Opening Doors
Project Guidance

The Queen's Nursing Institute

Food, Nutrition and Homelessness

Guidance for Practitioners

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Contents

Introduction

The purpose of this guidance is to help practitioners recognise and screen for nutritional need amongst single homeless and homeless families. This guidance has been designed to raise awareness of the importance of nutrition amongst front line workers working with the homeless population, and to help identify needs that can then be addressed.

Nurses and front line workers who have contact with the homeless are a key group who confront nutritional need on a regular basis. However, nutrition can often be overlooked when there are other competing priorities, such as safeguarding issues. Moreover when the issue of food is addressed by key workers, a 'broad brush' approach may be adopted (such as whether the individual is eating/or has access to food) rather than identifying the nutrient quality of a homeless person's diet. While this may be a realistic focus for practitioners, it can ignore the nutrient quality of the diet and result in further malnourishment or risk of malnutrition for the individual concerned.

This guidance seeks to address this issue. It consists of a paper providing information on the important constituents of a healthy diet, and the key issues and barriers faced by homeless people (single and families) in the context of food and healthy eating. It also contains information on tools that front line workers can use to screen for malnutrition in single homeless or homeless families with dependent children.

This briefing paper begins by describing the Healthy Eating guidelines provided by the Department of Health. These guidelines are then set in the context of homelessness. There is also a brief discussion of malnutrition among the homeless population, including barriers faced in meeting a healthy diet.

Appendix 1 provides information on nutritional needs from pregnancy and birth, through childhood and adult life stages.

Appendix 2 provides examples of two further screening tools that can be used by practitioners, one for homelessness and another for homeless families. These tools can be used to highlight any particular problems or issues that will then need to be addressed.

The use of the 'MUST' (Malnutrition Universal Screening Tool) is included and the paper concludes with an illustrated Case Study (Appendix 3) to support practitioners in addressing malnutrition among this group. In respect of nutrition screening tools we recommend 'MUST' as a first line. The additional tools can be used to help the practitioner in gaining further information surrounding food intake. However it is recognised that the practitioner will make their own decision about which tools to use, based on individual need, preference and circumstance.

The importance of food for health

Food is an important part of our lives, not only because it provides the essential nutrients the body needs but also because it has an important role to play in our general health and wellbeing. Food is an important part of our culture and traditions and thus plays a key role in social inclusion. Sharing and eating food with people promotes a sense of wellbeing and possessing the ability to buy, prepare and cook the same types of food as those around us helps us to feel socially included.

What is a healthy balanced diet?

A healthy balanced diet is a diet which contains a wide variety of foods to supply the energy and nutrients the body needs to function and to achieve optimal 'nutritional' health. A healthy balanced diet contains lots of starchy foods (e.g. bread, pasta, rice, potatoes, breakfast cereal) and fruit and vegetables; some milk and dairy foods (cheese, yoghurt and fromage frais) and foods containing protein such as meat, fish, beans, pulses, nuts and eggs.

The 'eatwell' plate (Figure 1) illustrates the different types of food and the proportions in which they should be eaten to consume a well-balanced and healthy diet. The eatwell plate is applicable to everyone (except children under the age of two years). People who are underweight or overweight can also use the eatwell plate to help achieve a healthy body weight.

Figure 1: The 'eatwell' plate (Food Standards Agency 2007)

Fruit and vegetables

Everyone should try to eat at least five portions of fruit and vegetables per day. Fruit and vegetables help to keep us healthy as they keep our immune system strong and are very low in fat. Eating fruit and vegetables instead of foods high in fat and/or sugar such as chocolate, pastries and crisps can help to maintain a healthy body weight and provide lots of valuable vitamins and minerals. This can help to reduce the risk of diseases such as heart disease, diabetes and cancer.

Fresh, canned, frozen and dried fruit and vegetables all count towards achieving the five a day target. A glass of unsweetened fruit juice (no added sugar) also counts as one portion, however, drinking more than one glass does not contribute to more than one of our five a day.

A portion of fruit and vegetables weighs about 80g for an adult. A medium sized apple, a heaped tablespoon of raisins and three heaped tablespoons of peas or mixed vegetables are examples of one portion (Please visit the following website for further information on portion sizes: www.nhs.uk/Livewell/5ADAY/Pages/Portionsizes.aspx). Children's portion sizes are smaller than adults as they have smaller stomachs. Generally, a portion size for a child is the amount that can fit in to the palm of their hand. Try to buy fruit and vegetables that are in season as they are often cheaper. Canned, frozen and dried fruit and vegetables are just as nutritious as fresh versions and also tend to be cheaper.

Starchy foods

Starchy foods such as bread, pasta and rice are an important source of energy and nutrients such as calcium, iron and B vitamins. Starchy foods should make up about a third of the food we eat.

Starchy foods are made from wheat grains. There are two types of starchy foods: refined and unrefined. Refined means that some parts of the grain have been removed whilst unrefined means that all of the grain has been used. This is the reason why unrefined starchy foods are also known as wholegrains.

Refined starchy foods include white bread, white pasta, white rice and potatoes without the skin. Unrefined starchy foods include wholegrain bread, wholewheat pasta, brown rice and wholegrain cereals. Although both types of starchy foods provide energy, we should try to choose wholegrains whenever possible as they contain many more nutrients such as fibre and B vitamins when compared to refined starchy foods. To help select wholegrain types of starchy foods look for the word "whole" before the name of the food e.g. whole oats, wholewheat crackers.

It is very important to note that very young children should not consume too much high fibre containing foods. Children require a lot of energy as they are growing and developing but have smaller stomachs than adults. Eating too many fibre rich foods may fill them up making it difficult to eat adequate energy and nutrients. As children approach school age, they should gradually move towards a diet lower in fat and higher

in fibre. By the age of five, children's diet should be low in fat, sugar and salt and high in fibre.

Lots of interesting recipes which include starchy foods can be found on page 45 in the 'Good Food in Tackling Homeless' handbook. A link to this hand book can be found in the "Further Resource" section at the end of this guide (see p.18).

Milk and dairy foods

Dairy foods include milk, cheese, yoghurt and fromage frais and are an excellent source of calcium and protein. The calcium found in these foods can be easily used by the body and therefore these foods are essential for bone health.

Children and adults also need a good protein intake as it is essential for growth and development in children and for repairing and maintaining body tissues in adults.
Be aware that some dairy products can be high in a type of fat called saturated fat which can increase the risk of heart disease. However, choosing lower fat versions will ensure that we are provided with all the nutritional benefits with reduced fat intake. For example semi-skimmed milk contains half the amount of fat as whole milk but contains more calcium! Choose low fat varieties of yoghurt and cheese. Cheese naturally low in fat include cottage cheese and ricotta.

Three portions of dairy products (match box size piece of reduced fat cheese; glass of skimmed/semi-skimmed milk and pot of low fat yoghurt) per day will ensure most of us get the calcium we need for healthy bones and teeth.

It is very important that children under the age of two consume whole milk (not semi-skimmed or skimmed milk) as whole milk is a valuable source of energy for developing children. Children over the age of two can gradually move towards consuming semi-skimmed milk.

Meat, fish, eggs, beans and other non-dairy sources of protein

Protein is found in every part of our body and has many essential functions. Protein can be found in animal food sources such as meat, fish, eggs, and plant sources such as nuts, pulses and lentils.

Everyone should eat at least two portions of fish per week, including one portion of oily fish. Oily fish contains essential fats called long chain omega 3 fatty acids which protect against heart disease. Women who may become pregnant should not eat more than two portions of oily fish per week. This is because they can contain environmental pollutants that could interfere with the baby's development. Less expensive sources of oily fish include mackerel, sardines, trout and herring.

Meat is also an excellent source of iron and vitamin B12. Some meat can be high in saturated fat. If possible, try to choose lean versions of meat and always cut the visible fat off meat before cooking. Grill or oven cook instead of frying.

Foods high in fat and or sugar

Foods in this group include butter, cream, cooking oil, cakes, biscuits, crisps, non-diet soft drinks and pastries. We should only eat a small amount of these foods as they often contain lots of fat and sugar and very little or no valuable nutrients. Limiting the intake of these types of foods can help us to protect our teeth from tooth decay and control our weight as they are often very high in calories. We all should try to eat healthier snacks such as fruit instead of chocolate or crisps or choose a scone or currant bun instead of cakes, buns and pastries.

The context of food & healthy eating within homelessness

Following on from the above discussion it is important to point out the challenges faced by single homeless and homeless families in accessing and eating a diet which follows the Healthy Eating guidance by the Department of Health. The impact of food choice and nutrition for homelessness cannot be separated from the impact of low income on food choice, for which there is a large body of research which highlights the difficulties of meeting a 'healthy diet.'

For example the Low Income Diet and Nutrition survey, published in 2007, surveyed the food and nutrient intake of low income households (but not the homeless). The study found that low income households had poor intakes of vitamins and minerals; were more likely to eat high-fat processed foods or fast / snack foods and were less likely to eat the foods recommended for health, for example lower-fat milk, fruit and vegetables and wholemeal products.

Table 1 (p.6) indicates some of the key barriers faced by both single and homeless families in meeting a healthy diet. This is not an exhaustive list and those wanting further information on these barriers are directed to further reading in the references section at the end of this paper (p.18).

Table 1: Key barriers faced by single people and homeless families in meeting a healthy diet

Single Homeless People	Homeless Families
Limited or no money to buy food	Limited money to buy food/increased demand on the food budget
No fixed abode	Living in temporary accommodation with shared food preparation and cooking facilities. Cooking facilities that are functional rather than sociable.
Reliance on day centres for food. Not always possible to address cultural differences in food provision, for example availability of halal foods	Limited food storage space
Drug/alcohol issues	Anxiety and depression among parents
Eating for fullness rather than nutritional value	Meeting children's food needs takes priority over carers needs - more likely that parents (more often mothers) become poorly nourished
Food is a low priority in life	Reliance on take-away food that is high in fat/sugar
More likely to have health problems including physical (e.g. digestive problems) and mental health (e.g. depression, anxiety)	Food is a way of conveying love and affection by parents to their children and 'healthy eating' is not always seen as a priority.
Weight loss	Food is low on the list of priorities (for parents) when coping with the reality of being homeless and living in temporary accommodation.
Irregular lifestyle	Drug/alcohol issues
Food insecurity	Food insecurity
Lack of knowledge about healthy eating	Lack of knowledge about healthy eating
Poor dental health and other health issues	Poor dental health for children and families and other health issues

Malnutrition and the homeless population

There is a limited amount of evidence in the UK as to the extent of malnutrition amongst the single homeless population and homeless families. Research carried out by Evans & Dowler (1999) to assess the diet of single homeless and marginalised in London highlighted that many did not meet current dietary recommendations. The diets of men and women were high in saturated fat and added sugars and low in fibre, vitamins and minerals, despite 70% reporting they wanted to improve their diet.

Unfortunately research on homeless families with dependent children is also scarce in the literature (despite a large body of evidence on the diet of low income households in the UK). Available literature has reported the dietary intake of homeless women and children living in temporary accommodation in north-west England to be poor with many women failing to meet the recommendations for energy, protein, fibre, calcium, iron, vitamin C and folate (Coufopoulos & Hackett 2009).

There is also limited research available on the other 'confounding' factors which may impact upon the diet of the homeless population (including drug and alcohol issues). Key issues affecting problem drug and alcohol users include irregular meal patterns, not eating anything on certain days, and concerns around weight loss (Shaw and MacDonald 2007). Those with problem drug and alcohol use have reported that nutrition and meal supplements have been of real value in respect of health (ibid).

Malnutrition

Although there is no consensus on the definition of malnutrition, a clear definition is given below:

"A state of nutrition in which a deficiency or excess (or imbalance) of energy, protein and other nutrients causes measurable adverse effects on tissue/body form (body shape, size and composition) and function and clinical outcome" (Elia 2003).

Malnutrition is thought to affect at least three million people in the UK (British Association for Parenteral and Enteral Nutrition (Brotherton et al 2010). Research suggests that there should be routine screening for malnutrition in high-risk groups (which include the homeless), with screening linked to appropriate plans for the management of malnutrition (Stratton 2007).

'MUST' – Malnutrition Universal Screening Tool

(see case study on page 16 for a worked example)

A standardised and validated tool: Malnutrition Universal Screening Tool ('MUST') is freely available to screen adults for malnutrition in the community and can be used by all care workers. 'MUST' is a five-step screening tool to identify adults who are malnourished, at risk of malnutrition (under nutrition), or obese (BAPEN). The 'MUST' tool can be accessed through the following link: www.bapen.org.uk/must_tool.html .

This tool is very simple and quick to use. Please note that Step 3 (Acute Disease effect) can be omitted in the community setting (see guidance notes on use of 'MUST' on BAPEN website: www.bapen.org.uk .

This screening tool provides a valid and reliable method of nutrition screening but is NOT a nutritional assessment. A nutritional assessment is a structured way to establish nutritional status and energy requirements by objective measurements and results in a care plan being produced. However screening provides an opportunity to clearly identify the risk of malnutrition amongst the homeless population and a clear indication of the next steps to be taken. BAPEN (2008) states that:

"The results of nutritional screening should always be linked to care plans and clear goals for nutritional intervention should be set and reviewed on an on going basis. Step 5 of the 'MUST' provides guidance on the management of those patients identified as being at Low, Medium or High risk of malnutrition. This step can be adapted to fit with local nutrition guidelines or policies. The results of screening should be communicated to members of the multidisciplinary team and across healthcare settings as the patient moves between primary and secondary care."
Source: www.bapen.org.uk/pdfs/must/must_faq.pdf

The additional screening tools (Appendix 2) which are included at the end of this paper are not validated nutrition screening tools; instead they are provided here for practitioners to use when working with single homeless / homeless families living in temporary accommodation. There are no scoring criteria to be used (as there is with 'MUST'). The tools are adapted from the publication Kourgialis et al (2001) Improving the nutrition status of homeless children: Guidelines for homeless family shelters. It is recommended that the tools are used as a guide for practitioners to use, alongside the information contained in this briefing paper on the 'eatwell' plate and dietary recommendations provided for different age groups.


140 MEALS
14cm Cereal Bowl
Mushroom Soup
Tomato Soup
MEALS 141
Spaghetti Bolognaise

Appendix 1

Dietary Recommendations for Different Age Groups

Dietary Recommendations for:

PREGNANT WOMEN

- Eat a variety of foods every day
- Follow the 'eatwell' plate format for healthy eating during pregnancy with the following additions:
- Aim for a pint of milk a day or 1/3 pint of milk plus a small pot of yoghurt & matchbox size piece of cheese]
- 2 portions of fish per week, including one oily fish such as sardines, mackerel or salmon (including tinned)
- Avoid vitamin A supplements
- Avoid alcohol and illegal drugs intake until the postnatal period
- 400µg supplement of folic acid each day recommended for women planning a pregnancy or who may become pregnant (NICE 2008)
- Vitamin D supplement to 10mcg/d is recommended especially for women of Asian, African and Middle Eastern origin
- Avoid liver and liver products such as pâté, as they contain high amounts of vitamin A, which can affect a baby's development
- Limit intake of caffeine to 200mg a day (2 mugs of instant coffee) as too much caffeine can result in a low birth weight or occasionally miscarriage.

Dietary Recommendations for:

YOUNG CHILDREN

- School-aged children still have high nutritional needs but quite small appetites. Make sure that there are plenty of nutrients as well as energy (however many children this age can also be overweight due to too much energy in the diet)
- Base meals and snacks on the five main food groups in the Eat Well Plate but limit fatty and sugary snacks
- Calcium is important for healthy bone development. Good sources include dairy products such as milk, cheese, yoghurt and fromage frais, as well as fortified orange juice, green leafy vegetables, cereals, sesame seeds and tofu. Ideally aim for three servings of calcium-rich food a day - for example, a 150ml glass of milk, a small pot of yoghurt and a small matchbox-sized piece of cheese
- Folate is important for growth, but intake is low in some children, especially those who miss breakfast because fortified cereals are a good source of folate. Other sources include fortified bread, green leafy vegetables and pulses
- Iron is important for prevention of anaemia and important for concentration. Good sources include red meat, liver, fortified breakfast cereals, beans and pulses
- To help absorb the iron more effectively from non-meat sources, combine it with vitamin C-rich foods such as citrus fruits and fruit juice
- Limit the amount of sugar and sweets eaten, and offer them at the end of meals, rather than in-between.

Dietary Recommendations for:

ADOLESCENTS

- Diet is important at this stage for continued growth and development
- During this time, a number of physiological changes occur in boys and girls that affect nutritional needs, for example increase in muscle mass amongst boys and menstruation amongst girls
- Include plenty of starchy carbohydrates - bread, rice, pasta, breakfast cereals, chapattis, couscous and potatoes (wholegrain varieties where possible)
- It is also important to include five portions of fruit and vegetables - a great source of fibre and vitamins and minerals
- Limit fatty and sugary foods
- Include two servings of protein daily, for example meat, fish, eggs, beans and pulses
- Important nutrients include iron (especially for girls) and there is a danger of iron deficiency anaemia at this age. Good sources include fortified breakfast cereals, leafy green vegetables, dried fruit and bread
- Calcium is another important nutrient at this age and some calcium-rich foods should be eaten every day in order to help prevent osteoporosis in later life. Milk and dairy products (including low fat) are a good source and aim for three portions of dairy food each day – for example, a glass of milk, a 150g pot of yoghurt.

Dietary Recommendations for:

ADULTS (19-65)

- Good nutrition at this age is important for current and future health status
- Include the main food groups from the 'eatwell' plate in the diet, including starchy carbohydrates, fruit and vegetables (five portions a day) and two servings of protein daily for example meat, fish, eggs, beans and pulses.
- Include three portions of calcium rich foods a day (should be low fat), for example, a glass of milk, a 150g pot of yoghurt and a small matchbox-sized piece of cheese
- Smokers have higher vitamin C requirements than those who don't smoke (Stein 2000). Vitamin C is needed for the absorption of iron and is found in a wide variety of fruit and vegetables. Good sources include kiwi fruit, oranges and broccoli.
- Maintaining a healthy body weight is important, including the prevention of underweight and overweight
- Healthy eating guidelines for those over 65 remain the same as those under 65, however, it is recommended that this age group should consume a daily vitamin D (10µg/day) supplement to meet Government recommendations.

For further useful advice and practical tips, please see a series of leaflets developed by Norfolk and Norwich University Hospitals NHS Foundation Trust Departments of Nutrition and Dietetics
www.nnuh.nhs.uk/leaflet.asp

Appendix 2

Nutrition Screening Tool for Homeless

(adapted from Children's Health Fund 2001)

For each statement below, circle YES for those that apply and NO for those that do not

1. I don't always have the money to buy the food I need
   Yes No

2. I eat less than 2 times per day
   Yes No

3. I eat meat and other proteins like beef, chicken, peanut butter, baked beans etc. less than once per day
   Yes No

4. I eat breads, cereals, rice, pasta, etc less than 2 times per day
   Yes No

5. I eat fruits or vegetables or drink juice less than 2 times per day
   Yes No

6. I drink/eat milk products like milk, cheese, yoghurt, etc. less than 3 times a day
   Yes No

7. I do not have any place to cook or to keep my foods cold
   Yes No

8. I have 3 or more drinks of beer or wine or other alcohol almost every day
   Yes No

9. I smoke cigarettes everyday
   Yes No

10. I often do not feel like eating, food shopping or cooking
    Yes No

11. I have tooth or mouth problems that make it hard for me to eat
    Yes No

12. I have one or more of the following: (tick all that apply)
    Diarrhoea__ Nausea__ Heartburn__ Bloating__
    Vomiting__ No/poor appetite __ Feel tired__

13. I have to watch what I eat because of a health problem like: (tick all that apply)
    Diabetes__ High Blood Pressure__ Kidney/liver problems__ HIV__

14. I have about £_____ a month to spend.

15. I spend about £_____on food every week.

Homeless Family Temporary Accommodation Nutrition Checklist
(adapted from Children's Health Fund 2001)

1. Families are assisted in accessing: (please tick all that apply)
   - Healthy Start vouchers
   - Emergency food supplies
   - Free school meals

2. Emergency food resources are available to clients
   Yes (on-site) Yes (through Referral) No

3. Cooking facilities (i.e. oven, hob, sink, fridge and space ot prepare food) are available to families in:
   - Room / flat
   - Communal kitchen shared with_____(number of) families
   - No cooking facilities available

4. For hostels with a shared fridge / freezer:
   There is a policy to deal with the security of families' individual food supplies
   Yes No

5. For hostels with cooking facilities:
   Cooking resources such as pots, pans and cooking utensils are provided
   Yes No

6. A 'starter-set' of food items is provided when a family first enters the hostel
   Yes No

7. Support for providing healthy food is available (for example cooking and shopping support)
   Yes No

8. Pregnant women area assisted in meeting their increased need for calories in the 3rd trimester by providing, or helping them obtain extra meals, snacks
   Yes No

9. Breastfeeding mothers are assisted in meeting their nutrition needs by providing, or helping them obtain, extra meals, snacks, beverages to meet increased needs
   Yes No

10. A private, quiet and supportive environment is provided in which mothers may breastfeed
    Yes No

11. Access to lactation support resources is provided for breastfeeding mothers
    Yes No

12. Children and families with nutrition problems are referred to a dietitian / nutritionist
    Yes No

The above checklist may be useful for those working with homeless families to review and assess nutrition related policies and practices within temporary accommodation such as family centres / hostels and houses of multiple occupation. The primary purpose of the checklist is to raise awareness of the nutrition needs of homeless families.

Appendix 3: Case Study

This case study gives you a chance to practice using the tools described in this paper.

'Joe Smith' is a single male and has been of 'no fixed abode' for the past couple of years. He occasionally sleeps overnight in a shelter and regularly uses day centres for meals. Joe is also a heavy drinker. Over the past couple of years he has noticed his weight decline and he has recently noticed in just the past couple of months that he has lost approximately 1 stone in weight. Joe is 40 years of age, height 1.78m (5ft 10") and his weight today is 54kg (8st 7lb). In the previous month he weighed 62kg (9st 10lb).

Using the 'MUST' tool available at: www.bapen.org.uk/must_tool.html carry out the following steps:

Step 1: Calculate Joe's BMI and identify a score.

Step 2: Note Joe's percentage unplanned weight loss and score using the tables provided.

Step 3: If applicable establish an acute disease effect and score.

Step 4: Add scores from steps 1, 2, and 3 together to obtain an overall risk of malnutrition.

Step 5: Use management guidelines and / or local policy to develop care plan.

Please see the next page for a worked example.

Answers:

Step 1: Calculate Joe's BMI and identify a score – BMI = 17 / Score 2

Step 2: Note Joe's percentage unplanned weight loss and score using the tables provided - % weight loss is between 5-10% / Score 1

Step 3: If applicable establish an acute disease effect and score – not applicable

Step 4: Add scores from steps 1, 2, and 3 together to obtain an overall risk of malnutrition – Overall risk of malnutrition score is 3

Step 5: Use management guidelines and / or local policy to develop care plan - Joe has a risk score of 3 which indicate he is high risk and should be treated as per recommendations. However in the community setting a referral to a dietitian may not be possible and / or there may be a long waiting time. It is important to improve and increase nutritional intake in the first instance.

The dietary information sheets for adults available on the web from Norfolk and Norwich University Hospitals NHS Foundation Trust are a useful starting point for practitioners, notably those on Gaining Weight.

To download the leaflets go to: www.nnuh.nhs.uk/leaflet.asp

References

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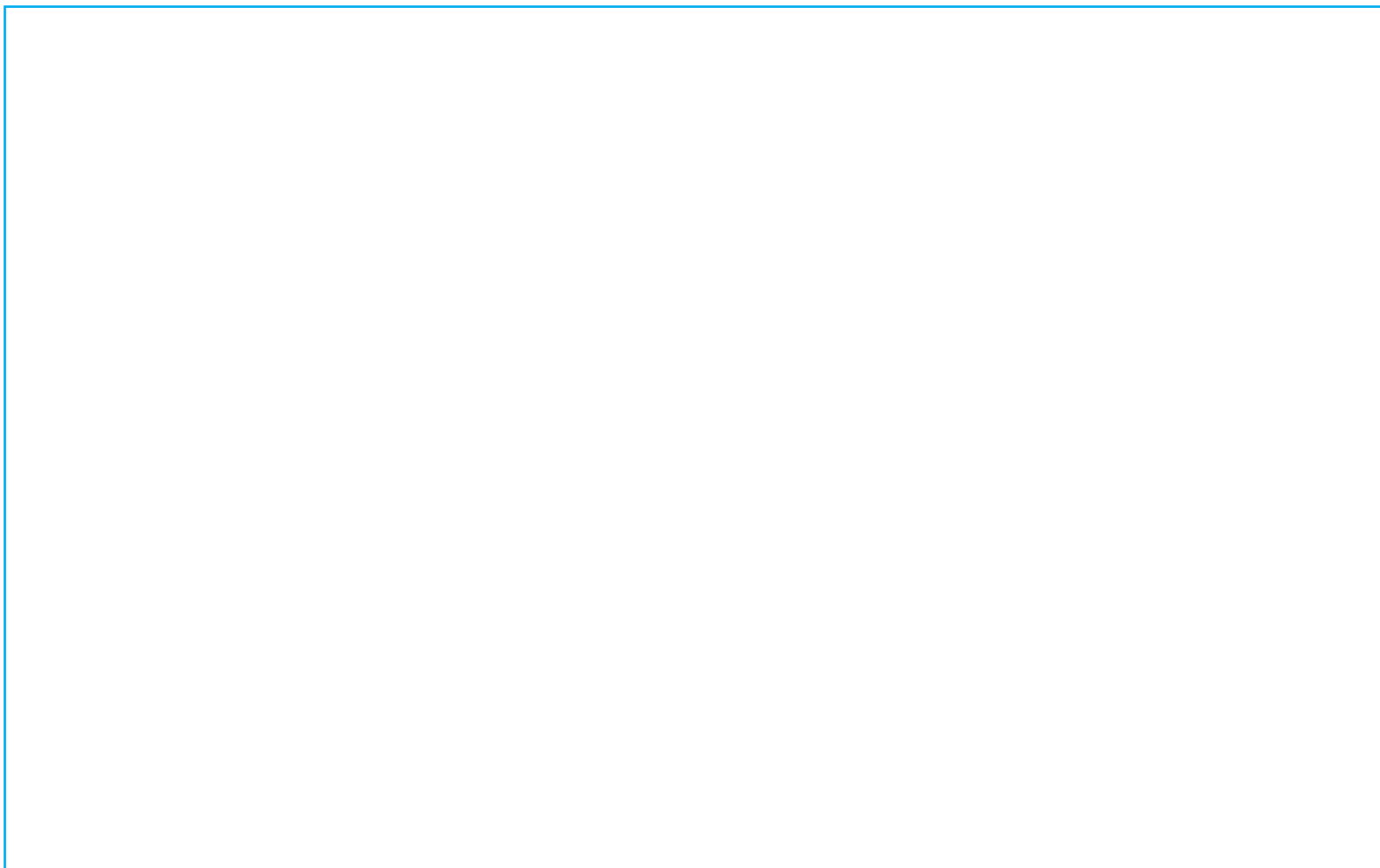

Further Resources

Further information about the importance of fruit and vegetables to health can be found on the NHS website: www.nhs.uk/livewell/5aday/Pages/5ADAYhome.aspx

Information on buying fruit and vegetables on a budget can also be found on the NHS website at: www.nhs.uk/Livewell/5ADAY/Pages/Tencheapways.aspx

Lots of tips on how to include fruit and vegetables in adult's and children's diets can be found on the change 4 life website (www.nhs.uk/change4life/Pages/change-for-life.aspx) and cheap easy to make recipes which include fruit and vegetables can be found in page 45 in the good food in tackling homeless handbook.

Information on eating on a budget and lots of recipe ideas can be found in the following links:

Edinburgh Cyrenians (2004) Good food in tackling homelessness handbook available at: http://scotland.shelter.org.uk/__data/assets/pdf_file/0017/23156/CyreniansGoodFood.pdf

British Heart Foundation: www.bhf.org.uk/heart-health/prevention/healthy-eating/healthy-eating-on-a-budget.aspx

England Shelter: http://england.shelter.org.uk/__data/assets/pdf_file/0003/328323/Healthy_eating_on_a_budget.pdf

Food Standards Agency: healthy eating for less dosh: www.food.gov.uk/multimedia/pdfs/publication/healthynoshlessdosh.pdf

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