**ULTRA MAMMA’S CORNER**

VITAMIN I – TO USE OR NOT TO USE

by Nancy Shura-Dervin

"I was popping vitamin I like they were M&Ms"... said one ultra runner recently.

NSAIDS: THE SHORT STORY...

If you have read some of the recent articles, you are aware of the controversy surrounding the use of NSAIDs (non-steroidal anti-inflammatory drugs) during ultra marathon training and racing. Categorically, NSAIDS are drugs that may be OTC (over-the-counter) or prescription strength, that are pain relievers, fever reducers, and also reduce inflammation. NSAIDs are particularly effective for treatment of mild-to-moderate pain due to inflammation associated with tissue injury. Common OTC NSAIDs are aspirin, ibuprofin, Advil and Aleve.

The most common side effect of NSAIDs is dyspepsia aka "stomach upset". GI (gastrointestinal) complications associated with NSAID use include stomach cramps, nausea, vomiting, stomach cramps, diarrhea, gastric ulcer and GI bleeding. Some NSAIDS are associated with increased risk of heart attack, heart failure and stroke. In particular, NSAIDs are known to be "anti-prostaglandin". By reducing levels of prostaglandin in the blood, pain levels are decreased but negative effects may result in the kidneys where prostaglandin plays a vital role in kidney profusion (blood flow). Low prostaglandin levels may result in constriction of renal (kidney) blood flow. This constriction of renal blood flow combined with other stresses associated with endurance running (dehydration, electrolyte imbalance, adrenal fatigue, hyperthermia, muscle damage), are associated with increased incidence of acute renal failure, secondary to rhabdomyolysis (a condition in which damaged muscle particles are released into the blood stream). In recent years, there have been numerous documented cases of hospitalizations due to acute renal failure among ultra runners who have used NSAIDS during training and racing.

THE REAL LOW DOWN...

Not only are NSAIDS a health risk for ultra runners, they actually interfere with our natural ability to manage pain. Here's how it works... You run, run, run. It starts to hurt. You have no real "fear" of this pain because your brain knows that it is "normal" to hurt when you run 25-miles, 50-miles, etc. As you keep going, your pituitary gland starts to produce endorphins that flow through your bloodstream. According to Wikopedia, endorphins "are produced by the pituitary gland and the hypothalamus in vertebrates during exercise, excitement, pain, consumption of spicy food, love and orgasm, and they resemble the opiates in their abilities to produce analgesia and a feeling of well-being". The more you train (run, run, run), the more adept you become at pumping out endorphins. Endorphins are "endogenous morphine" to an ultra runner and probably is the reason that ultra running is so "addictive"! The constant flow of endorphins throughout the running activity causes pain levels to "ebb and flow" and to become more manageable as the athlete becomes highly conditioned. But when NSAIDs are added to the picture, the body never becomes efficient at producing endorphins because the NSAIDs temporarily bring the pain levels down. The problems with this are that (1) the pain levels eventually come back up again and require repeat doses of NSAIDs, (2) NSAIDS create dependency and higher doses are soon required to relieve pain (3) Pain levels increase through the cycle because the endorphin response is being blocked by the NSAID use (4) Side effects of NSAIDs begin to set in causing increasing distress to the runner.

THE SOLUTION...

The solution to the NSAID dilemma is to "get clean"! Teach yourself to train without using NSAIDs or pain relieving drugs at all. When you encounter discomfort, pain, or fatigue, tell yourself "this is normal". Tell yourself "the more you hurt now, the less you will hurt later". Slow down or shorten your mileage a bit; pain is after-all, a message from your body telling you to ease up! Each time you return to the trail, you will come back stronger. For post-run soreness or pain, use ice, take a jacuzzi bath, get a nice massage. The result is that you will soon be training without taking pain meds at all and you won't suffer the medical problems associated their use.

ANECDOTE...

In 1997, I ran my first 100-miler without taking any pain meds; a fact that I'm sure helped get me to the finish line. Fast forward to 2003 when I ran the Badwater 135-Mile Ultra Marathon and on the second night, I had a terrible "tweak" in my neck and felt like a hot knife was stuck in my shoulder blade. Someone asked me when I last took ibuprofen and I answered "six years ago"! After a good laugh, they popped a single" Vitamin I in my mouth and about an hour later the pain was entirely gone!