





Please look at the list of values below, and check the one that is **least** important to you.

Artistic skills  
Athletics  
Business/earning money  
Compassion  
Conscientiousness  
Creativity  
Friendliness  
Generosity  
Hedonism (the pursuit of pleasure/happiness)  
Honesty  
Independence  
Intelligence  
Kindness  
Musical ability/appreciation  
Politics  
Relations with friends or family  
Spirituality/Religiousness  
Sense of Humor  
Spontaneity/Living life in the moment  
Trustworthiness  
Other: (write in)\_\_\_\_\_

On the previous page, you chose a value that is least important to you. Please type a short statement about why this value could be important to **another person**. Take a few minutes to think about how this value may influence this person's behaviors or attitudes. Please write about how this person may use this value in everyday life – at work, at home, with friends, or in dealing with strangers. Only think about why this value might be important to another person, and **not** why it is unimportant to you.

**\*All participants will read the following message about alcohol and breast cancer, and all will answer the questions that follow:\***

### **Alcohol and Breast Cancer**

Drinking a single alcoholic drink a day increases a woman's chance of developing breast cancer by around 6%, according to a major global study of woman's smoking and drinking behavior. The new research, published in a leading cancer journal, estimates that alcohol accounts for around 4 percent of breast cancers in the developed world - and nearly 2000 deaths from breast cancer each year in the US alone. If women's alcohol consumption continues to increase, this figure is likely to rise. In contrast, smoking, which causes a third of all cancers, was not found to contribute to breast cancer.

### **New Facts about alcohol**

In the past it has been extremely difficult for researchers to separate the effects of tobacco from the effects of alcohol because the more women drink the more they tend to smoke and vice versa. This is a major reason why previous work has yielded conflicting results regarding the impact of drinking on cancer risk. The sheer size of the new study, including data from approximately 150,000 women around the globe, allows the researchers to disentangle the two factors and make the most accurate estimates ever of the risks associated with smoking and drinking. Dr. Richard Doll, a co-author of the study, said: "There has been a great deal of research on whether smoking or alcohol contribute to breast cancer but until now results have been confusing. For the first time we have undertaken a study large enough and detailed enough to look at the separate effects of tobacco and alcohol reliably. When we did this we found that drinking, but not smoking, increases the risk of breast cancer."

### **How much alcohol?**

Professor Valerie Beral of the Cancer Epidemiology Center in Oxford, England, and co-author of the study said: "This research tells us there is a definite link between alcohol and breast cancer and the evidence suggests that the more a woman drinks the greater her risk." The average alcohol intake, especially for young women, has increased significantly in the last decade. This increase in alcohol consumption could have a significant impact upon breast cancer incidence. This research suggests that a woman who regularly drinks one serving a day (7 a week) has an increased risk of breast cancer of 6%, while having an average of 2.5 drinks a day (17.5 a week) will increase her risk by 15%. Current research suggests that alcohol may increase the risk of breast cancer by raising the levels of estrogen in the body. Estrogen has a well-established link with breast cancer, with research suggesting estrogen can play a role in both triggering its development and encouraging the growth of tumors.

- By the age of 80 breast cancer affects 8.8 out of every 100 women.
- One alcoholic drink a day raises the figure for women to 9.4 cases per 100.
- Six alcoholic drinks a day raises the figure for women to 13.3 cases per 100.

### **What about the benefits of alcohol?**

While women who drink are at a higher risk for a number of diseases, including cancers of the throat and liver, they are at a lower risk of heart disease and stroke than are non-drinkers. Dr. Gillian Reeves, who also co-authored the report, says "The balance between the harmful effects of alcohol on breast cancer and its beneficial effects on heart disease depend on a woman's age." It is not until after the age of 65 or so that the benefits of moderate drinking become apparent; before then the risk of breast cancer is far higher than that of heart disease.

### **Drinking too much is dangerous**

The Chief Executive of the cancer charity that funded this research, Paul Nurse, said: "Large studies of this kind are very important for dissecting the complex causes of cancer. This research reinforces advice that excessive drinking can be hazardous. It seems that women's attitudes regarding alcohol are changing and this can only have a negative impact on their health. It's important that we get the message out to young women that drinking too much is dangerous." There are many things that you can do to look after your heart, including plenty of exercise and eating a healthy diet. The small benefit that alcohol brings is not large enough to recommend that those who do not drink should start. Considering the potential harmful effects of drinking, including breast cancer, it is advised that those who do drink should attempt to cut down and to have several days a week without alcohol. According to the U.S. Department of Health and Human Services, people should not exceed the following recommendations for alcohol consumption:

- For women, no more than 1 serving per day (12 oz. of beer, 5 oz. of wine, or 1.5 oz. of hard liquor) and no more than 7 servings per week.
- For men, no more than 2 servings per day (24 oz. of beer, 10 oz. of wine, or 3 oz. of hard liquor) and no more than 14 servings per week.

1. If you have any interest in altering your alcohol consumption in the next 7 days, how will you go about it? Please list below any steps that you think you will take to reduce your alcohol consumption.

2. How worried are you about your drinking behavior?

1      2      3      4      5      6      7  
Not at all worried      Extremely worried

3. How worried are you about developing breast cancer because of your drinking behavior?

1      2      3      4      5      6      7  
Not at all worried      Extremely worried

4. How would you rate your chance of developing breast cancer in your lifetime?

1. Very low
2. Moderately low
3. Neither high nor low
4. Moderately high
5. Very high

5. Overall, how do you think your chance of developing breast cancer in your lifetime compares to the average woman your age?

1                      2                      3                      4                      5  
Much lower                      About the same                      Much higher

6. I feel very vulnerable to breast cancer.

1           2           3           4           5           6           7  
Strongly disagree                      Strongly agree

7. I intend to decrease the amount I drink in the next 2 weeks.

1           2           3           4           5           6           7  
Definitely will not do                      Definitely will do

8. I intend to decrease the number of times I drink in the next 2 weeks.

1           2           3           4           5           6           7  
Definitely will not do                      Definitely will do

9. I intend to decrease the highest amount of alcohol I drink at one time in the next 2 weeks.

1           2           3           4           5           6           7  
Definitely will not do                      Definitely will do

**Click on the link below if you would like to be directed to resources that would help you to reduce your alcohol consumption:**

<http://rethinkingdrinking.niaaa.nih.gov/ToolsResources/Resources.asp>