

Youth Resistance Training

by Brian Schiff, PT, CSCS

Among the general public, there are many questions regarding the safety of resistance training for youth populations. Often, parents ask me when their child can begin lifting weights, will it stunt their growth, and what exercises are appropriate. I believe the most important issue is not necessarily the age, but more importantly, whether the program is set up and monitored by trained professionals.

In reality, most sport specific forces applied to the musculoskeletal system may be greater in magnitude and duration than those resulting from strength training. Injuries typically occur as a direct result of unsafe behavior, improper spotting, equipment malfunction, or inattention. Inappropriate supervision of lifting appears to be a major factor in resistance training injuries nationwide.



So what is the correct age to begin strength training? Many experts feel a child can begin as young as 5 years old with proper supervision

and very little resistance, primarily focusing on form and technique. In my opinion, I feel once children reach age 10, they can safely begin to strength train. However, there are always exceptions, and I have worked with younger populations based on very specific needs.

My primary considerations involve professional program design and



appropriate rate of progression. These two factors are critical to success and avoiding injury. Epiphyseal plate (growth plate) fractures are not common with resistance training provided that correct lifting techniques are in place. Most lifting injuries, even among Olympic lifters, involve soft tissue injuries of the low back, shoulder and knee. As such, quality instruction is key. Progression is also important because current research seems to indicate that strength gains made in

prepubescent athletes are due largely to neuromuscular adaptations and not muscle hypertrophy (increased fat free mass). This leads me to believe that in this population, it is more important to emphasize lower loads/higher reps (10-15) with moderate volume, paying close attention to form – the goal being to prevent injury and improve motor skills/coordination.



Ultimately, youth training programs can be very rewarding. Given professional design, proper supervision and progression, and attempting to have fun, I believe youth can experience personal success, prevent injury and improve athletic skills. However, parents must seek professional guidance and the willingness of their child to ensure success.

Remember to consult your physician or strength and conditioning professional before attempting to start your child on a potentially dangerous program at home.

References

Haff. Roundtable discussion: youth resistance training. *Strength and Conditioning Journal*. 25(1):49-64. 2003