

The CARE CERTIFICATE

# Fluids and Nutrition

- What you need to know

Standard



## Fluids and nutrition and food safety

What we eat is vital to our health and wellbeing and how we look, feel and function. It is important that people have a diet that is safe to eat and has all the nutrients they need. Food safety is essential when preparing and handling food.

Not all substances and objects that can cause harm or illness can be seen. This means that people can become ill from eating food that tastes normal and looks safe. Whether you occasionally make someone a snack such as a sandwich, or are regularly involved in preparing meals, you should always make sure that the food is safe to eat.



### Contaminated

If something becomes contaminated it means it will become dirty, infected, unclean or polluted. This includes 'going off' by being too old to consume.

Food must be prepared and stored in ways that prevent it becoming contaminated with things that can cause harm or illness. Food hazards could be:

- **Physical** – such as objects that can be harmful, for example bones or bits of packaging. These could be in food when bought or introduced when preparing food. Check for these as far as is possible.
- **Chemical** – such as pesticides, weedkillers or cleaning chemicals that could be harmful if eaten, for example pesticides attached to fresh fruit and vegetables or cleaning products sprayed onto prepared foods. Ensure all fruit and vegetables are washed before preparation and avoid spraying cleaning products close to food.
- **Allergenic** – such as those that may cause reactions if an individual is allergic to the food, for example nuts, shellfish, milk or gluten. These may cause an itchy skin rash, breathing problems and/or stomach cramps with vomiting or diarrhoea. In the worst case the person may go into an **anaphylactic shock**. Always ensure foods that contain allergens are kept and prepared separately from foods that do not.
- **Bacterial** – such as **pathogenic** micro-organisms in food, for example raw foods that need to be cooked to remove the pathogens, or those found in the human gut, nose and mouth that can be transferred to food during the storage, handling and preparation process. Effective food safety principles should be followed to remove these risks.



## Anaphylactic shock

A severe and potentially life-threatening reaction to an allergy. Symptoms may include swollen hands, feet or eyelids, trouble with breathing and/or collapse and unconsciousness.



## Pathogenic micro-organisms

These are harmful germs that can be found in food and which can enter the body and grow or multiply causing infection and illness.

Legislation came into force on 13 December 2014 that sets out how food businesses deal with allergen information. This legislation applies to all organisations that provide food, including care and healthcare providers covering pre-packed and non-pre-packed foods. Providers are legally required to provide a warning if foods contain any of the 14 allergenic substances that are covered by the legislation. Information on the changes can be found here:

[www.food.gov.uk/science/allergy-intolerance/label/labelling-changes](http://www.food.gov.uk/science/allergy-intolerance/label/labelling-changes)



## Vulnerable

Individuals may be more vulnerable to being affected by contamination than is usual if a smaller number of bacteria can cause them illness, or if the symptoms they experience may be more severe. These could be due to a variety of reasons.



Some groups of people are more **vulnerable** to food-related illnesses because of a weakened immune system. These groups can include:

- **babies, toddlers, children and teenagers:** as immunity develops throughout our lives, the older we get the more immune we become to germs
- **pregnant and breastfeeding women:** childbearing and breastfeeding uses up a lot of the body's iron and zinc which are important for immunity
- **older people:** their immune system becomes less effective in recognising contaminated food
- **people living on a low income:** they find it difficult to afford a healthy and balanced diet
- **people in prison:** particularly through exposure in confined spaces to infectious diseases like tuberculosis and hepatitis C
- **people in hospital:** illness weakens the immune system, and some medication may also affect the immune system.

It is essential that precautions are taken to ensure that food is safe to eat. There are some basic principles you need to keep in mind to protect all individuals when handling, storing or preparing food, these include:

- remove jewellery before preparing food
- wash your hands thoroughly before touching food
- wash equipment in hot water between uses
- ensure food is cooked thoroughly
- store food in sealed containers and keep cooled
- food stored in a fridge should be labelled, dated and kept at 5°C
- store raw meat below cooked food
- prepare raw and cooked foods separately
- equipment should be washed in hot soapy water or a dishwasher if available.

The Care Quality Commission requires that where food is provided to individuals that it is handled, stored, prepared and delivered in a way that meets the requirements of the Food Safety Act 1990. If your role includes preparing or handling food, you must have the knowledge and skills to do so safely. Your manager will identify any training that you require.

## The importance of good nutrition and hydration in maintaining health and wellbeing

The food and drink that we have must provide the nutrients that our bodies need to work properly. To stay healthy we need a diet that includes the correct balance of the following:

### Carbohydrates

These provide most of the energy that we need. That includes energy for the basic actions that keep us alive (called the Basal Metabolic Rate) - for example, keeping the heart beating, enabling breathing, keeping blood circulating and for the production of hormones and enzymes and new tissues. Examples are bread, potatoes, rice or pasta.

### Vitamins

These support many different functions, including blood clotting, maintaining an effective immune system, and allowing the body to absorb energy from foods. Fruit and vegetables are good sources of vitamins.

### Minerals

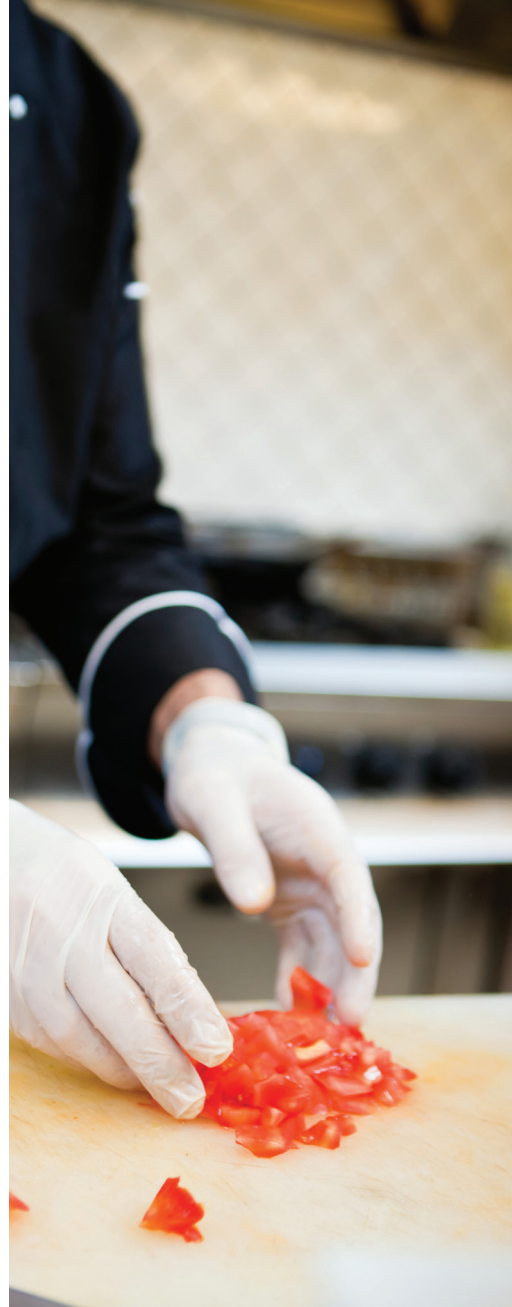
These include calcium, which helps to build strong bones and teeth, and iron, which helps the blood to carry oxygen around the body. Milk products are good providers of calcium and liver and shellfish are full of iron.

### Fibre

This promotes a healthy bowel and helps to remove waste products from the body. Fruit, vegetables, wholemeal bread, nuts and seeds are high in fibre.

### Protein

This is important for the body's cells and tissues to be repaired and replaced. You will find protein in milk products but also in meat, fish or beans.



A diet that does not include the right balance of everything we need can lead to ill-health. A healthy, balanced diet will give an individual the nutrients their body needs to function properly.

The 'eatwell plate' has been developed by Public Health England in association with the Welsh and Scottish Governments and the Food Standards Agency in Northern Ireland. It is the model used widely in the UK to illustrate a healthy diet and is suitable for most groups of people. It shows the five main food groups and the proportions of each food group recommended as part of a daily healthy diet.

See <http://www.nhs.uk/Livewell/Goodfood/Pages/eatwell-plate.aspx>

### **The food groups include:**

- fruit and vegetables
- bread, rice, potatoes, pasta and other starchy foods
- meat, fish, eggs, beans and other non-dairy sources of protein
- milk and dairy foods
- foods and drinks high in fat and/or sugar.

Fluid is essential for life. Without enough fluid the body cannot carry out basic processes that enable it to function correctly, such as:

- digesting food and enabling nutrients to be absorbed
- enabling blood to circulate around the body
- removing waste products via urine and faeces
- keeping cells and tissues moist, helping to avoid infection
- controlling body temperature by perspiration
- maintaining brain function.



It is recommended that individuals should have about 1.5–2 litres of fluid each day or 6–8 cups or glasses. Most ordinary drinks (for example, fruit juices, milk, tea and coffee in moderation and low sugar drinks) count as fluid but lots of alcohol can lead to dehydration. The best fluid to rehydrate the body is water. Some medical conditions, such as certain types of heart condition or kidney disease will require individuals to drink less.

There are times when an individual must not eat or drink anything for a set period of time, for example before an operation. This is known as “nil-by-mouth” and will be clearly shown in their care plan. This must be followed for their own safety. An individual’s exact fluid requirements will be in their care plan and should be referred to when providing care and support.

## Signs and symptoms of poor nutrition and hydration

Around a third of people admitted to hospital or care in the UK are **malnourished** or at risk of becoming so. **Signs and symptoms** that a person is not having the correct balance of nutrients include:



### Malnourished

The term malnourished means that an individual’s diet does not contain the right balance of nutrients it needs to function properly. This could include under-nutrition, when a person does not get enough nutrients or over-nutrition, when a person has more nutrients than they need.

### Signs and symptoms

These give us the first clues that an individual may be experiencing malnutrition.

- muscle weakness
- feeling tired all the time
- increased infections
- more falls
- constipation
- lack of energy
- gaining or losing weight
- changes in behaviour
- depression
- poor wound healing.



Early signs and symptoms of dehydration include:

- feelings of thirst as the body tries to increase fluid levels
- dark coloured urine as it tries to reduce fluid loss
- headaches, tiredness and confusion, as the flow of blood to the brain decreases.

(These signs might also indicate an undiagnosed health problem, for example type 2 diabetes.)

Ongoing dehydration can contribute to:

- constipation
- urinary tract infections, which are prevalent in some groups in care
- kidney stones and infections
- poor wound healing.

If dehydration remains untreated, it can have serious consequences. Blood circulation can be affected or kidneys can fail.

## Promoting adequate nutrition and hydration

When people receive any type of care or support (particularly long term care) an assessment should be made about their nutrition and hydration. This should include food allergies, likes and dislikes and the support they need to eat and drink. Information should also include things like whether they have their own teeth and, if not, can they eat normally or do they need soft food?

It is important to work in person-centred ways and to provide food which is suitable and that meets each individual's needs. If they have arthritis in the hands they may need help with cutting up food or opening packs like yogurts. Do they have beliefs or preferences that affect the foods that they eat? Are there any foods they should not have because of medication? For example, some people on certain medications for depression should not have cheese. Some individuals choose not to eat certain foods, for example, if they are vegetarians or vegans, so it is important that you know what this means. For example, those who are vegans do not eat dairy foods as well as not eating meat.

It is also important to know if there any foods a person should not have because of health conditions. For example:

- people with raised blood cholesterol levels may be advised not to have too much saturated fat such as butter, fried items and pastry
- people with diabetes may be encouraged to avoid too much sugar found in sweets, chocolate, sugared breakfast cereals, cakes and puddings and encouraged to eat fewer of these or smaller portions.
- those who have high blood pressure may be advised to limit salt
- anyone who is obese should be encouraged to limit sugary and fatty foods.

Some individuals might experience difficulties in eating or drinking without help. This may be due to:

- forgetting to eat (perhaps due to dementia)
- side effects of medication which may affect appetite or cause sickness
- poorly fitting false teeth
- physical illness such as a stroke which may have affected the individuals muscles around their mouth for chewing or hand for lifting drinks
- depression which may cause poor appetite
- a visual impairment which may affect the way a person sees their food to eat it

Equipment is available to support people in eating and drinking independently including:

- technology such as clocks or reminder messages to tell someone when it is time to eat or drink
- cutlery with shaped and padded handles that can help with gripping
- two-handled mugs to help people with poor grip, tremors or weak wrists
- cups with lids to reduce the risk of spillage
- one-way straws that help people to drink without the need to lift cups and glasses, even if muscle weakness has reduced their ability to suck
- non-slip mats which stop plates from moving around while people are cutting food
- plates and bowls with high sides to prevent food falling off the edges or insulated bowls which keep the food hot if the individual eats slowly.

It is important that individuals are treated with **dignity and respect**. They should have plenty of time to eat, not be rushed and be able to choose whether they would like to use any equipment offered. If you have concerns that an individual is not eating or drinking enough despite being encouraged and supported, you should discuss your concerns with your manager who may seek advice from a specialist such as a dietician or a nutritionist. They will ensure that additional support can be provided. This might include:

- closer monitoring of nutrition and fluid intake
- talking to the person to identify any barriers to eating and drinking
- emphasising that good nutrition and hydration are important
- discussing the problem with the person's carer or family member
- consulting with other workers such as doctors, therapists or dentists.

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### Compassion

All individual needs should be respected and a person should be treated in a compassionate way to help maintain adequate nutrition and hydration.

### Supporting individuals to have access to fluids, food and nutrition in accordance with their care plan

Providing for nutrition and hydration must be carried out in a person-centred way. Efforts must be made to meet each individual's needs and choices. Their care plan is an essential part of recording and delivering this.

Individuals should have access to fluid at all times, unless it is restricted for medical reasons. They should be encouraged to drink throughout the day and not wait until they feel thirsty, as feelings of thirst are an early sign of dehydration. To make sure that individuals are drinking enough you need to offer drinks and encourage and support them to drink as set out in their care plan. Drinks need to be refreshed regularly and placed within easy reach for those with restricted movement or mobility. If you are at all concerned about an individual's fluid intake, make sure you report these concerns to either a senior member of staff, the individual's carer or their family.

Food provided should be in accordance with an individual's care plan, and the care plan must ensure that cultural preferences, needs related to health conditions, and allergen advice is followed. Food safety principles need to be applied when storing, preparing and handling food. If the care plan states that the person needs encouragement or help and support with eating, this needs to be provided. Food needs to be served at the right temperature and within easy reach. If an individual needs specific utensils to eat independently, these need to be available too. As with concerns about fluid intake, any worries about an individual's food or nutrition should be shared with a senior member of staff, the individual's carer or their family.

THE CARE CERTIFICATE WORKBOOK STANDARD 8



The CARE CERTIFICATE

# Fluids and Nutrition

- What do you know now?

Standard



## Activity 8.1a



Part i) Food safety is essential when storing, handling and preparing food. Fill in the table below to **list** four of the basic principles of food safety, including hygiene.

**List** - this term means to identify the main points which can be written as bullet points.

### Basic principles of food safety

1.

2.

3.

4.

## Activity 8.1a



Part ii) Thinking about where you work, **describe** why food safety, including hygiene, is so important when preparing and handling food.

**Describe** - to describe means to create a picture with words but not simply writing a list of bullet points.

A large rectangular area with horizontal dotted lines for writing.

## Activity 8.1b



Part i)

**Explain** the importance of good nutrition and hydration in maintaining health and wellbeing. Make sure you include the factors in the grey boxes in your answer.

**Explain** - to explain something you will need to provide a clear account of your understanding, including details like why and how.

Carbohydrates

Eatwell Plate

Bodily functions

Balance

Vitamins

Minerals

Fibre

Protein

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## Activity 8.1b



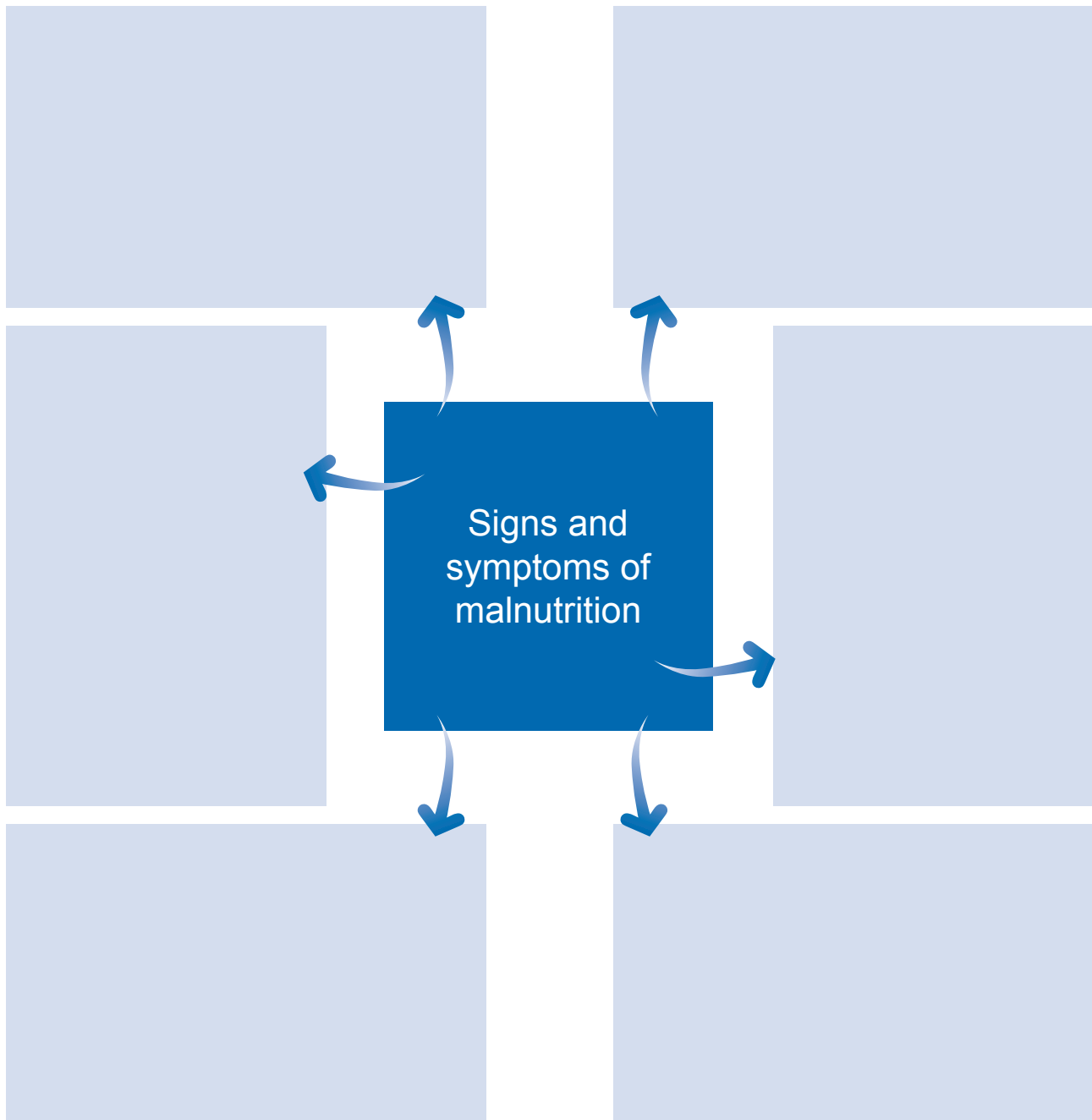
Part ii) Fill in the answers to the two questions on fluid intake.

|                                                                                                     |             |                                                                                                     |              |
|-----------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------|--------------|
| What is the recommended daily amount of fluid an individual must consume to support good hydration? | .....litres | How many 150ml glasses would an individual have to consume to reach the minimum recommended amount? | .....glasses |
|-----------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------|--------------|

## Activity 8.1c

Part i) Complete the diagram below to **list** the signs and symptoms of malnutrition.

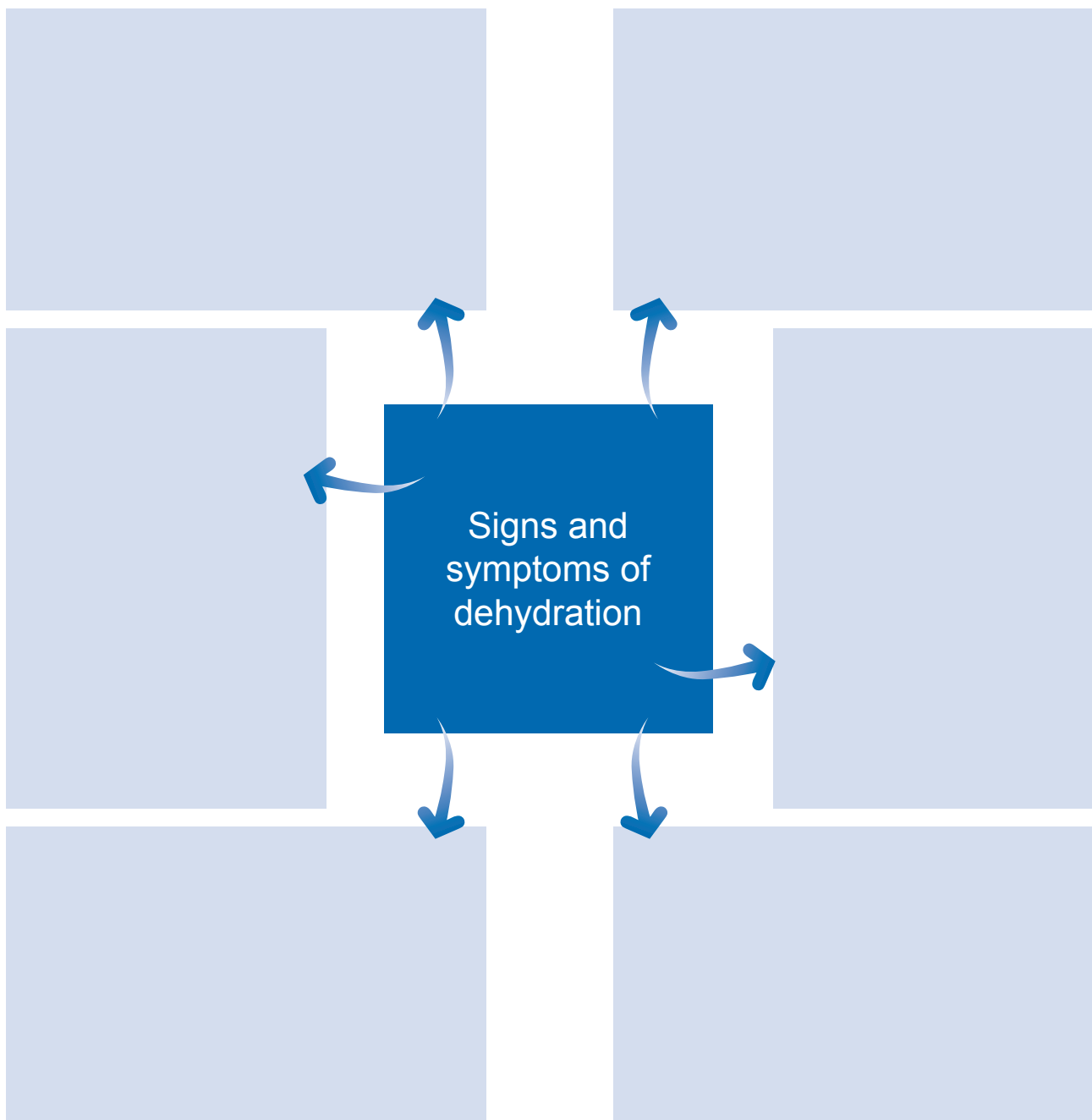
**List** - this term means to identify the main points which can be written as bullet points.



## Activity 8.1c

Part ii) Complete the diagram below to **list** the signs and symptoms of dehydration.

**List** - this term means to identify the main points which can be written as bullet points.



## Activity 8.1d

As a healthcare support worker or adult social care worker, you are required to promote good nutrition and hydration, encouraging and supporting individuals to have the correct balance of food and fluids according to their care plan.

For each of the examples below, **explain** how you would promote adequate nutrition and hydration for each individual.



**Explain** - to explain something you will need to provide a clear account of your understanding, including details like why and how.

| Individual                                                                                                                             | How would you promote adequate nutrition and hydration? |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| An individual who has had a stroke and whose muscles are weakened                                                                      |                                                         |
| An individual who has dementia and forgets to eat and drink                                                                            |                                                         |
| An individual who has a visual impairment and needs assistance to maintain their independence when preparing food, eating and drinking |                                                         |