



## Information for Patients about NSAIDs

Over 70 million Americans are affected by arthritis and musculoskeletal disorders. One of the mainstays of treatment for these conditions for more than three decades has been medications in the class known as the nonsteroidal anti-inflammatory drugs or NSAIDs. The American College of Rheumatology has prepared this list of commonly asked questions about NSAIDs.

### **Q. What are NSAIDs?**

A. NSAIDs, which stands for nonsteroidal anti-inflammatory drugs, are a class of medications that work to decrease inflammation, pain and fever. Traditional NSAIDs include aspirin, ibuprofen (e.g., Advil, Motrin), naproxen (e.g., Aleve) and many other generic and brand name drugs. A newer addition to the NSAID group is celecoxib (Celebrex) which is a COX 2 Selective NSAID. The NSAIDs work by a different mechanism than steroid medications (such as prednisone) to decrease inflammation and pain. It is important to discuss with your doctor the goal of using the NSAID. If the goal of taking the NSAID is to suppress inflammation then it will need to be taken at higher doses and on a regular dosing interval. If it is to relieve pain and not necessarily inflammation, then often lower doses and an as needed dosing interval are sufficient.

### **Q. What is the difference between traditional NSAIDs and celecoxib (Celebrex)?**

A. Celecoxib is a COX-2 selective NSAID, which also works to decrease pain and inflammation, but it is not more effective than traditional NSAIDs like ibuprofen or naproxen. COX-2 selective NSAIDs are somewhat less likely to cause stomach problems, like ulcers and bleeding than traditional NSAIDs, but have the same risk of side effects like high blood pressure, kidney problems, and fluid retention. In addition, celecoxib, like several other NSAIDs, has been associated with an increased risk of cardiovascular problems, like heart attacks, in some large clinical trials.

### **Q. What is the purpose of taking these types of medications?**

A. NSAIDs are taken to relieve pain and reduce inflammation and fever. For temporary conditions such as sprains, strains, and flares of back pain, for example, over-the-counter NSAIDs may be sufficient. For



chronic conditions such as rheumatoid arthritis, osteoarthritis, or lupus, these drugs are generally administered by a doctor in higher prescription doses and may be prescribed over a long period of time.

**Q. Are these drugs safe?**

A. All drugs have a risk of side effects, including NSAIDs. It is important to understand the risks and benefits of the drugs before making a decision to take them. Risks of all NSAIDs include, but are not limited to, stomach problems like bleeding and ulcer, high blood pressure, fluid retention, heart and kidney problems, and rashes.

Although it is perhaps natural to assume that medications that are available without a doctor's prescription (over-the-counter medications) are safer than the same or similar medicines that require a prescription, this is not necessarily true. In general, medications must be generally safe before the FDA will allow them to be sold over the counter. In order to provide some additional measure of safety, the doses of over the counter medications are often less than prescription doses of the same medicine. For example, the most common doses of ibuprofen in prescription form are 400 mg, 600 mg and 800 mg, whereas the over the counter pills are 200 mg. In equivalent doses, the safety profile of over-the-counter medications is the same as prescription medications, and this is certainly true for NSAIDs.

It is very important to not mix an over-the-counter NSAID with a prescribed NSAID as it will increase your chance of a toxic side effect. Mixing NSAIDs with aspirin also increases the risk of a gastrointestinal bleeding side effect.

**Q. Is there one NSAID that is safer than the others?**

A. There is no clear difference in the overall safety profile of the various traditional NSAIDs on the market, although the side effects of individual drugs may vary. In some studies, naproxen appears safer on the cardiovascular system. Celecoxib is associated with slightly fewer stomach problems than traditional NSAIDs, but it has been reported to be associated with a possible increased risk of heart problems, especially at doses above 200 mg per day. Some patients may be more sensitive to the side effects of one drug than another. Older persons have a higher risk of stomach bleeding, and those with heart conditions and high blood pressure are more likely to experience side effects with these drugs.

**Q. If I have heart disease, can I take an NSAID or celecoxib?**

A. If you have heart disease, you should not take celecoxib or an NSAID, including an over-the-counter NSAID, without first discussing it with your doctor. Treatments such as acetaminophen or other pain medications may be more appropriate in this situation. Some traditional NSAIDs may also interfere with aspirin prescribed to patients with heart disease. As well, aspirin plus an NSAID increases the risk of side effects.

**Q. What do I need to tell my doctor when considering one of these drugs?**

A. To be able to discuss the best possible treatment for your condition and safety, you will want to give your doctor a complete history of your health status. Your doctor will be interested in a medical history of stomach ulcers or bleeding, high blood pressure, fluid retention, heart failure, cardiovascular disease, asthma, pregnancy and allergies to sulfa drugs or NSAIDs.



In addition to a complete medical history, your doctor will want a complete history of all the medications you are taking or have taken recently. Some of the medications of interest are low-dose aspirin, steroids, Coumadin, Plavix, and other over the counter NSAIDs (such as Motrin, Advil, and Aleve).

**Q. Who should be especially cautious when considering using these drugs?**

A. Talk to your doctor before taking over-the-counter or prescribed NSAIDs if you:

- have decreased kidney or liver function, or an uncontrolled or undiagnosed liver problem (e.g., hepatitis)
- have had a recent ulcer, gastritis, or bleeding from the intestinal tract or if you have had these problems in the past
- take blood thinners like Coumadin, heparin, aspirin, or Plavix
- take steroids like prednisone
- have a low platelet count
- have Crohn's disease or ulcerative colitis
- have a history of stroke, heart attack, hypertension, or congestive heart failure
- have asthma or chronic lung disease
- are allergic to aspirin or other NSAIDs, or have nasal polyps
- have "reflux disease," indigestion or hiatal hernia
- are pregnant, may become pregnant, or breast feeding
- drink more than seven alcoholic drinks per week or more than two in a day
- are over the age of 65

NSAIDs should only be used during pregnancy when absolutely necessary, and only in consultation with a doctor; they should be avoided during the last 12 weeks of pregnancy because of the risk of harm to the growing fetus.

Additional caution and consultation with a doctor should be considered for those requiring the chronic use of NSAIDs for more than 30 days.

**Q. If these drugs are not right for me, what other drug approaches are available?**

A. NSAIDs can be very effective medications for arthritis or other rheumatic diseases. However, not all patients can take them, and there are many other choices your doctor may suggest for you. These range from topical therapies, injectable agents, or other pain relieving or anti-inflammatory medications. Surgery is also an option for some patients with arthritis. The best choice will depend on the type of arthritis you have, and other key factors such as other health conditions you may have, other medications you may be taking and what types of treatments have been used in the past.

**Q. What can I do for my arthritis pain that does not involve taking medications?**

A. Physical therapy, use of heat and cold, and other techniques including massage and relaxation therapies can be very helpful in reducing pain. Being physically active and eating right are two of the best strategies nearly everyone with arthritis (whether they take medications or not) can use to ease arthritis pain. Participating in at least 30 minutes of physical activity such as swimming, water aerobics, riding an exercise bike, and walking are beneficial for many patients at reducing arthritis pain and future disability. For your joint health, you can get those 30 minutes of physical activity by doing three 10-minute episodes. So, consider parking a little farther from the grocery store, walking up a flight of stairs



to a different water cooler, or walking to deliver a message at work instead of e-mailing your coworker. These actions will go a long way to helping you have less arthritis pain.

Maintaining a healthy weight is also important. If you lose as little as 11 pounds you can decrease the risk of developing osteoarthritis in your knees, and a weight loss of only 15 pounds in people with arthritis can cut your knee pain in half. Acupuncture has been shown to reduce knee pain in some people with osteoarthritis. To get started, consider going to an Arthritis Foundation life improvement series aquatics, exercise or self management class. Visit the [Arthritis Foundation Web site](#) to locate your local chapter and find the list of the classes.

Be knowledgeable about all of your medications, and review information from your doctor, pharmacist and other health care provider about both effectiveness and side effects. Always ask your doctor, pharmacist or other health care professional if you have questions about your medications. Tell your doctor about **all** medications you are taking, including medicines prescribed by other doctors, over-the-counter medicines and other supplements.

The best decision about what medication is best for you is a shared one between you and your doctor, taking into account your medical history and current medical problems, other medicines needed, and a discussion about the relative benefits or risks of medications.

The American College of Rheumatology is a professional organization representing more than 6000 doctors, scientists, and other health care professionals who treat arthritis and other musculoskeletal and inflammatory diseases.

**Written June 2007 by members of the ACR Drug Safety Committee.**

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