



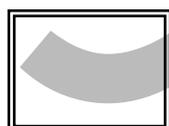
# Diet and Nutrition

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N.B: We are aware that official practice is to use the terms "service users" or "people using this service" to describe those receiving care. We prefer the term "client" and use it throughout our training package.

### Key:



worksheet



important

# Diet and Nutrition

## Learning outcomes.

- Know how to support individuals to make choices about food and drink.
- Know the principles of a balanced diet.
- Understand nutritional guidelines.
- Understand how to promote nutrition in health and social care settings.

## Fundamental standards.

The fundamental standards are the standards by which CQC will inspect social care. The standards are based on the regulations from the Care Act 2014 and CQC have changed the focus for the purposes of inspection.

The fundamental standards are those standards that no care setting must fall below.

## The standards are based on five areas as follows:

- |                    |   |
|--------------------|---|
| <b>Safe.</b>       | People are protected from abuse and avoidable harm.   |
| <b>Effective.</b>  | People's care, treatment and support show quality of life and promote good outcomes, and providers should show evidence to prove it.                    |
| <b>Caring.</b>     | Care should be person centred involving dignity and respect, and compassion.  |
| <b>Responsive.</b> | Following correct working procedures as agreed by your workplace and as set out in the client's care plan.  |
| <b>Well led.</b>   | Management leadership and governance should ensure all of the above happens. Staff training should be recognised and openness and fairness be apparent. |

These areas are known as key lines of enquiry or KLOES. Each KLOE has a set of criteria which CQC use to check whether the fundamental standards are being met.

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The fundamental standards are as follows:

**Person centred care.** Ensuring that those receiving the care are at the centre of all decisions.

**Dignity and respect.** Providing the client with dignity and respect in all aspects of their care.

**Need for consent.** Asking the client's permission before carrying out tasks that affect them.

**Safe care and treatment.** Following correct working procedures as agreed by your workplace and the client's care plan.

**Safeguarding service users from abuse.** Following agreed working and safeguarding procedures and being aware of signs and symptoms.

**Meeting nutritional needs.** Being aware of dietary needs, working with the care plan, ensuring clients have the right equipment and conditions to eat.

**Cleanliness, safety and suitability of premises and equipment.** Carrying out required checks of premises and equipment, implementing cleaning rotas and carrying out safety checks.

**Receiving and acting on complaints.** Having a complaints policy and procedure in place that is accessible to all and act in accordance with the policy when dealing with complaints.

**Good governance.** Ensuring that all aspects of the workplace is overseen and policies and procedures are implemented and monitored regularly.

**Staffing.** Fit and proper persons employed.  
Fit and proper person requirement for Directors is followed.

**Duty of candour.** Relevant information must be volunteered to all persons who have or may have been harmed by the provision of services, whether or not the information has been requested and whether or not a complaint or a report about that provision has been made.

Our Redcrier manuals will provide your staff with training to support attainment of the fundamental standards.

# Diet and Nutrition

## Introduction.

**Diet** - the sort of food normally eaten by a person or animal.

**Nutrition** - the process of nourishment.

We have come to think of diet in terms of slimming regimes and healthy eating plans but, in fact, the word describes any kind of regular eating habit. If you only eat crisps and chocolate that is your diet, whether a diet is good or bad will depend on the amount of food eaten and its nutritional content.

There is no such thing as the perfect diet for the following reasons:

1. We all have different nutritional needs depending on our age, size, gender, activity levels etc.
2. Experts disagree about the effects of different foods on the body, studies produce varying results.
3. New discoveries are being made all the time. For example vitamins were only identified in the first half of the twentieth century but they are vital for many physical and mental functions.

Food is a necessity for life, without it we would not be able to survive. It is essential for growth, energy, body maintenance and repair, and for protection against illness. When we eat a bad diet we become malnourished, malnutrition causes starvation; deficiency illnesses such as anaemia and scurvy, obesity, heart disease, clotted arteries and infections.

The information in this manual is based on Department of Health guidelines regarding healthy eating. They recommend a balanced daily diet combining all vital nutrients in varying amounts.

As diet and nutrition plays such an important part in ensuring physical and mental well being it is vital that your clients' nutritional needs are adequately provided for. This course is designed to help you to do this and covers the following areas:

- Nutritional requirements.
- Hydration.
- Achieving a balanced diet.
- Catering and monitoring.
- Food preparation and cooking.

## Diet and Nutrition

Write down what you think a balanced diet would need to include.

Sample

## Unit One

### Nutrition and quality of life.

The importance of the role nutrition plays in the health, growth and development of individuals is widely understood, without adequate nutrition these essential areas of our lives would face serious consequences, indeed the individuals very survival will be placed at risk.

Nutrition plays an important role particularly in our early years as growth and development are at its most active stage. The early relationship between mother and baby is of provider / consumer. Food is necessary, to the baby, to power physical growth, develop mental abilities and an effective immune system. Should this development be affected by lack of or poor nutrition physical and or mental development will not occur as it should. This may lead to poor health in later life, physical conditions such as poor bone development, stunted growth and fatigue.

### Nutritional requirements.

A balanced diet must include all nutrients necessary to health, discussed in this unit are:

The three major food groups.

- Carbohydrates.
- Protein.
- Fats.

### Carbohydrates.

After water our most basic need is energy, commonly measured in calories. We can get this energy from a variety of sources but the bulk of it should come from carbohydrates, ideally a minimum of 50% of our daily calories should be eaten in this form.

There are three types of carbohydrates, Polyols, starches and sugars. Starches are found in potatoes, cereals, bread, pasta, rice, pulses and vegetables but not generally in fruits, the main exception being bananas. Sugars are in fruits, vegetables, milk and foods such as sweets and cakes.

# Diet and Nutrition

Starchy carbohydrate sources should form the bulk of our diet, preferably in as unrefined a form as possible i.e. wholemeal bread and pasta, brown rice and potatoes cooked in their skins. The less processed the food the more nutrients it will contain, for example, although cakes contain starch they are also high in sugar and fat and lack vitamins and minerals.

Many people consider carbohydrates to be fattening, in fact it's often the spreads and sauces we put on them that cause the damage.

Foods such as fruit and vegetables contain sugar but have many nutritional benefits and should form part of a healthy diet. Sweets, cakes, ice cream, soft drinks, biscuits and similar foods with a great deal of sugar and few nutrients should be eaten only occasionally, preferably with meals to reduce the likelihood of tooth decay.

## **Polyols.**

Polyols, or sugar alcohols, form part of a group known as Nutritive Sweeteners. All nutritive sweeteners contain carbohydrate in the form of sugars, but contain fewer calories and have less effect on blood sugar levels. They are generally referred to, in food labelling, as "sugars or added sugars". Polyols are often used to sweeten food / drink on a volume-for-volume basis i.e. 1 spoon of polyols for 1 spoon of sugar, unlike artificial sweeteners such as saccharin, which is used in very small amounts.

## **Protein.**

Protein is vital for cell growth, repair and maintenance and to regulate bodily functions. It is made up of parts called amino acids, 22 types of which are needed by our bodies, these can be split into two types, essential and non essential. Non essential amino acids can be manufactured within the body, essential amino acids must be obtained from what we eat. Foods containing all essential amino acids are known as complete proteins, these include meat, fish, cheese and eggs. Vegetable sources (except Soya beans) contain only some of the essential amino acids and must be eaten in combination to provide our daily requirements. Complimentary sources include beans on toast and rice with dhal.

## **Fats.**

Fat is the demon of modern life, we all know that we should be eating less of it but most of us still eat too much. The problem is that fat is necessary in our diet and some fats can actually be good for us if eaten in the right quantities. Many slimming regimes concentrate on cutting out fat altogether, often at the expense of vital nutrients.

Fat is mostly made up of fatty acids, of which there are three basic types: saturated, polyunsaturated and monounsaturated. All foods containing fat have each of these in varying proportions; for example although we think of butter as a saturated fat it also contains monounsaturated and polyunsaturated fats as well.



## Saturated fats.

Saturated fats are normally solid at room temperature and are a major ingredient of meats, dairy products, milk chocolate and many processed bakery goods. These fats increase LDL (low density lipoprotein) 'bad' cholesterol, a major risk factor in heart disease.

## Polyunsaturated fats.

Polyunsaturated fats are usually liquid at room temperature, they are found in large quantities in vegetable oils and nuts. They help to lower LDL but can still be damaging in larger quantities because they may oxidise in the body, this process has been linked to various cancers.

However, some types of polyunsaturated fat, known as essential fatty acids, have been shown to be necessary to health. These fats are not present in many foods; the best sources are fresh, frozen or canned oily fish.

## Monounsaturated fats.

Monounsaturated fats, which may be liquid or solid, are present in largest amounts in olive oil, rapeseed oil and avocados. These are not only known to lower LDL but also to maintain levels of HDL (high density lipoprotein) or 'good' cholesterol.

Ideally our diet should be no more than 33% fats of which at least a third should be monounsaturated.

Food producers may provide, at a glance, information usually on the front of the packaging detailing the fat, sugar or salt content. Presentation is usually in the form of a traffic light system using familiar traffic light colours of red, amber and green.

 Red means HIGH. The food is high in fats, sugar or salt. It's ok as an occasional treat but don't make a habit of eating too much too often.

 Amber means MEDIUM. The food is a better choice.

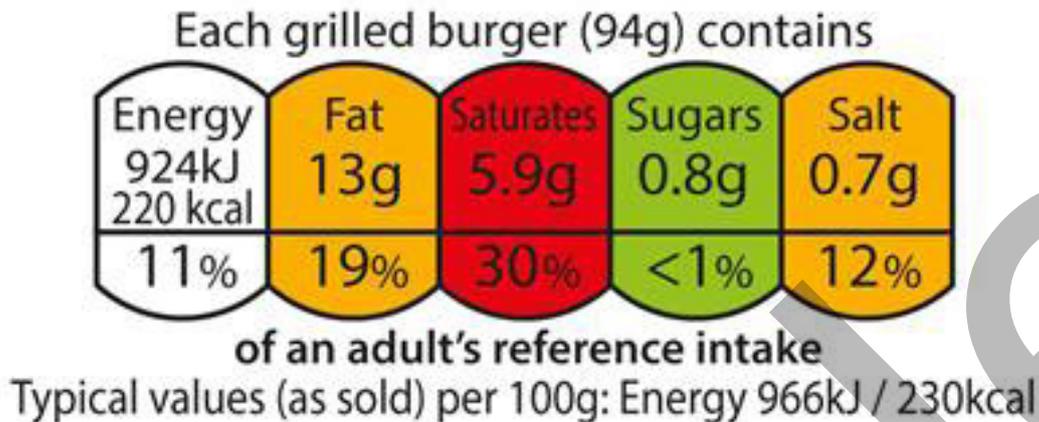
 Green means LOW. The healthier choice.

Should the food producer choose to provide this additional summary of contents it must be in either of the following formats:

- energy value (in both kilojoules (kJ) and kilocalories (kcal)); and
- the amounts (in grams (g)) of fat, saturates, carbohydrate, sugars, protein and salt.

# Diet and Nutrition

A typical presentation of front of packet information is shown below:



As well as the 3 main food groups discussed above, our daily diet should contain the following:

## Fibre.

There are two types of dietary fibre, insoluble and soluble, both of these are found in plant foods. Fibre is an important part of all diets but it is especially useful for people suffering from chronic constipation. We should eat around 24g of fibre each day, the average person manages just 13g, those with constipation may need up to 32g. Eating more than 32g has no extra benefit and may inhibit mineral absorption.

## Insoluble fibre.

Insoluble fibre is found in good quantities in grains such as wheat and rice and in vegetables and pulses. It gives your insides a workout, helping the passage of waste products and protecting against constipation and haemorrhoids. There is increasing evidence that this type of fibre can also help to prevent bowel cancer, diverticulitis and irritable bowel syndrome.

If you are eating extra fibre you should also drink more fluids.

## Soluble fibre.

Soluble fibre comes in several different forms including pectin, found in citrus fruits and apples; beta-glucans in oats, barley and rye; and arabinose in pulses. Various research has shown that this helps to reduce LDL blood cholesterol levels, (see information on fats), and helps to control blood sugar levels by slowing sugar absorption.

## Salt.

Salt is necessary for the correct functioning of nerves and muscles, it is also required for the maintenance of fluid balance within the body. The body automatically regulates how much salt or sodium is present within the body.

## Vitamins and minerals.

To function properly our bodies require a wide range of vitamins and minerals in relatively small amounts. Details of the various types, their benefits and sources, can be found at the end of this manual.

To ensure that we are getting all the nutrients we need we must eat a varied diet, not only do different foods contain different vitamins and minerals, the levels they contain will depend on where they were grown or, in the case of meats, what they ate.

Vitamins A, D, E and K are fat soluble, this means they can be stored by the body so we don't need a daily intake. Vitamin C and the B group cannot be stored and so we must have regular amounts. Many people take supplements to ensure this but research tends to show that vitamins and minerals are best obtained through diet unless medical advice indicates otherwise, for example during pregnancy.

Which vitamins can be stored in the body?

It is often assumed, because supplements can be bought across the counter at any supermarket or health food store, they are safe. Many vitamins will interact with widely prescribed medicines, either enhancing or decreasing their effect or effectiveness. These effects may cause life threatening reactions. If there is any doubt or concern consult the doctor, pharmacist for advice.

## Fluids.

We often take drinking for granted and don't even think about whether we have had enough. Water is essential to us living, without it we wouldn't survive long. Our body is nearly two thirds water, so it is important that we take in enough fluid to keep our bodies hydrated and healthy. Not getting enough fluid can make us feel tired, we may also get headaches and not perform at our best. Fluid is not only water but other drinks as well such as tea, coffee, fruit juices and soft drinks. We also get some fluid from the food we eat. If we are eating a healthy balanced diet then on average we will be getting 20% of our fluid intake from our food.

# Diet and Nutrition

How much fluid we need may depend on things like our age, the weather or how much physical activity we do. The EU recommendations suggest about 8 x 200ml for females and 10 x 200ml for males drunk slowly over the course of the day.

As a rough guide:

- Normal urine should be straw coloured.
- If you are passing dark yellow urine infrequently during the day you may not be drinking enough.
- If you are passing very pale urine frequently, you may be drinking more than you need.

Some groups of people need more encouragement to keep hydrated:

- Babies and children need plenty of fluids and should be encouraged to drink regularly.
- Older people can be less sensitive to feeling thirsty, so may need to be encouraged to drink more.
- Those who do a lot of physical activity need to plan refreshment breaks to maintain healthy hydration.

**Water** - by far the best thirst quencher; water contains no nutrients and so is not a food, however, it is even more vital to life. We could survive for many days without food but without water we would be dead within a few days.

**Milk** - a good source of the mineral calcium, drinking skimmed or semi-skimmed will keep the fat content down.

**Fruit juice** - a good source of vitamins, can count towards daily fruit and vegetable requirements, see section below.

**Alcohol** - can form part of a healthy diet when drunk in moderation. Recent studies have shown that alcohol in moderation may be good for the heart.

**Coffee / tea** - in moderation these are good antioxidants, (help to prevent cancer). Avoid drinking them with meals as they can prevent good mineral absorption.

**Fizzy drink** - should be avoided due to lack of nutrients and generally high sugar content.

**Fruit squashes** - same as fizzy drinks, even high juice varieties have very little benefit.

Give two examples of beverages which you might provide for your clients and explain some of their benefits.

## Fruit and vegetables.

Studies have shown that eating at least five portions of fruit and vegetables each day is good for health, the notes below show how this can be achieved.

- Fruit and vegetables can be fresh, frozen, tinned or dried.
- A glass of fruit / vegetable juice is one portion but should only represent one of the five a day as it is high in sugar and low in fibre. A handful of dried fruit counts as a portion but, like fruit juice should only count as one a day. Dried fruit is a good source of fibre but is high in sugar and low in vitamins.
- Potatoes do not count.
- Nuts and seeds do not count.
- Pulses such as lentils or baked beans can count towards the day's portions but are best considered as good sources of protein and starchy carbohydrates.
- At least one portion a day should be eaten raw.
- Salad items such as lettuce and cucumber are full of water and need to be eaten in relatively large amounts to be of benefit.
- One portion =
  - 1 Slice very large fruit e.g. melon.
  - 1 Large fruit e.g. orange.
  - 2 Medium fruit e.g. plum.
  - 1 Cupful small fruit e.g. grapes.
  - 3 Heaped tablespoons of vegetables.
  - 1 Dessert bowl salad.

## Diet and Nutrition

At least how many portions of fruit and vegetables should be eaten each day?

Sample

## Unit Two

### Achieving a balanced diet.

In unit one we identified the basic constituents of a balanced diet, in this unit we will look at how you could put them together.

Daily recommended calorie sources:

<b>Carbohydrates</b>	- 50% minimum
<b>Protein</b>	- 15% maximum
<b>Fats</b>	- 33-35% maximum
<b>Alcohol</b>	- 0-5%

Non drinkers could allow themselves a little extra sugar.

The above chart reflects ideal daily intakes of different foods, some people may require more calories than others but the proportions of the different food groups should remain the same. It is not essential to ensure every meal is made up this way, shortcomings in one can be made up in another, for example a high protein breakfast could be followed by a reduced protein lunch and dinner. However, it is best to consider using complex carbohydrates (pasta, rice, potatoes, bread and cereals) as the basis of each meal and working other foods around them. This is common practice in many cultures but here we tend to put our protein source first, for example we'll say we're having steak for dinner and everything with it will be secondary. By adjusting our way of thinking we can create healthier meals with more variety and choice.

Most meals should take the following form:

- A large serving of complex carbohydrates.
- One or two good sized servings of fruit and vegetables.
- A relatively small portion of protein, more if it's a vegetable source.
- A little added fat: butter, olive oil etc.

Although fat can form up to 35% of a healthy diet remember that it will be present in many different foods so add extra sparingly. Choose lean meat and lower fat protein sources where possible to ensure saturated fat intake is kept to a minimum.

When choosing protein sources remember the benefits of non meat and dairy alternatives such as pulses, they are less easily digestible so you can eat more of them, they are cheaper and are generally much lower in fat.