

## BIOLOGICAL IMPORTANCE OF OXYGEN AND OZONE

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**Abstract:** This article highlights the importance of both oxygen and ozone in the life. They give their aid to develop and make better any living organism. Oxygen involves all nutritions, whereas ozone covers people's environment.

**Keywords:** Oxygen, ozone, atmosphere layer, atmospheric air, molecule, biological importance, atom, properties, oxidizing, gas.

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Oxygen (lat. Oxygenium, Greek. oxys - sour and gennao - birth), O is a chemical element related to the group VI of Mendeleev's periodic system which serial number is 8.

Ozone (origin from ancient Greek: ozo - "dispersing smell"), O<sub>3</sub> is an allotropic form of oxygen. Ozone molecule obtains 3 oxygen atoms. Ozone was introduced for the first time in 1785 by the Dutch physicist Martin van Marum, that when electric sparks are passed away the air, it releases a specific smell and has oxidizing ingredients. The properties of ozone differentiate from those of oxygen. Blue-colored and explosive gas under normal conditions. Boiling temperature – 111.8°C, liquefaction temperature – 192.4°C. It is featured that strong oxidizing and sterile substance.

Oxygen and Ozone has their own features. Although both of them are gas, they are different from each other in terms of their properties. That is to say, they have some variations on their own task. For example, oxygen registers with large amount, and it includes a living organ. Because, it is a piece of nutritions. Oxygen is a piece of a living organ, while ozone is related to environment which surround us. It exists most part of atmosphere layer. Additionally, its function is to clean air to expand our life longer.

After informed about some information both oxygen and ozone, you will be introduced the biological importance of oxygen and ozone step by step.

Ozone, one of the most crucial gases in the atmosphere layer that balances biological balance in the world, suggests to the continuation of life in the world by cleaning the air. A person who can live without consuming food and water for months is not able to live without air for 5 minutes. Therefore, various forms of

oxygen, one of the building blocks of life, are also introduced for a healthy life style. Ozone is one of these forms. Ozone, which supplies the air a blue color, is a rare gas that can prevent almost all bad odors. It is the most powerful disinfectant and oxidizing gas which is known. Furthermore, ozone is commonly utilized in health care instead of oxygen, which is one of the essential elements of health care and treatment processes. As the amount of oxygen goes down in cities, people need more oxygen increase. Ozone is a factor that eliminate toxins by effectively providing the body with oxygen crucial for living tissues and cells.

Also, breathing may not always be enough to make oxidation throughout the body. Lack of oxygen may lead many diseases in the body, for instance, it causes chronic fatigue and make a reduction the quality of life. Therefore, different forms of oxygen play an significant role. Because of its antibacterial properties, ozone prevents the appearance of bacteria, mold, spores and fungi.

Oxygen is widely spreaded element on Earth. Oxygen contains 85.82% in sea water, is 23.15% in atmospheric air or 20.93% by volume, and 47.2% in the earth's crust. This concentration of oxygen in the atmosphere is kept constantly during photosynthesis. During this process, green plants utilize sunlight to change carbon dioxide and water into carbohydrates and oxygen. The main amount of oxygen is in the bound state; the amount of molecular oxygen in the atmosphere is only 0.01% of the total amount of oxygen in the earth's crust. Oxygen is of particular crucial in the life of nature. Oxygen and its mixes are indispensable for balancing life. They play a crucial role in metabolic processes and respiration. Oxygen is a type of proteins, fats, carbohydrates, from which organisms are "organize"; the human body, for example, involves nearly 65% oxygen. Most organisms get the energy they need to perform their vital functions by oxidizing certain substances with the aid of oxygen. As a consequence of the processes of respiration, decay and combustion, the reduction of oxygen in the atmosphere is compensated by the oxygen produced during photosynthesis. Deforestation, soil erosion, various mining activities on the surface of the earth make a reduction the overall mass of photosynthesis and reduce circulation in large areas.

Oxygen has not always been type of the earth's atmosphere. It seemed as a consequence of the crucial activity of photosynthesising organisms. Under the influence of ultraviolet rays, it turns into ozone. As a consequence of the accumulation of ozone, the ozone layer appeared in the upper part of the atmosphere. The ozone layer, like a screen, reliably guards the Earth's surface from harmful ultraviolet radiation for living organisms.

As a conclusion, both oxygen and ozone have their own importance to mankind. They help to grow, and make more healthier in their organism. They make a way to people to breathe fresh air. Additionally, they are functioned to

prevent from harmful light. For example, oxygen covers all nutritions in a living organism, and also ozone creates a good opportunity to be our air pure , and as a guard from toxic and harmful gas , sunlight.

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