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Caffeine Containing Beverages: Health Effects

Gurmeet Singh Sarla

Department of General Surgery, Senior Advisor Surgery, Military Hospital Devlali, Nasik, Maharashtra, India

Abstract

Objective: Comparison of health effects of tea and coffee.

Methods: Literature was reviewed at length and health benefits and harmful effects of tea and coffee were studied, analysed and compared.

Results and Conclusion: Tea and coffee are commonly consumed beverages which have a positive effect on human health.1-6 cups/ day of tea have beneficial effects on health but more than 8 cups of tea per day may have toxic effects on human health. Both green tea and black tea have a positive effect on health but effects of green tea have been extensively studied. Coffee intake lowers the risk of type 2 diabetes, heart failure and protects against Parkinson's disease in addition to having beneficial effects in cases of liver cirrhosis and in hepatocellular carcinoma. Overwhelming coffee utilization in pregnancy is by all accounts related with destructive results identified with low birth weight, preterm birth, and pregnancy loss. Coffee admission of more than 3-4 cups each day has appeared to build the risk of fractures in ladies with insufficient calcium intake. Medium-roasted coffee and filter coffee are associated with maximum health benefits. Coffee intake has been found to be associated with lower mortality in women whereas in men, it has been positively related to cancer and cardiovascular mortality, and inversely related to respiratory and other causes of death. Tea consumption has appeared to have lowered risk of malignant growth and cardiovascular mortality in men, yet no relationship with mortality in ladies could be established.

Keywords

Tea, coffee, milk, health benefits, health hazards

*Corresponding author: Gurmeet Singh Sarla, Department of General Surgery, Senior Advisor Surgery, Military Hospital Devlali, Nasik, Maharashtra, India. E-mail: rijak1@gmail.com

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Introduction

Coffee and tea are among the most generally devoured drinks in adult's world-over [1]. "What would you like to have, tea or coffee"? is a routinely asked question whenever you visit someone in office or even at home. The answer to this question is difficult for someone who doesn't have a specific liking to one of the two. Both the beverages contain caffeine and caffeine admission has been related with reduced perception of fatigue and tiredness [2]. Caffeine is additionally in charge of the impacts on sentiments of attentiveness and sharpness and diminished apparent effort and torment during exercise [3]. Coffee utilization is most noteworthy in Scandinavian nations whilst tea consumption is commoner in Turkey, Iran, and United Kingdom [4]. While coffee and tea are both expended in many nations, generally one prevails as a result of financial, showcasing, social and ethnic reasons [5]. Numerous individuals can pick among coffee and tea, and drink these in shifting proportions relying upon taste inclination, way of life, financial elements, hereditary qualities and wellbeing.

Methods

Literature was reviewed at length and health benefits and harmful effects of tea and coffee were studied, analysed and compared.

Discussion

Tea

Tea is the least expensive drink devoured by people next to water and it began in China more than 3000 years ago. It became popular in Britain in the 17th century and is devoured by two third of the total world populace today. Consuming tea has been believed to be a wellbeing advancing propensity since ages. Leaves of tea plant 'Camellia sinensis' has been found to have therapeutic advantages. Types of tea based on processing or harvested leaf development are black tea (fermented), green tea (non-fermented) and oolong tea (semi-fermented). Green tea is delivered by promptly steaming the freshly harvested leaves to prevent fermentation, yielding a dry, stable product. This steaming procedure decimates the enzymes liable for separating the shading shades in the leaves and enables the tea to keep up its green shading during the ensuing rolling and drying forms. Tea leaves are allowed to ferment before being either smoke fired, flame fired or steamed to make black tea.

Tea contains polyphenols and other components that may reduce the risk of developing chronic diseases such as cancer, cardiovascular diseases, arthritis and diabetes [6]. Tea goes about as a chemopreventive specialist against Prostatic malignant growth. Authoritative ends with respect to the defensive impacts of green tea have been seen from well-structured epidemiological examinations. Both green tea and dark tea positively affect wellbeing however

impacts of green tea have been broadly studied.1-6 cups/day of tea positively affect wellbeing yet in excess of 8 cups of tea for every day may adversely affect human health [6].

Coffee

Coffee is a brewed drink prepared from roasted coffee beans and is one of the most usually devoured refreshments worldwide because of its invigorating consequences for the focal sensory system just as its taste and fragrance. It lowers the risk of type 2 diabetes, heart failure and protects against Parkinson's disease and secures against Parkinson's ailment notwithstanding having gainful impacts in instances of liver cirrhosis and in hepatocellular carcinoma. Substantial coffee utilization in pregnancy is by all accounts related with hurtful results identified with low birth weight, preterm birth, and pregnancy loss. Intake of coffee of medium-roasted coffee and filter coffee are associated with maximum health benefits [7].

Coffee utilization with some restraint in the form of 3–4 cups in a day has been found to have gainful wellbeing effects [7]. Admission of coffee has been related with a lower risk of explicit malignancies, including prostate disease, endometrial malignancy, melanoma, non-melanomatous skin malignancy, and hepatic malignancy. It likewise had valuable relationship with metabolic conditions including type 2 diabetes, metabolic disorder, gallstones, gout,renal stones, hepatic fibrosis and cirrhosis. Advantageous affiliations have likewise been found betweencoffee consumption and Parkinson’s disease, depression, and Alzheimer’s disease.

Milk

400ml every day is the suggested milk utilization and it gives a bundle of basic supplements that are hard to acquire in low-dairy or without dairydiet [8]. Dairy items may speak to a helpful wellspring of dietary calcium, and for some individuals it is beyond the realm of imagination to expect to accomplish suggested every day calcium admissions with a sans dairy diet. Ideal use of milk and dairy items all through life is presumably going to be productive for skeletal prosperity. Hardly any studies have proposed a decrease in osteoarthritis progression related with milk utilization. Lactose intolerance can incite a shirking of all dairy products, yet this isn't vital in the vast majority. Specifically, yogurt and hard cheese are well tolerated and give the dietary advantages of dairy products [8].

Comparison

On literature review we came across studies uncovering that higher coffee admission was fundamentally, nonlinearly identified with lower mortality in females. In men, coffee was significantly positively related to cancer and cardiovascular mortality, and inversely to respiratory and other causes of death. Tea admission was identified with lower generally, malignant growth and cardiovascular mortality in men, yet indicated no

relationship with mortality in ladies. In substitution examinations, expanding the extent tea or supplanting coffee with tea was fundamentally and nonlinearly identified with lower risk of malignancy and cardiovascular mortality in men, however in ladies higher tea extents were decidedly connected with by and large mortality. An examination by van den Brandt proposes that for men, contrasted with selective coffee consumers, that drinking 30–50% tea demonstrated the most reduced mortality; any tea drinking appeared to be superior to just coffee. For ladies who drank only coffee or drinking up to 40% tea had the most reduced mortality; however those drinking higher rates of tea were at expanded mortality risk [9].

Discussion

Tea and coffee are generally devoured refreshments which positively affect human wellbeing. 1-6 cups/day of tea beneficially affect wellbeing however in excess of 8 cups of tea for every day may adversely affect human wellbeing. Both green tea and black tea positively affect wellbeing yet impacts of green tea have been widely contemplated. Tea contains polyphenols and other components that may reduce the risk of developing chronic diseases such as cancer, cardiovascular diseases, arthritis and diabetes and also has chemo preventive action against Prostatic cancer.

Coffee intake lowers the risk of type 2 diabetes, heart failure and protects against Parkinson's disease in addition to having beneficial effects in cases of liver cirrhosis and in hepatocellular carcinoma. Excessive consumption of coffee in pregnancy is apparently related with hurtful outcomes related to low birth weight, preterm birth, and pregnancy loss. Consumption of more than 3-4 cups of coffee daily has been associated with increased risk of fractures in women with low intake of calcium in their diets. Medium-roasted coffee and filter coffee are associated with maximum health benefits.

Coffee admission has been seen to be related with lower mortality in women whereas in men, it has been positively related to cancer and cardiovascular mortality, and inversely related to respiratory and other causes of death. Tea admission has been appeared to have lower risk of malignancy and cardiovascular mortality in men, yet no relationship with mortality in ladies has been established.

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