Health, Fitness, Short- and Long-term effects of exercise

-Short-term effects of exercise on the Musculo-skeletal system, respiratory and cardo-respiratory systems.
-Long-term effects of exercise on the Musculo-skeletal system, respiratory and cardo-respiratory systems.
-Definitions of Health, Fitness, Exercise and Performance and the relationship between them.

What does being healthy look like?

Physically

- *Having strength, balance, coordination and fitness to be able to do everyday tasks*
- *Not suffering from any illnesses, disease or injuries*
- *Body organs and systems are working together*

Emotional

- Absence of significant stress and anxiety
- Able to manage emotions and challenges
- Confident and content
- Feeling positive and optimistic about life and the future

Social

- You have friends
- Being able to interact with a range of people and having a sense of belonging.
- You have food and shelter and clothing
- Having respect, empathy and tolerance for other people.

Long-Term Effects of Exercise

Musculo-skeletal

- Increased bone density
- Muscle hypertrophy
- Increased strength of ligaments and tendons
- Increased tolerance to lactic acid

Cardiovascular system

- Cardiac hypertrophy
- Increased resting stroke volume
- Decrease resting heart rate
- Increase in maximum cardiac output
- Capillarisation at the lungs and muscles
- Increase number of red blood cells
- Increased size and strength of heart
- Drop in resting blood pressure

Respiratory system

- Increased vital capacity
- Increased number of alveoli
- Increased strength of intercostal and diaphragm muscles
- Increased lung capacity and volume

Short-Term Effects of Exercise

Musculo-skeletal

- Increase in temperature of muscles
- Muscle fatigue and lactic acid build-up

Cardiovascular system

- Increase in stroke volume
- Increase in heart rate
- Increase in cardiac output
- Increase in blood pressure

Respiratory system

- Increase in breathing rate
- Increase in tidal volume
- Increase oxygen uptake and carbon dioxide removal

Health - is defined as a complete state of physical, emotional and social wellbeing and not merely the absence o disease or infirmity.

Fitness – the ability to meet the demands of the environment.

Exercise – Physical activity which maintains or improves health and fitness.

Performance – How well a task is completed.

How can exercise improve health?

Physical – Improves health-related components of fitness, maintains healthy weight, removes cholesterol from walls of arteries, prevents high blood pressure, prevents osteoporosis, reduces the risk of type 2 diabetes, and prevents obesity.

Emotional – helps us ‘feel good’, helps overcome physical and mental challenges, aesthetic appreciation and increased self-esteem.

Social – opportunities to socialise/make friends, cooperation, good attitude to competing and good teamwork.