

Identification of Curcumin(*Curcuma longa* L.) from Two kinds turmeric Using HPLC and LC-MS analysis

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Turmeric (from the rhizome of *Curcuma longa* L., family Zingiberaceae) species are medicinal herbs with various pharmacological activities. They may contribute to many of the health benefits attributed to *Curcuma longa* L., foods. Curcumin, the major constituent of curcuminoids, is reported to be a natural antioxidant with inhibition effects for cytotoxicity and cancer. In this study, the effect of solvent composition on total extraction yield of turmeric has been investigated using the dipping method. The quantitative analysis of curcumin in different extraction has also been studied by RP-HPLC. From the experimental results, it is evident that the percentage of curcumin extracted from turmeric by pure methanol was higher than any aqueous methanolic composition, although the total extraction yield was the highest in 100% water. The comparison of two kinds of turmeric (Asian and American) has been done and it is found that the extraction yield in both cases is almost similar.