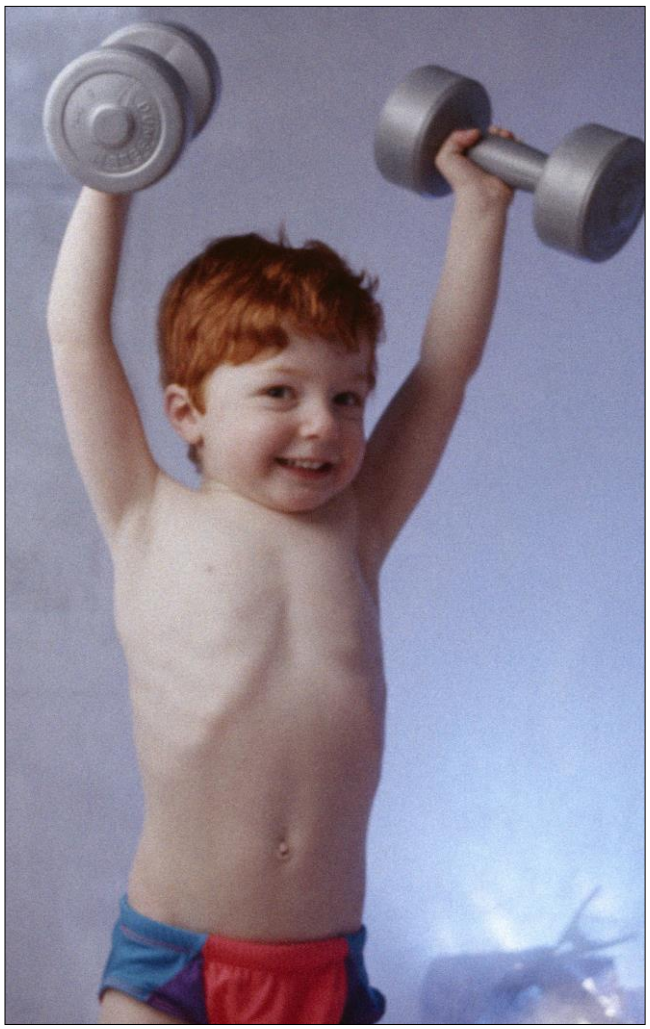
Weight Training

In the past, children were discouraged from strength training because of the likelihood of injury as a result of immature skeletal and muscular systems and the opinion that they are incapable of improving muscle strength through strength training. However, abundant research has shown that **properly designed training programs** not only enhance a child's athletic performance but also help protect against injury.



Historically, strength training has followed a "no pain, no gain" mentality. For parents and coaches interested in involving children in strength training programs, this mentality is incorrect and a danger to a child's physical and mental health. While the cardiorespiratory systems of children between the ages of 6 and 10 have developed enough to accommodate for most aerobic activities, their capacity for anaerobic activity has not as children have a low tolerance for lactic acid, a substance that leaves muscles tired and sore. Children are capable of coping with lactic acid accumulation by the ages of 15 to 18. Also, body tissues are susceptible to injury. Epiphyseal plates, or growth plates, at the ends of long bones are common sites of injury in children. Growth plates are made of a gristle-like substance that is weaker than hard bone and easier to fracture. These growth plates begin to close and harden as children reach the end of puberty.

Because of developmental factors like these, special consideration should be taken when creating strength training programs for children. Here are some guidelines to held design training programs suitable for your child:

- Low resistance or low weight exercises with a high number of repetitions should be used in order to avoid overexertion, soreness, and injury.

- Take time to properly instruct children in every exercise and observe them while they are doing each exercise for correctness.

- Positively reinforce a child's commitment and self-discipline, not only his or her accomplishments.

- Set realistic expectations so not to discourage the child, and remember that each person as a genetic potential.

- Design drills, games, and activities that are fun and emphasize the importance of ethics and fair play. More emphasis may be put on competition as a child gets older.

- Emphasize improving all components of fitness (strength, flexibility, coordination, and balance).

- Some fatigue is normal in children, but pain, excessive discomfort, and excessive fatigue should not be experience by a child after exercise.

- Maintain normal Vitamin D levels at all times in a growing child/ teenager.

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- Orthopaedics for Kids