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### Pharmacological effect of Hawangyeonhaedoktang on experimental triglyceride accumulated HepG2 cells

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The pharmacological effect of Korean-Chinese traditional herbal medicine, Hawangyeonhaedoktang (HT) on experimentally induced-triglyceride accumulation in cultured human hepatocyte HepG2 cells was studied. HepG2 cells were cultured in the Dulbecco's modified Eagle's (DME) medium without (Control medium) or with HT (0.5 mg/mL and 5.0 mg/mL) containing 1 mM oleate, 0.2% bovine serum albumin(BSA), and glucose 4.5 mg/mL for 6 and 24 hours in experiment I and 2 mM oleate, 0.5% BSA, and glucose 4.5 mg/mL for 6, 24 and 48 hours in Experiment II or 1 and 3 hours in Experiment III. Oleate [ $^{14}\text{C}$ ] (0.5  $\mu\text{Ci/mL}$  medium) added as a redioactive lipid precursor in the experiment I. In the experiment I, the intracellular triglyceride concentration was decreased remarkably during incubation for 6 and 24 hours, in a dose-dependent manner. At the same time, HT caused a decrease in the incorporation of [ $^{14}\text{C}$ ] oleate into intracellular triglyceride fraction and the secretion of triglyceride labeled with [ $^{14}\text{C}$ ] oleate into medium. In the experiment II and III compared to experiment I, the triglyceride accumulation in HepG2 cells was occurred, and HT prevented the accumulation of triglyceride during incubation for 24 and 48 hours. This result suggest that HT prevent the triglyceride accumulation in human hepatocytes by its inhibiting action on the intercellular triglyceride biosynthesis.