From nutrition scientist to nutrition communicator: why you should take the leap\textsuperscript{1,2}

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ABSTRACT

Media reports about new nutrition research are abundant, but they may confuse the public when unqualified sources are quoted, findings are reported out of context, or results appear to contradict previous studies. The nutrition scientist who conducts the research is best qualified to communicate the findings accurately and within context. Yet, some nutrition scientists hesitate to speak out in the media because of barriers such as a lack of time, media skills, and support from administrators or fear that their results will be miscommunicated or sensationalized. Scientists who do grant media interviews enjoy benefits such as positively affecting the public’s eating habits, influencing health and nutrition policy, and receiving heightened attention to their work, which can lead to future research funding. Scientists who want to improve their media skills can seek support from their institution’s public relations professionals and can learn from continuing education opportunities at conferences and self-study through articles and other resources. 

INTRODUCTION

If you are like many nutrition scientists, you complete your research, write up the results, and perhaps present your findings to colleagues at a conference—and that’s the extent of communicating about your work. Many scientists underestimate the importance of communicating their research beyond the podium or published journal article. But there are compelling reasons to play an active role in translating and communicating nutrition science. Serving on scientific or government panels and committees is a way to translate nutrition science; it is increasingly important, however, to communicate your science to the public through the media and other forms of mass communication. The benefits of these communications include providing the public with sound and accurate nutrition information, influencing health and nutrition policy, and gaining greater visibility for your work. If you do not provide the consumer with a responsible interpretation of your work and its relevance, others will explain your work instead. Are you willing to relinquish that role to others? If you are hesitant to take the leap from nutrition scientist to nutrition communicator, read on to learn more about the benefits and how to get started.

WHAT CAUSES MEDIA MISINFORMATION?

The media offer many powerful channels for communicating nutrition information to the public. Consumers rank magazines, newspapers, television, and the Internet among their top sources of health and nutrition information (1). Yet, many stories on new nutrition research are not accurately reported or fail to provide salient details. The general public is not well educated about science (2) or the scientific process (3). With respect to nutrition, the public may misinterpret the evolving nature of research to mean that nutrition authorities continually “change their minds” about how to eat for good health. Consumer research indicates that this misinterpretation fuels confusion, which may prevent consumers from adopting better eating habits. Nearly two-thirds (64\%) of consumers whose diets could be “a lot” or “somewhat” healthier cite “too much conflicting information about which foods are healthy and which are not” as a major or minor roadblock to healthful eating (1). Media misinformation is driven by several factors, such as an unqualified or inexperienced spokesperson, a lack of context, or an inexperienced reporter.

The process of conveying scientific information through the media has been likened to a “communications chain,” which has the scientist on one end and the journalist who delivers the information on the other end. In between are several key players who may influence the end result, including editors, public relations and public affairs professionals, special-interest groups, and representatives of the food, pharmaceutical, or supplement industries (4).

At times, those speaking out about the research along this communications chain are not qualified to do so. Those interviewed on science issues range from credible scientists and health professionals to self-proclaimed experts and special-interest groups with hidden agendas (5, 6). The Internet, whose use has exploded in recent years, provides an easy vehicle for the transmission of misinformation to consumers and the media. Paid television “infomercials” and shopping-network segments...
for selling functional foods, in which information may be exaggerated, can also be sources of misinformation. Scientists are among the most qualified and credible sources of comment about nutrition research, but they have slipped from the top spot on reporters’ speed dials. In the 1999 and 2001 editions of a biennial media-tracking survey commissioned by the International Food Information Council (7), scientific experts received the most citations, but, by the 2003 edition of the survey, scientific experts, researchers, and nutrition experts ranked third in the number of media citations, behind the federal government and food producers or culinary groups.

Lack of context in nutrition stories also contributes to misinformation to and confusion in the public. For example, in stories about what to eat or not to eat for better health, the following key information is often missing: how much to eat, how often to eat, and to whom the advice applies (7). This is unfortunate, because even brief reports can provide these contextual elements. By not providing this information in a simple, concise manner, inexperienced or publicity-seeking scientists may contribute to the lack of context and, thus, to a lack of understanding.

The background and level of experience of reporters (and scientists) influence the accuracy of reports. Many reporters with solid backgrounds in nutrition science present research findings correctly, in context, and with a clear indication of the relation of new findings to the existing body of research. Others, however, report new scientific findings without clearly indicating their limitations or inconclusiveness, which may lead consumers to act on information that changes or that is proven by further research to be inaccurate. Such developments fuel public confusion and the perception that nutrition information is unreliable and ever-changing (8).

Most reporters work hard to keep their stories accurate. However, the media are in business to sell papers or attract viewers and listeners. To do so, they sometimes use headlines or story lead-ins with words such as “breakthrough” and “cure” to describe the findings of studies that may offer only preliminary results. These tactics may attract the audience, but they could be misleading, especially if the audience does not read or listen to the entire story. In addition, some media reports are sensationalized. For instance, some special interest groups promote their own agendas by citing statistics out of context or quoting inaccurate and alarming data. The media present this information because of its shock value and audience appeal (9). The availability of a scientific resource may provide the media the balance to help reduce any sensational headlines.

COMMUNICATING THROUGH THE MEDIA: BENEFITS GREATER THAN BARRIERS

Qualitative research conducted by the National Cancer Institute revealed several barriers that prevent scientists from proactively participating in media interviews and other forms of direct public communication (10). The scientists cited barriers such as lack of interest, time, communication skills, and encouragement from administrators. The scientists also feared that the public would not understand scientific findings and that the media would “hype” or oversimplify their findings, report them prematurely or out of context, or use them to support a preconceived agenda (10). However, working with the media can greatly benefit the general public as well as the scientist, who can help improve public health by increasing the accuracy of media reports and the public’s understanding of those reports.

Nutrition scientists are encouraged to mentor the media not just by responding to questions but also by helping journalists better realize the implications of what they choose to report and how they do it. When a reporter inquires about a single study, the scientist’s greatest contribution can be helping shape the emphasis by offering an informed perspective on the findings and, in some cases, persuading the reporter that the story is not meaningful news (11). A scientist may be able to persuade a journalist who is trying to provide the proverbial “2 sides to the story” that equal weighting of the 2 “sides” may not be appropriate. For example, one source may be a credentialed scientist and the other may be lacking credentials, or a scientific consensus may favor one position over another. Many times, you can request to review quotes or the article before publication to ensure accuracy. If the writer is not close to a deadline, he or she often will comply with such a request.

Scientific research forms the foundation of health and nutrition policy. All aspects of nutrition policy, including the development of guidelines for health promotion and disease prevention, medical nutrition therapy, food assistance programs, and nutrition labeling of food or supplements, require new research findings for advancement (9). Scientists who want their research to affect policy must raise awareness and garner support among policy makers, colleagues, and the public. Consistently communicating research through such channels as the media, comments to agencies, and committee participation is essential to reach these audiences. If an industry is the source of funding, the industry may want the outcomes communicated to promote their product. In such a case, the source of funding should be disclosed.

The research programs of most scientists are supported to some degree by tax dollars, and competition is high for the discretionary funds that support nutrition and other biomedical research. Increasing the visibility of research in the media is crucial to receiving public support for future funding. Indeed, it can be argued that scientists have an ethical obligation to communicate with taxpayers about how their money is being spent and to disclose the results and relevance of the research (2, 12).

Communicating research outcomes through the media and other avenues helps relay scientific information to colleagues who missed the published article or conference presentation. When research is publicized, scientists may receive requests for information from fellow researchers as well as from colleagues outside their own discipline. These contacts can generate additional insights into the scientist’s work, can trigger collaborations with new colleagues, and can identify additional sources of funding for future research. Publicized research also helps attract talented students to the field (12).

EFFECTIVELY TELLING YOUR STORY THROUGH THE MEDIA: BRIDGING THE COMMUNICATION GAP

Many nutrition scientists are exceptional communicators among their peers and students but are not able to translate scientific information into consumer-friendly language (13). Ideally, academic institutions would require courses on communications and media relations as part of the science curriculum. Recognizing the importance of media training, many grant-awarding bodies now include in each grant award funds for media training for scientists (14). But scientists without those
TABLE 1
Key questions to assist in translating science for consumers

- Will this communication enhance public understanding of diet and health?
- Have I put the study findings into context regarding those to whom the findings apply and the way they fit in with previous research?
- Has the study or have the findings been peer-reviewed?
- Have I disclosed the important facts about the study, including the study design and any limitations?
- Have I disclosed all key information about the study’s funding?
- Have I clarified dietary risks and benefits?
- Have I communicated about the study in simple, understandable language?
- Have I met the needs of the media by responding to inquiries in a prepared and timely fashion?

1 Adapted from reference 3.

options can hone their skills in other ways. For example, they can seek information and training from their institution’s public relations or public affairs professionals, who can help scientists prepare for interviews and develop accurate and concise key messages that highlight their research findings. They also can write and distribute press materials about research, suggest the story to the media, and arrange interviews. They can even help a scientist develop a title for his or her research article that may garner media attention.

If you do not have professional support, take advantage of continuing education sessions focused on working with the media, which are offered at various conferences. Utilize resources that provide guidelines on effective communications, such as the guidelines summarized in Table 1. Participate in your professional organization’s media spokesperson program. For example, the American Dietetic Association (ADA) has a national network of 29 Registered Dietitians who act as ADA spokespeople and provide ~2000 media interviews each year (15). The ADA media spokespeople receive extensive training in pitching story ideas to the media and conducting interviews as well as support for media activities from ADA’s public relations department.

The Public Information Committee (PIC) of the American Society for Nutrition (of which I am currently the co-chair) has been working to position the society as the media’s state-of-the-art source for sound nutrition science information. The committee’s members want both to effectively reach the media with information that highlights the value of nutrition science findings and to position ASN and its journals as a valued resource for conveying accurate food and nutrition information to the general public. PIC’s activities include developing a guide to media experts that highlights ASN members who are willing to grant interviews on nutrition and health issues and their area of expertise. We have educated many ASN members and the media on timely nutrition issues through the PIC symposium held at each annual meeting and through subsequent publication of the proceedings of those symposia. We have also provided media training sessions for ASN members at the annual meeting. The newly established Nutrition Science Journalism Award recognizes consistent and accurate reporting on nutrition and brings attention to our organization as a resource. These efforts enhance our opportunities to help the media value nutrition science and to report more accurately on nutrition research. The next step is for each of us nutrition scientists to begin communicating with and establishing solid relations with the media.

Building confidence and skill in communicating through the media is a process that takes continued practice. The guidelines below can help both media-savvy scientists and those new to conducting interviews to effectively convey their messages.

TIPS FOR INTERACTING WITH THE MEDIA

Meet the media halfway

Reporters usually are under tremendous time pressure to “get the story” and meet their deadlines. You should try to “read” the reporter to know whether he or she is looking for in-depth information or just a quick quote, and adjust your comments accordingly. Ascertain the time available and be prepared to describe your research in 2 or 3 simple and concise key messages. It is also important to remember that, as a resource to the media, you have rights too. You can check your facts and call reporters back before their deadline. If a reporter pushes you to comment on a topic outside your area of expertise, you should say you are not familiar with the topic and then suggest that he or she contact another ASN member or direct the reporter to the online ASN Media Guide to Experts. You can also pleasantly move away from an inappropriate question and bridge back to your main point(s). This is easy. You could begin a response with “I may not be making my point clearly. What I think people need to know is…” If the reporter continue to ask questions you are uncomfortable with, you can pleasantly end the interview.

Be accessible and helpful when representatives of the media call, and you will probably earn a top spot on their contact list. Once you establish relations, take the initiative and contact reporters to suggest story ideas or to offer a comment on breaking nutrition news.

Target your remarks

The reader, viewer, or listener—not the reporter—is your audience, so target your remarks appropriately. For example, the type of information you would provide to readers of a general-interest magazine is quite different from the type you would provide to colleagues through a peer-reviewed journal. If a reporter calls from an unfamiliar media outlet, ask about the intended audience and its interests and concerns. The reporter will appreciate your efforts to ensure that your comments are pertinent to his or her audience.

Fill in the missing context

During interviews, explain whether your findings are preliminary or are supportive of a well-documented body of research and state why the information is relevant to the audience. For example, in addition to stating what to eat or not to eat, you should provide details, such as how much to eat, how often to eat, and to whom the information applies (details that often are missing), to help consumers interpret the information. The following sentence, summarizing a recent research study on yogurt consumption and weight loss (16), illustrates how context can be presented accurately and succinctly:

During a 12-wk study, healthy obese adults on a reduced-calorie diet [you have just established the group to which the information applies] who ate 3 servings of yogurt daily [you have just specified what they ate, how much was
eaten, and how often they ate it] lost an average of 14 more pounds, 66% more body fat, and 81% more stomach fat [you have just established the relevance to the audience] than did subjects who ate only one serving of dairy foods daily.

Use simple language, not “science-speak”

Scientists become frustrated with reporters who do not understand elements of the scientific method such as peer review, the incremental nature of science, and proper interpretation of statistics, probabilities, and risk. But effective communication is a two-way street. Reporters contend that scientists get too wrapped up in jargon and do not explain their work simply and clearly (12). Researchers who use multisyllabic scientific terms during media interviews increase the likelihood that the reporter will misinterpret the message or that the public will not be able to decipher the information. Make your point in simple language. Use everyday terms, such as “cause” instead of “etiology” and “high blood pressure” instead of “hypertension.” Consumers want practical information about what to eat, not abstract advice about nutrients. It is difficult to relate to intangible advice such as “consume 14 g of fiber per 1000 calories daily.” It is not easy to understand advice such as “eat at least 3 ounces of whole-grain foods daily to reduce the risk of heart disease and help with weight management,” unless it is explained that 1 ounce is about 1 slice of bread, 1 cup of whole-grain breakfast cereal, or 1/2 cup of cooked brown rice or pasta. A reminder to look for “whole grains” or “whole wheat flour” as the first ingredient listed on the food label provides additional useful information.

CONCLUSION: A CALL TO ACTION

The media will continue to be consumers’ main source of nutrition information, and we as nutrition scientists need to help translate our research for consumers. Many scientists believe their job is complete when they publish their results in a scientific journal. However, if we fail to take the next step of communicating our science through the media, it is likely that someone else will do that communicating—and that person may not get the story right or may “spin” the science to meet his or her own goals. There are special interest groups who communicate through the media as a major strategy to further their legislative, regulatory, and ideological agendas. They may not care about getting the science right.

Communicating through the media begins with the publication of research, and the title of your publication is the first message you deliver. Will the message go beyond the readers of scientific journals, and, if it does, will it be accurate? That depends on how willing we as a nutrition science community are to work at providing the translation for nonscientists. See Table 1 for some key questions to ask as you begin to translate science into meaningful consumer messages.

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