#### HEALTH

# Little Athletes, Big Injuries. Kids

suffer when coaches and parents pile on too much training. What to watch for

#### BY KATE STINCHFIELD

IT OUGHT TO BE HARD TO TAKE THE FUN out of play, but if you're an overambitious parent or coach with a young athlete in your charge, you may have managed to do it. Weekly sessions of intensive musclestrengthening, grueling push-up regimens and long intervals on fast-paced treadmills are becoming common for grade-school kids. Elite training centers that promise to give young athletes an edge during the offseason have been popping up since 2000, especially in affluent sections of New England and the Midwest.

To sports-medicine professionals, that's a worrying trend. Hard-core training can do kids more harm than good—particularly if they're under 12. As more children are pushed beyond their physical limits, sports injuries once reserved largely for the pros are turning up in the playground set.

A young body that's worked too hard can suffer in a lot of ways, but it's the bones that take the worst pounding. Activities like skating uphill on a Plexiglas surface, which allows skaters to strengthen their strides, or doing the explosive musclebuilding movements known as plyometrics can wreak havoc on the skeletal system, particularly the epiphyseal plate, or growth plate, which is essential in bone development—a process that is not complete until the late teens.

Harming a plate before a child hits puberty can affect the way the bones grow. "I saw one kid who was asked to do multiple plyometric jumps through the pain, and he pulled a growth plate off his knee," says Dr. Jordan Metzl, a member of the American College of Sports Medicine's youth sports committee. "Another kid tore a piece of plate off his hip from using too high weights while lunging and squatting."

There are other problems as well. Tommy John ligament surgery, an elbow procedure named after the Los Angeles Dodgers pitcher who was the first to undergo it, used to be limited to players in their 20s and older, but it is now performed on kids as young as 12—not surprising if they started pitching excessively at age 8 or 9. Similarly, stress fractures in the backs of middle-school football and soccer players have nearly doubled over the past decade as a result of overtraining.

No one is saying that kids shouldn't play sports or even that they shouldn't

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train. But "you shouldn't be training a 9-to-12-year-old to be a superstar," says Dr. Michael Bergeron of the Medical College of Georgia. "You should be thinking down the road so they can be that superstar at 18." That's what some training centers are now aiming to do. The coaches at BlueStreak Sports Training in Stamford, Conn., for example, assess each athlete's risk for knee injury, paying particular attention to girls, who are six times as likely as boys to injure their knees for a number of reasons, including basic anatomy, muscle strength and hormonal differences. The most vulnerable athletes are then required to wear a bracelet while training as a warning to coaches to take it slow.

But the biggest adjustment will have to be a psychological one: persuading coaches with unrealistic performance standards and parents with the means to pay an average of \$900 for a six-week training session that they must back off and put the health of the child first. "Sports used to be this wonderful even playing field," says Regan McMahon, a writer for the San Francisco Chronicle who has covered the professionalization of youth sports. "Now it's the rich kids who make the team. It's the uppermiddle-class parents who can afford all of these supplemental programs."

In fairness to the grownups, the kids themselves need to relax too. "I'm a kid who stays focused and works hard," says Connor Humphrey, an earnest 14-year-old football and lacrosse player in New Canaan, Conn. "I have goals for the future. I want to play lacrosse at Duke." That dream is commendable, but while pushing young bodies to the limit may mean more time in the game, it can just as easily mean a lifetime on the bench.

## The Big Hurt. Train like a pro, and you'll break like one too

Any athlete can be damaged by overwork, but none more than kids under 12, who are developing injuries once suffered only in the college and professional ranks

BASEBALL Pitching is not a natural motion, and too much of it can damage the rotator cuff in the shoulder or cause Little League elbow, a stress injury that leads to growth issues in the near term and post-traumatic arthritis later on.

FOOTBALL Moderate weight-training can help build bone density, but when coaches heap on too much weight, young football players can suffer stress fractures in the lower back.

soccer A heavy combination of highstress muscle-training and too much running can cause a host of injuries, like tendon tears, shin splints and damage to the kneecap.





