

Lipid peroxidation and oxidative stress

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Oxidative stress is the sum of all metabolites accumulated in tissues and biological fluids through radical oxygen species. Lipid peroxidation is a major mechanism of cell damage and involves polyunsaturated fatty acids oxidation. As a result of this process, reactive species and toxic products are formed.

Species bind to functional groups of proteins, phospholipids, DNA and cause function`s changes. The most important compound obtained by lipid peroxidation is malonyl dialdehyde. When the plasma concentrations of reactive species reach critical values, the organism has not the ability to neutralize them. This is how it is explained the involvement in cellular physiology and pathology.

Key words: oxidative stress, lipid peroxidation, radical oxygen species