Director of Public Health Annual Report

2021/22

Healthy weight for all children

Northumberland County Council

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Contents

Healthy weight for all children

This is my final report as Northumberland's Director of Public Health. Over the years I have consistently highlighted the strengths of our communities and the critical importance of our partnership working. We are stronger together than when we are working in silos. Preventative action is often the hardest of actions as it can require generational change to see impact. It requires sustained determination, commitment and investment to stay on track with our interventions and consolidate around a few core ambitions, to deliver the change which is within our gift to influence and control. Working as a collective system on infrastructure and policy change can be complex and will require us to overcome several hurdles, but that is the proposal for this year's report which is focusing on how we can ensure ALL our children can maintain a healthy weight.

We see inequalities in our children's weight with those in the least deprived areas more likely to be a healthy weight than those in our most deprived areas. This difference arises from the unequal and unfair distribution of resources and environments that promote healthy weight. Weight management services are great for a small number of people but it's like emptying the sea with a teaspoon.

This is a complex issue and as with anything to do with inequalities, there isn't one thing that will solve this, but we can do something to close the gap - we can focus on creating the conditions which enable positive choices. Our approach needs to be centred on those three questions at the heart of the Northumberland Inequalities Plan:

1. What can be done by communities (families)?
2. What might communities (families) need some help with?
3. What can't communities (families) do that agencies and organisations can?

Creating the conditions to ensure our children are a healthy weight means focusing on the evidence from whole systems approaches to healthy weight, which shows the balance is tipped towards our environments and how children live, learn, play and grow. This report isn't about large scale additional investment, it is more about how the power and influence of organisations and staff can be harnessed to create the environments which will give children and young people the best opportunities for healthy, nutritionally balanced food and active lives to be part of everyday routines.

No one will be underestimating the size of the challenge but combined with the strength of our communities, I think we can reverse the trend and in doing so, make a significant difference to health and wellbeing not only during childhood, but into adulthood as well.

Liz Morgan
Director of Public Health Northumberland

Acknowledgements

Thank you to everyone who has contributed to the report especially the lead author Kaat Marynissen and the main project team of Gill O'Neill, Jon Lawler, David Turnbull, Pam Forster, Claire Malone and the Integrated Wellbeing Service.

Thank you also to the many people who gave up their time to provide case studies, feedback and insights into the excellent work happening across Northumberland, as your contributions have been invaluable.

Portfolio holders' comments

Northumberland County Councillor Wendy Pattison, cabinet member for Adult Wellbeing

We know achieving healthy weight in childhood is a significant problem. We have seen a worrying increase in the number of children who are overweight or obese and we know focusing on and trying to address the issue at an early age is crucial.

With many significant challenges facing our society today, it is easy to feel overwhelmed and unsure what can be done. This report helps to identify where we are already succeeding and how we can work together to use the knowledge and skills we have to ensure the next generation lead happier, healthier lives.

Councillor Guy Renner-Thompson, cabinet member for Children's Services

Cost has always played a significant role in our food choices, and the current cost-of-living crisis means the price of food will be even more at the forefront of people's minds. Highly processed foods are cheaper than healthier foods, making them an understandable choice for families struggling financially.

This report explores the evidence and how we in Northumberland can build on the work that has been achieved to date, and move forward to support our communities to live long and healthy lives.

Glossary

Term	Definition
BMI	Body mass index. A measure which uses height and weight to calculate whether an individual's weight is healthy. For adults BMI is split into different ranges of underweight, healthy weight, overweight and obese. In children these same categories are determined by comparing their height and weight to standardised mass for what is expected at their age and sex (1).
NCMP	National Child Measurement Programme. A nationally mandated public health programme where each year children in Reception (aged 4-5) and Year 6 (aged 10-11) in schools have their height and weight measured. From this their BMI is calculated and compared to standardised measurements for what is expected, taking age and sex into account. The programme aims to assess the levels of overweight and obesity in children in primary schools to help inform local planning and delivery of services (2).
Health inequalities	The avoidable, unfair and systematic differences between different groups of people when it comes to health. This can include: • How healthy people are (e.g. life expectancy) • Access to care (e.g. availability of certain services) • Quality and experience of care (e.g. levels of patient satisfaction) • Behavioural risks to health (e.g. smoking) • Wider determinants of health (see below) In England health inequalities are often analysed across four key domains: • Socio-economic (e.g. income) • Geography (e.g. region) • Specific characteristics (e.g. sex, ethnicity) • Socially excluded groups (e.g. people experiencing homelessness)(3)
Wider determinants of health	The many social, economic and environmental factors that affect both our physical and mental health such as income, educational attainment and housing amongst others (4).
GDP	Gross Domestic Product. The total value of all of the goods made, and services provided, during a specific period of time. Often used as an indicator of a country's economy, as a rising GDP is thought to reflect a growing economy (5).

Term	Definition
IMD	Index of multiple deprivation. The IMD is used to calculate levels of relative deprivation for small areas (equivalent to ~1,500 residents) across England based on 37 separate indicators grouped into seven domains including income and employment, barriers to housing and services, crime, health deprivation and disability. Areas are split into deciles with Decile 1 representing the 10% of most deprived areas in England and Decile 10 the least deprived 10% (6).
HFSS	High in Fat, Salt and/or Sugar
Free sugars	All added sugars in any form; all sugars naturally present in fruit and vegetable juices, purées and pastes and similar products in which the structure has been broken down; all sugars in drinks (except for dairy-based drinks); and lactose and galactose added as ingredients. The sugars naturally present in milk and dairy products, fresh and most types of processed fruit and vegetables and in cereal grains, nuts and seeds are excluded from the definition (7).
Key stages	
1	Year 1 and 2 (ages 5-7)
2	Year 3-6 (ages 7-11)
3	Year 7-9 (ages 11-14)
4	Year 9-11 (ages 14-16) (8)
Active Travel	Making a journey by physically active means, such as walking or cycling.
In work poverty	When a working person's income after housing costs is less than 60% of the national average (9).
Whole systems approach	A whole systems approach involves tackling complex issues by enabling local stakeholders to come together and share an understanding of the reality of the challenge facing a community. Together they should consider how a local system is operating and where the greatest opportunities for change are, then agree actions in a way that is dynamic and flexible. By working together in an integrated way stakeholders can bring about long-term and sustainable system change (10).

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Context

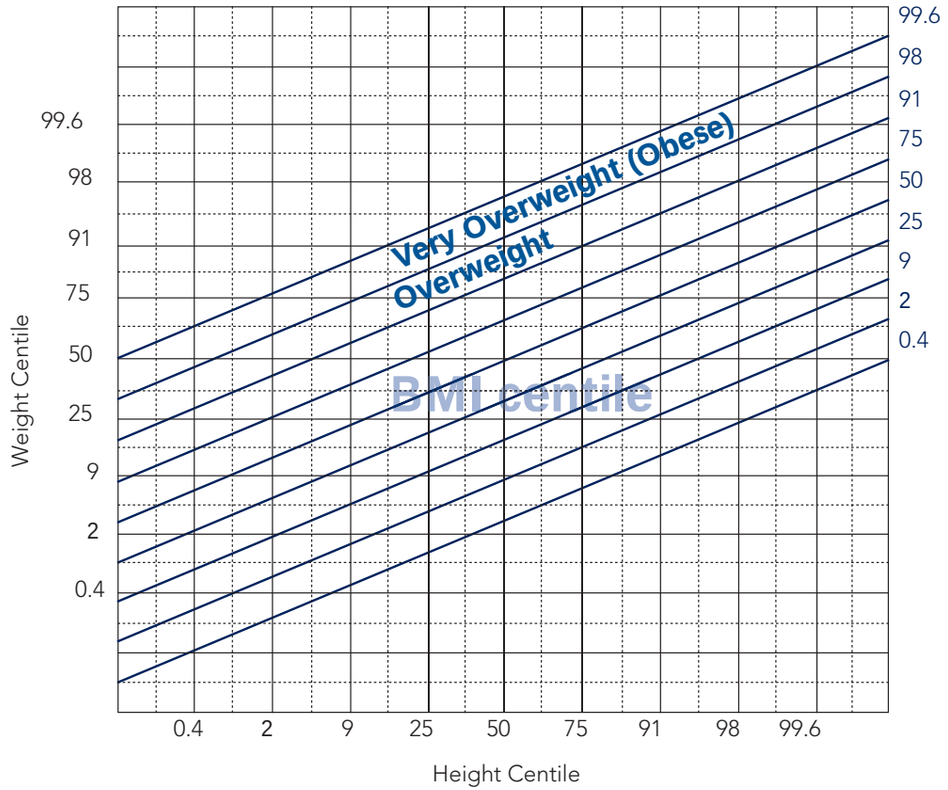
Measuring healthy weight

The National Child Measurement Programme (NCMP) is an annual England-wide programme which measures the height and weight of children in Reception (aged 4-5) and Year 6 (aged 10-11), to assess childhood overweight and obesity in primary schools (1).

Local data

The proportion of children and young people with a healthy weight is falling in Northumberland; in 2020/21 more children in the county were overweight or had obesity or severe obesity than ever before. This trend is seen throughout England, where the number of children who are overweight or have obesity has increased since the NCMP started in 2006 (2). Obesity and severe obesity have increased sharply since the beginning of the COVID-19 pandemic (2).

UK Growth Chart for Children aged 2-18 years



Growth chart used to plot children's height and weight. The 'BMI centile' that children fall into (shown by diagonal lines) show where they fall compared to others in their age and sex group. A BMI above the 91st centile ('91' line) suggests overweight and above the 98th centile is very overweight (obese)*. (24)

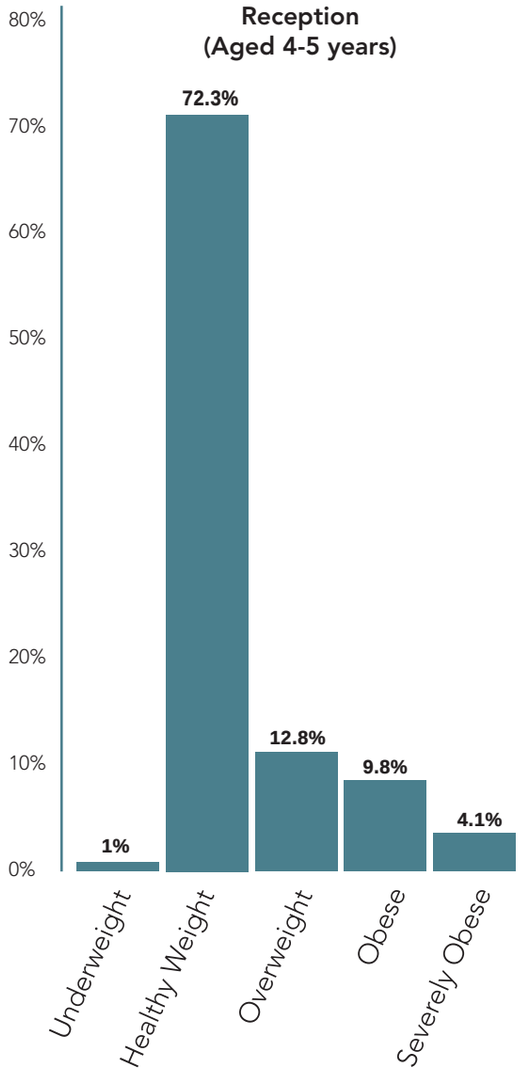
Over
1 in 5
children were overweight or had obesity in Reception.

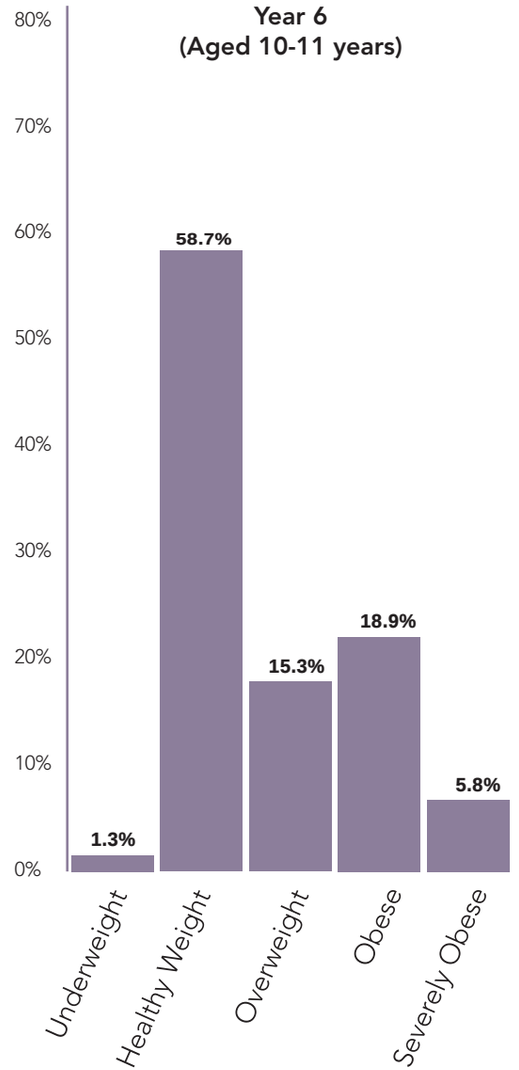
Over
1 in 3
in Year 6.

Northumberland 2020/21

- Reception (aged 4-5 years) - 72.3% of children were a healthy weight, with 12.8% classified as overweight, 9.8% as having obesity and 4.1% with severe obesity^ (3).
- Year 6 (aged 10-11 years) - 58.7% of children were a healthy weight. Of the remainder, 15.3% were overweight, 18.9% had obesity and 5.8% severe obesity (3).

Prevalence of weight category (%) for 2020/21

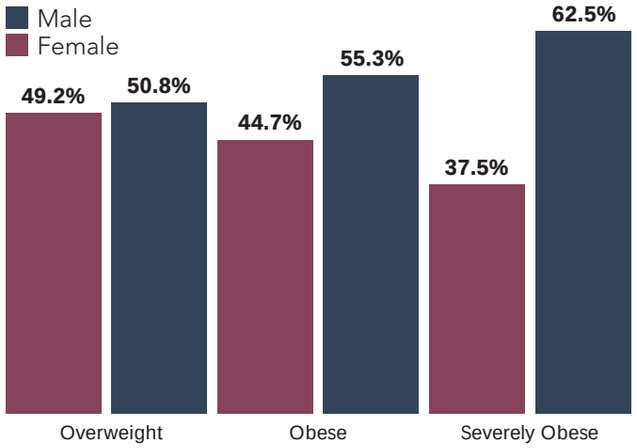




Gender

Nationally in 2019/20, obesity was more common in boys than girls in both age groups (4). In Northumberland boys and girls in Reception and Year 6 were equally likely to be overweight (female 49.2%, male 50.8%) but boys were more likely to have obesity (female 44.7%, male 55.3%) and almost twice as likely to have severe obesity (female 37.5%, male 62.5%) (3).

Gender Weight Breakdown in Northumberland for 2020/21



Adult weight

The sustained increase in overweight and obesity in children has been called an 'obesity epidemic' and echoes a similar trend in adults. The most recent data suggests only 36.5% of adults in England were a healthy weight. In 2020/21, 38.2% of adults were overweight (BMI of 25-30), with 25.3% classified as having obesity (BMI >30) (5).

COVID-19 highlighted the health impact of obesity which played a major role in the UK's high death rate (6). Someone with obesity is 1.5 times more likely to die from COVID-19, rising to 2.25 times more likely if they have severe obesity (7).

In 2020/21 of adults in England

36.5%

were a healthy weight

38.2%

were overweight

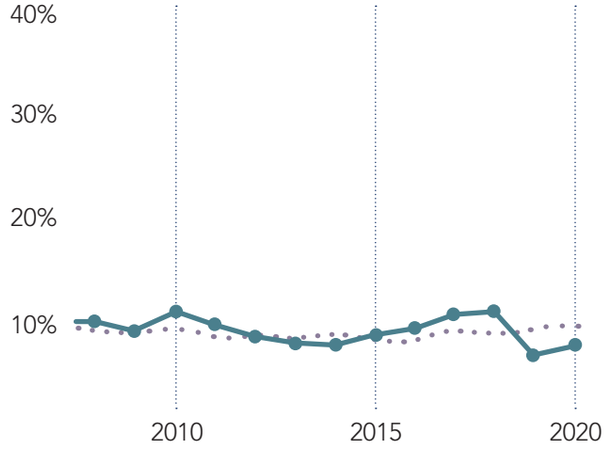
25.3%

were obese

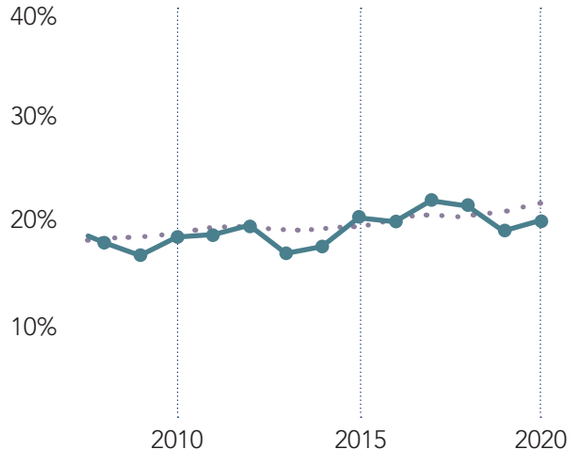
Underweight

Underweight is also an 'unhealthy weight'. Only 1% of Reception and 1.3% of Year 6 children in Northumberland are underweight, with both showing either a downwards or stable trend (3, 8). Historically, underweight children have been associated with disadvantage and not being able to afford enough food. However, in the 21st century disadvantage is most likely to be associated with overweight and obesity.

Reception (aged 4-5 years) prevalence of obesity (inc. severe)



Year 6 (aged 10-11 years) prevalence of obesity (inc. severe)



Wider determinants of health

The wider determinants of health is a commonly used term; it refers to the many social, economic and environmental factors that affect our physical and mental health (9) including income, educational attainment and housing.

Differences in factors including wealth, access to green space and healthy food mean that across the UK there are big differences in how many children become overweight or obese.

System map of the causes of health inequalities

This model is a simplification of the complex system that causes inequalities to thrive. It shows the different factors that impact our health, where they stem from (the wider determinants of health), how they interact, multiply, reinforce and act both in sequence and simultaneously.

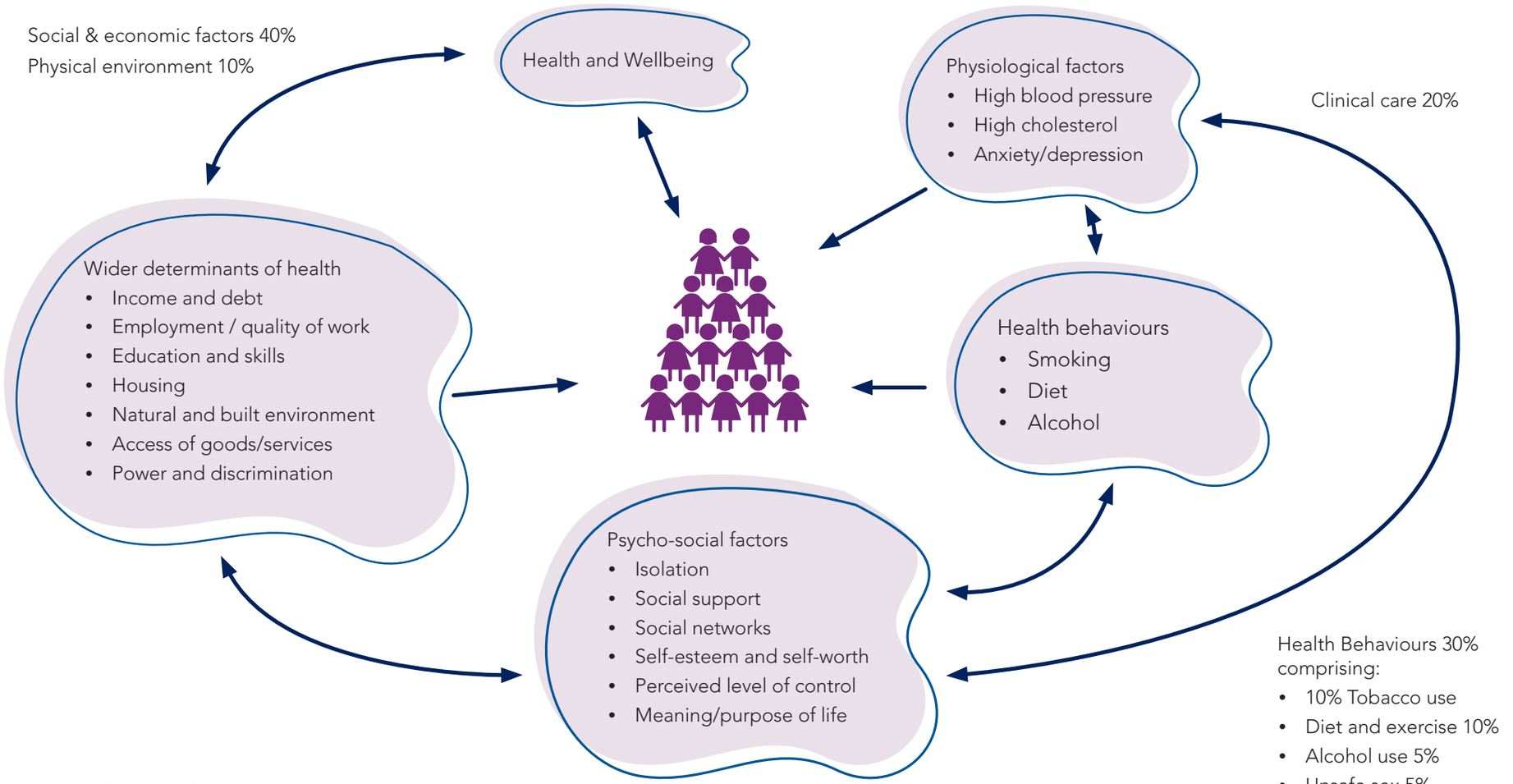


Image adapted from the Labonte models

National deprivation

A child living in one of the most deprived areas of England in 2020-21 was more than twice as likely to be overweight or obese compared to one living in the least deprived areas (4).

Northumberland deprivation

- Reception – of children measured 18.6% with obesity or severe obesity lived in the most deprived (IMD Decile 1) neighbourhoods compared to only 11.4% of children in the least deprived (IMD Decile 10) neighbourhoods**.
- Year 6 – 32.1% with obesity or severe obesity in most deprived (IMD 1) neighbourhoods compared to 13.4% with obesity or severe obesity in the least deprived (IMD 10) (3).

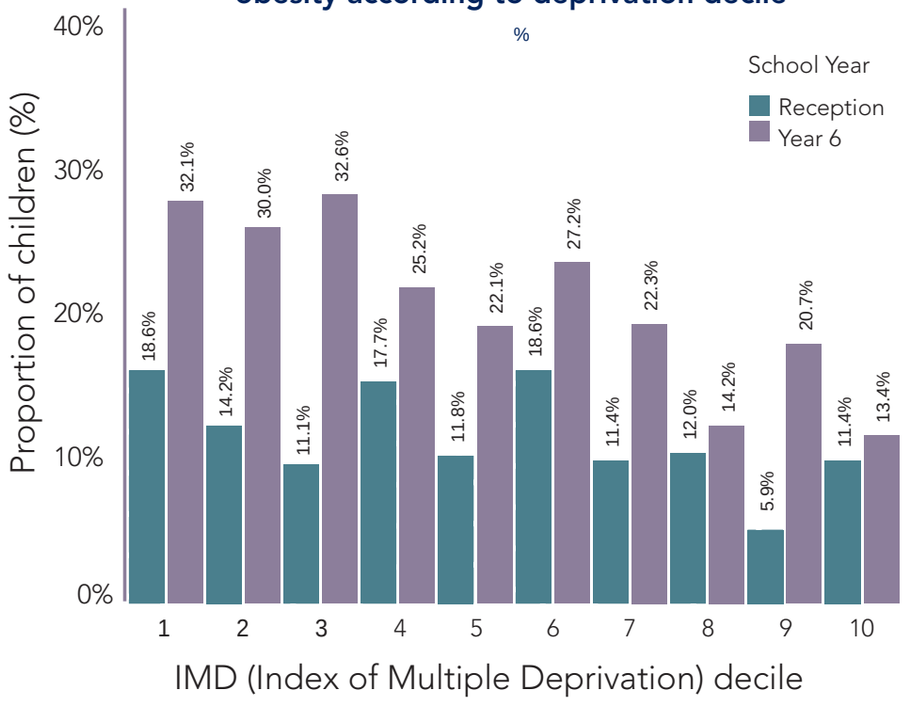
Achieving healthy weight

All children should have the same opportunities to thrive and be healthy. When children are a healthy weight, they are more likely to:

- Do well at school (10)
- Stay physically healthy, with a lower risk of weight related illnesses (e.g. type 2 diabetes, heart attacks and strokes in later life) (11)
- Have better mental health, with lower rates of conditions such as anxiety and depression (12)
- Report that they feel better about their lives (10, 13)

Healthy weight in childhood increases a young person's chances of maintaining health into adulthood.

Proportion of children with obesity or severe obesity according to deprivation decile



Economic burden

In the UK, obesity is now the second largest economic burden after smoking, resulting in a 3% loss of GDP in 2012 (14). It was estimated that elevated BMI cost the NHS £6.4 billion in 2015 increasing to £9.7 billion by 2050, with wider costs to society estimated to reach £49.9 billion per year (15).

Increasing length of life

Bringing everyone into a healthy BMI range could increase life expectancy by 2.7 years, with additional benefit for people living in the most deprived areas who are more likely to suffer from obesity and diet-related illnesses (16).

Reversing health outcomes

The risks of obesity-related diseases in younger people can be reversed. Children who were overweight or obese but were not obese by adulthood had a similar risk of weight-related health conditions to those who had never been obese (11). So helping our children and young people attain and maintain a healthy weight, will help to give them the best start in life.

Barriers to healthy weight

Genetics

People become overweight or obese when their body struggles to burn more calories than it consumes. Some people are genetically programmed to find this more difficult than others (15). In children, several genes linked to important aspects including appetite behaviour, food intake and sugar metabolism may play a role. However, this genetic predisposition alone is not enough to trigger the development of obesity (17).

Individual responsibility and 'willpower'

While the health behaviours of young people and their families play a part, focusing too heavily on the concept of individual 'willpower' ignores the fundamental contribution of wider social and environmental factors in the development of overweight and obesity.

By talking about children 'developing' overweight or obesity status we aim to reframe the issue as avoidable conditions driven by the environment they live in, where unhealthy options often take centre stage. We need to look more widely at the ways in which our homes, communities, schools and healthcare systems support children living healthy, active lives.

Seeing overweight

It can be harder to recognise when a child is overweight. With the ever-increasing rates of child and adult obesity, higher BMIs become common and harder to recognise by parents and healthcare professionals (18), making it difficult to offer timely support.

Turning the tide

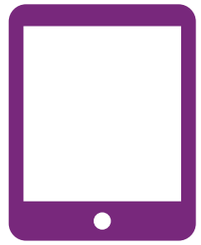
All these barriers are ingrained within our society and have been exacerbated by the current cost-of-living crisis. However, they are not insurmountable. This report highlights what is currently done in Northumberland to support healthy weight in young people and builds on this, making concrete and pragmatic recommendations for the future.

Environment

Our young people live in an increasingly 'obesogenic' (obesity causing) environment and culture. Maintaining a healthy weight is more difficult because of:

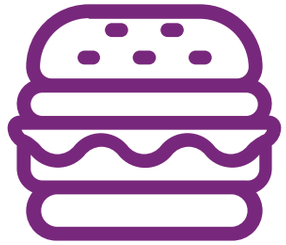
Limited access to green spaces reducing young people's physical activity

Widespread advertising of unhealthy foods influencing eating choices.



The impact of technology on how children play (i.e., using screens instead of playing outdoors).

Widespread car use making many journeys less active.



A proliferation of 'fast food' shops on the high street and disproportionate application of discount offers means 'unhealthy foods' which are high in fat, salt or sugar (HFSS) have never been more affordable, available or appealing.

Existing commitment

This report builds on our Joint Health and Wellbeing Strategy, to give every child and young person the best start in life (19), as well as answering calls from the community to support children in learning more about healthy eating, food choices, exercise and physical activity (20). It aims to address some of the challenges identified in our recent Inequalities Plan, which recognised the need for a community centred approach in tackling key health issues. As a result, our recommendations are led by the same three key questions:

1. What can communities do for themselves?
2. What can communities do with some help?
3. What can't communities do that agencies / institutions can?

Our recent signing of Food Active's Healthy Weight Declaration is a positive move forward. The Declaration has 16 commitments to adopt a long-term and whole systems approach to healthy weight, including addressing commercial determinants (such as working with the local food and drink sector), supporting health promoting infrastructure (such as reviewing the number of hot food takeaways in town/village centres) and promoting a culture shift to help make healthier choices easier (21).

Building on what's strong

The significant challenges we face today, from the hyper-acute (recovering from COVID-19, cost of living crisis) to the increasingly concerning (climate change), make it easy to feel overwhelmed and unsure what we can do. This report aims to identify where we are already succeeding and how we can use the knowledge and skills within our communities, the influence of the voluntary and private sectors and the support of local and national government to ensure the next generation lead happier, healthier lives.

Footnotes

^ NCMP data for Northumberland is available for the year 20/21. National data for the same year is not available as due to the COVID pandemic not enough local authorities completed the NCMP to establish a national figure. Therefore, comparisons have been made to national figures of the preceding year (19/20).

* To find out more please see the National Obesity Observatory guide to classifying body mass index in children (22)

** Deprivation is calculated using the index of multiple deprivation (IMD). For further details please see the glossary.

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Healthy weight in the home

There are many factors within a family's environment and routine that can influence a child's weight.

Eating norms and culture

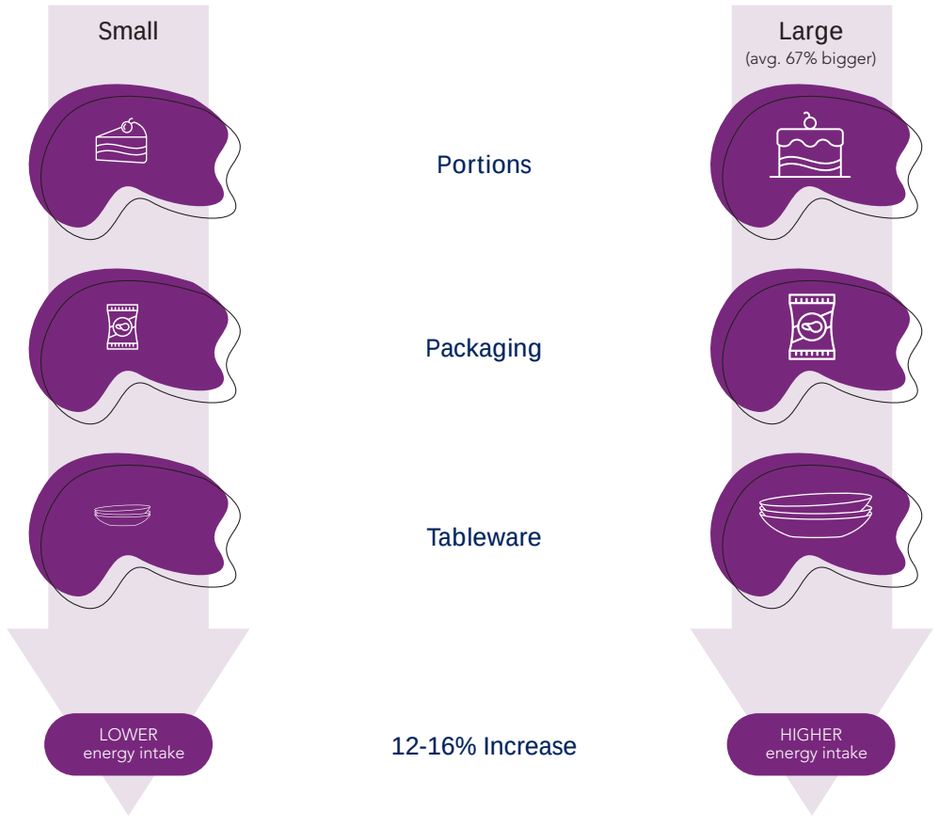
What and how we eat has changed fundamentally over the past hundred years:

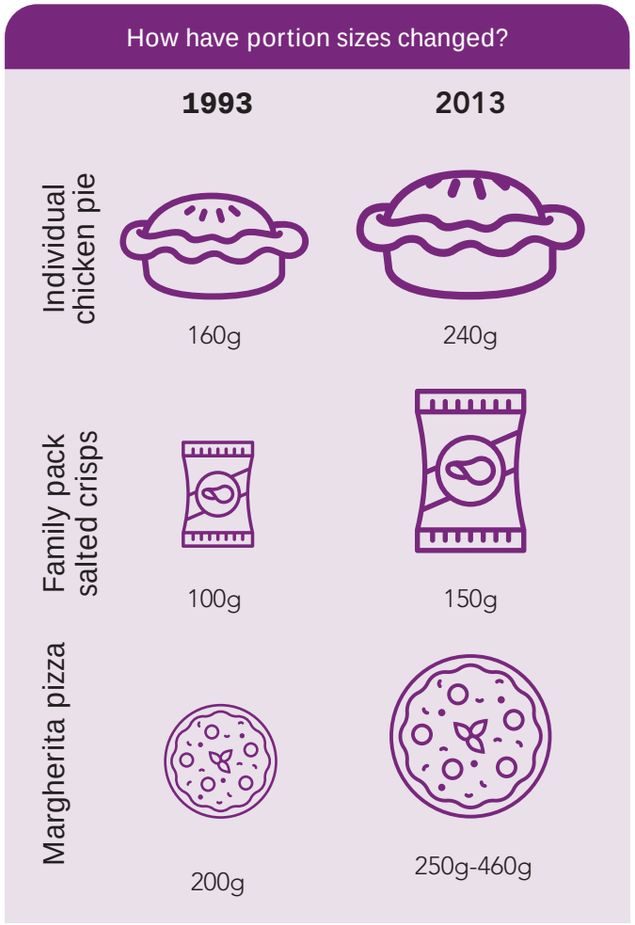
- An availability of less healthy foods that are high in fat, salt and/or sugar (HFSS).
- We now eat less fresh fruit and vegetables.
- Habits around mealtimes have changed and it is less common for families to sit and eat together. This has been influenced by the increase in lone parent families and where both parents work convenience is a bigger priority (1), especially with changes to employment patterns including more frequent shift work (2).

Increased portion sizes

Over a 20 year period the size of a packet of crisps has increased by 50%, and a margherita pizza has in some cases doubled in size (3). Larger portions, packaging and tableware all result in people eating more which can lead to weight gain (4, 5).

What impact do larger portions have?





Frequency of ready meals/take aways

The boom in home deliveries during lockdown saw a significant increase in the consumption of food made outside of the home, and the trend continues (1). Eating food from restaurants or fast-food outlets leads to higher intake of saturated fat, salt and an increase in daily total energy intake of around 200 calories (6). Despite moves to restrict the density and influence the location of takeaway outlets within communities (7) the speed of developments in the fast-food sector far outpace local government planning. An example of this includes companies trialling the use of drones to deliver food to customers (8).

Breastfeeding rates

In Northumberland (2021/22) under half (42.0%) of all babies were breastfed at 6-8 weeks after birth. This is slightly higher than the regional average (NE 37.0%) but lower than the England average (49.3%) (9). The good news is that in Northumberland breastfeeding has been increasing over the past 3 years and the gap with the England average has narrowed. Breastfeeding is incredibly important and protects against childhood obesity, particularly if continued for a longer period i.e. at least 6 months (10, 11).

Family budget

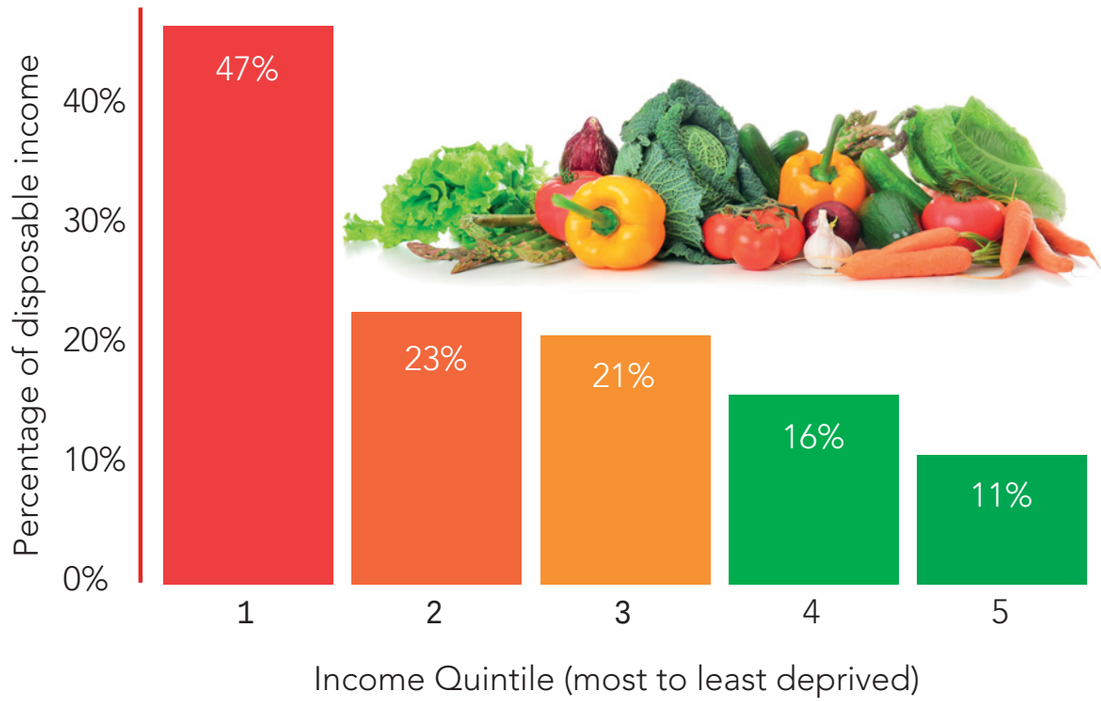
The poorest fifth of UK households would need to spend nearly half (47%) of their disposable income on food to meet the cost of the Government recommended healthy diet (12).

The current cost-of-living crisis means the price of food will be even more at the forefront of people's minds.

Highly processed foods – high in salt, refined carbohydrates, sugar and fats, and low in fibre – are on average three times cheaper per calorie than healthier foods (1).

The need to save on energy bills is also restricting the use of ovens, hobs and microwaves increasing reliance on ready-prepared food and less cooking from scratch.

Percentage of disposable income required to afford the Eatwell Guide by income quintile



Increased use of food banks

Increased use of food banks means more families are reliant on food that may not be nutritionally balanced, and this widens inequalities. Food banks are charity-run organisations which provide individuals who cannot afford food with emergency support in the form of food parcels. They rely on donations from individuals and businesses (such as supermarkets) and tend to stock food which is easy to store and has a long shelf-life (such as canned food) to ensure donations can be spread across the year (13). Food bank parcels are more likely to contain disproportionately high levels of sugar and carbohydrates and inadequate levels of vitamins such as vitamin D when compared to UK guidelines (14, 15).

Stress and anxiety

Living with financial hardship is extremely stressful, causing people to feel overwhelmed which makes it more difficult for parents to make healthier food choices or plan and cook meals (16). When we are tired or anxious, we often overeat and eat foods which make us feel better. As sugar, fat and salt stimulate the release of 'feel good' chemicals in our brains 'comfort food' is often high in these ingredients (1, 17, 18).

Access to basic equipment

There are currently an estimated 1.9 million people in the UK living without a cooker; 2.8 million people without a freezer; and 900,000 people without a fridge (19).

Lack of good quality sleep

Lack of good quality sleep has been linked to unhealthy weight in children, with studies finding that later bedtimes and sleeping less increased children's risk of developing overweight and/or obesity from infancy to adolescence (20-23). Lack of sleep could also lead to an increased intake of energy drinks, which will be covered more in the 'Healthy weight in schools' chapter.

Opportunities to build on

Breastfeeding support

We can increase the number of babies who are breastfed by further providing support to mothers and families. Despite breastfeeding being less common than we would like, the percentage of babies being breastfed in the first few months post birth in Northumberland has increased by over 5% since 2015/16 (9). This is likely to be the result of ongoing initiatives being led by midwives, health visitors and family hubs.

HENRY

The Health, Exercise and Nutrition for the Really Young (HENRY) programme is delivered across Northumberland, providing support for parents of children aged 0-5 years old. The programme comprises of eight sessions, working with families to help them in making positive changes that create happier and healthier home environments. Recent reports indicate that there is good engagement in Northumberland, with 87% of families completing all sessions and feedback from families is positive. Measures of success include healthier eating in parents and children as well as increased physical activity levels in parents and children (24). From 2023 we are investing in two additional HENRY programmes, one specifically designed for supporting parents in the antenatal period and the other supporting families with children aged 5 years and above (24).

Healthy Start scheme

Healthy Start is a UK-wide scheme which aims to provide a nutritional 'safety-net' for those who are pregnant and children under 4 years old in low-income families. The scheme provides families with support in buying milk and formula, fresh, frozen or tinned fruit and vegetables and pulses. Holders of a Healthy Start card can also request free vitamins during pregnancy and breastfeeding, or vitamin drops for their child. The most recent data from March 2022 suggests uptake of the scheme in Northumberland was at 80% (25).

Support to families

Northumberland County Council Public Health team, alongside wider stakeholders, are reviewing how best to support families of children who have been identified as being overweight or obese from the NCMP.

Case studies

HENRY

HENRY is a national charity supporting parents and carers through the Healthy Families: Right from the Start programme.

This 8-week intervention offers parents a chance to share ideas and gain new skills and tools to address lifestyle issues in a supportive and fun environment. The programme adopts a holistic approach and focuses on five research-identified risk factors for childhood obesity: parenting efficacy, family lifestyle habits, emotional wellbeing, nutrition and physical activity. HENRY's holistic approach to a healthy start helps children to flourish throughout childhood and beyond.

Last year within Northumberland 88% of participants in HENRY would 'definitely' recommend the programme to other families and 100% of families reported a healthier family lifestyle. Over half of children involved were active for 3+ hours a day and over 90% of people reported improved family eating habits (24).

Slow cooker sessions

Locally delivered food, cooking and eating sessions take place across the county. Many of these involve slow cookers which use less energy, are easy to use and quick to wash up. One example is Blyth Rotary Club, who have been running cooking sessions for five years in the Briardale Centre. Parents access these sessions via local schools and community groups, undertaking a course run by a local professional cook. This year, recipe booklets were provided by The Full Circle Food Project, a charity based in Hirst Park that educates people living in Northumberland about growing food to eat, healthy cooking on a budget and supporting healthier lifestyles.

Case studies
Infant Feeding Team

Claire, a young mum aged 20, first met the Infant Feeding Team after the birth of her second child. When her baby was 5 days old, she was experiencing initial difficulties with engorgement, sore nipples and a sleepy, jaundiced baby. As she hadn't breastfed her first daughter, Claire had normal concerns if she was doing ok with breastfeeding, so was supported during weekly home visits.

Later when Claire required surgery, the service provided advice on painkillers compatible with breastfeeding as well as equipment needed to express milk prior to going into hospital. As a result, her baby drank expressed breast milk during her hospital stay and she was able to continue breastfeeding on return home.

Now her baby is 12 weeks old, and Claire continues to exclusively breastfeed, praising the benefits to her and her baby's health as well as the economic benefits for her family. She regularly attends local 'walk and talk' sessions sharing her experience with other local mums, making new friends and normalising breastfeeding within her community.

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Healthy weight in our communities

Maintaining a healthy weight is challenging because of the complex interaction of social, political and environmental factors which shape our food environment. The availability, advertising and accessibility of food influences what, where and when we eat.

Part A: Food environment

Availability of healthy food is decreasing in our communities. On an English high street, more than 1 in 4 places to buy food may be fast food outlets, and this has been increasing since 2019 (1). There is a clear association between poverty and the density of fast-food outlets in the UK, with almost twice as many in the most deprived areas (2, 3), a pattern also seen in Northumberland (4). This can make accessing healthy food even harder for those with less disposable income.

We buy more unhealthy food than other European countries. Half (50%) of UK household food purchases are ultra-processed foods compared to 46% in Germany, 14% in France and 13% in Italy (2). Processed or ultra-processed foods are often HFSS and lower in fibre and water (2). Not only is eating processed food worse for our health, but we also tend to eat more of it (2, 5).

Access to healthy food for families is influenced by public or personal transport and distance to shops. Nationally around 3.3 million people cannot purchase raw ingredients within 15 minutes by public transport and the lowest income households are less likely to have a car (2, 6). In Northumberland's rural communities, access to healthy food can be a real challenge.

Advertising and promotions on foods high in fat, sugar and salt significantly influences what families buy. Those from lower socio-economic groups are 50% more likely to be exposed to adverts for HFSS foods than those from higher socio-economic groups (1). Foods marketed for children including breakfast cereals and yoghurts are often high in sugar and 'Buy One Get One Free' (BOGOF) promotions are disproportionately applied to these foods (7). National evidence suggests that 43% of food and drinks displayed prominently in shops were high in sugar and less than 1% were fruit or vegetables (8).

What is being done?

National legislation

The 2018 Soft Drinks Industry Levy ('sugar tax') led to a widespread reduction of sugar in drinks, and UK residents consumed an estimated 6,500 fewer calories per year (9). Planned Government legislation including banning multibuy promotions on HFSS products and free sugary drink refills in the 'eating out' sector was due to come into force in October 2022 (10). It is unclear whether this policy will be reviewed, and we await an update on progress.

Nourish Northumberland

Nourish Northumberland, a countywide partnership works with communities to create solutions, so our families have resilient access to healthy food.

Projects include:

- Seed to Fork: introducing children to growing food, understanding healthy eating and sampling what is grown.
- Berwick Food and Drink Festival: incorporated free healthy pizza making sessions with children.
- Castlegate Community Garden: a community garden maintained by children/young people from the Community Crew (a local youth group). "Members of the community are encouraged to pick the herbs, and fruit to cook with and eat when passing by and often parents are seen leaping out of a car or stopping with a pushchair to pick herbs before heading home to cook tea!" (Becci Murray, Operations Director, Berwick Community Trust)

Northumberland County Council Hot Food Takeaway Policy (2018)

This policy aims to limit the number of hot food takeaways, particularly where there are high numbers of children and young people, by restricting new hot food takeaways:

- In areas where over 35% of Year 6 pupils have overweight or obesity status.
- In areas where there are already more than a certain number of hot food takeaways per resident.
- Within 400m of a school or college.
- If there would be a cluster of three or more such businesses within 100m of each other.
- If it would replace the last convenience store or public house in a village, or the last convenience store serving a residential area (4).

Part B: Our physical environment

Physical activity combined with a balanced diet contributes to achieving and maintaining a healthy weight. Although physical activity alone is not the most effective way to lose weight, it is important for maintaining healthy weight (11) and has widespread benefits for children including:

- improved academic performance
- reduced risk of depression, anxiety and stress
- healthier lungs, heart, muscles and bones
- increased confidence and self-esteem (12, 13)

In Northumberland, data from Sport England shows 53% of those aged 5-16 years meet the recommended Government guidelines of being active for an average of at least 60 minutes per day, however 21% are active for less than 30 minutes a day (14).

In Northumberland, the number of adults who walk for leisure is higher than the England average (15) but walking and cycling 'for utility' as part of people's daily routine is less common. The number of children who undertake 'active travel' has decreased. Between 2003-2018 the percentage of children walking to school decreased by over 10% and the percentage cycling remained low (15). Encouraging active travel, for example through the use of travel plans, can play a key role in making children and young people more physically active (16, 17).

Challenges to being physically active:

Access to spaces, equipment and/or opportunities influence levels of physical activity for all. Access to green space increases physical activity (18) and helps provide:

- Improved mental health – living within 1km of green space is associated with better mental health especially for children under 12 (19).
- Improved immune system.
- A greater sense of community and social inclusion in children.
- Lower crime in disadvantaged neighbourhoods.
- Lower rates of obesity.
- Reduced exposure to air pollution which can influence cognitive development (18).

Perception of safety, the safer people feel, the more likely they are to be physically active (20-22).

A lack of confidence and skills are common reasons given for not undertaking physical activities such as cycling (23).

Gender differences in physical activity start early and persist into adulthood. Specific activities such as cycling also have a gender gap.

Feasibility and convenience of undertaking journeys by active versus inactive means influence families' choices and routines (24). Households without access to a car make significantly more trips and travel almost three times further on foot than those with access to a car (15).

The impact of technology has changed how young people interact, relax and play. This could explain lower levels of physical activity (25-28), more so in our older children. Of the children surveyed, Northumberland's Health Related Behaviour Questionnaire (HRBQ) suggests time spent on devices including a computer, games console, tablet or smartphone ranges from 1 hour up to over 5 hours (29).

Opportunities to build on

The Government has set new national targets for cycling and walking including:

- Ensuring cycling and walking become the first choice for many journeys, accounting for half of all journeys in towns and cities by 2030.
- Increasing the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025.
- Doubling cycling by 2025 (30).

Improving infrastructure

Northumberland County Council is developing Local Cycling and Walking Infrastructure Plans (LCWIPS) to improve cycle pathways and connections across the county to meet these targets. This is all part of the 'Our Way' strategy for Northumberland.

Cycling schools

Northumberland County Council's Go Smarter Team is working within schools to increase confidence and skills of young people, and the ongoing development of 'cycle libraries' aims to increase access to bicycles within communities.

Case studies
Wheels for All

Wheels for All (WFA) is a national charity who provide a platform for disabled people or others who may not have access to a cycling resource. With 50 WFA centres across the UK, the charity provides a network of accessible riding locations to suit a rider's needs, such as traffic free environments, community areas and on road cycle training.

Each centre comprises a variety of accredited WFA leaders and volunteers helping participants plan and work towards their cycling goals, be it for:

- Physical and mental health benefits
- Mobility support
- Transport solutions
- Social interaction

Each centre explores the needs of a rider and finds the right cycle for them. Due to the nature of adapted cycle design, adapted cycle variation and availability is not as common as a standard pedal two-wheel cycle.

Typically, a WFA centre allows its participants both social and private platforms to seek the benefits through riding that matter to them. In many cases participants may use a WFA session to substitute part of their weekly physiotherapy programme. This can often lead to private use of adapted cycles to help with mobility issues, for example when using parks, visiting towns and cities, general exercise or even as a transport solution.

Case studies
School streets

A joint programme between Northumberland County Council's Highways Improvement Team and Go Smarter Safe Routes to School aims to improve road safety and reduce traffic management issues experienced outside schools.

This programme works with schools, to roll out infrastructure solutions alongside promoting alternative modes of transport such as walking and cycling. Where appropriate, School Streets are also considered as a solution to congestion issues outside schools. The introduction of a School Street enables the area around the school to be closed to cars at the start and end of the school day, (residents are exempt); pupils are encouraged to walk, cycle or scoot to school instead.

To date, School Streets have been implemented at five schools: Josephine Butler Primary, Newsham Primary School, Blyth New Delaval Primary School, Hareside Primary School and Seaton Sluice Primary School, with a further six schools under consideration.

Road safety improvements are also introduced around schools, where considered necessary, as part of the Local Transport Plan. These include pedestrian crossings, improvements to footways and cycleways.

The Council also has a policy to introduce 20mph speed limits outside schools across the county provided it is feasible to do so, aimed at slowing traffic and improving safety, and there are a number of School Crossing Patrol sites. These assist with safe crossing of roads at key locations on the route to school and encourage people to make the journey by active and sustainable means.

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Healthy weight in schools

School is an important part of most children's lives and has a role in helping children and young people achieve and maintain a healthy weight (1). School is important as:

- **a food environment**
- **a learning environment**
- **an activity environment**

Part A: Food environment

Meal provision

Pupils in primary and secondary schools in Northumberland can either bring a packed lunch or eat a school meal.

We know that children who are hungry find it harder to concentrate which can impact on their and others' learning (2). In England, since 2014, under the Universal Infant Free School Meal (UIFSM) policy (3) children in:

- Reception to Year 2 (ages 4-7) are offered a free school lunch regardless of parental income (3).
- Year 3 and above, may be eligible for free school meals (FSM) (4, 5).

Many schools go the extra mile, providing breakfast clubs and ensuring children have a hot nutritious meal beyond the FSM provision offer.

Infants who eat FSM are more likely to maintain a healthy weight as UIFSM have low fat content (3, 6). However, inconsistent reach and uptake means that not all children who would benefit receive an FSM. Uptake is not universally consistent and has been found to be lower in communities experiencing inequalities (7, 8). Children from lower-income families who are ineligible for FSM are more likely to take a packed lunch which may be less healthy (2). Similarly, whilst FSM eligibility is based on access to certain benefits, this excludes those (nearly 2 in 10 people) experiencing 'in-work poverty' (12) which, in 2020, meant that more than 1 in 6 households may have been unable to access FSM (7, 8). Current cost of living pressures mean that this gap could increase even further in future.

In 2022 the proportion of children receiving FSM in England was the highest since the 1990s (5). In the North East, 3 in 10 pupils receive FSM compared to the 2 in 10 England average (9). Northumberland has the lowest percentage of children receiving FSM within the North East, however data does not identify variations in uptake across the county.

In England, school meals must meet School Food Plan (2014) standards including portion size, provision of healthy drinks and frequency of provision of certain foods (10). Northumberland schools can commission a local authority (LA) school meals plan which provides summer and winter menus, calculated according to Government nutritional guidelines. In Northumberland, those schools that take up the LA offer are known to provide a menu in-line with governmental nutritional standards.

Part B: Learning environment

The School Food Plan requires schools to teach cookery and nutrition to all children up to age 14 (2). Beyond this, including healthy weight themes in the Personal, Social, Health and Economic (PSHE) curriculum is not mandatory.

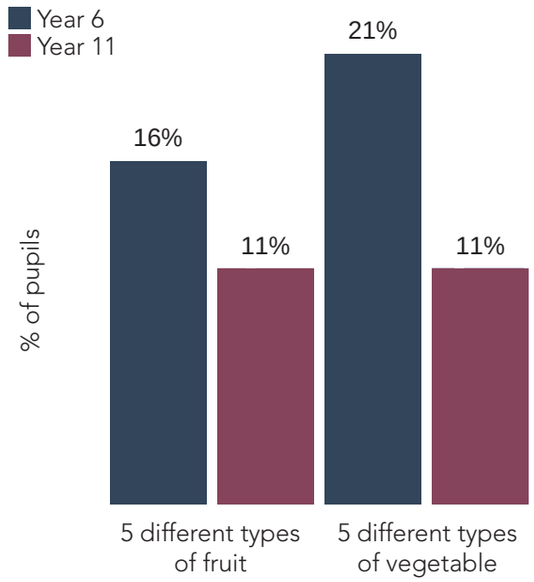
As children get older, they gain more independence, and parents and school often have less influence over what and when they eat. Eating breakfast and energy drink consumption are examples of how young people's behaviour can change as independence around choice shifts.

- Young people who eat breakfast may sleep better, exercise more frequently, have a healthier diet and better school attendance (11). Eating breakfast has also been linked to drinking less caffeine including cola, coffee or energy drinks (11). However, children are more likely to miss breakfast as they progress through secondary school (11).
- Sales and consumption of sports and energy drinks within the UK have increased rapidly over the past decade. Evidence identifies that up to a third of children in the UK consume caffeinated energy drinks weekly (12). An average energy drink contains more than the entire maximum daily recommended UK adult sugar intake (30g) (13). Many of these drinks are consumed by children, for whom the recommended daily sugar intake is lower (19g 4-6yrs old, 24g 7-10yrs old).

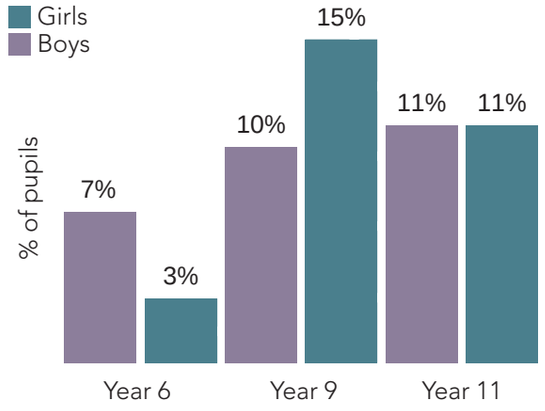
In Northumberland the 2021 Health-Related Behaviours Questionnaire (HRBQ) provided insights into eating patterns of school-age children. While young people's behaviour is influenced by home and community environments their responses identify some issues that could be addressed at school. We know that:

- Intake of more than 5 types (not portions) of fruit and vegetables decreases with age:
    - 16% of Year 6 pupils report eating over 5 different types of fruit a day, 21% over 5 different types of vegetables.
    - By Year 11 this is 11% for both fruits and vegetables (14)
- 3% of Year 6 pupils stated they don't normally have anything to eat or drink before school, for Year 11 pupils this was around 18% (11, 14).
- A quarter of Year 6 pupils and a fifth of Year 9 and Year 11 said they do not normally drink water every day (14)
- For Year 6 boys the second most popular daily drink (after water) was fruit juice, for girls this was diluted juice/squash/cordial. In Year 11 for boys this was fizzy drinks / pop, for girls it was tea or coffee (14)
- In Northumberland the number of children who drink energy drinks each day increases as they get older, which follows national trends(12).
    - 7% of Year 6 boys and 3% Year 6 girls
    - 10% of Year 9 boys and 15% Year 9 girls
    - 11% of Year 11 boys and 11% Year 11 girls (14)

Pupils eating fruit and veg a day (%) according to the Northumberland 2021 HRBQ



Pupils who drink energy drinks normally each day (%) according to the Northumberland 2021 HRBQ



Part C: Physical activity environment

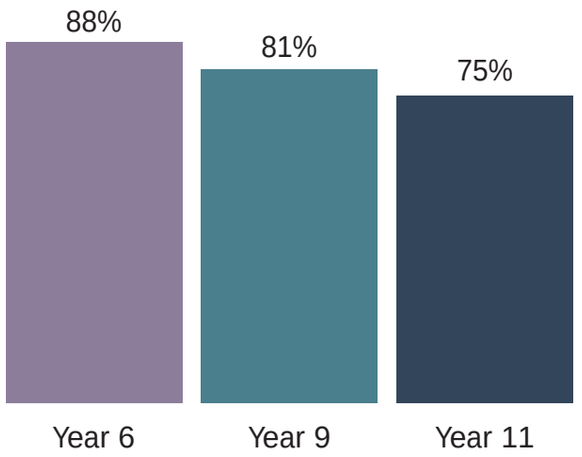
Curriculum

Physical Education (PE) is a part of the national curriculum across all key stages (up to age 16), including mandatory swimming in either key stage 1 or 2 (Ages 5-11) (15, 16). Whilst many parents are keen to see more time in the curriculum for PE a recent Ofsted report found that only 69% of 60 primary schools visited timetabled two or more hours of PE each week (8).

Activity levels and enjoyment of sport and exercise in young people decrease with age (14), which can be related to increased interest in/use of technology for recreation. During school hours mandatory PE could be a good way of encouraging consistent levels of activity across age groups.

(Year 6 (88%), Year 9 (81%), Year 11 (75%) of pupils responded that they 'agree' or 'strongly agree' that they enjoy taking part in exercise and sport).

Pupils who 'agree' or 'strongly agree' that they enjoy taking part in exercise and sport according to the 2021 HRBQ



Challenges to being physically active in school can include:

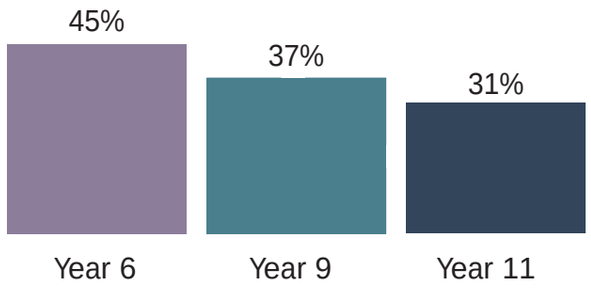
- Cost, however low-cost alternatives can be introduced and enjoyed (8).
- Gender Specific Barriers - often adolescent girls report experiencing social pressures, fear of forced competition and negative experiences relating to school PE kit and changing facilities (17, 18).
- Traffic levels and lack of safe cycle or scooter storage can deter parents and children from taking up active travel opportunities (17).

In Northumberland, the 2021 HRBQ highlighted that:

- 45% of Year 6 pupils and 31% of Year 11 pupils stated that they were physically active for an hour or more on at least 5 days in the last 7 days (14). This, despite the majority (88% in Year 6, 75% in Year 11) saying they enjoy taking part in exercise and sport (14).
- One in ten Year 11 pupils reported high levels of inactivity, saying they were physically active for less than one hour on any one day in the 7 days before the survey (14).

(Year 6 (45%), Year 9 (37%), Year 11 (31%) of pupils responded that they were physically active for an hour or more on at least 5 days in the 7 days before the survey)

Pupils who were physically active ≥ 1 hour on at least 5 out of the 7 days preceding the survey according to the 2021 HRBQ



Opportunities to build on

In Northumberland we have:

- A good PE support offer available to schools through Active Northumberland schools games programme which encourages an extra 30 minutes of daily activity.
- Targeted support with SEND schools in South East Northumberland through the Ability2Play programme https://www.facebook.com/Ability2Play
- As set out in the 'Healthy weight in our communities' chapter work is underway around the broader cycling infrastructure (LCWIPS) and road safety and traffic management infrastructures around schools (School Streets) which will increase availability of opportunities for walking and cycling for all. In addition, work is being taken forward by the Go Smarter team which will support young people to have increased confidence and access to equipment to enable them to take up these opportunities.
- Health Trainers from Northumberland County Council Public Health Service continue to work in partnership with Alnwick Garden to develop the fun and engaging Roots and Shoots programme. This offers unique education and gardening sessions for school children to increase their knowledge around healthy eating and the importance of having an active lifestyle.

Case studies

Holiday Activities and Food Programme (HAF)

Northumberland County Council and Leading Link have been running holiday activities for four years and this year is being supported with funding from the Department for Education (DfE).

School holidays can be difficult for some families because of increased costs and reduced incomes. Children from lower-income families may have less access to fun activities and experience 'unhealthy holidays' because of changes in their diet and physical activity.

HAF supports families across Northumberland so that children can:

- eat healthily and be active over the school holidays
- take part in a wide variety of engaging and enriching activities which help build resilience and support their wellbeing and educational attainment
- be safe and are not socially isolated
- have a greater knowledge of health and nutrition
- be more engaged with school and other local services.

The programme has received national recognition and is co-designed with community partners, young leaders, children and their families.

Children and young people who would benefit are invited to attend through their school and other partners. Most children who attend are eligible for free school meals and around 14% of children who participate in HAF have additional needs.

Work is underway with DfE to develop a programme for secondary school aged pupils linked to life skills and employment.

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Healthy weight in healthcare

Overweight and obesity are linked to many long-term health conditions. People who are overweight or obese are more likely to be seen in General Practice or admitted to hospital.

In 2019/20 there were over 6,300 obesity related admissions in Northumberland (1). This was an increase of 39% from 2018/19 (2). Although admissions linked to obesity remain low in under 24 year olds, we know that children who are overweight and obese are more at risk of becoming overweight or obese adults.

Healthcare settings are ideally placed to start the conversation about healthy weight: brief and opportunistic conversations in primary care can significantly encourage people to manage weight (3). Although healthcare staff (particularly in primary care) are well-placed to start discussions with families around a child's healthy weight there are several key barriers that can make this difficult.

Barriers

Lack of recognition by the parent and/or healthcare staff that a child is overweight. Almost a third of parents (31%) underestimated their child's BMI when asked to identify their child's weight status (4). Parents were far more likely to identify their child as overweight when they fell at the extreme ends of the spectrum.

Increased prevalence of overweight / obesity in society is changing our perception of what a 'healthy weight' body type looks like and making these conditions harder to recognise (5). This is exacerbated by the fact that media portrayals of obesity often feature examples of severe obesity that do not reflect the appearance of most individuals who are overweight or obese (6).

Personal weight stigma is a term used to describe the negative perceptions associated with overweight or obesity (7). These are often portrayed in the media as controllable conditions and people with them are seen as lazy, greedy and lacking in self-discipline (8, 9). This type of portrayal can reinforce the idea that overweight and obesity are an entirely personal responsibility and can increase dislike for people with these conditions (8).

In Northumberland over a quarter of Year 9 children (aged 13-14) say they have been picked on or bullied for their size or weight (10). Weight stigma can have a significant impact on children's mental health and wellbeing including increasing their risk of depression (11, 12) and even suicidal thoughts (13). Weight stigma has even been linked to poorer physical health as teenagers who experience it are more likely to develop type 2 diabetes and cardiovascular disease (which can lead to heart attacks and strokes) in later life (14).

Professional weight stigma can occur when healthcare professionals approach overweight and obesity in a negative way. A recent study which pulled data from social media comments (totalling over 5,500) highlighted that people who identified as living with overweight or obesity felt their quality of care was significantly lower, particularly around effective treatment and emotional support (15).

Local referral pathways

NICE Guidelines focus on discussing lifestyle changes with recommended regular and long-term follow-up, as well as referral to a weight management programme if it is available (16). There are currently no specific weight management services for children in Northumberland. At a North-East regional level there is a lot of variability. There is a local pathway for children with health issues related to their weight (see Appendix 1). However, this is designed to manage these health conditions and does not provide continued support for achieving a healthy weight. Development of referral pathways is further complicated by the fact that there is no clear evidence that one type of intervention is effective. Instead interventions need to be tailored to the child and their family and integrated across all the systems where they live and play (17).

What is available to health care providers?

Earlier recognition of unhealthy weight

There is ongoing work to try and increase parents' accuracy of recognising their child's weight status (18). Researchers from Newcastle University have developed the MapMe Tool which shows where children fall on a healthy weight scale (19).

Brief intervention and making every contact count

Opportunities to discuss weight status include:

- The Personal Child Health Record (PCHR) or 'red book'. This is a national standard health and development record given to parents / carers. It includes a record of key growth and development information including growth charts that identify when a child is straying outside of a healthy weight for their age / height.
- Immunisation appointments
- In Reception (~5 years) following receipt of NCMP letter.
- In Year 6 (10-11 years) following receipt of NCMP letter.

Good uptake of the NCMP has been identified as key by many areas with stable or declining childhood obesity rates (20). Northumberland has excellent engagement with over 95% of schools involved in the NCMP every year. This is consistently higher than the England average (21). However, while engagement with the NCMP is strong, the data collected is rarely shared directly with General Practices. Better data sharing may help to identify families who need support earlier and help to situate that support within their community networks.

Talking about weight

Talking to a young person or parent about healthy weight often remains a difficult conversation. A national toolkit encourages weighing children within a consultation to help parents or carers recognise when their child is overweight or obese, as well as reinforcing to families that there is a wide range of healthy weight for children depending on age, height and sex (22). Focussing on brief interventions is key, as lack of time was quoted by UK healthcare professionals as one of the most common reasons they did not discuss weight in an appointment (23).

Prevention and early help interventions

The HENRY (Health, Exercise and Nutrition for the Really Young) programme works with whole families to encourage them to create healthier home environments (24). Both healthcare staff and families can request a place on a HENRY course. There are no criteria other than that the family wish to attend, the child is under 12 years of age, the child/family are registered with the Family Hub /Children's Centre and live in Northumberland.

Further details of the HENRY programme can be found in the 'Healthy weight in the home' section. Registration forms are available online at: https://form.northumberland.gov.uk/form/auto/childrens_centres_reg

Found out more at https://www.henry.org.uk/content/animated-explainer-video

Specific weight management for overweight / obese children

A regional healthcare needs assessment is underway and due to report early 2023 on recommendations for childhood weight management pathways in the North East.

In Northumberland the Northumbria Healthcare NHS Foundation Trust will take referrals for children who have co-morbidities associated with their overweight/obese status (see Appendix 1).

Case study

A school asked the Northumberland 0-19 school nursing team to help a young person who was struggling with anxiety and was more frequently avoiding going to school.

The school nurse completed a holistic Health Needs Assessment with the young person and their parents. They found that the young person had issues with their body image and was being bullied. Their parents were worried that their child was overweight and that they also struggled to be healthy.

By working together with the family, a referral was made for the parent to the Northumberland Health Trainer service to help them with their nutrition and health behaviours. The young person was supported on a one-to-one basis to help them explore their emotional wellbeing and to adopt healthier behaviours. They were put off physical activity because they lacked confidence but after discussion, they agreed to be referred to YouthLink Peer support (Children North East charity). YouthLink provided mentoring support which helped build the young person's self-confidence and resulted in them participating in several physical activities in the community.

This highlights the complicated relationship between healthy weight, activity and emotional wellbeing and the impact on education and family life. Having a family approach was important, with the young person and their parent felt both feeling that they had made positive changes.

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Recommendations

As this report has shown, healthy weight in children is a complex issue. To be healthy, young people and their families need access to affordable, healthy food, and opportunities to be physically active, through play, leisure and safe active travel. All children deserve the same chance to thrive and be healthy, no matter where they live in Northumberland. This report highlights the impact of inequalities within Northumberland and the additional challenges faced by many of our families. Not everyone has the same access to things which children need to be healthy or can afford healthy food which makes achieving and maintaining a healthy weight an even bigger challenge.

These recommendations aim to firmly place children's healthy weight as a top priority in Northumberland. We can build on the inspiring work already happening in our communities, some of which is shared in this report, and take specific steps to help Northumberland's children and young people live the happy and healthy lives they deserve.

Reframing our approach

Achieving and maintaining a healthy weight can be challenging. Overweight and obesity have historically been considered through the lens of individual responsibility; the result of insufficient knowledge or willpower to make healthy choices. This could not be further from the truth for the vast majority so we need to look more widely at the ways in which our homes, communities, schools and healthcare systems can better support children to live healthy, active lives. The floodgates of less healthy options are wide open and overwhelming young people and families. By working upstream, with families and communities, we can filter the flow of less healthy options and direct our focus and energy on opening new channels for health.

Communication and sharing good practice

There are fantastic initiatives across Northumberland which are helping to ensure children are leading happier and healthier lives. Sharing good practice will help us to pool knowledge and experience, to celebrate and build on successes and extend these across Northumberland. Good communication will make it clearer what support is available to help families achieve and maintain healthy weight and how to access this support.

Collaboration

Developing a healthy weight alliance: A complex issue like healthy weight needs a collaborative system-wide approach. We have an opportunity to build on the good work already being done across Northumberland by establishing a healthy weight alliance, bringing communities and agencies together to build on these strengths and ensure we have a coordinated approach. This would provide governance and accountability, reporting to the Health and Wellbeing Board and overseeing the Healthy Weight Declaration, helping to take us further and faster on our journey of change.

Strategy development and implementation

We need to prioritise childhood healthy weight as a core priority in new and existing strategies to ensure there are concrete steps in place to improve the opportunities for Northumberland's children to stay healthy. We know that some families do not have the same access to healthy options as others, and inequalities must be at the heart of system-wide plans. We need to ensure that the following address this ambition:

- Northumberland Food Insecurity plan (new): Understand and support the food economy within Northumberland to identify how communities and the council can work together to ensure that all families have improved and reliable access to affordable, healthy food. Work together to increase the prominence of healthy foods to make healthier choices easier.
- Northumberland Physical Activity Plan (refresh): Understand how children and families move around in Northumberland. Make it easier for families to access green spaces, make spaces where children play feel safer and more appealing. Make it easier, safer and more enjoyable to use active travel so that walking and cycling become the first choice for everyday journeys (such as to and from school).

Using data and local insights

We need to make better use of NCMP data to inform plans and ensure work is prioritised and targeted to those areas where it is most needed. We need to fully involve communities to understand what is important to them when it comes to children's healthy weight and how they are best supported in this. By building our understanding we can develop action plans around the following key questions:

1. What can communities do for themselves?
2. What can communities do with some help?
3. What can't communities do that agencies / institutions can?

Appendix 1

Northumberland referral pathway to secondary care for children with underlying health issues associated with obesity

Referral criteria:
A child with:

- A BMI >98th centile. (For children under 2 years, professional judgment should be used when assessing height and weight percentiles)

AND at least one of the following:

- Short relative to weight i.e. height less than the 50th Centile
- Obese from preschool
- Suggestion of an associated genetic cause:
  a. Learning difficulties b. Visual problems c. Unusual facial appearance
- Family history (parent or sibling aged under 40 at onset) of: a. Diabetes Mellitus (type 2) b. Ischaemic heart disease c. Hypertension
- Evidence of endocrinological co-morbidity
  - a. Menstrual disturbances (secondary amenorrhoea)
  - b. Hyperandrogenism (hirsutism)
  - c. Acanthosis nigricans (pigmentation in groins and axillae)
- Evidence of respiratory co-morbidity
- Evidence of orthopaedic co-morbidity
- Extreme obesity (BMI significantly above the 99.6th centile).

Referral process

A clinical assessment to discuss possible underlying clinical causes of the obesity may also be required and should be completed by a registered health practitioner and a referral made to specialist support if required.

GPs/Practice Nurses, Public Health Nurses, Dieticians, Health Visitors and School Nurses can complete this assessment. Plotting the child's BMI on the growth chart with the parent is good practice and can help the parent identify that there is a weight issue, and that action/change is required. If a child or young person's BMI is equal or greater than the 98th centile on the UK 90 BMI chart, and the child also has secondary co-morbidities referral to a local paediatrician should be made.

North Tyneside and Northumberland paediatricians will take referrals from health professionals who are concerned and require a more advanced clinical assessment for the family. This referral is usually in the form of a letter. The paediatrician will see the family for assessment and investigation. This paediatric assessment may lead to referral to secondary care dietetic support or referral to tertiary care where more specialist support is required e.g., genetic or endocrine problems.

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