

Title Antiproliferative action of water extracts of seeds or pulp of five different raspberry cultivars
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Abstract

In many recent publications the importance of various constituents of berries, anthocyanins and polyphenols, is shown *in vitro* and *in vivo* to be beneficial in protecting cells from different forms of cancer. As red raspberries are very rich in the in content of ellagic acid, the goal of this work was to study the cancer suppressive action of water raspberry extracts obtained by extracting water soluble constituents from pulp and from seeds, of five different raspberry cultivars: K81-6, Latham, Meeker, Tulameen and Willamette. The further aim was to compare their antiproliferative action to malignant human colon carcinoma LS174 cells and to normal immune competent cells, with the action of ellagic acid alone. Results from this study show that water extracts of raspberries seeds or pulp possess the potential for antiproliferative action against human colon carcinoma cells *in vitro*. The antiproliferative action of seeds extract was correlated with its content of ellagic acid. The cytotoxic activity of seeds extracts was not pronounced on normal human PBMC.