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Antioxidant Potential of *ulva rigida* c. Agardh Extract: Protection from Oxidative Stress Hypothyroidism

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The purpose of this study was to evaluate the effects of *Ulva rigida* C. Agardh, one of the green algae, on and antioxidative system in the propylthiouracil (PTU)-induced hypothyroid rats. Thirty-two rats randomly divided into four groups: control (C), control+*U. rigida* extract (C+UR), hypothyroid (H) and hypothyroid+*U. rigida* extract (H+UR). *U. rigida* (2%) was administered in drinking water for 5 weeks after the induction of hypothyroidism. Hypothyroid rats were under oxidative stress as reflected by icreased plasma and tissue malondialdehyde (MDA) levels. *U. rigida* reduced serum total cholesterol and,- triglyceride levels and plasma and heart skeletal muscle, liver and,- kidney tissue MDA levels in the H+UR group. Serum total cholesterol and tissues MDA levels were reduced in the C+UR group. Whole blood glutathione peroxidase and erythrocyte superoxide dismutase activities were increased in the H+UR and C+UR groups compared with those of te respective control groups. Paraoxonase and arylesterase activities were lower in the H group and *U. rigida* increased paraoxonase and arylesterase activities in C+UR and H+UR groups. We conclude that hypothyroidism is associated with oxidative stress and, *U. rigida* extract might have a potential use as a protective antioxidant agent in hypothroidism.

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