

Strength conditioning is any activity that utilises a high intensity or muscle-specific training stimulus. Examples include jumping and sprinting, chin ups and press-ups as well as load bearing activities such as weight training. Core strengthening and injury-free exercises are also examples of strength conditioning.

Because sports involve repetitive stress, the most important role of strength conditioning is to increase physical resilience. It should also aim to raise the quality of training and performance by improving the efficiency of the body.

## What should children achieve from strength conditioning?

All children have to **learn how** to train and the earlier the process begins the further the process may be extended. Just like sports practices, strength conditioning needs to be started early and performed consistently in order that critical behaviours are reinforced:

- ☞ Stretching and injury-free exercise
- ☞ Warming up and cooling down
- ☞ Wise nutritional practices – timing and food choices
- ☞ Proactive and informed decision making, e.g. injuries and illness, contra-indicated or dangerous activities

## THE FIRST PHYSICAL PRIORITY FOR YOUNG ATHLETES IS INJURY-FREE AND THE REMOVAL OF PHYSICAL DEFICITS THAT IMPAIR TRAINING

- ☞ Injuries in repetitive sports occur as a result of physical deficits in the athlete (small imperfections in the body) and imperfections inherent the sport, which are patterns that over-emphasise certain muscle actions.
- ☞ Muscle and joint systems are limited by mechanical deficits so injury-free exercise also improves the performance of the body.
- ☞ Injury-free exercise should begin from the time sport becomes a routine stress - the results have to balance the effects of training.
- ☞ Children in sport should have a regular muscle balance and posture assessment to monitor deficits.

## THE SECOND PRIORITY IS TO INCREASE PHYSICAL STRENGTH AND POWER

- ☞ Young athletes need to be very physically strong. Every generation of athletes is bigger, stronger, and faster than the last.
- ☞ Strength is built by teaching the brain and muscles (neuromuscular system) to use muscle more efficiently (this is also what sports practices should aim to achieve) and by enhancing the process of physical development.
- ☞ Strength training can be initiated from 8-10 years of age. In young bodies it may involve external resistance but the choice should always be in keeping with the skill level and maturity of the individual.

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- ☞ Posture and sport
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