Diet and Nutrition

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Executive summary

Introduction

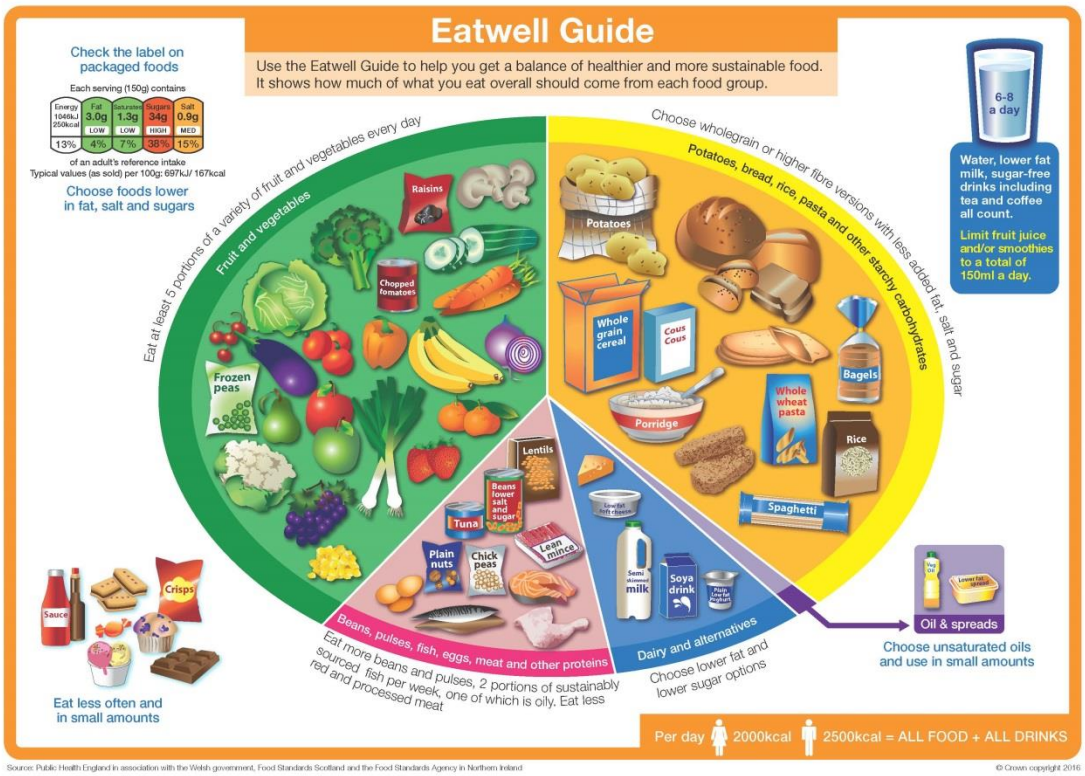
Good nutrition has a key role to play in both the prevention and management of diet-related diseases such as cardiovascular disease (CVD), cancer, diabetes and obesity (World Health Organisation, 2003). A child's diet during the early years has an impact on their growth and development. Diet is linked to the incidence of many common childhood conditions such as iron-deficiency anaemia, tooth decay and vitamin D deficiency (NICE 2015). Healthy eating during childhood and adolescence is vital as a means to ensure healthy growth and development and to set up a pattern of positive eating habits in order to reduce the risk of poor health in adult life.

Dietary intake and eating behaviours in England are related to socioeconomic position. People from lower socioeconomic groups tend to have diets that are less healthy than people from higher socioeconomic groups (Public Health England 2013). A poor diet is also associated with malnutrition and micronutrient deficiencies. Other effects include negative impacts on mental health, oral health and academic performance (British Medical Association 2015).

Unhealthy diets, along with physical inactivity, have contributed to the growth of obesity in England. The combination of unhealthy diets, physical inactivity, and high BMI is the biggest overall contributor to disability adjusted life years in England. Declines in mortality have not been matched by similar declines in morbidity, resulting in people living longer with diseases. (Newton et al 2015). The Department of Health has estimated that if diets matched nutritional guidelines, around 70 000 deaths in the UK could be prevented each year and that the health benefits (in terms of quality adjusted life years (QALYs)) would be as high as £20 billion each year (Cabinet Office 2010).

The promotion of evidence-based healthy eating messages is fundamental. Alongside this, it is necessary to ensure that guidelines concerning a nutritionally adequate diet are implemented to help prevent diet-related deficiencies and malnutrition in vulnerable infants, children and adults.

The Eatwell Guide is the current recommended pictorial representation of a balanced diet (Public Health England, 2016).



The Eatwell guide makes healthy eating easier to understand by giving a visual representation of the types and proportions of foods that should be eaten to provide a well-balanced, healthy diet. This includes snacks as well as meals. The Eatwell guide is intended as a guide to the overall balance of the diet over a day or a week rather than for any specific meal. Children under the age of two have different nutritional requirements so require tailored guidelines but by the age of five children should be eating a diet consistent with general population recommendations. This was reviewed in 2016.

Current nutritional guidelines:

Food Group/ Nutrient	Recommendations	Population Group	Reason for Recommendation on intake	Intake (national data)	Meets Recommendation
Total Carbohydrates	At least 50% of total energy (also includes the new maximum sugar recommendation)	Ages 2 years and above*	Source of energy	48% in 19-64 years olds 47.2% in adults aged 65 and over	Yes
Of which free sugars**	No more than 5% total energy • 19g or 5 sugar cubes for children aged 4 to 6. • 24g or 6 sugar cubes for children aged 7 to 10 • 30g or 7 sugar cubes for 11 years and over	Ages 2 years and above	Higher intake associated with greater risk of • Tooth decay • Type 2 diabetes • Energy intake resulting in weight gain and increasing BMI	Mean Intake • 4-10 year olds: 14.7% • 11-18 year olds: 15.4% • Adults aged 19-64: 11.5%	No
Fat	No more than 35% total energy	All	To reduce the risk of CVD and reduce the energy density of diets	Mean intake no more than 35% in all age/sex groups except Men aged 65 and over: 36%	Yes in all age/sex groups except men aged 65 and over
Of which saturated fat	No more than 11% total energy	All	To reduce the risk of CVD and to reduce the energy density of diets	Mean intake 12.6 % (19 to 64 years)	No
Trans fatty acids	No more than 2% food energy		To reduce the risk of CVD	Mean intake in all age/sex group: 0.6 – 0.7%	Yes
Salt	No more than 6g for adults (children need less)	Adults	To reduce the risk of hypertension and CVD	8.1g/day in adults aged 19-64 7.2g/day in older adults	No

Other nutrients/foods					
Fibre* **	• Adolescents aged 16 to 18 years and adults about 30g/day • 11 to 16 years 25 g/day • 5 to 11 years 20g/day • 2 to 5 years 15g/day	Ages 2 years and above	To have positive effects on • Blood lipids • Colorectal function	Mean intake in adults: 13.7 – 13.9g**** per day	No
Fruit and vegetables	At least 5 portions of a variety of fruit and vegetables a day	For aged 11 years and over	Reduces the risk of some cancers, CVD and other chronic conditions	Mean portion intake per day: • 4.1 in 19 to 64 years Old • 4.6 in older adults (30% of 19-64 years and 41% of older adults met recommendation) • 3.0 in 11-18 years old boys • 2.7 in 11-18 years old girls	No
Oily Fish	At least 1 portion per week (140g)	Adults	Cardio protective diet	Mean intake of 53 g (19 to 64 years) and 90g (Older adults) per week	No
Red and processed meat	Should not exceed 70g per day	Adults	Excess linked to cancer	Mean consumption 71g per day in 19-64 years olds(86g in men & 56g in women) 63g per day in adults aged 65 and over (75g in men & 54g in women)	Not in men

*No quantitative recommendations are made for children aged under 2 years, due to the absence of information, but from about six months of age, gradual diversification of the diet to provide increasing amounts of whole grains, pulses, fruits and vegetables is encouraged

**replaces the term NEMS and includes all monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups and unsweetened fruit juices

***Dietary fibre should be defined as all carbohydrates that are neither digested nor absorbed in the small intestine and have a degree of polymerisation of three or more monomeric units, plus lignin The previous dietary reference value of 18g/day of non-starch polysaccharides, defined by the Englyst method, equates to about 23-24 g/day of dietary fibre if analysed using these AOAC methods, thus the new recommendation represents an increase from this current value

****As defined using Englyst method

This chapter considers the need for a healthy, nutritionally balanced diet. Related chapters include the Pregnancy, Early years and Obesity chapters.

Unmet need and gaps

- There is an increasing prevalence of obesity and diabetes in the local population
- There is a need to ensure that Nottingham is a city that promotes healthier eating in a broad and structured way taking every opportunity to tackle unhealthy diets as effectively as possible
- The local authority has an important role in considering planning applications for takeaways, both in terms of density and location.
- The PHE Sugar report identifies key recommendations to reduce the sugar intake of the population. There is a need to consider implementation at local level.
- The implications of legislation tackling high sugar and/or high fat diets needs considering. The government have introduced a sugar levy in the 2016 budget.
- There is a need for interventions involving diet in young children to be targeted at high risk groups as part of obesity prevention strategies. Such interventions should be based on available evidence and should be rigorously evaluated for effectiveness.
- Nationally, the health of most population groups would benefit from improved diet. However, groups with the highest risk of poor health due to diet include: Children aged 18 years and under, young adults aged 19-24 years, smokers, people in lower socio-economic groups, adults aged 65 years and over living in institutions and black and minority ethnic groups.
- Further work is required to develop approaches to improve maternal and childhood nutrition.
- On average, low income households and those in the most deprived wards consume less fruit and vegetables, salads, wholemeal bread, wholegrain and high fibre cereals and oily fish and consume more white bread, full fat milk, table sugar and processed meat products
- Further work is required to support culturally appropriate interventions aimed at improving diet and nutrition, including reducing salt intake.
- Accredited training in diet and health is not routinely delivered to many of those who have opportunities to influence others' food choices.
- There is evidence of Vitamin D deficiency and the re-emergence of rickets in some population groups
- In addition to the promotion of healthy eating, there is a need to consider nutritional adequacy of the diet and prevention of malnutrition.

Recommendations for consideration by commissioners

- Ensure that evidence based messages and the "Eatwell guide" are used to promote consistent messages concerning a nutritionally adequate diet, healthy eating and prevention of obesity, CVD and diabetes.
- Interventions to improve diet should prioritise low income groups who have been shown to have the poorest diet and the highest incidence of obesity
- Take forward the recommendations in the PHE Sugar reduction report in a strategic and coordinated way
- Continue to develop interventions that improve the nutritional knowledge and food preparation skills of priority groups
- Develop an implementation plan around obesity prevention in young children, ensuring integrated working across Children's Centres, Schools and other community settings

- Develop a better understanding of local beliefs and attitudes to food and nutrition in cultural groups at higher risk of diet related health conditions and use this to influence commissioning of interventions, to maximise behaviour change
- Raise awareness of lifestyle interventions at a lower BMI for priority BME groups to prevent Type 2 diabetes & stroke
- Influence diet in early years in particular schools through education and implementing recommended national & local council food policy.

- To work with take-away and other food outlets to improve the nutritional quality of food served.
- Use existing powers to regulate the opening times and number of take-away and other food outlets serving foods high in fat, sugar and salt in given areas and in particular near schools.
- Ensure all food procured by, and provided for, people working in this part of the public sector is in line with dietary recommendations made in the 'Eatwell guide'.
- Increased promotion of Healthy Start including vitamin supplements to both professionals and parents, particularly to those in target groups and those who do not access Children's Centres.
- Further partnership working to increase school meal uptake, whilst also evaluating and further developing initiatives to improve nutritional standards of packed lunches.
- To target 16 – 24 year olds as there are no specific schemes in place at present