

Where Does It Hurt?

By Tom Welch, M.D.

PAIN, OR RATHER THE TREATMENT OF IT, has been in the news a lot lately. In a cascade of poor decisions, American medicine (and the pharmaceutical industry) came to the consensus that all pain was bad and merited aggressive treatment. The disastrous consequence has been an opioid epidemic claiming tens of thousands of lives annually.

In retrospect, the entire premise upon which this catastrophe was based seems flawed. It is as if the profession of psychiatry were to declare that all sadness required treatment.

Pain is a frequent accompaniment of wilderness travel. When and how should we treat it?

Early in my guiding career, I included a veritable pain control armamentarium in my field first aid kit, including syringes and injectable

morphine. It did not take long for me to drop these. I realized I never really needed them, and it was increasingly difficult, even as a licensed physician, to acquire them legally. In today's environment, I would be loath to carry such items loose in a backpack! I substituted oral opioids for a few years, finally abandoning them as well.

Today, the only pain control medications I carry in the woods are the ones most readers have in their home medicine chests. What I also have, however, is a more mature under-

standing of how they work and when they should be used.

The bulk of over-the-counter pain relievers fall into two groups: acetaminophen and NSAIDs (non-steroidal anti-inflammatory drugs). These medications have distinct mechanisms of action, which is why it is sometimes useful to use one from each category. Most stores include many choices within these categories, under a variety of brand names. I will use the generic names, since there is no important difference between these branded medications and their generic equivalents.

Acetaminophen appears to have its major site of action in the brain. No matter where the problem originates, what we "feel" as pain depends upon the way in which our brain interprets the signals sent to it. Thus, acetaminophen appears to work by blunting

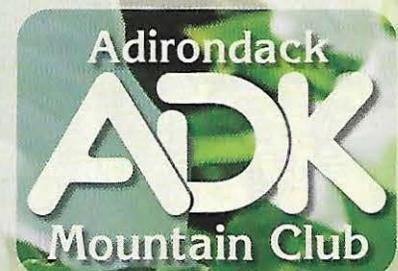
Monthly Giving with ADK

The protection of New York's wild lands and waters depends on steady, reliable support from committed donors like you. Monthly giving is the easiest and most efficient way to support ADK's mission all year long.

Become an ADK Champion; set up your automatic, monthly gift today!

It's easy: Visit ADK.org/donate, choose "make this a monthly gift," and we'll charge your credit card each month. You can change or end your pledge at any time.

*Already giving regularly via payroll deduction?
Please contact Nancy at nancy@adk.org to ensure
you are counted among our ADK Champions.*



Although both acetaminophen and NSAIDs are sometimes recommended for a more potent pain-relieving effect, remember to address the cause of pain, as well as possible non-drug treatments, whenever possible.

our perception of pain. For otherwise healthy adults, the maximum dose of this medication is 1000 mg (two 500 mg tablets) every six hours. This should not be continued for more than a few days without a physician's advice. Serious side effects and reactions to acetaminophen are unusual. Since its major toxicity is to the liver, it should be avoided by folks with known liver disease or who are heavy alcohol users.

The effect of NSAIDs on pain comes from a different mechanism: Inhibition of the synthesis of substances (prostaglandins) made at sites of inflammation which produce myriad effects, including pain. This is why these drugs are particularly effective in certain forms of arthritis.

Although generally very safe, NSAIDs have an array of side effects that are a bit more problematic than those associated with acetaminophen. Foremost among these are irritation of the stomach and intestine, sometimes resulting in bleeding.

There are a variety of formulations of these drugs, differing in dosage and timing; naproxen sodium, for example, is taken twice daily, while ibuprofen is usually taken every six hours. Because of this variability, it is best to consult with your pharmacist for precise dose advice. For most purposes, there is no meaningful difference between the types of NSAIDs available over the counter.

Because acetaminophen and NSAIDs have distinct mechanisms of action, it is sometimes recommend-

ed that they both be used for a more potent pain-relieving effect. In any case, remember to address the cause of pain, as well as possible non-drug treatments, whenever possible. The headache of dehydration, for example, is best treated by drinking fluids; indeed, dehydration increases the risk of side effects with NSAIDs. The soreness of thigh and calf muscles that sometimes comes from a long day's hike can benefit from massage and, perhaps, salty fluids. ▲

Tom Welch, MD, is a physician at Upstate Medical University in Syracuse and an active member of the Wilderness Medical Society. He is a licensed professional guide and a certifying instructor for the Wilderness Education Association, and has guided groups in the Adirondacks, Montana, and Alaska. More information is available at his website and blog, www.adirondoc.com. Luke Probst, PharmD, director of pharmacy services at Upstate Medical University, reviewed this column and provided helpful suggestions.

Inside or Out
ADK takes you to new places

Published by Rizzoli International with ADK, this new title celebrates America's original hiking destination through breathtaking contemporary photography by Carl Heilman. Compelling text by Neal Burdick describes the history of the region's trails.

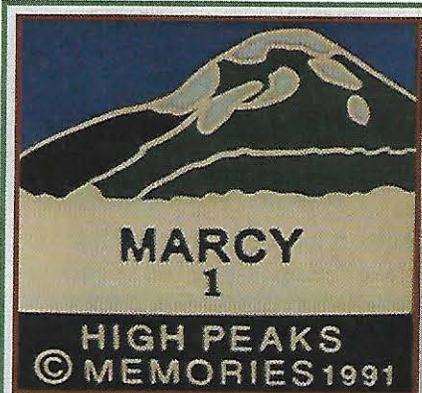
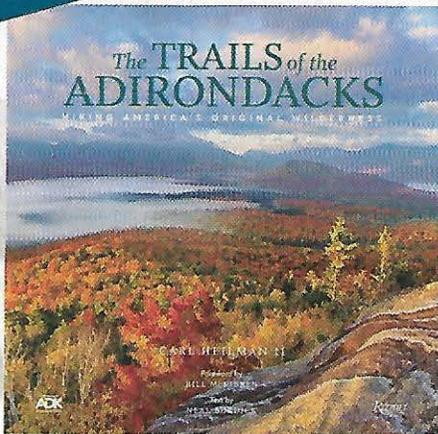
Vignettes by Christine Jerome and Stuart F. Mesinger, maps, and archival photos provide additional perspective and interest.

Hardcover, 10" x 10", 288 pages, includes fold-out map \$45 (member discounts apply)

Adirondack
ADK
Mountain Club

Working for Wilderness

800-395-8080 ▲ ADK.org



HIGH PEAKS MEMORIES Mountain Pins for Mountain Highs

Purchase all 46 High Peaks and more at these great NY shops:

- ADK HPIC, Heart Lake, Lake Placid
- Hoss's Country Corner, Long Lake
- Adirondack Trading Co., Lake Placid
- The Mountaineer, Keene Valley
- Newman News, Lake Placid
- ADK, Lake George