

Health-Positive Effects of the 'Sake' of Japan

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Summary

Recently, the possibility that alcohol may impact on health by reducing chronic disease risk has become a focus of wide interest. Alcohol consumption in moderation may protect against ischemic heart disease, cancer, osteoporosis and all-cause mortality. Health-negative problems, in contrast, are likely to occur in individuals who are labeled "heavy drinkers" and alcoholism will not be discussed in this paper.

Sake is a clear alcoholic beverage from fermented rice and water due to interactions with microbes known as koji and sake yeast. The alcohol content normally ranges from 14 to 15 % by volume and sake contains a great number of nutrients, such as amino acids, organic acids, sugar and vitamins. Numerous reports have appeared in support of the view that appropriate intake of alcoholic beverages may act indirectly to decrease risk of cerebrovascular disease, for example, through its inhibition of the oxidation of low-density lipoprotein, or reduction of coagulation (fibrinolytic agents). It should be noted that health-positive effects commonly attributable to sake include cancer. Liver cirrhosis and liver cancer mortality differ with the region of the country, being high in West Japan and very low in East Japan. Intake of sake is associated with reduction in the risk of cancers among East Japanese adults. Cultured human cancer cells of prostatic, bladder and cervical canal carcinomas undergo condensation and peeling on the addition of sake samples, which thereby inhibits their growth.

This suggests that both antioxidative micronutrients and anticarcinogenic ingredients are effective. In two large-scale cohort studies in Japan, sake consumption significantly decreased the risk of various cancers other than squamous cell carcinomas of the esophagus. We can therefore argue that greater interest should be focused on non-drinkers and heavy drinkers as high risk groups, with sake being one of the best natural medicines. Based on up-to-date evidence, moderate amounts of sake of about 40 g/day (2 cups) may exert health-positive effects in man.