

# WHAT ARE ANABOLIC STEROIDS?

Anabolic steroids are drugs that are chemically related to the main male hormone testosterone. They are best known for their effects on building muscle (called anabolic). Sometimes doctors prescribe anabolic steroids to help patients with AIDS gain weight and to treat certain types of severe anemia (low red blood cells) or other health problems.

Some people, though, use these drugs illegally to improve athletic performance or to get a more muscular look. Not only is this against the law, but many sports ban use of anabolic steroids as "performance-enhancing drugs."

Anabolic steroids come in various forms, including pills, creams, patches, tablets, injections (shots), or drops placed under the tongue. Veterinary steroids (those for animals) often contain the same components as human steroids, but are not as pure. People sometimes use these as well.

### DID YOU KNOW?

Improper use of anabolic steroids can have unhealthy side effects. These include changes in behavior, increased risk for heart and liver disease, and unwanted—sometimes permanent—changes in physical features.

#### **ANABOLIC STEROIDS**

- Anadrol (oxymetholone)
- Dianabol (methandrostenolone)
- Winstrol (stanozolol)
- Deca-Durabolin (nandrolone)
- Oxandrin (oxandrolone)
- Testosterone cypionate and testosterone enanthate

#### WHO IS USING ANABOLIC STEROIDS?

Both adults and children use anabolic steroids. In one study, use among youth has increased 16% among 10th graders and 37% among seniors in high school since 1996. A 2007 report from the Centers for Disease Control and Prevention found that one of every 25 high school students had used anabolic steroids. The 2009 Pride Survey, of more than 120,000 U.S. students in middle and high school, also looked at steroid use. It found that nearly one in 14 twelfth-grade boys and one in 37 twelfth-grade girls reported using anabolic steroids in the prior year.

Steroid use by college athletes has increased as well. Also, some professional athletes continue to use these drugs, including star athletes.

Not just athletes are using anabolic steroids. Some young people take them to look more muscular or to lose body fat.

## WHY ARE ANABOLIC STEROIDS A CONCERN?

Anabolic steroids have dangerous physical, mental, and emotional side effects. These may be more dangerous in young adults because they can stop growth. In women, they can cause permanent changes in the voice and genitals.

After stopping these drugs, people can feel severe depression and moodiness.

Injections of anabolic steroids carry the risk of infection with AIDS or hepatitis if the drug users share needles. Also, anabolic steroids obtained without a prescription are unreliable. They may contain dangerous substances, or may not even contain steroids.

#### SIDE EFFECTS OF ANABOLIC STEROID USE • Facial hair Women Deep voice • Increased body hair • Irregular periods • Increased appetite • Enlarged clitoris • Breast growth Boys and • Shrunken testicles Men **Both** Physical: **Emotional and mental:** • Severe acne • Angry outbursts ("roid rage") • Baldness or or aggressive behavior hair loss • Paranoia (fears that do not • Liver abnormake sense) • Hallucinations (seeing or malities and tumors hearing things that are not • Blood clots there) • Heart disease

### Questions to ask your doctor

- What are healthy ways that I can enhance athletic performance?
- Could my health problems be due to my taking steroids?
- How should I get off steroids? Will I need treatment?
- Should I see an endocrinologist?

#### **RESOURCES**

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- Hormone Health Network information about hormone abuse: www.hormone.org/abuse
- National Institute on Drug Abuse (National Institutes of Health): www.drugabuse.gov/drugs-abuse/steroids-anabolic
- United States Anti-Doping Agency: www.usada.org
- American Academy of Pediatrics Healthy Children: www.healthychildren.org (search for hormone abuse)

## WHAT SHOULD YOU DO IF YOU USE ANABOLIC STEROIDS?

If you are using anabolic steroids without a doctor's prescription, stop. You could be causing harm to your body that you cannot reverse. Instead, use healthy options such as good nutrition and exercise.

If you have used anabolic steroids and are having health problems, see your doctor to get the proper treatment.

#### **EDITORS**

Lisa Fish, MD Linn Goldberg, MD The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

