The UK national food guide

Objectives

By the end of this section, you should be able to:

- Describe the key features of the national food guide ('eatwell guide') and healthy eating guidelines and explain how they are used
- Identify the different food groups included in the 'eatwell guide' and the nutrients they contribute
- With reference to 'quantity' and 'quality', give advice to promote a diet representative of healthy eating recommendations
- Analyse your own eating habits in relation to the 'eatwell guide'
- Identify ways to make eating habits more closely resemble the 'eatwell guide' and healthy eating guidelines
- Explain how to access reliable sources of nutritional information when advising individuals on healthy eating
- Explain how to interpret available information
- Distinguish between evidence-based knowledge and unsubstantiated marketing claims.

Healthy eating guidelines

From the information covered in this section it is possible to construct some healthy eating guidelines. These are as follows:

- 1. Eat at least 5 portions of a variety of fruit and vegetables every day
- 2. Consume less 'free sugars'* and more dietary fibre
- 3. Continue to derive approximately 50% of total dietary energy from starchy carbohydrates, choosing wholegrain or higher fibre versions with less added fat, salt and sugar
- 4. Have some dairy or dairy alternatives; choose lower fat and lower sugar options
- 5. Eat more beans and pulses and 2 portions of sustainably sourced fish a week, one of which is oily
- 6. Eat less red and processed meat
- 7. Choose unsaturated oils and spreads and eat in small amounts
- 8. If consuming foods and drinks high in fat, salt or sugar have these less often and in small amounts
- 9. Drink 6-8 cups/glasses of fluid a day water, lower fat milk, sugar-free drinks including teas and coffee all count. Limit fruit juice and/or smoothies to a total of 150ml a day
- 10. Recommended daily energy requirements for men are 2500Kcal and for women 2000Kcal
- *'Free sugars' are those added to foods plus those naturally present in fruit juices, syrups and honey. It does not include the sugars naturally present in intact fruit and vegetables or dairy products.

The UK national food guide – 'The eatwell guide'



Source: Public Health England in association with the Welsh government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

Most people in the UK eat and drink too many calories, consume too much fat, sugar and salt, and not enough fruit, vegetables, oily fish or fibre. The Eatwell Guide defines the government's advice on a healthy balanced diet to support people to make healthy choices. It provides a visual representation of the food groups and the proportion of each food group that should make up your overall diet. It gives examples of different foods that can contribute towards a healthy balanced diet.

To achieve a healthy, balanced diet, people should try to choose a variety of different foods from the five main food groups.

Whilst there will be variations in energy and nutrient requirements between individuals, the national guideline for males is 2500Kcal per day and for women it is 2000Kcal per day. Various factors, such as age and gender, play a part in individual requirements for energy and nutrients, for example:

- The RNI for vitamin C for a child aged 1 year and under is 25mg/d, and for an adult is 40mg/d
- Adolescents have higher calcium requirements to cover their bone growth

- The RNI for iron in women aged 19-50 years is 14.8mg/d, which is higher than for men (8.7 mg/d) to cover menstrual losses
- The RNI for vitamin D in women that are pregnant or breastfeeding is 10 µg/d, whereas there is no RNI set for women of childbearing age who are not pregnant or breastfeeding
- Energy requirements for pregnant women increase by 0.8 MJ/day or 200 kcal/day, but only in the final three months of pregnancy
- Protein requirements increase in pregnancy (an additional 6g/d) and lactation (an additional 11g/d 0-6m and 8g 6+ months).

It is also recognised that some sections of the population will require varying proportions in relation to those represented by the 'Eatwell Guide' eg, the proportion of the carbohydrates food group may be less for some individuals or the proportion of protein foods may be higher. This could be influenced by the presence of certain medical conditions or the specific nutritional goals of an elite performer for example.

If you consider the above in relation to the Eatwell Guide, those individuals who require more energy, will require more food throughout the day, but the proportions of the food groups will stay the same.

It is important to note that children under two have different requirements, but children over the age of two should be working towards a diet resembling the Eatwell Guide.

Using the Eatwell Guide

The guide is split into five food groups:

- Potatoes, bread, rice, pasta and other starchy carbohydrates
- Fruit and vegetables
- Beans, pulses, fish, eggs, meat and other proteins
- Dairy and alternatives
- Oil and spreads

The guide encourages the choice of different foods from the first four groups every day, to help ensure the population obtains a wide range of nutrients needed to remain healthy. Choosing a variety of foods from within each group will add to the range of nutrients consumed. Notice that foods and drinks high in fat, salt or sugar are not included since the recommendation is to consume this type of food and drink less often and in small amounts.

The size of the segments for each of the food groups is consistent with Government recommendations for a diet that would provide all the nutrients required for health.

The Eatwell Guide is not meant to represent the balance required in any one specific meal or over a particular timescale, rather, it represents the overall balance of a healthy diet.

'Quality' of food

Bread, rice, potatoes, cereals and pasta – approximately 33% (6–11 servings)

(N.B. the recommendation for 50% of total dietary energy refers to total carbohydrate consumption as a proportion of overall diet which includes ALL starch, sugars and dietary fibre).

This food group occupies a large section of the food plate, indicating that people should be obtaining a high percentage of energy from this food group. This does not mean you can eat any amount of food from this group; it is crucial to note that there are 'good' carbohydrate choices (high nutritional quality and value) and 'bad' carbohydrate choices (poor nutritional quality and value).

People should be aiming to consume a variety of high 'quality' foods in this group and not just the usual bread, pasta and rice; consider the sources of carbohydrates. When making food choices in this food group try following these approaches:

- Choose unrefined carbohydrates wholegrains and fibre-rich
- Include starchy vegetables as an alternative to potatoes/pasta etc., e.g. sweet potato, yams, butternut squash and pumpkin
- Avoid overconsumption of refined carbohydrates e.g. white bread and products made from refined flour, pasta, white rice and refined breakfast cereals
- Add variety to your diet by including grains such as barley, millet, spelt, quinoa, brown rice and wholegrain/brown rice pasta
- Include predominantly low GI/GL carbohydrates

It is now recommended that the dietary reference value for the average population intake of dietary fibre should be increased as follows:

30g a day - aged 16 and over

25g for 11 to 15 year-olds

20g for 5 to 11 year-olds

15g for 2 to 5 year olds

Fibre encompasses all carbohydrates that are naturally integrated components of foods and that are neither digested nor absorbed in the small intestine.

Fruit and vegetables – approximately 33% (3-5 servings of vegetables and 2-4 servings of fruit)

This food group also occupies a large section of the food plate. In fact, it indicates that this food group should be consumed in the same proportion as the starchy carbohydrates group.

A general guideline for this food group is that people should be consuming at least five portions of fruit and vegetables per day. One adult portion of fruit or vegetables is 80g. For children, a portion equates roughly to the amount they can fit in the palm of their hand.

This food group is essential to provide a rich supply of vitamins, minerals and fibre. If you are consuming over this recommendation of five portions per day, this should not be seen as a problem, unless you are consuming a high volume of fruit and vegetables and not a lot from

other food groups. This can lead to a deficiency in energy and other essential nutrients (namely protein and fat).

When making choices in this food group consider the following:

- Limit consumption of fruit/vegetable juices and smoothies to a combined total of 150ml a day
- Include a variety of fruits and vegetables
- Include brightly coloured fruits and vegetables
- Include green leafy vegetables

Portion sizes:

- For small fruit, one portion is two or more small fruit, for example two plums, two satsumas, two kiwi fruit, three apricots, six lychees, seven strawberries or 14 cherries
- For medium sized fruit, one portion is one piece of fruit, such as one apple, banana, pear, orange or nectarine
- For large fruit, one portion is half a grapefruit, one slice of papaya, one slice of melon (5cm slice), one large slice of pineapple or two slices of mango (5cm slices).
- A portion of dried fruit is around 30g however, dried fruit can be high in sugar and can be bad for your teeth. To reduce the risk of tooth decay, dried fruit is best enjoyed as part of a meal, as dessert for example, not as a snack between meals
- Green vegetables two broccoli spears or four heaped tablespoons of cooked kale, spinach, spring greens or green beans count as one portion
- Cooked vegetables one portion is three heaped tablespoons of cooked vegetables, such as carrots, peas or sweetcorn, or eight cauliflower florets count as one portion
- Salad vegetables three sticks of celery, a 5cm piece of cucumber, one medium tomato or seven cherry tomatoes count as one portion
- Tinned and frozen vegetables roughly the same quantity as you would eat for a fresh portion. For tinned, choose those canned in water, with no added salt or sugar.

Meat, fish, eggs and beans, and other non-dairy sources of protein – approximately 15% (2–3 servings)

This food group occupies a smaller section of the food plate compared to the fruit and vegetable group and the starchy carbohydrates group. This group provides energy and protein as well as essential vitamins, minerals and fats.

As with all the food groups there are good and poor choices in relation to the 'quality' of the food. Good choices will ensure a good supply of essential fatty acids, amino acids, vitamins and minerals. Bad choices will provide a high percentage of saturated fats.

When making food choices in this group consider the following:

- Include more foods from non-animal sources such as pulses (all beans/peas/lentils), nuts and seeds
- Eat 2 portions of sustainably sourced fish per week, one of which is oily (this helps to increase omega-3 intake)

- Aim for at least two portions of fish every week, one of which should be oily, such as salmon or mackerel.
- Try not to consume your entire protein intake from meat or animal products
- Eat less red and processed meat (bacon, ham, sausages etc.).

Dairy products – approximately 15% (2–3 servings)

As with the previous group, this group is required in a smaller proportion than fruit and vegetables or the carbohydrates group. It will provide energy, protein, fats, vitamins and minerals.

When making food choices in this group consider the following:

- Choose lower fat and lower sugar options
- Some lower fat alternatives may be beneficial for some people (although it is important to read the food label as some lower fat options are high in sugar)
- Be aware of portion sizes as these foods can be high in energy as well as fat
- Individuals who do not consume dairy products can increase their intake of foods from other groups to obtain the essential nutrients they may be missing out on, e.g., nuts, seeds, pulses, whole grains, brightly coloured and green leafy vegetables.

Foods containing fats and/or sugar – approximately 5% but not essential (include sparingly)

Foods high in fats and/or added 'free sugars' such as crisps, confectionary, cakes, biscuits, pastry, cheeses, butter, preserves/sweet spreads and sugary drinks (including tea and coffee with added sugar), should be consumed less often and in small amounts.

Free sugars should account for no more than 5% of daily dietary energy intake equivalent to:

- 19g, 5 sugar cubes, or 3-5 teaspoons for children aged 4 to 6
- 24g, 6 sugar cubes, or 4-6 teaspoons for children aged 7 to 10
- 30g, 7 sugar cubes, or 5-7 teaspoons for 11 years and over, based on average population diets.

High levels of sugar consumption are associated with a greater risk of tooth decay and the higher the proportion of sugar in the diet, the greater the risk of excessive energy intake.

Oils and spreads – choose unsaturated options and use in small amounts.

The small size of the purple section reflects the fact that oils and spreads are high fat and contain a lot of calories, so these should only be consumed in small amounts. As part of a healthy diet, we should try to cut down on foods and drinks high in saturated fats and Trans fats and replace some of them with unsaturated fats.

When considering fat intake and selecting which oils/spreads to use consider the following:

- Although saturated fat should not be eliminated from the diet, be aware of how much saturated fat you consume/use butter, ghee, palm oil etc.
- Be aware that some vegetable oil spreads/margarines may be high in trans fats, therefore limit consumption of them
- Remember that all types of fat are high in energy. A gram of fat, whether saturated or unsaturated, provides 9kcal (37kJ) of energy compared with 4kcal (17kJ) for carbohydrate and protein
- The average man should aim to have no more than 30g of saturated fat a day
- The average woman should aim to have no more than 20g of saturated fat a day
- Children should have less
- Found primarily in oils from plants, unsaturated fats can be either polyunsaturated or monounsaturated. Monounsaturated fats help protect our hearts by maintaining levels of HDL cholesterol while reducing levels of LDL cholesterol. Monounsaturated fats are found in olive oil, rapeseed oil and their spreads, avocados, and some nuts such as almonds, Brazil nuts and peanuts.

Hydration guidance - 6-8 glasses a day.

Keeping hydrated is part of a healthy diet and so the Eatwell Guide reinforces fluid intake recommendations and the best drinks to choose. The guide advises a fluid intake of 6-8 glasses a day. Water, lower fat milk, sugar-free drinks including teas and coffee all count. Fruit juice and/or smoothies should be limited to a total of 150ml a day.

The consumption of sugar-sweetened beverages (e.g. fizzy drinks, soft drinks and squash) should be minimised by both children and adults because:

- Drinking high-sugar beverages results in weight gain and increases in BMI in teenagers and children
- Consuming too many high-sugar beverages increases the risk of developing type 2 diabetes.

Guideline daily amounts for energy

UK estimated average requirements for adults are based on the average energy required for people of a healthy weight who are moderately active.

	Males		Females	
Age (yrs)	MJ/d	Kcal/d	MJ/d	Kcal/d
19-24	11.6	2772	9.1	2175
25-34	11.5	2749	9.1	2175
35-44	11.0	2629	8.8	2103
45-54	10.8	2581	8.8	2103
55-64	10.8	2581	8.7	2079
65-74	9.8	2342	7.7	1912
75+	9.6	2294	8.7	1840

(British Nutrition Foundation 2015)

Main points

The 'Eatwell Guide' is the UK national food guide. It provides a pictorial representation of the healthy eating guidelines.

- The 'Eatwell Guide' encourages healthy eating choices from the different food groups to help ensure the population obtains a wide range of nutrients needed for good health.
- The size of the segments for each of the food groups is consistent with government recommendations for a diet that would provide all the nutrients required for a healthy diet (for those over the age of two).
- The 'Eatwell Guide' is not meant to represent the balance required in any one specific meal or over a particular timescale, rather it represents the overall balance of a healthy diet.
- It is essential to consider both quantity and quality of foods represented by the national food guide.
- People should aim to consume more fruit and vegetables, more dietary fibre and wholegrains whilst reducing their intake of refined carbohydrates and fatty/sugary/salty foods and drinks.
- Aim to drink 6-8 cups/glasses of fluid a day and limit fruit juice and/or smoothies to a total of 150ml a day.
- Recommended daily energy requirements for men are 2500Kcal and for women 2000Kcal, but these energy requirements will differ according to a variety of factors.