

OXYGEN

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.