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Oxidative stress and diseases in dog

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Abstract Metabolism causes the production of reactive oxygen species and other free radicals thus the endogenous antioxidant system is crucial in controlling free radicals. Nevertheless, excess free radicals can accumulate regarding to environmental factors, pathological conditions and diseases resulting in oxidative stress. Oxidative stress has been related to many diseases that contribute to the death. Reduction of free radicals, which result in the products from oxidative processes are reduced and the oxidative processes are hindered, is the major mechanism of antioxidants and thereby delay or prevent oxidative stress. This article described oxidants formation, antioxidants, oxidative stress and the roles of both endogenous and exogenous antioxidants in controlling oxidative stress including changes of dog's antioxidants and oxidative stress indices level in different diseases.

Keywords: Oxidants, antioxidants, oxidative stress, diseases, dog
