

# NEW MEDIA

## for COMMUNICATING FOOD SAFETY

**Blogs are an important and growing source of information for the general public and should be used to convey food safety messages and inform consumers.**

**P**roducers, processors, and retailers are realizing that communications with consumers must evolve to reach a new generation of food handlers.

The toll-free *Turkey Talk-Line* by poultry producer Butterball, for example, has provided Thanksgiving cooks with last-minute information about thawing and cooking turkeys since 1981. In 2008, Butterball augmented the telephone service to reach a new generation of cooks by offering text messages, Web chats, and blogs hosted by seasoned home economists (York, 2008). Information about safe food practices must use the channels familiar to today's food handlers in a manner that can be understood, appreciated, and utilized by that audience.

According to a national study released in August 2008 by the Center for Studying Health System Change (Tu and Cohen, 2008), the fastest-growing resource of health information for Americans is the Internet. Weeks after Butterball publicized its new services, the U.S. Food and Drug Administration announced collaboration with the health Web site WebMD.com that would allow the FDA to provide timely safety alerts and other public health information to the millions of WebMD users, in order to conveniently and effectively reach a wider audience (U.S. FDA, 2008).

Blogs, in particular, are rapidly growing in popularity and are quickly becoming important sources of information that can and should be utilized for the distribution of food safety communications.

### **What is a Blog?**

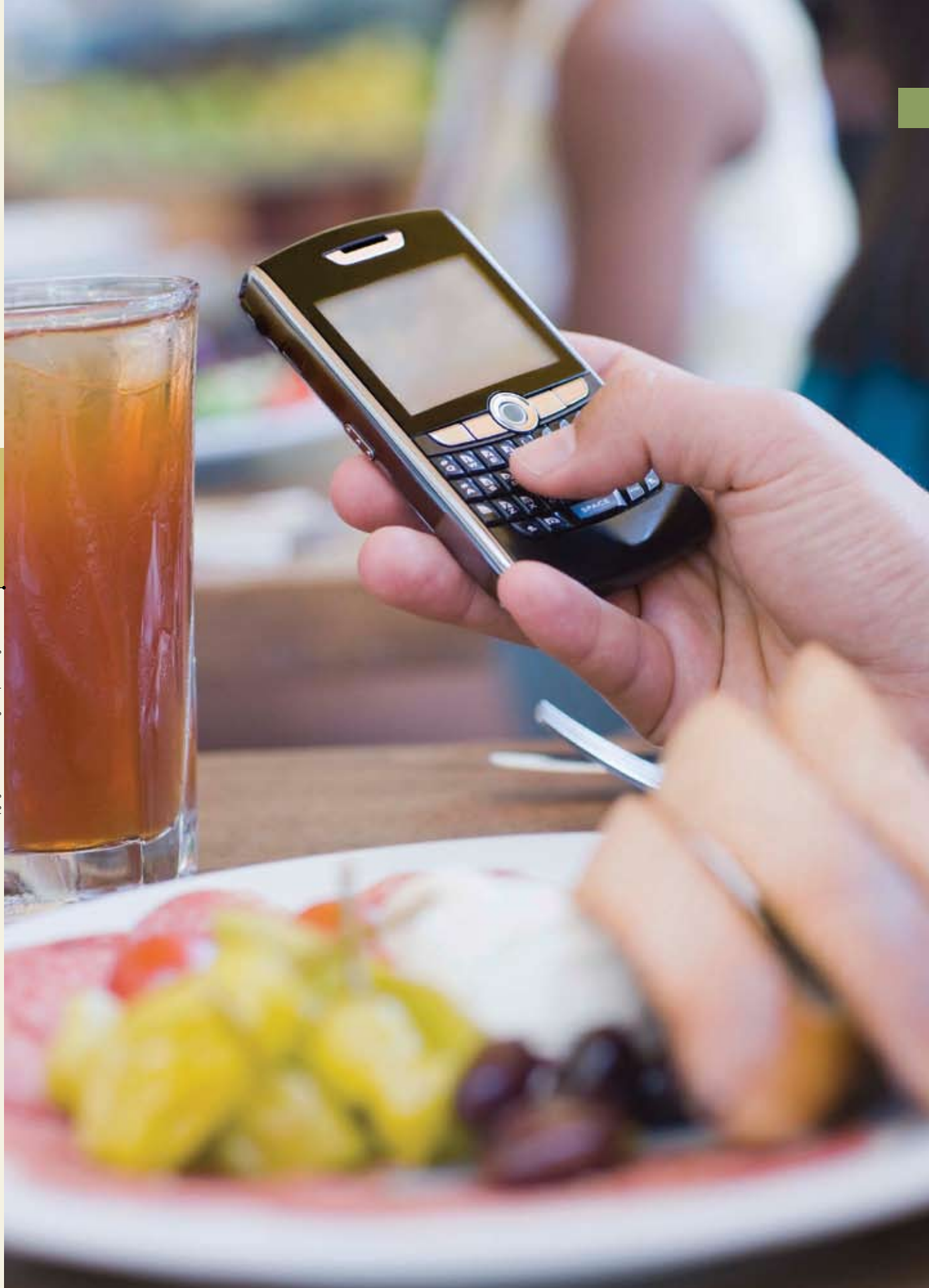
Known initially as Web logs, blogs are Internet spaces where authors provide personal commentary on events,

issues, and ideas, while allowing for interaction and the creation of new ideas (Perlmutter, 2008). Blogs were viewed originally as Web sites with comment threads and links to other Web pages (Riley, 2005). Today, Web sites used as blogs still include links; however, blogging now consists mainly of "personal commentary on non-personal events" (Perlmutter, 2008). The emotional connections established between readers and the information presented makes modern blogging a unique and increasingly popular form of communication.

The availability of user-friendly software to create and manage blog Web sites has contributed to the popularity of blogs and the vast number of authors emerging in recent years (Anonymous, 2004). The value of Internet indexing has also been a factor. Because there are no required credentials to become a blogger, many blogs are filled with unverified information and claims (Alterman, 2003). However, many blogs are used to disseminate evidence-based, analytical information and to create a conversation with readers. With an estimated 12,000 new blogs created daily, blogging may be more than a passing fad (Du and Wagner, 2006).

### **History and Evolution of Blogs**

One of the first Web sites that could be considered a blog was created in 1992 and contained only links to other new Web sites. In 1997, it is thought that Jorn Barger of robotwisdom.com coined the term Web log, and two years later, personal Web sites were simply called blogs. The first free public blogging service, Blogger (www.blogger.com), was launched in August 1999. Blogger.com provided the public with simple blog creation tools that led to a rapid



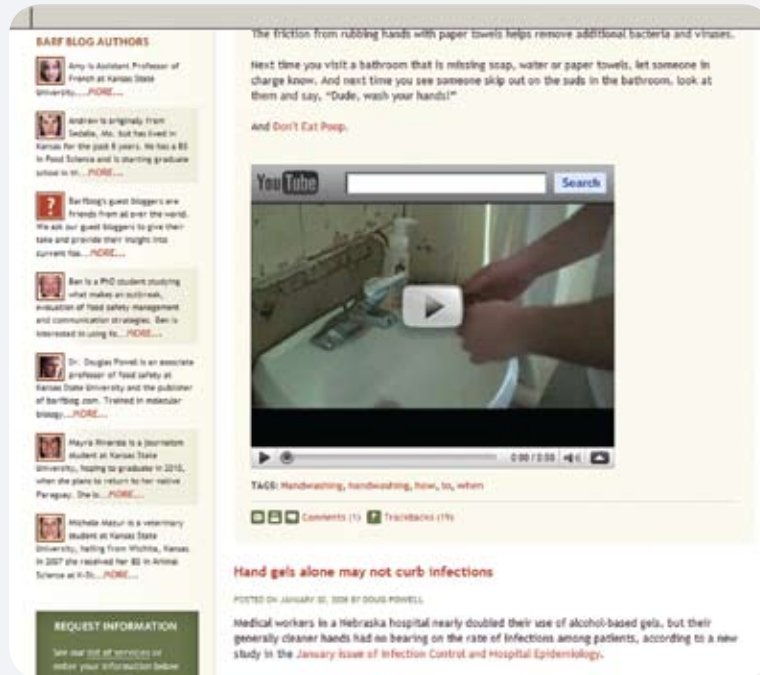
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*The popularity and growth of new media such as blogs offer an important vehicle for disseminating food safety messages to a new generation of food handlers.*

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*Posts to barfblog.com are based on media coverage or personal experiences and grounded in scientific research. The site serves as a central location where affiliated researchers provide rapid and brief commentary about food safety issues that arise through news coverage of current events.*



increase of authors, companies, and technology for blogs (Riley, 2005). Blogs entered into the broader public consciousness and attained notoriety during the 2004 U.S. presidential primaries when potential Democratic nominee Howard Dean gathered a strong online following attributed to bloggers (Perlmutter, 2008). Google also joined the blog craze in 2004 by releasing a search engine that was blog specific (Perlmutter, 2008). By the end of the year, Merriam-Webster deemed blog as the word of the year (Anonymous, 2004). Later, some of the first reports during natural disasters such as Hurricane Katrina and the south Asian tsunamis appeared on blogs (Perlmutter, 2008).

Today, blogs are a common form of communication, particularly for the generation born between 1977 and 1997—dubbed the Internet generation—who grew up using the Internet for many aspects of life, including school work and social interaction (Irvine, 2004). A blog ([www.digutmb.blogspot.com](http://www.digutmb.blogspot.com)) designed and operated by students in the Dermatology

Interest Group at the Univ. of Texas Medical Branch in Galveston since 2004 provides information relevant to dermatology students. One of the university's dermatology professors, surprised by its success, remarked, "Students are so facile with the Internet these days. This is just a good way for them to communicate" (Mathieu, 2007). Sharing or receiving information through blogs is not limited to young people, however. The popular health Web site, WebMD ([www.webmd.com](http://www.webmd.com)), is host to a variety of blogs written by medical professionals on topics that are of interest to consumers, such as pregnancy, asthma, and sleep disorders. Blogs written by non-professionals on personal experiences, such as the thoughts of a mother of an autistic child, are also offered. According to the senior vice president of consumer marketing for WebMD, consumers choose to receive information from blogs on topics of personal interest because of the "emotional connection" that blogs provide (Mathieu, 2007). However, the WebMD Web site also contains a disclaimer to remind

consumers that posted information is not an adequate substitute for a visit with a qualified healthcare provider (Mathieu, 2007).

In early 2008, South Korean bloggers demonstrated the strength of online opinion-sharing when unverified information connecting bovine spongiform encephalopathy (BSE) to imported U.S. beef was spread through the Internet and led to public outrage (Herskovits and So-eui, 2008). President Lee Myung-bak's public approval rating subsequently plunged and led several members of the president's cabinet to offer their resignation (Anonymous, 2008b; Xinhua, 2008). "The Internet has generated what can be called 'lifestyle politics,'" said a Korean political science professor at the height of the U.S. beef debate. "These are soft, everyday issues that can quickly become major political topics" by sharing public opinions online (Herskovits and So-eui, 2008). Blogs play an increasingly important role as a forum of public debate, with consequences for the media and for politics (Drezner & Farrell, 2004).

## Food Safety Blogs

An increasing number of consumers seek food safety information from Internet sources, including one-in-eight Canadian consumers and one-in-four American consumers (Cody and Hogue, 2003; Ipsos-Reid Corp., 2006). Beyond the online debate of South Koreans on the issue of imported U.S. beef, recent foodborne illness outbreaks linked to meat and produce in the U.S. have also stimulated blogging by consumers and others on food safety issues. Powell et al. (2007) recognized that news spread through the Internet in an unprecedented fashion following produce outbreaks in 2006, and observed, "Producers, processors, retailers and regulators of agricultural commodities ... must now pay particular attention

to the myriad of Internet-based social networking sites [such as blogs] that allow individuals to act as their own media outlet.”

Research on health and related behaviors has suggested that individuals make rational decisions about such behaviors when they are aware of, and have some knowledge about, the risks associated with particular actions (Redmond and Griffith, 2003; Levy, 2002). Prior to 2004, the U.S. documented eight years of decrease in rates of foodborne illness. The decrease in illnesses stagnated in the four years following (CDC, 2008). New food safety messages and mediums need to be experimented with and evaluated to encourage safe food-handling behaviors and effective reduction in the incidence of foodborne illness. Producers, regulators, and others in the farm-to-fork food safety system who choose to be proactive must become comfortable with Internet-based media (Powell et al., 2007). The widespread use of blogs can be utilized to facilitate and enhance discussion of food safety issues.

Bill Marler, a personal injury and products liability attorney with the Seattle law firm Marler Clark, has been litigating foodborne illness cases since an *E. coli* O157:H7 outbreak was linked to Jack in the Box restaurants in 1993. The Web site for Marler Clark asserts that all the lawyers at the firm are “the catalyst behind print and broadcast news stories about [food safety] topics” (Anonymous, 2008a). As host to Marler Blog ([www.marlerblog.com](http://www.marlerblog.com)) and dozens of other blogs, Marler “provide[s] commentary on food poisoning outbreaks and litigation” (Marler Blog, 2008). He understands the significance of providing commentary on newsworthy food safety events, rather than simply re-telling them. Marler recognizes the need for improvements in the safety of the food supply and that he can be an instrument of change

**Safest food in the world - Barack Obama edition**

POSTED ON JUNE 21, 2008 BY DOUG POWELL

Barack Obama may be the change candidate but his food safety rhetoric falls into a tired and unsubstantiated pattern.

Obama wrote on Friday in a letter to *Cow Call Weekly* (great reading for the beach).

“America continues to have the safest, most abundant and cheapest food supply in the world. ... Beef producers are a key component in a healthy and vibrant rural America. By strengthening USDA and working to enhance food safety and meat processing, my administration will assist the industry in providing a wholesome and safe product to your customers.”



Maybe Barack is using the same PR folks as the Taste of Chicago. And with over 800 people sick from Salmonella in tomatoes and no source in sight, is it really the right time to be making claims about who has the safest food?

Thanks to Kansas State PhD student Charles Dodd for forwarding the item.

TAGS: Food safety communication, Safest food in the world, barack obama, food safety

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in that area. “The most important thing,” Marler claims, “is to use that advocacy platform—which is your blog and the Internet—to be a change agent” (LaGatta, 2007).

#### An Example: barfblog.com

Barfblog.com operates on the philosophy that to be effective in compelling audiences to change practices, food safety messages should be rapid, reliable, relevant, and repeated. Barfblog.com posts are based on media coverage or personal experiences, grounded in scientific research, and saturated with the recurring theme of food safety culture—a set of values wherein food safety risks are openly identified, discussed, and addressed. The blog initially went online in fall 2005. Software issues, a lack of focus, and excessive spam eventually lead to reconsideration and consolidation, and a revised barfblog.com was launched in May 2007.

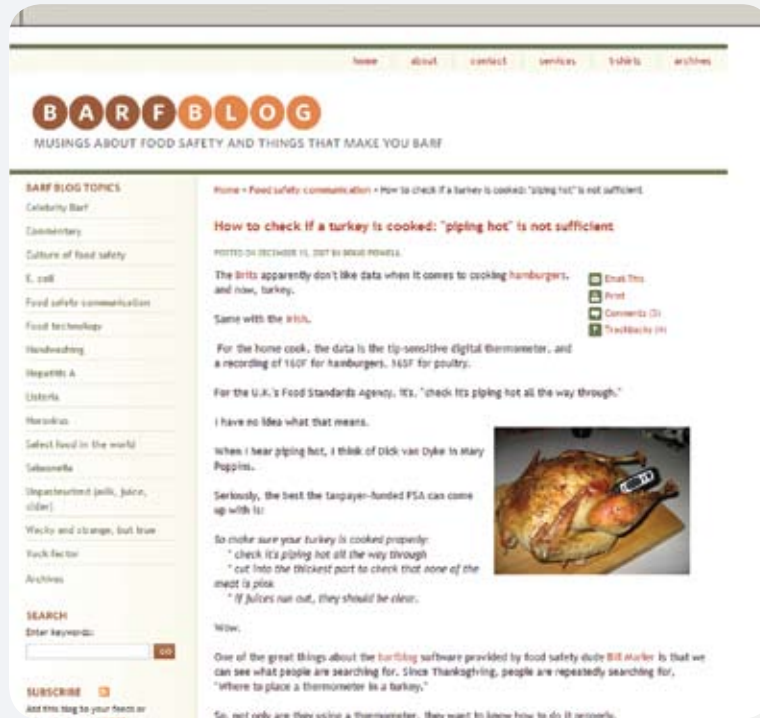
The site serves as a central location where affiliated researchers provide rapid and brief commentary about food safety issues that arise through news coverage of current events, as well as public discussion. The design of the blog and individual posts serve three distinct

intentions: (1) to sufficiently entertain readers and encourage repeat visits; (2) to increase awareness of evidence-based food safety information; and (3) to effectively respond to readers’ interests gathered through active analysis of public search strategies and comments to previous posts. To date, posts with unique and timely information and those that mention celebrities are viewed most frequently.

Medeiros et al. (2001) assert that food safety messages should be aimed toward a specific audience. Most employed food handlers are under age 30 (52%), hold a high school diploma or less (65%), and only work part-time (on average, 24.8 hr/wk) with a relatively short job tenure (National Restaurant Assn., 2006). Food handlers who reflect these demographics likely would not seek out food safety information, nor may many of today’s consumers who prepare food at home. A Canadian survey conducted in 2006 found that those most likely to seek out food safety information had average education levels, lower than average household incomes, and were not the main person responsible for food preparation in their home (Ipsos-Reid Corp., 2006). Demographics

*Barfblog posts with unique and timely information and those that mention celebrities are viewed most frequently. Pop culture references and images are blended with food safety messages to engage readers who may be more interested in celebrity gossip than in food safety.*

*Around the time of the Thanksgiving and Christmas holidays in 2007, search queries to the barfblog Web site appeared for "how to insert a thermometer into a turkey." In response, barfbloggers posted a picture of a thermometer inserted into a turkey with referenced tips for safe cooking of poultry.*



that include most employed food handlers, however, are the same as many of North America's Internet users. Though Americans who have attended college are more likely to use the Internet, in 2008, 63% of individuals with a high school diploma and 44% of those with less than a high school education reported accessing the Internet at home at least occasionally (Pew Internet, 2008). One-third of Canada's Internet users are under age 35 (eMarketer, 2004). Messages on safe food handling require special consideration for these audiences that may not be actively seeking such information. Pop culture references and images are blended with food safety messages on barfblog.com to engage readers—both employed food handlers and consumers who handle food at home—who may be more interested in celebrity gossip than in food safety.

Celebrity experiences with foodborne illness are utilized on barfblog.com, as well as personal narratives of bloggers. Mathiasen

(2004) suggested effective food safety messages be created by combining personal experiences with safe food-handling information. This combination encourages a personal connection by the audience with the effects of foodborne illness on families and communities (Durant, 2002). The use of stories and verbal narratives in message delivery has been demonstrated many times as more effective in transferring information than the use of prescriptive messages or numerical statistics alone. For example, Slater and Rouner (1996) investigated the effectiveness of a variety of messages containing a combination of narratives and statistics around the safety of alcohol consumption. They found that survey respondents, who were value-protective (identifying as non-believers in the information prior to the study), rated messages with narratives as higher quality and perceived them as most persuasive. In a 2002 study, Morgan and colleagues evaluated various safety messages targeted at farmers

regarding the use of personal protective structures for vehicles, by presenting combinations of different message delivery methods. They found that messages based on stories, and those that were meant to elicit fear about individual practices, had more impact than presenting consequence-based statistics alone. Similarly, in 2007, Lordly evaluated storytelling as an educational tool as part of a university undergraduate nutrition course. Self-reported results revealed that students valued storytelling: 100% of the students agreed or somewhat agreed that stories reinforced facts as well as provide a context for using theoretical information taught by the instructor. Psychologist Howard (1991) argues that narratives and storytelling are effective methods in conveying information because there is a better understanding of one's place in a system when an individual sees himself or herself as an actor within the context of a story.

Beyond using narratives to reach a wider audience, each barfblog.com post aims to increase awareness of food safety topics by providing scientifically sound commentary to timely, pertinent news and updating when necessary. Barfblog.com puts food safety messages into the context of current events that affect consumers' lives, an approach supported by communications research that suggests relatable backgrounds and surprising content enhance the effectiveness of messages (Lordly, 2007; Leventhal et al., 2006; Shannon, 1948). This approach has led barfblog.com to become a source of information by mainstream media, including *The New York Times* and *USA Today*. Reporters and opinion columnists have been known to use blogs they recognize as reliable when gathering information and opinions on various issues (Drezner & Farrell, 2004). Solicitors also cited

commentary from barfblog.com during a public inquiry led by Professor Hugh Pennington into the circumstances that led to an outbreak of *E. coli* O157:H7 infection in South Wales in September 2005. A *New York Times* article (Martin, 2007) recounted an anecdotal experiment posted on barfblog.com that tested microwave-cooking instructions for ConAgra Food's *Banquet* potpies at the height of an investigation that linked the pies to an outbreak of *Salmonella*. (An account of the experiment is available at <http://barfblog.foodsafety.ksu.edu/2007/10/articles/food-safety-communication/cooking-a-frozen-pot-pie-in-a-microwave/>.)

Finally, barfblog.com posts respond to readers' interests as identified through review of public search strategies and

comments made to previous posts. Near the Thanksgiving and Christmas holidays in 2007, for example, search queries to the site appeared for "how to insert a thermometer into a turkey." In response, barfbloggers posted a picture of a thermometer in a turkey with referenced tips for safe cooking of poultry. (See <http://barfblog.foodsafety.ksu.edu/2007/12/articles/food-safety-communication/how-to-check-if-a-turkey-is-cooked-piping-hot-is-not-sufficient/>.) Additionally, the ability for readers to comment on posts to the site allows for online discussions and instant feedback that provide insight into consumers' interests and concerns that can be addressed through subsequent comments by barfblog.com authors, or by future posts. **FT**

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