



As our name *Physical Solutions* suggests, our emphasis has always been on results and solutions. One of our passions is working with young people to prevent injuries and improve performance. Achieving results requires knowing where they are starting from and where they are headed. We do evaluations and testing, and design appropriate exercise based on research and experience. The article below discusses strength training for young athletes, and how, done safely, is a necessary part of their training.

If you would like to sign up for a regular email version of this newsletter delivered to your email inbox, sign up on our website (<http://physicalsolutionsnc.com>) or contact our office and we'd be happy to add you to the list.

Cathy Busby

YOUTH STRENGTH TRAINING

A question that comes up frequently is –“When is it safe for kids to strength train?” Parents hear that “kids should not lift weights” and wonder at what age they can start safely. This is often asked by parents whose children are involved in training and playing sports more than 10 hours weekly, often in contact or high risk sports. The real question is: How do we *safely* train adolescent athletes so they are strong, flexible, and balanced enough to meet the demands of these high level sports?

Appropriate strength and flexibility exercises should be an integral part of an athlete’s training at any age if they are engaged in a sport beyond the casual or recreational level. The many hours spent in practice concentrate on sport-specific skills and team building. An overemphasis on sport-specific skills provides too little stimulus on certain muscles and too much on others. Through appropriate testing, these areas can be identified and corrected leading to better sports performance and fewer injuries.

The American College of Sports Medicine believes that 50% of overuse injuries in youth sports could be prevented if there was more emphasis on fundamental fitness rather than just sport-specific skills. Acute injuries can be limited as well. For example, ACL tears (anterior cruciate ligament at the knee) have been on the increase for many years now and are especially a problem for female athletes who are 6 to 10 times more likely to tear their ACL than their male counterparts. Studies of the underlying risk factors for these injuries demonstrate that much could be done through proper training to significantly lower risk factors of sustaining such injuries.

So where to begin?

Youth strength training must start with mastery of certain basics, such as “the universal athletic position” (see picture). The youth’s own body weight is used as resistance with various weight shifting maneuvers. Gradually weights can be added while performing functional movements.



TEACHING THE E1 (EXTREMITY EVALUATION AND MANIPULATION) FOR THE UNIVERSITY OF ST AUGUSTINE (USA) FOR HEALTH SCIENCES

Have you ever wondered where Cathy heads off to on a regular basis? She’s been teaching the E1 Course for the U of St. Aug. since 1987. This seminar includes instruction about the anatomy and biomechanics of all extremity joints, how to perform a thorough evaluation of each joint and how to treat each joint utilizing manual therapy when indicated. At the time she completed her certification in manual therapy (MTC) through the university, she was asked to become a continuing education faculty member. These seminars are presented to physical therapists and occupational therapists who are seeking additional training in manual therapy, wish to become certified and/or are taking the course for credit towards a DPT. www.usa.edu

Unsupervised and heavy weight lifting can create problems before growth plates have completely closed; however, appropriate strength training actually builds strong tendons, bones, ligaments, and muscle - all of which will serve to prevent injury now and other problems later.



We've had many successful years treating young athletes with injuries as well as training them to improve performance and prevent injury. All of our programs are guided by certified trainers and experienced therapists who have been athletes themselves. We will be training athletes over the winter season to prepare them for spring sports. Consider making us an important part of your athlete's preparation, a part we believe is as important as their yearly sports physical.

QUICK LINKS...

Youth Strength Training, American College of Sports Medicine

- <http://www.acsm.org>
(Click **NEWS** on the Menu bar and then "Current Comments" in the 3rd bullet point)

ACL Injuries Growing Problem for Young Female Athletes, CNN, March 26, 2007

- <http://www.cnn.com/2007/HEALTH/conditions/03/26/hm.acl.girls/index.html>

Young Athletes and Women More Likely to Have Second ACL Surgery Within a Year, Sports Medicine Blog, October 1, 2009

- <http://sportsmedicine.about.com/b/2009/10/01/young-athletes-and-women-more-likely-to-have-second-acl-surgery-within-a-year.htm>

Strength Training: OK for Kids When Done Correctly, Mayo Clinic

- <http://www.mayoclinic.com/health/strength-training/HQ01010>

Strength Training for Young Athletes, Book excerpt by William J. Kraemer, Ph.D. & Steven J. Fleck, Ph.D

- <http://www.davedraper.com/youth-strength-training.html>

Strength Training for Kids: A Guide for Parents and Teachers, ACE (American Council on Exercise)

- http://www.acefitness.org/fitfacts/fitfacts_display.aspx?itemid=339

**AROUND THE OFFICE
(AND BEYOND!)**

Betty Jo Johnson and Julie Fritz attended a seminar on Sept. 4th, 2009 entitled *Sports Injuries: Knee, Shoulder, Wrist, Elbow, Ankle* presented by Jodi Chambers, PA-C, ATC from PESI HealthCare. Ask them about the new techniques they learned!

ABOUT PHYSICAL SOLUTIONS

Physical Solutions was founded by Cathy Busby to provide effective, efficient solutions to relieve pain and to return individuals to the highest level of function possible. Cathy's experience as an athlete, teacher, coach, and physical therapist gives her a unique perspective to help you work toward peak physical performance, whether you're an athlete or if you just want to be able to do daily activities without pain.

Questions? Give us a call today!

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