Your body and exercise

Y8 Physiology

Bones and Muscles

- Physical activity = movement

- Sedentary behaviour = sitting / lying down

- 30 min exercise 5 times per week = minimal needed

- 30 min walk at a fast pace (just short of jogging)

- muscle atrophy —> when muscles don't get used and waste away (use it, don't lose it)

- osteoporosis = when bones are weak, brittle and break easily

Cardiovascular System

- heart , lungs and blood vessels (veins and arteries)

- send blood and oxygen to all body cells

- heart is a muscle

- lack of exercise means that:

    - blood gets thicker and moves about body slowly

    - blood vessels get thicker and less flexible

    - these two reasons can lead to heart attack and strokes as blood clots block the arteries to the heart and vein

Endocrine System

- regulates hormones

- insulin = hormone that regulates blood sugar levels

- type 2 diabetes = too much sugar in blood, insulin not working to regulate it

- sleep cycles are controlled by hormones secreted during exercise. Exercise regulates your sleep cycle so you sleep well at night and wake up refreshed, not tired.

Nervous system

- brain and spinal cord

- dementia is a disorder caused by lack of using your brain

- depression and anxiety is reduced with exercise because exercise releases endorphins, hormones that make you feel good and happy

- lack of exercise reduces your body temperature which means that your metabolism is slowed down = fat deposits and lethargy (tiredness)

Immune System

- better circulation means more blood reaching all your body cells more often which means better immunity as blood carries white blood cells which fight disease

- stronger heart = better immunity

Digestion

- exercise speeds up digestion

- lack of exercise leads to constipation = hard to go to the toilet, never feeling empty inside bowel

- it is healthy to go to the toilet 2-3 times per day for poo and as often as possible for wee

- drink over 2L water per day, increase fibre in diet thru eating fruit, vegetables and nuts and seeds and exercise 30 min/day