

THE ABC'S ON OTC'S

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Gymnasts are known for their countless hours in the gym; all that swinging, jumping, flipping, and tumbling can leave athletes with pain. Oftentimes that pain can be managed through **over the counter (OTC)** analgesics. Upon entering the drug store, parents, athletes, and coaches may be left bewildered in attempting to determine the best option for their type of pain.

Pain relievers can be used for a myriad of ailments from the common cold to injury pain management. No individual OTC medication is appropriate for every condition, so understanding the differences between medications can help parents and coaches choose the right medication for their child in an effort to manage pain and facilitate return to activity.

Acetaminophen (Tylenol), Aspirin, Ibuprofen, and Naproxen (Aleve) are common OTC's used in pain management. Acetaminophen is an analgesic and an antipyretic (fever reducer). It does not provide anti-

inflammatory effects. Over-ingestion of acetaminophen can lead to liver damage. All medications have side effects but acetaminophen is less likely to irritate the gastrointestinal tract than other OTC's.

Aspirin (acetylsalicylic acid) functions as a pain-reliever, a fever reducer, and an anti-inflammatory. However, aspirin is more likely to irritate the gastrointestinal tract and asthmatics have a greater risk for allergic reactions among other side effects.

Non-steroidal anti-inflammatory (NSAID) such as ibuprofen and naproxen have anti-inflammatory,

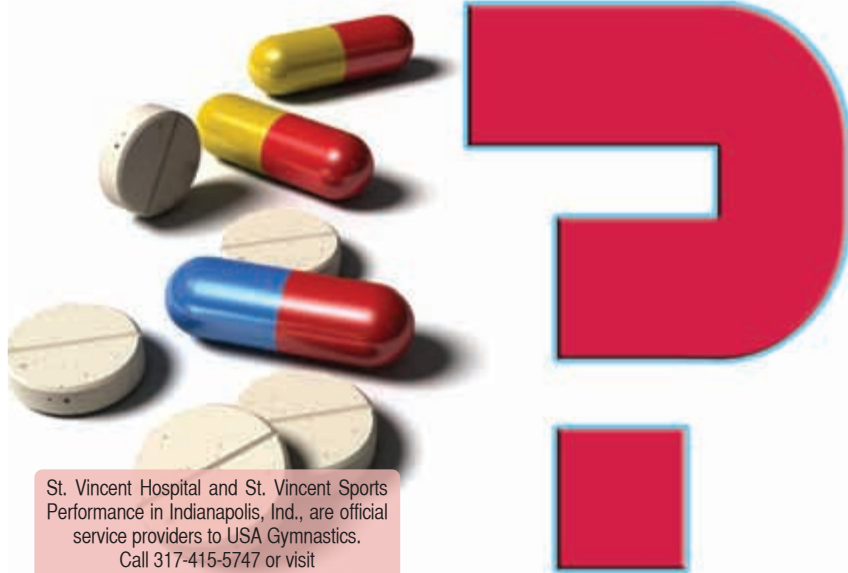
pain-relieving, and fever-reducing properties much like aspirin but with fewer side effects. They also have a longer duration of action than aspirin.

While NSAID medications seem to have the most benefits when dealing with musculoskeletal injury, there are instances when acetaminophen can be more beneficial. Generally, inflammation is seen as a negative with athletic injuries. Many athletes are familiar with the R.I.C.E. principle; all of these actions are utilized to decrease the amount of inflammation at the injury site. However, the inflammatory response is a necessary mechanism of injury. Inflammation clears dead cells and helps restore tissue so some swelling can be a positive. NSAIDs can also increase the risk of dehydration, so for multi-sport athletes or activities with long duration, such as distance running, acetaminophen can be more beneficial. Thinning of the blood occurs with the use of NSAIDs, so for athletic competitions with potential for head injury, such as concussions, acetaminophen is best. Finally, acetaminophen is best when managing pain associated with broken bones; Studies have shown that NSAIDs can decrease bone healing.

Reading labels for possible side effects, drug interactions, and recommended dosage is always a must. Being well informed and asking questions about OTC's to healthcare professionals can help parents, coaches, and athletes choose the best medication for their specific condition. ❌

References

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The right time for acetaminophen. NATA News., May 2003, 24.



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