



THE JOURNAL OF YOUTH RUNNING

PREHAB

PREVENTING INJURY IN YOUNG RUNNERS

PART 1

Running is one of the safest sports for children. But it takes more than statistics that say running is safe to keep kids from getting injured. In the author's day, emphasis was on rehabilitating runners post injury. Today, it is on activities and precautions that will keep runners healthy, what we call pre-habilitation, to PREHAB runners to reduce the risk of injury.

Yet, even with precautions, it is impossible to ensure that a child will not experience an injury. The injuries most common to young runners are painful conditions caused by repetitive stress being placed on the child's body. When the child's body is unable to recover between frequent and/or intense periods of effort, it breaks down, resulting in pain in the soft tissues (muscles, ligaments, tendons) or in the bones.

Here are eight things coaches and physicians have offered to the Journal of Youth Running over the years that will help keep kids free of injury. Others will be introduced in the February issue.

#1. CHRONIC INJURIES

Most injuries that plague young runners are chronic type injuries caused by a physical weakness or poor body mechanics and triggered by doing more than what the body is ready for. These, if not corrected, can result in injuries common to the foot, lower leg, knees or hips. To stop running for a few days may provide relief but is not a long-term answer. Inherent with chronic injuries, the symptoms will come back once the runner returns to doing what caused the injury in the first place.

For youth, the first line of defense is building up mileage or speed gradually, engaging in other physical activities rather than running every day, using proper mechanics, and backing off when pain first occurs.

#2. KNOW EACH RUNNER'S LIMITS

With young runners, there is no norm. Each runner is unique, with strengths and weakness, with skills and not with skills, with a history of being active, being fit, and those who are neither.

When coaching teens, a typical day's workout may be 10 x 200 meters. Faster kids will run them faster; the slower will run them slower. With young runners, the workout may still be 200s, but the number will depend on what each individual child is capable of. For some, it may be two or three. That is their limit, their threshold. When they reach their limit, they are done. It is time to do something else.

#3. THE IMPORTANCE OF VARIETY AND MODERATION

Stacy Frye, M.D., has served as a consultant to the Journal of Youth Running on all aspects relating to the health and safety of young runners. She specializes in Pediatric Orthopedics and Sports Medicine, is a member of the teaching faculty at Michigan State University's College of Human Medicine and is widely recognized as an authority on sports-related injuries in children.

Dr. Frye reports "There is a concerning trend of children training or competing essentially year-round to gain a competitive edge -- to compete with the best, to be the best. Dedicated rest time from the child's sport has become obsolete for many families. We see kids losing the intrinsic love for the sport and, ironically, putting their overall health at risk. Overuse injuries are all too common.

"With children, variety, moderation and simple enjoyment are the ways to keep kids healthy. Make it about the overall experience rather than the number of medals earned.

"Professional athletes recognize the importance of rest, variety and balance; to take time off to play other sports, to cross train, to work on agility, coordination and strength. It makes them better athletes, physically and mentally. For children, variety and moderation are even more important -- using the running muscles in different ways, such as swimming, biking, playing a team sport, dancing or doing yoga, will keep them healthy and active."

#4. ACTIVE RECOVERY

For each day the runners count laps or miles, have a short run "tempo" day, those with runs somewhere between a jog and a sprint but for short distances, only 30 or 40 meters. These have a "training effect," but most importantly, allow the child to finish the day's run with their energy reserve untouched, ready to come back tomorrow, ready to go. Short runs also are important in building strength and improving cardiovascular fitness in young and new runners. Best yet, short runs can be fun, especially if they are part of a relay or game; or maybe short out-and-back runs where the goal is simply to repeat each run in the same time, not faster.



#5. GOOD FORM

Many runners, and particularly young runners, want to take big, long strides thinking long strides equate to running fast. Exercise science tells us, however, that overstriding actually causes a slower leg turnover. Overstriding is also seen as being the cause of injury to the lower leg, the result of the heel striking the ground first causing a braking action. Most coaches today want the foot to come in contact with the ground under the hips, not out in front.

#6. SHOES

For runners, both young and old, shoes are the platform that allows the ankle, knee and hip to line up correctly (one on top of the other) when the foot comes in contact with the ground. Being out of alignment makes running difficult and contributes to hip, back, lower leg and foot injuries. Children need shoes that are not broken down, that fit properly and provide the right type of support for the child.

When buying shoes, look for a store that specializes in running shoes, one where runners likely work, and take your child's everyday shoes with you. Explain what type of running your child does and hand the salesperson the shoes you brought. A knowledgeable salesperson will look for wear patterns that will tell them a lot about what your child needs.

When the salesperson pulls a pair of shoes off the shelf, ask what this pair offers that others don't. If you get an answer that makes reasonable sense, you are probably in the right store. Next, wait for the salesperson to ask your child to run in the shoes he or she suggests, even if only a few yards. If the salesperson watches from behind and does this again with another pair of shoes, you know you are in the right store.

COMING IN FEBRUARY

YET MORE TIPS ON PREVENTING INJURIES IN YOUNG RUNNERS

#7. ORTHOTICS

For children, those whose feet roll or are collapsing inward, a stability-rated shoe should be the first option. If the child's foot continues to collapse inward when running, then it is okay to think about purchasing orthotics. But remember, sport orthotics are not all the same, just as children's feet are not all the same. If you want what is right for your child, consult with an orthopedic physician or a podiatrist who regularly treats children. They are the experts.

A down-side of children using orthotics is the support they offer may restrict the natural strengthening of the foot. Again, ask a medical professional before taking action.

#8. RUNNING SHOES ARE FOR RUNNING

Running shoes are designed for forward movement and that is what they should be used for: going forward, as in running. Using them for basketball or tennis, where lateral movement is called for, may cause a turned ankle which is not good. On top of that, using running shoes for everyday use shortens the structural integrity of the shoe, defeating the reason you bought them in the first place.

If you would like to share information about your youth running program, contact us at...

editor@childrensrunning.org

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