

Quercetina inibe a leucemia WEHI-3 in vivo e promove resposta imune

Quercetin inhibited murine leukemia WEHI-3 cells in vivo and promoted immune response.

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Source

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Abstract

Enhanced flavonoid consumption is closely related with a reduced cancer incidence as shown in epidemiological studies. Quercetin (3,5,7,3',4'-pentahydroxyflavone) is one of the active components of flavonoids which exist in natural plants, particularly in onions and fruits. It was reported that quercetin induced apoptosis in human cancer cell lines, including human leukemia HL-60 cells, but there is no available information as to its effects on leukemia cells in vivo. The purpose of the present studies was to focus on the in vivo effects of quercetin on leukemia WEHI-3 cells. The effects of quercetin on WEHI-3 cells injected into BALB/c mice were examined. Quercetin decreased the percentage of Mac-3 and CD11b markers, suggesting that the differentiation of the precursors of macrophages and T cells was inhibited. There was no effect on CD3 levels but increased CD19 levels. Quercetin decreased the weight of the spleen and liver compared with the olive oil treated animals. Quercetin stimulated macrophage phagocytosis of cells isolated from peritoneum. Quercetin also promoted natural killer cell activity. Based on pathological examination, an effect of quercetin was observed in the spleen of mice previously injected with WEHI-3 cells. Apparently, quercetin affects WEHI-3 cells in vivo.

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