

Tips for Young Runners

Running can be a valuable lifelong activity if it is approached in an appropriate way. It has the power to maintain health and wellness throughout a person's life, or it has the power to cause discomfort and injuries. The following are tips for young runners to help keep running an activity that is fun and will put them on the path for long term health.

What are the benefits to running?

Physical	Physiological	Psychological
Stronger bones and joints	Stronger cardiovascular system	Higher self-confidence and self-esteem
Increased muscle strength	Improved sleep	Better concentration at school
Improved flexibility	Increased overall energy levels	Less anxiety

What are the potential adverse reactions?

When the intensity, duration or frequency of workouts increase too quickly and don't allow for proper recovery in-between sessions, the risk for injury and overtraining increases.

Overuse Injuries: When physical stress is placed on the body, a process of internal remodeling occurs. This remodeling process involves the breakdown and subsequent buildup of our muscles, tendons, bones, etc. Ideally there is a balance between the two, however if the breakdown occurs more rapidly than any buildup, an overuse injury can result.

- The progression of symptoms of an overuse injury follows a relatively sequential course and is described in 4 stages:
 - Pain in the affected area after physical activity
 - Pain during physical activity, not restricting performance
 - Pain during physical activity, restricting performance
 - Chronic, persistent pain, even at rest



It can be confusing to determine if the pain the young athlete is experiencing is from an injury or part of the physical toll of practice and play. Consider the progression of their complaints and if the pain does not improve quickly and without residual compensation, than this is most likely due to an overuse injury.

Overtraining: This is a state of mental, physical, and/or emotional exhaustion and typically looks like burnout. It's important for young runners to listen to their body and communicate negative feelings, emotions or physical pain. Parents/coaches must be keen to the signs and symptoms of overtraining and know when/how to intervene. Common signs and symptoms include:

- Constant fatigue
- Decreased enthusiasm, motivation, ambition or pride
- Decreased sports and/or school performance
- Personality or mood changes
- Increased injuries, chronic muscle and joint pain
- Increased anxiety, fear of failure
- Difficulty sleeping

Fitness and skill development must be balanced with a proper recovery in order to avoid overtraining and increase young athlete's chances for success.

How can we ensure optimal training and success in young runners?

- **Physically:**
 - Train for practice – don't practice to train. Start running weeks-months prior to the start of practice to help condition the body for this activity.
 - Gradually increase in mileage and intensity to allow the bones, muscles and joints to transition and adapt to the new load. To optimize recovery, do not increase mileage more than 10% per week.
 - Runners would benefit from other sports as well that stress other muscle groups and movement patterns to develop all-around physical fitness.
 - Alternate between hard workout/easy running days.
 - For longer distance runners, try not to run all miles on concrete or pavement. Consider including workouts on the grass or track.
 - Change shoes at least every 500 miles, or if they outgrow their shoes, whichever comes first.
 - Proper warmup includes a light jog followed by dynamic stretches and exercises.
 - Proper cool down focuses on static stretches as well as exercises designed to strengthen the core and hips, both of which also help to improve running economy and fitness.
 - Listens to the athletes complaints. "No pain, No gain" does not apply here. Any pain lasting more than a few days despite reducing the training load should be investigated.
- **Physiologically:**
 - Good nutrition is also important to preventing injury.
 - Increase fluid intake during the day to help avoid the cumulative effects of dehydration.
 - Ensure a well-balanced diet that meets the increased energy demands of the sport
 - Good sleep habits are critical to recovery and growth and one of the keys to the success in any young athlete.
- **Psychologically:**
 - Ensure the idea/desire to participate comes from the child, not some outside source (parents, coaches).
 - Make sure the performance expectations don't exceed their physical capability.
 - Look individual success as a result of improvement, rather than finish place. For example, emphasis how they may have run faster than they did last time, rather than focusing on improving from 10th place to 1st.
 - Provide strong emotional support so they feel loved and supported regardless of the outcome of the race.

Most experts agree that there is no upper limit recommendation on mileage for young runners. As long as it is done safely and they are enjoying the activity, there is no scientific evidence of any negative physiological effects. A runner that starts increasing their mileage at age 10-13 may not improve as much at age 14-18 than one who starts at age 14. However they should be able to compete at a higher level overall and potentially with less risk of injury, due to their early miles.

Like so many other individual sports that rely on self-motivation and hard work to achieve success, running teaches self-respect, commitment and builds self-esteem, all of which are important values for kids to learn and build on in their lives.

Consult your primary care physician for more serious injuries that do not respond to basic first aid. As an added resource, the staff at **Children's Sports Medicine** is available to diagnose and treat sports-related injuries for youth and adolescent athletes. To make an appointment, call **402-955-PLAY (7529)**.