KIDS LIFTING WEIGHTS

Which Side Are You On?

BY MARCIA BRADFORD

Many years ago, my brother's high school baseball coach put him on a weight-training program, including weightlifting, to improve his pitching skills. A relatively new approach at the time, especially for a 15-year-old athlete in a small school, the experi-

ence proved beneficial for him. Today, elementary school children are involved in a variety of strength and weight training programs, including competitive weightlifting, raising questions about whether these activities are effective, safe and age appropriate.

For parents, coaches and athletes concerned about injuries or even long-termed damage to bone and muscle development, the medical advice is mixed. The Mayo Clinic, for example, states that strength training offers many bonuses to young athletes and can also

put non-competitive kids on a lifetime path to better health and fitness. However, the same report advises in favor of resistance-based strength building exercises and against weightlifting, bodybuilding or power lifting. The concern is that weightlifting could put too much strain on young muscles, tendons and areas of cartilage that haven't yet turned to bone (growth plates).

The American Council on Exercise (ACE), a nonprofit organization focused on safe and effective exercise and physical activity, has a different take on the issue. ACE's "Strength Training for Kids: A Guide for Parents and Teachers" states that "two of the most



►YOUTH Sports

are that strength training may stunt the growth of children and that children should not lift weights until they are 12. There is simply no evidence to support either of these statements. In fact, all of the major fitness and medical organizations in the United States (such as the American College of Sports Medicine and the National Strength and Conditioning Association) recommend strength training for youth, assuming that basic guidelines are adhered to and that appropriate leadership is present. Children can begin to train with weights as soon as they are able to accept and follow directions-usually around the age of 7 or 8."

Even in competitive weightlifting, the age of participants has steadily gone down as experience and research have indicated it is no more dangerous—and actually statistically less dangerous—than several other youth sports, said Pete Roselli, high performance director for USA Weightlifting, the national governing body for competitive weightlifting.

"For many years, the practice was that young athletes should not be involved in competitive weightlifting until their late teens," he said. "Now, athletes around the world are competing in this sport at 8 and 9 years of age."

Method Matters

According to Debi Pillarella, an ACE-accredited master trainer and director of Fitness Points, a medical fitness facility in Indiana, studies show no correlation between weight training and injuries to growth plates. "We are seeing that sports-related injuries are mostly due to the way training is done rather than the type of training," she said. "Any physical training can be potentially harmful if it is done too intensely or too quickly."

ACE's position, said Pillarella, is based on more than 20 years of research conducted by Avery D. Faigenbaum, Ed.D., and Wayne L. Westcott, Ph.D., authors of "Youth Strength Training." Faigenbaum, a pediatric exercise scientist and professor at the College of New Jersey in Ewing, N.J., asserts that weightlifting will not stunt a child's growth. He contends that children old enough to participate in sports are old enough to lift weights, and that it could make it safer for them to play sports and improve sports performance.

Roselli said all types of sports training must be tailored to the age of the child. "In swimming, for example, young kids are trained in more rudimentary skills and are limited in the time they train," he explained. "The same is true in weightlift-

ing. Children start out

gradually with the basics for limited periods of time, with trained and certified coaches."

Roselli, who works with junior and senior Olympic athletes, added that young children and preteens have different physical capabilities than adults, so coaches and parents should be careful about the amount of time and the intensity levels to which a young athlete is exposed.

Definitions

Bodybuilding: The objective is to sculpt the body.

Power Lifting: A sport related to developing absolute strength, regardless of the speed of movement.

Resistance Training: Involves using apparatus, such as barbells, dumbbells, tubing, machines and one's own body weight.

Building Strength Safely

The Mayo Clinic staff advises parents to check with their children's doctor before beginning a strength training program, especially if a child has a known or suspected health problem—such as a heart condition, high blood pressure or seizure disorder.

Pillarella recommends a fitness assessment to make sure a child has proper posture, alignment and good body control before using weights, resistance bands or even one's own weight to build strength. Additionally, she said, kids must be able to process many instructions at once.

"In summer camps or pre-season training, have each young athlete go through an orientation program before getting into any type of weight training," Pillarella suggested.

"Examine their posture and alignment, thoroughly discuss safety issues and then develop a program designed to help them with specific sports. Each sport has different muscle areas that require strengthening. Above all, supervision by a trained adult is essential," Roselli said.

"No matter what your age, basic safety dictates that you should not be training by yourself. The best practice is for young athletes to work with a trainer who is educated and experienced in working with teens and pre-teens," Roselli added.

Pillarella said that weight training equip-

Benefits Of Youth Strength Training

Done properly, strength training can:

- increase a child's muscle strength and endurance;
- help protect a child's muscles and joints from sports-related injuries; and
- improve a child's performance in nearly any sport, from dancing and figure skating to football and soccer.

Even if a child isn't interested in sports, strength training can:

- strengthen a child's bones;
- help promote healthy blood pressure and cholesterol levels;
- melp a child maintain a healthy weight; and
- mimprove a child's confidence and self-esteem.

-Source: The Mayo Clinic



ment in the home should be in a designated, clutter-free area. "I have a small home gym that has a poster with safety rules, including the need for supervision at all times."

Parents need to be strong advocates for safety, she added, by making kids aware that weights could cause injury if dropped on the feet or chest, and resistance bands and tubes could result in pulled muscles.

Benefits Beyond Body Building

According to ACE, "improvements in muscular fitness, bone mineral density, body composition, motor fitness performance and injury resistance should be compelling for all parents, though children will likely focus on enhanced sports performance and the social aspects of strength-building exercises."

To encourage their kids to participate, parents should stress self-improvement and individual success, always making sure everyone is having fun, Pillarella said. "Youth strength-training programs can generate significant improvements in self-esteem, mental discipline and socialization of children who participate," she said. "Overweight and obese children often excel in these types of exercises and competitions. Weight training provides an opportunity to let children who typically struggle with group activities stand out and perform well on an individual basis."

Roselli pointed out that competitive weightlifting includes several body-weight categories, which can be beneficial to athletes who aren't physically large enough or fast enough for other sports. "People in the mid-range can find many opportunities in weightlifting," he said.

An indication that strength and weight training is becoming better understood and accepted for youth is its incorporation into physical education programs, Roselli said. "More and more, across the country, we are seeing some forms of resistant exercises and weight training provided in middle

and high school curriculums," he said.
"Many community sport programs now include weightlifting movements in their fitness programs."

The use of weight training to strengthen athletes for a variety of competitive sports has led many of them to eventually specialize in weightlifting, Roselli added. "The main attribute needed in weightlifting is a burst of strength, but flexibility and acrobatic talent are also helpful to successful competitors, so we see some crossover with other types of sports."

More Info:

USA Weightlifting

www.teamusa.org/USA-Weightlifting

American Council on Exercise www.acefitness.org

Mayo Clinic www.mayoclinic.com