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Employees and Food Safety: Is Training Important to Food Service Managers?

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Employees and Food Safety: Is Training Important to Food Service Managers?

Abstract

A sample of food service managers were surveyed regarding the value they placed on food safety training: whether they would provide higher pay or bonuses for trained new workers or pay a fixed amount for current employee training. They were also asked how important public image was to their business. Approximately 72% indicated they would be more likely to hire food safety trained workers, and 50% would be willing to pay higher wages to those trained. Finally, given tight labor supplies for this sector, 93% were willing to hire trained Welfare-to-Work participants. However, other barriers to hiring these participants remain.

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Introduction

In 1998, Cooperative Extension specialists in Colorado, Wyoming, and Montana conducted focus groups with restaurant workers and managers to help identify motivators and barriers to safe food handling practices in restaurant settings. A recurrent theme was the shortage of workers trained in safe food handling procedures and an overall high turnover rate among restaurant employees. Discussions with food service managers indicated a strong preference to hire workers with training in safe food handling procedures (Kendall, Melcher, Pelican, & Paul 1998).

The CSREES-USDA Food Safety and Quality National Initiative, which funded the study discussed in this article, seeks to target food handler education programs for high-risk and hard-to-reach clientele. One such group includes former welfare assistance recipients who are now required to seek job training and are uncertain as to what skills will improve their value to employers. The goals of the study were to assess:

- Importance managers placed on safe food handling skills
- Importance of public image for food service managers
- Interest in integrating food safety training into welfare-to-work job training programs
- Labor market implications of food safety training for these food service managers
- Extension personnel's role in this effort

Background

The Centers for Disease Control and Prevention (CDC) estimate that approximately 76 million cases of foodborne illness result in 325,000 hospitalizations and 5,000 deaths annually (Mead et al., 1999). The yearly cost of lost productivity alone is estimated at between \$20 and \$40 billion in the U.S. (FDA, 1997).

Barriers to safe food handling practices for food service establishments are of increasing concern as Americans eat away from home more often. According to the National Restaurant Association (2000), half of all adults are restaurant patrons on a typical day. Moreover, public health officials have predicted that foodborne illness may become even more of a problem in the years to come (US-DHHS, 2000).

The FDA's report, *FDA Retail Food Program Database of Foodborne Illness Risk Factors* (2000), presents data to establish a national baseline of foodborne illness risk factors and for measuring the current status of occurrence of these factors. Among the establishments studied were fast food and full-service restaurants. The baseline data collected reflected the Food Code provisions on the occurrence of five risk factors:

- Food from unsafe sources
- Inadequate cooking
- Improper holding temperature
- Contaminated equipment
- Poor personal hygiene

Each of these issues is addressed in this study's survey. Further, within each of these categories, the FDA recorded "out of compliance" observations of more than 40% in both fast-food and full-service restaurants:

- Cold holding at 41 degrees F or below
- Ready-to-eat foods held cold at 41 degrees F or below
- Commercially processed foods date-marked
- Surfaces, utensils cleaned and sanitized
- Proper hand washing

These statistics pointed to a need for more employees trained in proper food handling techniques. In 1995, ServSafe Training (the National Restaurant Association's food safety training program) was adopted as a training tool for Colorado, Wyoming, and Montana. It was expanded in 1997 and 1998 with a train the trainer program. Over the 3 years ending in 2000, over 1,157 food handlers in Colorado had participated in the program.

Labor Management Challenges: Welfare-to-Work

Labor management challenges for the restaurant industry go far beyond the need for food safety training. The Colorado Restaurant Association (CRA) reports labor shortages throughout the late 1990's were due to a 2.6% unemployment rate while restaurant sales in the state increased 6.1% annually (Husted, 2000). This led to short-staffed food service establishments, and managers suggest this is a barrier to safe food handling (Kendall et. al, 1998). The study focused on one potential pool of foodservice workers, those individuals on welfare or taking part in federal assistance programs.

The Colorado welfare-to-work program offers potential employers subsidies and tax credits, and seeks to provide training and skills that are in high demand among Colorado employers (Colorado Welfare Reform, 2000). Our Extension personnel have been active in attending sessions with the Colorado program directors to better assess the need for food safety training among this potential labor source.

One assumption motivating the study was that employers may be reluctant to hire persons on welfare because they fear:

- The person will not have the requisite skills needed to prepare and/or serve food to customers in a safe and efficient manner and
- They (the employers) will not have the time needed to adequately train the person.

Thus, it was felt to be important for Extension agents to be able to provide a food safety education certificate program for welfare-to-work participants that showed that these workers had acquired the necessary knowledge and skills. This would be of benefit both to those needing jobs and those in the food service industry needing trained workers.

Methodology

An important component of the project was to establish the potential value of food safety training for both the employer and the employee, information Extension agents would be able to use in promoting the value of food safety training and its implied benefits to food service managers. The survey was used to indirectly determine the value of food safety programs and specific skills or knowledge associated with the training.

The survey asked questions with respect to the company's operations and food safety training

practices, including basic description of the type of food service, use of external and internal training programs, financial incentives to employees trained in food safety, and overall happiness with training received on several food safety issues. Kendall et al (2001) focus on the overall satisfaction with food safety training while the findings presented here focus on the following topics:

- The relative importance of food safety issues to managers
- Management's willingness to pay for safety training in the form of wages, pay raises, promotion, and actual training programs
- The level of importance placed on public image by managers

Focus groups with several food service managers were used to test the survey and increase the readability of survey question. When asked about methods to increase response rate, several participants noted that phone calls and other follow-up measures commonly used for consumer surveys may not be appropriate or effective. As an alternative, it was decided to add a one-dollar bill to the survey to show appreciation to respondents.

In early 2000, 500 surveys were mailed to restaurant managers in Colorado, Wyoming, and Montana. The sample was drawn from former ServSafe participants (because there was interest in how past participants rated that program), restaurant association mailing lists, and yellow pages. The resulting response rate was 28%, which is comparatively low, but as high as one can expect for a sector that has relatively significant time constraints, little office staff, and less formal organizational structure.

Results

The restaurant managers who responded to the survey were not fully representative of restaurant demographics, likely due to the fact that corporate-based restaurants were less likely to respond to surveys if most correspondence is referred to a national corporate office. Among respondents, 43% managed full-service restaurants, 33% managed limited service restaurants, and the rest worked with a variety of types of establishments, including cafeterias, catering, and bars/taverns.

On average, respondents' businesses served 408 guests per day and employed 18.8 full and 15.3 part-time employees at their locations. Approximately 45% of the meals were served at lunch, 32% at dinner, and the rest at breakfast and other times.

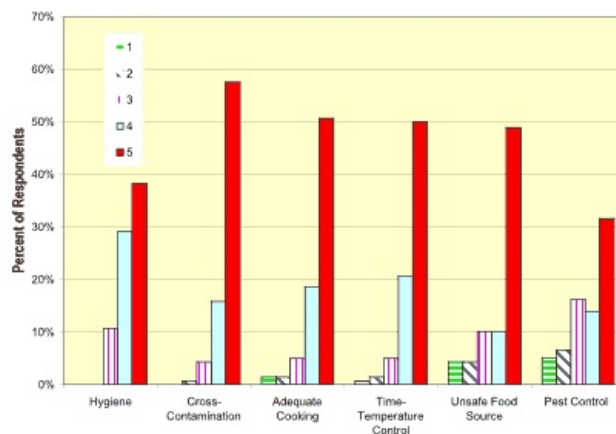
Food Safety Issues and Hiring Practices

Respondents were asked to rank the level of attention and time spent on the following food safety issues:

- Personal hygiene
- Avoiding cross-contamination
- Adequate cooking
- Time-temperature control
- Avoiding food from unsafe sources
- Pest control management
- Time

A ranking scale of 1 to 5 was used, with 5 representing the most attention or time spent on any one factor. As expected, food service managers ranked all food safety skills as high (See Figure 1). In particular, however, close to 60% of the managers ranked cross-contamination highest. Pest control training received the lowest ranking, with only about 31% of respondents rating this factor a 5 and 5% assigning pest control training an importance value of 1.

Figure 1.
Ranking of Food Safety Issues



Next, managers were asked how satisfied they were with the training that they received for these issues from ServSafe or other sources. Many were very satisfied, with 56% (using a Likert scale of 1-5) believing that the training had actually decreased food safety concerns for their business,

20% giving raises to workers who attended the training, and 20% promoting employees based on their participation in food safety training. See Table 1.

Table 1.
Training Satisfaction and Willingness to Pay

Variable	Yes
Willing to Hire Welfare-to-Work Trainees	93%
Likely to Hire Previously Trained Workers	72%
Decrease of Safety Concerns	56%
Bring in Trained Worker at Higher Level	54%
Pay a Higher Beginning Salary	39%
Give Pay Raise for Attending a Training	20%
Promote Worker after Attending a Training	20%
Pay a Signing Bonus	14%

Willingness to Pay for Safety Training

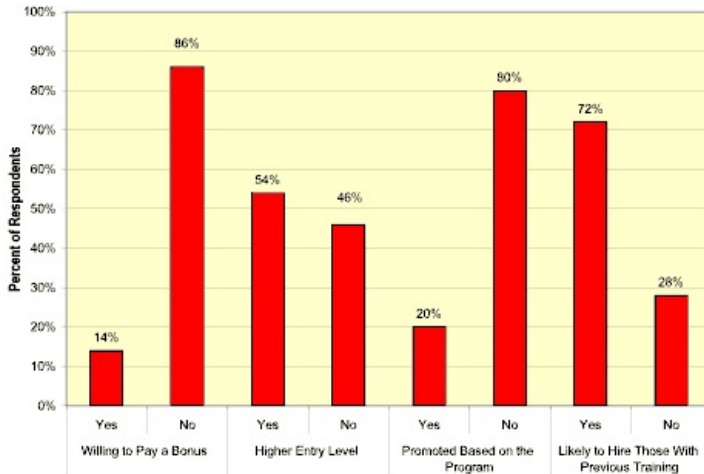
How does this translate into a willingness to pay for programs and/or offer higher wage premiums, promotions, or even bonuses? When asked what they would be willing to pay for training programs, 79% of managers said that they would be willing to pay some dollar amount ranging anywhere from \$5 to \$150, with the largest percentage (29%) willing to pay between \$11-\$25. The breakdown of premiums shows that 20% of these managers were willing to pay at least \$.51 to \$1.00 in additional hourly wages. See Table 2.

Table 2.
Willingness to Pay Fees for Training Programs

Fee for Training Program	Percent	Hourly Wage Premium	Percent
\$0	21%	\$0	34%
\$5-10	14%	\$0.05-0.25	9%
\$11-15	29%	\$0.26-0.50	27%
\$26-50	17%	\$0.51-1.00	20%
\$51-100	12%	\$1.01-1.50	3%
\$101-150	7%	\$1.51-2.00	4%
		Over \$2.00	3%

Managers were also asked if they were willing to pay signing bonuses to trained workers but only 14% said yes. In addition, 54% of managers say they might hire those trained in food safety at a higher level, and 72% were more likely hire those individuals with previous training. See Figure 2.

Figure 2.
Value of Training



It was thought that full-service restaurants may have more concern about image, leading to a higher willingness to pay for food safety training programs and willingness to pay a higher wage to workers trained in food safety compared to limited service restaurants. In fact, managers of full-service restaurants indicated greater willingness to pay a higher starting salary to workers with previous food safety training than did managers of limited service restaurants (75% vs. 54%).

Further, 40% of managers from full-service restaurants were willing to pay at least \$0.50 more per hour, compared to only 20% of managers of limited service restaurants. Not surprisingly, 80% of managers of full-service restaurants indicated some willingness to pay for food safety training, compared to 69% of limited service restaurant managers. Similarly, 42% of full-service restaurant managers indicated willingness to pay at least \$26 for food safety training, compared to 21% of limited service restaurant managers.

Although not presented here, these restaurant types were almost indistinguishable in their ratings on the importance of food safety issues and satisfaction with past food safety training. These findings would indicate that while the importance of food safety issues and satisfaction with food safety training do not vary by location and type of restaurant, willingness on the part of restaurants to pay both directly and indirectly for food safety training does vary.

It was interesting to note, however, that many managers unwilling to pay bonuses to workers with training were still willing to pay for the training sessions. See Table 3.

Table 3.
Managers Not Willing to Pay a Hiring Bonus but Willing to Pay for Training Session

Amount of Fee Willing to Pay	Percent
\$0	22%
\$5-10	16%
\$11-15	31%
\$26-50	14%
\$51-100	12%
\$101-150	5%

Importance of Public Image

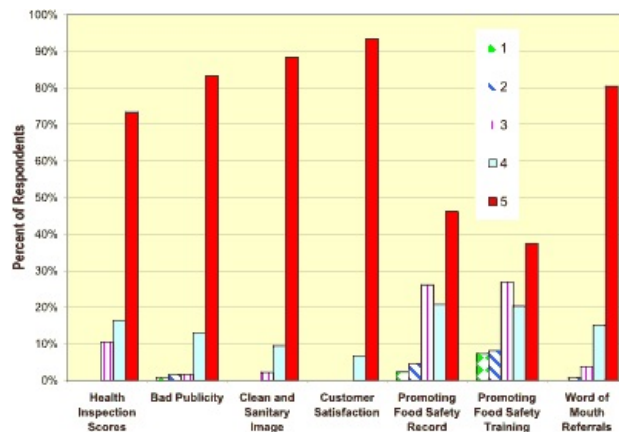
We next asked managers to rate the importance of different factors that affected the public image of their business. These included:

- Health inspection scores
- Bad publicity
- Clean and sanitary image
- Customer satisfaction
- Promoting food safety record to customers
- Promoting food safety training to customers
- Word-of-mouth referrals

As shown in Figure 3, respondents ranked all factors relatively high. The highest ranked concerns across the sample were customer satisfaction, the desire to be known for a clean and sanitary image, concern about bad publicity, word-of-mouth referrals, and health inspection scores. The need to promote food safety records and training seemed the least important, which would make sense, for, if the restaurant promotes a clean image and customer satisfaction, the training and safety records would speak for themselves.

Figure 3.

Importance of Various Factors on Public Image of Business: Ranked from 1 to 5, with 5 Being the Most Important



Food Safety, Labor Market, and Extension Implications

Employers understand the positive and necessary value of safety training programs and emphasize training as important employment qualification, but few have hired trained workers. However, these same employers are at least willing to do so and would even be more willing to bring these individuals in at a higher level than pay to for training themselves. If given the choice, most managers would choose training incentives that require no ready outlays of cash payments.

The study discussed sought to better understand both potential problems by enumerating and publicizing the value of specific skills and the overall value of food safety training to the food service industry. The findings provide some support that managers do value food safety training to private managers, in addition to the public benefits defined in the introduction. Our Extension specialists developed a display and brochure with these findings for distribution at job service offices to assist in recruiting trainees. It is important that they and other Extension personnel continue to have a presence at the statewide meetings where this kind of information can be disseminated to public Workforce personnel.

Based on interviews with workforce centers around the state, however, hiring activity among food managers has been minimal, showing a discrepancy between what employers say and what they may do. This may be explained by the challenges presented by shift work in this industry. Research shows that single mothers have been most likely to take advantage of increased minimum wages and welfare reform (Turner, 2000). Yet, childcare constraints make their availability for food service shifts problematic.

Alternatively, concerns about reliability and "soft work skills" may prevent food service managers from hiring welfare recipients. A National Restaurant Association policy brief (1997) noted that state welfare-reform agencies had only begun to address such key issues as the lack of available childcare, health care, and transportation. Government agencies may be working to match welfare recipients with employers, but those who study welfare reform say government help has traditionally been in short supply once a company actually puts welfare workers on the payroll.

Of more direct relevance to this project, few welfare recipients saw food service as an attractive employment option to aspire to, as evidenced by the lack of interest in food safety training offered through Colorado workforce offices through this project. There was anecdotal evidence that training in hard skills that were perceived to have greater value in the labor market were more likely to draw trainees than food safety skills.

Indirectly, this study found that pre-employment food safety training may not be valued by labor

market participants and, instead, that value will be created once a worker is on the job and managers communicate the need for stronger food handling skills. Thus, these findings should motivate Extension personnel to promote the implicit value of food safety training and to find more ways to encourage employers to directly support food safety training through training fees or the pay incentives that they say they are willing to provide.

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