

# How plyometrics will benefit the next generation of athletes

## Revered plyometrics pioneer outlines positive impact of training on aspiring sports stars

Over the past two decades, plyometric training has become a staple of informed sport conditioning programs everywhere. Now **Dr. Donald Chu**, one of the pioneers of research-supported plyometric training, says plyometrics can also prepare the athletes of tomorrow for success. As Chu outlines in his forthcoming book, *Plyometrics* (Human Kinetics, August 2013), establishing age-appropriate plyometric training guidelines for children and adolescents will not only reduce the risk of sport-related injuries in young athletes but also enhance their athletic performance—the same kind of impact the popular form of training has on more mature athletes.

The reason it's essential to establish these guidelines, Chu points out, is that more children and adolescents are beginning to participate in sports and conditioning activities in schools and private programs, such as select or club sports, sometimes without consideration for cumulative workload. He reports that despite previous concerns regarding the safety and efficacy of strength and plyometric training for youth, a compelling and growing body of evidence indicates that regular participation in well-designed, sensibly progressed, and properly instructed resistance and plyometric training programs can offer measurable health and fitness value for children and adolescents. "This is particularly important for aspiring young athletes who may be ill-prepared for the physical and psychological demands of sports practice and competition due to the apparent decline in free-time physical activity," he comments.

Revered throughout the strength and conditioning community and widely credited with bringing plyometric training to the attention of coaches, athletes, and fellow professionals, Chu notes that the observable benefits of resistance, plyometric, and speed training are now known to be greater than those attributable to normal growth and development in children and adolescents. "These gains stem largely from neuromuscular adaptations in preadolescent children along with increases in fat-free mass during adolescence, since testosterone and other hormonal influences on muscle hypertrophy would be at work during and after puberty," he says.

In addition to improving muscular strength and power and reducing the risk of injury, Chu believes regular participation in a progressive resistance, plyometric, and speed training program has the potential to positively influence several measurable health and fitness factors. Chu stresses, "It can provide an opportunity for aspiring young athletes to learn proper exercise technique, gain confidence in their abilities to be physically active, and receive basic education on program design, safety concerns, and healthy lifestyle choices that include proper nutrition and adequate sleep."

Filled with the latest research and application of plyometrics for athletic performance and injury prevention, *Plyometrics* features exercises and drills designed to improve footwork and basic movement skills ranging from beginning to advanced. It includes sport-specific exercises and workouts for basketball, soccer, football or rugby, martial arts, volleyball, and swimming. For more information on this and other sport conditioning books and resources, visit [www.HumanKinetics.com](http://www.HumanKinetics.com).

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