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The Effects of Tormeric on Human Lev kocytes

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The Effects of Turmeric on Human Lev Kocytes

Abstract

Turmeric(Curcuma lunga) is the rhizome derived spice of a ginger plant. Though this spice is most popular for its use in South East Asian cuisines, turmeric has demonstrated medicinal properties. Most notably, turmeric has antioxidant, anti-arthritic, and anti-inflammatory properties. Here we demonstrate the effect turmeric has on human leukocyte cell line(U-937). Through RT-PCR, the mRNA from each sample was tested for mu opiate. Results demonstrated that the low concentration of turmeric did not change the expression of the Mu receptor, while at a high concentration down regulated Mu receptor expression. To further investigate the effects of turmeric on U-937 cells, these cells were incubated for 24 hours and examined via Real-time PCR and RT-1VT for microbarray gene pattern expression. Microarray revealed which specific DNA sequences, the cells cRNA hybridized to. These data indicated that at a low concentration, turmeric seemed to increase the quantity of CYP2D6, while at a high concentration, it decreased the quantity CYP2D6, one fo the most important enzymes involved in morphine synthesis in animals, including human white blood cells. Thus, the spice/nutritional substance may exert its health promoting actions via endogenous morphine signaling or a common signaling component.

評語

1.This study aim to in vestigate the effect of turmeric on human leukocyte cell.

The aims is clear and novel.

2. The results of microarray open many possibilities to the mechanism.

More genes should be explored in the future.