

**You must** be able to know and understand the reasons why some people have to follow a special diet. **You should** be able to explain the various key terms: diet related illnesses, cardiovascular disease, coronary heart disease, stroke, obesity, diverticulosis, anaemia, coeliac disease, osteoporosis, food allergies and food intolerances.

If we eat a healthy balanced diet, the majority of people will get all the nutrients they need. Dietary needs are different for males and females and change throughout different life stages like adolescence, pregnancy and old age. Some people restrict their diet on account of their religious beliefs and some need to avoid certain foods for medical reasons.

**Cardiovascular disease (CVD)** - This is the general term that describes disease of the heart or its blood vessels. The term includes coronary heart disease and stroke in which arteries carrying blood around the body become blocked with fatty deposits (cholesterol) and consequently blood flow is reduced. CVD is linked to poor diet and lifestyle traits such as obesity, high blood pressure, a diet high in cholesterol and lack of exercise. To reduce the outcome of CVD it is important to follow dietary guidelines and eat a diet that is low in saturated fat and instead eat foods higher in unsaturated fat such as oily fish, nuts and seeds, olive oil and the recommended 5-a-day of fruit and vegetables.

**Diabetes: type 2** - The body may produce too little insulin, or the body has become insulin resistant and cannot utilise the glucose produced by carbohydrates. To help prevent this condition, people should follow the healthy eating guidelines, exercise and maintain a healthy weight. This kind of diabetes usually affects people who are overweight or older. If a person is overweight, they are twice as likely to get type 2 diabetes. Therefore, a high-sugar diet and high-fat diet should be avoided.

**Coeliac Disease** - The body cannot absorb the protein found in wheat, rye, barley and some oats. The protein is called gluten. People with this will need to avoid ALL food and drink with this in it such as bread, cakes, pasta and couscous. There are many gluten-free products on the market today which will carry a symbol on its packaging. People with this allergy damage the lining of the small intestine if gluten is eaten. This prevents the absorption of nutrients, leading to weight loss and malnutrition. Gluten intolerance produces a less severe reaction and people with this condition suffer bloating and diarrhoea.

**Food intolerance and allergies** - A food intolerance is when a person has an unpleasant reaction to a food or an ingredient. A food allergy, on the other hand, involves the person's immune system. Some people are either born with or develop an **allergy** and will have to avoid eating certain foods e.g. nuts or eggs. Symptoms of allergies include severe skin rashes, eczema, diarrhoea and even anaphylactic shock. Peanut allergy is the most commonly known allergy. It causes severe symptoms which affect people's breathing and causes anaphylactic shock. This is a serious condition where the throat swells up, preventing air from reaching the lungs. All pre-packed food in the UK must clearly state on the label if they contain any of the 14 major food allergens. Allergens can be written in bold,

capitals, italics, highlighted or underlined on food labels. Cross-contamination of allergens must be stated as a warning on packaging labels. **Lactose intolerance** means that a person must not consume cows' milk. This causes abdominal pain, bloating and diarrhoea. People with lactose intolerance do not have the enzyme lactase in their stomachs, so they cannot digest it.

**Obesity** - This is the term to describe a person who is very overweight, with a lot of body fat. It is a common problem in Western society. The method to determine if a person is overweight is to measure their BMI. This is a measure of whether they are a healthy weight for their height and age. Obesity is when people have a BMI (body mass index) of more than 30. To control obesity, it is recommended to follow a healthy balanced calorie-controlled diet (following the Eatwell Guide) and to exercise regularly. Obesity occurs when the energy taken in from food and drink is far greater than the energy used in daily activities. Obesity can have a negative impact on quality of life and increase the probability of other medical conditions such as heart disease and type 2 diabetes.

**Iron deficiency anemia** - Iron is important in making red blood cells, which carry oxygen around the body. Iron deficiency anemia results in the person affected feeling tired and lethargic because organs and tissues will not get as much oxygen as they need. Good sources of iron include liver (avoid during pregnancy), eggs, red meat and dried fruit e.g. dried apricots and most dark green leafy vegetables.

**Calcium** - This nutrient has several important functions. These include helping build strong bones and teeth, regulating muscle contractions (including heartbeat) and making sure blood clots normally. A lack of calcium could also lead to a condition called rickets in children and osteomalacia or osteoporosis in later life. Losing bone density is a normal part of the aging process but for some it can lead to bone fractures. To prevent this, eat a healthy, balanced diet and take regular exercise. Vitamin D is also important for health bones and teeth as it helps the body absorb calcium. Calcium rich foods include dairy foods, green leafy vegetables and tofu. Vitamin D can be found in eggs and milk but is also made in the skin in response to sunlight.