

Sports And Your Children's Feet



Children and Sports

All parents know that children take to sports like ducks to water. Almost as soon as they start to walk, they're chasing balls, swinging sticks, and running races against nobody in particular.

Children's sports used to mean baseball, basketball, or football. That's changed. Soccer has leapt onto the youth sports scene, as have wrestling, tennis, and lacrosse with older children. The starting age for training in individual sports such as swimming, skating, track, and gymnastics grows younger every year.

Parents should encourage their children to participate in sports but never forget that competition should be fun. Too much emphasis on winning can alienate a child from athletic competition.

Children active in sports programs will improve their cardiovascular and musculoskeletal systems, coordination, and state of mind. Participation in sports develops a sense of self discipline, teamwork, and recognition of the importance of a healthy body - good habits that last a lifetime.

Training Emphasis

Every child physically matures at his or her own rate and has a different degree of athletic ability. No amount of training can improve a child's natural athletic ability, but training helps improve coordination and therefore performance.

Early training should emphasize proper technique and basic movement skills in all sports, especially in children younger than 10. Podiatric physicians, specialists in treating the lower extremities, say children who concentrate on a single sport at too young an age are more likely to develop injuries of the foot and ankle. Save specialization in sports for the late teens, they advise.

Warming up before participating in sports is more important for adults than children, but it helps loosen the muscles and prevent injuries in athletes of all ages. Light jogging and smooth stretching exercises (be sure not to bounce when stretching) are all that's necessary for young athletes. Learning to stretch at an early age will set a good pattern for sports activities as the body develops.

Footwear

Whether parents like it or not, part of a child's image revolves around footwear. Expensive sneakers have become fashion statements as much as athletic equipment. But for good foot health, the condition of the shoe is more important than the price tag or brand name.

Podiatric physicians agree it's often better to buy a child two \$50 pairs of shoes than a single \$100 pair, so the shoes can be

rotated to avoid rapid wear deterioration. Excessive wearing of the outsole, loss of shoe counter support, or wearing out in the midsole indicate it's time to replace the shoes.

Because a child's feet are constantly growing, it is important to allow at least one finger's width from the end of the longest toe when buying shoes. Remember, proper fit is very important. You can have the best shoe in the world, but if it doesn't fit right, it doesn't do its job.

In the shoe store, children should put on both shoes, with their athletic socks and the laces tied tight, for several minutes to properly check the shoes' fit. Shop for shoes in the afternoon, when the feet are naturally slightly swollen.

In young children, an "all purpose" sports shoe works well for most sports. A running-specific shoe is not suitable as an all purpose shoe; moving laterally in a running shoe is more difficult and presents greater risk of injury for children. After the age of 10, sport-specific shoes can help improve performance and protect the feet. With the exception of the running shoe, a degree of crossover between sporting shoes is usually not harmful to the feet of a child athlete.

Rubber cleats are not usually necessary for children under 10, though they pose little potential harm for them. They are most useful on a soft-field sport such as soccer. Podiatric physicians recommend molded shoe rubber cleats rather than the screw-on variety. Metal baseball spikes can be dangerous and should not be used until the teenage years.

Growing Bones and Ligaments

The immature bones of children are different from those of adults. The "growth plates" in children's bones do not finish closing until age 15-17 in boys and 13-15 in girls. When stressed, these plates are more susceptible to injury than the tendons and ligaments that support the joints. Ligaments tend to "give" before bones in adults.

Podiatric physicians warn repetitive overuse can cause inflammation of the growth plates. They advise parents to promote diverse physical activities for their children rather than one sport. This is especially important with individual sports such as running, gymnastics, and tennis, which require long hours of practice.

Statistics show children who concentrate on just one sport for long hours at a time are setting themselves up for injuries. Because of the susceptibility of bones with open growth centers to overuse injuries, sponsors of the Boston Marathon recently increased the minimum participation age from 16 to 18.

A sports medicine podiatrist can offer a thorough examination of the entire lower extremity and identify a leg length imbalance, weakness, or biomechanical imbalances that may need to be addressed to prevent injuries on the athletic field.

Injuries and Treatments

Many children suffer from mild "torsional" imbalances, commonly known as in-toeing and out-toeing. Most children outgrow these imbalances without medical treatment. However, if a child has obvious torsional imbalances, he or she may be more susceptible to injury. If that is the case, keep a close eye out for foot and ankle injuries associated with sports activity. Foot injuries commonly seen in very active children include:

Ankle Sprains: In older children, stretched or torn ligaments in the ankle, known as sprains, are more common than fractures. A sprain may cause extensive swelling around the ankle just like a fracture. Immediate treatment is crucial to quick healing. A podiatric physician can provide treatment as well as recommend balancing and strengthening exercises to restore coordination quickly.

Fractures: Fractures from overuse in child athletes are commonly seen in podiatric medical offices. Growth plates are particularly susceptible to injuries, but mid-shaft fractures of the bone also occur. If a fracture is not severe, rest and immobilization may be the best treatment. More complicated injuries may require casting or surgical correction. If swelling and pain persist, see a podiatric physician.

Sever's Disease: An inflammation of a growth plate, Sever's Disease is often felt as pain behind the heel caused by inflammation of the apophysis, a growth center where a tendon is attached to the bone. Rest, ice, and heel lifts are usually prescribed.

Shin Splints and Stress Fractures: Shin splints are microtears or inflammation of the anterior leg muscles, as are achilles tendon pulls in the posterior region of the leg. Again, rest is most important in healing these injuries. If pain is persistent, see a podiatrist, who can recommend strengthening exercises, certain shoes, or, if indicated, prescribe custom-made shoe inserts known as orthoses.

A Word to Parents

All parents want to see their children do well in sports. But putting too much pressure on a child to become a star athlete may result in both physical and emotional injury to the child. A child should enjoy playing a sport, but if forced, could be turned away from all sports for a lifetime.

Especially with individual sports such as swimming, figure skating, and gymnastics that require long hours of practice every day, be certain the child's heart is in the endeavor, not just yours. When it comes to sports, overzealous parents can potentially do their children more harm than good.

Tips from the APMA

- Don't put too much performance pressure on your child.
- Don't let children use running shoes for court sports. An ankle sprain could result.
- Change shoes often. Check the sizing and wear regularly.

The American Podiatric Medical Association operates a toll-free telephone service, **1-800-FOOTCARE (1-800-366-8227)**, from which consumers can obtain informative literature on a variety of foot health topics. The [American Academy of Podiatric Sports Medicine](#), an affiliate of APMA, may be reached at 1-800-438-3355.

Produced in cooperation with the [American Academy of Podiatric Sports Medicine](#).



Copyright 2008, American Podiatric Medical Association, Inc.
9312 Old Georgetown Road
Bethesda, MD 20814-1621
(301) 581-9200