

# Principles of Training

## The Specificity Principle

The specificity principle refers to sport specific training. It states that in order to reach maximum training effects for a specific sport, the training needs to be as close to that sport as possible.

Let's examine some aerobic-based sports like long-distance swimming and running. Athletes in both sports need a high level of cardiovascular training. According to the specificity principle, simply becoming more aerobically fit will not give you maximum benefits in the sport. Swimmers must train by swimming and runners must train by running. This is because both sports involve different muscle groups. Swimming involves more upper body muscle development, while running requires training the load-bearing, lower body muscles. Although cardiovascular training will benefit both swimmers and runners, specific training is needed to achieve the greatest possible body adaptations.

Now let's examine a football lineman. An average football play lasts for 4 seconds. A large part of a football players training needs to involve training anaerobically. A lineman can perform sets of bench press (to mimic the pushing involved) and squats (to mimic the lower body strength involved) in cycles of 4 seconds rather than a specific number of repetitions each time. However, this will not be enough. He also needs to complete sport specific training with footwork drills, hand-eye coordination drills and pushing a football sled.



## The Principle of Individual Differences

The principle of individual differences accounts for the fact that all athletes have a different physical and psychological makeup. This means that all athletes will respond to training differently and all athletes need to train differently (what works for one person, may not work for another). Several factors need to be looked at when designing a training program. Some factors are:

- Current fitness level
- Specific sport requirements (e.g basketball vs football)
- Specific position in sports (e.g quarterback vs lineman)
- Age
- Gender
- Ability to recover from workouts
- Susceptibility to injury

Information is available everywhere about the types of workouts professional athletes perform. This does not mean anybody should perform them. Because of individual differences, the professional athlete will be at a different stage in their training and have different goals than somebody else. Attempting to copy another person's workout can lead to injury and frustration. This is why it is important to understand your needs and goals in training. A training program needs to be designed to meet your own needs and goals.

