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## DYNAMICS OF FREE-RADICAL PROCESSES IN THE ANIMALS AFTER PROTRACTED INFLUENCE OF EXOGENOUS NITRIC OXIDE AND IONIZING RADIATION

Aim of the investigation was to study the influence of nitric oxide (NO) and low doses of ionizing radiation (LDIR) on free radical processes that occur in various tissues of mammalian organism. Fractionated LDIR irradiation was shown to temporarily disrupt an oxidative metabolism. At same time protracted NO inhalation causes more significant harmful effects. This indicated that there are two pathways of oxidative metabolism disruption caused by generation of reactive oxygen or nitrogen species in tissues of mammalian organism.

*Keywords:* low doses of ionizing radiation, nitric oxide, superoxide radical, free radical processes, antioxidative enzymes.