

## *“Strength Training for Developing Athletes”*

### **By: Mind to Muscle Sports Conditioning Centre**

Most athletes, coaches and parents believe strength training is weight training using heavy resistance. However, there are many forms of resistance that are safe to increase strength. For example, stretch cords or tubing, medicine balls and if nothing else, the athlete’s body weight, will all act as a form of resistance. Athletes who do not perform resistance training have 3 times the risk of injury compared to athletes who do participate in some form of resistance training (Bompa, 2000).

A common concern with resistance training is whether it is appropriate for young, developing athletes either prepubescent or pubescent. Therefore, professional experience in applying appropriate exercise programs with progressions, muscle balancing, proper technique and specific resistance is invaluable in producing strength gains while still preventing injuries.

A focus on fine motor control to develop neuromuscular skills is recommended. Exercises that demand balance, dexterity, multi-directional movement skills and read/react drills are most beneficial. All exercises must be pain-free. “No pain, no gain”, simply does not apply. Constant, close supervision and instruction is key to ensure proper technique for all young, developing athletes. Also, be sure to include exercises to balance the strength of muscles often neglected which tend to be the muscles that stabilize the low back and shoulder blade regions.

An athlete must achieve the ability to decelerate and slow down before they can go faster. This ability to decelerate and brake increases the eccentric strength of muscles and tendons and, as a result, decreases impact and shear forces. Traditional weight training tends to emphasize linear or straight-line resistance provided by machines. The strict motions of machines are designed to target one or two muscles at a time limiting the development of joint stabilization muscles.

Most of all, keep training fun. A young athlete is more likely to continue with training when challenged for a short period of time with drills that are not repeated and are exciting.