

## FITNESS AND HEALTH

**There are plenty of reasons why getting off the couch and into your games kit is a good thing<sup>1</sup>. Our bodies are like cars; they need to move to function well!**

### **BENEFITS OF SPORT**

Regular exercise improves health and fitness.

- ❖ **Health** is defined as a state of complete mental, physical and social well-being; not merely the absence of illness.
  
- ❖ **Fitness** is the ability to meet the demands of the environment.

**Mental benefits** include:

- improved confidence
- relief of stress/tension

**Physical benefits** include:

- losing weight
- improved posture
- improved body shape (physical appearance; the distribution of muscle and fat)

**Social benefits** include:

- meeting people
- making friends

Being a member of a sports club and regularly participating in sport will develop **personal qualities** from:

- **Co-operation** – working with others.
- **Competition** – testing yourself against others.
- **Physical challenge** – testing yourself against the environment or your best performances.

## **HEALTH RELATED FITNESS FACTORS**

Everyone needs to have a level of fitness for everyday activities.

### **FITNESS FACTORS:**

- **Stamina:** is a combination of cardio-respiratory endurance and muscular endurance:
  - **Cardio-respiratory endurance** is the ability to exercise the whole body for long periods of time. It is the ability of the heart and lungs to get oxygen to the muscles, so that the muscles can perform for a long time.
  - **Muscular endurance** is the ability of a muscle or group of muscles to perform for a long time. It is the ability to use voluntary muscles many times without becoming tired.
- **Strength** is the amount of force a muscle can exert against a resistance. It is the greatest force a muscle can produce in pushing, pulling or lifting.
- **Flexibility or suppleness** is the ability to stretch muscles so that a joint has a large range of movement.
- **Speed** is how quickly muscles can move the joints. It is the ability to perform a movement or cover a distance in a short period of time; how quickly an individual can move.

## **SKILL RELATED FITNESS FACTORS**

- **Agility** - the ability to change the position of the body quickly and with control. This helps team players dodge their opponents.
- **Balance** - the ability to maintain the position when stationary (static balance) or moving (dynamic balance). This helps gymnasts maintain their position.
- **Co-ordination** - the ability to use two or more body parts together. This helps all athletes to move smoothly and quickly.

- **Reaction time** - the time between the presentation of a stimulus and the onset of a movement. This helps swimmers to make a fast start.

## **AGE**

**It takes more than your body alone to perform. Age dictates how much strength you have, with optimum fitness experienced into your late twenties then declining by about 2% each year after. Being motivated is also important - you know, the difference between feeling really lazy versus wanting to go out there and kick some butt!**

Regular exercise and skill development are vital parts of growing up. However, heavy weight training and extreme distances should not be attempted by children as both affect joints and growth. Performance increases with age until your **late twenties**. After that age **strength and endurance decline by 1-2% per year**.

### **EFFECTS OF AGEING INCLUDE:**

- MHR (Maximum Heart Rate) decreases each year which means you can't work as hard.
- Arteries harden - blood flow to muscles is reduced.
- Muscles reduce in size and muscle strength decreases.
- Body fat builds up as you are less able to use it for energy.

**Training can improve performance and reduce the effects, but cannot prevent the decline.**

## TEST

**1. The ability to keep going for a long time is called:**

- cardiovascular fitness
- strength
- power

**2. The range of movement at a joint is called:**

- coordination
- balance
- flexibility

**3. Flexibility is vital for:**

- hockey
- football
- gymnastics

**4. How well a task is completed is called:**

- strength
- performance
- training

**5. The ability to change our body position quickly is:**

- agility
- coordination
- balance

**6. Reaction time takes place between stimulus and:**

- movement
- making a decision
- understanding

**7. All sprinters need very good:**

- agility
- reaction time
- balance

**8. Strength and endurance usually decline after your:**

- mid-twenties
- mid-thirties
- mid-forties

**9. The effects of ageing can be reduced by:**

- training
- smoking
- studying

**10. An ageing effect on arteries is that they:**

- become limp
- weaken
- harden