

## **Anti-inflammatory and anti-mutagenic effect of the YHK phytocompound in hepatocytes: In view of an age-management liver-protecting approach**

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### **Abstract**

The receptor for advanced glycation end products (RAGE) regulates cellular proliferation in hepatocellular carcinoma (HCC). The aim of this study was to test the in vitro effect of Yo Jyo Hen Shi Ko (YHK), a nutraceutical with prior data suggesting its hepatocyte-protecting role, in regulating RAGE in the proliferation of the HCC cell line HuH7 as well checking also its potential modulation in the expression of the transcriptional factor nuclear factor- $\kappa$ B (NF- $\kappa$ B) p65. Our study showed that YHK significantly reduced cellular growth in the HuH7 cell line ( $p < 0.05$ ). Moreover, this phytocompound partly reduced gene expression of NF- $\kappa$ B p65 (by 35%,  $p < 0.05$ ). These data suggest that YHK has a potential role as a modulator of RAGE and RAGE ligands for potential healthy liver intervention in HCC prevention strategies. © Copyright 2014, Mary Ann Liebert, Inc. 2014.

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