

ANOTHER REASON TO AVOID NSAIDS

Regular M&F readers already know that we warn against taking non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen for delayed-onset muscle soreness, the pain that follows intense workouts. NSAIDs work mainly by inhibiting an enzyme present in muscle cells called cyclooxygenase (COX) that initiates inflammation and pain following a muscle injury, such as after a hardcore training session.

While it would seem like a good idea to inhibit COX, inflammation is actually a necessary component of muscle growth. In fact, [research shows that NSAIDs decrease muscle](#)



[protein synthesis and muscle growth.](#) And if that's not enough to deter you from taking NSAIDs, new research from Appalachian State University (Boone, North Carolina) may. Scientists found

that taking NSAIDs before exercise increases oxidative stress following a workout. Such an increase can have negative implications on not only muscle recovery but also your health.

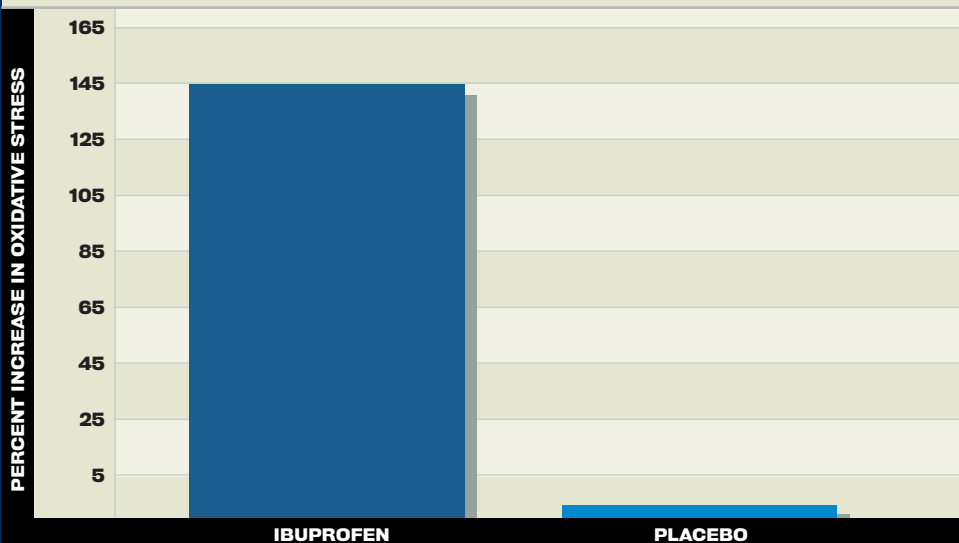
Oxidation Overload | The researchers had 54 ultramarathoners take either ibuprofen or a placebo on the day before and the day of an ultramarathon race. They collected samples of the runners' blood and

urine the morning before the race and immediately afterward to measure indices of oxidative stress. Racers who took ibuprofen were found to have significantly higher levels of oxidative stress.

JUST SAY NO

The take-home message from these studies on NSAIDs is simply that you should avoid taking them whenever possible. Of course, there are times when NSAIDs are helpful and even necessary, such as when you have a headache that won't quit or an injury that's inflamed. At those times when you must take an NSAID, consider taking it with an antioxidant supplement such as 500–1,000 mg of vitamin C.

NSAIDs, ENOUGH SAID | This graph shows the percent greater increase in oxidative stress after the race compared to before the race in ultramarathon subjects taking ibuprofen vs. a placebo.



Graph created using data from McNulty, et al, 2007.

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