

STRENGTH TRAINING FOR CHILDREN AND ADOLESCENTS

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Modern day youth are not as active as they should be and secular trends in muscle strength and motor skill performance highlight the need for youth coaches, physical education teachers and health care providers to integrate different types of strength-building exercises and skill-enhancing activities into class lessons and sports practice. Despite outdated concerns and misperceptions, a compelling body of evidence has found that pediatric resistance training can offer unique benefits for children and adolescents when appropriately prescribed and supervised. In addition to enhancing muscular strength and motor skill performance, regular participation in a youth resistance training program can facilitate weight control, strengthen bone and increase a young athletes' resistance to sports-related injuries. Furthermore, since good health habits established during childhood may carry over into adolescence and adulthood, the importance of implementing targeted interventions early in life should be recognized by teachers, coaches and health care providers. There is

not one "optimal" combination of sets, repetitions, and exercises that will promote favorable adaptations in all children and adolescents. Rather, the sensible integration of different training methods and the periodic manipulation of program variables over time will keep the training stimulus effective, challenging and pleasurable for the participants. One example of an effective training concept is called *integrated neuromuscular training* or INT which incorporates both health-and skill-related components of physical fitness into every training session. This type of training does not require expensive equipment, but it does require qualified instruction, a systematic progression of training variables, and an understanding of pediatric exercise science. The goals of this workshop are to review the potential benefits of strength training for school-age youth, explain the rationale behind integrative neuromuscular training, and show attendees how to incorporate resistance training with medicine balls into a youth training program that is safe, effective and fun.

NEW TRENDS IN HIGH PERFORMANCE CONDITIONING

Bill Foran

MS, CSCS, RSCC*E. Head Strength and Conditioning Coach. Miami Heat.

This presentation will take an in depth look at the Miami Heat's strength and conditioning program. Coach Bill Foran will discuss his strength training philosophy based on total body balanced strength with an emphasis on the core and hips. The conditioning program is based on interval training to prepare players for the demands of a basketball game as well as the long NBA season. Quickness, agility, and explosiveness are also key components to preparing

basketball players; reactive and resistance agility drills as well as plyometric and speed training complement the strength program for maximum results. Coach Foran will also discuss the importance of being at the proper body weight and body fat percentage and their effects on performance. We will take a look at new trends in training including the joint by joint approach, conditioning older athletes and injured athletes, and what is new in the NBA.