

COMPONENTS OF BLOOD

- plasma
 - clear, yellowish liquid
 - transports waste products (carbon dioxide)
- red blood cells
 - contain haemoglobin that binds to oxygen and transport it around body
 - circular biconcave shape = larger surface area to volume ratio for faster diffusion of oxygen
 - no nucleus to store more haemoglobin and transport more oxygen
- white blood cells
 - phagocytes (digest foreign particles eg. bacteria)
 - lymphocytes (produce antibodies to protect body from pathogens)
- platelets
 - releases enzymes at site of injury that converts fibrinogen to fibrin, which forms a mesh across the damaged surface to trap red blood cells and form a clot to prevent further blood loss and entry of pathogens.

CORONARY HEART DISEASE

- coronary arteries become blocked or narrowed by deposition of cholesterol and saturated fats in the lumen, so red blood cells are unable to transport oxygen to heart.
- This reduces blood supply to the heart muscles, or even cut it off completely.
- due to insufficient oxygen from blood, this will lead to a heart attack, where the region of the heart muscle dies and leads to heart failure, when the heart is no longer able to pump blood to other parts of the body

preventive measures

- healthy diet low in cholesterol and saturated fats
- no smoking (nicotine increases blood pressure)
- exercising regularly to lower stress and strengthen heart