

Must Athletes Keep Increasing Strength?

The trend in most sports today is to develop greater levels of strength. This is probably due to the presence of strength and conditioning coaches on most athletic teams who believe that greater strength is the key to greater success on the field, court or ring. Can this however, be substantiated?

To gain more strength, most athletes use strength training programs similar to bodybuilders, weightlifters and powerlifters. In essence, they do considerable body part (area) training. They use mostly general strength exercises for increases in strength on a year-round basis.

When developing a general strength base, training like a bodybuilder, weightlifter or powerlifter is effective. However, for the high-level athlete continually developing higher levels of general strength can lead to poorer athletic performance. This is especially true when the general strength training does not include specific strength exercises.

Coaches and athletes equate greater levels of strength with better playing performance. But it is well known is that greater strength has a direct correlation to improved performance only with youth and novices. Youngsters, and relatively weak athletes, once they become stronger, play much more effectively and execute the game skills more effectively.

However, adult athletes who have been in training for approximately 3-5 or more years usually do not need much more additional strength. Primary focus at this time is on specialized strength training. This is needed to more effectively improve skill execution and game performance. Getting stronger with general strength exercises is usually a detriment to more effective playing.

Lifting heavy weights to develop greater strength leads to slowness in movements. This in turn leads to slower execution of skills and speed. This has been substantiated by studies and comparisons of times from high school through college. In addition, the heavy weights may lead to decreased flexibility, greater stress on the body and most importantly, changes in skill execution technique.

The reason for this is that general exercises do not duplicate what the athlete must do in execution of his skills in gameplay. This is why specialized exercises are needed. These exercises develop strength as it is displayed in execution of the skills. Specialized strength exercises develop strength in the same neuromuscular pathway as seen in execution of the

skill and increase strength over the same range of motion in which it is displayed in execution of the skill.

A bona fide high-level athlete who has been in training for years can have great speed and quickness. If he then goes on a high intensity weight-training program that consists of general strength exercises he will become slower rather than faster as anticipated. Because of this it is critical that each athlete be evaluated on his or her merits to see if additional strength will be of value and how much and perhaps more importantly, what kind of strength should be trained.

For the high-level athlete, training for additional strength throughout the year but especially in-season is not wise. According to studies done on world record holders in many sports, the strongest athletes are not the best athletes. In fact, they are not even close to being the best.

World class athletes seem to fall in the middle of the range from the weakest to the strongest athlete. These studies have proven that there is no need for continual development of more strength, especially general strength. Optimal strength of the muscles involved and how they are involved is the key to greater success.

It should also be noted that by spending more time developing greater amounts of strength, you ignore other physical qualities and technical abilities that play equal, if not more important, roles in game performance. Athletes need a combination of physical and technical qualities, not merely strength.

Overemphasis on strength training shows that even though you gain greater strength, you can show a major decrease in your ability to perform well. Even studies with collegiate athletes show that those in major strength training programs do not show improvement in their skill execution, speed, quickness, explosiveness etc.

For the high-level athlete, who has been in training and lifting weights for several or more years, additional strength should be in the form of speed and explosive strength training. This training should be coupled with technique of the skills that the athlete must perform in gameplay. This is the best way in which athletes can improve their performance.