

YOUTH MOVEMENT

From preschool to high school, here's what your kids should, and shouldn't be doing, when it comes to running

By Marc Bloom
Image by Chris Crisman



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If you've ever watched children chasing squirrels in the backyard or sprinting to the corner mailbox, you know they don't just run--they fly

With arms jutting out, knees high, and big smiles. No rules, just pure joy. Stay out of the way, parents! No structure or programs or advice. No "training," no goals, and no plans for the Junior Olympics. Right?

Well, yes and no.

Studies show that 17 percent of American children ages 2 to 19 are overweight and that fewer than eight percent of elementary schools and 6.4 percent of middle schools provide daily P.E. class, so it's obvious that kids need to move their bodies more. And what better activity than running? "Children involved in running can carry it on as a lifestyle that is maintained into adulthood," says Teri McCambridge, M.D., chair of the American Academy of Pediatrics (AAP) Council on Sports Medicine and Fitness. "Kids get used to being active," agrees Bill Roberts, M.D., past president of the American College of Sports Medicine.

Still, things don't look great at the opposite end of the spectrum either. Yes, we have a lot of young couch potatoes in dire shape, but we also have overbooked, overstressed, overtrained young athletes, including runners, immersed in parent-driven year-round competition, resulting in an epidemic of youth injury and burnout. According to the AAP, children and teens ages 5 to 14 now account for 40 percent of all sports-related injuries. In track and cross-country, stress fractures, especially among girls, are increasingly prevalent. One of the largest studies of high school sports injuries, covering 60,000 athletes in Seattle from 1979 to 1993, showed girls cross-country runners with the highest rate of injury--even greater than football players. The coauthor of that study, Stephen Rice, M.D., now the director of the Sports Medicine Center at Jersey Shore University Medical Center in Neptune, New Jersey, believes the data still stands. "If anything, today's young athletes are more intense in their training," says Dr. Rice. "Sports are year-round, and there's a lot of overuse injury."

But there is a middle ground between too little activity and too much adult-generated structure. People involved in running--from coaches and teachers to doctors and parent-runners--have created hundreds of inspiring running programs for kids nationwide. For example, more than 80,000 youngsters participate in the national Marathon Kids program, receiving free running and nutrition advice. The New York Road Runners oversee activities for more than 17,000 kids. And the St. Louis Read, Right and Run program provides training tips for 3,000 children who read 26 books, "right" the community with 26 good deeds, and run 26.2 miles over six months.

But whether they run with Mom or Dad or join school programs, kids aren't merely smaller versions of adult runners. They require particular care at every step of their development. So with the help of medical experts and experienced coaches, we've established the important guidelines for each growth stage to safeguard kids' health and ensure their running enjoyment. Your role? Counsel, encouragement, and, yes, an occasional pair of shoes.

Doctors and coaches agree that kids should not start running in any purposeful way before they start kindergarten. That's because most children won't achieve a mature running gait until they are at least 5 years old. Duke University pediatric cardiologist Brenda Armstrong, M.D., who helps coach the Durham Striders youth track club for ages 6 and up, in North Carolina, says her biggest concern at this age is injuries. "I worry about shinsplints in a very young child whose gait is not yet coordinated," says Dr. Armstrong. Also, 3 and 4-year-olds have short attention spans, and their vision is not yet mature, making it difficult for them to track and judge the speed of moving objects.

A young child should still run as part of play and can try short children's races of up to a couple hundred yards. "As long as the child is capable of running without falling down, it's okay to run in brief spurts," says Teri McCambridge, M.D., a pediatric sports-medicine specialist. "If the parents do a 5-K race, a child can do the 'kiddie dash.'"

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Youngsters 5 to 8 years old should be encouraged to run as part of play, such as in games of tag, or in short bursts with walking or other activities in between. Running in this way allows children to use more of their body than if they were jogging continually in a straight path, which makes it less likely that they'll become bored or injured.

Longtime coach Bob Glover, who conducts the City Sports for Kids track program for the New York Road Runners Foundation, has his youngest charges, 5 to 8, work up to 20 or 30 minutes of movement, running, or walking three times a week. While running a couple of 200-meter laps, they play games like hiding behind the coach, and Glover takes frequent breaks to read running-related stories to the kids. "Most of the kids are having so much fun, they don't even know they're running," says Glover.

In the Durham Striders club, 6- to 8-year-olds do a few 100-meter repeats on the curve of the track or the grass infield. "The 6-year-olds can run or walk," says Frank Davis, one of the club's founders. Other days, Durham kids run hills, repeating bursts on a 50- to 75-meter incline.

Many experts, however, warn against 5-Ks for those under 8. "We're fine with a mile fun run, but nothing longer," says Brenda Armstrong, M.D., of Duke. "And a child who says he or she is hurting or tired must be allowed to stop." Bill Roberts, M.D., past president of the American College of Sports Medicine, has his own Happy Test. He believes that 7- or 8-year-olds can run a couple of miles, provided it's their choice and they enjoy it. How can you tell? "Smiles," he says.

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In the pivotal preteen years, growth and maturity allow for formal training, and competitive opportunities are abundant. Some kids this age will lean toward training and racing year-round, but they shouldn't give up other sports. "If they do another sport, they can still run on their own," says youth sports-medicine specialist Stephen Rice, M.D. "Kids in this age group shouldn't focus solely on competitive running."

A big reason for restraint at this age is growth-related injury. As the long bones in kids' legs grow, the cartilage is not ossified, and hard running can lead to discomfort near the ends of the bones. When this syndrome strikes the knee--a common running condition known as Osgood-Schlatter--it can be very painful and may require medical attention.

Plus, too much too soon can lead to burnout. "It's better to whet their appetite for more later on," says Matt Centrowitz, a two-time Olympian in the 1500 and 5000 meters and track coach at American University. Centrowitz's daughter, Lauren, now an All-American cross-country runner at Stanford, didn't run her first 5-K until age 12. His son, Matthew, was the fastest high school indoor miler this year and is headed to the University of Oregon on a track scholarship. "If you push someone," says Centrowitz, "sooner or later they balk because it's your will, not theirs."

Coach Bob Glover from New York encourages kids at this age to emphasize speed over distance. Preteens can work up to running three miles at a time three to five times a week.

Many easy-does-it programs for kids in this age group are centered around the mile, whether it's building up to run a mile a day or racing a mile. The Newton Heartbreak Hill International Youth Race, held on Boston Marathon weekend, is a half mile up and a half mile down the famous ascent. The Marine Corps Marathon

"Healthy School Award" winner, Lynbrook Elementary in Virginia, has students doing up to a mile in P.E. class. "The mile is a good distance for kids, since they have to pace themselves," says Richard Dexter, Lynbrook's coach. "Young children usually have only two speeds: on and off. All year long as we prepare the kids to run the mile fitness test, we preach 'pace, don't race.'"

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At this age many children enter a period of "peak height velocity," according to Angela Smith, M.D., an orthopedic surgeon at Children's Hospital of Philadelphia. Early teens experience rapid growth while their bones have not fully mineralized and their muscles are not yet good shock absorbers. Consequently, Dr. Smith advises against the kind of heavy training loads--running several miles a day at a hard pace with frequent competition--that bring young runners into her office with stress fractures.

Puberty can also impact early-teen runners. During puberty, boys gain strength and muscle mass--a definite plus for performance--while girls gain body fat, which often slows them down.

For many early teens, middle school track and cross-country teams are their first chance to run as part of an organized program. However, coaching expertise at this level can be spotty, and some schools have poor facilities available for practice. Parents should look into all the details of such programs before signing up their kids. Alternatives to school-based programs include local adult running clubs, many of which embrace kids, and youth clubs associated with local gyms.

Young Runners offered by the New York Road Runners Foundation is a model program for middle-schoolers. Around 15 to 30 students per school in 60 schools practice two or three times a week, running a few miles at a comfortable pace, training for races up to 10-K. Teachers are trained to coach the kids, who run at school or nearby parks or tracks.

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For many teens, high school running is year-round, with base training in the summer, cross-country in the fall, and track in the winter and spring. While training loads can vary widely--with weekly totals ranging from 20 to 70 miles--the best coaches learn how much training each athlete can handle and find ways to adapt their programs to the individual. Good coaches will also employ a total fitness approach for teen runners, including elements like weight training, calisthenics, and pool exercises. "Cross-training maintains fitness while reducing the risk of overuse injuries to the lower extremities, which plague high school runners," says Stephen Rice, M.D., a youth sports-medicine specialist. "The ideal is to build slowly with running, while mixing in other sports."

At Oakton High in Virginia, coach Scott Raczko, who also coaches world-class miler Alan Webb, develops whole-body fitness with weight training, core exercises, and plyometric drills. This past winter's USA junior cross-country winner, Elliott Heath of Winona High in Minnesota, includes bicycling in his training. And the 2006 Foot Locker high school girls cross-country champion, Kathy Kroeger of Independence High in Tennessee, is also a competitive swimmer. Another top-ranked runner, Max O'Donoghue-McDonald of Seattle Prep, cross-trains on an elliptical.

The bottom line for high-schoolers? Incorporate other activities with running. "Don't go crazy with the mileage and speedwork or you'll risk injury or burning out," says Dr. Rice. "The idea is to enjoy running in the long term."