UC San Diego Health

The Opposite of Doping

By Heather Buschman, PhD | June 30, 2017



quick search for "drugs and sports" brings up a long list of resources and articles about athletes using performance-enhancing drugs. But what about the opposite — drugs that make exercise more difficult, or even dangerous?

"Many medications — both over-the-counter and prescription — can have side effects that athletes and even occasional exercisers should take into consideration," said Catherine Robertson, MD, orthopedic surgeon and head team physician for the San Diego Padres. "Not only can certain medications slow you down, they can make you more prone to injury."

Here are a few side effects Robertson recommends patients keep in mind before they mix common medications and exercise:

Drowsiness and fatigue

Many cough, cold, flu and allergy medications cause drowsiness. Robertson recommends looking for non-sedating varieties if you plan to exercise or play sports while taking them. In addition, blood pressure-lowering beta blockers work by blocking adrenaline, which can cause fatigue, shortness of breath and reduced exercise capacity. Most people on a beta blocker are being treated for a cardiac condition or high blood pressure. If you have a chronic medical condition, it's important to speak with your primary care physician about how to exercise safely.

Gastrointestinal distress

Medications such as antibiotics and anti-inflammatory pain relievers can cause an upset stomach, nausea and diarrhea — all things can be exacerbated by and interrupt a workout. Common antiinflammatories (or NSAIDs) that are provided over-the-counter are ibuprofen (Motrin, Advil) and naproxen (Alleve). These medications are intended to be used as needed, not every day or for every exercise bout. NSAIDs should always be taken with food to avoid gastrointestinal side effects. If you have a previous history of ulcer disease, do not take NSAIDs without speaking to your doctor. NSAIDs can also affect the kidneys, so that they should not be taken frequently in individuals with kidney or renal disease. Acetaminophen (Tylenol) is different— it can be useful for reducing joint or post-exercise pain, but should also be used in moderation.

Dehydration



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Athletes taking them should be extra vigilant about hydration, Robertson said. "You can even think of fluids as a performance enhancer. If you avoid dehydration and excessive loss of electrolytes, you will tend to perform better, especially in warm environments."

Increased blood pressure

In addition to drowsiness, cough, cold and flu medications can raise your blood pressure and heart rate, increasing risk of heart attack and stroke. If you have a history of heart disease or high blood pressure, it's a good idea to check in with your regular doctor before starting a new medication, even if it is over-the-counter.

Muscle pain

Muscle pain (soreness and weakness) is one of the most frequently reported side effects of cholesterol-lowering statins. This can vary from person to person and sometimes goes away after a period of taking the medication. If you note increased aches and pains after starting a statin, make sure to speak with your doctor as there are alternative medications.

Bone loss

In a recent randomized, controlled trial, researchers found that older women who took ibuprofen immediately after resistance training lost bone mineral content in their lower forearms. In contrast, either resistance training or ibuprofen alone prevented bone loss. "This is still an area of early study that needs to be examined more before any firm conclusions can be drawn,"

Robertson said. "And in the meantime, it's clear that appropriate weight-bearing and resistance training can have benefits for bone health, especially in those with or at risk for osteoporosis."

Masking more serious symptoms

With all pain relievers, Robertson said, there's always a risk that if you're taking them frequently, you may be masking a more serious injury. "Pain that is getting worse or keeping you from doing normal activities should be checked out," Robertson said. "The goal is to not take medications every day." However, in individuals, with arthritis or other chronic joint disease, the benefits of exercise are very clear: Most people who participate in some form of exercise experience less pain. The key is getting to know what exercise works for you. This may mean exercising every other day or working out in the pool to offload sore joints instead of higher-impact activities.

"We want people to be aware of potential side effects when taking medications," Robertson said. "But also keep in mind that exercise still has many benefits, even if you're not performing at your peak. As the American College of Sports Medicine has said, 'exercise is medicine.' That said, it's a good idea to talk to your doctor or pharmacist if you have concerns about the medications you're taking and your level of physical activity, especially if you have known medical conditions."

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