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## Performance-enhancing drugs and your teen athlete

Are you the parent of a student athlete? If you are, your life is probably as hectic as your child's. But in your daily rounds of carpools, practices and games, have you taken the time to talk to your child about the dangers of performance-enhancing drugs? Pros and Olympic athletes aren't the only ones lured by the promise of a shortcut to increased strength and stamina. Kids in high school and middle school are using these products, too. And your child could be among them.

### What are performance-enhancing drugs and supplements?

Performance-enhancing drugs and supplements are used to boost athletic performance, ward off fatigue and enhance physical appearance. They're also taken to increase muscle mass and strength. But they can cause serious harm. Here's a look at some of the substances your son or daughter might be using.

#### **Creatine**

Creatine is an over-the-counter supplement best known for improving performance to a small degree in sports involving short bursts of high-intensity activity, such as power lifting, wrestling and sprinting. Side effects include stomach pain, nausea, diarrhea and muscle cramps. High doses of creatine may be associated with kidney, liver or heart problems.

The effects of creatine on children and teens haven't been well studied. Studies involving adults have revealed no significant risks, but these results may not carry over to real-life situations. Most athletes who use creatine take 20 to 30

grams a day, but the studies reported to date used only the manufacturer's recommended dosages of 5 grams a day.

A recent survey indicated that more than 5 percent of middle school and high school students had used creatine. Some researchers see creatine as a steppingstone to more dangerous performance-enhancing substances, such as anabolic steroids.

### **Anabolic steroids**

The use of anabolic steroids is increasing among young athletes, despite the fact that these drugs are illegal without a prescription. Anabolic steroids are synthetic versions of testosterone and come in tablets, injections, patches or gels. They build muscle and increase endurance, and are particularly popular with bodybuilders and football players.

In the United States, about 3 million people use anabolic steroids — one in four of these steroid users started as a teenager, and one out of every 10 is a teenager. Anabolic steroids can halt bone growth and result in a permanently short stature, so they're particularly dangerous for still-growing adolescents. Steroids can also damage the heart and liver.

Signs your son may be taking anabolic steroids include increased acne and male-pattern baldness. If your daughter takes anabolic steroids, she may develop male characteristics, such as a deep voice or dark facial hair. Teens who take anabolic steroids may have angry outbursts known as "roid rage." They may seem unusually moody and may experience depression when they stop using the drugs.

### **Steroid precursors**

Steroid precursors are substances that the body converts into anabolic steroids. They are used to increase muscle mass. Common steroid precursors include:

- Androstenedione ("andro")
- Androstenediol
- Norandrostenedione
- Norandrostenediol
- Dehydroepiandrosterone (DHEA)

The Anabolic Steroid Control Act of 2004 made most steroid precursors illegal without a prescription. DHEA is the only one that is still available in over-the-counter preparations. Side effects of steroid precursors are similar to those for steroids.

### **Ephedra**

Ephedra is a plant that contains the stimulants ephedrine and pseudoephedrine,

which have been used by athletes to reduce physical fatigue, lose weight and improve mental alertness.

Also known as ma-huang, ephedra can cause such side effects as strokes, seizures and heart attacks — even death. Ephedra can raise your blood pressure and cause an irregular heart rhythm. In 2004, the Food and Drug Administration banned ephedra from being sold in dietary supplements because of health concerns. Manufacturers of ephedra-based supplements are contesting that ruling in court.

## Why do teens take them?

Teens tend to deny their mortality and take risks that more mature people wouldn't consider. Here are some situations in which teen athletes might consider taking performance-enhancing drugs.

- **Frustration.** Most athletes reach a plateau at some point in their training. Performance-enhancing substances may help them move beyond it.
- **Curiosity.** Even athletes making good progress with their training may become curious and take performance-enhancing drugs just to see what will happen. No tests can detect some drugs, so there's little chance of getting caught.
- **Psychological effects.** Some substances produce feelings of invincibility and euphoria, which may be pleasurable enough that an athlete doesn't want to stop taking banned drugs.
- **Peer pressure.** The use of performance-enhancing substances is accepted by a significant number of athletes. If they think members of opposing teams use these substances, athletes may feel they need help to remain competitive.
- **Implicit approval.** Parents and coaches may choose to ignore signs of performance-enhancing drug use in teens who appear to be elite-level athletes.

## What you can do

Does your teen plan to compete for athletic scholarships? If so, he or she is under considerable pressure to succeed. And besides the pressure from coaches, parents and peers, teens place a lot of pressure on themselves. Not surprisingly, the pressure may force them to consider using performance-enhancing drugs and supplements.

Reassure your teen of your love and support — even when your child doesn't perform well in competitive sports. If you're worried that your teen may be using performance-enhancing drugs or supplements, here's what you can do:

- **Be clear about your expectations as parents.** Tell your teen that unless the long-term effects of performance-enhancing drugs on young athletes are known to be safe, you expect him or her to avoid them. Make no exceptions. Teach your teen that short-term gains can lead to long-term problems.
- **Discuss ethics and proper training.** Athletes should compete fairly. Remind your son or daughter that using a performance-enhancing drug is similar to cheating, but even more importantly, also could lead to serious health problems or even death. Another key message is that a well-balanced diet and rigorous training are the true keys to athletic performance.
- **Talk with your teenager's coach.** Let the coach know you've talked with your teen and that you don't approve of performance-enhancing drugs. Ask the coach about the school's position on performance-enhancing drugs. Another option is to contact the athletic director of your local school district.
- **Monitor your teen's purchases.** Take a close look at the over-the-counter preparations your teenager takes. Check closely to see what the ingredients are. Pay attention to what your teen purchases on the Internet. Most steroids, for example, are purchased over the Internet.

All children have health education in school. But ultimately it's up to you to talk with your son or daughter about performance-enhancing drugs. Remember — teens are smart, they ask tough questions, and they tend to deny risks to their health. So do your best to convey the message that performance-enhancing drugs are risky business.

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