

Alcohol and breast cancer: How Much is Too Much?



Introduction:

A recent report from the **American Society of Clinical Oncology** made national headlines based on their recent report which concluded that **even light drinking can slightly raise a woman's risk of breast cancer** (ref. 1)

This statement sent chills down the spine of many of my patients, especially those who enjoy a glass of wine or a cocktail at the end of a stressful day. The first question most patients are asking is "should I stop drinking altogether?" There is no simple answer to this question, but my personal opinion is that the risk of light to moderate drinking (up to 14 oz. per week) is low as long as it is spread out for the full week. Binge drinking, especially for young women, is of concern and should be avoided.

Three points that lend support to my conclusions:

Number 1: The J-Curve:

The J-Curve illustrates the phenomenon that **drinkers have lower mortality**

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rates than non-drinkers (ref. 2). Thus, the lowest point on the J-shaped curve represents mortality rates for light to moderate drinkers. As alcohol consumption increases beyond this low point, mortality rises in direct proportion to the amount of alcohol consumed.

The explanation for this phenomenon is straightforward. Light to moderate drinking reduces mortality rates for heart disease. Deaths from heart disease are much more common than deaths from breast cancer. Thus, if you have a strong family history of heart disease and minimal risk factors for breast cancer it would seem logical to encourage light to moderate alcohol intake.

Number 2: Risk assessment can be misleading.

A recent article in the New York Times by Aaron Carroll offered two helpful examples to put risk of drinking into perspective (ref. 3). His first example is that a **40-year-old woman** has an **absolute risk of 1.45 percent of developing breast cancer in the next 10 years**. The data from the ASCO study indicates that light to moderate alcohol intake **increase the risk to 1.51**, which is an **absolute increase of .06%**.

In another example, he estimates risk based on the concept of the **Number Needed to Harm (NNH)**. This formula concludes that **if 1,667 women became light drinkers, one additional person might develop breast cancer and the other 1,666 women would not**.

Number 3: No such thing as the average women.

Risks of developing breast cancers vary greatly from woman to woman. Some women like Angelina Jolie are at high-risk for developing breast cancer, and many women are at low risk: (i.e. older women with no family history of breast cancer). **Failure to take risk factors into account can distort conclusions on alcohol risk**. For example, the NYT times article also points out that **when smoking and heavy alcohol are deleted from the ASCO equation, the risk of light to moderate intake of alcohol is almost eliminated**.

Of course there are many other factors that can increase a woman's risk of developing breast cancer: the following list includes known risk factors (in addition to smoking and alcohol).

the know risk factors in addition to heavy drinking and smoking:

Controllable risk factors:

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- Obesity (primarily applies to women over 50)
- Lack of exercise
- High carb/high sugar diet
- Post-menopausal hormone replacement (>4 years of combined estrogen and progesterone replacement)
- BCPs: (remains controversial: see next month's Ask the Doctor)

Non-controllable risk factors:

- Family history
- Breast density

The point is that risk assessment is complicated and each woman should review the data and make her own decision. Hopefully, this discussion will help readers make a personal decision on alcohol consumption. For more information on this subject, contact us at:

Reference links:

1. Reports from the **American Society of Clinical Oncology:**

<http://ascopubs.org/doi/abs/10.1200/JCO.2017.76.1155>

2. **The J -Curve:**

<https://academic.oup.com/annonc/article/24/3/807/205972>

3. **New York Times article:** Aaron Carroll

<https://www.nytimes.com/2015/02/03/upshot/how-to-measure-a-medical-treatments-potential-for-harm.html>

The end
