

Communicating with Consumers: Antibiotic Issues and Food Animal Production

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Objectives

- Provide consumer perspective and market responses on certain aspects of antibiotic use in food animals and the “hot button” issues
 - What’s at stake: Global One Health
 - What questions concern consumers most
 - Addressing those questions
 - Food for thought

Our “Global One Health”

- Global interdisciplinary approach to address challenges of interactions between animals, humans and the environment.¹
- Primary emphasis on diseases.
- Of the ~ 1,500 diseases that affect people, 2/3's can pass between animals and humans.²
- In addition, world production of food animals is reduced by more than 20% due to disease,² creating food security challenges.



¹ www.ifahsec.org.

² OIE estimate, IFAH.

The challenge

- Strong agreement among experts for balancing “one” global health; the question is:

How can we preserve the efficacy of currently available antimicrobials for use in people and animals?



Why people & animals share antibiotic classes

- Pathogens are similar in people and animals
- R&D-driven for humans; animals secondary (yet important) beneficiaries

Potential risks cited for “sharing”	Potential risks cited for not “sharing”
Resistance development, with human health implications	Animal mortality
Residues in meat/milk from improper use	Disease outbreaks, with animal and human health risks
	Illegal and off-label use

It's a complex issue, often incorrectly simplified, thus misleading to the public



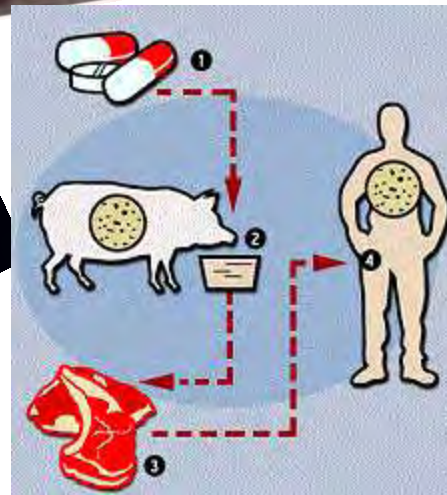
It's not chicken feed.
Antibiotic resistance adds billions to health care costs.

To reform health care we need to reduce health care costs, and that includes reducing the drug-resistant diseases that cost our country billions. This means stopping the misuse of the antibiotics our families rely on. Many industrial farms routinely feed these drugs to chickens and livestock that aren't sick, which promotes the development of deadly antibiotic-resistant infections.

It's time to limit the use of antibiotics in animal agriculture to treating diagnosed diseases. Support H.R. 1540 and S. 619, the Preservation of Antibiotics for Medical Treatment Act (PAMTA).

Union of Concerned Scientists
American Academy of Pediatrics
SaveAntibiotics.org
PEW RESEARCH CENTER

Who's hogging our antibiotics?
Up to 70% of U.S. antibiotics go to farm animals that aren't sick.



Denmark: Therapeutic tonnage \uparrow after elimination of GP use

Kilograms (kg) of antibiotics used in Denmark for Food Animals



Ban implemented 1999. Therapeutic Usage increase (%) since 1996.

The Danish Integrated Antimicrobial Resistance Monitoring and Research Programme (DANMAP); www.danmap.org.

So where does that leave consumers?

Major Challenges for Animal Agriculture

Anthropomorphism

- Pets have changed peoples' view of animal “use”
- “You wouldn't treat your dog like that.”

Agricultural Alienation

- “Milk comes from the grocery store”
- Most Americans are multiple generations removed from the farm
- Yet they care about the system

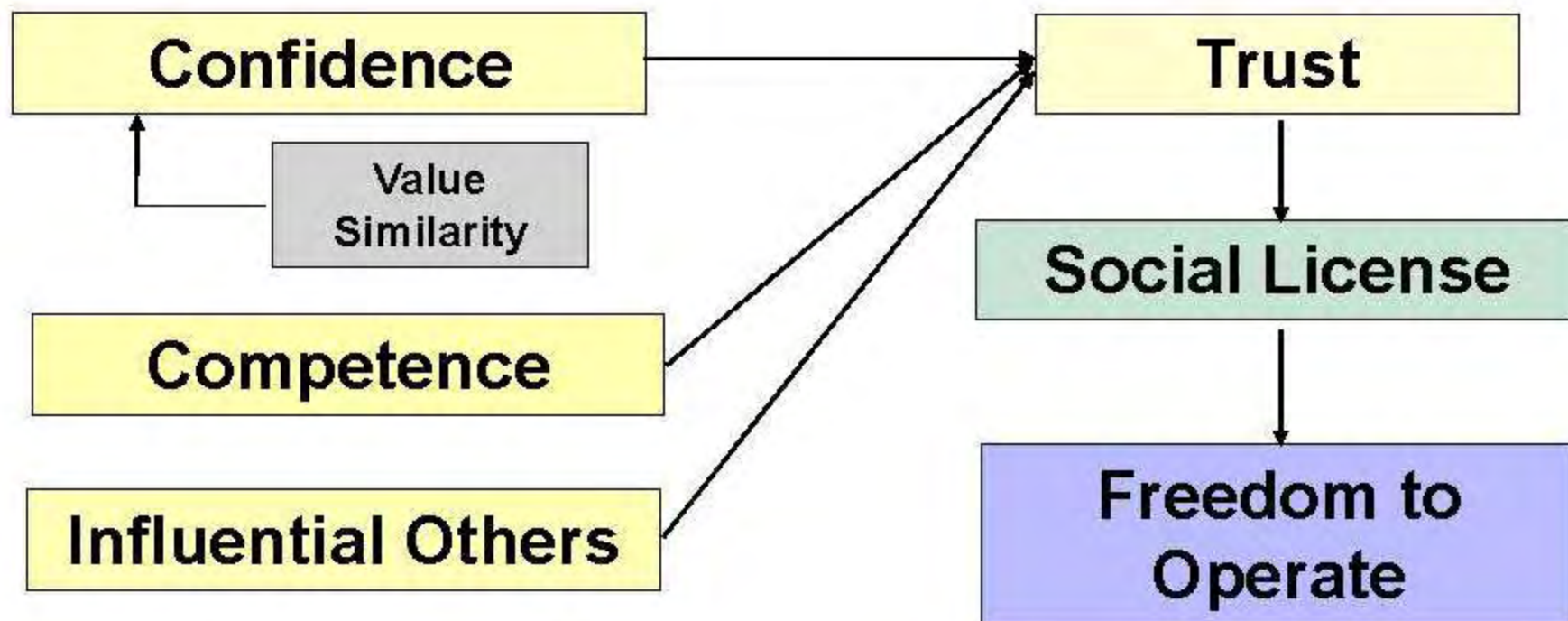
Loss of Faith in Science and Technology

- Complexity at a level that many cannot understand



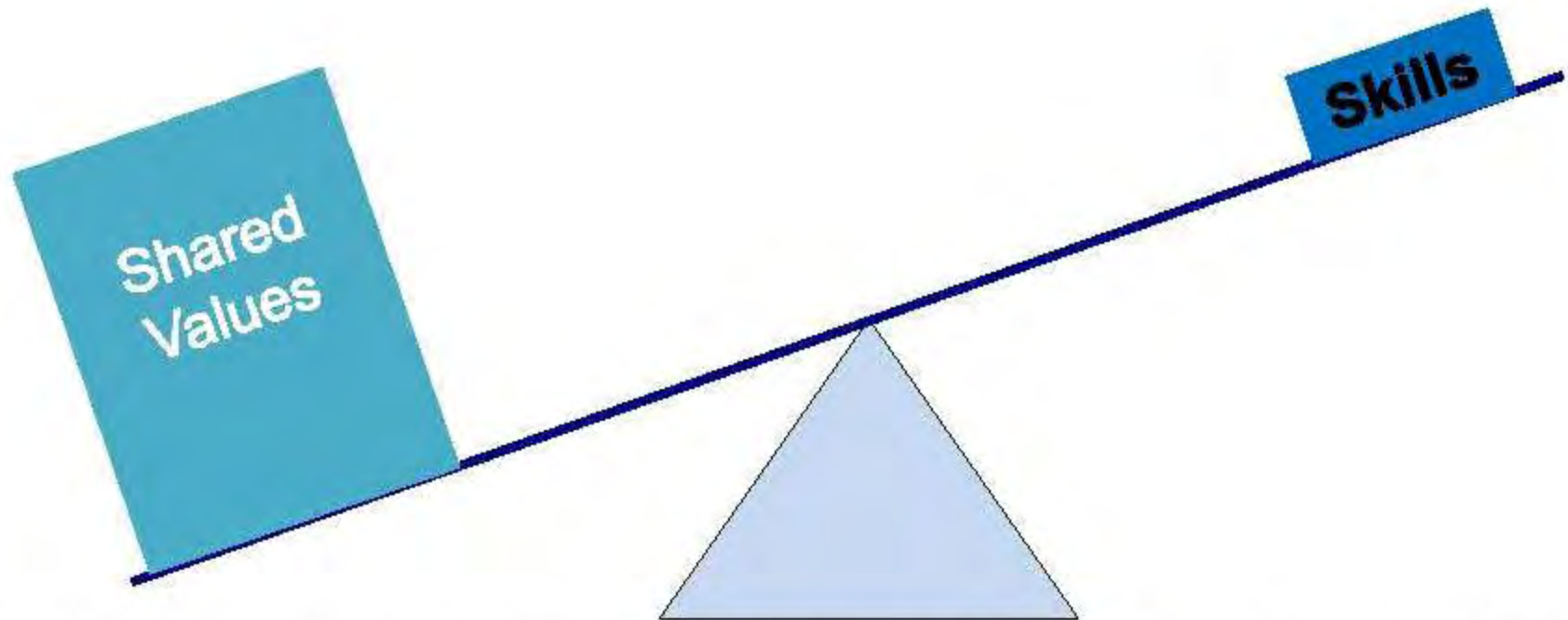
Earning and Maintaining the Social License

(Sapp/CMA)



Trust research was published in December, 2009 – *Journal of Rural Sociology*

What Drives Consumer Trust?



Shared values are 3-5X more important in building trust than demonstrating competence

Trust research was published in December, 2009 – *Journal of Rural Sociology*

What is on the minds of consumers?

What about all those residues in the meat??

Is ANYbody watching what they give these animals??

Am I better off just buying organic?



Consumer research

- Pfizer Animal Health sponsored research to better understand consumer perceptions about animal medicine use and food safety
- Quantitative study, fielded 11/2008,
- >2000 adult non-vegans
- Established their baseline feelings about agriculture and food safety
- Participants were then presented with a **basic description** of animal care, antibiotic use on the farm and safeguards in place along the food chain
 - Measured attitude changes after reading the description

Description of Dairy Cow Production

Cows are raised by a team of people committed to the animals' health and creating wholesome, high quality food for consumers. From the beginning of cows' lives, veterinarians have a very important role in overseeing their health. As a part of their care, vaccines are oftentimes administered to cows to protect them from various illnesses.

As with any animal or human, cows can sometimes get sick over the course of their lives. In these situations, FDA-approved medicines, like antibiotics, are used to treat sick dairy cows under the supervision of licensed veterinarians.

Description of Dairy Cow Production (continued)

If an antibiotic is administered to help a sick cow, then that cow's milk is not allowed to enter the food supply until the antibiotic has sufficiently cleared the animal's system. During this "withholding period", the cow's milk is discarded. The withholding period, which is established by the FDA for each approved antibiotic, ensures that the antibiotic does not end up in the milk and dairy products found in grocery stores and markets where you make milk and dairy purchases.

There is also an extensive testing system in place to ensure that no traces of antibiotics are in milk and dairy products. For instance, every load of milk sold by a dairy producer is tested multiple times for traces of antibiotics as established and overseen by state and government agencies. If their dairy products, including milk, test positive for any traces of antibiotics, these products are destroyed and the offending dairy producers are faced with steep fines.

Consumers are compassionate

- Despite having no information, consumers mostly support farm antibiotic use for treatment of sick animals
 - Pfizer (> half agree should be treated, 2008)
 - PEW research (61% strongly favor, 2011)
- However, not sure treated animals should go into the food supply (almost 2/3's say no or don't know)



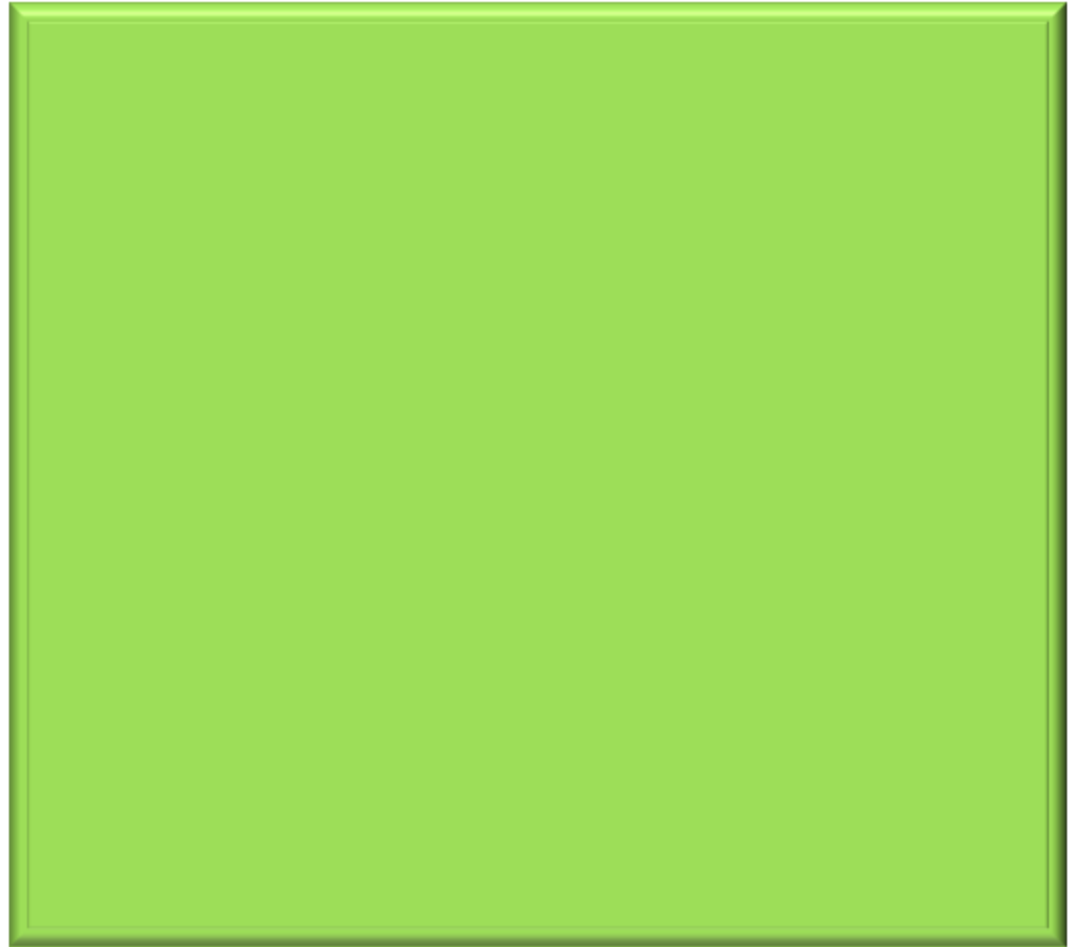
But they also hold these views . . .

- “Antibiotics are used indiscriminately on the farm, with minimal oversight of either veterinarians or FDA.”
- “Antibiotics given to animals will end up in the food and possibly jeopardize my/my family’s health.”
- “Using antibiotics on the farm contributes to the creation of resistant pathogens that threaten health.”
- “Using antibiotics to promote growth is unacceptable.”

Overcoming consumer concerns

Concern:

- “Antibiotics are used indiscriminately on the farm, with minimal oversight of either veterinarians or FDA.”



Overcoming consumer concerns

Concern:

- “Antibiotics are used indiscriminately on the farm, with minimal oversight of either veterinarians or FDA.”

Facts that help:

- Farm animals are under the care of a veterinarian.
- The FDA is responsible for regulating medicines, like antibiotics, for animals.

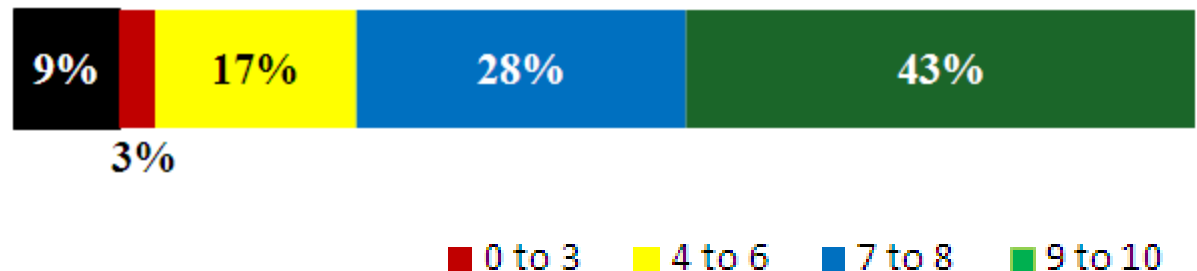


Positive impact of the veterinarian

- Learning that farm animals are under the care of a veterinarian scored highest in improving consumer confidence about meat and dairy safety

Impact on confidence of dairy safety

Dairy Cows are under the care of licensed veterinarians



Overcoming consumer concerns

Concern:

- “Antibiotics given to animals will end up in the food and possibly jeopardize my/my family’s health.”



Overcoming consumer concerns

Concern:

- “Antibiotics given to animals will end up in the food and possibly jeopardize my/my family’s health.”

Facts that help:

- Explanation of withdrawal time
 - Established for each antibiotic by FDA
 - Ensures antibiotics clear system
- State/federal testing and monitoring systems with penalties for violations



Overcoming consumer concerns

Concern:

- “Using antibiotics on the farm contributes to the creation of resistant pathogens that threaten health.”

- *More challenging to address with consumer audiences because the answers are less simple.*

Overcoming consumer concerns

Concern:

- “Using antibiotics on the farm contributes to the creation of resistant pathogens that threaten health.”

Facts that help:

- Like an MD, a veterinarian is key to ensure correct use
- FDA regulates to minimize resistance potential
 - Guidance #152
- Meat safety regulations reduce pathogens overall
- Proper handling of food

Some applications, however, are simply viewed as unacceptable

Concern:

- “Using antibiotics to promote growth is unacceptable.”

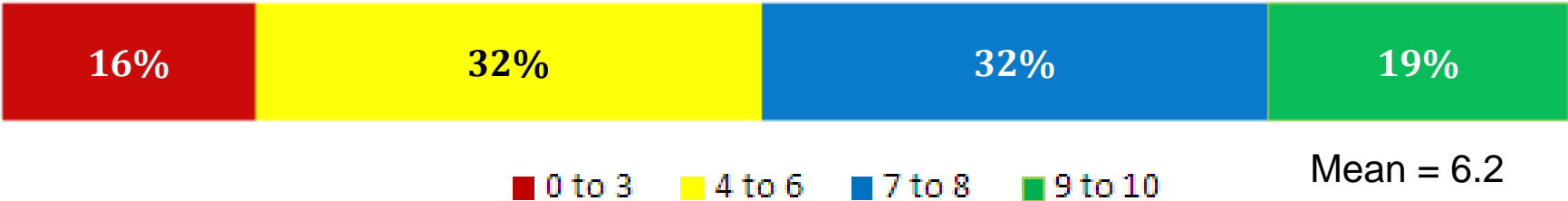


Our interpretation

- Consumers appear open to learning more about how medicines are used on the farm
- When they are given facts about what is being done today, many become much more comfortable that current safeguards are providing adequate protection

One example: Basic confidence in **pork safety** greatly improves after reading description of current safeguards

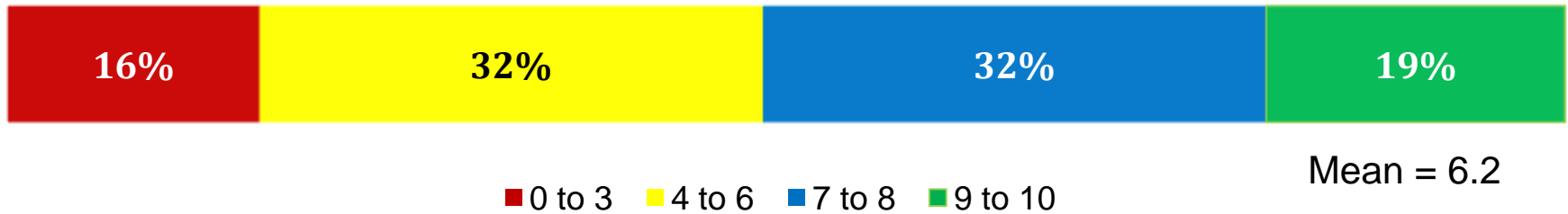
Pre-Description – Ranking of Pork Safety



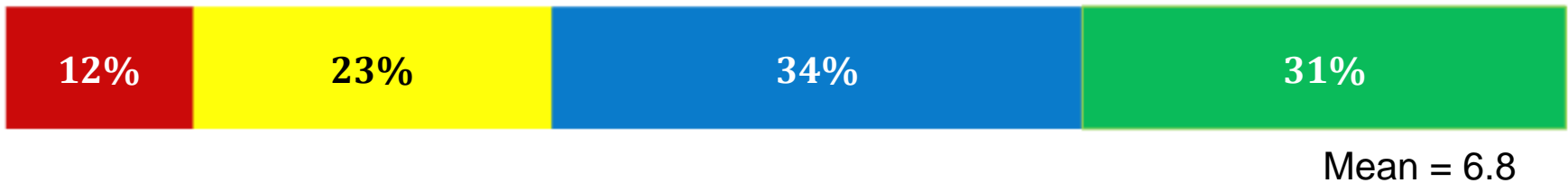
(PAH, 2008)

One example: Basic confidence in **pork safety** greatly improves after reading description of current safeguards

Pre-Description – Ranking of Pork Safety



Post-Description – Ranking of Pork Safety

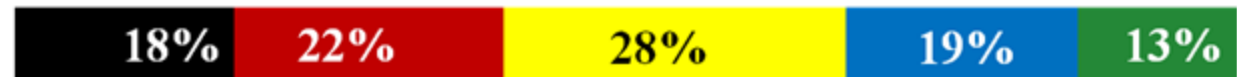


(PAH, 2008)₉

Another example: Description information changes views about adequacy of government regulations

Current gov't regulations do an adequate job of protecting the food supply from Ab residues winding up in beef products.

Pre-Description – Level of Agreement



■ 0 to 3 ■ 4 to 6 ■ 7 to 8 ■ 9 to 10

(PAH, 2008)

After reading the safeguard description, most consumers view regulations as adequate to ensure safety

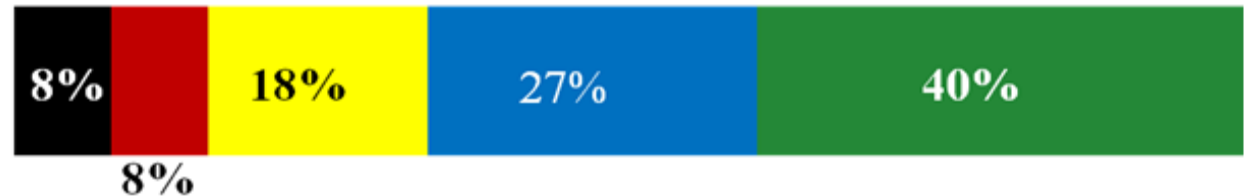
Current gov't regulations do an adequate job of protecting the food supply from Ab residues winding up in beef products.

Pre-Description – Level of Agreement



The practices described seem adequate in ensuring beef products are safe for me and my family

Post-Description



low agreement/confidence ←————→ high agreement/confidence

■ 0 to 3 ■ 4 to 6 ■ 7 to 8 ■ 9 to 10

General Study Conclusion

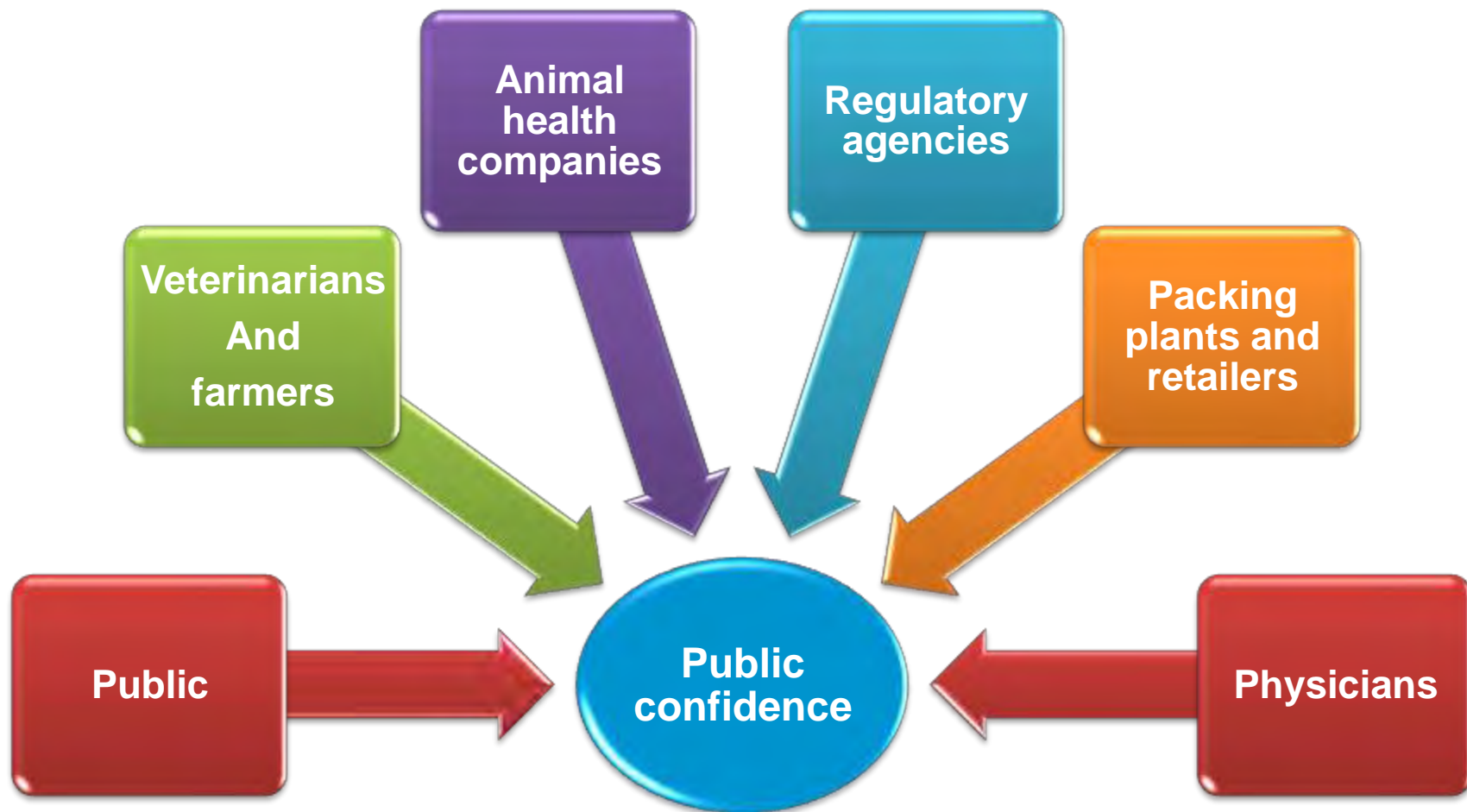
- Providing basic information had a significantly positive impact on consumer attitudes about dairy especially regarding:
 - the use of antibiotics to treat sick animals and
 - the various protections – many already in place -- to help ensure safe meat and dairy products.

Recommendations

- To bolster customers' confidence, dairy veterinarians and producers should be making *basic* facts available to the food chain.
- The research shows that using the core messages below will help:
 - Animals are under the care of licensed veterinarians.
 - Sick animals should be treated with medicines, such as antibiotics, to restore their health as long as protections are in place to ensure that their meat or milk is safe for people.
 - If medicine, such as an antibiotic, is administered to help sick animals, then their meat or dairy products are not allowed to enter the food supply until the medicine has sufficiently cleared the animal's system.
 - Milk is tested and withdrawn from the human food supply if tests are positive for antibiotic residues.
 - Vaccines are used to protect animals from various illnesses.

Working together going forward

Building public trust will require work across stakeholders



Going forward as an industry

- Reinforce by action that medicines are not used indiscriminately
- Producers must have protocols ensuring appropriate use, such as
 - Veterinarian *routinely validating* all uses
 - Independent audits to verify appropriate use
- Non-therapeutic uses
 - No rationale seems to comfort to consumers and many in public health
- Improve our communication skills on safeguards



Conclusions

- Antibiotics (and new ones) will always be needed for animal and human health to support our global health.
 - Despite the public misrepresentations, consumers support treating sick animals and are confident about safeguards, *when informed*.
- Producers have to be vigilant & judicious users by involving veterinarians to maintain their ability to use Abs.
- Pfizer believes the future of animal agriculture lies in the veterinary profession and is investing in veterinarians as the animal health *and* food safety gatekeeper.
- We also must, as an industry, consistently and effectively communicate and demonstrate our food safety commitment to the food chain & consumers to build long-term trust.