



Q&A

What is Stabilized Oxygen?

The term “Stabilized Oxygen” refers to a solution intended to be used as a dietary supplement for human consumption that contains oxygen atoms as a key ingredient. Generally, the definition implies that there is the presence of a molecule containing diatomic oxygen (O₂) that is typically bonded to other atoms forming an “ion”, or a negatively electrically charged group of atoms. Most of the stabilized oxygen solutions that were sold in the 1980s and 1990s contained chlorine dioxide (or “chlorite”) molecules where two oxygen atoms were bonded to a single chlorine molecule (ClO₂-). This solution is extremely alkaline (pH 12 or more) and is very caustic. O₂[®], on the other hand, is a cluster of four oxygen atoms in a very stable grouping called polyatomic tetraoxygen.

Why is oxygen so important to a healthy body?

Scientists now also agree that oxygen plays a powerful and primary role in our overall health and well-being. A growing number of researchers have confirmed that the best way to improve health may be related to the optimum oxygenation of every cell. 80% of all our metabolic energy production is created by oxygen! The human body is largely composed of oxygen, so it is no wonder that scientists are now discovering how low levels of oxygen can disrupt the body’s ability to function correctly.

All metabolic processes in the body are regulated by oxygen. Our brains process billions of bits of information each second. Our metabolic processes work to rid our bodies of waste and toxins. Even our abilities to think, feel and act require oxygen-related energy production. Oxygen also plays a vital role in proper metabolic functions, blood circulation, and the assimilation of nutrients, digestion and the elimination of cellular and metabolic wastes. The oxygen concentration in a healthy human body is approximately three times that of air.

Fortunately, oxygen is the most abundant element on earth comprising nearly 50% of the earth's crust and averaging about 20% of dry air in a non-polluted environment. Sufficient oxygen helps the body in its ability to rebuild itself and maintain a strong and healthy immune system. You know how important water, vitamins, minerals and enzymes are to your health and vitality. Although you can actually exist without food for about 40 days, and water for about seven days, without oxygen, life ceases to exist in only minutes.

Don't we get enough oxygen just from breathing?

NO. Pollution is everywhere. As toxins contaminate the air they replace oxygen. The earth's air use to be as high as 50% oxygen. Today, it's 20% and in some places in the world, like Tokyo and Beijing, it can be less than 10%. Also, stress (emotional or physical), lack of exercise, infections, medications, viruses, drugs and alcohol, polluted air, highly processed fast foods and polluted water reduce bioavailable oxygen in the blood stream.

What is O₂[®]?

O₂ is a liquid dietary supplement containing dissolved and bioavailable oxygen molecules.

Is O₂[®] stable?

Stability is the tendency of a material to resist change, decomposition due to internal reaction, or due to the action of air, heat, light, pressure, etc. Inert implies non-reactive. The naturally occurring Noble Gases (are helium/He, neon/Ne, argon/Ar, krypton/Kr, xenon/Xe, and the radioactive radon/Rn. These gasses are inert due to the fact that they have full outer shells, and therefore do not need to gain or lose electrons in order to reach a stable electronic configuration. O₂[®] is stable but is not inert.

What can destabilize O₂[®]?

The oxygen molecules in O₂[®] will become unstable when they come into contact with metal (like a stainless steel spoon) or when combined with organic matter (food). Therefore, use a plastic spoon when stirring and always take O₂[®] 30 minutes before and one hour after eating.

Does O₂[®] contain hydrogen peroxide?

No. Independent analysis indicates there are no molecules of hydrogen peroxide (H₂O₂) in O₂[®].

Does O₂[®] contain chlorine dioxide?

No. Independent analysis indicates there are no molecules of chlorine dioxide or "chlorite" (ClO₂) in O₂[®].

What are the ingredients in O₂[®]?

There are only three ingredients in O₂[®]: Distilled water, sea salt and polyatomic oxygen molecules.

Is O₂[®] a "natural" product?

Legally, food labeled "natural" does not contain any artificial ingredients, coloring ingredients, or chemical preservatives. Based on this definition, O₂[®] is a "natural" dietary food supplement.

How does O₂[®] get into the bloodstream?

Independent research has established that the polyatomic oxygen molecules in O₂[®] are safely and easily absorbed into the blood stream through capillaries in the mouth (ultra-lingual and sublingual) as well as through the stomach lining.

Is O₂[®] an ionic solution?

Yes. Simply explained, an ionic solution exists when one substance is dissolved into another, (the solute dissolved into the solvent). All atoms and molecules (substances) comprise of one or more electrons spinning around a central nucleus. If one or more of those electrons are removed that substance becomes an ion. An ionic solution contains both positively charged anions and negatively charged cations, which are positive. To illustrate an ionic solution, imagine putting some table salt (NaCl or "sodium chloride") in water and watching it dissolve. Chemically, the ionic bond between the sodium atom and the chlorine atom is broken in the solution. The result is the formation of a positively charged sodium ion (Na⁺) and a negatively charged chloride ion (Cl⁻) which remain in suspended in the water. Because O₂[®] contains salt, it is an ionic solution.

Why is pH important in an oxygen supplement?

pH means the "potential of Hydrogen" and is the measurement of the hydrogen ion concentration in a solution. The scale goes from "0" to "14". The lower the pH value, the higher the ion concentration and vice versa. An "alkaline" solution will have a pH that is between 7 and 14. An "acidic" solution will have a pH between 0 and 7. Water, the

universal solvent, has a neutral pH of 7. O₂[®] is slightly alkaline and has a pH of about 7.3. Stabilized Oxygen solutions with a pH below 5.0 and above 9.0 can potentially damage the skin and tissues in the mouth and esophagus. O₂[®] is the only nearly neutral and pH balanced oxygen supplement available today.

Do you have to dilute O₂[®] to use it?

No. O₂[®] may be taken full strength or it may be diluted in water. It is effective when taken either way.

Is O₂[®] responsible for free radical damage?

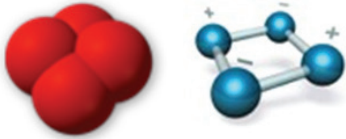
The scientific literature clearly indicates that most free radicals are formed as a natural part of the body's normal metabolic activity in producing the energy the body needs to "exist" and sustain itself. Breathing is the major source (contributor) of free radicals, yet without breathing, the body dies. Almost all free radicals produced during the energy-production cycle are reduced to water. Some are used to fight against invading bacteria and viruses. Some, the result of contaminants like smoke, pollution, alcohol, ozone, radiation and highly processed foods, are very damaging to the body. Natural nutrient antioxidants (vitamins, amino acids and minerals) occurring in the foods we eat are designed to control the production of these deleterious free radicals. It is important to remember that the research clearly shows that diatomic oxygen (O₂) is essential for a healthy body and that an abundant supply of oxygen helps reduce free radical activity, not increase it!

Can you take too much O₂[®]?

No. O₂[®] is completely safe to use in any amount.

What does the oxygen molecule in O₂[®] look like?

Original research conducted in the 1990s on O₂[®] resulted in the theorized O₄ molecule above. Since that time, ongoing research conducted at the University of Rome and published in the Journal of Physics has resulted a different proposed molecular structure as pictured to the left. Both models do have a commonly held belief that the bonding between all four oxygen molecules are very strong and may account for the stability of the molecule.



I've never heard of polyatomic tetraoxygen. Are you sure this isn't something made up just to convince us that O₂[®] is "different" or "unique"?

No. The existence of polyatomic oxygen is a physical chemistry "fact". Allotropes of oxygen differ on the structure (forms) of the oxygen atoms, (i.e. how the atoms are arranged), while isotopes of oxygen differ on the number of neutrons of the atoms (i.e. the composition of subatomic particles in an atom). The naturally occurring stable isotopes of oxygen are ¹⁶O, ¹⁷O, and ¹⁸O, with ¹⁶O being the most abundant (99.762%). The allotropes of oxygen include: Dioxygen (O₂) which is the form of oxygen that is we breathe; Trioxygen (O₃), usually known as ozone; Tetraoxygen (O₄). The existence of the metastable O₄ molecule was confirmed in 2006 and research indicates that this allotrope has the potential to be a much more powerful oxidizer than either O₂ or O₃.

O₂[®] smells like "pool water". I tested it with a poolchlorine test kit and it tested positive for chlorine. Does that mean it contains chlorine?

No. O₂[®] does not contain and free chlorine. The standard method for testing for free chlorine uses DPD test tablets that react with various forms of natural oxidizing agents as well as any free chlorine in water. These oxidizers include: ozone, chlorite, chlorate, hypochlorous acid, hypochloric acid, bromine and iodine. The presence of any of these compounds in water will react with the DPD test tablets or other free chlorine test solution kits and will indicate an incorrect reading of the free chlorine levels. Thus, tests using the above method will indicate levels of free chlorine that are inaccurate.

O₂[®] is processed using activated charcoal filters that eliminate any and all trace amounts of free chlorine that might be in the solution. As our assays reveal, O₂[®] contains sodium chloride (NaCl) and during the manufacturing process these atoms are separated into Na⁺ and Cl⁻ ions. We are more sensitive to the "smell" of Cl⁻ just as we are more sensitive to the "taste" of Na⁺. Again, chlorine gas (Cl₂) is not a by-product of OXIGENESIS' stabilized oxygen reacting in the blood stream, digestive system or on the skin. Individuals can, however, detect the smell of Cl⁻ (chloride ions) as the Cl⁻ ions evaporate. This is what gives O₂[®] its distinctive "smell".

Is O₂[®] antimicrobial?

Merriam-Webster defines "antimicrobial" as "destroying or inhibiting the growth of microorganisms and especially pathogenic microorganisms." Using this definition, O₂[®] is definitely antimicrobial. Independent tests have clearly demonstrated that, even when diluted as much as seven times, O₂[®] kills the test organisms on contact.

How does O₂[®] kill microorganisms?

The outer cytoplasmic membranes of unicellular pathogens are composed of lipids, proteins, and lipoproteins. These membranes act as a diffusion barrier for water, ions and nutrients. Research indicates that the membranes are actually a lipid matrix containing randomly distributed globular proteins that penetrate through the lipid bilayer. It is this high lipid content of the cell walls of these pathogenic bacteria that may explain their sensitivity, and eventual destruction, when exposed to oxygen molecules. Oxygen molecules penetrate these cellular envelopes and affect the cytoplasmic integrity of these pathogenic organisms. In addition, oxygen disrupts the metabolic activity of these disease-causing cells.

The oxygen in O₂[®] disrupts the integrity of the bacterial cell envelope through the oxidation of the phospholipids and lipoproteins. In fungi, O₂[®] oxygen inhibits cell growth at certain stages. With viruses, the O₂[®] oxygen damages the viral capsid and disrupts the reproductive cycle by disrupting the virus-to-cell contact with peroxidation. The weak enzyme coatings on cells that make them vulnerable to invasion by viruses make them susceptible to oxidation and elimination from the body, which then replaces them with healthy cells.

Can you mix O₂[®] with juices or other drinks?

No. The oxygen molecules in O₂[®] can become unstable when O₂[®] is added to any liquid other than water.

Can you take O₂[®] with other nutritional supplements or medications?

O₂[®] should not be taken with other dietary supplements or prescription medications because ingredients in these formulations may destabilize the oxygen molecules in O₂[®]. However, O₂[®] may be taken in addition to these formulations if taken 30 minutes before or an hour after them.

Can you take O₂[®] with food?

No. Food can be oxidized and so may destabilize O₂[®]. O₂[®] should be taken separately and only with water.

Is O₂[®] FDA approved?

Dietary Supplement Health and Education Act (DSHEA) of 1994. DSHEA regulations state that dietary supplements may not make health claims unless supported by evidence and only when approved by the FDA. However dietary supplement manufacturers may make claims that their supplements affect the structure or the function of the body. So, O₂[®], as a "dietary supplement", does not require FDA approval.

Does O₂[®] relieve sunburn and other burn pain?

Yes. The oxygen in O₂[®] has a soothing and calming effect on the skin. It can help reduce redness and swelling and bring almost instant relief to sunburn or any other first degree burn.

Does the oxygen in O₂[®] promote skin health and healing?

Yes. Oxygen is perhaps the key ingredient in helping to repair damaged skin. It is essential in creating elastin and collagen, which are important molecules in maintaining skin texture and elasticity. Oxygen is also biocidal and can help reduce inflammation and redness that may be caused by harmful bacteria. O₂[®] should be sprayed liberally and regularly on the skin and is safe to use on the face and neck.

Can children take O₂[®]?

Absolutely. We recommend that they take half the adult dose. O₂[®] can also be given to infants, pregnant women and nursing mothers without any concern of toxicity.

Can pets/animals take O₂[®]?

Absolutely. Dosages should be determined by weight. We would use the "rule of thumb" of one drop of O₂[®] for every five pounds of weight. O₂[®] has been used for many years by professional trainers and large animal vets in the horse breeding and racing industry. (OXIGENESIS markets O₂[®] under the trade name EQUINEO₂TM.)

Can O₂[®] be used to help preserve the quality of water stored for emergency purposes?

Yes. We recommend you add 1/4 ounce of 35% O₂[®] for every gallon of stored water. Every 60-90 days, add an additional 1/4 ounce per gallon to help control microorganisms and algae buildup. If the water is being stored where it is being heated by sunlight (UV rays) and where the temperature of the water averages 80o F/27o C, then we recommend that additional O₂[®] be added every 30 days.

How does O₂[®] get into the body?

There appears to be ample supportive scientific evidence that dissolved oxygen in a liquid supplement form can be absorbed either sublingually into the blood stream or may pass directly through the stomach lining into the blood plasma. Research has clearly shown (Dr. Arthur Guyton, M.D.) that the blood plasma contains approximately 3% dissolved oxygen; the red blood cells (hemoglobin) hold the remaining 97% in a completely healthy and well-oxygenated individual. Oxygen passes out of the red blood cells and into the plasma to be transferred to the cells that need oxygen for the metabolic process. These cells then pass CO₂ back into the plasma that is picked up by the red blood cells in the exchange. Oxygen is almost always present in the plasma as it travels though the body.

Research conducted on O₂[®] by Suntory International of Japan indicates that there is a direct and long-lasting correlation between the consumption of O₂[®] and an increased partial pressure of oxygen in arterial blood. A Duke University study, completed in March of 1996, indicates clearly, for the first time, the actual mechanisms by which oxygen is transported in the blood directly to the tissues and how oxygen is released and acquired by the blood through both the lungs and the plasma. The combination of these two studies implies that O₂[®], when taken orally, is absorbed into the blood stream where it is transported directly to the tissues.

I'm on a reduced sodium diet. Will taking O₂[®] affect my dietary restrictions?

One daily recommended dose of O₂[®] (45 drops), taken in three doses of 15 drops in 8 ounces of water each day, would contain less than 5 mg of sodium -- and sodium is the big culprit in increasing blood pressure. That's why patients with high blood pressure have to watch and monitor their sodium intake. 5 mg is an insignificant amount of

sodium. By comparison, one bowl of a popular rice cereal contains over 300 mg of sodium.

I'm on a reduced sodium diet. Will taking O₂[®] affect my dietary restrictions?

One daily recommended dose of O₂[®] (45 drops), taken in three doses of 15 drops in 8 ounces of water each day, would contain less than 5 mg of sodium -- and sodium is the big culprit in increasing blood pressure. That's why patients with high blood pressure have to watch and monitor their sodium intake. 5 mg is an insignificant amount of sodium. By comparison, one bowl of a popular rice cereal contains over 300 mg of sodium.

Is O₂[®] better than (35%) hydrogen peroxide?

Yes. 35% hydrogen peroxide is not intended for internal use. Hydrogen peroxide is labeled "Food Grade" as an approved use for use to clean food-handling equipment. Ingesting hydrogen peroxide can cause serious side effects and hydrogen peroxide is listed as a hazardous material.

DISCLAIMER:

These statements have not been evaluated by the U.S. Food and Drug Administration. The information is provided for educational purposes. You may not experience the same benefits from taking or using O₂[®]. O₂[®] is sold as a nutritional dietary supplement under the FDA DSHEA regulations of 1994. O₂[®] is not intended to diagnose, treat, cure or prevent any disease or medical condition. Always consult with a professional medical practitioner before taking any dietary supplement, especially if pregnant, nursing, taking prescription medications or under a doctor's medical care.