How Can Public Understanding of Science Be Improved?

Moderator:
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Washington, DC

Panelists:
Julianne Chappell
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Sharon M Friedman
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Salt Lake City, Utah

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The primary goal of the International Food Information Council (IFIC) Foundation, said David Schmidt, is communicating science-based information on nutrition and food-safety issues to health professionals, the news media, and teachers. Consumers are generally unfamiliar with the scientific process. The news media are the number one source of health information for consumers and therefore can help improve public understanding of the scientific process. Details and context, which “help demystify” science-related processes, are often lacking when it comes to the dissemination of food-safety and nutrition information, said Schmidt. But by providing more contextual details, the media can help consumers know what to think about health-related information.

Julianne Chappell outlined the primary reasons why increased public understanding of science is needed. In a democracy, it is the people who ultimately make decisions about social institutions and about what research will be funded. It is the scientific publishing industry that needs to focus on providing more information to the public. Our mission, said Chappell, should be to communicate to the greatest number of people possible. Improving Public Understanding: Guidelines for Communicating Emerging Science on Nutrition, Food Safety, and Health (http://ificinfo.health.org/resource/guidelines.htm) outlines the required components of scientific journal articles: Papers should present science in its full context; papers must speak to the largest possible audience; journals should produce 1 to 3 news releases for media sources outlining upcoming journal topics of general interest; and news releases and advance journal copies should be sent to members of the media who subscribe to the journal. The publication at the above Web site contains specific “communication guidelines” for scientists, journal editors, journalists, and industry and consumer groups. Our industry, said Chappell, must keep this question in mind: Will the communication and promotion of a particular study improve public understanding of diet and health-related issues?

Sharon M Friedman focused on the efforts of journalism schools to improve public understanding and perception of science. The adoption of science-writing programs would greatly help this process. Science-writing courses (for people who want to write about science for the lay public) are given across the United States in over 35 degree-granting institutions. Lack of statistical training can be a problem for science writers, said Friedman. A major problem in science writing is that journalists tend to emphasize events rather than trends; trends can be problematic for the public, which cannot make sense of conflicting stories about a common health- or science-related trend.

Science writers need assistance from those of us in the field so that they can research and establish context for the issues they cover.

Lee Siegel, a former Associated Press (AP) writer, explained that most journalists look to the AP, rather than to local or regional sources, for their science-related information. Yet local news has the potential to become national news. Siegel is concerned because journals provide press releases to the media that outline the top 3 to 5 studies in an upcoming issue and in selecting these studies tend to choose the ones that they feel will be pertinent nationally rather than locally. Local science writers might be less likely to cover these studies, because they do not necessarily pertain to their local audiences. Siegel is opposed to the embargo often imposed by journals whereby media sources must be subscribers to receive advance materials; he calls this phenomenon “checkbook journalism”. He feels that if journals want publicity and coverage of their science, they should make this news available to all members of the media.

As Siegel concluded his presentation, a lively debate ensued during which the nature of the relationship between members of the media and the scientific community was discussed. Of primary concern is that science be reported in a responsible, accurate manner so that a lay audience is not confused or misled by the information.