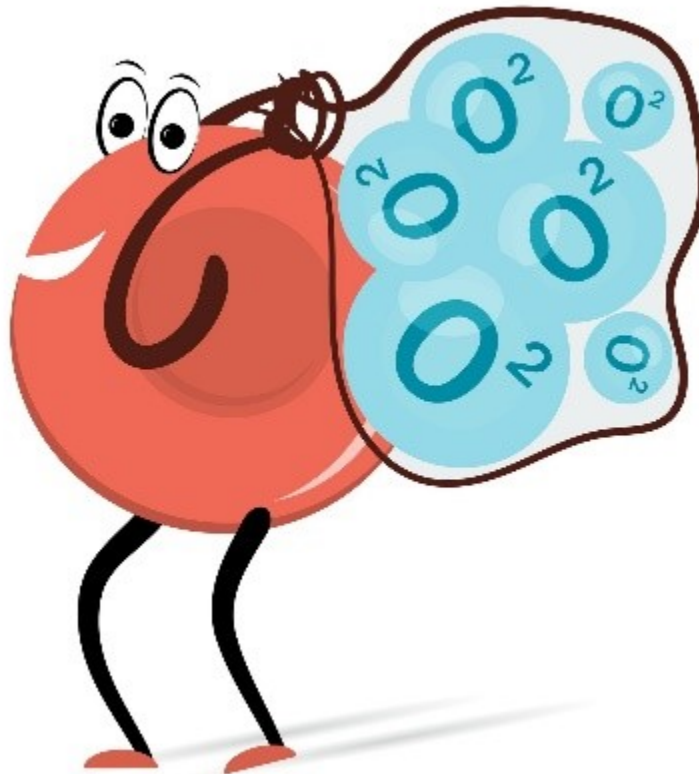


# Word for Word

## An Airtight Explanation of Hypoxia vs. Hypoxemia



Hypoxemia is a reduction in blood oxygenation, whereas hypoxia is a reduction in oxygen supply to tissue to below adequate levels. The various causes of hypoxia include inadequate blood flow to the tissue and inadequate oxygen in the blood due to hypoxemia or anemia. Since hypoxemia causes hypoxia, their presentations and management can have much in common. However, the two conditions are distinct, and either can be present without the other.

When talking about the condition affecting the blood, use *hypoxemia*, and when talking about the condition affecting tissue, use *hypoxia*.

### Examples:

The patient's blood passed from the right to the left chambers of the heart without gaining oxygen, causing hypoxemia.

The cyanide caused profound hypoxia due to the inability of the mitochondria to use oxygen properly.

## Bibliography

*Dorland's Illustrated Medical Dictionary*, 32nd ed. Philadelphia, PA: Elsevier Saunders; 2012:908.

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