# Focus Question 3 - What role do preventative actions play in enhancing the wellbeing of the athlete?

## Physical Preparation

**Pre-screening**

1. What basic information should be included in a pre-screen questionnaire?
2. **Age, Gender, Medical History, Previous Experience**
3. Gender, Medical History, Previous Experience, Financial Status
4. Age, Current Health Status, Fitness Goals, Previous Experience
5. Gender, Fitness Goals, Medical History, Previous Experience
6. Which group of people is pre-screening most important for?
7. **Males aged over 35, females over 45, high blood pressure, smoker, pregnant, sedentary lifestyle**
8. Young people, low blood pressure, smoker, pregnant, low levels of exercise
9. Males and females aged over 40, low blood pressure, smoker, pregnant, sedentary lifestyle
10. Young people, high blood pressure, non- smoker, low levels of exercise

**Skill and Technique**

Mix and Match Injuries that can occur due to incorrect skill and technique in the following sports

|  |  |
| --- | --- |
| **Sport** | **Injury** |
| **Volleyball** | Hit by the ball in the head - Batter |
| Rugby League/Union | **Broken Fingers** |
| Cricket | Blow to the body with a stick |
| Hockey | Neck Injury |

**Physical Fitness – True/False Statements**

|  |  |
| --- | --- |
| **Statement** | **True/False** |
| Physical fitness requirements are correlated with position requirements | **T** |
| Previous injuries does not affect physical fitness requirements | **F** |
| Increasing physical fitness can help reduce injuries | **T** |
| Decreased levels of physical fitness does not impact the ability to consistently perform the correct skill and technique | **F** |
| All players in a team should partake in the same physical fitness training | **F** |

**Warm Up, Stretching and Cool Down**

1. The purpose of a warm up is to;
2. **Increase blood flow to the muscles, increase body temperature, increase flexibility, mentally prepare**
3. Decrease blood flow to the muscles, increase body temperature, increase flexibility, mentally prepare
4. Increase blood flow to the muscles, decrease body temperature, increase flexibility, mentally prepare
5. Increase blood flow to the muscles, increase body temperature, decrease flexibility, mentally prepare
6. Which statement is correct in relation to the benefits of using an appropriate stretching exercise?
7. Decrease the length of the muscle, Reduce tension in the muscle, Increase blood circulation, improve ROM at the joint
8. Increase the length of the muscle, increase tension in the muscle, increase blood circulation, improve ROM at the joint
9. **Increase the length of the muscle, Reduce tension in the muscle, increase blood circulation, improve ROM at the joint**
10. Increase the length of the muscle, Reduce tension in the muscle, Increase blood circulation, reduce ROM at the joint
11. What are the benefits of a cool down?
12. Increase flexibility in muscle groups, disperse lactic acid, prevent blood pooling
13. Maintain flexibility in muscle groups, accumulate lactic acid, prevent blood pooling
14. Increase flexibility in muscle groups, disperse lactic acid, increase blood pooling
15. **Maintain flexibility in muscle groups, disperse lactic acid, prevent blood pooling**

## Sports Policy and the Sports Environment

Use the following acronyms to demonstrate your understanding of the syllabus dot points

|  |  |
| --- | --- |
| Syllabus Term | Reasons for the sports policy/rules/equipment |
| **Modified Rules for Children** | 1. **Reduce Injury** 2. **Learn Skill and Technqiue** 3. **Increase Success** 4. Easier **Rules** to understand |
| **Rules of Sports and Activities** | 1. **Heat** Rule in Tennis 2. Must wear **Shinpads** in Soccer 3. **Qualified** Referee 4. **Penalties** in all sport for breaking the rules |
| **Protective Equipment** | 1. **Helmet** worn in cycling/horse riding etc. to **reduce** head injuries 2. **Pads** in cricket to reduce **injuries** 3. **Mouthguards** in rugby to protect **teeth** |
| **Matching Opponents** | 1. **Promote Safety** 2. Match based on **skill** **level** 3. **Increase** participation and enjoyment |
| **Safe grounds, equipment and facilities** | 1. **Reduce Injuries** 2. Ensure all athletes have the correct **protective equipment** 3. **Broken** equipment isn’t used |

## Environmental Conditions

***Mix and Match – Temperature Regulation***

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| --- | --- |
| **Thermoregulation** | **Description** |
| **Convection** | Loss of heat from the body to the environment via infra-red rays |
| *Conduction* | **Transfer of heat through moving currents of air** |
| Radiation | **Loss of heat from the body when sweat is converted into vapour and leaves the skin** |
| **Evaporation** | *Transfer of heat through contact with other objects* |

***Mix and Match – Climatic Conditions***

|  |  |
| --- | --- |
| **Climatic Condition** | **Description** |
| **Temperature** | *Convection can contribute to wind chill which can impact on performance* |
| **Humidity** | **Can pose significant safety hazards, particularly for those athletes with compromised respiratory systems due to conditions such as asthma** |
| *Wind* | **Excessive heat and cold can result in hyperthermia or hypothermia** |
| **Altitude** | **The amount of moisture in the air and can limit the body’s ability to dissipate heat** |
| **Pollution** | **May reduce aerobic capacity due to the variance in air pressure at high altitude** |

***Guidelines for Fluid Intake***

Fill in the numbers that are missing

* Drink ***500*****ml** of fluids ½ to 1 hour before exercise
* Drink at least ***200* ml** of fluid every 10 – 15 mins during exercise (increase for hot/humid conditions)
* During exercise take full advantage of all breaks in play to replace fluids
* After exercise ensure you are full rehydrated
* To assess fluid loss weigh yourself before you start exercise. **1kg** =  **1 litre** of fluid that needs replacing
* After exercise aim to replace  **1.5 times** the amount of measured fluid deficit

***Acclimatisation***

Acclimatisation is a training technique where **climatic** stress causes **physiological**  **adaptations** to occur. Immediate responses to exercising in altitude are:

* **Hyperventilation** – stabilises after about a week
* Increased **cardiac output** – Due to **increased levels of haemoglobin**
* Increase **Blood Pressure**

**Long** term adjustments involve:

* Increase in the number of **red blood cells** and **haemoglobin**
* Changes to cells and tissues

The longer someone trains in altitude the better the performance will become. **30** mins acclimatisation activity each day for **7**-10 days is usually ample for preparation for safe exercise in heat.

## Taping and Bandaging

|  |  |
| --- | --- |
| Syllabus Term | How does this prevent and/or treat injuries? |
| **Preventative** | 1. Stops a player **rolling** their ankle in netball 2. Protects volleyball players **fingers** from dislocation 3. Reduce **shoulder** movement in Rugby League 4. Reduces chance of **hyperextension** |
| **Isolation** | 1. Prevents further **injury** 2. Helps in **healing** process 3. Reduces **excessive** mo**vement** of injured area |
| **Treatment (Bandaging for Immediate treatment of injury)** | 1. Control **blood flow** and **prevent** infection 2. Apply **pressure** to reduce **swelling** 3. **Immoblise** and **support** injured area |