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Free Radical

National Cancer Institute

Source

National Cancer Institute. *Free Radical*. NCI Thesaurus. Code C512.

Molecules or atoms with at least one unpaired or 'free' electron in the outermost electron shell. Chemically unstable, free radicals stabilize themselves by appropriating an electron from a nearby molecule, thereby damaging that molecule by altering the electron number in its outermost electron shell. By-products of both normal cell processes and environmental toxin exposure, oxygen free-radicals in high concentrations may damage DNA, proteins, and lipids, thereby increasing the risk for various diseases including cancer. (NCI04)