

EFFECTS OF T₃ ON LACTATE DEHYDROGENASE, CATALASE AND PROTEIN OF THE FRESHWATER FISH, *CHANNA PUNCTATUS*

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ABSTRACT – Effects of triiodothyronine (T₃) on activity of lactate dehydrogenase (LDH), catalase (CAT) and protein content of various tissues of the freshwater fish, *Channa punctatus* were investigated. The activity of LDH and catalase increased (1.2-2.8 fold) in liver, brain, gill, and skeletal muscle in response to thiourea treatment, whereas protein content decreased (15-28%) in response to thiourea treatment as compared to control values. Injection of T₃ to thiourea exposed fish declined the activity of LDH (25-50%) and catalase (20-40%) in different tissues. While protein content increased (1.2-1.5 fold) in liver, brain, gill and skeletal muscle of the freshwater fish upon T₃ injection. The present findings suggest T₃-dependent inhibition in anaerobic (LDH) and antioxidative (CAT) capacity and induction in protein profile in the freshwater fish, *C. punctatus*.

Keywords : T₃, LDH, CAT, protein, fish, *Channa punctatus*.