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### Effects of Edible *Lentinus tuber-regium* on Oxidative Stress and Defense System in Serum of SD Rats

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Oxidative stress and defense system using SD-rats were carried out on an edible Nigerian mushroom, namely, *Lentinus tuber-regium* (Fries) Singer. Experimental diets prepared with *Lentinus tuber-regium* (LTR) instead of carbohydrates were fed to SD rats for 6 weeks. Hydroxyl radical ( $\cdot\text{OH}$ ) formations were significantly inhibited (21.7% and 16.4%, respectively) in LTR-50 and LTR-100 groups used instead of carbohydrates, and hydrogen peroxide and nitric oxide (NO) were also significantly inhibited about 10%, and 6~10%, respectively compared with control group, but no significant difference between superoxide radical ( $\text{O}_2^{\cdot-}$ ) formations in these groups. Lipid peroxide (LPO) and oxidized protein (OP) levels as an oxidative stress were desirably inhibited (about 6~12% and 5~13%, respectively) in these LTR groups compared with control group. Superoxide dismutase (SOD), glutathione peroxidase (GSHPx) and catalase (CAT) activities were significantly increased (15~30%, 10~25% and 60~90%, respectively) in these LTR groups. These results suggest that an edible mushroom, *Lentinus tuber-regium* may be inhibit an oxygen radicals and oxidative stresses, but may also effectively modulate an aging processes.