

# **InfoSheet – Anti-inflammatory medicines**

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## **What are nonsteroidal anti-inflammatory drugs?**

Nonsteroidal anti-inflammatory drugs, or NSAIDs, are medications effective in treating inflammation and pain. They are routinely used for conditions such as arthritis, back pain, muscle sprains, fever, and headache. Some of these drugs require a prescription from your doctor. Advil and ibuprofen and Alleve are three commonly used over-the-counter NSAIDs.

## **How do they work?**

NSAIDs act on certain hormones (prostaglandins) in the body that produce inflammation. By blocking the hormones from doing their job, the swollen tissues reduce in size and some of the pain-causing chemicals are not produced. This, in turn, decreases pain related to the inflammation.

In addition, NSAIDs have a direct pain-relieving effect that is separate from their anti-inflammatory effect. In this way they are similar to Tylenol and other analgesics.

## **How are they taken?**

NSAIDs can be taken by mouth, injection, or suppository. The oral form should be taken with food and a glass of water to avoid stomach upset.

## **What are the side effects?**

Some people experience upset stomach, nausea, diarrhea, and headaches with these drugs.

Gastrointestinal side effects are some of the most common problems. Motrin, naprosyn, and other older NSAIDs are nonspecific, affecting both COX-1 and COX-2, the two prostoglandin-producing enzymes. COX-1 is beneficial for the stomach, and blocking it can lead to ulcer formation. The new NSAIDs (like Bextra, Celebrex, Mobic, and Vioxx) are COX-2-specific, and they are less likely to lead to ulcers and gastrointestinal upset.

In very rare instances, NSAIDs have been known to cause kidney failure, a rash, muscle cramps, numbness in the extremities, mouth ulcers, blurred vision, jaundice, difficulty breathing and unusual bleeding.

## **Are they addictive?**

Fortunately, NSAIDs are not addictive, which makes them especially useful with chronic illnesses like arthritis.

## **What other precautions should I know?**

You should not take NSAIDs if you have had an allergic reaction to them in the past. They should be avoided during pregnancy and when breast-feeding. Patients with peptic ulcers or those taking blood thinning medications may not be able to use them. Special care should be taken if you have health conditions such as asthma, kidney or heart disease, or impaired liver function. Always discuss potential drug interactions or precautions with your doctor.