

From Family Picnics to Company Teams: Advice for Amateur Athletes



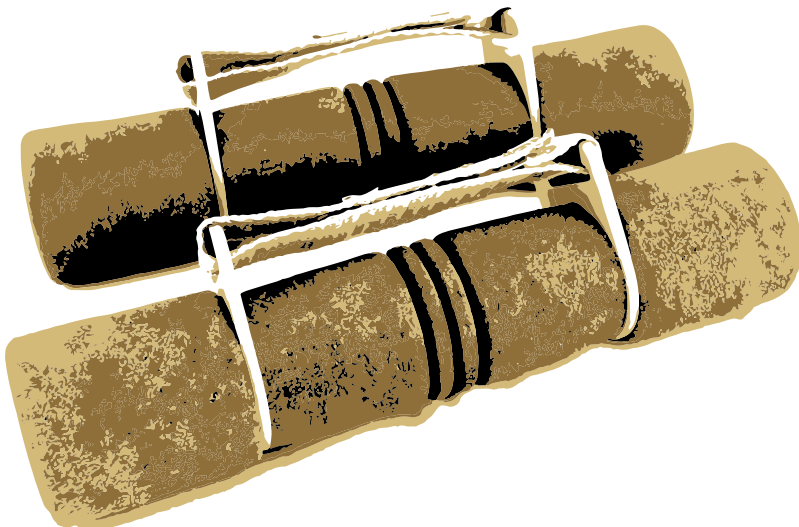
Physical conditioning reduces the chance of acute injuries, the resulting use of powerful pain medications, and the risk of prescription drug abuse



Andy, a 45-year-old manager of a retail outlet store, stands for hours on the job but exercises little. Recently, he joined his company's soccer team. On the second night of practice after running for over 1 hour, he tripped and fell trying to kick the ball. By that evening, his back was in bad shape. The next day, his doctor prescribed muscle relaxants and hydrocodone. After Andy used up the prescriptions, his back was better, but it still ached a bit at day's end. Andy liked the feelings brought on by the hydrocodone and continued using it even after his symptoms resolved. Soon, his work began to suffer. After several months of struggling to stop taking hydrocodone, Andy sought help from his doctor. With support, he is now pain free and off medications. How could this have been prevented?

■ Athletic Injuries

Sports and recreational activities are the number-one source of consumer product injury in the United States, costing almost \$270 billion annually (Lawrence, Spicer, & Miller, 2014). Among working adults, the largest costs are associated with bicycling, basketball, and exercising, with football, baseball/softball, and soccer also frequent injury sources.



Many recreational athletes like Andy suffer minor injuries associated with overuse or lack of physical conditioning. Exercise soreness, scrapes, cuts, bruises, and minor sprains are common and can usually be safely treated with rest, ice, and over-the-counter (OTC) treatments. When more serious injuries occur—such as head injuries, sprains and possible muscle tears, dislocations, or fractures—prompt medical assistance is needed (Andrish, 2009). Young people tend to be aggressive when it comes to occasional sports and may think of themselves as invulnerable to injury. Older adults could be at high risk for injury after occasional physical exercise because many carry excess body weight, suffer from arthritis, or have weak or underdeveloped muscles (Andrish, 2009). These conditions set people up for overuse injuries, such as bursitis, tendinitis, and stress fractures. Also, each pound of excess weight increases the stress load on the knee by a factor of four (Messier et al., 2005). Andy should not have begun his soccer activities with such great intensity, even though he wanted to impress his co-workers.

■ Hidden Dangers

For acute injuries, many people look for a pill to relieve pain. For minor injuries, OTC pain relievers can be used. These include acetaminophen (e.g., Tylenol) and nonsteroidal anti-inflammatory drugs (NSAIDs; e.g., aspirin, Aleve, Advil, Motrin). NSAIDs relieve pain by reducing inflammation (irritation and swelling). These pain relievers should not be overused because they can cause stomach ulcers, bleeding, and harm to the kidneys if taken in large doses or for long periods (Hernandez-Diaz & Rodriguez, 2000).

If these medicines do not relieve pain, a doctor may prescribe something stronger. Many NSAIDs, for example, are available at prescription doses. Prescription pain medications, however, frequently have side effects and should be taken with care following label guidelines. The most powerful pain



relievers are opiates—hydrocodone (e.g., Vicodin); oxycodone (e.g., OxyContin, Percocet); morphine (e.g., Kadian, Avinza); and related drugs. These drugs are not much different from heroin. While very effective for acute pain, they have dangerous side effects, are addictive, and do nothing to treat the cause of the pain (Bogduk, 2004; Chou & Huffman, 2007). Because of these risks, their use is restricted, and they are not appropriate for long-term use. Furthermore, developing research suggests that long-term use of opioids may increase the nerve endings' pain sensitivity, which actually worsens the pain (Lee et al., 2011). Some people also can become addicted after only a few doses. Symptoms of addiction include increasing need for higher doses; preoccupation with use; use despite psychological, physical, or interpersonal problems; and inability to control use.

Most workers don't think about prescription drug abuse when they join a pick-up basketball game on a Saturday afternoon. Take steps to prevent injuries from recreational sports.

Prescription pain reliever misuse is a major public health concern because of its high risk for overdose and addiction. In 2008, 14,800 overdose deaths in the United States involved prescription opioid pain relievers, outnumbering deaths from heroin and cocaine combined (CDC, 2011).

People who want to improve their athletic performance may be tempted to get a prescription for anabolic androgenic steroids to increase strength and endurance, reduce fatigue, enhance injury recovery, or achieve a more ideal weight (Messier et al., 2000). While these drugs may be available without

a prescription on the black market, their purity and safety are unregulated and uncertain. Anyone considering using any of these medications needs to discuss their risks and benefits with a knowledgeable physician.

■ *The Solution: Preventing Injuries*

The risk of acute injuries from irregular physical activity can be lowered substantially through physical conditioning: (1) losing excess weight, and (2) committing to a program of regular exercise.

Losing weight is a challenge, but it can be accomplished through keeping track of calories consumed, cooking at home, eating only small amounts of fatty or overly sweet and salty foods, avoiding sugary drinks, limiting alcohol intake, and controlling appetite by eating the recommending servings of fresh veggies and fruits (Guenther et al., 2006).

Commit to a lifestyle that includes regular exercise. Check with a physician before starting an exercise program. Use the *10% rule*: increase physical activity by no more than 10% each week, and do not increase the intensity, duration, or number of repetitions in the same week (Andrish, 2009). Overweight people or those with existing injuries might begin with aquatic exercise, which limits joint stress. Try yoga to increase flexibility, balance, and core body strength and also to lower stress (Ross & Thomas, 2010).

These measures do not guarantee injury-free “weekend warrior” activities but will go a long way toward preventing risk of injury from recreational sports. If injured, ask your provider about OTC pain relievers, and follow medical advice regarding other measures that may bring relief. If prescribed opiate pain medications, use as directed.



■ Useful websites

http://www.niams.nih.gov/Health_Info/Sports_Injuries/sports_injuries_ff.asp

<http://orthoinfo.aaos.org/menus/sports.cfm>

http://www.niams.nih.gov/Health_Info/Sports_injuries/default.asp

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