

Starter:

1. Obesity is a risk factor of developing many other diseases
True/ False [1 mark]
2. Suggest two dietary recommendations for people with osteoporosis
[2 marks]
3. Describe how a high intake of fats may affect cardiovascular health
[2 marks]
4. Hypotension is a disease in which blood pressure is too low.
True/ False [1 mark]
5. Explain the relationship between diet, nutrition and health
[2 marks]

Revision- Diet, Nutrition and Health

Learning Objectives:

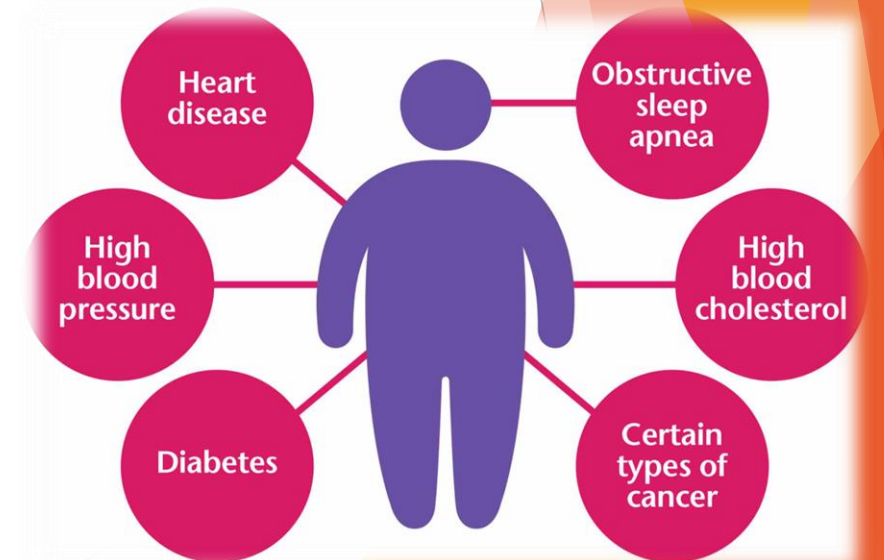
Recall information about nutritional needs

Address any misconceptions

Apply knowledge to exam questions

In depth look- Obesity

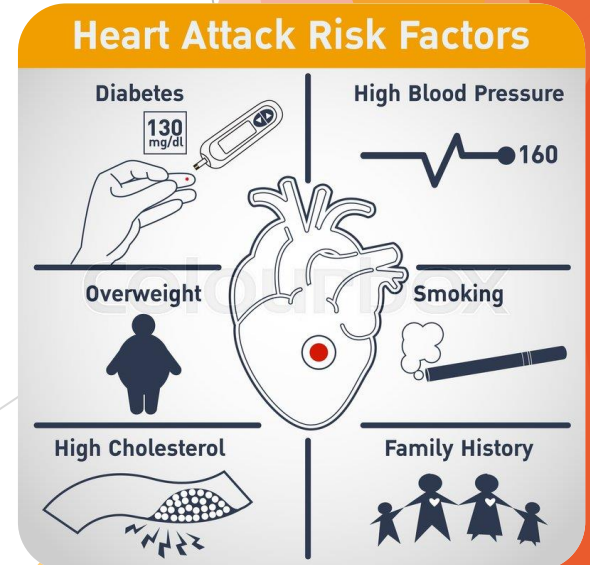
- ▶ Obesity is defined as being very overweight, 1 in 4 adults and 1 in 5 children in the UK are classed as obese.
- ▶ These levels are based on your BMI= Body Mass Index
 - ▶ $\text{BMI} = \text{weight (in kilograms/kg)} / \text{height (in metres squared, m}^2\text{)}$
- ▶ Health problems linked to obesity are: Type 2 diabetes, CHD, Stroke, some Cancers, Arthritis and Depression (these can be considered RISKS)
- ▶ How to treat?
 - ▶ Children should exercise 1 hr a day, adults 4 hrs a week
 - ▶ Eating correct portions and not over eating



In depth look- Cardiovascular issues

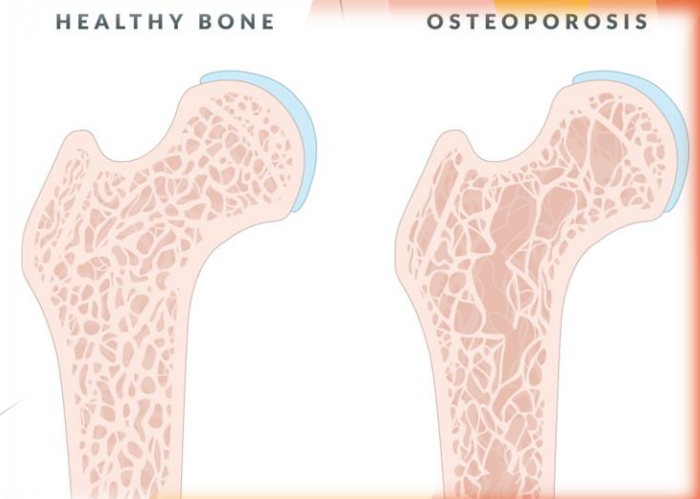


- ▶ Cardiovascular disease= Coronary Heart Disease (CHD) and stroke
- ▶ If blood flow is reduced or stopped by a BLOOD CLOT or narrowing of BLOOD VESSELS damage can be caused to the body, this can lead to a HEART ATTACK. If this happens in the brain it can lead to STROKE.
- ▶ CHD- blood vessels in heart get blocked with fatty deposits (plaque). Angina is when the blood flow is restricted, if cut off completely- heart attack.
- ▶ Stroke- blood supply to brain cut off.
- ▶ Risk factors= high blood pressure (hypotension), smoking, high cholesterol, diabetes, lack of exercise, obesity, genetics.



In depth look- Bone Health

- ▶ Strength of bones depends on diet, exposure to sunlight and exercise.
- ▶ Rickets=
 - lack of Vitamin D and Calcium in diet.
 - Leads to weak and soft bones (bow legs)
 - Might be due to lack of exposure to sunlight (kids playing indoors more)
 - Children aged 6m-5yrs can have vitamin drops.
- ▶ Osteoporosis=
 - Lack of Vit D and calcium from childhood to early adulthood
 - More likely to break bones- weaker, more brittle
 - Healthy diet include calcium and Vit D
 - Most likely to effect women over 50+



In depth look- Dental Health

- ▶ Dental health is important, to keep your teeth and gums healthy.
- ▶ Should have regular check ups with the dentist
- ▶ Brushing should start from the first tooth being visible in babies.
- ▶ Teeth should be cleaned twice daily for 2 mins a time. A FLUORIDE toothpaste should be used (why?)
- ▶ Sugar
 - ▶ Eating foods with high sugar content/ free sugars in can encourage tooth decay
 - ▶ 0-3 year olds should not have sugar in their diets
 - ▶ RDA 30g a day 11+
 - ▶ Tooth decay is when plaque forms on your teeth which contains bacteria- this interacts with food, producing acid which erodes teeth



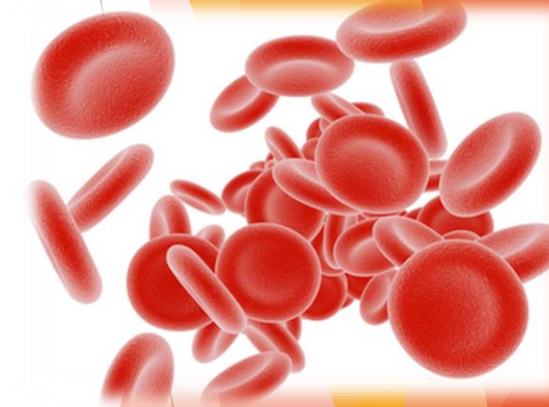
In depth look- Anaemia

▶ Iron-deficiency anaemia

- ▶ Symptoms: a pale complexion, breathlessness, heart palpitations, tiredness, dizziness and fainting
- ▶ Cause: menstruation, pregnancy, not eating enough iron in diet
- ▶ Treatment: iron tablets, iron absorbed easily when combined with Vitamin C

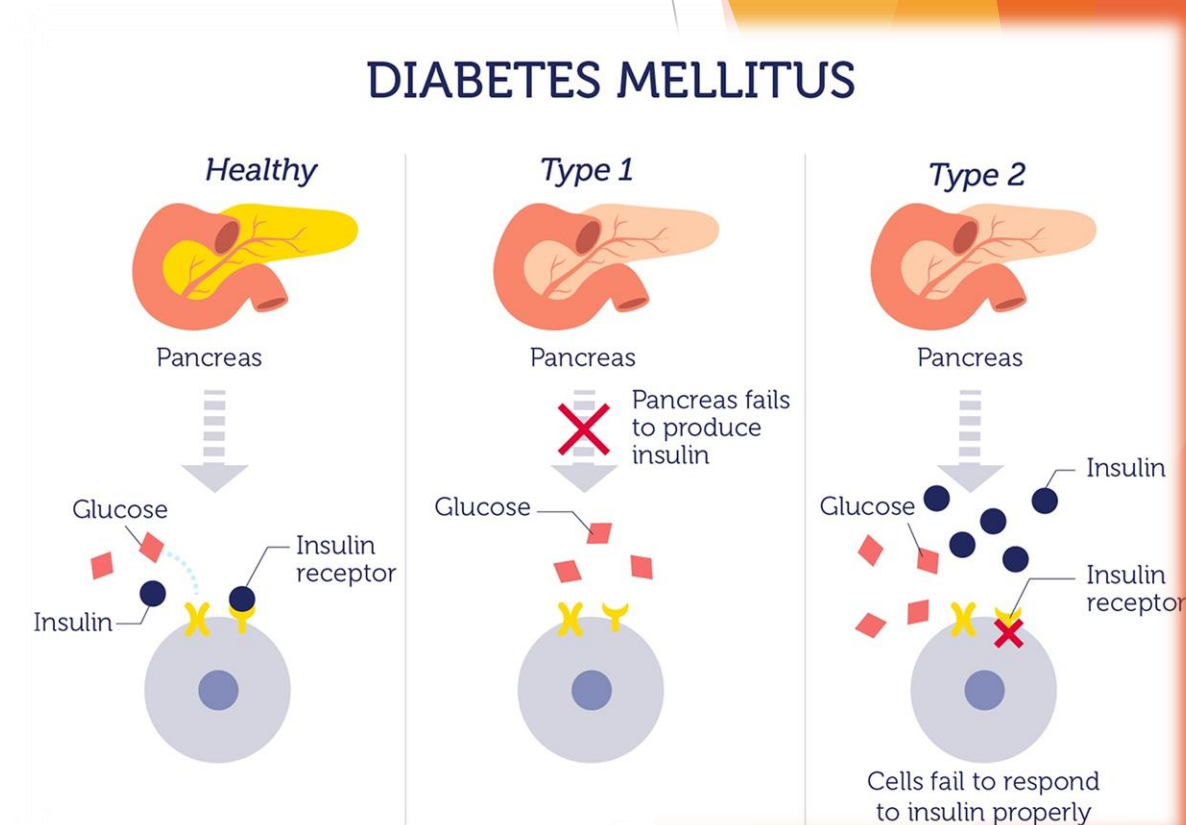
▶ Pernicious Anaemia (lack of B12 in diet)

- ▶ Cause: lack of B12 in diet, affects mainly vegans as they don't have animal sources in diet
- ▶ Treatment: tablets or injections given



In depth look- Type 2 diabetes

- ▶ Condition that affects the blood sugar levels in a person
- ▶ Type 2 diabetes is the most common in the UK (usually controlled by the diet)
- ▶ Likely to develop it (risk factors)- overweight, over 40, eat fatty/salty/sugary foods often, hypotension, lack of exercise.
- ▶ Symptoms: tiredness, thirsty, peeing more
- ▶ Treatment: food diary → starchy carbohydrates (slow release energy)



Plenary- Exam question

Assess dietary needs of a teenage girl in order to prevent iron deficiency anaemia. [6 marks]

P-Point

E-Evidence

E- Explain

L-Link

Mark Scheme

The answer includes a reference to:

(1 mark for each correct statement, max. 6 marks)

- Teenage girls need more iron than teenage boys.
- Teenage girls are at more risk of developing anaemia due to menstruation.
- Iron is necessary to build haemoglobin in the red blood cells and transport oxygen around the body.
- To provide the proper amount of iron, girls should eat:
 - red meat and offal (e.g. liver)
 - leafy green vegetables such as spinach or kale
 - broccoli
 - fortified cereals
 - eggs
 - wholegrain bread
- Folate (folic acid, vitamin B9) and vitamin B12 (cobalamin) are also necessary in the process of building red blood cells, and help to prevent anaemia.
- Sources of folate include:
 - leafy green vegetables such as spinach, broccoli
 - wholemeal cereal products, e.g. wholegrain bread, brown rice
 - fortified foods, such as orange juice, bread
- Sources of vitamin B12 include:
 - meat
 - poultry
 - fortified foods, such as bread, breakfast cereals
 - egg yolks
 - milk and dairy
 - fish and shellfish
- Vitamin C increases iron absorption in the intestines, helping to prevent anaemia.
- Vitamin-C-rich foods include:
 - potatoes
 - cabbage and sauerkraut
 - bell pepper, broccoli, tomatoes
 - strawberries
 - oranges and lemons

Accept other suitable answers.