

Use of Medicines

The primary use of medicines in sports is to treat pain and inflammation. Athletes may also take medicines to treat specific medical conditions, such as asthma or diabetes, or to treat common illnesses, like colds, congestion, cough, allergies, diarrhea, and skin infections.

Athletes should talk with their doctor before using any medicines to learn how to use them correctly, how much to take, if there are any side effects, and how they might affect their sports. The use of supplements, including iron and vitamins, as well as any supplement used to enhance sports performance, should also be discussed with a doctor.

General guidance

- Medicines should only be a small part of an overall treatment plan. Sports injuries need to be properly diagnosed and treated in a way that looks at both the causes and effects of the injury.
- Nonsteroidal anti-inflammatory drugs (NSAIDs) are helpful for chronic conditions in which the inflammation does not help the injury heal. For acute injuries, they may actually delay healing.
- Do not use more than one NSAID at the same time. It is fine to use with acetaminophen. NSAIDs should be taken with food, even if it is just a snack.
- Pain medicines can be used to treat acute injuries. However, in some cases, pain relief can mask important warning signs and lead to further injury.
- Long-term use of medicines that reduce pain or inflammation should not occur without the approval of a doctor. If long-term use is needed, athletes should see their doctor regularly to check for side effects.
- All medicines can have side effects and can affect training and sports performance. Athletes should always check with a doctor before using medicines to treat injuries or illnesses.
- Always follow the instructions for dosing on the package or from your doctor when using medicines.
- Never borrow or share prescription medicines—even if they are used for a similar condition.
- Supplements are medicines, even though they are not packaged or advertised as such, and should be treated with the same caution.
- Athletes who may be drug tested should be aware that many prescription and nonprescription medicines are banned from use in training and competition. A list of banned substances can be found at www.usada.org.

Nonprescription medicines

Nonprescription medicines are ones that do not require a doctor's order. However, this does not mean they are safer than prescription medicines. Two of the most common nonprescription medicines used in sports are

- NSAIDs, such as ibuprofen (2 brand names are Advil and Motrin) and naproxen (one brand name is Aleve), to reduce pain and inflammation (swelling)
- Analgesic medicine, such as acetaminophen (one brand name is Tylenol), to reduce pain

These medicines are most often used to relieve pain, spasm, or chronic inflammation. For acute injuries such as sprains, strains, and fractures, long-term (more than 3 to 7 days) use of NSAIDs may actually delay healing. Short courses (less than 3 to 7 days) of these medicines may speed recovery in ligament injuries, while their effects on muscular and bony injuries are less clear. However, with overuse injuries, such as tendonitis, bursitis, shin splints, or arthritis, they may help the recovery process. Acetaminophen can be used to reduce pain in both acute and overuse injuries but is not helpful in reducing swelling or inflammation.

Side effects of NSAIDs

NSAIDs, both prescription and nonprescription, have side effects including stomach upset, gastritis, and ulcers. They also have a blood-thinning effect and can increase the likelihood of bleeding after a cut, deep bruise, muscle strain, or head injury. Long-term use can affect the kidney and liver. Athletes who are dehydrated or have kidney or liver disease should not take NSAIDs.

When to see a doctor

Medicines alone are rarely sufficient to treat sports injuries. Pain and swelling can also be treated with rest, ice, immobilization, compression, bracing, and elevation. Medicines can mask pain, which can lead to further injury. For more severe or ongoing problems, athletes should talk to their doctor about further diagnostic testing and additional treatment options. In general, if athletes need to take a medicine to play, they should see a doctor.

NOTES

Listing of resources does not imply an endorsement by the American Academy of Pediatrics (AAP). The AAP is not responsible for the content of the resources mentioned in this publication. Web site addresses are as current as possible, but may change at any time.

Products are mentioned for informational purposes only and do not imply an endorsement by the American Academy of Pediatrics.

The information contained in this publication should not be used as a substitute for the medical care and advice of your health care professional. There may be variations in treatment that your health care professional may recommend based on individual facts and circumstances.

Copyright © 2011 American Academy of Pediatrics

All rights reserved.

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™