continuation of breastfeeding alongside appropriate introduction to solid foods for up to two years of age.
Early years	
EY1	Ensure that all early years childcare settings support and encourage the healthy early development of all children through the provision of healthy eating teaching, policy and practice.
EY2:	Ensure that all early years childcare settings support and encourage the healthy early development of children through the provision of active play and structured physical activity sessions.
EY3	Provide high quality support and advice to pregnant women and families with children who are at the greatest risk of poor childhood development.
Children and Young People	
CYP1	Ensure that all schools support and encourage the healthy development of children, in line with the Healthy Schools Standard, through the provision of healthy eating 'whole school food' and physical activity teaching, policies and practice.
CYP2	Increase the uptake of Free and Paid school meals to align with the national average of 45% and to exceed the average by 2015.
CYP3	Ensure schools actively support learning and participation in healthy eating and physical activity initiatives through provision within the school-day and extended school services.

INITIATIVES

- Ensure women of child-bearing age and their partners are aware of the importance of a healthy diet. As part of a wider strategy, to disseminate healthy eating guidelines and a healthy eating social marketing campaign across Northamptonshire (see Theme 2).
- Implement a training programme to deliver healthy eating and physical activity advice to all pregnant women at first appointment.
- Implement the Northamptonshire Breastfeeding Strategy across the County in conjunction with Northamptonshire Breastfeeding Strategy Group and the County lead for breastfeeding.
- Ensure all early years provision environments implement introduction to solid foods best practice and nutritional standards in line with the department for Education and Skills and the Caroline Walker Trust Guidelines by 2013 (10% year 1, 50% year 2, 100% year 3).
- Ensure that all early years settings achieve the Early Years Heartbeat Award by 2013 (10% year 1, 50% year 2, 100% year 3).
- Ensure all childcare settings provide active play and structured physical activity sessions.
- Implement a training programme to ensure Health Trainers, Maternity Services and Health Visitors identify and support families at risk and refer to appropriate support services.
- Continue to implement the Healthy Schools Standard across Northamptonshire, including The Healthy Schools Enhanced Award for Healthy Eating and Physical Activity in schools across Northamptonshire.
- Implement the development and introduction of Whole-school Food Policies in Schools across Northamptonshire so that all schools have a policy by 2011.
- Ensure that all schools have a Travel Plan by 2011 that support walking and cycling to school.
- Implement a publicity campaign to increase the uptake of schools meals and free school meal provision, especially by 'at-risk' families.
- Implement the NCC Hot Meal Plan to increase access to hot food within schools.
- Ensure schools provide opportunities for sport and physical activity within the school day and as a part of Extended School Services.
- Ensure schools provide opportunities for the development of cooking skills and healthy eating within the school day and as part of Extended School Services.
- Ensure all young people 11-16yrs are entitled to learn to cook by the development and introduction of the 'Licence to Cook' programme in Schools

7.2 THEME 2: PROMOTING HEALTHIER FOOD CHOICES

The aim of this theme is to increase the number of children and adults who eat healthily throughout Northamptonshire. Individuals and families will be supported to eat more healthily in line with Food Standards Agency guidelines on healthy eating. In particular reducing consumption of food high in fat, sugar and salt, especially by children and increasing consumption of fresh fruit and vegetables.

Whilst eating a healthy balanced diet in the correct portions will directly help adults and children to achieve and maintain a healthy weight, the theme will also support healthy nutrition in the population as a whole. It is possible to be a healthy weight or underweight, but have a diet of poor nutritional value. Promoting healthy eating and encouraging people to choose the right balance and variety of foods to help them obtain the wide range of nutrients required to stay healthy. This in turn will allow them to support healthy eating in the population as a whole.

This will be achieved by a number of strategies to ensure that adults and children have the knowledge of how to eat healthily and have easy, affordable access to healthy food choices in everyday life.

Education to promote health and prevent disease has been used with success throughout this century, and has been an essential component of public health. Despite progress and the development of advanced social marketing techniques, interventions that rely purely upon communication and education have predominantly failed to yield substantial results. A more comprehensive approach combines education with the knowledge of situational and environmental factors, which discourage people from healthy choices, and wherever possible modifying these external factors to try and improve an individual's control (19). For obesity this means providing health education and supporting local food industry to promote healthy eating choices. Studies have demonstrated the likely link that increased exposure to fast-food outlets in the neighbourhood lead to increased fast food consumption and a poorer diet (14).

Considering the range of issues that can affect diet, this strategy will look at ways of influencing the food 'environment', such as improving food labelling, supporting work places to develop healthy eating policies and working with the local food and drink industry to promote healthy eating. This will be complemented by providing clear guidelines and information to individuals, families and organisations on healthy nutrition and the link between a healthy diet and healthy weight, enabling them to make informed choices.

OBJECTIVES

HCF1	Disseminate a clear consistent Healthy Eating message for individuals, families and organisations across Northamptonshire based on Food Standards Agency guidelines on healthy eating.
HCF2	Increase the number of adults and children who eat a healthy diet in accordance with Food Standards Agency guidelines on healthy eating.
HCF3	Support and influence the local food and drink industry, retailers and other relevant stakeholders to promote healthy eating, provide clear and consistent food labelling and to support the National Healthy Food Code of Good Practice.
HCF4	Promote a 'whole site' approach to making healthier food choices easier through the development of Healthy Eating policies within the workplace, schools and other public and private organisations.
HCF5	Ensure those at greatest need have affordable access to healthy nutrition.

Pre-school and child nutrition is also addressed under Theme 1: Children: Healthy Growth and Healthy Weight.

INITIATIVES

- Disseminate healthy eating guidelines across the county in line with the Food Standards Agency (FSA) as part of a wider social marketing campaign to increase healthy eating.
- Work with local food outlets to provide healthy food options and/or improve recipes or cooking techniques in order to provide healthier food (Heartbeat Award).
- Influence local supermarkets and food outlets to focus special offers on healthy food options such as fruit and vegetables.
- Work with key employers to develop 'whole site' healthy eating policies including a vending machine 'code of practice'.
- Ensure all schools develop a 'whole school' healthy eating policy.
- Increase eligible families' participation in the Healthy Start Scheme through identification and signposting by health professionals and local authorities.

7.3 THEME 3: BUILDING PHYSICAL ACTIVITY INTO OUR LIVES

The aim of this theme is to increase the number of adults or children who are physically active in the County as a means to achieve and maintain a healthy weight.

The Active People Survey 2008, which measures adult participation in sport and active recreation, estimated that 22.5% of the county's adult population are active for 30 minutes at a moderate intensity on 3 or more days every week. This places Northamptonshire as the 18th most active county out of 35, making activity levels in the county in the middle of the national range.

A strategy for increasing physical activity levels of the population of Northamptonshire as a whole has been developed between key partners as part of the County's Physical Activity Framework 2008 (21). The Framework includes plans for reducing inequalities and widening access to physical activity; promoting activity in the workplace; enabling and sustaining active communities; encouraging activity and healthy lifestyles in children and young people and developing and promoting consistent messages about physical activity across Northamptonshire. Key partners responsible for delivering the Framework include the County Sports Partnership-Northamptonshire Sport, NHS Northamptonshire, Northamptonshire County Council and Local Authorities. Northamptonshire Sport is the lead agency for delivering the physical activity agenda.

The work under this theme of the Healthy Weight Healthy Lives Strategy supports the agenda of increasing physical activity levels *per se*, but will focus resources on adults and children who are overweight or obese. It has long been known that exercise can assist in weight reduction and maintenance. However, an increase in physical activity levels is not only beneficial for weight loss, but for improved mobility, improved psychosocial satisfaction and a reduction in chronic conditions linked to obesity, such as Type II Diabetes and Coronary Heart Disease (5).

NORTHAMPTONSHIRE PARTNERSHIP OBESITY STRATEGY

Individuals who are overweight or obese may be limited in the amount or type of exercise that they can undertake. Supervised physical activity 'on prescription' is already available county-wide as part of the NHS Northamptonshire 'Activity on Referral (AoR)' scheme. The scheme provides physical activity at Leisure Centre gyms for individuals referred by their GP based on a number of referral criteria including having a BMI over 25. A large number of clients (479 in 2008) who are referred have raised BMI as one of the referral criteria.

This theme will ensure that appropriate and supported opportunity for exercise for adults and children are available as part of the scheme. Feedback from the AoR programme to date has indicated that a wider range of activities together with a scheme for children would be beneficial. In addition, the theme will also address the needs of those individuals whose level of obesity and/or co-morbidities linked to their weight require more specialised or supported physical activity provision. This is enable them to improve their health and help them to achieve and maintain a healthy weight.

OBJECTIVES

PA1	Provide opportunity and incentive for overweight and obese adults and children to be more active, more often, particularly those individuals and families who are currently the most inactive.
PA2	Develop services to support the needs of those children and adults whose level of obesity and/or associated co-morbidities require more specialised or supported physical activity and advice to enable them to exercise safely and achieve and maintain a healthy weight.

General pre-school and child physical activity is also addressed under Theme 1: Children: Healthy Growth and Healthy Weight.

INITIATIVES

- Increase the range of physical activities available for overweight and obese people as part the Activity on Referral Scheme (e.g. health walks).
- Develop and deliver a Children's Activity on Referral (CAoR) programme to encourage those children referred opportunities to increase their participation in physical activity.
- Deliver a social marketing campaign to encourage overweight and obese adults and children to become physically active as part of a wider Physical Activity Social Marketing Campaign.
- Ensure that the needs of those people whose level of obesity and/or associated co-morbidities require more specialised or supported physical activity and advice to enable them to exercise safely is provided as part of the Activity on Referral Scheme.

7.4 THEME 4: CREATING INCENTIVES FOR BETTER HEALTH

This theme aims to provide individuals with information, opportunity and incentive to adopt healthy lifestyles and take responsibility for their own health and well-being. The theme will utilise a number of different approaches to incentivise people to be physically active and eat healthily, such as work place health initiatives and the introduction of new policies and practice that encourage healthy living across the County. As well as ensuring that people have access to information to enable them to make informed healthy lifestyle choices.

At present there is insufficient knowledge of what techniques are most successful at incentivising people to change their lifestyle. An innovative 3-year pilot programme, utilising best-practice from international obesity prevention programmes will be conducted in Corby. The programme will pilot a multi-component approach comprising a range of different supported interventions to improve diet, reduce energy intake and increase physical activity in the population, supported by social marketing. The programme will be used to identify successful cost-effective methods for reducing obesity that can then be rolled out County-wide.

The Workplace can have a significant impact on a person's ability to maintain a healthy weight and employer incentives such as work place health schemes can produce significant benefits for employees in terms of health improvement, as well as benefiting employers through reduced sickness absence and enhanced retention of staff.

The work under this theme will also link closely with the work of the Northamptonshire LAA Board aspiration to become the 'fittest' County in England and the development of a County Declaration of Health and Well-being to encourage healthy living through policy and incentive.

OBJECTIVES

CIBH1	Create incentives through policy, practice and legislation that encourage individuals to be physically active and eat healthily.
CIBH2	Increase the number of statutory organisations and key employers who provide Workplace Health Schemes to improve the health of the working-age population.
CIBH3	Pilot and evaluate a range of different techniques to incentivise healthy living through behaviour change.
CIBH4	Increase awareness of the adverse effects of being overweight and obese to incentivise people to make lifestyle changes to achieve and maintain a healthy weight.
CIBH5	Use web-based and social marketing techniques to provide healthy lifestyle information and incentivise people to make positive changes towards healthy living.

INITIATIVES

- Develop a County Declaration of Health and Well-being (Northamptonshire LAA Public Services Board).
- Pilot a multi-component programme to reduce the prevalence of obesity in Corby and identify cost-effective methods that can be implemented County-wide.
- Support key employers to develop Work Place Health initiatives (including Healthy Eating [Theme 2]).
- Implement a Healthy Weight Awareness Social Marketing Campaign to enable people to recognise what constitutes a healthy weight for adults and children and the importance of maintaining a healthy weight.
- Develop an interactive healthy lifestyle site as part of the NHS Northamptonshire website incorporating social marketing and networking methods to support healthy living.

7.5 THEME 5: PERSONALISED ADVICE AND SUPPORT

The aim of this theme is to ensure that there are sufficient services and support to meet the needs of adults and children who are already overweight or obese. The aim will be to develop a consistent, evidenced-based Care Pathway for the management and treatment of adult and childhood obesity throughout Northamptonshire, including clear referral pathways and referral criteria from Primary Care.

A review will be undertaken of current provision of programmes to support overweight or obese patients, whether in the community or primary care setting and the demand on services, based on obesity prevalence data. A market analysis of weight management services will be conducted to examine alternative models of service design that could improve the effectiveness and/or number of people who are able to access support. Ensuring that those in need of services are effectively identified and referred will also be important in reducing obesity prevalence.

Recognising the link between mental health and physical well-being, a patient's motivation to change their behaviour can be adversely affected by mood disorder. In particular depressive illness which is typified by loss of motivation, appetite changes and low self esteem (24). Addressing patient's depressive symptoms in Primary Care as part of an overall Care Pathway may improve patients self motivation for positive behaviour change.

In addition to providing weight management services to adults and children who are already overweight or obese, the theme will also address ways of providing information and advice for people to make healthy lifestyle choices and take responsibility for their own health, such as provision of information on healthy eating and physical activity from pharmacies.

OBJECTIVES

PAS1	Develop and implement an effective Care Pathways for adults and children for the management and treatment of obesity across Northamptonshire, ensuring that all stages of the Care Pathway incorporate NICE Guidelines and current best-practice on the management and treatment of obesity.
PAS2	Increase provision of community weight management services through the commissioning of multi-component, evidence-based obesity intervention programmes as part of the Care Pathway for Obesity, ensuring adequate provision within localities where obesity prevalence is high.
PAS4	Ensure that those in need of Weight Management support are identified and referred, or able to self-refer, to accessible weight management services through marketing, training of front line staff and social marketing to reach the target population.

INITIATIVES

- **Market Analysis and Service Re-design** – Undertake a Market Analysis of Community Weight Management Services to examine best-practice and alternative models of service design that could improve the effectiveness and/or number of people who are able to access weight management services. Commission new services as part of a County-wide Care Pathway for the management and treatment of obesity in-line with NICE Guidelines.
- **Community Weight Management Standards and Guidelines'** – Develop a set of 'Community Weight Management Standards and Guidelines' for private, public and third sector organisations responsible for the delivery of weight management services. Guidelines to include standards for the delivery of weight management and qualifications and training of staff (based on NICE and National Obesity Observatory Guidelines).
- **Research Project** – Obesity Management in Primary Care - Conduct an evaluation of the barriers and enablers to implementation of NICE guidelines for the treatment of obesity in primary care by consultation with professional and public (Research study to be conducted by NIHR CLAHRC for LNR), including the use the Quality and Outcomes Framework to incentivise GPs to monitor and record all patients BMI.
- Based on the outcome of the CLAHRC study, develop new services or procedures to support the implementation of NICE Guidelines for the Management and treatment of obesity in Primary Care.

8. IMPLEMENTATION AND GOVERNANCE

The implementation and governance framework for the Strategy is given in Figure 5. The strategy will be implemented jointly by partners (Appendix 1). A Theme Lead will be identified for each area from across the partner organisations and will be responsible for championing and leading the implementation of the objectives and initiatives of that theme. Theme leads for each area will form an Implementation Group. At present no additional funding has been identified to support implementation. The Implementation Group, reporting to the Health and Well-being Board of the Northamptonshire Partnership, will be responsible for setting priorities for implementation, identifying funding and agreeing key organisation(s) responsible for delivering each initiative.

IMPLEMENTATION AND GOVERNANCE

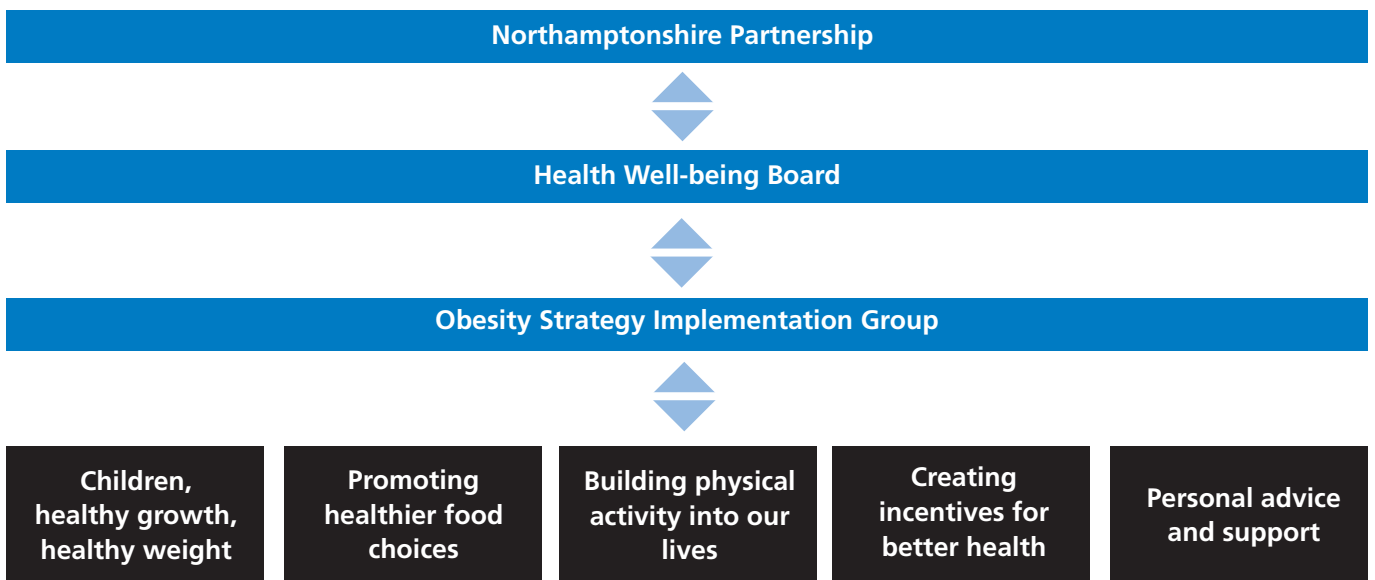


Figure 5: Implementation and Governance of the Healthy Weight healthy Lives Strategy for Northamptonshire

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APPENDIX A: PARTNERSHIP CONSULTATION APPROACH

A broad range of partners from all sectors have been consulted during the development of the Healthy Weight Healthy Lives Strategy, as listed below. Consultation has been facilitated through the provision of four workshops on the scope, themes, objectives and initiatives of the strategy together with consultation questionnaires for partners to submit their comments through-out the development of the strategy.

LIST OF PARTNERS

- NHS Commissioners
- NHS Provider Services
- Northamptonshire Healthcare Trust (NHT)
- Community Pharmacy
- GPs
- Nene Commissioning
- Northamptonshire County Council
- County Councillors
- Corby Borough Council
- Daventry District Council
- East Northants Council
- Kettering Borough Council
- Northampton Borough Council
- South Northants Council
- Wellingborough Council
- Groundwork
- Cultural Community Partnerships
- Age Concern
- Northamptonshire Carers
- Food Standards Agency
- Independents working within the food sector
- Patient Representatives

APPENDIX B: CRITICAL OPPORTUNITIES IN THE LIFE COURSE TO INFLUENCE BEHAVIOUR



Age	Stage	Issue
	Preconception – In utero	Maternal nutrition programmes foetus
0 – 6 months	Post-natal	Breast versus bottle-feeding to programme later health
6 – 25 months	Weaning	Growth acceleration hypothesis (slower pattern of growth in breastfed compared with formula-fed infants)
2 – 5 years	Pre-school	Adiposity rebound hypothesis (period of time in early childhood when the amount of fat in the body falls and then rises again, which causes BMI to do the same)
5 – 11 years	1st school	Development of physical skills Development of food preferences
11 – 16 years	2nd school	Development of independent behaviours
16 – 20 years	Leaving home	Exposure to alternative cultures/behaviours/lifestyle patterns (eg work patterns, living with friends etc)
16+ years	Smoking cessation	Health awareness prompting development of new behaviours
16 – 40 years	Pregnancy	Maternal nutrition
16 – 40 years	Parenting	Development of new behaviours associated with child-rearing
45 – 55 years	Menopause	Biological changes Growing importance of physical health prompted by diagnosis of disease in self or others
60 + years	Ageing	Lifestyle change prompted by changes in time availability, budget, work-life balance Occurrence of ill health

Table 6: Critical opportunities in the life course to influence behaviour

