

عنوان مقاله:

Comparative study on anticarcinogenic effect of hesperidin and hesperetin on breast cancer

محل انتشار:

یازدهمین کنگره بین المللی سرطان پستان (سال: 1394)

تعداد صفحات اصل مقاله: 2

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خلاصه مقاله:

Objective: Breast cancer is the most common in women. Based on studies, there is a direct relationship between the cancer and the production of free radicals. Although it seems antioxidants such as flavonoid effect on antioxidant/oxidative status on cell cancer, but the effect of rutinoid on its antioxidant activity is still unknown. Therefore, this study aimed to compare the effect of hesperetin (HT) with hesperidin (HD; HT-7-rutinoid) on the MDA cellular level and paraoxonase-1, arylesterase activities in MDA-MB-231 cells. Method: The cells cultured, after 48 hours treated with various concentrations of each reagent hesperetin and hesperidin. after that paraoxonase-1, arylesterase activities and MDA cellular level was measured by spectrophotometer fluorescence. Results: In a dose manner, sample, which treated with 175 micromolar of HD in comparison with the sample that has the same concentration from HT has the most positive effect on paraoxonase-1 and arylesterase activity ($P < 0.05$). By increasing concentrations of both treatments, the cellular level of MDA in comparison with control was promoted ($P < 0.05$). Conclusions: The results of this study, which was conducted for the first time, demonstrate that despite of increased levels of oxidative stress in cancer cells by hesperetin and hesperidin, they can strengthen paraoxonase and arylesterase activities in range of concentrations studied.

کلمات کلیدی:

breast cancer, paraoxonase, arylesterase, MDA

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