Heavy alcohol consumption may be linked to a greater risk of developing lung cancer, while higher BMI and increased consumption of black tea and fruit are associated with lower risk of the deadly disease. In three separate studies presented at CHEST 2011, the 77th annual meeting of the American College of Chest Physicians (ACCP), heavy alcohol consumption was related to increased risk of lung cancer, while specific ethnic groups, including African American men and Asian women, had slightly higher risks for lung cancer. Conversely, black tea consumption was shown to reduce lung cancer risk in nonsmoking women, while higher BMI and increased fruit consumption were associated with a lower risk of lung cancer in both men and women.

Lung Cancer Risk Factors

"Heavy drinking has multiple harmful effects, including cardiovascular complications and increased risk for lung cancer, said Stanton Siu, MD, FCCP, Kaiser Permanente, Oakland, California. "We did not see a relationship between moderate drinking and lung cancer development. So it appears probable that most middle-aged and older moderate drinkers have coronary artery protection and no increased risk of lung cancer risk."

Dr. Siu and his research team studied 126,293 people who provided baseline data from 1978 to 1985 and followed them until 2008 to determine their risk for developing lung cancer in relation to cigarette smoking, alcohol consumption, gender, ethnicity, BMI, and level of education. Of the 1,852 people who developed lung cancer during this time, results showed that cigarette smoking remained a strong predictor of all types of lung cancer; however, heavy alcohol consumption (> 3 alcoholic drinks per day) also increased lung cancer risk, with a slightly higher risk related to heavy beer consumption as opposed to wine and liquor.

"Genetic variations among different ethnic groups could explain the elevated risk for lung cancer. Environmental exposures, occupation, and diet can also influence lung cancer risk," said Dr. Siu.

Reduced Risk of Lung Cancer

Although researchers found several factors that increased lung cancer risk, other factors were found to be related to reduced risk of the disease. Dr. Siu and team found an inverse relationship between BMI and lung cancer risk, where higher BMI levels were associated with a lower risk for lung cancer. A similar relationship was seen in those who graduated from college.

"Explanations are not evident, but people with more education probably have a generally healthy lifestyle," said Dr. Siu. "The BMI-cancer association was independent of smoking, and we speculate that nutritional factors may be involved."

In a separate study also presented at CHEST, researchers from the Czech Republic investigated the relationship between smoking exposure, diet, and exercise, and the risk of lung cancer. They found that consumption of black tea had a protective effect on nonsmoking women, while fruit had a protective effect for both men and women.

"Smoking remains the primary risk factor for lung cancer, yet we can't ignore other environmental or lifestyle factors that may impact one's health," said David Gutterman, MD, FCCP, President of the American College of Chest Physicians. "Quitting smoking or never starting can help to reduce lung cancer risk, as can living an overall active and healthy lifestyle."

Provided by American College of Chest Physicians