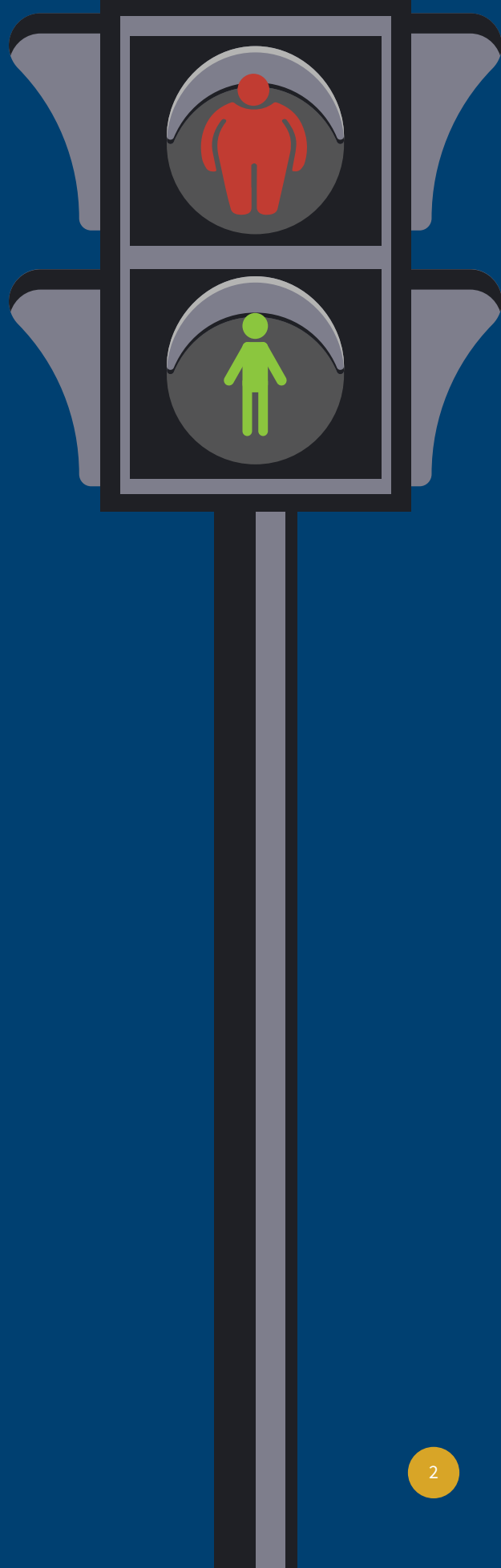


Childhood Healthy Weight

The road to a better future



Isle of Man Director of Public Health
Annual Report 2018



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Introduction

My first annual report included a range of health and outcome indicators to give an overview of health and well-being in the Isle of Man. This was intended to help us all understand the key challenges we face in improving health and to encourage more joint working across government, the third sector and beyond.

This year, I want to look in more depth at one of our greatest public health challenges: childhood overweight and obesity. A quarter of children on island are overweight or obese at age 5, as are two thirds of adults. Our figures are in line with those from other high income countries and are similar to those for England. The Isle of Man is part of the 'obesity epidemic'.

Obesity starts early in life and is often related to family habits around diet and physical activity. Habits established early on are difficult to break, which is why a focus on reducing childhood overweight is so important.

The historic 'treatment' based approach has had no impact on the rising tide of obesity. We need to move beyond an approach based only on trying to change the behaviour of individuals or families to one that addresses the environment which all too often encourages poor diet and sedentary behaviour.



I hope this report will be a starting point for developing a shared strategy to tackle childhood overweight and obesity across government, the third sector and our communities.

Dr Henrietta Ewart, Isle of Man Director of Public Health





A quarter of children on island are overweight or obese at age 5, as are two thirds of adults.



Body Mass Index (BMI) categories

Body Mass Index (BMI) is a measure that indicates whether people are of healthy weight for their height. It also takes into account age and gender for children (aged 2 to 18)⁽ⁱ⁾

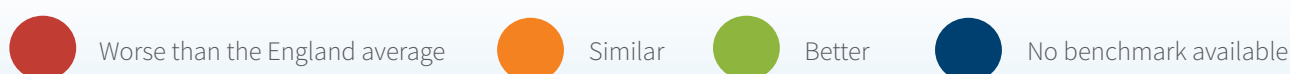
Within this report we have used the following categories of BMI:

		For under 18s this refers to children who's BMI is:	For most adults this refers to a BMI of:
Underweight		Below the 2 nd centile	Below 18.5
Healthy weight		Between the 2 nd and 85 th centile	18.5 to 24.9
Overweight		Between the 85 th and 95 th centile	25 to 29.9
Obese		Above the 95 th centile	30 and over

It may be difficult to tell from appearance whether a child is becoming overweight or is obese. Measurement is, therefore, important and needs to be supported by health professionals with skills in discussing the sensitive issue of weight with parents.

Key

Throughout this report certain data items have been colour coded to indicate a benchmark comparison against the England average:



Summary of the population

The tables below show how many children and young people there are on the Isle of Man and where they live.

Age	0-4	5-9	10-14	15-19	Total
Male	2,186	2,436	2,346	2,506	9,474
Female	1,958	2,297	2,123	2,283	8,661
Total	4,144	4,733	4,469	4,789	18,135

18,135 aged 0-19 (21.8% of the overall population)
 4,144 aged 0-4 (5% of the overall population)⁽ⁱⁱⁱ⁾

Area of Residence/Age	0-4	5-9	10-14	15-19	Total
Towns					
Douglas	1,455	1,544	1,480	1,590	6,069
Ramsey	364	407	373	422	1,566
Peel	332	344	277	259	1,212
Castletown	168	195	176	225	764
Villages					
Port Erin	146	171	163	162	642
Port St Mary	66	79	94	117	356
Laxey	72	90	90	106	358
Onchan	438	517	470	487	1,912
Parishes					
Andreas	51	88	74	81	294
Arbory	106	106	87	88	387
Ballaugh	45	43	52	60	200
Braddan	253	260	212	226	951
Bride	7	11	18	23	59
German	40	42	60	58	200
Jurby	43	56	49	54	202
Lezayre	45	63	79	71	258
Lonan	79	96	86	93	354
Malew	85	91	113	126	415
Marown	90	171	150	137	548
Maughold	37	57	54	61	209
Michael	65	108	96	87	356
Patrick	77	93	110	112	392
Rushen	52	67	67	94	280
Santon	28	34	39	50	151
Total	4,144	4,733	4,469	4,789	18,135

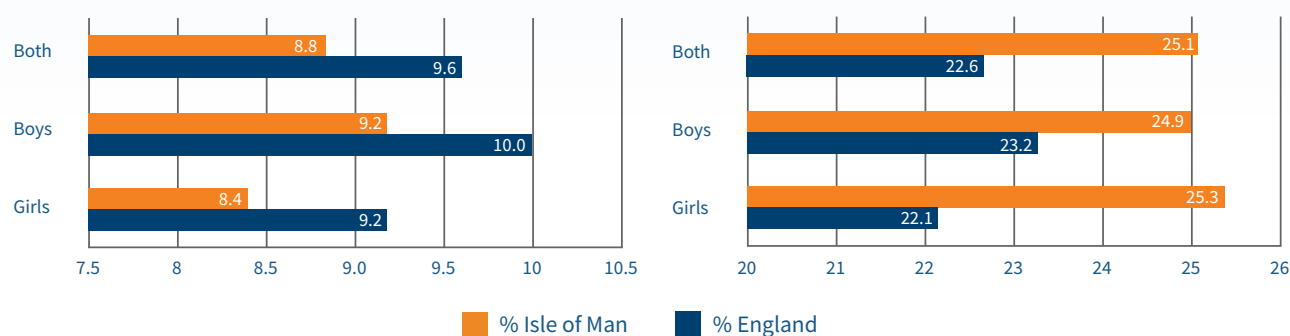
Health and weight of our children

25.1% of 5 year olds are overweight or obese ⁽ⁱⁱⁱ⁾

8.8% of 5 year olds are obese

Our obesity rate is lower than the England average. However, our combined total of overweight and obesity is higher than the England average.

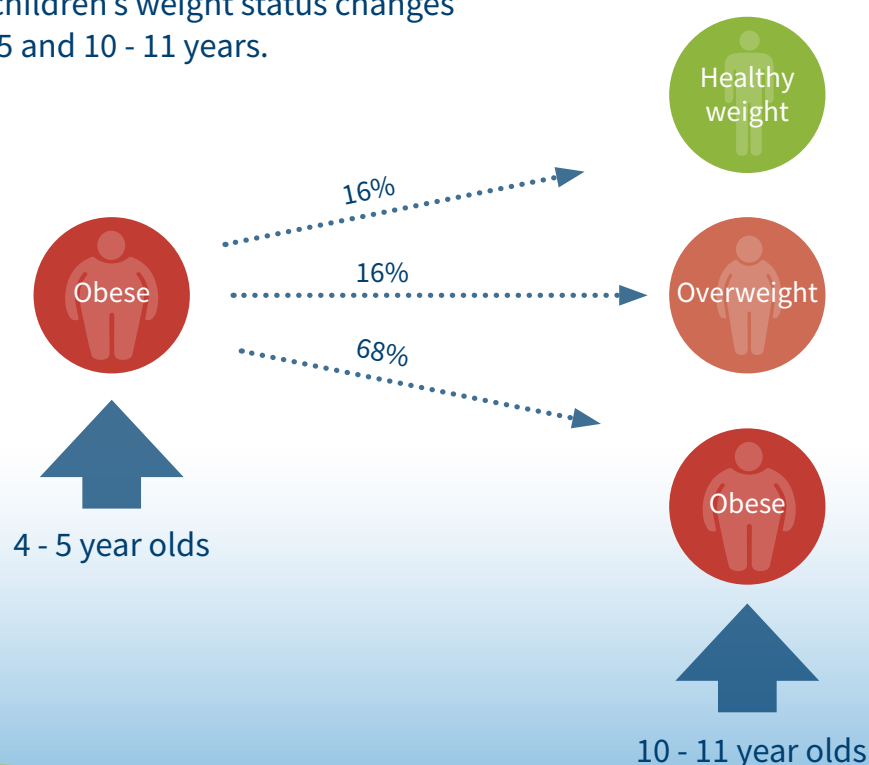
Children in reception year classed as obese: **Children in reception year classed as overweight and obese (combined total):**



In England, by the time children reach year 6 (ages 10-11, last year at primary school), the rate of overweight and obesity has risen to 34.2% ^(iv). The Isle of Man has no measurement programme for this age group, but if we assume similar rate increases we would expect more than one third of our school children to be overweight when they leave primary school.

A recent study by Public Health England tracked how children's weight changed between reception year (age 4-5) and year 6 (age 10-11). Eighty-four percent of children, who were obese at age 5, were obese or overweight at age 11. Only 16% had achieved a normal weight. ^[1] This demonstrates how important it is for us to get environment and habits right for children during the early years.

How obese children's weight status changes between 4 - 5 and 10 - 11 years.



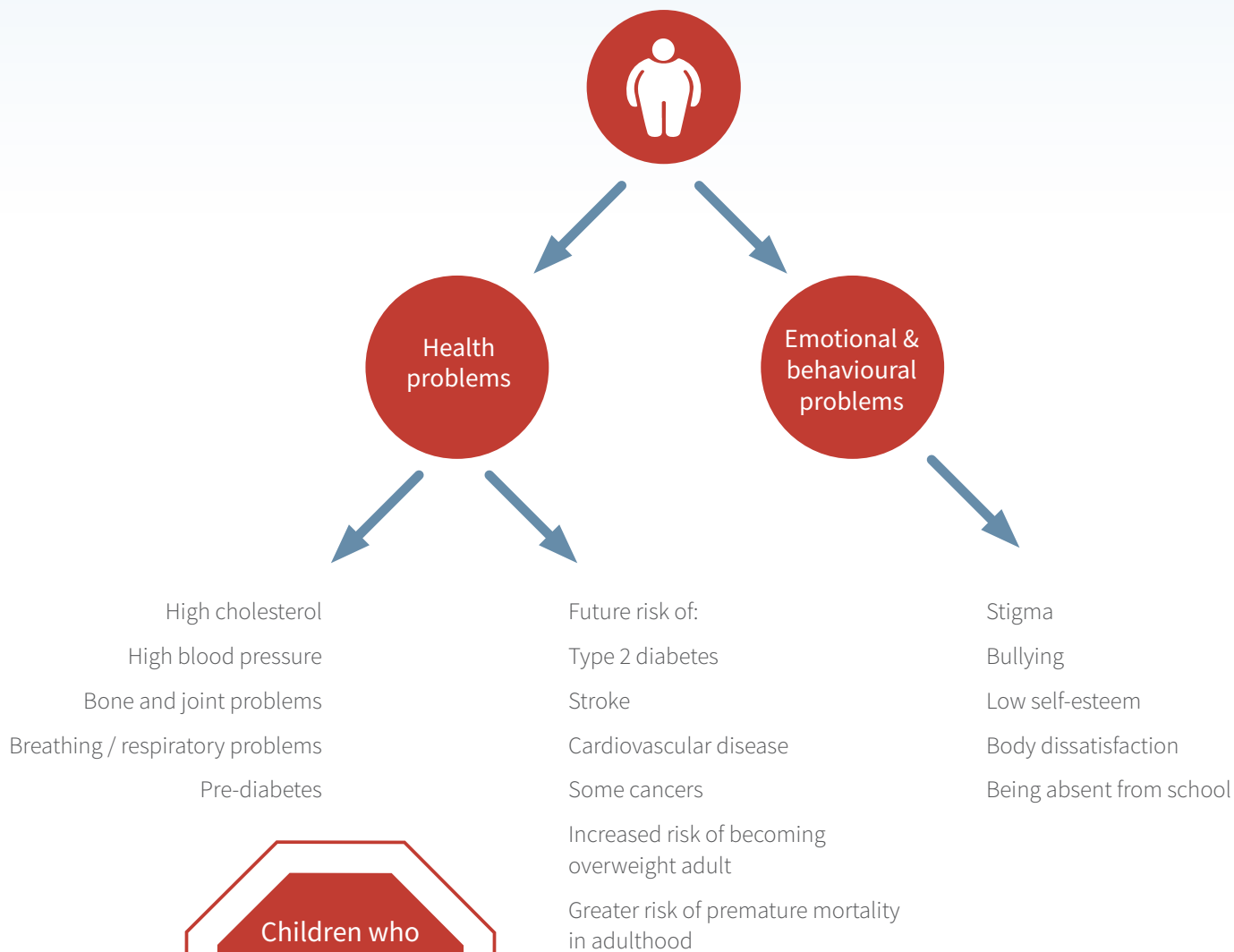
⁽ⁱⁱⁱ⁾ For school entry year 2016/17

^(iv) Source: Public Health England, Public Health Outcomes Framework

Consequences of obesity in children

The weight of our children matters. Children who are obese can have significant and life-long difficulties.

Impacts of childhood obesity



What drives our children's weight?

We know that obesity starts early in life and is often the result of a cumulative build-up of risk factors:



Early years and schools

Only
70.5%
of mothers breastfeed
within 48 hours of
delivery



Pre-pregnancy and early years (0 - 4 years)

Maternal lifestyle and weight

Factors influencing a child's weight begin even before birth. Children of women who were obese before and during their pregnancy are more likely to become obese themselves as adults.^[2]

Mothers should receive clear, consistent advice about healthy lifestyle, diet and physical activity in pregnancy.^[3]

Mothers who are overweight or obese tend to have bigger babies. High birth-weight is linked to long term risk of overweight in childhood and adulthood.

Babies who weigh more than 4000g (9 lb) at birth have a long term risk of overweight or obesity that is double that of smaller babies.^[4]

Smoking in pregnancy, as well as having other harmful effects, doubles the risk of children being obese at school entry.^[5]

Breastfeeding

Breastfeeding for the first 3 months of a baby's life significantly reduces the risk of being obese by the time they are a teenager.^[6]

The longer a baby is breastfed the more the risk of obesity is reduced – for every month there is a 4% reduction in risk of later life obesity and this protective factor is effective for breastfeeding up to 9 months.^[7]

Breastfeeding rates on the island are significantly worse than the England average:

- Breastfeeding initiation is **70%**
- Breastfeeding (wholly or partially) at six to eight weeks old is **41%**

Breastfeeding should be supported by health professionals, and also by community based schemes, such as peer support by La Leche league, and breastfeeding friendly outlets such as cafes, shops and hospitals. Workplaces and nurseries can also support mothers who are returning to work by giving them the time and facilities to breastfeed or to express and store breast milk.

Health benefits from breastfeeding include:

- Reduced risk of respiratory infections, gastroenteritis, ear infections, allergic disease and Sudden Infant Death Syndrome (SIDS)
- Better neurological development
- Reduced risk of tooth decay and cardiovascular disease in later life
- Enhancing emotional attachment between mother and baby
- Reduced risk of breast cancer, ovarian cancer and hip fracture from reduced bone density for the mother
- Faster return to pre-pregnancy weight^[8]

21.8%
of mothers on the island are obese at the time of their booking appointment^(v)



^(v) The booking appointment is the first official antenatal visit to the midwife at around 8-10 weeks gestation

Physical activity

Physical activity has an important role in the prevention of overweight and obesity in children, as well as having wider impacts on development, health and well-being. Children should be encouraged to be physically active from birth. Once they can walk unaided it is recommended that they are active for 3 hours in total throughout the day.^[9] This can be as simple as skipping to the park, playing a chasing game or using a climbing frame.

Habits track from childhood to adulthood. Building physical activity into daily routines is one of the best and easiest ways for children to think of it as normal, making it more likely that they will carry on in later life. Physical activity can only help the achievement and maintenance of healthy weight in conjunction with a healthy diet in which calories consumed balance with calories expended. Physical activity alone is not an intervention for weight loss. As the saying goes, 'you cannot outrun a bad diet'.

Local activity levels in children aged 11 to 15 are available from the Isle of Man Youth Survey.^[10] The 2015 survey showed that only 30% of children were achieving the recommended levels of exercise.

Boys were more likely to reach the recommended level than girls (36% compared to 27%). We do not have data for activity levels in younger children (aged 5 to 10).^[vii]

Studies from Ireland and the UK show that dropout rates from organised sports rise as young people leave full-time education.^[11, 12, 13] Sport has an important contribution to make to levels of physical activity and should be promoted for all age groups, but many people will never actively participate in organised sports and others will do so only for a part of their life course. From a population perspective, it is the activity that we build into our everyday lives that will make the most difference.

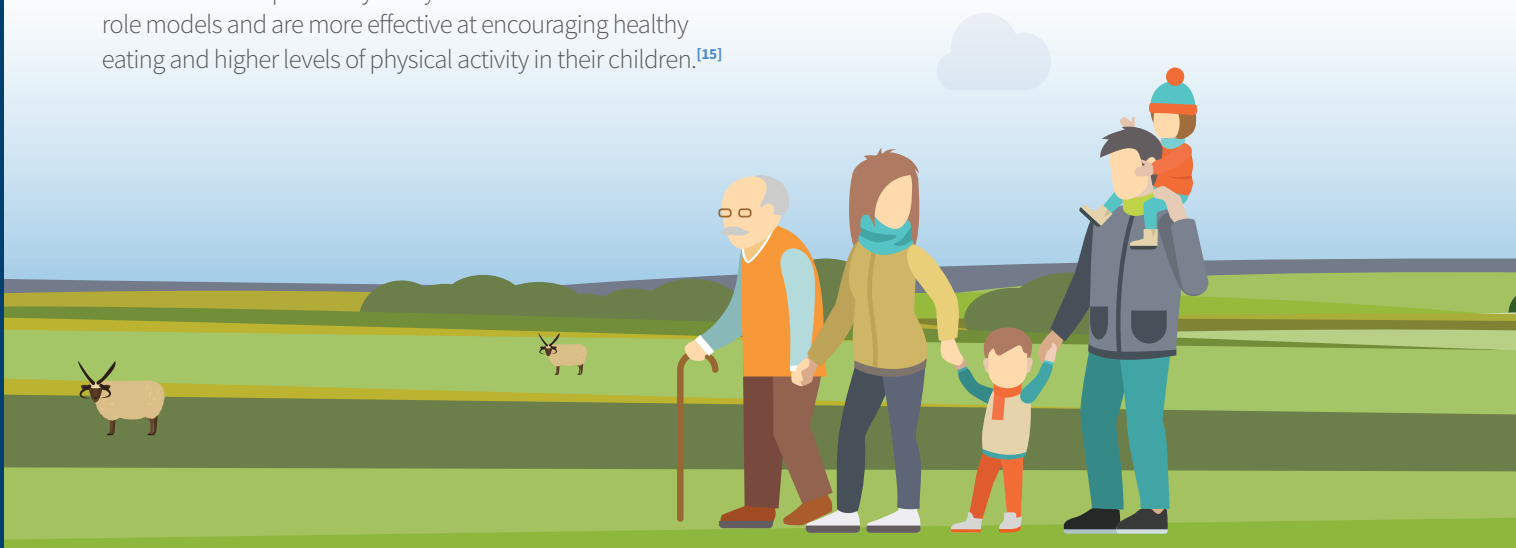
We need to consider including questions about children's health (including physical activity) in our routine health and lifestyle surveys.

Importance of the family in promoting health

Parents are major influencers of their children's eating habits and activity levels.^[14]

Parents who adopt healthy lifestyles themselves are better role models and are more effective at encouraging healthy eating and higher levels of physical activity in their children.^[15]

Eating together as a family for at least one meal a day can support healthy eating, for example, greater consumption of fruit and vegetables.^[16]



^(vii) The Health Survey for England, 2015 included questions about levels of physical activity in children. However, the question design was different to that in the Isle of Man Youth Survey and therefore benchmarking against the England data is not possible.

Pre-school and school years

Children spend a significant proportion of their lives in the school environment and this provides an opportunity for schools to have a positive impact on weight through food and physical activity policy. This is important from nursery through to secondary schools and college.

When children start reception year there are already signs of an unhealthy lifestyle with 25.1% of 4-5 years olds being overweight or obese.

We currently have no measurements of children's weights in Year 6, and therefore no measure of the changing prevalence of overweight across childhood. Extension of our Childhood Measurement Programme to include measurement at Year 6, would improve our understanding of trends in overweight and obesity, inform future planning and provide an additional opportunity to discuss weight and lifestyle with parents and children.

Building physical activity into daily routines is the easiest way for children to benefit from physical exercise. Walking or cycling to school improves the health of children and those who travel actively are more likely to hit the physical activity targets.^[17] Simple schemes like painting colourful markings on the playground have been shown to increase activity levels during play.^[18] Offering activities such as the

'Daily Mile' in primary schools and the related 'Fit for Life' for children over 11 can increase activity levels, particularly for those who are not drawn to more traditional school sports.^[19]

Children in secondary school are more independent; they are allowed to make choices for themselves and can therefore choose how to travel to school, the extent to which they participate in sports or other physical activity opportunities, what they eat, what they drink and who they spend their time with.

The environment for secondary school pupils, and factors such as peer pressure, often make the healthy choice a difficult and unpopular one. The environment in their wider communities is also often not conducive to healthy lifestyle choices.

When children start reception year there are already signs of an unhealthy lifestyle with

25.1%

of 4-5 years olds being overweight or obese.

Case study

Food outlets near secondary schools on island^(viii)

The Public Health Directorate recently undertook a project to look at proximity of food outlets to secondary schools on the island.

Children spend large amounts of time at school and as a result a significant proportion of a child's diet is consumed within school hours.

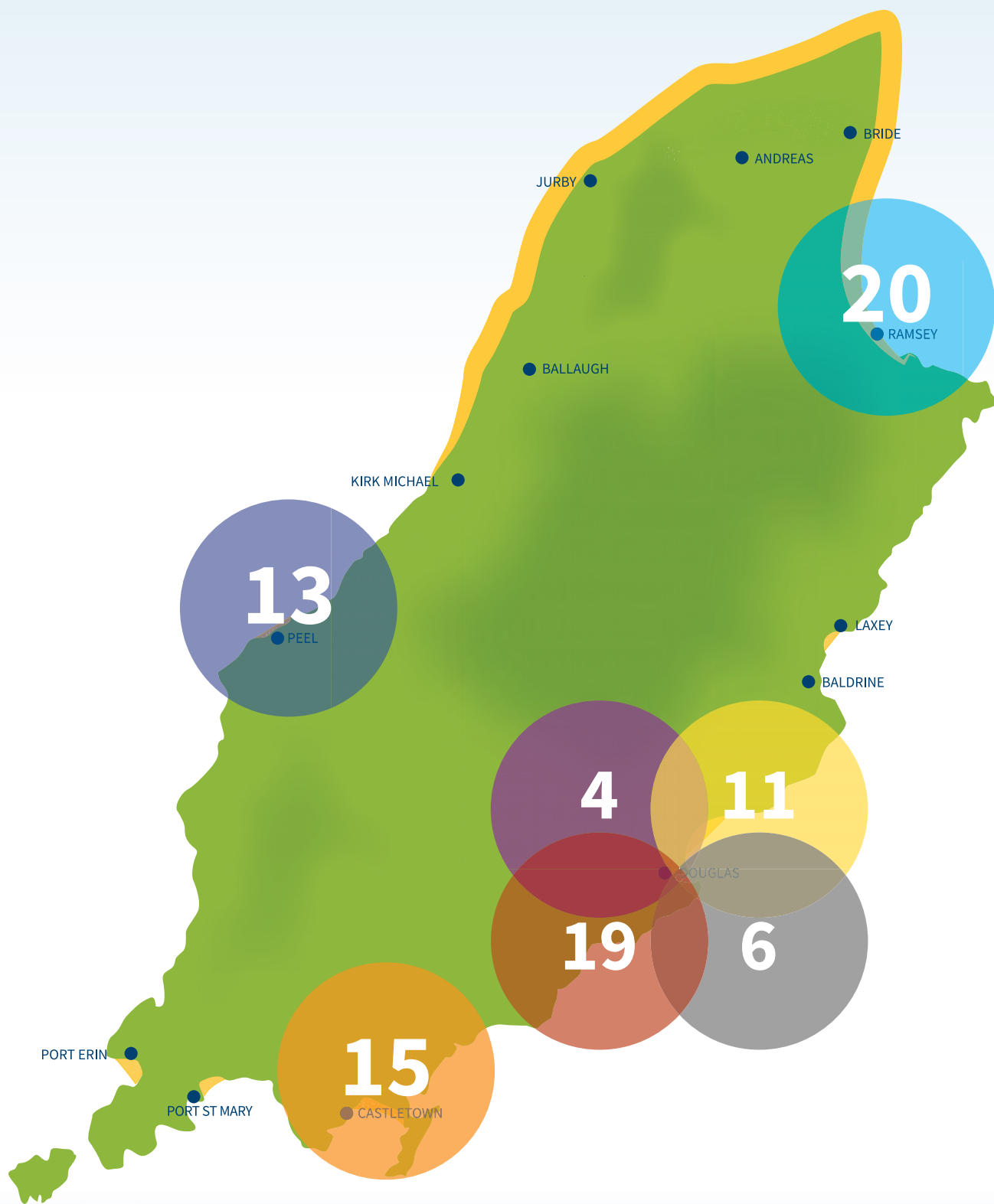
Many children leave school premises during lunch time and there are also opportunities to purchase food on the way to and from school. Within a 10 minute walk of schools students can get to takeaways, corner shops, café/diners and petrol stations. Although some of these food outlets offer healthier options, high calorie, energy-dense choices are prominent and these are often large in portion size and high in sugar, salt or fat. There is variation across the island schools and college regarding canteen options, vending machine content and water dispenser availability.

None of the schools or colleges surveyed had a healthy eating policy in place. The high density of food outlets offering high calorie, energy dense food options close to schools and lack of food policy in schools may be contributing to rates of overweight and obesity in young people.

The diagram on the right shows the number of fast food outlets within a radius of 800m from each of the Island's main schools.

-  Queen Elizabeth II
-  University College Isle of Man
-  St Ninian's Upper
-  St Ninian's Lower
-  Ballakermeen
-  Castle Rushen
-  Ramsey Grammar





Communities and a healthy environment

Changing the food environment

It is difficult to make healthy choices when we are surrounded by food high in fat, salt and sugar which is easily and cheaply available. This means we are consuming foods of little or no nutritional value (e.g. sweets, cakes, biscuits and sugary drinks) far more often than we should. These foods contribute significantly to excess calories consumed and hence to overweight and obesity.

The food and drink industry have a vital contribution to make to improving diet. This can be done by reformulating processed foods to decrease the amount of fat, salt and sugar contained; by improving 'front of pack' labelling to make calorie and food group content clearer; reducing portion sizes; and changing the approach to promotions and marketing. These can be achieved by voluntary agreement with industry or, where this fails, through legislation (as has been done through the Soft Drinks Industry Levy).^(ix)

On island, there is limited opportunity for action in these areas as much of our food is imported and we are exposed to advertising campaigns through media produced in the UK. However, we do have an opportunity to work with food retailers and food outlets to encourage promotion of healthier foods and healthier catering. Government departments have a role to play in improving the quality of the food offer in schools, hospital and other venues.^[20,21] (x) We could also consider whether action is needed to control the density of fast food outlets, particularly near schools.

^(ix) The Soft Drinks Industry Levy (SDIL) has been introduced in the UK and will be effective in the Isle of Man by April 2019. This means that producers of drinks are being regulated via a tax on the sugar in drinks, the higher the sugar level, the higher the product is taxed

^(x) Both the English and Scottish Governments have developed schemes to encourage food outlets to promote healthier options. See references 20 and 21.

Living more active lives

As well as creating conditions for healthier weight and diet, we should be enabling personal change, allowing everyone to start, live and age well.

We want the Isle of Man's future generations to start life with a healthy weight; grow at a healthy rate; and have a positive attitude to, and experience of, food.

Evidence shows that physical activity is one of the best things we can do to improve our health, whether we are overweight or not.^[22] It doesn't matter how people get active it just matters that they do. Improving the environment around them, making physical activity easy and a normal part of their everyday lives, combined with action on diet and behaviour change will all work to reduce our obesity rate and improve health across the island.

Being outdoors is great for physical and mental health and well-being, making people feel good, helping them live longer and take part in their community. Our island's natural environment provides abundant opportunities for outdoor leisure activities.

The Isle of Man Social Attitudes Survey^[23] responses are encouraging for residents' use of the natural environment:

- 79% use footpaths
- 71% use beaches
- 61% use glens
- 53% use parks
- 48% use woodlands

Walking is still the most popular activity.

Children are more physically active when outdoors.^[24] Making the outdoors environment attractive, safe and accessible to children will play a significant role in influencing how active they and their families are.

For school age children the journey to school is the most routine one so promotion of making this journey 'active' is important. The environment around schools has a role to play in making it an easy choice to be an active journey. The National Institute for Health and Clinical Excellence (NICE) recommends planning and maintenance of streets and roads around schools to prioritise active travel by, for example, widening pavements, having cycle lanes, restricting and slowing motorised traffic and creating safe routes to schools.^[18]

Encouraging short journeys to be made by walking or cycling can contribute significantly to children achieving the minimum recommended 60 minutes of activity every day, and benefit other family members if they all do it together.

We need to think about the built environment and the role that planning has to play in this. The planning process can help create healthy living environments that make physical activity easy to do, encouraging community activities and social interaction.



Treatment

Children who are overweight or obese can lose weight and maintain the weight loss. There is strong evidence to show that involving whole families, rather than just the child who is overweight/obese, in a multi-component, lifestyle weight management programme is the most effective approach. Family involvement improves outcomes for both younger children and teenagers, although teenagers may prefer to attend separate sessions from their parents or carers.^[25]

The Department of Health and Social Care (DHSC) does not currently fund weight management programmes for children of any age, although a pilot project offering access to the DHSC funded adult weight management programme for teenagers is currently running. Consideration should be given to introducing a family-based multi-component weight management programme in line with evidence based quality standards for children and young people as part of the weight management pathways on island.

Whilst weight management programmes have a contribution to make to reducing overweight and obesity, they cannot function in isolation. Early identification of children at risk of overweight/obesity is essential.

Midwives, health visitors and school nurses have a key role to play in this, along with GPs and other health and care professionals.

However, many staff may lack the skills and confidence to raise sensitive issues about children's weight and encourage lifestyle change, with or without signposting to further information and/or a weight management programme. Skills to support behavioural change can be taught using approaches such as 'Making Every Contact Count' and introducing this training, and ensuring it is embedded in practice and delivers improved outcomes, should be considered.^[26]

Motivational techniques to encourage behaviour change and family based weight management programmes can lead to weight loss. However, these approaches rely on changing individual and family behaviour. Without addressing the wider environmental determinants of overweight/obesity to make these changes easy changes, the impact of these programmes will always be limited.

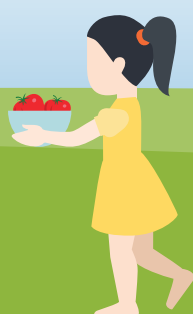


Food poverty and inequalities

Families on low incomes face particular challenges in following a healthy diet and maintaining healthy weights. Overweight and obesity levels are higher in low income families than high income ones. In England, over the past decade, rates of overweight and obesity have begun to fall in high income families whilst they continue to rise in low income ones.^[27] Data from the 2016 Household Survey for England showed that 20.7% of children in households in the lowest income group were obese compared with only 7.8% in the highest.^[28] We do not currently collect comparable statistics here and we need to consider doing so.

A major barrier to healthy eating for low income families is the price gap between 'more healthy' and 'less healthy' foodstuffs. A 2012 study based on data from the UK National Diet and Nutrition Survey, found that the average cost of 'less healthy' food (defined as calorie dense and high in fat and sugar) was £2.50 per 1,000 calories, compared to an average cost of £7.49 per 1,000 calories for 'more healthy' items (including whole grains, fruit, vegetables, low-fat dairy products and sources of lean protein).^[29]

Over recent years, the public has become more aware of lifestyle factors and changes to individual behaviour that can help with achieving and maintaining a healthy weight. However, those with higher incomes often find it easier to make these changes in their own and their families' lives. For this reason, offering interventions such as healthy eating or broader lifestyle management programmes for families on low incomes, while important, has limited impact. Families worrying about how to pay for rent and utilities struggle to find time to plan and cook healthy meals, or organise physical activities. If we want to reduce the obesity problem, we need to understand how to make the healthy choices the easy choices for low income families.



What next?

This report has presented an overview of overweight/obesity in children and young people, what we know about factors that predispose to overweight/obesity, and we have considered the evidence for changes to the environment that are protective and the evidence for interventions to treat it. We are aware that there are examples of good practice across the island. It has been beyond the scope of this report to identify and report on all of these. In any event, the key point is that isolated areas of good practice are not having, and cannot have, a significant impact on levels of childhood overweight and obesity at population level.

It is very clear that there is no magic wand, either to prevent or treat obesity. What is needed is sustained, co-ordinated action across all sectors of government and our communities. I hope that this report will open debate and lead to agreement on clear objectives for action on diet, activity and healthy weight for children in the Isle of Man – and agreement on the capacity and resources needed to deliver measurable change.

There are two broad areas for action:

1. Transforming the environment to make healthy choices about food and physical activity the easy choices; and
2. Encouraging and enabling people to live healthier lives – including supporting behaviour change for both prevention and management of overweight and obesity.

Specific actions we should consider under these two areas are outlined on the next page.

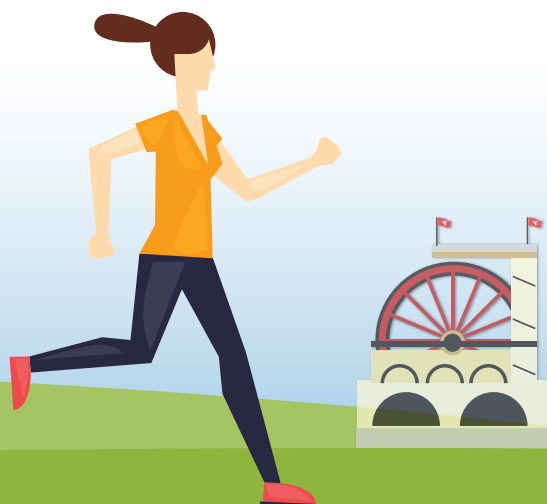
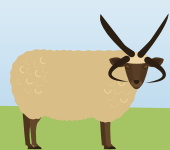


Transforming the environment

- Work with food retailers to encourage the promotion and availability of affordable healthy food and beverages and discourage the promotion of unhealthy options (e.g. through two for one offers). This could include the development of specific award or recognition schemes with retailers.
- Work with outlets offering food for consumption outside the home (restaurants, cafes and fast food outlets) to encourage healthier food offers and portion control. Again, this could include establishing schemes such as 'Healthier Catering Awards' or the 'healthyliving award' which have achieved some success in England and Scotland respectively.^[20, 21]
- Develop minimum nutritional standards for school meals and the Department of Health and Social Care food offered to patients, visitors and staff.
- Review the food and beverage offered to staff and/or the public across all government sites, including cafes, restaurants and vending machines.
- Determine how we can best support nurseries, primary and secondary schools and the college to promote healthy weight through healthy food and physical activity.
- Ensure that the development and implementation of active travel policies for schools (identified as a priority in the Active Travel Strategy) are taken forward.
- Consider how we can use the approach to planning to create environments that encourage active travel and other opportunities for physical activity.
- Consider whether we should use planning processes to limit the number of fast food outlets, particularly near schools.

Encouraging and enabling people to live healthier lives

- Ensure ante-natal and maternity services are giving clear, consistent and evidence based advice and support regarding diet and physical activity in pregnancy, and breastfeeding.
- Ensure staff working with families, children and young people (particularly, but not limited to, midwives, health visitors and school nurses) have training to enable them to raise issues around healthy weight and promote behaviour change. Monitoring to support staff and ensure consistent delivery will be required.
- Consider extending the Child Measurement Programme to include routine measurement in Year 6 (age 10 to 11).
- Consider commissioning multi-component family based weight management programmes for children at risk of or with established obesity, in line with evidence based quality standards.^[30]
- Consider working with communities to understand what making healthy choices the easy choices means for them and how they can contribute to achieving this.



Areas where we need further information

We currently have inadequate information to understand the impact that food poverty and inequalities may be having on levels of overweight and obesity here. We should consider undertaking a specific project to understand the problems and explore options for addressing them.

We need to know more about patterns of activity in younger children and to explore the reasons for the gender gap in activity levels between older girls and boys.

Finally, whatever approaches we agree to take forward must have a robust monitoring and evaluation framework. As I said in my last report, we need to be clear about what we expect to achieve from any action and agree from the start how we are going to measure it.

Update from the 2017 report

Last year's report presented an overview of health and well-being in the Isle of Man, using local data – the first time this had been done. The intention was to raise awareness of the factors impacting on health and well-being, to help identify key areas for improvement and provide a baseline against which to measure change. We have used the report to discuss with colleagues across government, the third sector, businesses and communities the importance of considering health and well-being in all our work.

Whilst the feedback on the report has been positive, we now need to go further in committing to specific actions to address the key challenges. This year's report has moved from a general overview to a deeper exploration of what is arguably our most pressing public health priority – childhood overweight and obesity. This year I have included some specific suggestions for actions to address this priority. I will report on progress in next year's report.



Acknowledgements

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