

Tylenol and Advil both good for pain, but not the same

By ACSH Staff — May 12, 2015



We tend to think of over the counter (OTC) drugs for pain

relief as interchangeable but this can be a dangerous misconception. Depending on the type of injury or pain and the condition of the person involved, taking the wrong one can be ineffective at best and downright harmful at the worst.

In a *Wall Street Journal* [review](#) [1] of the two most popular OTC pain relievers ibuprofen and acetaminophen Sumathi Reddy points out the differences between them, and the most effective use for each.

Ibuprofen (Advil, Motrin) belongs to a class of drugs called nonsteroidal anti-inflammatory drugs, also known as NSAIDS. These drugs act by inhibiting the process of inflammation the process that causes redness, swelling and pain in arthritic joints, as well as after a sports injury such as a sprain. They re also effective for other minor pain such as headaches, and help fight fever. However, they can cause stomach and other GI bleeding, and people who are on blood thinners (who would be more prone to bleeding anyway) should consult their healthcare providers or pharmacist before using these drugs. Taking too much ibuprofen can result in serious toxicity kidney complications, hypertension and thus a higher risk of cardiovascular problems. Their use is not advised for pregnant women or for babies less than 6 months old. Aspirin is also an NSAID, and has similar similar side effects, as well as the possibility of causing Reye s syndrome in children.

Acetaminophen (Tylenol), works by a different (and unknown) mechanism than the NSAIDS, and does not cause GI problems. Like ibuprofen, it can be effective for pain control, although it is regarded as less effective in both pain and fever control. Unlike ibuprofen, appropriate doses of acetaminophen are considered safe for babies and pregnant women. By far, the biggest risk from acetaminophen comes from excessive use.

ACSH s Dr. Josh Bloom explains: Acetaminophen has what is called a low therapeutic index the difference between an effective dose and a toxic dose. The maximum recommended daily dose is 3,000 mg six extra-strength pills (This was recently reduced from 4,000 to 3,000 for exactly this

reason.) As little as two or three times this dose can cause irreversible liver damage, and death. In fact, many people who attempt suicide by taking a large dose of a narcotic, such as Vicodin (Tylenol plus hydrocodone), will survive the narcotic, but end up dying from irreversible liver failure.

This low therapeutic index can cause problems that most people are unaware of. Cough syrups are formulated for different uses cough suppressants, decongestants and pain control. Those that control pain may contain full doses of acetaminophen (and many do). So, if someone takes a full dose of the syrup plus Tylenol over the course of a few days, they may unwittingly poison themselves with acetaminophen. It is a much better idea to buy plain cough syrup for a cough, and then add Tylenol or a decongestant as needed.

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