5. HEALTHY LIFESTYLES

5.1 Healthy Eating

This section describes the principles and recommendations for a healthy diet, the impact of healthy eating on health, and what is known about the diet of people in Buckinghamshire.

Balance is the key to a healthy diet. This means eating a wide variety of foods in the proportions found in the Eatwell Plate¹, as well as consuming the amount of food and drink which enables an individual to achieve and maintain a healthy body weight (see sections 5.2 and 5.3 for more details on healthy weight). Healthy eating is based on the following principles²:

- Meals which are based on starchy foods such as potatoes, bread, rice and pasta, choosing wholegrain varieties where possible.
- Eating plenty of fibre-rich foods, such as oats, beans, peas, lentils, grains, seeds, fruit and vegetables, wholegrain bread, and brown rice and pasta.
- Eating at least five portions of a variety of fruit and vegetables each day, in place of foods higher in fat and calories.
- Eating a lower-fat diet, avoid increasing calorie intake.
- Eating as little as possible of fried foods, drinks and confectionery high in added sugars, and other food and drinks high in fat and sugar.
- Eating breakfast.
- Watching the portion size of meals and snacks.
- For adults, minimising the calories taken in from alcohol.

While these broad recommendations apply at all ages, the details of a healthy diet may be different at different life stages. For example, a child will need smaller portions, and older frail adults who have a smaller appetite, but high nutritional needs, may need to boost their calorie intake with nutrient dense food which provides both calories and nutritional quality in smaller volumes.

5.1.1 The impact of nutrition on health

A variety of research has estimated the impact of poor diet on many causes of illhealth, for example:

• Eating a healthy, balanced diet is known to reduce the risk of developing a range of chronic conditions such as heart disease and stroke, diabetes, high blood pressure, some cancers and some forms of dementia. Poor diet is estimated to account for a third of all cases of cancer, and a further third of cases of cardiovascular disease³.

• Obesity increases the risk of developing Type II diabetes, cardiovascular disease and some cancers².

Research has also shown that eating a healthy diet can prevent ill-health and deaths, for example, it is estimated that:

- 70,000 early deaths in the UK could be avoided each year if UK diets matched nutritional guidelines. The health benefits of meeting these guidelines are estimated to reach almost £20 billion a year⁴.
- 4,000 deaths in the UK would be prevented by sticking to dietary recommendations on fibre, around 7,000 from watching fat intake and 7,500 by reducing salt⁵.

Evidence also suggests that:

- Eating at least 5 portions of fruit and vegetables a day could reduce the risk of deaths from diseases such as heart disease, stroke and cancer by up to 20%⁶.
- Each increase of one portion of fruit or vegetables a day can lower the risk of coronary heart disease by 4% and the risk of stroke by 6%⁷.
- Good nutrition can support people in their educational attainment and learning through improved concentration⁸.
- Activities to encourage healthy eating, such as lunch clubs and community meals, can reduce social isolation, promoting mental health and wellbeing and community cohesion.
- Being conscious of the food we eat and the amount we need can improve the local environment through reducing food waste.

5.1.2 Information on dietary behaviour in England

Information on national dietary behaviour comes from the National Diet and Nutrition Surveys (NDNS). This is an annual programme, carried out by the Food Standards Agency, which surveys a national sample of 1000 adults aged 19 to 64 years and aims to provide a comprehensive, cross-sectional picture of the dietary habits and nutritional status of the population of the UK. It is not robust at a local or regional level. Data is collected using an unweighed four day diary, blood and urine samples, and information on dietary habit collected through face to face interviews.

The most recent national data from the NDNS (2014) suggests that diets do not meet current guidelines (table 1). Average intakes of saturated fat, sugar and salt are above recommendations while intakes of fruit and vegetables and fibre are below recommendations. Calorie intake is difficult to measure, but there is evidence that intake exceeds recommendations⁹. Average intakes of added sugar exceed the recommended in all age groups, but most notably for school children and teenagers¹⁰.

Table 1	Recommended and ac	tual consumption	of major food	groups for UK
adult po	pulation			

Food Groups	Adult Population recommended average amount (expressed as % of food energy)	Average actual consumption (NDNS)
Saturated fat	11	12.6
Total fat	Not ≥ 35	35
Non milk extrinsic sugars (NMES)	Not ≥ 11*	12%
Fibre (Non starch polysaccharides NSP) (g/day)	18**	13.8
Salt (g/day)	6	8.1g ¹¹
Fruit and vegetable	≥5 portions a day	4.1
Oily fish	140g per week	53g
Red and Processed meat	Not >70g per day	71g (men 86g, women 56g)

*Recommendation and definition recently changed to 5% free sugars.

**Recommendation recently changed to 30 g/day

Source: National Diet and Nutrition Survey: 201412

Consumption of fruits and vegetables is below recommended levels and the purchase of fruit and vegetables has declined in recent years. Only 28.7% of the England population consume the recommended five portions of fruits and vegetables per day, although the proportion of the adult Buckinghamshire population who do so is slightly higher at 30.8%¹³. For both men and women, the proportion nationally consuming 5 or more portions per day increased from 2001 (when measurements started), reaching a peak in 2006 at around 28% for men and 32% for women, but falling again since then. There was a similar trend for children, with an increase in the proportion consuming five or more portions per day from 2005, and prevalence fluctuated around 19-21% for boys and 20-22% for girls between 2006 and 2010. Since then the prevalence has dropped to 2005 levels.

5.1.3. Information relevant to dietary behaviour of the Buckinghamshire population

There are limited local data concerning the diets of people in Buckinghamshire. However, data are available on a number of indicators of dietary behaviour, including breastfeeding (see JSNA section 6.7), levels of tooth decay in children (see JSNA section 6.15), and excess weight in children and adults (see JSNA sections 5.2 and 5.3). This is summarised in the following paragraphs with additional data not shown in the other sections of the JSNA shown in Table 2.

5.1.3.1 Early Years

In 2014/15, 76.3% of mothers in Buckinghamshire initiated breastfeeding, significantly higher than England but lower than the South East average. Breastfeeding initiation was significantly higher than England in all areas of Buckinghamshire, except Aylesbury Vale, where only 72.3% of mothers initiated breastfeeding, significantly lower than the England average.

Data on tooth decay among children also show that while the Buckinghamshire average is better than England, there are wide variations within the county, with the highest levels of tooth decay among both 3 year olds and 5 year olds being found in Aylesbury Vale. Tooth decay is also more common among more deprived population groups. It should be noted that while tooth decay can give an indication about a child's diet, particularly sugar consumption, it is also dependent on their oral hygiene practices.

Fewer children aged 4 to 5 years in Buckinghamshire are overweight or obese than the national or South East averages, but again there are significant variations within Buckinghamshire. There is a clear relationship between obesity in 4 to 5 year olds and socioeconomic deprivation, with 6% of those in the least deprived quintile of the population being obese, compared with 10% in the most deprived quintile.

5.1.3.2 School age children

Regarding school age children, the proportion of 10 to 11 year olds in Buckinghamshire with excess weight is lower than in England or the South East, but as over 1 in 4 in this age group locally are overweight or obese it is still a significant problem. As with younger children, the rate of obesity in the most deprived quintile (19%) is almost twice that in the least deprived quintile (10%). The most recent data on tooth decay in 12 year olds was from 2008/09 and found that 26.6% of this group in Buckinghamshire had decay experience, compared with 33.4% nationally¹⁴. A recent national survey of 15 year olds found that 59.5% of those in Buckinghamshire reported that they ate five or more portions of fruit and vegetables a day, compared with national and regional averages of 52.4% and 54.4% respectively (table 2)¹⁵.

5.1.3.3. Adults

It is estimated that over a quarter of a million adults (62.6% of the adult population) in Buckinghamshire population are overweight or obese, although this is a little below the national and regional averages¹⁶. There are no local data on tooth decay among adults, but national and regional estimates suggest that around 30% of the adult population are affected by tooth decay (table 2)¹⁷. The proportion of adults in Buckinghamshire who reported consuming five or more portions of fruit and vegetables a day is higher than the national average, but this is still only 30.8% of the population¹¹. It is also estimated that 10% of the national population over 65 are suffering from or at risk of undernutrition¹⁸.

Table 2 Indicators of dietary behaviour, school age children, adults and older people, Buckinghamshire, South East and England

	Buckinghamshire	South East	England
% 15 year olds eating 5 or more portions of fruit and vegetables a day 2014/15 ¹³ (self-reported data)	59.5	54.4	52.4
% adults overweight or obese, 2012-14	62.6	63.4	64.6
% adults with tooth decay 2009	Not available	29% (South Central)	30%
% adults consuming 5 a day 2011	30.8	Not available	28.7
estimated proportion of people aged over 65 who are suffering from or at risk of under-nutrition 2006	Not available	Not available	10%

Sources: What about Youth Survey 2014/ PHOF / PHE Dental Health Surveys / Local health data/ BAPEN

5.1.4 Healthy diet in different population groups

5.1.4.1 Age and gender

Consumption of fruit and vegetables varies with age among both adults and children. Children aged 11 to 12 and young adults aged 16 to 24 consume, on average, the lowest number of portions of fruit and vegetables and are least likely to meet the '5a-day' recommendation¹⁹.

5.1.4.2. Socioeconomic deprivation

There are some national level data on consumption of fruit and vegetables in different groups of the population. Higher consumption of fruit and vegetables is associated with higher income, and vice versa: 30% of men and 35% of women in the highest income quintile had consumed five or more portions on the previous day compared with only 19% of men and 23% of women in the lowest income quintile. The same pattern is seen in children. Both men and women living in London and other regions in the South consumed, on average, the highest number of portions.

There is a well-established association between tooth decay and deprivation, which is seen locally among children (see above), but also at regional and national levels among children and adults.

5.1.5 Geographical variations in diet

Data on fruit and vegetable consumption in the Districts in Buckinghamshire is reported in the 2013 Health Survey for England (based on modelled estimates for the local areas). The lowest proportions of five-a-day consumption were in Wycombe and Aylesbury, and the highest in Chiltern. However there is no statistically significant difference between areas (figure 1).



Figure 1 Estimated proportion of the population eating 5 or more portions of fruit and vegetables a day, Buckinghamshire Districts, 2013

Source: Health Survey for England 2013 (local health profiles data set)

Buckinghamshire had the fourth highest proportion of adults eating five or more portions of fruit and vegetables a day among its group of 16 CIPFA comparator Local Authorities in the 2013 Health Survey for England (figure 2). However the differences between almost all the Local Authorities were not statistically significant, although Buckinghamshire was slightly above the England average.



Figure 2 Proportion of adults consuming five or more portions of fruit and vegetables per day, Buckinghamshire and comparator Local Authorities, 2013

Source: Health Survey for England 2013

5.1.6 Horizon scanning

Following a Scientific Advisory Committee on Nutrition report on sugar in 2014, Public Health England in their 2015 response to this report 'From evidence into action'²⁰ outline the interventions that will be needed to encourage the population to meet the new guidelines - reducing sugar from 10% of energy intake to 5% and increasing fibre consumption from 18g per day to 30g. Interventions to support these healthier choices may include fiscal measures on sugar and local interventions such as a premium on sugary drinks in local retailers with the funds going to support education programmes.

5.1.7 Conclusions

Information from national surveys suggests that on average, people in this country eat more saturated fat, sugar and salt, and less fruit, vegetables and fibre than recommended for a healthy diet. There is limited information about the diet of people in Buckinghamshire, but what is available suggests that on average the diet of both adults and children in Buckinghamshire is better than in the country as a whole. However, there are still high levels of excess weight and dental caries both in adults and children, and lower than recommended levels of fruit and vegetable consumption and breastfeeding. There is also clear evidence of inequalities within Buckinghamshire, with more deprived populations having less healthy diets and higher levels of obesity and dental caries. There is strong evidence that an unhealthy diet leads to worse health outcomes, and clear scope for improvement to reduce the impact dietary patterns in Buckinghamshire will have on the current and future health of the population and on demand for healthcare. However, changing dietary behaviours and food culture is challenging and requires commitment from planners and providers of health, education, social care and voluntary services, and from investors, business and the government.

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