

The Benefits of Resistance Training for Youth

By Josh Hewett

Introduction

For years medical and exercise professionals as well as parents discouraged prepubescent youth from resistance training. The old school of thought was that strength training would damage the growth plates and retard or stunt children's skeletal development. In fact, nothing could be further from the truth. Research has dispelled all of the past concerns and it is also worth noting that there has never been an incidence of growth plate breakage reported in the United States.

According to Wayne Wescott, Ph.D. (*Specialized Strength Training*, 2001) progressive resistance training is actually the best way to **enhance** musculoskeletal development in boys and girls. Other studies have even indicated that resistance training has its greatest positive affect on bone formation during the prepubescent years (Bass, 2000). This potential benefit may be especially important for young women who are at increased risk of developing osteoporosis.

If established training guidelines are followed and if nutritional recommendations are adhered to, participation in regular resistance training will have a favorable influence on growth at any stage of development.

The American Academy of Pediatrics (2001), the American College of Sports Medicine (2000), the American Orthopaedic Society of Sports Medicine (1988), and the National Strength and Conditioning Association (Faigenbaum et al., 1996) all support participation in youth resistance training activities as long as the program is supervised and designed correctly.

Joe Defranco, a respected strength and conditioning coach who works with young athletes, is quoted as saying the following regarding the growth myth:

"It still amazes me that parents won't hesitate to get their young children (6-7 years old) involved in sports such as football, gymnastics, basketball and soccer, yet they feel that participating in a strength-training program is damaging to their children's bone health and will stunt their growth.

The fact of the matter is that running, jumping and tackling can create loading on a child's body which is up to ten times greater than most strength training exercises. In other words, the physical demands on a child's body are far greater on the athletic field compared to the weightroom. Parents who don't let their children participate in resistance training are actually increasing their children's risk for injury on the athletic field.

There have even been position stands by such organizations as the American Orthopedic Society for Sports Medicine and the American Academy of Pediatrics suggesting that children can benefit from participation in a properly designed and supervised resistance training program. Position stands recommend that prepubescent

children shouldn't lift maximal weights; they should lift weights that can be lifted for at least six repetitions with proper form.

Strength training in this manner can be the most potent exercise stimulus for bone growth and development. In fact, research has shown that young weightlifters have greater bone densities than individuals who don't lift. Thus, the positive benefits of resistance training for bone health, injury prevention and improved athletic performance are far greater than the risks."

Strength training for kids is not to be confused with competitive weightlifting, bodybuilding or powerlifting. Instead, the focus is on moderate weights and controlled movements, with a special emphasis on proper technique and safety. This doesn't require access to expensive exercise machines either, as children can build muscular strength using free weights, resistance bands, or body weight exercises. Recent research indicates that strength gains of roughly 30% to 50% are possible for youth during childhood and adolescence following short-term (8-12 weeks) training programs.

Benefits of Youth Resistance Training

In addition to enhancing muscular strength and local muscular endurance, regular participation in a youth resistance training program has the potential to influence several other aspects of health and fitness. The potential benefits of youth strength training are summarized below:

Potential Benefits of Youth Resistance Training

- Enhance sports performance
- Increase muscle strength
- Increase muscular power
- Increase local muscular endurance
- Improve body composition
- Increase bone mineral density
- Increase cardio-respiratory fitness
- Improve motor performance skills
- Increase resistance to injury
- Enhance mental health and well-being
- Stimulate a more positive attitude towards lifetime physical activity

Youth Resistance Training Guidelines

Resistance training should be recommended to adolescents and children as part of a well-rounded physical activity program that includes exercises for cardio-respiratory fitness, flexibility, agility, and balance. Those who are interested in helping children and adolescents participate in resistance training programs should consider the following guidelines.

Youth Resistance Training Guidelines

- Provide qualified instruction and supervision
- Teach youth the benefits and risks associated with strength training
- Begin each session with a 5 to 10 minute warm-up

- Begin with one light set of 10 to 15 repetitions for a variety of exercises
- Include exercises to strengthen the lower back and abdominals
- Target the major muscle groups in balance
- Progress to 2 or 3 sets of 6 to 12 reps depending on goals and needs
- Increase the resistance gradually as strength improves
- Focus on the correct exercise technique instead of the amount of weight lifted
- Strength train 2 to 3 times per week on nonconsecutive days
- Listen to each child's concerns and answer any questions
- When necessary, adults spotters should be nearby for safety
- Focus on participation and provide positive reinforcement
- Keep the program fresh and challenging by systematically varying the training program in order to optimize gains, prevent boredom, and prevent overtraining.

Summary

Parents, teachers, and coaches should realize that participation in a resistance training program, along with other types of physical activity, gives children and adolescents another opportunity to improve their health and quality of life. Scientific evidence indicates that youth resistance training programs are safe and beneficial. Medical and fitness organizations now support participation in well-designed and properly instructed youth resistance training programs.

A fantastic resource for coaches, trainers, and parents is the **Long Term Athlete Development** model founded by [Canadian Sport for Life](http://www.ltad.ca), which can be found at www.ltad.ca. The CS4L outlines a progressive training plan for young athletes at every age.

In conclusion, we now have the evidence to recommend youth resistance training as part of a well-rounded physical activity program.

About The Author:



Josh Hewett, BA Kin, is a certified trainer, coach, competitive strength athlete, and author. He is the owner of Top Form Fitness and the founder of Team Barbarian Strength Athletics (OPA affiliated). His articles have been featured on several popular websites, including Elite FTS, The Diesel Crew, Straight To The Bar, QFAC, and many others. Josh has been working in the fitness and physical conditioning industry for over 20 years, and has helped hundreds of people reach their fitness and performance goals using his proven training system.

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