Innovate Animal Ag

AMERICAN VIEWS ON TECHNOLOGY IN ANIMAL AGRICULTURE

A WORD FROM THE CEO

The last few decades of industrialization in animal agriculture have led to an unprecedented period of abundance in our food system. More people than ever have access to a practically unlimited supply of affordable, safe, and nutritious animal protein.

Yet this abundance hasn't come without costs. As we'll demonstrate in this report, Americans care deeply about the welfare of farm animals, and want them to be handled respectfully and responsibly. Producers understand all too well that this declining consumer trust in animal agriculture threatens the industry's long term sustainability.

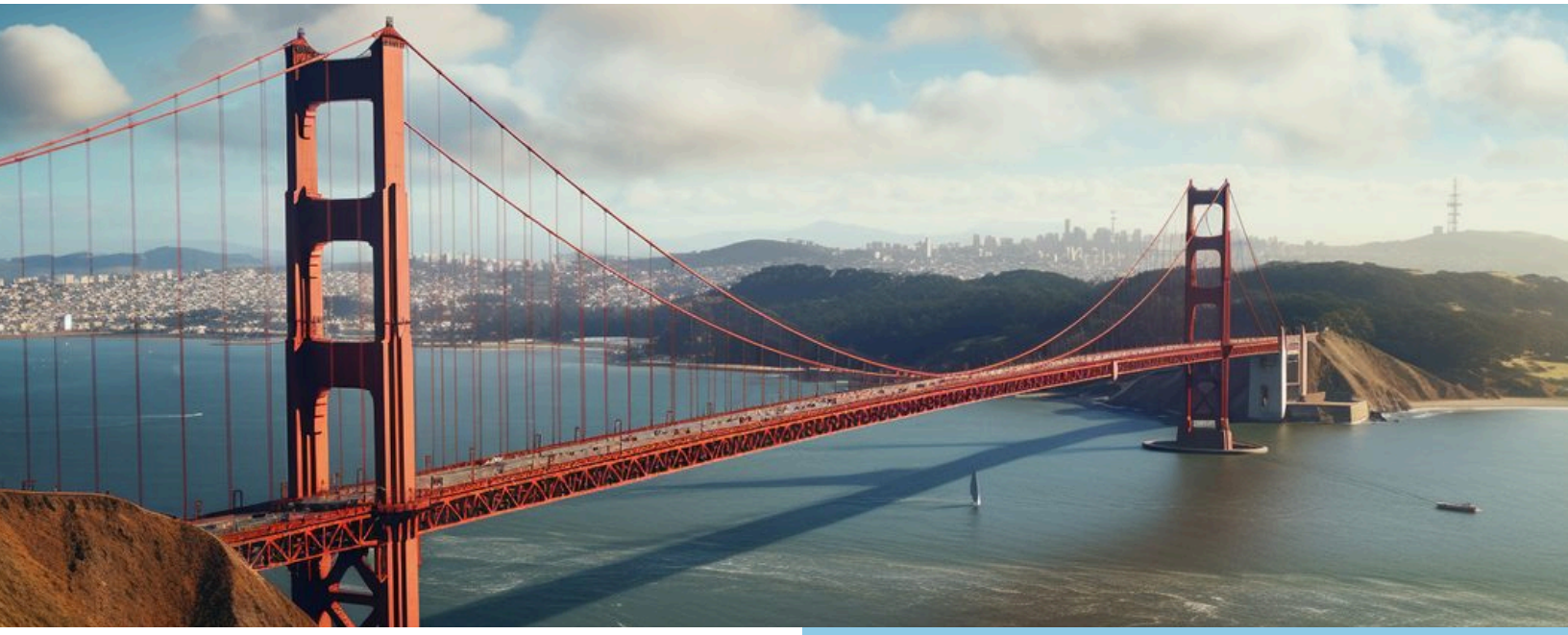
Recent polling from Positive Sum Strategies sheds light on how Americans believe we should respond to this challenge. One solution that's clearly not practical is vegetarianism: Americans stridently reject the logic that we should sacrifice the abundance we've gained in our food system by forgoing animal products altogether.

Another possible solution is regenerative and organic agriculture. While the recent successes of these initiatives has been a positive development, this polling demonstrates that consumers are not simply yearning for a more traditional, naturalistic method of agriculture, where animal husbandry seeks to re-learn what was successful in the past.

Rather, Americans fundamentally want practical solutions to the problems they see. In many cases, leaning into cutting-edge, science-backed technologies is seen as the most sensible way to solve challenges in animal health and welfare. Contrary to conventional wisdom, this survey indicates that Americans broadly approve of the use of technologies when they solve clear, understandable problems, or improve animal welfare. Even controversial technologies such as gene-editing are acceptable if they're targeted at the right problem, such as stopping HPAI.

This presents an opportunity for business leaders and policymakers alike. Technology is powerful because it allows us to cost-effectively solve many of the most pressing challenges in animal health and welfare at scale, without having to give up the abundance we've created in our food system. And as long as consumers are educated on why technologies are used, they will gladly support companies and policymakers that help make this a reality.

Robert Yaman
CEO, Innovate Animal Ag



About Innovate Animal Ag

Innovate Animal Ag is a 501(c)3 nonprofit think tank that promotes technology as a practical way to improve animal health and welfare while also restoring consumer trust in animal agriculture. We conduct research on cutting-edge technologies that can improve animal health and welfare, then publish high-quality, science-backed resources to demystify the technologies for business leaders and policymakers. We then work directly with the companies developing and implementing these technologies to ensure they are rewarded for the important work they do.

Technology is powerful because it eliminates tradeoffs. It can allow us to meet the expectations of the modern consumer around animal welfare, while simultaneously ensuring we can maintain an abundant supply of safe and affordable animal protein.

Key Takeaways

Farm animal welfare is a popular, bipartisan issue.

- 65% of Americans agree that it's important for food companies to find new ways to guarantee the humane treatment of animals on farms, including majorities in all political parties.

- 74% of Americans prefer that technology is used to improve animal welfare rather than to lower the cost of food.

Americans favor technology, not vegetarianism.

- Across a number of welfare challenges, a plurality (average 39%) of Americans favor technological solutions compared to abstaining from consuming animal products (average 6%).

- Only 30% of Americans have been hesitant to purchase meat or eggs based on concerns over animal welfare.

Americans favor technology if they understand the problem, but are skeptical otherwise.

- Americans generally approve of using technology to improve animal welfare (e.g. 79% approve of solving boar taint with technology), or to solve concrete problems (e.g. 71% support using gene editing for avian influenza), but disapprove of using technology merely to lower costs (e.g. 58% disapprove of using AI to increase stocking density.)

Business leaders and policymakers have an opportunity.

- 50% of Americans are willing to pay more for foods produced more humanely.

- 65% of Americans would support government incentives for animal welfare-improving technologies, including majorities in both parties.

Recent polling published by Positive Sum Strategies shows that animal welfare has broad bipartisan support like few other issues in the US. Americans are concerned about the ways that farm animals are treated, and prefer practical technology-based solutions compared to alternatives such as not eating meat. It's also important that Americans understand why the technology is being used, otherwise they react more negatively.

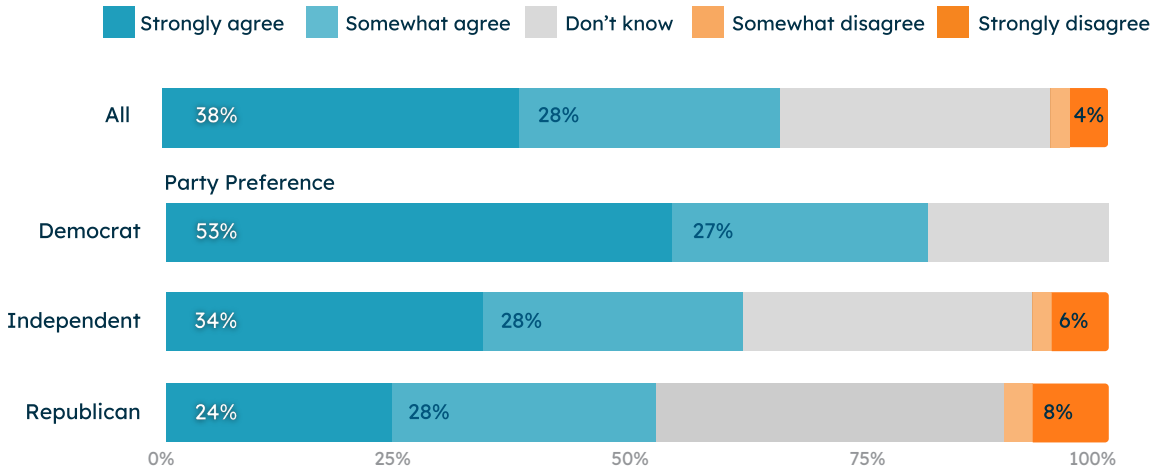
These data demonstrate that producers in animal agriculture can and should talk about their use of technology, as long as it solves a clear problem that consumers would understand. Additionally, if policymakers enact policies that incentivize the development and use of technology to improve animal health and welfare (e.g. through tax credits or low interest-rate loans), they will have broad bipartisan support while also supporting American farmers, and securing America's position as a global leader in innovation.

Animal Welfare is a popular, bipartisan issue

Like few other issues in our politically divided climate, animal welfare generally receives broad bipartisan support. 65% of Americans agree that it's important for food companies to find new ways to guarantee the humane treatment of animals on farms, versus only 6% that disagree. While this statement receives more support from Democrats than Republicans, it still gains support from majorities across all political parties.

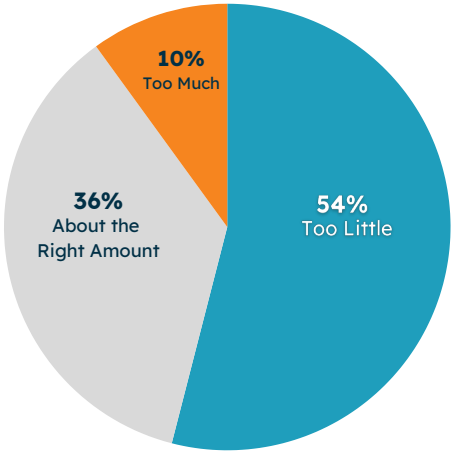
Americans Believe Food Companies Should Find New Ways to Improve Animal Welfare

How much do you agree or disagree with the following statement?
I believe it's important for food companies to find new ways to guarantee the humane treatment of animals on farms.



Most Americans Think We Do Too Little to Improve the Well-Being of Farm Animals

Do you think broadly that in our society we do _____ to improve the well-being of farm animals?



Additionally, a majority (54%) of Americans believe that we do too little to improve the well-being of farm animals.

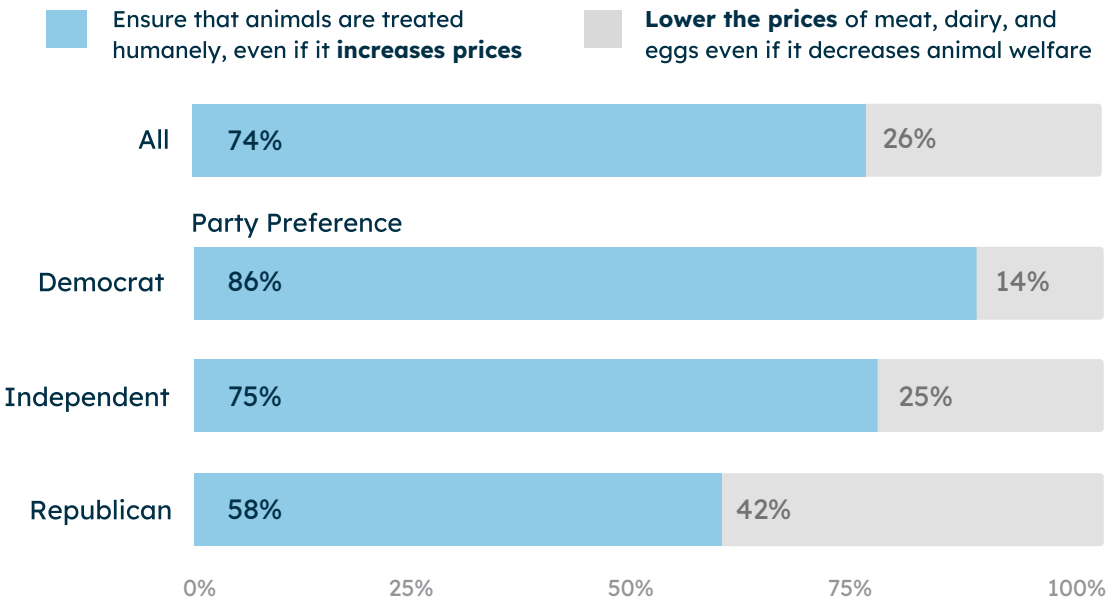
These findings mirror previous polling showing broad support for animal welfare issues. For example, a recent poll by YouGov showed animal rights as the fourth most supported political cause (behind free speech, religious freedom, and racial equality), and second least opposed cause (only behind free-speech).

One might suspect that concerns over farm animal welfare goes down as concerns over food costs rise. However, even in today's economic climate, where concerns over cost of living are especially high, a shocking 74% of respondents said that using technology to improve welfare is a more worthwhile use of technology than lowering food costs.

A Majority of Americans Want Animal Welfare Even if It Increases the Price of Animal Products

When thinking about technological advances in animal farming, which comes closer to your view?

Companies should focus on using technology to:

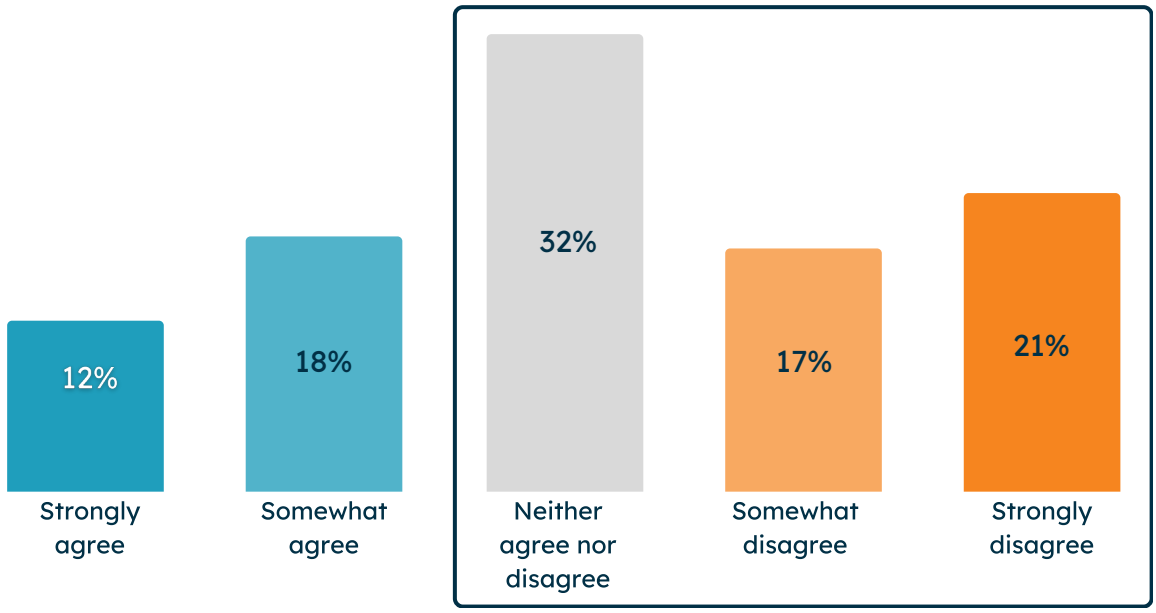


Americans favor technology, not vegetarianism

This widespread concern for animal welfare does not translate into Americans believing we should not eat animal products. Only 30% of consumers report having been hesitant to purchase animal products in the past because of things they had heard about the way animals were treated. What hesitation does exist may lead to reductions in meat consumption, or may push towards higher-welfare products, but it does not lead to abstaining from animal products altogether, as confirmed by the low rates of vegetarianism and veganism in the US.

For the Average Consumer, Concern for Animal Welfare Does Not Mean That We Should Abstain from Animal Products

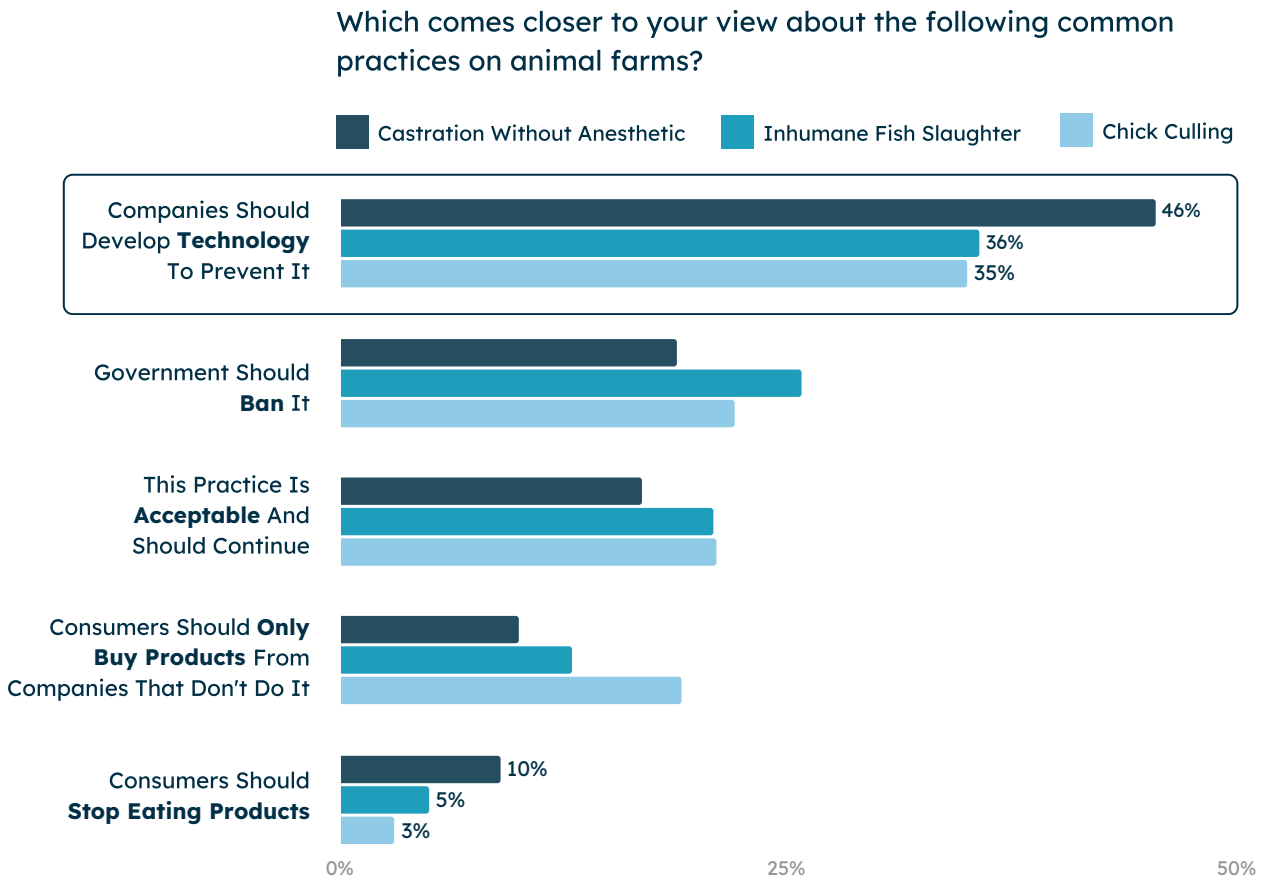
How much do you agree or disagree with the following statement?
I have been hesitant in the past to buy meat, dairy, or eggs because of things I've heard about the way animals are treated.



These data mirror other polling that also shows an overwhelming belief that diet choice is a personal issue, and that concern for animal welfare does not necessarily mean that we abstain from eating animal products. For example, a poll originally conducted by Sentience Institute, and reproduced by Oklahoma State University, showed that although 74.6% of Americans reported feeling some discomfort with the animal farming industry and 49.1% even reported wanting to "ban slaughterhouses," an overwhelming 95.9% believe that whether to eat meat is a personal choice.

When presented with possible solutions to three commonly cited animal welfare challenges, "stop eating products" was consistently the least popular option, receiving only 10% for pig castration, 5% for inhumane fish slaughter, and 3% for male chick culling. However, one alternative stood out as the most popular, which was using technology to prevent the practice altogether. 46% of Americans favored technological solutions to pig castration, 36% for inhumane fish slaughter, and 35% for chick culling. These data suggest that technology could present a practical and commonsense way to solve important animal welfare challenges.

Technology Is the Most Sensible Solution to Animal Welfare Challenges



The Promise of Technology

The popularity of technological solutions may come as a surprise, given that many trends in food production point towards simpler, more naturalistic methods of producing foods (e.g. the growth of the organic food segment and of regenerative agriculture). However, this misses an important subtlety in the way that Americans think about the use of technology in animal agriculture. Survey respondents were presented with a number possible uses of technology in animal agriculture and asked whether they believed it was a "Good use of technology," or a "Bad use of technology." Americans largely approved of technologies that had a clear benefit for animal welfare.

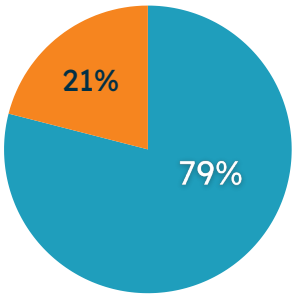
Americans Approve of Technologies That Have a Clear Benefit for Animal Welfare

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology.

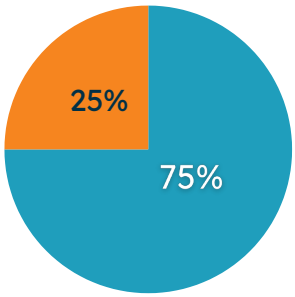
Good Use of Technology

Bad Use of Technology

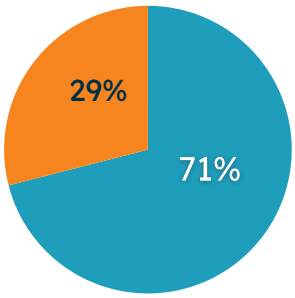
Developing a Way to **Remove Boar Taint via a Shot**, Rather Than Through Castration With a Knife



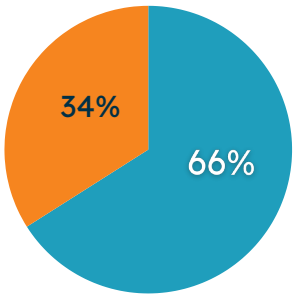
Developing **Mobile Chicken Coops**, so That Chickens Consistently Have Fresh Pasture to Graze On



Developing Technology to **Hatch Eggs on Farm**, so Live Chicks Don't Have to Be Transported Long Distances



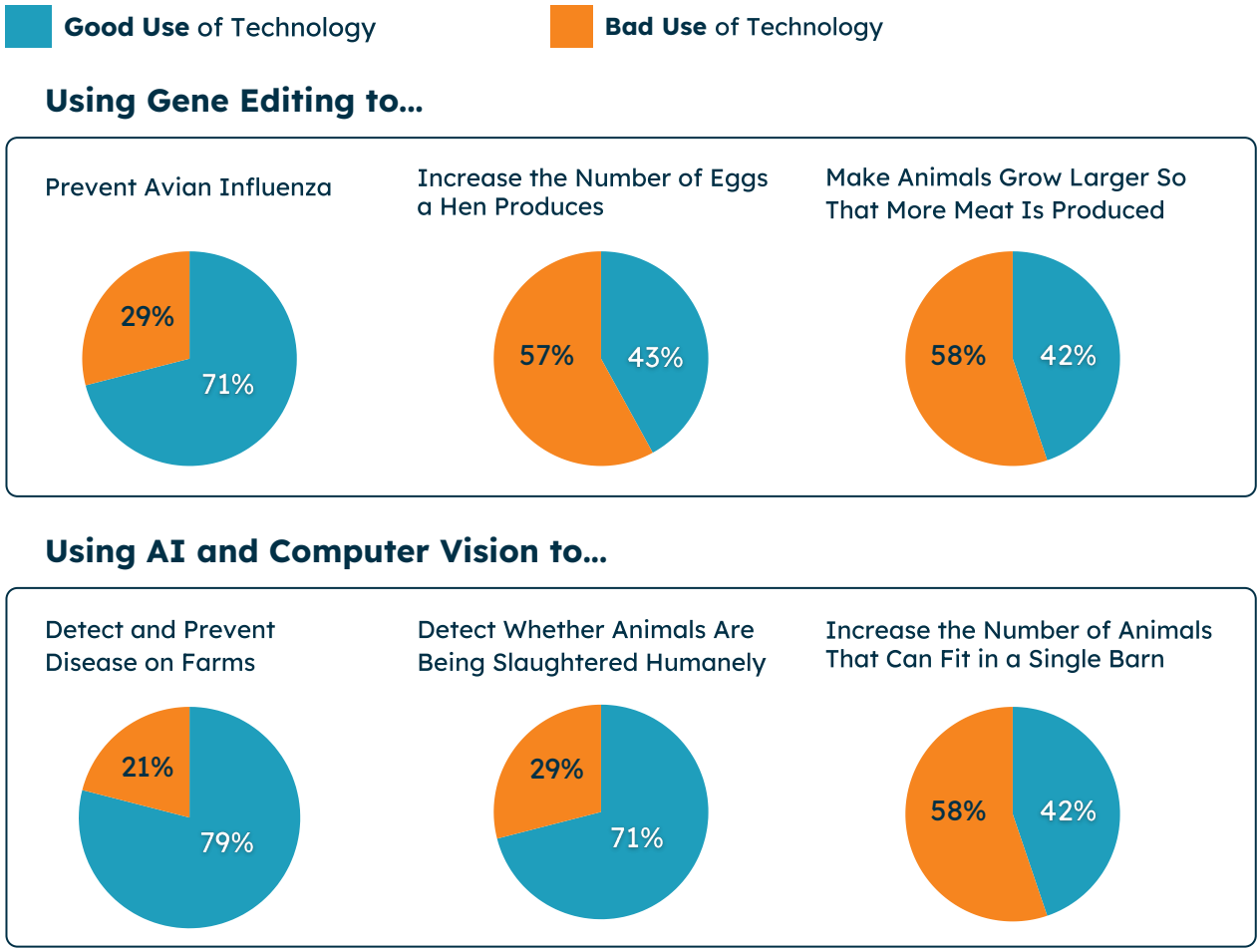
Developing Technology That Allows Egg Producers to **Hatch Only Female Chickens**, to Avoid Male Chick Culling



To further elucidate how Americans think about technology, survey respondents were presented with a number of different applications of the same technology: either gene-editing, or the use of AI and machine vision. While there may or may not be actual applications of these technologies to these problems in practice, these questions treated the technology as a constant so that differing attitudes towards the *application* of technology could be assessed. Applications that were purely pointed at economic benefit or lowering costs (such as increasing the number or size of animals within a barn) were seen as bad uses of technology, but technologies that solved a problem that Americans understood (such as avian influenza) were good. These data indicate that Americans are not wholly opposed to applications of technology in animal agriculture - they just need to clearly understand the benefit that the technology provides.

Americans Prefer Technology Solves Problems They Understand, Rather than Improve Economics

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology.



Practical Takeaways

Businesses

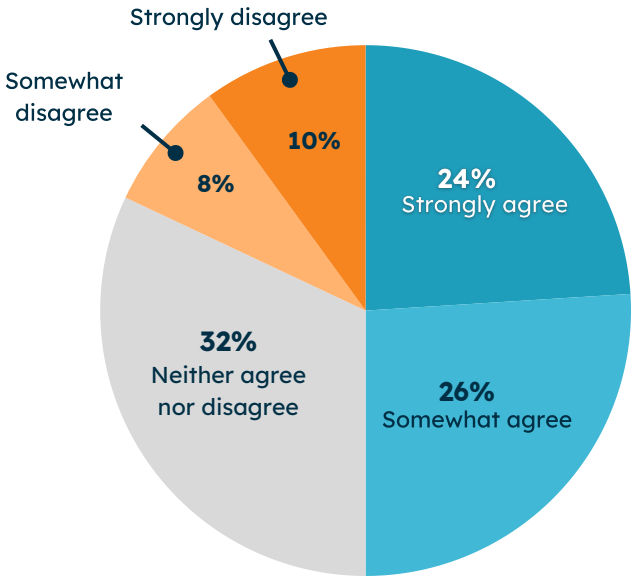
These data indicate that businesses operating in the animal agriculture supply chain can and should talk about what they're doing to improve animal welfare. As long as consumers understand the "why" of how technology is used, they will react favorably. Additionally, half of Americans indicate that they are willing to pay more for foods that are produced more humanely. Products with improved welfare offer business opportunities to reach consumers with higher willingness-to-pay, helping to increase margins.

For example, in-ovo sexing is a new technology coming to market in the egg industry where the sex of a chicken egg can be determined while it's still developing. This allows egg producers to hatch only females, providing an alternative to the culling of day-old male chicks. In a previous survey commissioned by Innovate Animal Ag, 71% of American egg buyers reported being willing to pay a premium for eggs produced using in-ovo sexing, indicating that this is a particularly important issue for consumers. Roughly half of consumers were willing to pay 60 cents or more per dozen, substantially more than the anticipated 12-36 cents per dozen that in-ovo sexing will add in the short term. Ultimately, consumers will reward companies that can find innovative ways to improve animal welfare, and that can communicate effectively about it.

Half of Americans Are Willing to Pay More for Foods Produced More Humanely

How much do you agree or disagree with the following statements?

I am willing to pay more for foods that are produced more humanely.

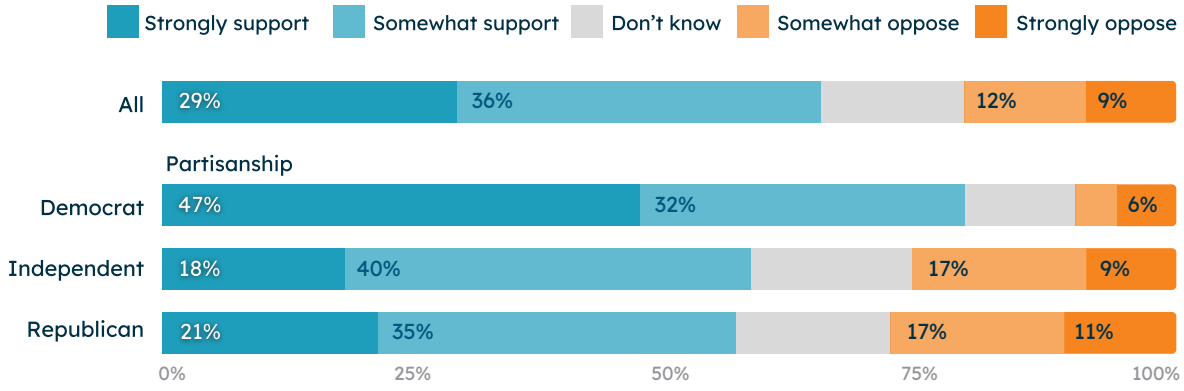


Policymakers

These data also present an opportunity for policymakers. 65% of Americans, including majorities in both parties, would support the government providing incentives such as low-interest loans or research grants to producers to research and implement new technologies that could improve animal welfare.

Americans Across Both Parties Support Government Incentives For New Technologies That Improve Animal Welfare

Would you support or oppose the government providing low-interest loans or research grants to farms to research and implement new technologies that could improve animal welfare?



Indeed, it's often stated that America is always 10-15 years behind Europe when it comes to agricultural innovation, especially around animal welfare. This position in the global market is unpopular with Americans, with 73% agreeing that it's important for the US to be a global leader in agricultural innovation. Policies which incentivized the development and implementation of new cutting edge technologies in agriculture could help recover America's leadership in global innovation, directly help farmers compete in the global economy, and cement America's moral leadership in the field of animal welfare.

Full Data

This survey was released and conducted by the nonpartisan polling firm Positive Sum Strategies. Data was collected in two batches: the first was an online sample of 1022 respondents fielded over web panels on January 15, 2024, and the second was an online sample of 1000 respondents fielded over web panels on January 21, 2024. Both surveys were weighted to education, gender, race, respondent quality, and 2020 election results.

How much do you agree or disagree with the following statements about farm animal welfare? I believe it's important for food companies to find new ways to guarantee the humane treatment of animals on farm

	All	D	I	R
Strongly agree	38	53	34	24
Somewhat agree	28	27	28	28
Neither agree nor disagree	29	19	31	37
Somewhat disagree	2	0	2	3
Strongly disagree	4	0	6	8
Agree	65	80	62	52
Disagree	6	1	7	11
Net Support	59	80	54	41

Do you think broadly that in our society we do...

	All	D	I	R
Too much to improve the well-being of farm animals	10	3	13	15
About the right amount to improve the well-being of farm animals	36	25	36	49
Too little to improve the well-being of farm animals	54	72	51	36

When thinking about technological advances in animal farming, which comes closer to your view?

	All	D	I	R
Companies should focus on using technology to lower the prices of meat, dairy, and eggs even if it decreases animal welfare.	26	14	25	42
Companies should focus on using technology to ensure that animals are treated humanely, even if it increases prices	74	86	75	58

How much do you agree or disagree with the following statements about farm animal welfare? I have been hesitant in the past to buy meat, dairy, or eggs because of things I've heard about the way animals are treated

	All	D	I	R
Strongly agree	12	18	9	8
Somewhat agree	18	20	20	13
Neither agree nor disagree	32	35	35	26
Somewhat disagree	17	18	15	17
Strongly disagree	21	9	22	36
Agree	30	38	29	22
Disagree	38	27	37	53
Net Support	-8	11	-8	-31

In the US pork industry, male pigs are generally castrated with a knife without anesthetic, since uncastrated pigs sometimes develop a strong, unpleasant odor known as "boar taint" in their meat. Which comes closest to your view:

	All	D	I	R
Consumers should only buy pork from companies that don't do it	9	7	13	7
Consumers should stop eating pork	10	11	12	6
Governments should ban it	19	27	13	14
This practice is acceptable and should continue	17	8	18	27
Meat companies should develop technology to remove boar taint via giving the pigs a shot	46	47	44	47

In the US seafood industry, fish are often slaughtered in inhumane ways, such as via an ice bath or through suffocation. Which comes closest to your view:

	All	D	I	R
Consumers should only buy fish from companies that slaughter fish humanely	13	13	12	13
Consumers should stop eating fish	5	4	5	5
Governments should ban inhumane slaughter practices	21	25	21	16
Current practices are acceptable and should continue	26	17	27	36
Seafood companies should develop technologies that allow for the humane slaughter of fish	36	40	35	30

In the United States egg industry, male chicks are killed at birth because they have no economic use. The practice is called "chick culling." Which comes closer to your view:

	All	D	I	R
Consumers should only buy eggs from companies that don't do it	19	24	14	18
Consumers should stop eating eggs	3	4	5	1
Egg companies should develop technology to prevent it	35	42	31	32
Government should ban it	22	21	23	22
This practice is acceptable and should continue	21	9	27	26

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Developing technology that allows egg producers to hatch only female chickens, to avoid male chick culling (the common practice of killing of day-old male chicks because they don't lay eggs)

	All	D	I	R
Good use of technology	66	72	69	56
Bad use of technology	34	28	31	44

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Developing a way to remove boar taint via a shot, rather than through castration with a knife

	All	D	I	R
Good use of technology	79	83	77	76
Bad use of technology	21	17	23	24

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Developing mobile chicken coops, so that chickens consistently have fresh pasture to graze on

	All	D	I	R
Good use of technology	75	83	73	68
Bad use of technology	25	17	27	32

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Developing technology to hatch eggs on farm, so that live chicks don't have to be transported long distances

	All	D	I	R
Good use of technology	71	80	66	67
Bad use of technology	29	20	34	33

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Using gene-editing to prevent avian influenza

	All	D	I	R
Good use of technology	71	78	69	63
Bad use of technology	29	22	31	37

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Using gene editing to create pigs that never develop boar taint (Boar taint refers to a strong, unpleasant odor that develops in the meat of uncastrated pigs. In the US pork industry, this has led to male pigs being castrated with a knife)

	All	D	I	R
Good use of technology	65	68	69	56
Bad use of technology	35	32	31	44

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Using AI and computer vision to increase the number of animals that can fit in a single barn

	All	D	I	R
Good use of technology	42	43	45	40
Bad use of technology	58	57	55	60

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Using gene-editing to make animals grow larger, so that more meat is produced

	All	D	I	R
Good use of technology	42	43	48	33
Bad use of technology	58	57	52	67

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology: Using AI and computer vision to detect and prevent disease in farm animals

	All	D	I	R
Good use of technology	79	88	81	68
Bad use of technology	21	12	19	32

Below are some ways that technologies could be used in animal farming. For each, say whether you think it is a good use of technology or a bad use of technology Using AI and computer vision to detect whether animals are being slaughtered humanely

	All	D	I	R
Good use of technology	71	75	72	65
Bad use of technology	29	25	28	35

How much do you agree or disagree with the following statements about farm animal welfare? I am willing to pay more for foods that are produced more humanely

	All	D	I	R
Strongly agree	24	35	22	14
Somewhat agree	26	32	25	19
Neither agree nor disagree	32	25	34	39
Somewhat disagree	8	4	8	12
Strongly disagree	10	4	10	17
Agree	50	67	48	33
Disagree	18	8	18	29
Net Support	32	59	30	4

Would you support or oppose the government providing low-interest loans or research grants to farms to research and implement new technologies that could improve animal welfare?

	All	D	I	R
Strongly agree	29	47	18	21
Somewhat agree	36	32	40	35
Neither agree nor disagree	12	4	17	17
Somewhat disagree	9	6	9	11
Strongly disagree	14	11	16	15
Agree	65	80	58	56
Disagree	21	9	26	29
Net Support	44	70	32	27

How much do you agree with the following: It is important for the United States to be the global leader when it comes to agricultural innovation

	All	D	I	R
Strongly agree	40	39	37	44
Somewhat agree	33	40	32	26
Neither agree nor disagree	9	8	9	10
Somewhat disagree	4	1	5	5
Strongly disagree	14	12	17	14
Agree	73	79	69	71
Disagree	13	9	14	15
Net Support	60	70	55	55

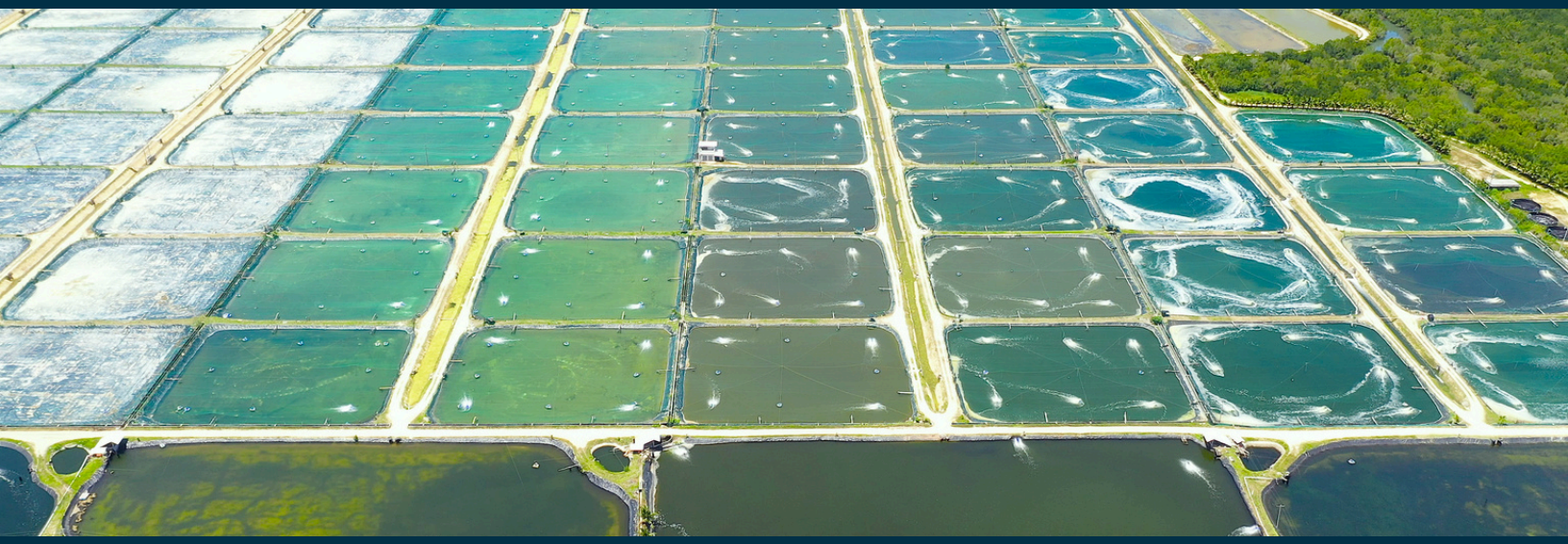
Stay up to Date

To stay up to date with the most recent information on technology in American agriculture, sign up for our newsletter at innovateanimalag.org and follow us on LinkedIn.

Our Website

LinkedIn

Contact Us



Innovate Animal Ag