# Transcriptomic analysis of the hepatic response to stress in the red cusk-eel (Genypterus chilensis): Insights into lipid metabolism, oxidative stress and liver steatosis

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 Teleosts exhibit a broad divergence in their adaptive response to stress, depending on the magnitude, duration, and frequency of stressors and the species receiving the stimulus. We have previously reported that the red cusk-eel (Genypterus chilensis), an important marine farmed fish, shows a physiological response to stress that results in increased skeletal muscle atrophy mediated by over-expression of components of the ubiquitin proteasome and autophagy-lysosomal systems. To better understand the systemic effects of stress on the red cusk-eel metabolism, the present study assessed the transcriptomic hepatic response to repetitive handling-stress. Using high-Throughput RNA-seq, 259 up-regulated transcripts were found, mostly associa