

Methods and Effects of Training Revision Guide

St Mary's Catholic Academy
GCSE Physical Education

Effects of Warm Up and
Down

Training should be considered to be a very **deliberate and controlled process**, following **precise guidelines**. One of those guidelines is that **every session starts with a warm up and ends with a cool down**. **Specific training methods** are used to bring about **specific outcomes** and even the timing and order of when to use each training method can be planned to the finest detail.

W

A

R

M

Pulse raising activity

The pulse raiser will increase deep muscle temperature, loosen joints and increase respiratory and cardiac rates. Stroke volume increases allowing for greater oxygen delivery to the muscles that will work during the performance.

Stretching and mobility exercises

Stretching and mobility exercises increase the range of motion at joints, increase the extensibility of the muscle and helps to reduce the risk of soft tissue injuries such as sprains and strains.

Sport specific activities

Sport specific activities involving drills and practices that develop the core skills of the performance. This causes an increased coordination of antagonistic pairs of muscles, an increased feeling of confidence and increased coordination between players in team sports.

Mental preparation

Times set to rehearse the challenge ahead and concentrating on the specific targets that are to be achieved.

Effects of Warm Up and Cool

Down

O

O

O

Light jog

The light aerobic work allows for the respiratory and cardiac levels to reduce gradually. Core muscle temperature is maintained while capillaries are flushed with oxygenated blood. Lactic acid and other toxins are removed from worked muscles more efficiently.

Stretching

Stretches within the cool down are typically held for 30 seconds. As the muscle stretches blood flow is increased allowing for faster recovery. Muscles are better prepared for the next training session and soreness and pain experienced after training is reduced.

Refuelling

Consuming carbohydrates, proteins and fluids within the first two hours post-exercise allows for optimal recovery. Carbohydrates replace the glycogen burned during training. Proteins help the adaptation process by allowing muscles and other soft tissues to be rebuilt stronger. Fluids such as water and isotonic drinks allow for rehydration.

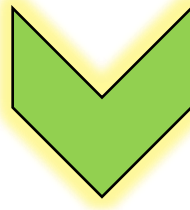
Methods of Training

CONTINUOUS TRAINING

(Develops cardiovascular fitness)

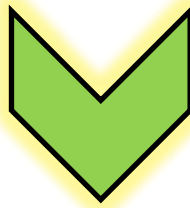
PLYOMETRIC TRAINING

(Develops power)



FARTLEK

(Develops cardiovascular fitness)



FLEXIBILITY TRAINING

(Develops flexibility)

INTERVAL TRAINING

(Develops strength, speed and muscular endurance)

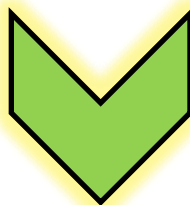


CIRCUIT TRAINING

(Develops muscular endurance and strength)

WEIGHT TRAINING

(Develops strength and muscular endurance)



EXERCISE CLASSES

(Develops muscular strength and whole body conditioning)

All methods of training need to be
The Training Year
specific to the individual performer,
the activity.

The training methods described on the previous page can be **combined in unique** ways to allow for different athletes to peak their performance at exactly the **right moment in the season**. These peaks will typically coincide with the most important competitions. A swimmer will try to peak for the major championships. A games player will try to peak for the decisive matches of spring. A skier will try to peak for the European winter





Which of the following components of an effective warm up increases the deep muscle temperature?

1. Stretching
2. Pulse Raiser

For what reason is an active cool down completed after every training and competitive session?

1. Increased coordination of antagonistic pairs

Which training method is most commonly used by a marathon runner?

1. Continuous training
2. Weight training
3. Pilates

How can a trainer monitor the intensity of an interval training session?

1. Distance covered
2. Timing of recovery period
3. %MaxHR

Which training method is most relevant for a tennis player developing power?

1. Fartlek training
2. Plyometric
3. Flexibility training

Which process involves reducing the training intensity prior to competition?

1. Tapering
2. Recovery
3. Pre-season

How do we measure the intensity of flexibility training?

1. %max HR

Answers

1. Pulse raiser
2. Removal of lactic acid
3. Continuous training
4. % max HR
5. Plyometric training
6. Spinning
7. Tapering
8. %RoM
9. After training
10. To increase coordination of antagonistic pairs

