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**Effect of *Camellia sinensis* on the expression of collagen type I in human hepatic stellate cell line LI90.**

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Tea is one of the most popular beverages in the world. It can be classified basically into three types depending upon the manufacturing process; green, black, and oolong. In this study, the antihepatofibrotic effect of the solvent extracts from three teas (green tea, black tea and 10% fermented oolong tea) was investigated in human hepatic stellate cell line. The effect of black tea extracts on the collagen secretion and cytotoxicity were different depending on the extract solvents. Ethanol extract of black tea was dose-dependently inhibited the collagen secretion and increased the cytotoxicity. Water extract was not significantly affected on the both collagen secretion and cytotoxicity, however, ethylacetate extract was increased the collagen secretion and cytotoxicity in a dose-dependent manner. Black tea solvent extracts were activated or inhibited human *COL1A2* promoter and AP-1 site activities similar to the collagen secretion. Ethylacetate and water extract of black tea were stimulated the *COL1A2* promoter activity about 158% and 104%, respectively, and ethanol extract was blocked it about 69% at 100µg/ml concentration. All solvent extracts from green tea and oolong tea were dose-dependently inhibited the collagen secretion, *COL1A2* promoter activity and AP-1 binding site activity, however, oolong tea showed stronger cytotoxicity than green tea. Ethylacetate extract of green tea was dose-dependently blocked the collagen secretion without the cytotoxicity, particularly, at 100µg/ml concentration collagen secretion and *COL1A2* promoter activity were decrease 99% and 53%, respectively.

Collectively, the fermentation process of *Camellia sinensis* produced different effects on the collagen secretion, *COL1A2* promoter activity and AP-1 binding site activity and these differential effects of teas might due to the different components and/or contents produced during the fermentation process.