Do Consumers Trust Food-Safety Information?

Jean C. Buzby and Richard C. Ready
(202) 219-0905

Most people obtain food-safety information from television and newspapers, yet most are more likely to completely trust the food-safety information from Government publications and food packaging or labels. In the spring of 1995, researchers at the University of Kentucky surveyed over 1,000 Americans about where they obtained food-safety information, whether they trusted this information, and their major concerns related to food. The survey also provided information on whether people would pay more to reduce their risks from pesticides on food. These results can be used to help Government and other educators select the best media for teaching consumers about food safety.

The survey was mailed to 3,000 households randomly selected out of U.S. phone books. About 35.6 percent responded with completed interviews (1,069 households). The respondents were similar in profile to the U.S. population in terms of household size and income. However, whites were overrepresented in the sample (87 percent) when compared with the U.S. population (83 percent). There were slightly more men than women in the sample. This proportion was expected from the nature of the survey, because households are often listed in the phone book under the husband's name.

The authors are agricultural economists. Buzby is with the Food and Consumer Economics Division, Economic Research Service, USDA. Ready is with the Agricultural University of Norway.

People Get Food-Safety Information From Many Sources

When survey respondents were asked where they obtained food-safety information, 70.1 percent mentioned newspaper articles and 71.3 percent indicated television shows and news (fig. 1). Half said they obtained information from food packaging or labels. Only 16.5 percent obtained food-safety information from Government publications. Five percent said that they do not pay attention to food-safety information.

Although respondents could indicate multiple sources of information, our findings are similar to the results of a survey by Texas A&M University in the 1990's, which asked adult Texans to choose the one source where they got most of their safety information. Most indicated newspapers and magazines (37.5 percent), followed by television (21.7 percent), other sources (17.8 percent), other people (13.7 percent), and physicians (8.5 percent).

We asked respondents to rate how much they trust the accuracy of the food-safety information they receive from each source. Possible ratings ranged from "no trust" to "trust completely." Figure 2 highlights responses from two of the four categories of trust—those sources that respondents "trust somewhat" and those that they "trust completely."

Of the 52.3 percent of respondents trusting food-safety information from Government publications, 10.8 percent trusted the accuracy completely, 41.5 percent trusted it somewhat. For the 55.9 percent trusting the food-safety information found on food packaging and labels, 10.2 percent did so completely and 45.7 percent trusted it somewhat. (These labels are regulated by the Federal Government, so it is not surprising that they received a similar level of trust as do Government publications.)

About 8 percent completely trusted the accuracy of food-safety information from television shows and news, compared with 6.2 percent for newspapers, 5.2 percent for magazines, and 3 percent for store brochures. Only 1.4 percent completely trusted the accuracy of food-safety information in advertisements. It is not surprising that these were the least trusted source of food-safety information out of these seven sources, because people may feel that advertisers have incentives to make positive claims about their products.

Figure 1
Where Do Consumers Obtain Food-Safety Information?

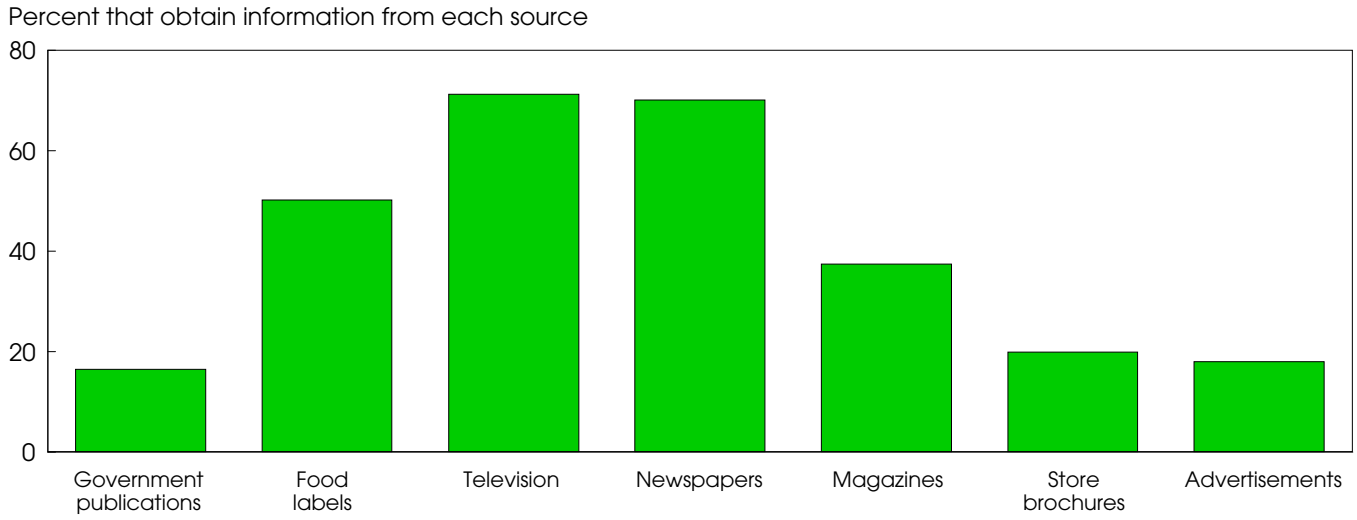
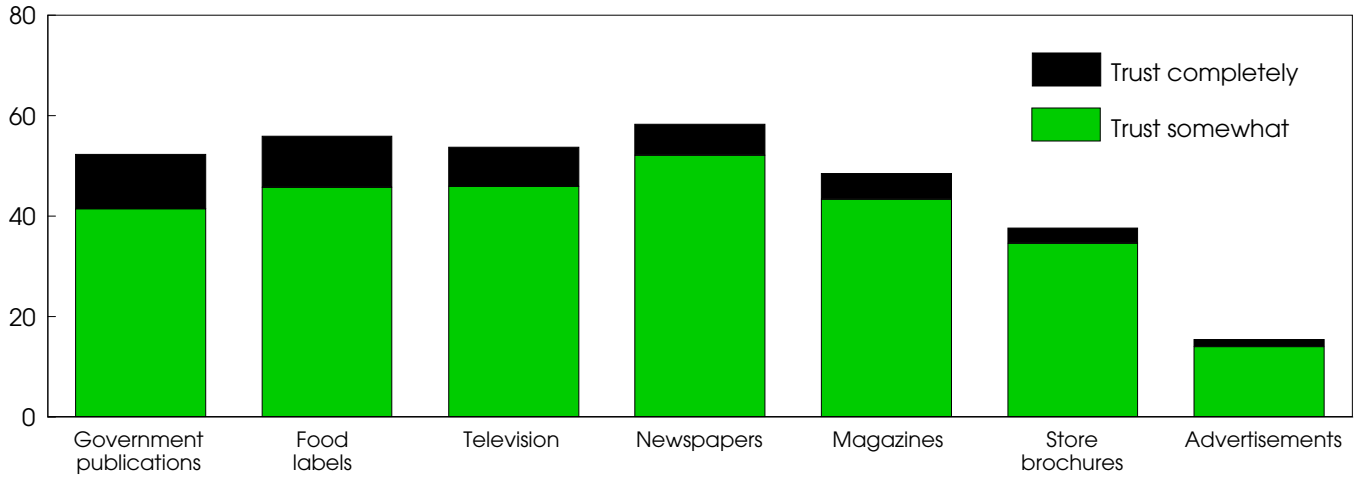


Figure 2
Do Consumers Trust Food-Safety Information?



Part of the lack of trust in food-safety information may stem from the fact that the public is generally aware that the goal of food marketers may be to sell their product, and that these marketers on occasion may make unproven claims to advertise their products. For example, supermarkets used to sell *Salmonella*-test kits that consumers could use in their homes. The kits were advertised as being able to accurately detect *Salmonella*. However, USDA later banned these kits when the kits did not live up to the claims.

Still another factor is the nature of scientific data. The information changes over time as more data become available. A case in point is the conflicting scientific opinions over which type of cutting board is the most sanitary: plastic or wooden.

Do Consumers Trust Pesticide Testing of Fresh Produce?

Another part of the survey asked people where they purchased fresh produce and whether or not they trusted these places to test for pesticide residues. Over 90 percent of the respondents usually bought most of their fresh produce in a grocery store or supermarket. One percent

usually bought their fresh produce in an organic-food store, and 1 percent usually purchased it from roadside stands. One percent grew most of their produce.

The Federal Government has a number of programs that test for pesticide residues on fresh produce; however, no Federal and State laws require food stores to test produce. Some stores test their own produce. Over 86 percent of the people surveyed did not know whether or not their food store tested its produce for pesticide residues, 2.4 percent thought that their food store tests "all" of its produce for pesticides, while 6.4 percent thought that their food store tests "some" of its produce for pesticides.

Not all entities that test for pesticide residues in produce were equally trusted, however. More people showed "complete trust" in independent-testing companies to test fresh produce for pesticide residues than they did for other participants in the food system. Almost 18 percent completely trusted independent-testing facilities to test fresh produce for pesticide residues, compared with 13.6 percent trusting health-food stores/cooperatives, 10.5 percent the Government, and 4.8 percent completely trusting supermarkets to do the testing. Seventy percent completely or somewhat trusted independent-testing companies to test for pesticide residues, compared with 56.3 percent trusting health-food stores/cooperatives, 45 percent the Government, and 35 percent supermarkets.

High Saturated Fat and Cholesterol Is the Top Concern Related to Food

Each year, the Food Marketing Institute (FMI) performs national telephone surveys that ask the open-ended question "What is it about the nutritional content of what you eat that concerns you and your family the most?" Between 1983 and 1987, the FMI surveys found that concerns about fats and cholesterol were relatively lower than concern about chemical additives. However, these concerns reversed, and "fat content/low fat" has been the top concern stated since 1988. Part of this change in rankings is likely due to increased media attention to health risks of too much fats and cholesterol in the diet.

We gave our survey respondents a list of seven potential concerns related to food and asked them to indicate which was their most important concern as opposed to FMI's open-ended nutritional content question. High-saturated fats and cholesterol was the leading concern—39 percent of the respondents ranked it number one (fig. 3). Food poisoning (30.4 percent) and pesticide residues (13.6 percent) were the next two highest concerns. These rankings are consistent with findings from a 1992 consumer survey by the University of Kentucky. The consistency of these rankings between 1992 and 1995 is interesting, given that there have been some well-publicized food-safety outbreaks in the media since 1992, such as the 1993 *E. coli* O157:H7 outbreak from eating contaminated hamburgers.

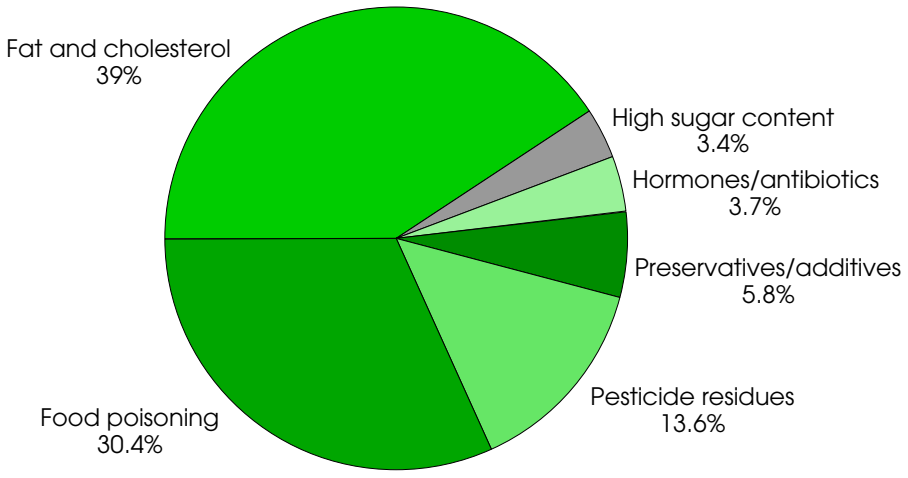
Other surveys indicated consumers are very concerned over pesticide residues and food safety. However, the rankings in this survey reflect current scientific evidence which indicates that pesticides pose a lower risk to consumers than does food poisoning.

Food-Safety Information Shared Through Many Channels

Television and newspapers currently reach the most people in terms of disseminating food-safety information. However, Government publications and food package labeling also provide opportunities to educate people effectively—given the relatively higher levels of consumers with "complete trust" in these modes of communication. Still, over 40 percent of the survey respondents did not trust the accuracy of food-safety information in any form—including Government publications and food labeling.

These findings mean that educating the public about food safety poses real challenges. How are we

Figure 3
Consumers' Top Concerns Related to Food



going to educate people if over 40 percent do not trust the accuracy of food-safety information? Are there other media that would be more effective in educating consumers? In the Texas A&M University study, researchers found that physicians and other people were also sources of food-safety information, but these sources were less commonly cited than printed media and were also reported to be less effective sources of food-safety information. And, the survey did not ask respondents how much they trusted the information from each source.

Other potential sources of food-safety information included in a 1992-93 national survey by the U.S. Food and Drug Administration (FDA) were cookbooks and Government hotlines or county extension offices (see box). The FDA survey found that people relied on cookbooks more than the Government sources for food-safety information. Perhaps people do not know about the hotlines that answer questions about safe food handling.

In 1994, FDA and USDA established the Foodborne Illness Education Information Center. One mission of the Center is to develop an educational database that can be used by organizations, educators, and trainers who produce educational and training materials for consumers and food workers. People can access the database in many ways, including the Internet and the National Agricultural Library's electronic bulletin board.

Local, State, and Federal Governments have also used labeling regulations over the past decade to educate consumers about food-safety practices. For example, Florida, California, and Louisiana require restaurants selling raw shellfish to display warnings to customers. Since 1994, USDA has required that raw meat and poultry carry labels listing safe handling, preparation, and storage procedures.

Safe Food Handling Information a Phone Call Away

Two Federal Government hotlines answer questions about safe food handling. For seafood safety, call the Food and Drug Administration (FDA) at 1-800-FDA-4010. Meat and poultry safety information can be obtained from the USDA Food Safety and Inspection Service (FSIS) Meat and Poultry Hotline by dialing 1-800-535-4555. The FSIS hotline has received an increasing number of calls since its introduction in 1985. Some of these calls are from extension agents who want up-to-date food-safety information that they can share with their local clientele.

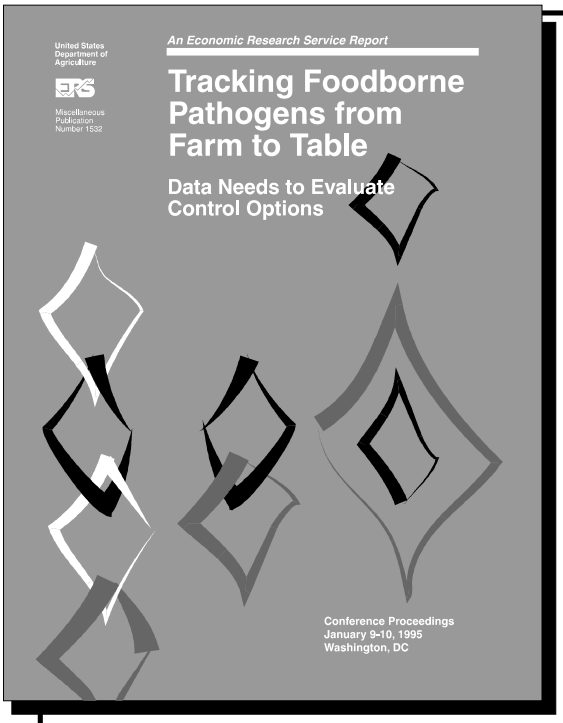
References

Buzby, Jean C., and Jerry R. Skees. "Consumer Food Safety Concerns," *FoodReview*, USDA, Economic Research Service, Vol. 17, Issue 2, May-Aug. 1994, pp. 19-22.

"Survey of Consumer Food Handling Practices and Awareness of Microbiological Hazards, Frequencies of the Total Population," USDA, Food Safety and Inspection Service, Policy Analysis Unit, May 1994.

Knabel, S.J. "Foodborne Illness: Role of Home Food Handling Practices," *Food Technology*, Vol. 49, No. 4, April 1995, pp. 119-131.

Mcintosh, W.A., G.R. Acuff, L.B. Christensen, and D. Hale. "Public Perceptions of Food Safety," *The Social Science Journal*, Vol. 31, No. 3, 1994, pp. 285-92. ■



Linking knowledge to prevent foodborne disease . . .

In a recent Economic Research Service report, scientists, policy makers, and economists evaluate available data for controlling foodborne illnesses from meat and poultry along the farm-to-table chain

Tracking Foodborne Pathogens from Farm to Table:

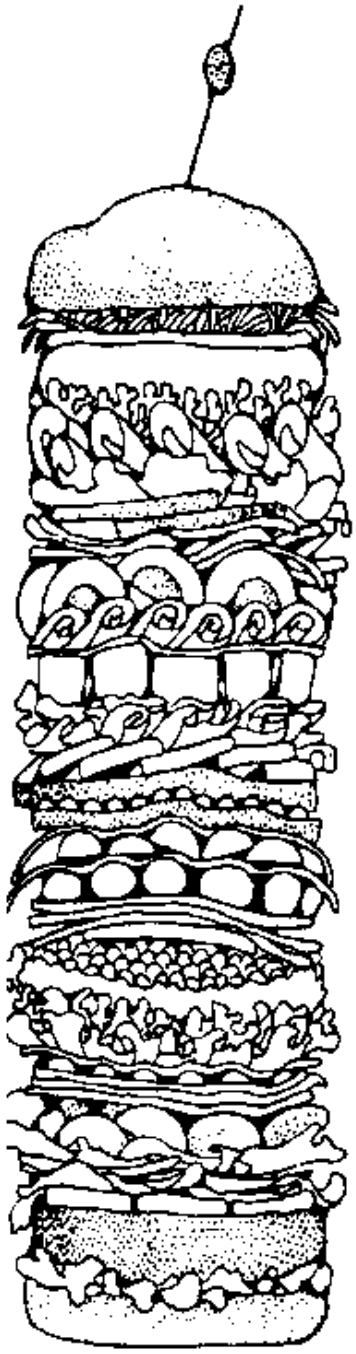
Data Needs To Evaluate Control Options

Proceedings of an interdisciplinary conference

- *the role of data and analysis in policy design*
- *analyzing consumer risk*
- *taking account of changing consumption and production patterns*
- *economic evaluation of a HAACP approach*
- *data bases used in tracking foodborne pathogens*

. . . and more

To order call 1-800-999-6779
(703-834-0125 outside U.S. and Canada)
$18 per copy **Stock Number MP-1532**



Crave More Information?

Get ***FoodReview*** magazine, from USDA's Economic Research Service.

FoodReview serves up the latest trends and indepth studies on what Americans are eating.

FoodReview includes data and analyses on food consumption, nutrition, spending, marketing, food safety, and food assistance. Get the facts on:

- **Nutrition and Health Issues--**Nutrition education, fat and fiber intake, nutrient content, diet-health awareness, costs of a nutritious diet, consequences of poor diets; implications for consumers and the food sector

- **Food Safety--**Assessment of food safety regulations, estimates of foodborne disease costs, reducing microbial foodborne disease risks

- **Market Trends--**Organics, nutritionally improved foods, fast food, new product introductions, food labeling, advertising

- **Food Assistance--**Program participation, costs, and trends in food stamps, school food programs, and WIC; proposed welfare reforms; and program changes

Call 1-800-999-6779 to subscribe

Agricultural Outlook Forum '97

The meeting will come to order

USDA's 73rd Annual Outlook Forum

When: February 24-25, 1997

Where: Omni Shoreham Hotel
Washington, DC

Hear from government and industry experts on:

- *Farm Act impacts, 1997 and beyond*
- *Risk management issues*
- *Farm commodity and trade prospects beyond the year 2000*
- *Market stability and world food security*

For information:
Call (202) 720-3050
E-mail to Agforum@oce.usda.gov
Write Outlook Forum, Room 5143 South Bldg., USDA
Washington, DC 20250-3800

For hotel reservations:
Call (202) 234-0700
Ask for the Outlook Forum rate

General information, program updates, and forms for registration and hotel reservations are also available on the home page:
http://www.usda.gov/oce/waob/agforum.htm

Plan now to attend

Those who attended the 1996 Forum will receive a registration brochure in November.