

the healthy swimmer



Jeff Lewis

KT Tape: Not Just for Elite Athletes Anymore

Many of us watched women's beach volleyball champs **Kerri Walsh** (above) and Misty May-Treanor win Olympic gold in 2004 and 2008. Last year in Beijing, Walsh was sporting some peculiar black tape strategically placed on her shoulder during the games. It turns out this tape, KT Tape, is one of her secret weapons. According to manufacturer Lumos Inc., KT Tape works by lifting the skin and relieving pressure on pain transmitters, providing muscle-pain relief and support without restricting motion.

The good news for swimmers is that KT Tape is water-resistant and now, easy to obtain and use. KT Tape is the first kinesiology tape to come in pre-cut strips. KT tape may help swimmers with chronic training injuries during practices, but may not be legal in all swim competitions. Check with meet officials before taping for a competition.

According to a Lumos news release, kinesiology tape has never been available direct to consumers, and previously required special cutting and training to use it."

Lumos claims that many injuries respond well to KT Tape, including chronic knee and elbow injuries, sprains, and general back and shoulder pain, allowing athletes to remain active while injured. KT Tape comes in specially perforated segments and specific application instructions. There are also video tutorials on KT Tape's website that show how to dress a joint or muscle properly. <<<

>>> For more information, visit kttape.com.

Surfer's Ear Strikes Swimmers

Just when you thought it was safe to go back in the water ... a new threat emerges. This threat, called "surfer's ear," does not come with a large dorsal fin, but it does affect swimmers the same as surfers (even though swimmers do not resemble seals from below, as surfers do when paddling their boards.)

Named for its most frequent victims, surfer's ear attracted the attention of the medical community when the popularity and availability of wetsuits made it easier for people to spend prolonged periods in cold water. Now, as open water swimming has exploded in the fitness-conscious segment of our society, many triathletes and open water swimmers are being treated for surfer's ear.

Acquiring surfer's ear, also known as exostosis, is a slow process, often diagnosed in people in their mid 30s to late 40s. Over time, exposure to cold, windy and wet conditions causes the bone around the ear canal to develop bony growths that slowly block the canal. This, in turn, can cause hearing loss and lead to chronic ear infections due to excess water and debris being trapped

in the ear canal. Anyone exposed to these conditions over time is at risk, including kayakers, jet skiers and divers.

Treatment for surfer's ear involves general anesthesia, sharp instruments, words like "dissect," and sometimes, a very large drill. Doctors say it is better to prevent the formation of bony growths by protecting the ears when swimming in cold conditions. Ear-plugs, a neoprene hood, or a swim cap is *de rigueur*, depending on your exposure time and water temperature.

Masters swimmer Paul Plackis, 55, with the Florida Aquatic Combined Team, recently underwent surgery for surfer's ear. Plackis flew to Santa Cruz, Calif., to have the procedure performed by surgeon Douglas Hetzler, who has treated many cases of surfer's ear and has developed surgical techniques utilizing micro-chisels and minimizing the use of a drill, which can damage delicate tissues. Plackis grew up in Long Island and has been surfing since age 10, as far north as Newfoundland. <<< >>> For more information on the diagnosis and treatment of surfer's ear, visit Dr. Hetzler's site at www.santacruzmedical.org/surfersear.



NYC Shooter

Practitioner Profile: Miller Receives Prestigious FINA Appointment

While in Rome this past August for the World Swimming Championships, **Dr. Jim Miller**, 59, Virginia Masters, was selected to be one of eight physicians to serve on FINA's Sports Medicine Committee.

"I am very excited to have the unique opportunity to serve all of the aquatic disciplines," Miller says. "The SMC has not had representation with a background in Masters and open water, which are the fastest growing areas of aquatics internationally."

Miller is the first American to receive a FINA appointment to this committee in the past 10 years. He will serve four years, running through the London Olympics in 2012. The committee oversees medical matters for all aquatic events under FINA worldwide.

Miller also is a national team physician for USA Swimming. He has served U.S. Masters Swimming in many roles: coach, author, committee member, director and president. Miller



serves on the Sports Medicine and Science Committee and has made the study of sports medicine, with an emphasis on swimmer physiology, his professional focus. <<<

The information in this department is not intended as a substitute for professional or medical advice. It is not intended to provide medical advice on personal health matters. For personal medical advice, consult your healthcare provider. If you are concerned about a particular medical condition or injury, see your healthcare provider for evaluation and care.

Readers Ask: Warm Pool Water

Q: "Our training facility keeps the water temperature between 78 and 80, which I am used to. Sometimes when I travel, I swim at other facilities where the water is anywhere between 84 and 88. I have a difficult time completing a workout in water that warm, but the swimmers who practice in those facilities seem to do OK. Are they just used to it? Is there something wrong with me?"

A: We turned this question over to our Sports Medicine and Science Committee, made up of medical professionals within our membership who contribute their knowledge and expertise to USMS in a variety of ways. The committee fields all requests for medical information from both inside and outside the USMS community. The committee has also produced articles related to health and science, which can be found on the usms.org site under the "Health and Fitness" tab.

Committee members agree that swimming for exercise in warmer water is more difficult. Jessica Seaton, chiropractic or-



thopedist, points out that many pools keep the water warm for older adults doing water exercise and younger children taking swim lessons. "Both of these groups tend to get cold more easily," Seaton says.

Just a few degrees can make a significant difference, says Joel Stager, director of the Counsilman Center for the Science of Swimming in the Department of Kinesiology at Indi-

ana University, "in terms of the body being able to dump the heat generated internally during an intense effort. Metabolic heat increases proportionately to the intensity of effort and can easily increase 10- to 15-fold during a workout."

Bronwyn Lewis, a nurse practitioner, adds that when swimming in a cooler pool, "your heart rate is lower and, as a result, more blood is available for your work-

ing muscles. When you visit a pool that is warmer, you have to adjust your pace accordingly. It will take less time to heat up the body and the elevated body temperature signals the brain to shunt blood to the skin for cooling, thereby leaving less oxygen-rich blood for muscles. So, if you swim in warmer water, start low and go slow."

Kenneth Leclerc, physician with South Texas Cardiovascular Consultants, and Mark Kaelin, exercise physiologist at Bellarmine University in Louisville, Ky., agree that one can adapt to warmer water, within reason.

"This is an example of specificity in training. The body adapts to the environment that a person trains in," Kaelin says, adding that it is much harder to train in warmer water. Leclerc points out that although few studies have been done, one measuring the effects in very warm water (98 degrees) found that swimmers were unable to complete their expected swims. "Quite simply, your body can't dissipate its own heat production in warmer water and you overheat," Leclerc says.

It is important to avoid overheating while swimming in a pool that is warmer than what you are used to. Jim Miller, USA Swimming National Team physician, and Jane Katz, professor of gerontology at the City University of New York both advise swimmers to drink more water than normal. "If you routinely wear a cap during practice, ditch it," Miller says, adding, "Some athletes will hop out briefly to take a lukewarm shower (not cold)." <<<