FOR RELEASE FEBRUARY 12, 2015

# How Different Groups Think about Scientific Issues

#### FOR FURTHER INFORMATION ON THIS REPORT:

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202.419.4372 www.pewresearch.org This coming weekend's <u>conference of the American Association for the Advancement of Science</u> (AAAS) will feature a significant number of discussions about how the public thinks about science issues and how scientists communicate about their work. The Pew Research Center will be <u>presenting new findings</u> at the conference about the ways scientists engage with the public and media.

There has been considerable interest in specific demographic breakdowns of the general public's answers to science-related questions that <u>Pew Research covered in its recent report on science issues</u> and the gaps between citizens and scientists' opinions on a range of issues. Here are additional demographic breakdowns of views among the general public based on a nationally representative survey of 2,002 U.S. adults conducted August 15-25, 2014.

The margin of error for results based on the full sample is +/- 3.1 percentage points. For details on the survey methodology, including margins of error for key subgroups, see Appendix A.

#### Safety of genetically modified foods

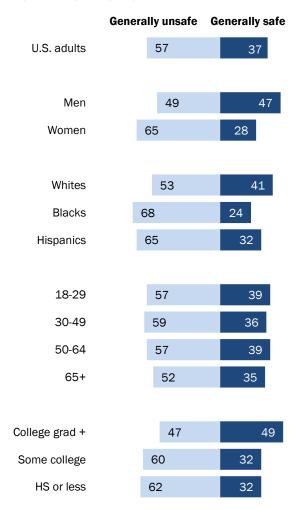
By a 57%-37% margin, the public believes that genetically-modified foods (GM foods) are generally unsafe to eat. This is a major contrast with scientists Pew Research surveyed. Some 3,748 U.S.-based members of the AAAS were surveyed from September 11 to October 13, 2014 and they said such foods were generally safe to eat by an 88%-11% margin.

The nearby chart of the data from the survey of the general public shows several patterns. Those more likely to think genetically modified food is unsafe include: women, African-Americans and Hispanics, and those without college degrees.

There are no statistically significant differences on the safety of eating GM Foods between Republicans and those who lean to the Republican Party as compared with Democrats and those who lean to the Democratic Party. Nor are there differences on this issue among political ideology groups. Pew Research will issue a detailed report on public attitudes about science-related topics by political groups later this spring.

## Views on Safety of Genetically Modified Foods, by Key Demographics

% of U.S. adults who say it is generally safe or unsafe to eat genetically modified foods



Survey of U.S adults August 15-25, 2014. Q38. Those saying don't know are not shown. Whites and blacks include only non-Hispanics; Hispanics are of any race.

## Public views about scientists' understanding of the health effects of GM crops

Survey respondents were asked: "From what you've heard or read, would you say scientists have a clear understanding of the health effects of genetically modified crops or are scientists not clear about this?"

Two-thirds (67%) of adults say scientists do not have a clear understanding, while 28% say scientists have a clear understanding of the health effects.

Those more likely to think scientists do not have a clear understanding of the health effects of GM crops include: women and older Americans. Non-Hispanic whites and blacks are more likely than Hispanics to say scientists do not have a clear understanding of this.

## Views on Scientific Understanding of GM crops

% of U.S. adults who say scientists have a clear/not clear understanding of the health effects of GM crops

	Scientists do not have a clear understanding		Scientists have a clear understanding	
U.S. adults		67		28
Men		64		32
Women		71		24
Whites		69		26
Blacks		70		28
Hispanics		59		38
18-29		61	37	
30-49		66		30
50-64		72		25
65+	72			19
College grad +	68			28
Some college		66		31
HS or less		69		26

Survey of U.S. adults August 15-25, 2014. Q39. Those saying don't know are not shown. Whites and blacks include only non-Hispanics; Hispanics are of any race.

#### Looking for GM food labels while shopping

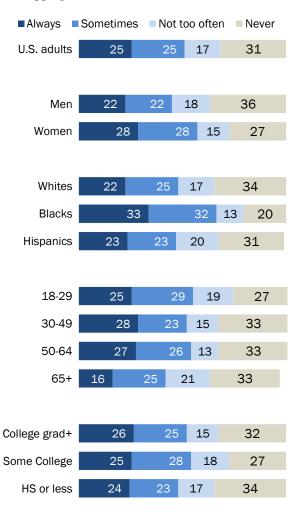
Those in the general public survey were asked: "When you are food shopping, how often, if ever, do you look to see if the products are genetically modified?"

Some 25% say they always look for such labels; 25% say they do so sometimes; 17% say they do so "not too often"; and 31% say they never look for GM labeling.

Men are more likely than women to say they never look for GM labels. There are modest differences across other subgroups on this question as shown in the nearby table.

## Checking for GM Food Labeling, by Key Demographics

% of U.S. adults who say they look for GM labeling when food shopping



Survey of U.S. adults August 15-25, 2014. Q37. Those saying don't know or volunteering another response are not shown. Whites and blacks include only non-Hispanics; Hispanics are of any race.

#### Should childhood vaccines be required?

Respondents in the survey were asked:
"Thinking about childhood diseases, such as measles, mumps, rubella and polio, should parents be able to decide not to vaccinate their children or should all children be required to be vaccinated?"

About two-thirds (68%) of adults say vaccinations should be required and 30% say parents should be able to decide. By contrast, 86% of AAAS scientists say all children should be required to be vaccinated.

In the general public survey, those more likely to say parents should be able to decide include younger adults, Republicans and independents. There are no significant differences in views about this issue by gender, education or race and ethnicity.

A <u>separate Pew Research survey</u> found substantial agreement among adults that vaccines for diseases such measles, mumps and rubella (MMR) are safe for healthy children: 83% take that position. There were no differences among partisans on the general safety of such vaccines.

#### Views on Childhood Vaccinations, by Key Demographics

% of U.S. adults who say parents should be able to decide not to vaccinate their children or that all children should be required to be vaccinated

Parents should decide			Should be required		
U.S. adults	30		68		
Men	31		67		
Women	29		70		
Whites	30		68		
Blacks	31		66		
Hispanics	25		75		
18-29	41		59		
30-49	35		64		
50-64	23		75		
65+	20		7	9	
College grad +	28		70		
Some college	32		66		
HS or less	30		69		
Republicans	34		65		
Democrats	22		76	5	
Independents	33		65		

Survey of U.S adults August 15-25, 2014. Q25. Those saying don't know are not shown. Whites and blacks include only non-Hispanics; Hispanics are of any race.

#### **Evolution**

The Pew Research survey asked: "Which comes closer to your view? Humans and other living things have evolved over time or humans and other living things have existed in their present form since the beginning of time?"

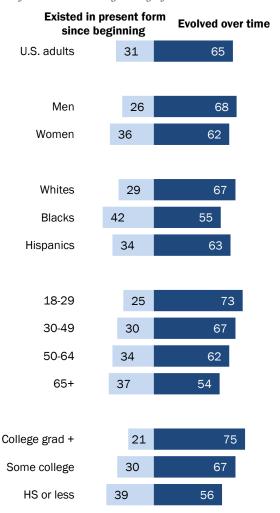
Some 65% of adults say humans have evolved over time and 31% say humans have always existed in their present form. By comparison, fully 98% of AAAS scientists say humans and other living things have evolved over time.

Those in the general public who said humans evolved over time were asked a follow-up question about whether natural processes like natural selection guided evolution or whether a supreme being guided evolution. Some 35% of all adults say natural processes occurred and 24% say a supreme being guided evolution.

Among the general public, those more likely to say humans have existed in their present form since the beginning include: women, African-Americans, older adults, and those who do not have college degrees. Beliefs about evolution among the general public also <u>vary by religious group</u> with white evangelical Protestants especially likely to say that humans have existed in their present form since the beginning.

### Views on Evolution, by Key Demographics

% of U.S. adults who say humans and other living things have evolved over time or have existed in their present form from since the beginning of time



Survey of U.S adults August 15-25, 2014. Q16. Those saying don't know are not shown. Whites and blacks include only non-Hispanics; Hispanics are of any race.

#### **Beliefs about Climate Change**

The Pew Research survey asked: "Which of these three statements about the earth's temperature comes closest to your view? The earth is getting warmer mostly because of human activity such as burning fossil fuels, or the earth is getting warmer mostly because of natural patterns in the earth's environment or there is no solid evidence that the earth is getting warmer?

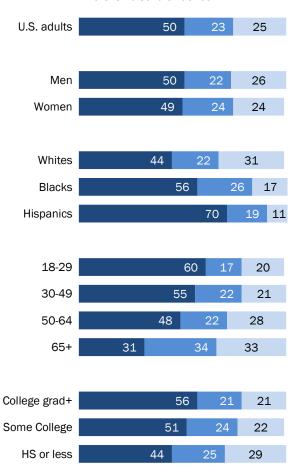
When asked to pick among three choices, 50% said that climate change is occurring mostly because of human activity such as burning fossil fuels, 23% said that climate change is mostly because of natural patterns in earth's environment, and another 25% said there is no solid evidence the earth is getting warmer. That contrasts with views among scientists; fully 87% of AAAS scientists say the earth is warming due to human activity, 9% say the earth is warming due to natural changes in the earth's environment and just 3% say there is no solid evidence that the earth is getting warmer.

Seniors (ages 65 and older) are less inclined than other age groups to say that climate change is mostly due to human activity and more among this group say there is no solid evidence of warming. Those with a college degree are more likely than those with less education to say that climate change is occurring due to human activity. Men and women hold similar views on this issue.

## Views on Climate Change, by Key Demographics

% of U.S. adults saying that the earth is getting warmer because of human activity/because of natural patterns in earth's environment/or that there is no solid evidence that earth is getting warmer

- Because of human activity
- Because of natural patterns
- There is no solid evidence



Survey of U.S. adults August 15-25. Q20F1. Those saying don't know are not shown. Whites and blacks include only non-Hispanics; Hispanics are of any race.

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Hispanics are more inclined than non-Hispanic whites to say the earth is warming due to human activity.

Views about climate change tend to differ by party and ideology, a pattern also seen in previous Pew Research surveys. Fully 71% of Democrats and independents who lean Democratic say the earth is warming primarily due to human activity. In comparison, only 27% of Republicans and leaning Republicans hold this view; 30% of this group says climate change is mostly due to natural patterns in the earth's environment and 41% say there is no solid evidence the earth is warming.

#### The value of human astronauts to the space program

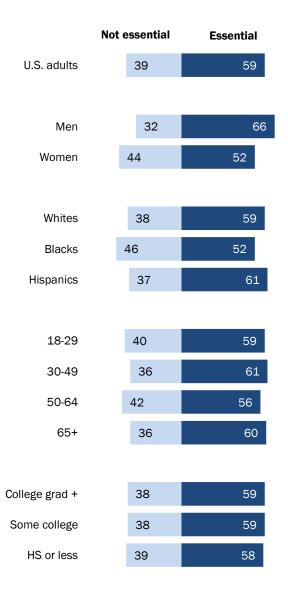
The Pew Research survey asked a question about the role of astronauts in the future as part of space exploration: "The cost of sending human astronauts to space is considerably greater than the cost of using robotic machines for space exploration. As you think about the future of the U.S. space program, do you think it is essential or not essential to include the use of human astronauts in space?"

A majority of the public (59%) says astronauts are essential to include in the future of the U.S. space program, while 39% say astronauts are not essential. By contrast, 52% of AAAS scientists say astronauts are not essential and 47% say they are essential.

Men are a bit more likely than women to consider astronauts essential in the future of the U.S. space program. There are no differences in views about this issue by age, race and ethnicity, or education.

## Views on Astronauts in the Future of U.S. Space Program, by Key Demographics

% of U.S. adults who say human astronauts are essential or not essential in the future of the U.S. space program



Survey of U.S. adults August 15-25, 2014. Q30. Those saying don't know are not shown. Whites and blacks include only non-Hispanics; Hispanics are of any race.

#### Investment in the space station

The survey asked: "Do you think the space station has been a good investment for this country, or don't you think so?"

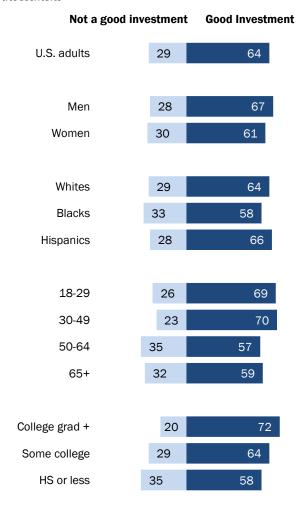
Some 64% of the public say investment in the space station was a good investment, about three-in-ten (29%) say it was not. Among AAAS scientists, 68% say the space station was a good investment for the country.

Those who have attended college or hold a college degree are more likely to say the space station has been a good investment for the country. There are no differences on this question by gender or race and ethnicity.

----- Additional contributions to this material were made by Monica Anderson.

### Views about the Space Station, by Key Demographics

% of U.S. adults who say the space station has been a good investment for the country or not a good investment



Survey of U.S. adults August 15-25, 2014. Q29. Those saying don't know are not shown. Whites and blacks include only non-Hispanics; Hispanics are of any race.