

**STUDIES ON THE ANTIMUTAGENIC AND CYTOTOXIC
EFFECT OF POLYPORUS UMBELLATUS CONSTITUENTS.**

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A wide array of natural products have been identified to possess potential cancer chemopreventive properties. Of particular interest is *Polyporus umbellatus* frs. that exhibits antimutagenic and cytotoxic effects. The crude drug "chorei" prepared from the dried fruit body of *Polyporus umbellatus* is used for kidney and other such disease. In this study, we are isolating the minor components of Chorei and examined their antimutagenic and cytotoxic effects. 5~10% of Chorei fractions(A~F, C1~C3, E1~E3) showed highest inhibitory activity on 4-nitroquinoline-1-oxide(4-NQO) against salmonella typhimurium TA 100, and on 2-nitrofluorene(2-NF) against Salmonella typhimurium TA 98. More than 10% of each Chorei Frs(A~F, C1~C3, E1~E3) showed almost same antimutagenic effects as that of 7.5% concentration or lower antimutagenic effects. Chorei frs(C, D, E, C1~C3, E1~E3) showed cytotoxic effect against HL-60 and SiHa. IC50 value of most frs. were below 100µg/ml, and further investigation on minor component isolation and cytotoxic mechanisms are needed.