15 tips to better communicate about GMOs with the public

We natural scientists excel at accumulating scientific knowledge. Thus, it is only natural that we believe that, if we can just share scientific information — and lots of it — others will think as we do about a controversial topic. This is called the *information deficit model*. It is perfectly logical that we scientists try to fill an information deficit. It is also a singularly ineffective approach to communicating science with many non-scientists, particularly concerning a controversial topic.

I am not a social scientist, but I have spent a lot of time reading their literature. Luckily for me, my fiancé is also steeped in social science literature. I've learned I have been going about it all wrong. So here are some "nuggets" I have gleaned various sources grounded in the social sciences and in principles of communication. These may be particularly helpful for those of you that engage the public on genetically engineered (GE) crops.

- 1. Let critics speak first. Start by asking, "What are your top concerns?"
- 2. Remember that communication begins with a connection with, and the trust of, our audience. Tell a story about yourself. Explain tell why you are motivated to talk about the subject.
- 3. Take all concerns seriously. They are serious concerns to somebody.
- 4. **Empathize**. As had been said many times by many others, people must know how much you care before they care about how much you know.
- 5. **Listen**. Practice active listening. Repeat their concerns back to them. This opens lines of two-way communication.
- 6. **Use language of unity, not division**. Use words like "us" and "we," instead of "they" and "them." Connect clauses in a sentence with the word "and" instead of "but." Doing so builds bridges instead of barriers.
- 7. Keep it respectful. Don't say anything that causes another to feel stupid or dismissed. At a minimum, they will stop listening to you. Worse-case: they will find a way to undercut your work. Likewise, don't "bash" the other guy/gal, no matter who it is. It doesn't feel good, and members of your audience will judge your message by how you behave towards others.
- 8. **Speak to shared values**. Your critics care deeply about food safety and quality. So do you. Be sure to say so, in ways that build bridges, not barriers. Always try to find a way to explicitly affirm their underlying value, and state it if you share that value. In fact, we usually share many values with our critics.
- 9. **Affirm legitimate concerns.** What concerns you about GE? Roundup-resistant weeds? High seed costs? Corporate control of crop genetics? Sharing your own concerns increases your credibility. People don't have to hold the same position as you, but they will trust you more if you are open about concerns as well as benefits.
- 10. **Personalize the topic**. Does your family eat GE foods? If so, say so. I do. There is no better way than this to communicate your confidence in the massive amount of scientific evidence showing that GE crops are as safe as any other crops. Farmers, tell why you use GE crops. Invite people to the farm. Reach out to local schools, churches, and civic groups in your community.

- 11. Address food safety questions by citing scientific consensus. People often ask about Europe, and it surprises them to learn that the European scientific community holds positions very similar to scientists in North America. (See here.)
- 12. **Don't be surprised by questions that essentially ask, "So what?"** Don't assume people understand why GE may be helpful in meeting important human goals for our food system.
- 13. **Find a way to affirm those who may disagree**. For example, I have found that many farms in the sustainable agriculture community are "incubators" for novel ideas. Whether or not their techniques are appropriate for all farms, affirming their passion about farming helps to ease tensions and open lines of communication.
- 14. **Don't engage in negativity on social media**. Limit unproductive debate on social media: Respond no more than twice to a critic who doesn't seem to be engaging in genuine dialogue, and "punt" after that.
- 15. "Thanks for your feedback." Sometimes that is all that needs to be said.

Guidelines such as these are easy to say but surprisingly difficult to employ. They will not help when confronted by people with strongly held opinions nor with people who may have conflicts of interest or affiliations with organized anti-GMO efforts. However, they do seem to help open the minds of many, so that people are more receptive to engage with us scientists and to listen to what we have learned.

Always remember that the goal of science communication with the public is not to "change minds." It is to assure the public has the opportunity to understand the science well enough to make a decision that is right for them. However, we won't even get to that point without communicating the science in ways that speak to values.

I hope these suggestions are useful in your endeavors in science communication.

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