2017 AICR Cancer Risk Awareness Survey Report
INTRODUCTION

In 2001, the American Institute for Cancer Research (AICR) first commissioned a Cancer Risk Awareness Survey to gauge Americans’ awareness of various lifestyle-related cancer risk factors. This is the 8th edition of the survey.

The survey provides important insights and trends into how Americans are able to separate clearly established cancer risks from factors about which there is no scientific consensus, but which many of the general public believe cause cancer. AICR focuses on cancer risks related to diet, physical activity, and body weight and analyzes the global research on how these factors link to risk.

We recognize there are many reasons for low awareness about certain cancer risk factors and hope these survey findings can help individuals make behavior changes to lower risk based on AICR’s comprehensive research.

Part 1: Key Findings

Part 2: Selected Trends in Awareness for Cancer Risks Associated with Diet, Physical Activity and Body Weight

Part 3: Trends in Awareness for Other Notable Cancer Risks
PART 1:
Key Findings
KEY FINDINGS

Fewer than half of Americans recognize that alcohol, processed meat, high amounts of red meat, low amounts of fruits and vegetables and not enough physical activity all have clear links to cancer development.

Americans generally remain more prone to blame cancer on factors they do not control than they are to recognize the steps they can take to help protect themselves. This has held true in every AICR Cancer Risk Awareness Survey conducted since 2001.

• Awareness of several clearly established lifestyle-related risk factors—**inactivity, alcohol, diets high in red meat, diets low in vegetables and fruits, and processed (cured) meats**—remains alarmingly low; below 50%.

• Only 1 in 2 Americans (50%) are aware that obesity is a cancer risk factor. Aside from not smoking, staying a healthy body weight is the single largest factor to lower cancer risk.

• The majority of Americans believe that stress, beef hormones and genetically modified foods lead to cancer factors that remain unproven.

• Many Americans say sugar and high-fat diets cause cancer to develop, at 28% and 44% respectively. Both topics have made headlines this year and both have inconclusive links to cancer.

• Only 4 in 10 Americans (39%) recognize that alcohol increases cancer risk, this is especially concerning given that awareness has dipped over the past 16 years, from 42 percent, as the evidence has increased.

• Only 1 in 10 Americans know that coffee links to cancer risk. Coffee lowers risk of two cancers.

• An overwhelming majority of Americans correctly identify tobacco (93 percent) and excessive sun exposure (84 percent) as cancer risks.
# RANKED RESULTS OF AICR’S 2017 CANCER RISK AWARENESS SURVEY

The percentage of Americans who answered “YES” when asked if each of the following factors has a significant effect on whether or not the average person develops cancer. Ranked from highest percentage to lowest:

(NOTE: The established cancer risks highlighted in AICR’s reports are in bold.)

<table>
<thead>
<tr>
<th>RANKING</th>
<th>2017</th>
<th>CHANGE FROM 2001</th>
<th>RANKING</th>
<th>2017</th>
<th>CHANGE FROM 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tobacco*</td>
<td>93 percent</td>
<td>+1</td>
<td>16. Overweight/Obesity [tie]</td>
<td>50 percent</td>
<td>+15</td>
</tr>
<tr>
<td>2. Inherited Predisposition/“Cancer Genes”**</td>
<td>87 percent</td>
<td>-2</td>
<td>17. Diets Low in Vegetables &amp; Fruits</td>
<td>45 percent</td>
<td>-1</td>
</tr>
<tr>
<td>3. Radiation*</td>
<td>86 percent</td>
<td>+3</td>
<td>18. Diets High in Fat</td>
<td>44 percent</td>
<td>0</td>
</tr>
<tr>
<td>4. Industrial Pollution [tie]</td>
<td>84 percent</td>
<td>0</td>
<td>19. Trans-fats</td>
<td>41 percent</td>
<td>+12</td>
</tr>
<tr>
<td>5. Excessive Exposure to the Sun* [tie]</td>
<td>84 percent</td>
<td>-6</td>
<td>20. Cured Meats</td>
<td>40 percent</td>
<td>+8</td>
</tr>
<tr>
<td>7. Pesticide Residue on Produce***</td>
<td>74 percent</td>
<td>+2</td>
<td>22. Insufficient Physical Activity [tie]</td>
<td>39 percent</td>
<td>+4</td>
</tr>
<tr>
<td>10. Radon*</td>
<td>58 percent</td>
<td>+2</td>
<td>25. Diets High in Red Meat</td>
<td>35 percent</td>
<td>-4</td>
</tr>
<tr>
<td>11. Stress</td>
<td>56 percent</td>
<td>+8</td>
<td>26. Breast Implants</td>
<td>33 percent</td>
<td>-14</td>
</tr>
<tr>
<td>12. Artificial Sweeteners</td>
<td>55 percent</td>
<td>+20</td>
<td>27. Sugar</td>
<td>28 percent</td>
<td>+13</td>
</tr>
<tr>
<td>14. Hormones in Beef</td>
<td>52 percent</td>
<td>+13</td>
<td>29. Coffee</td>
<td>10 percent</td>
<td>-1</td>
</tr>
<tr>
<td>15. Viruses and Bacteria**** [tie]</td>
<td>50 percent</td>
<td>-6</td>
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</tr>
</tbody>
</table>

*These factors are well recognized as cancer risks, though they are not highlighted in AICR’s reports.

** Only about 5-10 percent of cancers are caused by “cancer genes.”

***Evidence links high daily exposure of pesticides (as occurs among farm workers) to cancer, the evidence on lower levels of exposure is far less clear.

****Several viruses, including the human papilloma virus, link to various cancers.
Well-established cancer risk factors* include:

✔ **Obesity**
   Raises risk for colorectal, breast (post-menopausal), ovarian, esophageal, endometrial, kidney, pancreatic, gallbladder, stomach, liver and advanced prostate cancers.

✔ **Insufficient Physical Activity**
   Raises risk for colorectal, breast (post-menopausal) and endometrial cancers.

✔ **Diets Low in Vegetables and Fruits**
   Raises risk for colorectal cancer and mouth/pharynx/larynx cancer.

✔ **Alcohol**
   Raises risk for colorectal, breast (pre- and post-menopausal), mouth/pharynx/larynx, liver, esophageal and stomach cancers.

✔ **Diets High in Red Meat**
   Raises risk for colorectal cancer.

✔ **Cured (Processed) Meats**
   Raises risk for colorectal and stomach cancers.

✔ **Coffee**
   Lowers risk for liver and endometrial cancers.

*AICR/WCRF. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective* and the Continuous Update Project (CUP) reports.
PART 2:
Selected Trends in Awareness for Cancer Risks Associated with Diet, Physical Activity and Body Weight
Which of the following do you believe has a significant effect on whether or not the average person develops cancer? (% of YES responses)

- Overweight/Obesity: YES 50%
- Diets low in vegetables and fruits: YES 45%
- Alcohol: YES 39%
- Cured meats: YES 40%
- Insufficient physical activity: YES 39%
- Diets high in red meat: YES 35%

The Trend
Awareness that being overweight increases cancer risk has climbed slowly but steadily over the past 16 years, from 35 percent in 2001 to 50 percent today. Yet that still leaves just one in two Americans realizing that obesity links to cancer growth.

The Takeaway
Apart from not smoking, being at a healthy weight is the single most important thing Americans can do to protect themselves from cancer. Obesity increases risk for eleven of the most common cancers in the US, and AICR estimates it to be a cause of almost 133,000 cases every year. Awareness of this link needs to be much higher, on par with that of tobacco and excessive sun exposure.
The Trend
Following a drop in awareness in 2013, awareness that processed meat is a cause of cancer remains low at 40 percent; it has only risen 8 percent since 2001.

The Takeaway
Cured meats, also called processed meat, include bacon, ham, hot dogs and cold cuts. Even small amounts of processed meat, consumed regularly, make colorectal and stomach cancers more likely. This is why AICR recommends avoiding these foods in general, and saving them for special occasions.

Yet many busy American families turn to processed meats – especially hot dogs – as a convenient everyday meal. Today only four in ten Americans know of the clear link between these foods and increased cancer risk. This number needs to be much higher.
Diets Low in Vegetables and Fruits

The Trend
Awareness that diets lacking in plant food dropped after 2009, and is now similar to awareness levels in 2001.

The Takeaway
Awareness remains low, which means that Americans are either not hearing or are ignoring health messages about the protective power of plant-based diets.

Given the clear evidence that diets high in fruits and vegetables – as well as whole grains and beans – decrease risk for several cancers, this finding suggests that science-based public health advice may be losing ground to the “noise” that exists on the internet and in social media.
The Trend
Since 2001, fewer Americans now recognize that alcohol links to cancer even as the evidence with alcohol as a cause of cancer has grown. Awareness had been trending upward the past two surveys, but has since dropped.

The Takeaway
Messages about the potential heart-health benefits of modest alcohol intake may be clouding the alcohol-cancer link in the minds of Americans. Alcohol remains a clear and convincing cause of several cancers, including breast and liver cancers. The best advice, when it comes to cancer risk, is not to drink at all.
**The Trend**

After a high in 2009, awareness that physical activity plays a role in risk has dropped to 39 percent. Awareness of this key cancer protective strategy has only moved slightly upward since 2001.

**The Takeaway**

Being physically active protects against cancer both directly (by helping to regulate the body’s hormone levels) and indirectly (by helping to prevent the buildup of excess body fat, itself a cause of 11 cancers).

But we are becoming an increasingly sedentary country, as screen time increases and commutes get longer.
Diets High in Red Meat

The Trend
Awareness of this important cancer risk factor has vacillated over the course of the survey, but saw no change over the past four years.

The Takeaway
The traditional American meal, which consists of a large chunk of red meat (beef, pork, lamb) with some starchy vegetables on the side, has to change. At high levels of red meat consumption, risk for colorectal cancer increases markedly. It is dismaying that 2 out of 3 Americans have not heard this message.

For cancer protection, AICR recommends that individuals limit themselves to no more than 18 ounces (cooked) red meat per week.
PART 3:
Trends in Awareness for Other Notable Cancer Risks
The Trend
Holding steady since 2001

The Takeaway
We’re encouraged that health messages about such a clear and convincing risk for many cancers are being heard.
Inherited Predisposition/Cancer Genes

The Trend
Holding steady.

The Takeaway
It’s true that individuals born with BRCA1, APC or other “cancer genes” are at increased risk for cancer.

Note, however, that respondents were asked if they thought various factors have a significant effect on whether or not the average person develops cancer. And the vast majority of cancers that occur – as many as 90 to 95 percent, by some estimates – occur in individuals who do not carry these genes.
The Trend
Holding relatively steady, with a slight dip in awareness since 2001.

The Takeaway
There’s no question that sun exposure increases risk for skin cancer, the most common form of the disease. Given the sheer number of skin cancers that occur in the US every year, the fact that awareness of this risk factor is relatively high is encouraging.
2017 AICR Cancer Risk Awareness Survey

METHODOLOGY

The AICR Cancer Risk Awareness Survey has been conducted periodically since 2001. A random sample of Americans aged 18 and older is telephoned on behalf of AICR by SSRS (www.ssrs.com) using the SSRS Omnibus survey.

2005: 1,010 respondents. Margin of error: +/- 3 percent.
2007: 1,022 respondents. Margin of error: +/- 3 percent.
2009: 1,021 respondents. Margin of error: +/- 3 percent.
2011: No survey was conducted.

2013: 1,026 respondents. Margin of error: +/- 3 percent. (30 percent of respondents were reached by cell phone.)
2015: 1,108 respondents. Margin of error: +/- 3 percent. (50 percent of respondents were reached by cell phone.)
2017: 1,004 respondents. Margin of error: +/- 3 percent. (61% of respondents were reached by cell phone)

The data for the 2017 survey were collected from December 7–11, 2016. The SSRS Omnibus sample is designed to represent the adult U.S. population (including Hawaii and Alaska). The SSRS Omnibus uses a fully-replicated, stratified, single-stage, random-digit-dialing (RDD) sample of telephone households, and randomly generated cell phone numbers. The survey was conducted in English and Spanish.

Respondents are read the following question: “Which of the following do you believe has a significant effect on whether or not the average person develops cancer?”

The 29 risk factors are randomly ordered, and read to respondents one at a time; to each, respondents answer “Yes,” “No” or “Don’t Know.”

Raw data tables of the 2017 survey, including breakdowns by sex, age, household income, region, education, race, political affiliation, and metro status, and a full methodology report are available upon request: communications@aicr.org