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Superoxide production, oxidative damage and enzymatic antioxidant defenses in shark skeletal muscle

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Pelagic sharks, unlike teleost fish, require constant active swimming to obtain a suitable oxygen (O_2) supply. An increase in O_2 consumption during exercise enhances production of reactive oxygen species (ROS). We hypothesized that shark species that display vigorous exercise, such as *Isurus oxyrinchus* and *Carcharhinus falciformis*, have higher ROS production and, in consequence, higher antioxidant enzyme activities in muscle in comparison with species with less active swimming, like *Sphyrna zygaena*. Superoxide radical ($O_2^{\cdot -}$)

Palabras clave: *Carcharhinus falciformis*, *Isurus oxyrinchus*, *Sphyrna zygaena*, Oxidative stress, Reactive oxygen species, Antioxidant enzymes, Sharks, Swimming capacity

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