

# strength training in children/adolescents (5 - 15 years)

In our society, children/adolescents are becoming more involved in community based physical activities such as soccer, basketball, football, baseball/softball, gymnastics, dance and cheerleading. Children/adolescents are often not prepared physically to meet the demands of these activities to prevent injuries. With basic strength training principles, children/adolescents can increase their muscular strength as a result of neuromuscular activation and coordination. Pediatric strength training is based on different techniques than adult strength training. To have a successful outcome in strengthening a child/adolescent, it is imperative that a trained adult in pediatric strength training be available to supervise the child/adolescent in lifting techniques and program design.

## who would benefit from strength training?

- All children/adolescents who have been cleared from their physician in a pre-sport physical would benefit from strength training and being physically active.
- All children/adolescents who are able to follow directions.

## advantages for strength training in children/adolescents:

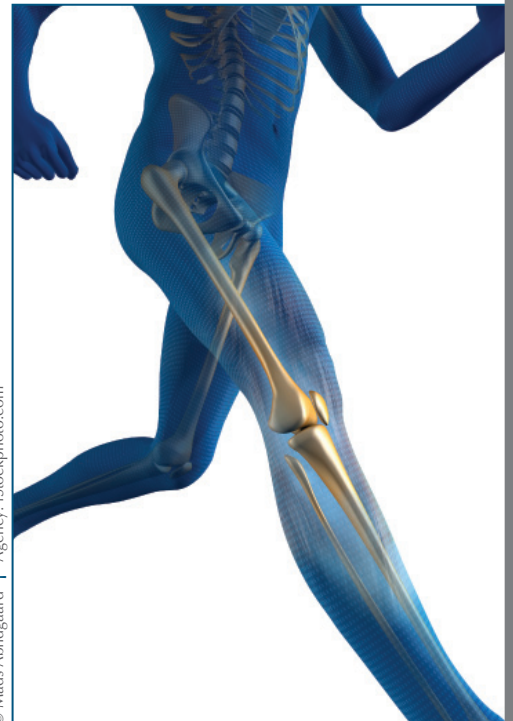
- Increases bone density.
- Increases joint stability/protection.
- Increases coordination/balance/proprioception (body awareness).
- Increases physical endurance.
- Increases muscle strength.
- Increases joint motion range.
- Improves sport performance.
- Assists with rehabilitation of injuries.
- Prevents injuries.
- Enhances long-term health.

## possible risks from strength training:

- Muscle strains from lifting too much and poor technique.
- Growth plate injuries can occur from lifting too much and poor techniques, but are rare.

## guidelines for strength training:

- Child/adolescent must pass a pre-sport physical completed by a physician.
- Initial training must be with no weight or low weight until technique is learned.
- Strength training should be done two to three times a week for 20-30 minutes at a time. There is no additional benefit from doing strength training more than four times a week.
- It is recommended to start with 10 percent of maximum lift capabilities: goal is to achieve 10 repetitions times three sets (30 total); then increase weight in small increments 5-10 percent.
- In order to maintain progress, the child/adolescent will need to continue the strengthening program a minimum of two times a week. After six weeks of not doing any strengthening activities, most of the gains achieved will diminish. Strength training is an ongoing process in order to maintain physical status.



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Contact Cook Children's SPORTS Program to schedule a strength training technique session.

**CookChildren's**

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