TOP TWELVE QUESTIONS

1. When can my child start lifting weights?

The main question is really "should" my child be lifting weights? However, from a pure basic research standpoint, youth can start lifting weights ONLY if they are in a supervised setting with correct technique. Most injuries have occurred in home gym settings without supervision. After that, usually they have achieved normal balance control by age 8, which they will need to have the correct technique. Using various weights or child-sized machines, youth can gain strength by neurologic mechanisms instead of by muscle hypertrophy, so they will not get physically bigger until puberty, but can get stronger. Usually this is not a required part of a sport training program at young ages, and if employed, should just be one small part of a varied training program. Most youth should already have established:

- a desire to lift weights (a desire of their own)
- enough maturity to accept strict instruction to avoid injury
- that the desire is to get stronger, not just look better (muscles won't grow until puberty kicks in)
- enough achievement in the skills of their sport to even need to add strength (why get stronger at something you are not good at?)
- 2. Should my child take supplements? Which ones are safe? Healthy children should stay away from athletic supplements and concentrate on good nutrition as a way to optimize their performance, training, and recovery. Many of the current so-called "ergogenic aids" are either outright dangerous to the organs and growth of a young body (the steroid precursors, testosterone boosters, or ephedra products), or they have not been proven to be safe over the long term to growing bodies and kidneys (creatine), so none of these are recommended. The research is not substantial enough or long enough to know how it could effect a young athlete in the future.

Certain athletes with high calorie demands in their sports may need to get extra calories or a little extra protein to support their energy needs and the body's need to grow by drinking a sports shake, but one that is not high in fat, sugar, or artificial sweeteners.

Synthetic vitamins unfortunately have not been proven effective in many studies and often are just flushed down the toilet as expensive urine. Yet, vitamins that occur naturally and are attached to the thousands of enzymes and phytonutrients of whole food nutrition (fresh fruits and vegetables) have been shown to actually get into the body in high concentrations and have long term positive effects on health. Fruits and vegetables provide antioxidants which help clean up the free radicals of the body, which are the "smoke" that is produced from the "fire" of exercise and stress. These antioxidants also help decrease muscle breakdown from strenuous exercise. Fruits and vegetables also increase immune function and help prevent heart disease among numerous other beneficial effects, which is important for any person—young or old, athlete or nonathlete. Safe supplements are very hard to come by when dealing with youngsters. Condensed fruits and vegetables in a capsule such as <u>Juice Plus+</u> is a safe, convenient way for them to get all the bonuses of many different fruits and vegetables to significantly enhance any diet, and to optimize their health for maximal training, competition, and performance.

3. Is it dangerous to head the ball in soccer?

Most of the research points out the fact that long-term changes and harmful effects on mental capacity occur after head TRAUMA. This occurs more frequently with repetitive concussions, rather than heading the ball. Although the verdict is not completely settled among pro soccer players who have been playing for years and accumulating many head injuries, most people agree that young soccer players do not have the strength to produce the high velocity balls that could cause injury. Most need good instruction on appropriate heading technique, neck strengthening, and avoid collisions during heading which can cause a concussion.

4. What kinds of baseball pitches are safe?

For young throwers who have not gone through puberty, overhead pitches are the safest. Curve balls, and sliders both place the elbow in a more stressful position which can lead to ligament or bone damage. These more risky pitches should be avoided until after the most significant growth has already occurred. Technique is very important.

5. Should my child compete wearing a brace?

If an injury is being treated, and the child has progressed enough to be able to perform the functions of his/her sport in the brace without pain, then it is reasonable to allow the child to return to practice in the brace. Braces should NOT be substitutes for doing the physical therapy exercises, but only for protection from further injury. If there are still any deficits even in the brace, then the child should be limited to partial practice doing things that can still be done without pain.

6. How many pitches are allowable?

Pitch counts exist to protect young growing elbows and shoulders from overuse injuries. Not only is proper technique necessary, but the types of pitches is important (question 4). The accumulation of pitches makes a difference, so counting pitches for a week also includes back-yard pitches at home, as well as at practice. A good number to stay close to is around 100-120 pitches a week.

7. Which is better for an injury—ice or heat?

For an acute injury, using cold therapy (ice packs, ice cups, or frozen peas) is best. This is usually good for the first 2-3 days. After that, heat may be used. A good scenario is when you put heat on the injured joint, do range of motion exercises or physical therapy, then finish off again with ice.

8. Should my child drink water or a sports drink?

During practices or games, water is often sufficient because of the short duration of the activity. During half-time, long breaks, or after the activity, then a sports drink is good. The important points to remember are:

- Youth have poor thirst drives, so drink breaks should be mandatory and frequent
- Youth have poor thermoregulation, so they are at higher risk for heat illness and need adequate fluids if training in warmer situations

9. When should I take my child to a doctor after an injury?

In general, any injury that causes a noticeable change in the function or performance of the athlete should be evaluated. Not all youth will notify an adult of an injury, so do not depend on the child telling you about a problem. Additionally, if any injury causes swelling of a joint, then an evaluation should be done to check for bone or ligament damage.

10. Is it OK for my child to take anti-inflammatories before practice or a game?

If a child has recently sustained an injury, and has been cleared to return to participation, then an anti-inflammatory may be appropriate to complete the course of recovery. However, taking continual or repetitive anti-inflammatories just to perform better with less aches and pains, then that is not appropriate at all. Long-term use of these medications has been shown to be hard on the stomach, liver, and kidneys. They should only be used when necessary, and should only be used if recommended by a physician.

- 11. When can my child start playing football? When young, children cannot generate the speed, strength, or forces necessary for big injuries. Youth football leagues that group youth by size and weight are helpful to avoid lop-sided situations which can cause injury. These situations are ideal to learn the general skills of the sport. As they get older, then leagues are not set up that way, and the huge discrepancy in height and weight that occurs between kids the same age can put many youth at risk for significant injury. So the answer is really not when should my child start playing, but when should my child stop playing football!
- 12. How can my child stay active if he or she is injured? There is a very important concept in sports medicine called "active rest". This involves allowing the injured part to heal, and still allow the child to practice other skills that do not cause pain, or will not place the child at more risk of injury. Staying in good conditioning is still very important and is often overlooked. So, for example, if a basketball player is recuperating from an ankle sprain, then doing physical therapy and wearing a brace is appropriate. Riding a stationary bike to stay in cardiovascular shape is important, and then the child may also shoot free-throws, and work on passing drills, but not do any running or jumping.