Care for More O With that H2O?
Depending on whom you talk to, it's either an athlete's dream drink or a big waste of time and money. It seems no one is indifferent about extra-oxygenated water.

By ELAINE ZABLOCKI

Kickboxing champion Cung Le always drinks Oxy-Water. When he flies to compete on the other side of the world, he takes it with him.
"I drink lots of water, and this tastes really clean," Le tells WebMD. "It gives me a boost, so I've been using it for two years, and I don't drink any other water."

Le heads the Cung Le Martial Arts Training Center in San Jose, Calif. -- and he's not alone in his enthusiasm for oxygenated water. A quick Internet search turns up a host of companies selling the product under names such as Oxy Up, Aqua Rush, Oxygen8 and Athletic Super Water. Kenn Visser, president of LifeO2 International, based in Sarasota, Fla., says his company now sells its water in 16 countries and every time zone.

Proponents of oxygenated water claim it supplements oxygen taken in through the lungs and boosts energy levels, endurance, and concentration. Water usually has 4 to 8 parts per million of oxygen, while oxygenated water may have more than 50 parts per million.

Even so, how can such a tiny amount of dissolved oxygen possibly have any effect?
"This is just an advertising gimmick," says John Itamura, MD. "You get oxygen through your lungs. Your stomach may possibly absorb some of this dissolved oxygen, but the key to good athletics is developing good lungs. The way to boost your ability to take in oxygen is to do strenuous aerobic exercise like running or cycling. This water isn't going to hurt you, but I don't think it's going to help you substantially."

Itamura is an orthopaedic surgeon with a special interest in sports medicine at the University of Southern California Keck School of Medicine in Los Angeles.

Craig Horswill, PhD, is principal scientist at the Gatorade Sports Science Institute in Barrington, Ill. -- and like Itamura he doubts oxygenated water products have any positive effects.
"They don't taste very good because as you push oxygen into water, peroxide forms," he says. "And having peroxides in water isn't such a good thing, because it supports oxidative reactions."

And even if the blood did absorb a tiny amount of oxygen through the stomach, it's hard to see how this could benefit athletic performance, say some experts.

(Continued on Page 17)
"If any oxygen introduced to the stomach and intestines were taken up by the blood, this blood travels to the right chambers of the heart and then to the lungs," Howard G. Knuttgen, PhD, tells WebMD via an email message. "[In the lungs] the blood picks up oxygen from the alveoli for delivery to all of the tissues of the body, including the exercising muscle. Oxygen already in the blood will reduce the oxygen transferred from the alveoli to the blood in the pulmonary capillaries. Picture a bus arriving at a station with four passengers and a capacity of 20; it can pick up 16 passengers. An identical bus arriving with 13 passengers can only pick up seven."

Knuttgen is a lecturer in the department of physical medicine and rehabilitation at Harvard Medical School in Boston and editor-in-chief of the Georgia Tech Sports Medicine and Performance Newsletter.

Nevertheless, some competitive athletes swear they perform better when they drink oxygenated water. The extra boost could be an issue of mind over matter, however.

"Everybody is always looking for an edge, and many methods athletes use to improve performance are based on myth, not evidence," says Gary Brazina, MD.

"There's a huge psychological motivation that comes into play here. If someone is looking for an edge, and they find something they believe in, whatever it is, if they think they're going to do better, then they do better," says Brazina, a Los Angeles- and Aspen-based orthopaedic surgeon who has served as team physician to the Los Angeles Blades and consultant to the Joffrey Ballet.

But other experts point out that -- oxygenated or not -- water is water and Americans need more of it.

"Whatever the water is, tap or bottled, we need to drink more water," says Barbara S. Levine, RD, PhD, director of the human nutrition program at the Rockefeller University in New York City.

"People are drinking far too much alcohol and caffeinated beverages, which are dehydrating," she says. "Many of us experience minor signs of dehydration such as headache, fatigue, dry skin, or constipation. When you drink enough water, your urine will be a light color, like light straw."

Richard Barclay is CEO of Oxy-Water NA Inc., the Columbus, Ohio, company that makes the water Cung Le praises. Barclay says their product is different from other oxygenated waters, and prefers to call it "oxygenized" rather than oxygenated.

The mouth as well as the stomach can be an effective transportation method for oxygen, he argues.

"Homeopathic medicines and nitroglycerine tablets are given through the mouth," Barclay points out. Skeptical physicians don't recognize the benefits of Oxy-Water "because this is a little different from what they're used to. Anybody who says this is a scam and can't benefit people will have egg all over their face."

Barclay cites the work of Bo Fernhall, PhD, who recently completed a double-blind, placebo-controlled study of athletic performance using Oxy-Water. Fernhall, chairman of the exercise science department at Syracuse University in Syracuse, N.Y., will present this study at the American College of Sports Medicine conference in Baltimore May 30-June 2.

"While I'm not permitted to discuss the specifics before the conference, it does appear that there are beneficial results," Barclay tells WebMD.

Lewis G. Maharam, MD, hasn't made up his mind yet about oxygenated water.
MEMBERSHIP REPORT

New Members: June 12, 2001

Steven J. Nelson
Mississippi Dunes Golf Links
P.O. Box 54, Cottage Grove, MN 55016
W: 651/768-9633

Dean Bennett
Bristol Ridge Golf Course
P.O. Box 280, Somerset, WI 54025
W: 715/247-3673

Gregory Simon
Whispering Pines Golf Course
P.O. Box 542, Maple Lake, MN 55358
W: 320/274-5141

Richard Raffety
The Fairways Golf Course
480 55th Ave., SE, St. Cloud 56303
W: 320/260-3637

Justin Funk
Stillwater Country Club
1421 N. 4th St., Stillwater, MN 55082
W: 651/439-7760

Shaun McMillen
Fluid Solutions, Inc.
4809 Zealand Ave. N., Minneapolis, MN 55428
W: 763/533-2943

RECLASSIFICATIONS

Daniel G. Swenson
The Refuge Golf Club
C to B - GCSAA

Submitted by Daniel Swenson
Membership Chairman

H2O--

(Continued from Page 17)

"I haven't seen any medical evidence to show drinking highly oxygenated water helps you in any way whatsoever," says Maharam, medical director of the New York City Marathon and president of the Greater New York Regional Chapter of the American College of Sports Medicine.

"At the same time, these waters have great testimonials, with athletes saying they feel better when they drink them," he says. "In the past, we've seen athletes give testimonials in support of creatine, followed by scientific research that showed it really did have beneficial effects. At this point, with oxygenated water, we've heard the testimonials but we haven't seen the scientific evidence."

(Editor's Note: Elaine Zablocki is a freelance writer who's been reporting on health and health care for more than a decade. Her work has appeared in Physician's Practice Digest, Medicine on the Net, and Health System Leader.)