The Safe Path to Success: How a Food Safety Training Program for Employees and Managers Is a Critical Component for Restaurant and Foodservice Operations
A properly trained staff is a critical necessity for success in the marketplace. Everyone agrees on that point. Additionally, everyone agrees that food safety is a critical necessity, and that it is of utmost importance for any dining experience. Yet, among decision-makers, all too often there is a gap between the recognition of a need and the allocation of time and resources to fulfill that need.

When it comes to restaurant and foodservice operations, the gap between recognizing the need for food safety training and then allocating the resources to provide the training can be dangerous. That gap represents an opportunity for food to become contaminated and for a foodborne-illness outbreak to occur.

Utilizing research published in 2009 in the *Journal of Food Protection*, one estimate stated that the annual cost of foodborne illnesses in the state of Ohio alone would be “approximately $4.1 billion.” According to data published in the *Journal of Environmental Health*, the estimate of annual productivity losses due to foodborne illnesses was “between $20 and $40 billion.”

The numerous benefits of food safety training include not only a safer dining environment, but also the potential for fewer hospitalizations, less disruption to communities, and increased health for guests. Food safety training definitely can protect the bottom line of any restaurant or foodservice operation.

Restaurant operators should ask themselves two basic questions: Are the guests at my restaurant in danger? Is my staff doing everything possible to try to keep food safe and to prevent a foodborne-illness outbreak?

Studies have shown that food safety training—at both the employee level and the manager level—can lead to a substantial reduction in the likelihood of a foodborne-illness outbreak.

For operators, food safety training leads to peace of mind. There are also many demonstrable benefits to providing adequate food safety training for a staff. Food safety training protects the general public, provides employees with opportunities for career growth, and allows operators to increase their profits while being responsible contributors to the community.

The purpose of this white paper is to illustrate how food safety training and certification are necessary not only to reduce the likelihood of a foodborne-illness outbreak, but also to help employees, managers, and the overall operation to excel on a day-to-day basis.
is analyzing food preparation practices and employee behaviors that are most commonly reported to the Centers for Disease Control and Prevention (CDC) as contributing factors in foodborne-illness outbreaks. The FDA has identified five key factors for these foodborne-illness outbreaks:

- Food from Unsafe Sources
- Improper Holding/Time and Temperature
- Inadequate Cooking
- Poor Personal Hygiene
- Contaminated Equipment/Prevention of Contamination

Media reports on foodborne-illness outbreaks are a reminder that food from an unsafe source—or food that is not cooked and handled properly—can harm people. That is a frightening scenario, but it is a scenario that potentially could be avoided with proper staff training.

A comprehensive food safety training program covers a vast array of topics, including all the key foodborne-illness risk factors identified by the FDA.

In addition to addressing the public safety issues, a comprehensive food safety training program can lead to increased efficiency, higher profits and more repeat business. Employees who are properly trained in food safety are less likely to engage in harmful activities, such as accidental cross-contamination. This kind of mistake can force a manager to throw food out, which certainly hurts the operation's bottom line.

Food safety is tied to maintaining a positive image within the community. Today’s dining customers are on tight budgets and are extremely sensitive to issues associated with food safety. With a variety of dining options available in almost every town, guests will not return to an establishment where they have observed an unclean environment or any other signs that the staff is not properly following food safety regulations.

**Training on Food Allergens and Cross-Contact**

**Management, servers and kitchen staff** must be thoroughly trained regarding the dangers of food allergens and cross-contact. Food safety training can help a staff to prevent a guest from having a food-allergic reaction, which is a medical emergency.

Employees must be knowledgeable of all the ingredients in every dish on the menu. Servers and kitchen staff should be aware of ways to prevent cross-contact (the transferring of allergens from one food to another food that is served to a guest).

A few simple steps learned in a training session can prevent a major crisis. For example, delivering a food-allergic guest’s order to the table separately from the other orders accomplishes two things. It reduces the likelihood of cross-contact, and it sends the message that guests’ health and safety is a top priority.

Being able to identify the symptoms of an allergic reaction (and knowing what to do when they are present) is a responsibility that is shared by the entire staff. As with any type of emergency, working together to prevent a
crisis is always preferable to facing a crisis. Every experienced manager knows that training is the key to crisis prevention.

Handwashing: Dangerously Overlooked

Children often hear parents say, “Wash your hands before dinner!” The importance of that age-old advice is magnified tremendously for professional foodhandlers.

A comprehensive food safety training course covers topics that might seem complex to some employees (such as microbiology or sanitizer concentration), as well as topics that are deceptively simple, such as handwashing. Although handwashing may seem to be obvious and straightforward, some foodhandlers may not wash their hands correctly.

Inadequate handwashing is a significant issue within the realm of personal hygiene. One FDA report stated, “Hands are a common vehicle for the transfer of harmful bacteria and viruses to food products. Effective handwashing is one of the most important measures to minimize the contamination of food by employees.... Reinforcing the importance of handwashing should be supported by a management system

that includes proper employee training and monitoring of the frequency and effectiveness of handwashing practices.”

Every entry-level foodservice employee has a vague understanding that handwashing is important, but workers who complete a food safety training program gain an in-depth understanding of how and when to adequately wash their hands.

Some of the steps in proper handwashing involve running water that is at least 100°F (38°C), using an adequate amount of soap, and scrubbing vigorously for 10–15 seconds before rinsing. The entire handwashing process should take about 20 seconds. Comprehensive food safety training also helps employees understand the link between handwashing and the spread of certain illnesses, such as Norovirus gastroenteritis.

Researchers have interviewed employees to determine what the perceived barriers are to properly performing food safety practices, including handwashing. In some cases, a lack of training is the problem. In other cases, employees falsely believe that they don’t have time to wash their hands during busy shifts.

One study, published in the Journal of the American Dietetic Association, found that employees often cited time constraints as a reason for not washing their hands. The study recommended the following: “Training sessions should focus on educating employees that properly performing the [food safety] practices does not take as much time as perceived.”

The key here is that the obstacles to performing food safety practices correctly are
often perceived barriers, as opposed to what we might call real barriers. (An example of a real barrier would be an inadequate number of color-coded cutting boards in the kitchen of a large restaurant.)

The study also stated that managers “should incorporate food safety practices into employees’ daily routines to eliminate the perceptions that time constraints are a barrier to performing proper food safety practices.”

The lesson? Safety should always take precedence over speed. After all, those 20 seconds an employee spends to wash his hands could prevent a foodborne-illness outbreak from occurring.

Time and Temperature Violations: Damaging the Bottom Line

Following food safety guidelines doesn’t just protect the public — it also protects an operation’s bottom line.

Imagine a scenario in which a poorly trained employee sets a cooked chicken on a counter in the kitchen area. On this particular shift, the restaurant is unusually hectic. The employee gets distracted, forgets about the chicken, and thus the food does not cool properly. A certified kitchen manager notices that the chicken has been cooling for two hours. Using a thermometer, the manager sees that the chicken has not yet cooled down to a temperature of 70˚F (21˚C). Realizing that this food has not cooled correctly, and that dangerous pathogen growth could have occurred, the manager makes the wise decision to throw out the food.

The manager says to herself, “Better safe than sorry,” knowing that she has helped prevent a potential foodborne-illness outbreak. The manager also explains the situation to the employee.

There are multiple types of financial loss associated with this particular scenario. Figuratively speaking, money has been thrown into the garbage. Time is money, and time has been wasted.

The lesson? Food safety training can lead to greater safety and greater efficiency in the kitchen environment—both of which can lead to higher profitability.

Handling Illness Among Foodservice Employees

Proper food safety training for managers involves knowing how to handle a variety of personnel challenges. An ill employee who reports to work presents a potentially dangerous situation.

Research has indicated that infected restaurant employees were a contributing factor in some U.S. foodborne-illness outbreaks. This emphasizes the need for employees and managers to be trained and educated regarding illness in the workplace. A comprehensive food safety training course covers not only topics such as proper cooking techniques and the proper cleaning of kitchen equipment, but also the recommended procedures to follow when an employee is ill.
Food Safety Training: Always an Essential Component

Restaurant and foodservice establishments should consider food safety training to be nonnegotiable for all employees. Unfortunately, training is an area that often is subject to budget cuts. It might be an easy target when budgets are tight, but it shouldn’t be thought of that way. Training is a necessary, essential investment that enables an operation to stay safe and to flourish even during an economic downturn.

Taking a route that “meets the bare minimum” for training requirements is a shortsighted approach that may seem to save money in the short term but could lead to disastrous results in the long run.

No one would want to undergo surgery with a medical staff that had simply met the bare minimum for sanitation and safety requirements. Patients want to be under the care of medical professionals who are thoroughly trained and who have safety at the forefront of their minds at all times. Similarly, customers will seek out restaurants where they can observe a staff that is focused on food safety.

A comprehensive food safety training program provides solutions for both employee and manager training. A comprehensive food safety training and certification program such as ServSafe can help protect the local community and simultaneously boost the operation’s bottom line.

Certified Kitchen Managers: Trained to Protect

Imagine two restaurants. They’re located in the same city. They serve approximately the same number of guests each month. They each have a staff of about 50 employees. They have similar menus. But there is an important difference. One restaurant was linked to a recent foodborne-illness outbreak, and the other was not.

So what is the crucial difference between these two establishments? The answer lies in the number of certified kitchen managers that each operation has on its staff.

A study published in the Journal of Food Protection analyzed and compared restaurants in which a foodborne-illness outbreak had occurred and restaurants in which outbreaks had not occurred. The report stated, “Outbreak and nonoutbreak restaurants were similar with respect to many characteristics. The major difference was…the presence of a certified kitchen manager (CKM); 32 percent of outbreak restaurants had a CKM, but 71 percent of nonoutbreak restaurants had a CKM… Food safety certification of kitchen managers appears to be an important outbreak-prevention measure...”

This study points to a link between two things: (a) the likelihood of a foodborne-illness outbreak occurring in a restaurant; and (b) having a certified kitchen manager on staff in a restaurant. The aforementioned difference in percentages (32 percent versus 71 percent) suggests that a restaurant with a certified
kitchen manager (CKM) on its staff is less likely to be the site of a foodborne-illness outbreak.

Having a CKM on staff is important for any dining establishment. This person can lead by example and help create a culture of food safety awareness for the entire staff. Ideally, an operation will have a certified kitchen manager on duty for every shift. Some restaurants insist that there be a CKM present at any time that employees are working (before and after operating hours, during cleaning procedures, etc.).

Providing a restaurant staff with an adequate number of properly trained managers is like assigning the proper number of police officers to patrol an area. When a healthy number of properly trained professionals are around, the safety level increases for everyone.

A study published in 2009 in the Journal of Food Protection suggested that the presence of a certified kitchen manager was “protective for most types of critical violations” found in restaurant inspections. The study further stated that “CKMs were associated with a lower likelihood of violations for personnel, food source and handling, and facility and equipment requirements and to a lesser extent for warewashing and other operations.”

Another study, published in Food Protection Trends, highlighted the significant role that properly trained managers can play in removing obstacles to food safety. Researchers noted that “although managers may not be able to control the customer ‘rushes’ that often result in time pressure, managers can emphasize the importance of food safety over speed and attempt to ensure that staffing is adequate to meet the demand.”

The results of these studies make it abundantly clear that a relatively small investment in manager training today could prevent a devastating and grossly expensive disaster from happening in the future.

The potential costs and consequences of a foodborne-illness outbreak are myriad, and they include the following:
- Loss of customers and sales
- Loss of reputation
- Negative media exposure
- Lowered staff morale
- Lawsuits and legal fees
- Staff missing work
- Increased insurance premiums
- Staff retraining

Some decision-makers say to themselves, “Oh, none of those things will happen to me.” Let’s put it in perspective: The cost of training seems relatively small when compared to the potential costs associated with an emergency situation. Remember, providing training and education to managers and employees is one of the best ways to reduce the likelihood that a foodborne-illness outbreak will occur.

**Food Safety Training: A Continuous Cycle**

**Instructional design experts agree** that training should not be thought of as “a one-time thing,” but rather a continuous process. This is especially true for food safety training. Each shift presents new opportunities for managers and employees to confer on ways to
Figure 1: Comprehensive Food Safety Program

This diagram illustrates how a comprehensive food safety training program represents a continuous cycle. Let’s take a look at the career of Maria. When she was hired as a server 18 months ago, Maria enrolled in entry-level food safety training. She actively used food safety knowledge and techniques on the job. Her manager, Thomas, was impressed by her commitment to food safety. As Maria’s career advanced, she enrolled in a manager course and became a certified kitchen manager. Eventually, Thomas was promoted and transferred to another location. Maria then became the manager of the operation where she started her career. Today, Maria oversees a staff, ensuring that all employees have food safety at the forefront of their minds.

Thomas, Maria and the entire staff share a vernacular and an understanding of food safety techniques. When Maria says something about the “temperature danger zone,” her employees know she’s talking about food held between the temperatures of 41°F and 135°F (5°C and 57°C). When Maria mentions “FAT TOM,” her staff immediately comprehends that she means the acronym referring to the six conditions that promote the growth of pathogens: Food, Acidity, Temperature, Time, Oxygen and Moisture.
ensure that food remains safe—whether the task is receiving a shipment of fresh produce, or cleaning and sanitizing a food preparation surface.

Food safety training occurs on the job just as much as it does in the classroom. As the Journal of Food Protection has noted, “The presence of a CKM [on a staff] also likely improves the quality of informal on-the-job training on which many restaurants rely, thus increasing adherence to recommended food handling and preparation practices…”

In order to develop a pervasive culture of food safety, it’s imperative that managers and employees share the same terminology and concepts. This allows the entire staff to “speak the same language” and to reinforce techniques that are learned in the training setting.

**Employee Retention**

**Proper food safety training** is intrinsically tied to career advancement. That, in turn, leads to increased productivity and higher employee retention for the company. In short, food safety training is a “win-win-win” that helps the public, the employee, and the company.

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<tr>
<th>Food Safety Training: A Win-Win-Win</th>
<th>Public Receives Safe Food = Win</th>
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<td>Employee Receives Career Advancement = Win</td>
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<td>Operator Receives Higher Productivity, Employee Retention, Praise from the Community = Win</td>
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**Figure 2: Food Safety Training, a “Win-Win-Win”**

According to a study published in 2008 by Duke University and CFO magazine, “difficulty in attracting and retaining high-quality employees” was the top concern among the more than 1,000 chief financial officers surveyed.

Whether the economy is in a downturn or in a recovery mode, retaining employees is typically a surefire way to increase productivity. Employee retention also helps the company to avoid unwanted expenses associated with worker orientation.

In one survey of food service managers, “approximately 72 percent indicated they would be more likely to hire food safety trained workers, and 50 percent would be willing to pay higher wages to those trained.”

When an employee “buys into” training, then he or she tends to remember the information and use the techniques on the job. One of the most effective ways to get employees to “buy into” food safety training is to remind them that they are learning skills and techniques that are directly tied to performance reviews, salary increases and career advancement.

**Responding to a Foodborne-Illness Outbreak**

**A comprehensive food safety training program** provides managers with the skills needed to reduce the likelihood of a foodborne-illness outbreak. It also provides them with training and instructions on what to do if an outbreak does occur. In many situations, if the recommended steps are taken quickly, then the scope of a foodborne-illness outbreak can be reduced.

The following case study illustrates the way an experienced manager should handle a challenging situation, as described in the textbook ServSafe® Essentials, Fifth Edition.
Linda Burke, the manager in this case study, knew exactly what to do. She has a thorough understanding of her operation’s food safety management system, which helps prevent problems. But when a foodborne-illness outbreak did occur, Linda remained calm. That’s because she had a crisis management plan in place.

Linda’s years of experience, combined with the training she received, helped her handle this challenging situation in a professional, efficient manner.

Linda is one of millions of workers who have benefited from the ServSafe® food safety training program. At the start of her career, Linda enrolled in the ServSafe Starters® Employee Online Course. This training gave her the skills and knowledge necessary to keep food safe. Later, Linda enrolled in the ServSafe Manager Online Course to advance her career, and to help prepare her to obtain the ServSafe Food Protection Manager Certification. The Manager course built upon the training Linda had received in ServSafe Starters, and it enabled her to become a better supervisor.

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“The ServSafe food safety training program includes content that is based on information provided by industry experts who have determined the knowledge, skills and abilities foodhandlers need to know in order to perform their jobs effectively,” said Beth Johnson, executive vice president, public affairs, National Restaurant Association. “Whether the topic is adequate handwashing, correctly reheating food, or developing an integrated pest management program, the ServSafe program helps employees keep food safe from farm to fork.”
About ServSafe

PUBLISHED BY THE NATIONAL RESTAURANT ASSOCIATION, the ServSafe food safety training and certification program is the industry leader. Incorporating the latest science-based information, real-world scenarios and updated case studies, ServSafe represents the highest standard in food safety training and certification.

Accepted in all 50 states, ServSafe is the most widely accepted food safety training program among local, state and federal health departments. Furthermore, the ServSafe certification program is accredited by the American National Standards Institute (ANSI)–Conference for Food Protection (CFP), and through the years has awarded nearly 4 million ServSafe Food Protection Manager Certifications.

ServSafe is a program that brings food safety concepts to life, making them more engaging, increasing learner comprehension, and helping lead to increased food safety application on the job.

ServSafe offers a variety of employee-level and manager-level products, which are available in traditional formats or online. Materials are available in multiple languages. Visit www.ServSafe.com for more information, or email ServSafe@restaurant.org.
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6. Howells et al.


11. Cates et al., p. 388.

