

Promoting Dialogue on Genetically Engineered Crops (GMOs)¹

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The following are useful guidelines for engaging the public on genetically engineered (GE) crops.² These are easy to understand but difficult to put into practice, especially in emotionally charged moments. But thanks to the expertise of social scientists, you will find that these suggestions will help open lines of communication, and build trust, on this emotional topic (as well as on other sensitive topics). Many of these principles are summarized in an online webinar available at [https://www.apsnet.org/publications/Webinars/ondemand/Pages/ApproachableScienceonGeneticallyEngineeredCrops\(GMOs\).aspx](https://www.apsnet.org/publications/Webinars/ondemand/Pages/ApproachableScienceonGeneticallyEngineeredCrops(GMOs).aspx). Useful guidance is also available in the publication, *De-Problematizing GMOs, Suggestions for communicating about genetic engineering*, available at <https://biblio.ugent.be/publication/8518193/file/8518194.pdf>.

- **Let critics speak first.** Ask, “What are your top concerns?”
- **Remember that communication begins with a connection with, and the trust of, our audience.**
 - Tell a story about yourself. Explain why you are motivated to talk about the subject.
- **Speak to shared values and to common interests.** Your critics care deeply about food safety and quality. So do you. Be sure to say so, in ways that build bridges, not barriers. It turns out that shared values do much more to build trust with people than scientific competence. Always try to find a way to explicitly affirm underlying values, and say so when you share values of your audience.
- **Take all concerns seriously.** They are serious concerns to somebody.
- **Empathize.** Critics must know how much you care before they care about how much you know.
- **Listen.** Practice active listening. Repeat their concerns back to them. This opens lines of two-way communication.

¹ Portions of this content were published previously at <https://geneticliteracyproject.org/2017/07/13/15-tips-better-communicate-gmos-public/>. A free webcast, presenting many of these principles, is available at [https://www.apsnet.org/publications/Webinars/ondemand/Pages/ApproachableScienceonGeneticallyEngineeredCrops\(GMOs\).aspx](https://www.apsnet.org/publications/Webinars/ondemand/Pages/ApproachableScienceonGeneticallyEngineeredCrops(GMOs).aspx).

² GE crops are often referred to as *genetically modified organisms* (GMOs), but that phrase is not used much by scientists because it is not very precise.

- **Seek consent before questioning “trusted messengers.”** Suppose, for example, that someone puts a lot of stock in a particular internet source you know to be inconsistent with prevailing scientific knowledge. Before responding, respectfully ask if they would like to hear what you have learned from the scientific community. People almost always agree, and by giving consent, they are more likely to be open to your comments.
- **Use language of unity, not division.** Use words like “us” and “we,” instead of “they” and “them.” Use words like “and” instead of “but.” Doing so builds bridges instead of barriers.
- **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.
 - 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.
 - Think twice before impugning the motivations of others.
- **Ways to explain the basic biology of GE crops**
 - Word processor analogy: Copying and pasting genetic material is essentially like copying and pasting text using a word processor. This also can be helpful in addressing food-safety questions.
 - Playing cards can be used to illustrate how genetic engineering is less disruptive to the plant than is conventional breeding.³ See video at https://www.youtube.com/watch?v=uzD4ASf_owk.
- **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.
- **Personalize the topic; humanize the technology.**
 - 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.
 - Universities, consider offering a non-majors course in biotechnology and/or open houses for the public.
 - Scientists, tell a story; what got you interested in molecular biology?
 - Is your audience aware of the tremendous advances in medical therapies that would not exist without genetic engineering?

³ This is not to suggest that conventional breeding is more dangerous. Conventional breeding is the foundation of plant improvement

- **Several points are helpful in addressing food safety questions.**
 - Cite the 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 <https://kentuckypestnews.wordpress.com/2015/03/31/consumption-of-genetically-engineered-gmo-crops-examples-of-quotes-from-position-papers-of-scientific-organizations/>
 - I have no concern about my family eating “GMO foods.” That is because I’ve studied the scientific literature intensely, and I have concluded that the world’s major scientific organizations are “spot on.” My comfort with “GMO foods” conveys my confidence in the scientific findings better than a thousand data slides.

- **Don’t tell them everything you know.** While we have important knowledge about the subject, it is easy to “wear out” an audience by presenting too much. Talk *with* others, not *at* them.

- **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.

- **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 your farm, affirming their passion about farming helps to ease tensions and open lines of communication.

- **Take some time to reflect broadly on the topic.**
 - What are my motivations on this topic?
 - If my way of seeing things prevails, who will benefit? Will anyone be disadvantaged?

- **Consider your position on “GMO” labeling.** Does it foster transparency and consumer trust in the food supply?

- **“Thanks for your feedback.”** Sometimes that is all that needs to be said.

- **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.

- **All GE crops are not created equal.** One has to see one of my detailed presentations to understand why this is true, but it is an important point. Make this point with examples.

- **Disclose funding related to GE crops.** Be particularly scrupulous about reporting private-sector funding. Such funding does not disqualify you from speaking on a subject, but public trust depends on being transparent about possible conflicts of interest.

- **Never challenge personal experience.** If someone says that they feel better by avoiding GE crops, thank them for their feedback. Don't challenge it, because it is their experience, not ours. Besides, you risk alienating other listeners.
- **What are the values that you "bring to the table" on the topic at hand?** At a minimum, self-reflection on this point is useful. This short essay on analyzing moral issues (at <https://www.scu.edu/ethics/ethics-resources/ethical-decision-making/thinking-ethically/>) is useful. Depending on your circumstances and time available, it may be helpful to explicitly state your values in relationship to the topic.

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