Food poverty, diet and health

This topic summary covers:

- The benefits of a healthy diet and the risks of not eating well
- What determines how healthily people eat
- The diet of residents in Brighton & Hove and who might eat less well
- What helps reduce barriers to eating well
- What might change in coming years

A poor diet is characterised by:

1. What determines diet?

   - Knowledge and skills
   - Personal or cultural reasons
   - Marketing / food industry

   What people eat

   - Affordability
   - Access to healthy food
   - Individual circumstances
   - Medical or health issues

   Poor diet causes more deaths globally than any other risk factor, including tobacco, high blood pressure, and other health risks...
1. Why this topic is important

What we eat matters to the health and quality of life of individuals across all life stages and to wider society and the environment. Poor diet can affect physical health, participation and quality of life, and mental wellbeing, and food systems can have environmental impacts.

Starting well

Breastfeeding, and the introduction of a wide variety of solid foods, provides the best opportunity for normal growth and the prevention of illness in early childhood.

Food types and feeding practices are strongly correlated with tooth decay in children.

Too much, insufficient or poor quality food, can be associated with excess weight or under-nutrition, impacting on healthy development, behaviour and academic performance.

During adolescence (and at other ages), individuals’ approaches to eating/dieting, body image, etc. can have negative effects on health.

Living well

Poor diet, in parallel with lower levels of physical activity, is associated with diet-related illnesses such as diabetes, heart disease, stroke and some cancers. These affect different population groups unequally.

Diet-related illness is associated with a loss of mobility, restricted life style, lower independence, and loss of work days and income.

Diet can affect mental health, either directly or indirectly, through diet-related diseases.

Ageing well

Bone density loss and osteoporosis in the ageing population, higher in women, is connected to deficiencies in calcium and vitamin D.

Loss of appetite and thirst, which are common in older age, can lead to malnutrition, micronutrient deficiency, nutrition-related diseases and dehydration, and it is associated with frailty, falls, longer hospital stays and increased mortality.

The incidence and prevalence of coronary heart disease and diabetes are highest in the older population. This is linked to nutrition in earlier life (but can be reversed in some cases with a change of diet).

Poor nutrition in older age is associated with low socio-economic status, depression and loneliness (more common in men than women).

Society and the environment

Nutritional content of diet has been linked with behaviour, eg. aggression / violence and ADHD.

35% of domestic waste in Brighton & Hove in 2010 was food waste.

Food systems and what we eat impact on biodiversity, climate change, water and the availability of nutrients. How food is produced, distributed and consumed has both short and long term impacts.

Food systems rely on biodiversity which is in decline.

An estimated 15% of public expenditure health and social care in England in 2011/12 was associated with extra costs resulting from malnutrition.

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* Topic summaries are available on some health conditions related to diet on the Brighton & Hove Connected website.
2. Current picture: What we eat

**Eating 5-a-day in Brighton & Hove**

Two out of three local school children aged between 8 and 15 years reported eating 5 or more portions of fruit or vegetables yesterday\(^{11}\)

<table>
<thead>
<tr>
<th>% of school children eating 5-a-day</th>
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<tbody>
<tr>
<td>Brighton &amp; Hove 67%</td>
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Two out of three Brighton & Hove adult residents eat 5 or more portions of fruit or vegetables a day. This is a better result than the city’s benchmarked authorities, and also better than England as a whole\(^{12}\)

<table>
<thead>
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<th>% of adults eating 5-a-day</th>
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<tr>
<td>Brighton &amp; Hove 67%</td>
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<tr>
<td>England 57%</td>
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</table>

... and not enough fibre, vitamins and minerals.

**Did you know...?**

- 18% of 4-5 year olds, 26% of 10-11 year olds (2017/18), and 48% or adults are overweight or obese in Brighton & Hove (2016/17)
- In 2015 there were an estimated 16,600 city residents over 16 with diabetes

Although there is no equivalent local data, nationally too much sugar, red meat, salt and fat are consumed...

fingertips.phe.org.uk
2.1. Comparisons and inequalities

BABIES AND PRE-SCHOOL CHILDREN

Overall, our residents’ diets are off to a good start: The breastfeeding rate at 6-8 weeks is among the highest in the country: 70% in Brighton & Hove; 43% in England (2017/18). However, more deprived areas have the poorest rates nationally.\(^{13}\) This is also seen locally, with the lowest breastfeeding rates in 2017/18 in North Portslade (about 3 in 5) and Moulsecoomb (about 6 in 10)\(^{14}\).

Health visitors make at least five visits for every child up to the age of two. In 2018 following health visitor referrals:

- There were 399 attendees at Children’s Centres’ food banks.
- Staff at Children’s Centres provided 70 families with ‘healthy meals on a budget’ support and 74 families with ‘supporting my child to enjoy mealtimes’ interventions.

The map (right) shows the place of residence of families referred by health visitors in 2018 to food banks by ward. A similarity with the map (above) of children living in income deprivation is suggested.

641 children is 44% of those eligible. That’s nearly £2,000 a week or £103,000 a year that could have been spent in the local economy.

641 eligible local children (under 4 years old in families on benefits) are not receiving healthy start vouchers to buy milk, formula milk, fruit & veg and vitamins to help them eat healthily in their first years of life (Mar 2019)
% of Brighton & Hove school children saying they ate 5 or more portions of fruit or vegetables yesterday
(Safe and Well Schools Survey, 2018)

<table>
<thead>
<tr>
<th>School Year</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>65%</td>
<td>69%</td>
<td>71%</td>
<td>70%</td>
<td>67%</td>
<td>63%</td>
<td>58%</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>65%</td>
<td>69%</td>
<td>71%</td>
<td>70%</td>
<td>67%</td>
<td>63%</td>
<td>58%</td>
<td></td>
</tr>
</tbody>
</table>

The light grey dotted line shows the 2016 SAWSS results for comparison.

Poverty proofing the school day: Audits of all city schools took place between 2017 and 2019 to see how poverty might impact on children at school, including around food. Some findings are below:

Good ideas...
- Tasty/appealing food, allowing seconds and more salad/veg
- Feeding everyone who is hungry (delicately managing forgetting of money/lunch box)
- Allowing everyone (both those eating school meals and lunch boxes) to eat together. Involve staff at meal times.

Things to avoid...
- Portions can be too small for some/older children
- Food options don't always meet individuals' medical, cultural or other needs/preferences
- There is a need to avoid identifying recipients of free school meals on school trips.

School meals: All infant school pupils can receive free school meals, but in Jan 2019 the schools census found that nearly 1 in 4 infant pupils (23%) did not do so. Individual schools take-up rates ranged from 55% to 96%.

The school holidays and weekends present a challenge for any families depending financially on school meals to feed their children.

Eat up your veg!
A 2011 national report found that:

An audit of school dinner waste in two Brighton & Hove primary schools in 2017 found that the ten most wasted items in school meals were all vegetables.
Deprivation is an underlying theme which decreases the likelihood that people will eat healthily... and inequalities are clearly reflected in a number of diet-related health conditions.

Undernutrition and malnutrition

Community settings: It is estimated nationally that 93% of those affected by undernutrition are living in the community. Local research suggests many older people experience undernutrition for non-medical reasons such as loss of mobility, affecting shopping or cooking, loneliness, isolation, food poverty or life changes like bereavement or leaving hospital. A 2019 report showed few people receive information or advice on nutrition as part of their hospital discharge package.

Hospital patients: In Brighton & Hove in the 5 years ending 2017/18 there were: 18 people in total admitted to hospital with a recorded primary diagnosis of malnutrition, and an average of 41 admissions per year with a malnutrition diagnosis (primary or any diagnosis level).

However, many people admitted to hospital are undernourished without this being recorded as a diagnosis. National surveys found:

- 33% of everyone admitted to hospital locally in 2010 were undernourished
- Nationally, more people are admitted with undernutrition during winter months
- Older and younger adults were more at risk.

Reasons behind why hospital patients have malnutrition can include cancer, Alzheimer’s, liver disease, abdominal pain and psychiatric conditions.

The likelihood of eating 5-a-day increased with age between the 18-24 and 65-74 year age groups, but dropped in those aged 75 or over.

People living in the most deprived quintile had the lowest consumption of 5-a day (48%).

50% of households cannot afford to follow government recommendations set out in the NHS Eatwell Guide, according to the Food Foundation and healthy, nutrient-rich foods are 3 times more expensive than unhealthy ones.
2.2. Diet, income and costs – national data

A healthy diet rises with income.\textsuperscript{10}

The cost of food
Food and non-alcoholic beverage prices rose 9.3\% in real terms between 2008 and their peak in 2014, but there have been gradual price reductions from 2014 to 2018 (Consumer Price Index).

In 2016/17, averaged over all households, 10.5\% of money spent went on food and non-alcoholic drinks. For households with the 20\% lowest income, the equivalent figure was 14.3\%.\textsuperscript{24} Food is the largest item of household expenditure for low income households after housing, fuel and power costs.\textsuperscript{25}

The poorer half of UK households need to spend 28\% of their disposable income after housing costs to comply with the NHS Eatwell Guide\textsuperscript{22,23}

The richer half of UK households need to spend 12\% of their disposable income after housing costs to comply with the NHS Eatwell Guide\textsuperscript{22,23}

UK trends 2013-2016/17 in quantities (by weight) of food types purchased\textsuperscript{26,27}

MORE purchased since 2013

About the SAME

LESS purchased since 2013

- Eggs +5\%
- Biscuits +3\%
- Cereals +2\%
- Cheese +2\%

- Fruit 0\%; cakes 0\%;
- Confectionery +1\%;
- Veg, (excl. potatoes) +1\%;
- Meat products +1\%;
- Milk products -1\%;

- Meat -4\%;
- Fish -6\%;
- Potatoes -6\%;
- Bread -12\%;
- Sugar/preserves -15\%;
- Fats -18\%
2.3. Household food insecurity – local data

% of Brighton & Hove residents who agree and disagree they will have enough money in the next 12 months for basic living costs (eg food and fuel) after paying for housing

(City Tracker survey, 2014-2018)

Brighton & Hove Food Partnership has a standard set of questions for use in community settings to gather information about food poverty from people who access services or events:

<table>
<thead>
<tr>
<th>Surveys in community settings in Brighton &amp; Hove</th>
<th>Council housing tenants (STAR survey)</th>
<th>Other community settings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tend to eat less healthily because of affordability</td>
<td>39%</td>
<td>61%-62%</td>
</tr>
<tr>
<td>Skipped meals or reduced portion size in the last 2 months</td>
<td>21%</td>
<td>15%-76%</td>
</tr>
<tr>
<td>Disagree they have enough money to afford basic living costs</td>
<td>19%</td>
<td>56%-78%</td>
</tr>
</tbody>
</table>

* Brighton Unemployed Centre Families Project; Brighton Community Festival Group; Moneyworks; Amaze

“It’s getting worse, and some people simply do not receive enough benefits to live on, especially those with disabilities or unable to work.”

(Food bank survey participant, 2018)
2.4. Crisis food poverty and food banks

Food banks experienced an increase in demand in 2018 from the following groups:

- Universal Credit recipients
- People in work
- Disabled people
- People with mental health conditions
- Large families
- Single parents

as well as

- asylum seekers
- refugees
- vulnerably housed
- young people
- rough sleepers
- older people

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The number of food banks in the city that believe they can meet demands (2018):

- no. of food banks up from 13 to 17
- no. of food parcels up from 266 to 358
- average value of food parcels down from £23 to £18

Food banks are located in central areas as well as more peripheral neighbourhoods.

Local Discretionary Social Fund (LDSF) payments for food are up:

- £1,582 (2017/18)
- £480 (2013/14)

LDSF payments are for people on low income faced with an unforeseen emergency or financial crises. East Brighton, St Peter's & North Laine, and Queen's Park wards have the highest numbers of recipients.

Food bank data taken from Brighton & Hove Food Partnership food bank annual reports, 2014-18. Further information food banks is also available at https://bhfood.org.uk/resources/referring-to-a-food-bank/
2.5. **What else influences diet**

In addition to affordability, listed below are other factors which impact on what people eat. Some examples of local work which help support a healthy diet are included.

<table>
<thead>
<tr>
<th>Access to healthy foods</th>
<th>Type and number of food outlets and the ease/cost of accessing them</th>
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</thead>
<tbody>
<tr>
<td>In a 2017 survey, one school in the city was found to have 67 fast food and sweets shops within 400m, 24% more than in 2014(^{29}).</td>
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<tr>
<td>However, food accessibility is not just about shops. Brighton &amp; Hove has almost 40 sites with more than 1,000 allotment plots (offering concessions on rent for older people, people with disabilities and those on benefits); almost 80 community gardens for growing food; food buying groups and co-operatives, as well as 2 community fridges. (^{30})</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge and skills</th>
<th>Understanding what a healthy diet is and having skills and resource to buy/obtain and prepare nutritious food</th>
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</thead>
<tbody>
<tr>
<td>Organisations and charities in the city deliver some classes for basic cooking skills and cooking on a budget, and may be free or by donation.</td>
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<tr>
<td>Some schools in the city teach pupils how to grow food and how to cook, and give lessons about food and nutrition. Nutritional advice is provided by health trainers, commissioned services, and some charities can also give basic nutritional advice.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual circumstances</th>
<th>Time, convenience, habits, motivation; Peer, family, cultural, or religious influences</th>
</tr>
</thead>
<tbody>
<tr>
<td>National research shows that sharing meals correlates with consuming a wider range of fruit and veg. (^{31}) The city promotes shared meals through courses, festivals and other initiatives (eg. Chomp which helps address ‘holiday’ hunger during school holidays).</td>
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</tr>
<tr>
<td>Other research conducted locally showed that parents are the gatekeepers of household veg consumption. Their main motivation, especially when money is tight, is that food isn’t wasted so they tend to buy vegetables they are familiar with, even if they cost more. (^{32}) Tastes and habits learned in childhood are a key determinant of adult diets.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketing</th>
<th>Marketing techniques (including branding and promotions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing is a powerful – and successful – tool for selling particular products, and can be deployed to promote products which are detrimental to health.</td>
<td></td>
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<tr>
<td>However, marketing can also be used to support a healthy diet and has underpinned the city’s ‘Veg City’, and ‘Sugar Smart’ campaigns, and is integral to Brighton &amp; Hove striving to becoming the a ‘Gold Sustainable Food City’.</td>
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</table>

<table>
<thead>
<tr>
<th>Medical / health issues</th>
<th>Impact of health conditions on food choices and cooking ability (eg allergies; anorexia; dementia; and immobility)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are cookery courses open to people recovering from anorexia or dealing with allergies, while others focus on people with dementia or with learning disabilities. Some courses also cater for people with other disabilities or impairments.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal / cultural reasons</th>
<th>Diet can be influenced by personal motivations and taste preferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drivers behind food choice include: vegetarian/veganism (for cultural or environmental / animal welfare reasons) and environmental considerations (eg. food miles; food production; packaging).</td>
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</tbody>
</table>
Healthy Choice is a joint initiative between Brighton & Hove City Council and the Food Partnership to support food outlets to prepare, cook and serve food in a healthier way. Those that do can apply for an award and can access free nutrition advice, guidance and help to review menus.

Sugar Smart launched in 2015 with a debate to raise awareness of sugar intake and to ask whether and how to take action to reduce intake. The debate received significant media coverage with support from Jamie Oliver and there was a focus on the idea of a ‘sugar tax’.

The debate found high and recently increased levels of concern about dietary sugar intake. 82% of participants stated action should be taken to help residents reduce their intake, providing a clear mandate for local action.

In 2017, the council made a joint pledge with Brighton & Hove Food Partnership to become a pioneer Veg City. This commitment is part of the national Peas Please initiative led by the Food Foundation.

How do shoppers in the city choose the food they buy?

According to a local survey (2018; n=210), the kind of food bought by people in the city tends to be determined by their usual shopping habits, as well as inspiration, ideas and cooking skills.

When deciding how much to buy, the things that matter most are how much they have to spend, not wanting to waste food, and what’s on special offer.
3. **What works**

3.1. **Addressing barriers to eating well**

Targeted interventions can be effective, but may not transfer to other settings/populations or to different aspects of the diet.³

<table>
<thead>
<tr>
<th>Setting</th>
<th>Interventions</th>
</tr>
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<tbody>
<tr>
<td><strong>Supermarkets</strong></td>
<td>Most people buy their food in supermarkets, providing a setting for successful interventions to raise awareness and nutrition knowledge, although long term behaviour change is uncertain.</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td>Work in schools enables access to students, parents and staff. Healthier eating can be encouraged, eg through multimedia, internet, growing projects, cooking, as well as influencing the nutritional quality of what’s on offer in schools.</td>
</tr>
<tr>
<td><strong>Workplaces</strong></td>
<td>Increased availability and appeal of healthy food on offer in staff canteens and price promotions for healthier foods. Nutritional education coupled with workplace changes, particularly if interactive activities are employed and sustained.</td>
</tr>
<tr>
<td><strong>Primary care settings</strong></td>
<td>Behavioural counselling in conjunction with nutrition counselling seems most effective in such settings, although there are cost implications of training primary care professionals.</td>
</tr>
<tr>
<td><strong>Community settings</strong></td>
<td>Educational and behavioural strategies in community settings, which have been shown to increase fruit and vegetable intake and reduce consumption of fat and sugar.</td>
</tr>
</tbody>
</table>

3.2. **Tackling food poverty**

The Brighton & Hove Food Partnership Strategy Action Plan³³ summarises ways to tackle food poverty (see left). It contains a comprehensive plan towards the vision of “healthy, sustainable and fair food for all”.

**A need for evaluation:** Understanding which kinds of project are most effective in securing long-term improvement requires robust evaluation so that investment can be wisely targeted.
4. Future trends and developments

**OPPORTUNITIES**

Local:
- New focus on food security in Brighton & Hove & Greater Brighton Economic strategies
- Planning policies including revised guidance on incorporating food growing in developments
- Local partnership and vibrant community food sector

National legislation / policy:
- Government focus on calorie, sugar and salt reduction
- Parliamentary interest in the marketing of poor quality foods
- Consultation on household and business waste management.

International:
- Technology, eg lab meat, edible insects, hydroponics
- Drivers to meet UN Sustainable Development Goals, which include food security and food waste.

**RISKS**

- Further increase in cost of living, especially housing costs
- Further welfare reform and increased financial pressures
- Cuts to support services that help people at risk to food poverty (eg access to advice)
- Impact of external factors, eg leaving the European Union, on food prices, availability and/or changes to regulations around food quality
- As children who aren’t taught cooking at school become parents, they lack skills to cook for their children
- Growing ageing population (one of the populations at risk of food poverty and malnutrition)
- Food-related health inequalities – for both adults and children – continue to widen in the city.

5. Where to find out more

**Other JSNA reports**
- oral health
- healthy weight adults
- healthy weight children
- maternal and infant health
- cancer; diabetes; heart disease; stroke

**Contributors include:**
- Ruth Condon, Public Health Team, Brighton & Hove City Council
- Tilly Paz, MSc student, University of Brighton
- Brighton & Hove Food Partnership

**Point of contact:**
- public.health@brighton-hove.gov.uk
- April 2019

**Further reading**

Brighton & Hove Food Strategy Action Plan, 2018-2023
6. References

13. PHE Fingertips https://fingertips.phe.org.uk/search/breastfeeding#page/7/qid/1/pat/6&par/E12000008/atti/102/are/E0600043/iid/92517/age/170/sex/4
16. Unpublished audit carried out by Brighton & Hove Food Partnership over two weeks for the school meals service, 2017.
29. https://bhfood.org.uk/