

TRAINING METHODS



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- Traditional methods focused on specific exercises and specific muscles, however today's methods are more functional. Methods now normally involve functional movements that integrate various muscles. This allows the muscles to maintain their anatomical relationships. Training methods used for sport today may involve speed training, agility, power etc...

TRAINING METHODS

- Periodization
- Flexibility training
- Core training
- Cardiorespiratory training
- Resistance training
- Circuit or stage training
- Plyometric training
- Speed/agility/quickness training
- Balance training

PERIODIZATION

- Most athletes train year round to maintain their competitive edge.
- Periodization is the development of an overall training program which has been segmented into various periods/parts in order to maximize performance at specific times and reduce the risk of injury or mental burnout.

PERIODIZATION

- In seasonal sports such as football, hockey or soccer the breakdown is simple: Preseason(precompetition), In season (competition) and then off season (transition).
- Each of the above portions are called **mesocycles** and combine to form a training period. The overall period (year) is referred to as a **macrocycle**, however for an Olympic athlete, a macrocycle could be much longer! (4 years between events).
- Each of the mesocycles are made up of smaller compartments (training periods) called **microcycles**

FLEXIBILITY TRAINING

- Flexibility is the ability for a joint to move freely through its full range of motion (ROM)
- Flexibility training is now recognized as a critical part of sport and training programs.
- Benefits include: correction of muscle imbalances, decreased muscle stiffness, increased length of muscle, decreased joint stress, improved posture, and possibly increased strength

FLEXIBILITY TRAINING

- Static stretching: hold certain stretches for 15-30 seconds repeatedly
- Active-isolated stretching: actively move joints through a range of motion, hold for 1-2 seconds and then repeat 5-10 reps.
- Dynamic stretching: stretching while moving, you contract a joint to produce movement and allow momentum to help move a joint through its full range.
- Yoga: help improve muscle relaxation through poses and stretches
- Myofascial release: identify the muscle tightness then massage it by applying pressure (foam roller, ball etc.)

CORE TRAINING

- A strong core (area between the shoulders to the hips) is critical for performance in fitness and sport. Also important in preventing back issues later in life.
- Muscles in the core are needed to brace and stabilize the spine during movement. If your core can not support your spine while your limbs produce movement you risk the chance of injury.
- Individuals should focus first on core stability, then core, strength and finally core power.

CARDIORESPIRATORY TRAINING

- Also called endurance training
- Most people think only of aerobic training when they think cardiorespiratory, however a good endurance training program will include (base training, interval training, sport specific training)
- Base training (occurs in off season): includes activities that vary in terms of intensity and duration (one day may be short and light work (recovery workout), while other days may be long and more intense).
Steady uninterrupted exercise workouts
- Interval training: mixing intensities within workout periods, high intensity and low intensity periods within the same workout. Goal is to stress the system and achieve gains in aerobic and anaerobic systems.
Fartlek training is simply a form of interval training where the work and rest periods are less rigid.
Individual simply makes these decisions as they train that day.
- Sport specific training: actual activities, drills etc that are specific to the sport/event

RESISTANCE (STRENGTH) TRAINING

- Use of resistance or weights can help improve strength, and range of motion when done properly.
- Things to consider:
 - Order of exercises should be from large to small
 - Number of repetitions
 - Number of sets
 - Amount of rest between sets
 - Intensity of each set
 - Volume of each workout
 - Number of training sessions in a given period

CIRCUIT AND STAGE TRAINING

- Group of 4-10 exercises that are performed for a given time or number of repetitions before the individual moves to the next exercise. Rest is often minimal during a circuit in order to keep the heart rate high and get a cardio benefit.

PLYOMETRICS TRAINING

- Form of resistance training that can improve strength and power through rapid stretch and shortening cycles of muscle contraction.
- Use pre-stretch or counter movement to build up muscular energy before and explosive movement releases it.
- Should only be done after a strong resistance base.

SPEED/AGILITY/QUICKNESS TRAINING

- Relates to strength and power as well as motor learning and control.
- If done correctly this form of training can improve performance and reduce the risk of injury