Science 'court' to rule on 'facts' in contentious GMO debate

In a contentious debate such as the one over GMOs, the assessment of scientific facts tend to become distorted with emotion-based perception. <u>David Ropeik</u>, international consultant and author on risk perception and communication, argues for the need to separate the assessment of the scientific evidence and emotion in the GMO debate:

The scientific facts about the safety of GM food get badly distorted in what is essentially a values debate. Each side has its own opinion, and therefore its own view of the facts. Wouldn't it be great if instead we could first objectively consider the hard scientific evidence, and then, separately, have the values debate about how some people don't like big rich powerful companies like Monsanto, or corporate large scale agriculture, or the ways that human-made technology, for all its benefits, has also harmed the natural world.

Ropeik examines the feasibility of a science 'court' where the facts would be assessed objectively in controversial issues like GMOs. He provides an example in which a 'court' had been established equally by both sides of a conflict to conduct the assessment. In 1980, the Health Effects Institute was created by the Environmental Protection Agency and automobile manufacturers, then at war over the health effects of air pollution, to "rule on the facts."

Each side put up 50 percent of the money to create an independent organization – neither side has control – to analyze research already done or do original research when needed, creating HEI as, in effect, a science court empowered to rule on "the facts". A roster of HEI sponsors reads like the invitation list to what could turn into a really nasty dinner party; Exxon and the EPA, the American Petroleum Institute and the Renewable Energy Foundation of China, vehicle makers and the environmentally active William and Flora Hewlett Foundation. But HEI works precisely because, unlike most independent think tanks and academic institutions and national science academies, the competing parties have declared a truce in pursuit of the truth, purposefully empowering a trusted independent referee of the facts. HEI is their creation, to provide neutral, reliable high quality research, and everybody agrees that the HEI view of the evidence will be accepted as fact.

Ropeik acknowledges that distortion of scientific facts would still occur from lobbying groups, but he argues that the value of the science 'court' lies in establishing fact to empower policy-makers and the public in their decision-making.

In the end, of course, each side would still have their own facts, cherry picking and distorting the evidence to their ends. That's human nature. But with the finding from the 'science court' in hand, policy makers would have their own facts, ... and the regulations and programs based on those facts would be more evidence-based and have a stronger foundation against political

and legal challenges. That's just what HEI has achieved with air pollution.

The need for an independent science court has never been greater. More and more in these polarized times we tend to see the facts the way our friends do. And the threats we face in our global technological world continue to grow more and more complex, and further beyond the capacities of a risk perception system based more on feelings and gut intuition than facts and careful objective reason. The risk of getting risk wrong has never been greater. Across a broad range of issues, an HEI-like science referee could help objectively establish what the evidence tells us about so many issues, and that can help us make more informed and intelligent choices about the best ways to keep ourselves safe.

Read the full, original article: Does society need a science court to help establish "the facts"?

Additional Resources:

- "Video: Hofstra GMO debate highlights science v precautionary fears," Genetic Literacy Project
- "Debating GMOs: Anti Michael Pollan and plant scientist Pam Ronald break new ground with dialogue," New Yorker