Sports & Fitness Oxygen

For many years, experts have tried to find a safe, simple, economical way to administer additional oxygen to high performance athletes and general sports people. International sporting clubs and associations like English football teams and professional American athletic teams NHL, NFL and the NBA know the vast benefits of giving extra oxygen to their elite athletes. They have used many different types of oxygen delivery systems but oxygen steam saunas is the best way to deliver oxygen to the cells and the muscles which where it is needed for athletes.

At the 2004 Athens Olympics the world's best athletes were talking about the dangers of "Oxygen Debt" [Physiological state produced by vigorous exercise, in which the lungs cannot supply all the oxygen that the muscles need]. "The evidence is overwhelming. Oxygen plays a powerful role in our health and well-being. The more oxygen we have in our system, the more energy we produce. Understanding this is more important today than ever before, because of a general deficiency of oxygen intake. Simply put, the best way to optimize health is to be sure that we oxygenate every cell of our body." Dr. Norman McVea

FOXSports.com reported that football superstar Terrell Owens used oxygen to hasten his recovery from an ankle injury so that he could play in the 2005 Super Bowl. In an article in the Cincinnati Inquirer Cincinnati Bengals defensive tackle Bryan Robinson says oxygen was the catalyst in getting a nagging ankle injury to heal. In a recent issue of the Dallas Cowboys Official Weekly, linebacker Kevin Burnett credits oxygen for helping him get back onto the playing field quickly after surgery to repair cartilage damage in his knee.

Several English football teams used oxygen therapy to treat their players, apparently with excellent results. In one case, an athlete with ligament damage reduced recovery time by 33 per cent with oxygen therapy, and a second player receiving oxygen therapy recovered in only four days even though doctors had predicted a three-week lay-off.

Why do these finely tuned, world class athletes choose to use oxygen?

The sight of the professional football player inhaling oxygen on the sideline every weekend in the Fall is commonplace because football is a game of quick, high intensity bursts of energy, coupled with violent contact. Athletes are under intense physical and mental stress combined with extreme aerobic and anaerobic activity. As a result, their bodies emit more carbon dioxide during the game than they admit in oxygen. Muscle and mental fatigue occur- especially in the later parts of the game. Even though they are some of the best conditioned athletes in the world, many elite football players choose to use oxygen to recover faster, avoid cramping, and stay fresh physically and mentally to the end of the game.

During times of strenuous physical activity, the body simply exhales more carbon dioxide than it admits in Oxygen. The body's response to maintain blood oxygen levels is to obviously breathe more heavily to increase Oxygen intake. Muscle fatigue and cramping occur when glycogen in oxygen-starved blood turns into lactic acid. Adding oxygen to the blood inhibits the production of lactic acid, and helps decompose what is already produced.

Medical studies past and present have shown that oxygen before and during physical activity enhances endurance performance and can cut down on recovery times.

Oxygen Helps Injuries Heal Quickly

Oxygen therapy helps athletes at all skill levels heal quickly and get back to their favorite pursuit. Many sports injuries involve strains and sprains, which naturally cause swelling and edema (accumulation of excess fluid in connective tissue). These natural reactions to injury compress blood vessels and restrict the vital flow of oxygen-carrying plasma and red blood cells to the injury site. Cells and tissues surrounding the injury site become starved for oxygen, which impedes healing. In extreme cases, cell and tissue death can occur. Oxygen therapy saturates the blood plasma and hemoglobin with oxygen. The red blood cells become more malleable as well, increasing their ability to penetrate restricted blood vessels. Life-giving oxygen is thus able to reach the injury site so that cells can heal and the immune system can fully defend the body against harmful agents. Healing time is reduced significantly, and athletes get back into play faster.

Oxygen combines with glucose to create ATP, the main energy source for your muscles. The more ATP your muscles have, the more powerful and explosive they will be. When your muscles don't receive enough oxygen to support their exertion, they begin to produce lactic acid, which can cause muscle fatigue and failure. The more oxygen your muscles receive, the slower the production of lactic acid and the slower the rate of muscle fatigue. Oxygen is needed by your body to metabolize lactic acid in the liver after exercise. The more oxygen you get into your body POST-exercise, the faster your muscles can recover.

Your blood is loaded with oxygen. You breathe air in, your lungs siphon the oxygen into your blood, and your heart pumps these oxygen rich blood cells into your muscles and up to your brain. The quicker your body and brain receive this oxygen, the quicker it will rejuvenate and the sharper it will function.

A growing number of athletes are now using oxygen during competition and between training sessions. With oxygen

being a key component in muscle recovery and brain stimulation, its benefits are finally being introduced to athletes in

sports ranging from football, basketball, ultimate fighting, hockey and tennis.

Is Oxygen only for athletes?

Although athletes will greatly benefit from oxygen, anybody can take it to improve their overall vitality and alertness during their typical activities, including driving, walking or sitting at a computer desk. People with many different diseases and the elderly often see benefits as well.

How Oxygen Therapy Increases Endurance and Relieves Fatigue

Oxygen is essential to athletic endeavors of any sort because it facilitates the production of glycogen, one of the main sources of muscle energy. In a process called glycolysis, a glucose (sugar) molecule is broken into two pyruvic acid molecules. A pyruvic acid molecule enters the muscle cell, where it combines with oxygen to produce adenosine triphosphate (ATP), the source of muscle energy. When insufficient oxygen is present to create ATP, the pyruvic acid becomes lactic acid. This lactic acid naturally diffuses to the bloodstream, where it is carried away. However, during intense exercise, the lactic acid cannot be removed quickly enough, and it collects in the muscle cells, causing fatigue.

The reported benefit of oxygen is that it can affect every aspect of performance for an athlete:

Power and Explosiveness

Endurance

Lactic Acid Muscle Burn

Training Intensity

Training Capacity

Recovery

Mental Clarity and Focus

Muscle recovery

Reduce brain fatigue

To think clearer

Shorten reaction time and improve reflexes

Promote an overall energy boost

Strengthens fatigued immune systems

Give you the extra jump on competitors

Oxygen provides greatly increased oxygen saturation throughout the body, allowing the body to get the oxygen it needs to create ATP for energy and flush out the lactic acid that causes muscle fatigue. The elevated oxygen levels help athletes increase performance and recover more quickly after a workout. In addition, increased oxygen delivery to the brain facilitates brain function and enhances an athlete's ability to make the split-second decisions that can make a difference in the outcome of the game.

Athletes of any age or ability can benefit from oxygen.

Hyperbaric oxygen chambers and breathing oxygen requires a doctor's prescription, but oxygen steam saunas require no prescription and do not have the possible negative side effects of hyperbaric oxygen. Bottled or canned oxygen can give a brief boost but has limited effect on getting the oxygen to the muscles. So, the best solution for athletes, that are not rich and do not have sports doctors to give them prescriptions for oxygen therapies, is oxygen steam saunas.