

Kinetics of Thyroid Hormone Induced Changes in Liver and Skeletal Muscle Enzymes of *Clarias batrachus*

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Kinetics of triiodothyronine (T_3) induced changes were studied in cytoplasmic malate dehydrogenase (cMDH), mitochondrial malate dehydrogenase (mMDH) and lactate dehydrogenase (LDH) of the liver and skeletal muscle of a catfish, *Clarias batrachus*. The rates of gradual inductions in the activities of all the three metabolic enzymes were faster in skeletal muscle than those of the liver. These time-dependent and tissue-specific inductions may be due to the possible differences in the rates of different enzymic syntheses. The maximum inductions in the activities of cMDH, mMDH and LDH were recorded around 19 hr after T_3 treatment. Thereafter, the activities of all the enzymes gradually declined to their half levels within the next 12 hr which reflected the physiological half-life of these metabolic enzymes in the freshwater catfish.

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