Pleurotus citrinopileatus alleviates alcohol-induced fatty liver via upregulating AMPK signaling

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The current study was designed to investigate the anti-steatosis effect of *Pleurotus citrinopileatus* extract (PC) and the underlying mechanism via acute and chronic alcoholic hepatosteatosi murine models. In vitro, the anti-steatosis effect of PC was further confirmed via Nile red staining in HepG2 cells treated with ethanol. Both of acute and chronic alcohol-induced mice hepatosteatosi model, PC decreased serum aminotransferase and triglyceride accumulation. Upregulated Srebp1, P2X7R and downregulated SIRT1, AMPKalpha caused by acute and chronic alcohol intake were modulated by PC. In ethanol-exposed HepG2 cells, PC reduced lipid accumulation in a concentration-dependent manner and exhibited superior ability in controlling lipid accumulation compared with metformin.