How Society Feels About Breakthrough Science

Findings Across Generations

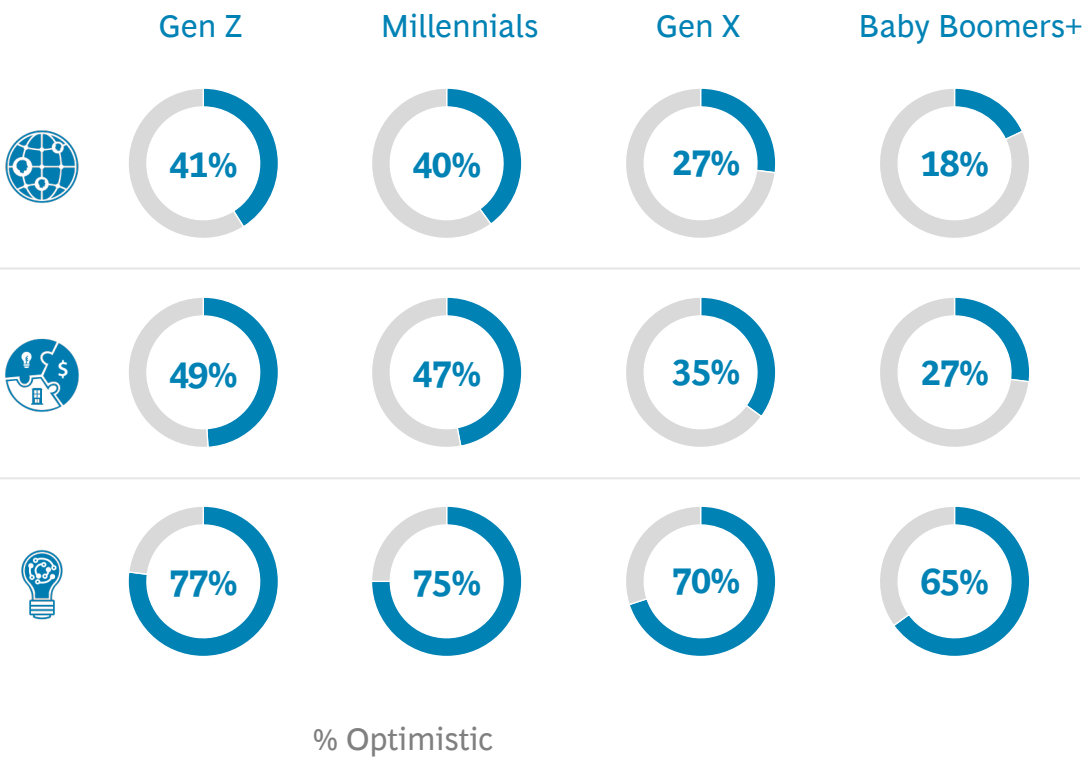
This snapshot report offers a deep dive into generational data from a landmark study on public sentiment toward AI in healthcare, cell and gene therapies, cultivated meat, and new genomic techniques in agriculture, conducted across 13 countries. It explores a current of positivity towards innovation across younger generations around the world.

leaps by BAYER + BCG

1. Open to Innovation

Gen Z and Millennials are consistently the most optimistic generations; science and technology inspire the most optimism.

Optimism about the direction in which the world is heading in terms of …

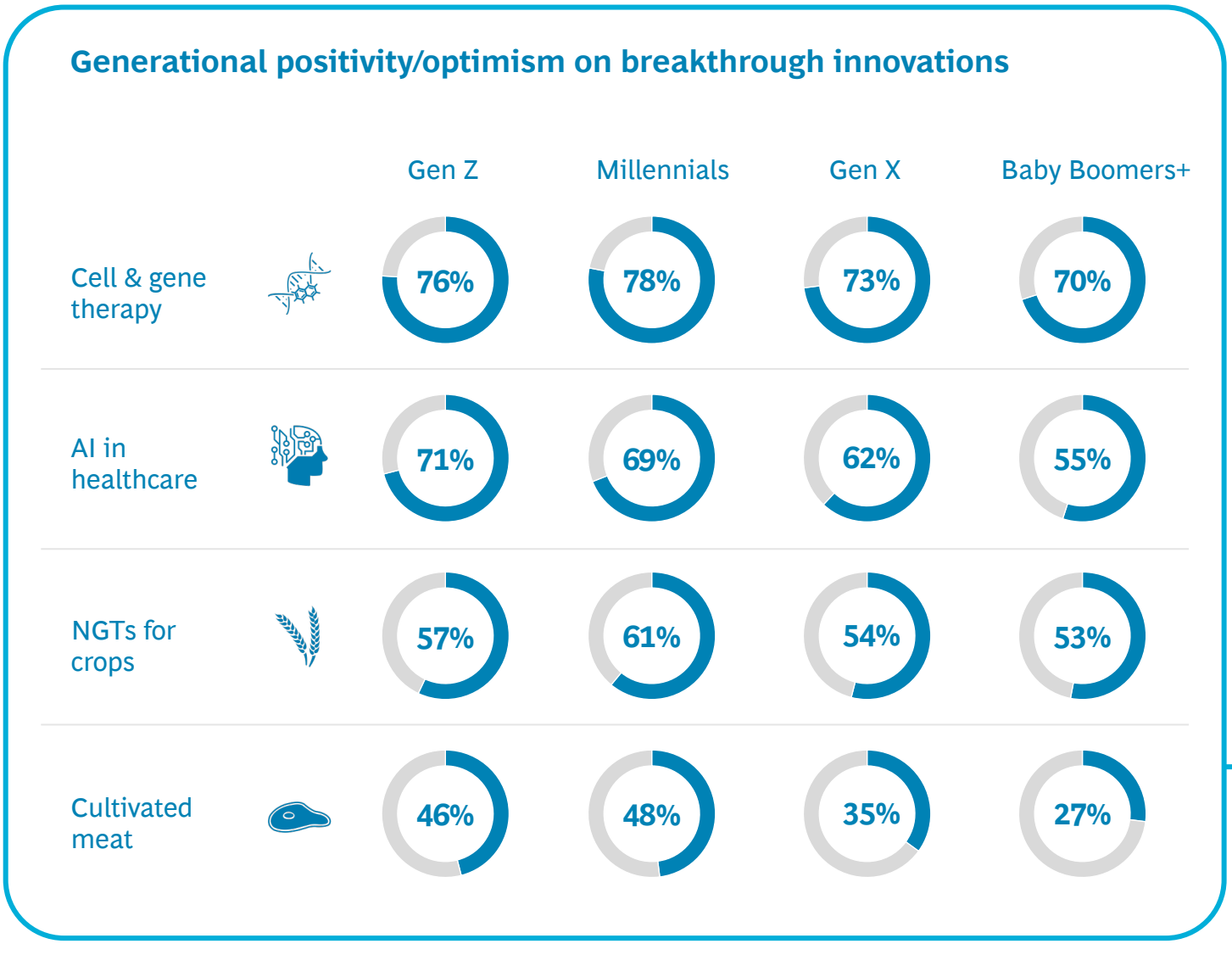


Q. Are you optimistic or pessimistic about the potential of cell and gene therapy to cure diseases such as Parkinson's Disease and other degenerative diseases? (n=12,320). Note: Optimistic = only optimistic answers, very and fairly optimistic. Q. To what extent do you feel positive or negative about the impact of Artificial Intelligence (AI) on the future of human health? (n=13,111). Note: Positive = only positive answers, very and fairly positive. Q. Overall, is your opinion of new genomic techniques (NGTs such as genome editing tools like CRISPR) positive, negative or neutral? (n=11,951). Note: Positive = only positive answers. Q. Overall, is your opinion of cultivated meat positive, negative, or neutral? (n=12,485). Note: Only positive answers. Q. At this moment, to what extent are you optimistic or pessimistic about the direction in which the world is heading in terms of: "Politics and global affairs", "The economy", "Science and technology". (n=13,111). Note: Optimistic = only optimistic answers, very and fairly optimistic.

1. Open to Innovation

Gen Z and Millennials are the most optimistic generations across all breakthrough innovations surveyed.

Generational positivity/optimism on breakthrough innovations



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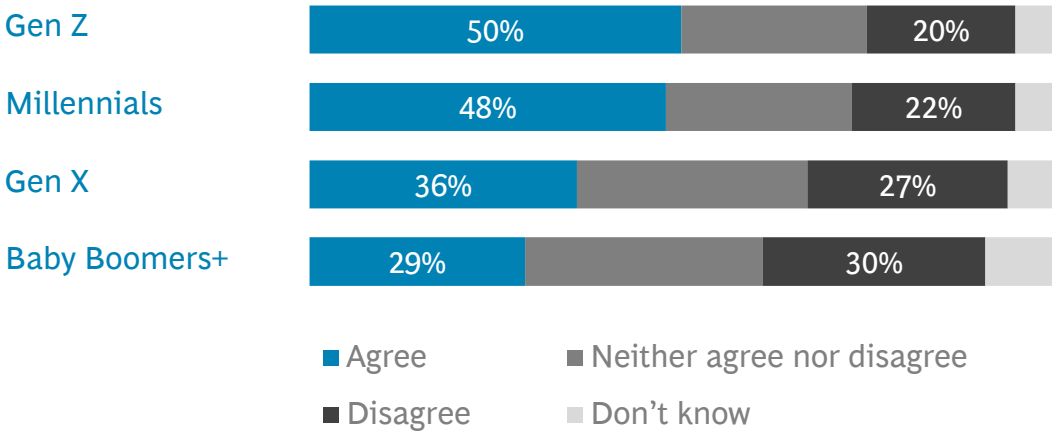
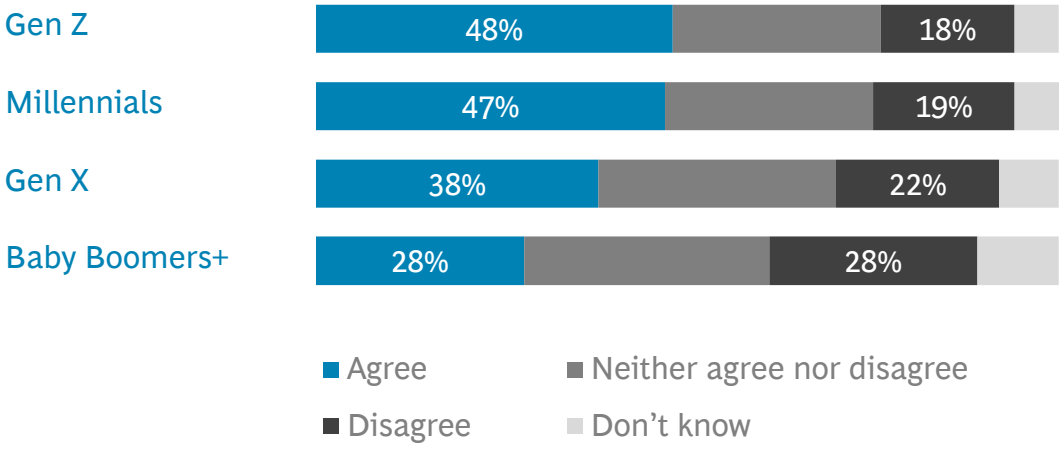
2. Views on Corporations and Governments

A greater proportion of Gen Z and Millennials state that corporations are open about innovation risks and opportunities and feel their views are reflected in government policy.

Agreement that companies pursuing scientific innovation are transparent on risks and opportunities



Agreement that own views on scientific innovation are reflected in government policy

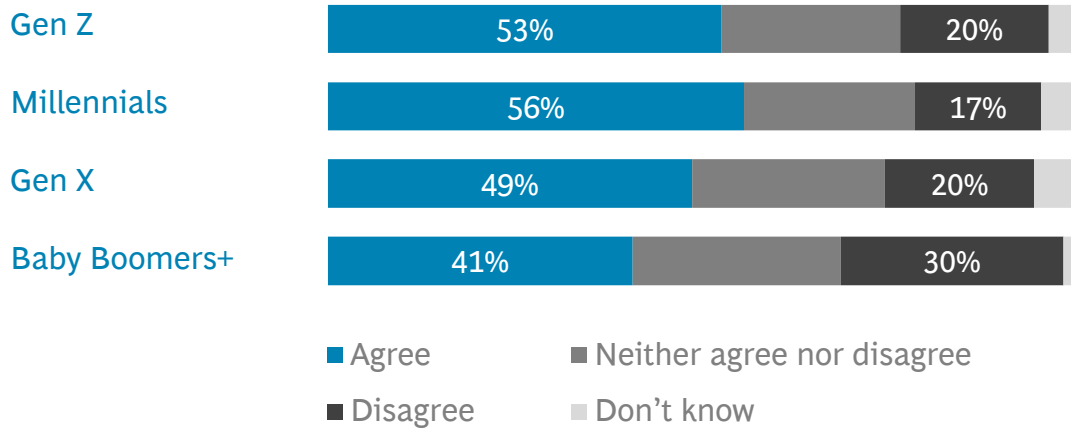


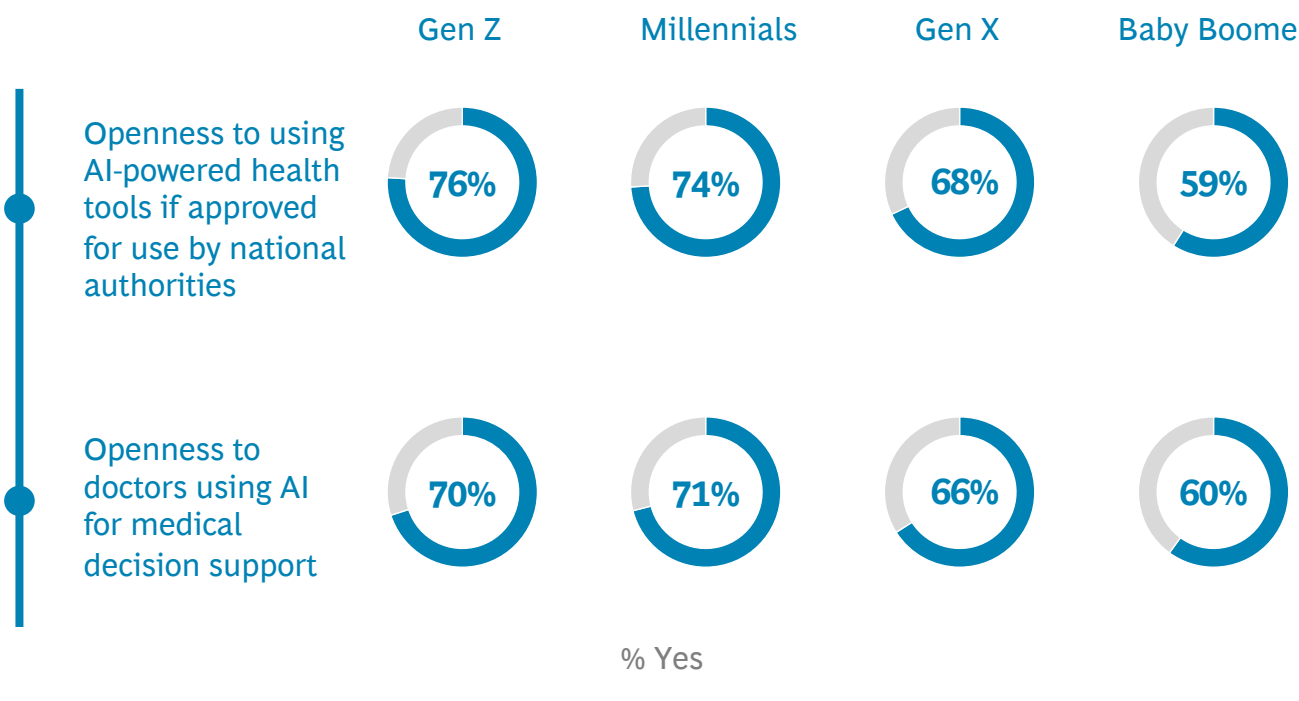
Base: Total n=13,111 online adults aged 18+ . Baby Boomers + (1928-1965) n=3,517, Gen X (1966-1979) n=3,051, Millennials (1980-1995) n=4,066, Gen Z (1996-2006) n=2,477. Q. To what extent do you agree, or disagree, with each of the following statements? "I feel companies pursuing scientific innovation are transparent on risks and opportunities", "I feel my views on scientific innovation are reflected in government policy". Note: Agree = only positive answers, strongly and tend to agree, Disagree = only negative answers, strongly and tend to disagree.

3. Trust and AI

Millennials and Gen Z are most trusting and open to the use of AI to manage their health, medical data and support decision-making.

Trust in AI to handle health and medical data





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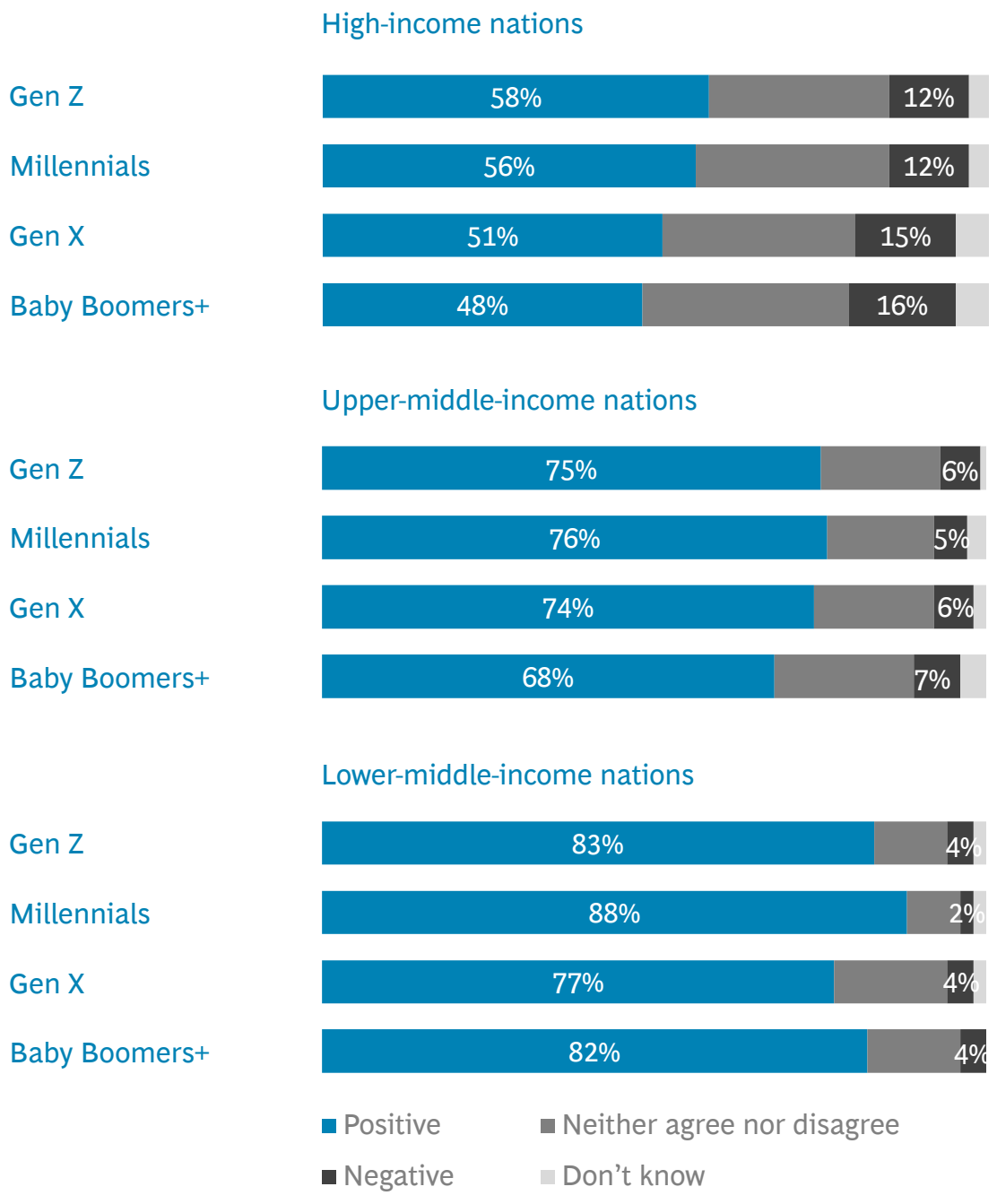
4. Positivity Toward AI

Younger generations are generally more positive towards AI's future in health, particularly in lower and upper-middle-income countries.

Feelings towards the impact of AI on the future of human health



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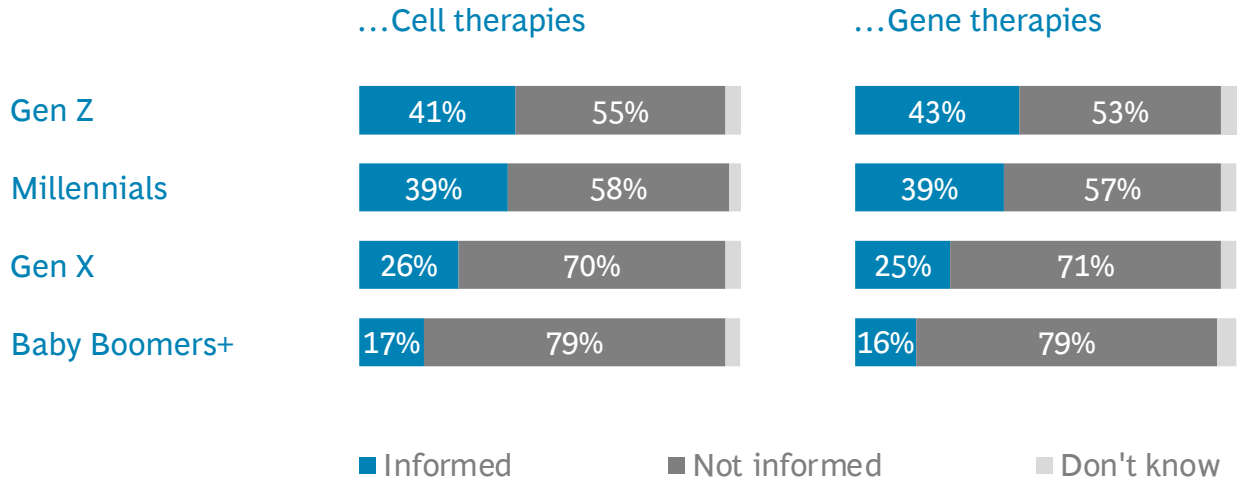
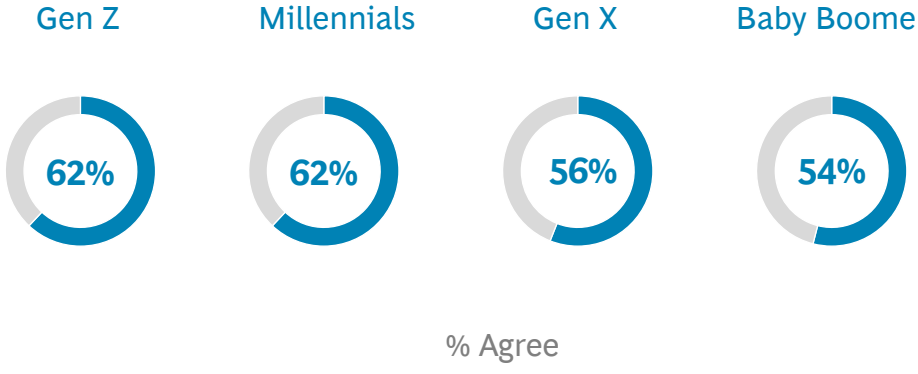
5. Cell and Gene Therapies

Younger generations are more informed about cell and gene therapies and more likely than older generations to support cure development regardless of affordability.

Degree to which people feel informed about…



Agreement that cure development is important, even if not universally affordable



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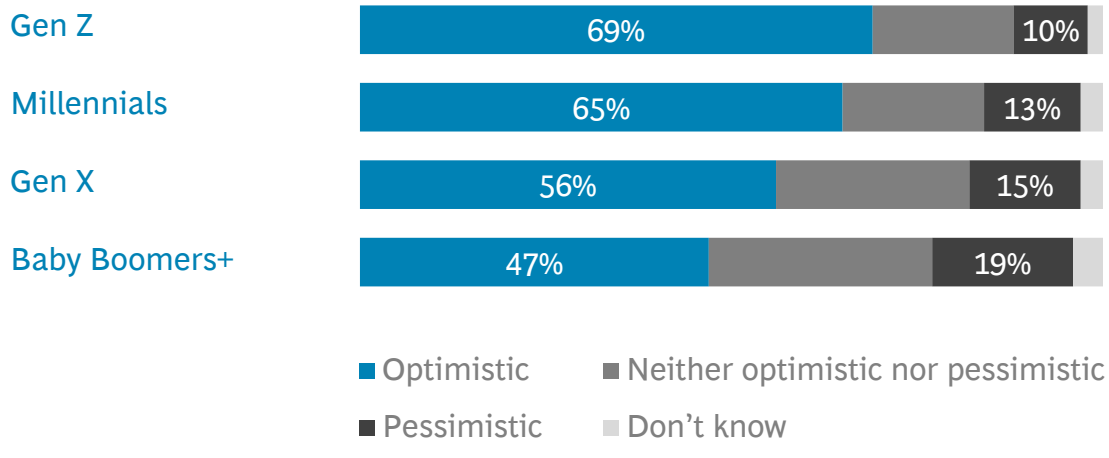
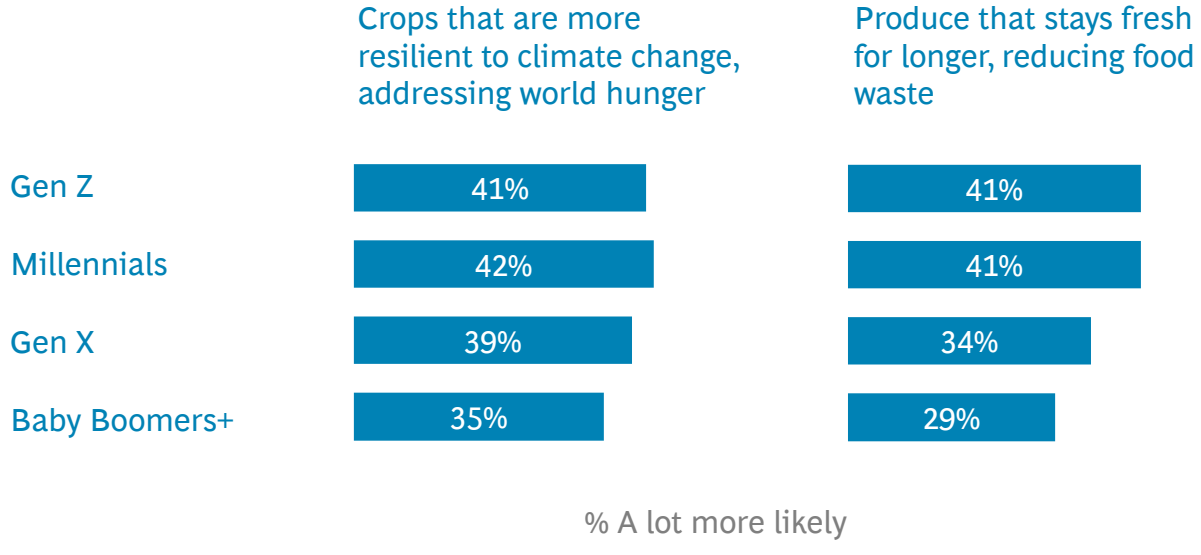
6. Environment and NGTs

Younger generations are more optimistic about the environmental benefits of scientific breakthroughs.

Level of optimism regarding the potential for scientific breakthroughs to solve environmental challenges



Likelihood for each of the following to increase positivity towards new genomic technique (NGTs)



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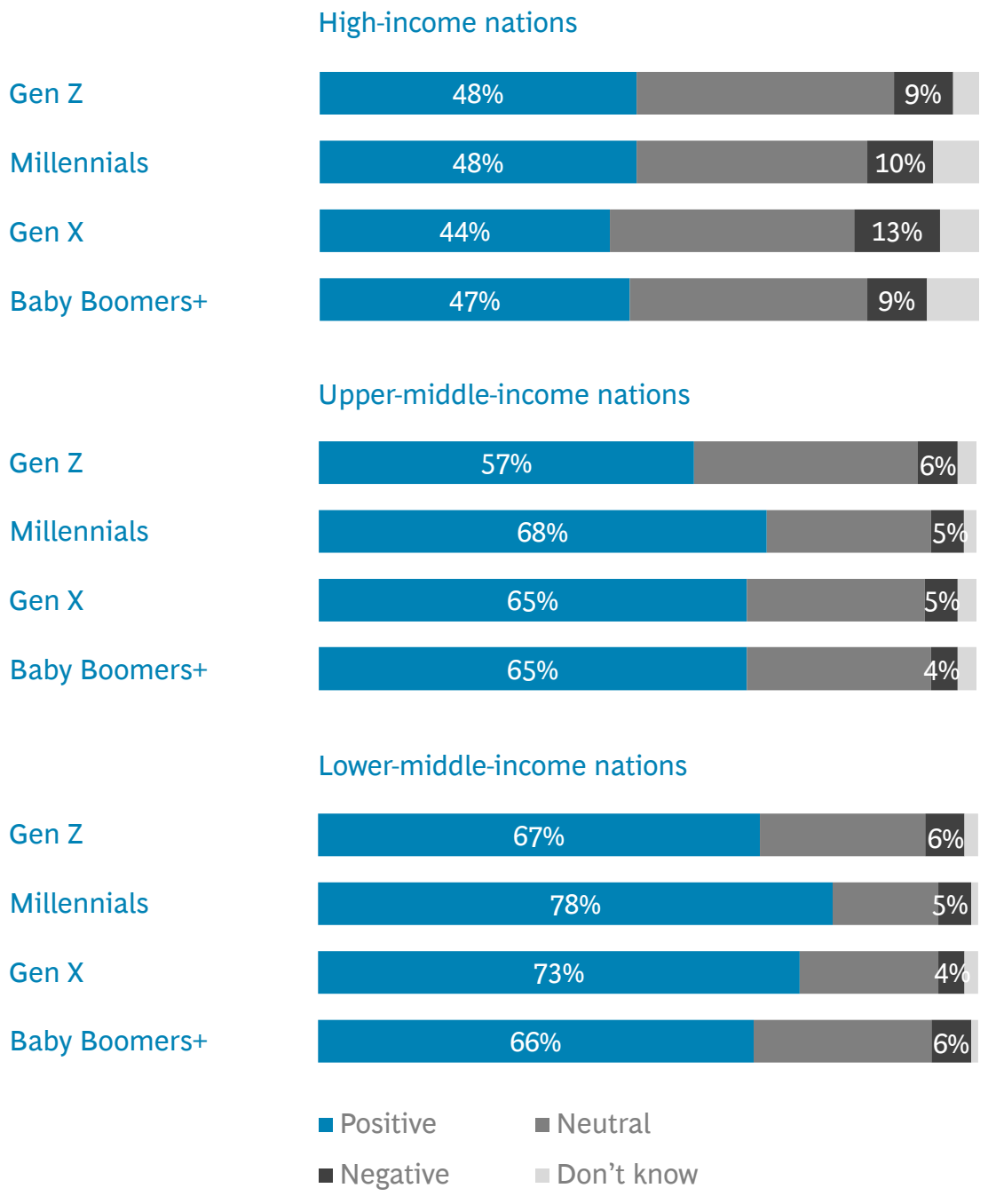
Q. To what extent are you optimistic or pessimistic about the potential for scientific breakthroughs to achieve each of the following? "The potential for scientific breakthroughs to solve environmental challenges". Note: Optimistic = only optimistic answers, very and fairly optimistic, Pessimistic = only pessimistic answers, very and fairly pessimistic.
Q. How likely or not is each of these benefits to make you feel positive towards new genomic techniques (NGTs)? "Crops more resilient to climate change, addressing world hunger", "Produce that stays fresh for longer, reducing food waste".

7. Positivity Toward NGTs

Positivity towards NGTs varies by country income level, but younger generations hold a more positive view.

Opinion of New Genomic Technique (NGTs)



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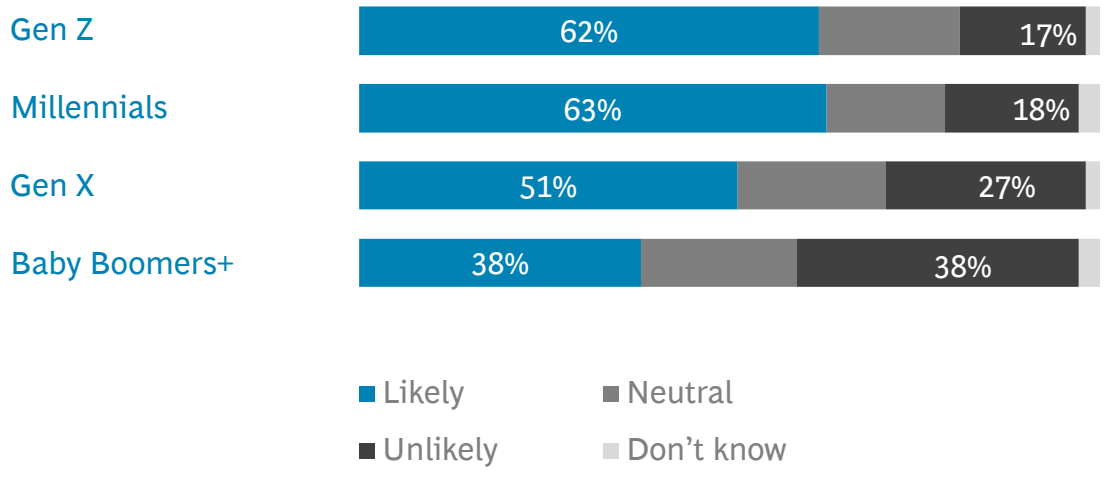
8. Cultivated Meat

Younger generations are most open to trying cultivated meat.

Likelihood to try cultivated meat



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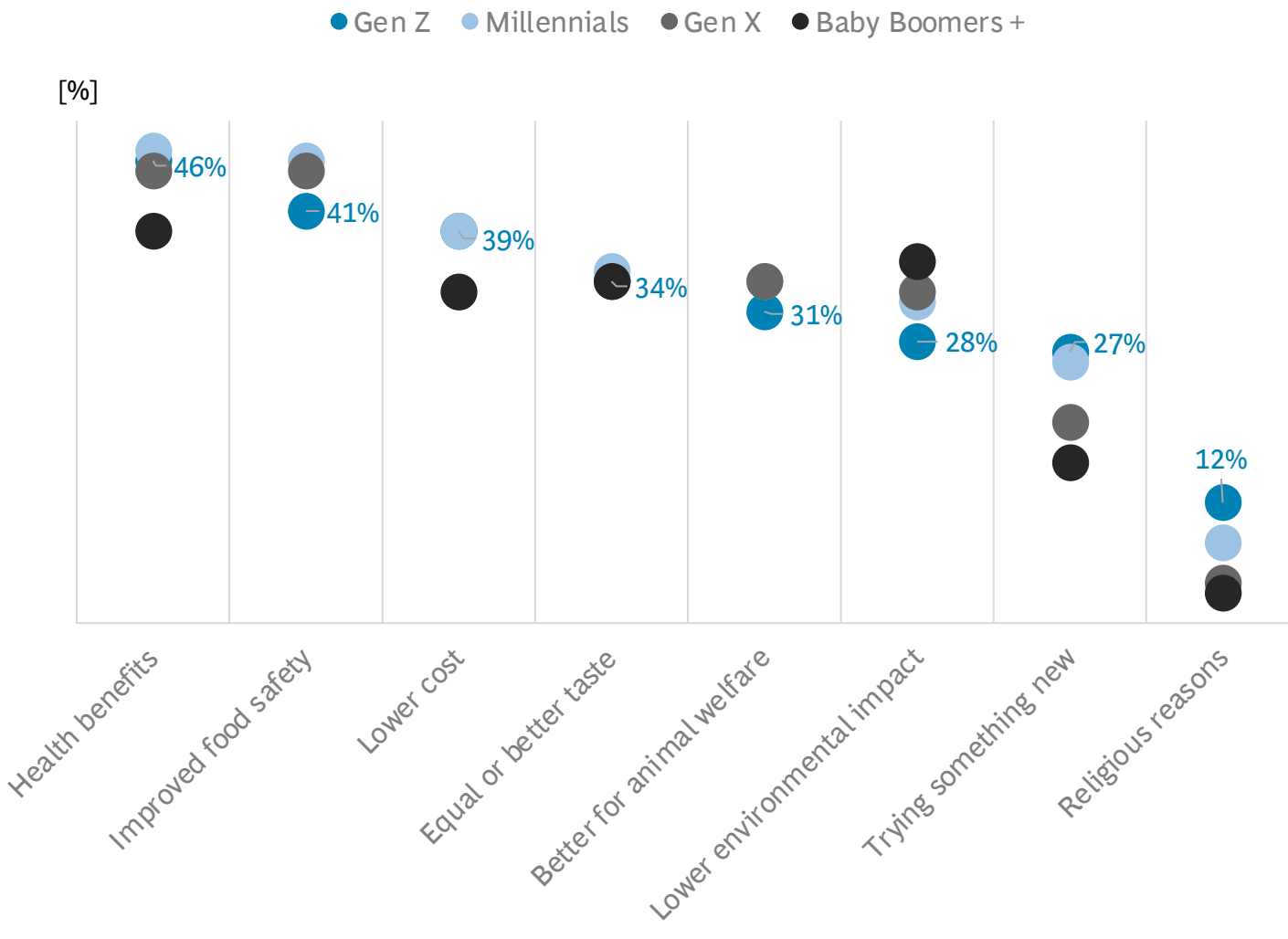
8. Cultivated Meat

Health benefits and improved food safety are seen as the top reasons for younger generations to try cultivated meat.

Top influential reasons that would encourage Gen Z to eat cultivated meat



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Methodology

A survey on public attitudes towards breakthrough technologies was conducted online by Ipsos on behalf of Leaps by Bayer and Boston Consulting Group (BCG). Conducted between August 27th and October 18th, 2024, the online survey collected 13,111 responses from adults in 13 countries: Australia, Brazil, China, France, Germany, India, Italy, Japan, Mexico, Nigeria, Singapore, South Africa, and the United States. The sample was weighted to ensure national representation based on region, age, gender, employment status, and ethnicity (in the US).

For AI in healthcare the sample included all survey respondents, for cell and gene therapy, new genomic techniques for crops, and cultivated meat certain questions were only shown to those who stated they understood or somewhat understood the respective definition of the topic (after being shown a description) were included in the sample size. Please refer to each page for information on base size.

Age groups were clustered as:
Gen Z: (1996-2006) 18-27 years old
Millennial: (1980-1995) 28-43 years old
Gen X (1966-1979) 44-57 years old
Baby Boomer+: (1928-1965) 58+ years old

Special thanks to Ipsos

For additional information on the study and its methodology
https://leaps.bayer.com/breakthroughstudy.pdf


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