



Breast Cancer and Alcohol.

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Since the eighties, studies consistently showed an increase in breast cancer risk by moderate alcohol intake of one to two drinks per day in women. This association exists for wine, beer and spirits. Despite the consistency in the overall association, several important questions remain. Is the association between alcohol intake and breast cancer risk affected by the timing of alcohol exposure? Is it modified by other risk factors such as Body Mass Index, Menopausal status and Hormone Replacement Therapy or physical activity? Is it more pronounced for hormone receptor positive tumors?

The biological mechanisms of this association are unknown. A difference in ability to metabolise alcohol through genetic differences in alcohol dehydrogenase could be a reason. Others showed that alcohol intake has an influence on sex hormone concentrations in blood : the higher the alcohol intake the higher the level of sex hormones.

On the other hand, it has been shown that wine is rich in polyphenols, considered to be potential cancer chemopreventive agents, having an antiproliferative effect. Low concentrations of polyphenols and thus low consumption of wine could have a beneficial antiproliferative effect on breast cancer growth!

Studies are needed to elucidate the mystery: moderate alcohol seems to be associated with higher breast cancer risk. What about wine with its beneficial effects of polyphenols. Is it just a matter of doses?