

[Open Peer Review on Qeios](#)

Oxidative Stress

National Cancer Institute

Source

National Cancer Institute. *Oxidative Stress*. NCI Thesaurus. Code C17741.

A disturbance in the prooxidant-antioxidant balance in favor of the former, leading to potential damage. Indicators of oxidative stress include damaged DNA bases, protein oxidation products, and lipid peroxidation products. The damage to biological tissues is caused by superoxide and other free radicals generated by many factors, including exposure to alcohol, medications, trauma, cold, toxins, and radiation or by antimicrobial cellular immunity, metabolic abnormality, or "normal" aging; not synonymous with hypoxia or hyperoxia. Oxidative stress promotes a range of degenerative disorders, including cancer, diabetes, premature aging, Alzheimer's, and many others.