

Alcohol and tobacco together increases the risk of cancer

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ABSTRACT

When you smoke and drink at the same time, your body breaks down alcohol and nicotine more slowly. Your chance of getting cancer increases with the amount of time the chemicals remain in your bloodstream.

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INTRODUCTION

Drinking and smoking are often associated with each other, much like bacon and eggs. However, in terms of cancer risk, "gasoline and matches" is more appropriate, according to Stephen Lynch, MD, City of Hope Phoenix's primary care physician and intake physician.

Tobacco and alcohol use each independently increase the chance of getting certain cancers. In fact, the National Cancer Institute states that smoking tobacco alone is associated with an increased risk of 17 different cancers. Furthermore, drinking too much alcohol has been linked to an increased risk of up to seven malignancies, including breast cancer in women.

The chance of getting malignancies in the aerodigestive tract—the lips, mouth, larynx, pharynx, throat, esophagus, and colon—is greatly increased when drinking and smoking together.

How can cancer result from smoking?

Numerous carcinogenic chemicals are produced by a chemical chain reaction that occurs every time a smoker inhales from a burning cigarette. These substances enter the body through the lips, pass through the tongue and mouth, descend the neck, and enter the lungs, where they cause inflammation and expose the body to substances that can cause cancer. Compounds from tobacco smoke enter the bloodstream after entering the lungs, where they disseminate carcinogens throughout the body.

The U.S. Centers for Disease Control and Prevention (CDC) state that tobacco use is associated with 90% of all lung cancer cases and can cause cancer almost anywhere in your body. In America, lung cancer is the primary cause of cancer-related deaths.

According to the CDC, tobacco use is the primary preventable cause of disease and mortality in the United States, accounting for about 480,000 deaths annually from heart disease, stroke, cancer, and other causes. In addition to harming DNA, tobacco smoke also ruins cell repair proteins. Additionally, smoking obstructs the metabolic detoxification process, which helps the body rid itself of toxins by neutralizing some of them.

Does drinking lead to cancer?

In contrast to tobacco use, which is dangerous in any quantity, moderate alcohol consumption may not be hazardous. In reality, for certain individuals, consuming moderate amounts of alcohol may help lower their risk of stroke and cardiovascular disease.

Smoking is a no-brainer, according to Doctor's. Now, everyone is aware of that. However, alcohol is said to be healthy because it does offer certain advantages in lowering cardiovascular risk.

The American Heart Association and the National Institutes of Health (NIH) define moderate alcohol use as having no more than one drink for women and two for men per day.

It is crucial to consider the advantages and disadvantages of alcohol intake because even moderate consumption can raise the risk of cancer in a number of ways. Alcohol could:

Create inflammation in the pancreas and liver, which increases

the likelihood of cancer developing in those organs. Generate ethanol, which metabolizes to acetaldehyde, a chemical that may prevent cells from repairing DNA damage, harm to healthy cells, and Boost the production of estrogen, which may raise the risk of cancer, reduce the body's capacity to absorb and break down nutrients, and reduce the immune system's potency

How drinking and smoking can increase the risk of cancer

In a number of ways, alcohol amplifies the carcinogenic consequences of tobacco. For instance, it might boost the synthesis of specific enzymes that turn the chemical tobacco tar-which are created by burning tobacco-into carcinogens. The global number and proportion of cancer cases attributable to alcohol consumption according to cancer types are indicated in below mentioned (Figure 1) [1].

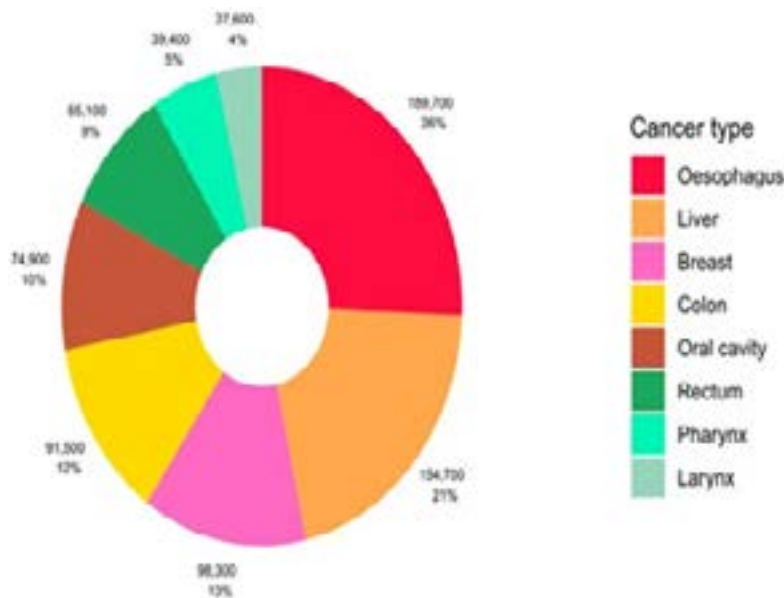


Fig. 1. Global number and proportion of cancer cases attributable to alcohol consumption according to cancer type

According to the NIH, those who smoke and drink have a 15-fold increased risk of mouth and throat cancer compared to those who do not smoke or drink.

You can be impeding the effectiveness of your cancer therapy if you have been diagnosed with the disease but still smoke and drink. Additionally, these practices may exacerbate the disease's symptoms and its negative effects. Nevertheless, after receiving a cancer diagnosis, two thirds of patients and survivors still smoke, according to study.

Cancer patients who smoke have a lower overall quality of life than cancer patients who do not smoke, according to research from the University of Rochester. The body is severely taxed by smoking, cancer, and cancer treatments; these factors combined may make it more challenging for the body to heal from treatment.

The researchers stated that a higher symptom burden can lead to treatment interruptions, dosage reductions, and therapy delays. In turn, therapeutic efficacy may be compromised by dosage reduc-

tions and treatment pauses, leading to a drop in survival rates. The office of the surgeon general claims that smoking raises the likelihood that many cancer therapies won't be successful. Smoking may result in hypoxia, which is a low oxygen level in the body or a portion of it, which might affect the effectiveness of immunotherapy and radiation treatment. Additionally, toxins included in tobacco smoke may alter the metabolism of chemotherapeutic medications, increasing their toxicity or decreasing their efficacy. Certain cancer medications may interact with alcohol, reducing their efficacy. It could exacerbate the adverse effects of chemotherapy, raising the possibility of vomiting, dehydration, and other stomach problems.

Alcohol misuse significantly affects cancer patient's treatment outcomes by increasing the need for surgery, lengthening hospital stays, requiring more recovery time, raising health care expenses, and increasing death, according to the American Society.

Give up lowering your risk of cancer

For some people, drinking and smoking may go hand in hand. In other words, someone who is attempting to give up smoking could fail if they drink alcohol, and vice versa. Additionally, this is more typical in social situations where there are other people smoking or drinking.

Researchers from the NIAAA came to the conclusion that studies show that consuming tobacco and alcohol together can augment the pleasure users experience from either drug alone.

Health professionals view alcohol and smoke differently when offering quitting alternatives.

The CDC advises people who choose to drink to do so in moderation, even though it says quitting alcohol is the healthiest course of action. Nevertheless, some persons ought never to consume alcohol, such as:

- Women who are or may become pregnant
- People under the age of twenty-one
- People with certain medical problems or on certain drugs
- Addicts or people who are unable to regulate their alcohol intake

However, even modest tobacco usage carries concerns when it comes to smoking, each cigarette has an adverse effect. However, it's never too late to give up smoking, regardless of how long you've smoked. There are many health advantages to stopping smoking, and they start nearly immediately and keep coming in the months and years that follow.

The CDC states that a person's chance of acquiring malignancies of the larynx, mouth cavity, and pharynx decreases by half five to ten years after they stop smoking. Twenty years after quitting, the risks are almost identical to those of a nonsmoker.

But quitting is difficult. According to surveys, the majority of smokers wish to stop, but most of them struggle for multiple tries before succeeding.

Not everyone will benefit from smoking cessation techniques including counselling, prescription medications, or nicotine replacement therapies. Inquire with your healthcare provider or support group about the available options to create a customized quitting strategy that suits your needs. Among the possible strategies are:

- Nicotine replacement products
- Techniques for behavioral health
- Prescription drugs
- Respiratory care

Almost three-quarters of cases of upper aerodigestive tract malignancies in affluent countries are caused by smoking and alcohol intake, which are key risk factors. When it comes to alcohol intake, the amount consumed matters more than how long it is con-

sumed. In contrast, there are comparable effects of smoking level and duration on the risk of upper aerodigestive tract malignancies. The development of various cancer forms is multiplied when alcohol and tobacco use are combined.

Ways to lower your risk

Your risk of cancer is increased by alcohol and tobacco use in any proportion, but the good news is that you can lower your risk right now by doing the following:

Giving up smoking

There is no acceptable smoking threshold. Your chance of dying from smoking-related diseases is greatly increased by even one or two cigarettes a day or sporadically smoking (only on the weekends).

According to Doctor's, quitting smoking is the best thing you can do for your health. Your body will start to repair as soon as you stop smoking, and over time, your risk of chronic diseases, such as cancer, heart disease, and stroke, drops significantly.

Counsellors can help you get motivated to quit, stay motivated to quit, and get answers to any problems you may have. They can assist you in creating a smoking cessation strategy that suits you when you're ready [2-4].

CONCLUSION

Alcohol consumption lowers willpower and causes the brain to crave nicotine, which is why many who have quit or are trying to quit tell us that it is the main cause of relapses. Your team can offer you helpful tips on how to prevent smoking triggers when you're out with pals.

Limiting alcohol:

Despite what the general public may think, there is no safe alcohol consumption limit in terms of cancer risk. The best strategy to lower your risk if you do drink is to drink less. In order to lower their risk of alcohol-related illness or injury, adults should not consume more than four standard drinks in a single day or more than ten standard drinks in a week, according to new guidelines announced by the National Health and Medical Research Council.

According to doctors, knowing how much a typical drink contains can help you stay within the suggested limit.

The type of alcohol and even the form of the glass can affect how big a regular drink is.

Reducing your intake and risk of alcohol-related disease can be achieved in part by having a clear grasp of what constitutes a typical drink.

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