

Principles of Food Inspection

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ABSTRACT

A brief review of the history of food-caused illness in humans and those categories or areas in a foodservice operations that are considered critical by public health personnel are discussed. The role of the foodservice manager is examined with respect to foodborne outbreaks. Some issues divergent from basic sanitation, but nevertheless, important to the foodservice manager and to public health personnel, are presented.

When the average consumer enters a foodservice establishment and purchases anything from a snack to a complete meal, that person is most immediately concerned with appearance and taste of the food, “atmosphere” of the eating place, and cost of the food. Rarely does the consumer give thought to the safety of the food. Most of those consumers simply assume the food to be safe just as they assume that pasteurized milk is safe. Usually their assumption is correct, but sometimes an unpleasant surprise awaits them 3 or more hours after they consumed food in a foodservice establishment (6).

The recognition that food may cause sickness and death goes back to the earliest period of recorded history. Experience taught man that certain naturally occurring plants always produced illness when eaten. These were long ago eliminated from the eating habits of mankind. They also learned that some animal foods produced illness during certain seasons. These they also guarded themselves against. That certain naturally occurring acceptable food sometimes caused illness was also known early in man’s history, but the reasons why this happened did not come to light until the germ theory of disease was demonstrated and became an accepted fact. This was scarcely more than three quarters of a century ago (4).

Most of the precise knowledge about foodborne poisons and foodborne infections is of relatively recent discovery, and even today much is yet to be known about these subjects. The field at present recognizes only a few fundamental causes for the spoiling of food, although the circumstances in which these fundamentals operate are innumerable, most of which relate to the handling of food. For example, one fundamental cause of spoiling is bacterial contamination, but such contamination may take place in any number of circumstances associated with handling of food in the process of production, preservation, storage, distribution, and preparation for consumption (4).

Preparing and serving wholesome food to the public is a very important obligation of the foodservice industry. It is an obligation that can only be fulfilled if everyone in every establishment understands what sanitation is, appreciates its importance, and practices it in whatever task performed. Practicing sanitation means applying sanitary measures at every stage of the operation for the sake of cleanliness and for the sake of protecting the health of the public served (5).

SANITARY PRACTICES

Sanitary practice, then, is concerned with the purchase of a sound food supply and its sanitary storage; with the adequacy of the physical plant and its maintenance regarding repairs and cleanliness; with the adequacy and cleanliness of storage facilities, equipment, utensils; with sanitary dishwashing operations; with the good health, good personal hygiene, and good working habits of the food handler; with the sanitary manipulation of food and effective time-temperature control throughout preparation and service; and finally with the education of foodservice employees in the various aspects of sanitation in a foodservice operation (5).

Many of the factors covered in the inspection of eating establishments are inferentially related to health. For example, it might be difficult to show that a restaurant floor had to be constructed of smooth and non-absorbent material to protect patrons (1). Additionally no valid proof exists, nor is there necessarily a direct relationship, that if dust or dirt gets on food, the person who eats the food will have his health automatically impaired. Also, there may be no overwhelming evidence that a person who coughs on food will produce illness in another person who eats the food. Yet each item checked in an
inspection contributes to the overall image of good, safe operating practices and the public should expect, and is entitled to, sanitary and safe food when dining in a public eating establishment.

The basic, bottom line reason for public health inspection of foodservice operations is to prevent, or at least to reduce the probability of food-borne illnesses. Every step in the handling of food may be a point at which contamination may occur.

CAUSES OF FOODBORNE ILLNESS

It cannot be too strongly emphasized that in the vast majority of outbreaks of food-borne sickness, the food affected is not noticeably altered in appearance, taste and/or smell. The principal causes of food-borne disease outbreaks are:

1. Failure to refrigerate perishable foods.
2. Sick or diseased employees.
3. Poor employee personal hygiene.
4. Failure to thoroughly cook foods that might be contaminated.
5. Obtaining food from unsafe sources.
6. Failure to clean and sanitize kitchen utensils and equipment.
7. Poor food storage practices leading to contamination by rodents, sewage, customers and/or with toxic materials.

Reduced to the simplest terms. Protecting people from illness due to contaminated food does appear to be a pretty straightforward matter. It is! The stumbling block comes in awakening people, foodservice personnel, to the existence of the problem and getting them to act on it - by habit. Key factors in the protections of the public are:

1. Informing employees on the nature of disease. They should not come to work when they have a communicable disease.
2. Safe water supply.
3. Proper toilet and lavatory facilities.
4. Approved methods of waste disposal.
5. Proper refrigeration and food storage.

Some formal training in basic principles of foodservice should be required of everyone who handles food, and sanitation must be an important part of such training (5). The foodservice manager has a clear-cut single objective: to protect people against illness from contamination of food by harmful organisms and their toxins, and by other poisonous materials (7). To do this the foodservice manager must be committed to one or both of two courses of action:

1. To keep food free of bacterial contaminants in the first place; and/or
2. To prevent growth of bacteria that may invade food during storage, preparation, and service.

In the final analysis, the integrity of the management and the quality of the employees are the true keys to sanitary and safe food in foodservice operations.

CHANGES IN FOODSERVICE OPERATIONS

Protection of food from unwanted microbial contamination and unwanted microbial growth is a present, and will be a future, concern of the foodservice industry. Even with this in mind, we must remember that the foodservice industry is different now than it was years ago.

There are fewer full-service food operations which means less food preparations and, consequently, fewer opportunities for contamination. Foodservice operations are purchasing more pre-portioned and pre-prepared foods that are more safely stored and need little handling or preparation. Any reduction in food handling also reduces the probability of contamination and less opportunity for bacterial growth. There are more chain and/or franchised operations with limited menu items allowing for reduced and specialized food handling.

Additionally, there are issues upon us that are different than protecting food from contamination and/or reducing the probability of a food-borne outbreak. The foodservice industry and public health personnel are also concerned with:

1. Truth-in-menu criteria.
2. The use of analogue foods.
3. Nutritional labeling on menus
4. The use of consumer give-aways.
5. Public disclosure of foodservice inspection records.

Truth-in-menu guidelines

There appears to be a need for development of truth-in-menu guidelines that are directed toward protection of the consumer's health. For example, "low calorie", "salt-free" or "low sugar" term usage on a menu must be supportable by specific data.

The use of generally accepted industry and regulatory terms with regard to definitions of standards of identity, quality, grade or portion must not be violated. Here is where consumers, consumer groups, or health departments acting as advocates for the consumer find instances that approach outright consumer fraud (8).

The Truth-In-Menu Guidelines recently published by the Chicago and Illinois Restaurant Association point out four areas where deception might take place (2):

1. Incorrect or deceptive geographic points of origin should not be used.

Examples of the type of menu items which might be violating this guideline if their point of geographic origin could not be substantiated by observing the labels or invoices are: Lake Superior Whitefish, Maine Lobster, Colorado Trout, Idaho Potatoes.

2. Merchandising terms relating to the method of preparation or characteristics of a food product which cannot be verified by the owner should be avoided. This area of menu misrepresentation is a difficult one to define and yet deals with the very heart of the truth-in-menu problem.

Included in this category would be such statements as: "our own special sauce", "fresh daily", "home-made", "best blend", etc. An effective operating rule in this
rather gray area would seem to be that if a restaurant chooses to use descriptive words or phrases, the words should be accurate and the description verifiable.

3. The menu description or quality should accurately represent that item that is actually being served.

Any product brand that is advertised must be the one that is actually being served. Examples of possible violations would be serving other colas for "Coca-Cola" or other gelatine products for "Jello". Some easy examples of what to avoid with regard to dairy products in this area of prohibited misrepresentations are: margarine cannot be represented to be butter, whipped topping should not be called whipped cream, or non-dairy creamers should not be served as cream. Other common violations in this area are the substitution of halibut for turbot, sharkmeat for whitefish and small chickens for Rock Cornish game hens.

4. Menu items represented to be of specific sizes or weights must be no less than what is advertised.

Any representation of size whether it is in terms of pounds or inches should be accurate and must be verifiable. For example, what is presented in the menu as a 12-oz. steak or a ½-lb hamburger must weigh that amount before being cooked.

Analogue foods

Only analogue foods that have been “approved” by U.S.D.A. and/or F.D.A. should be used as ingredients in foods sold, prepared, or served by foodservice operations. When an analogue is used as a substitute for a valuable constituent in whole or in part, for example, textured vegetable protein is substituted for chicken in chicken salad, the menu listing of the food item should disclose to the customer such a substitution (8).

Nutritional labeling

If a nutritional claim is made, then it must be supported by documentation. Such documentation must be available to the consumer upon request and the menu listing must accurately reveal the nutritional information (8).

Consumer give-aways

The foodservice industry should take proper measures to protect itself and the consumer in the use of “give-aways” by having appropriate testing done and using adequate labeling as to use and/or function of the item (8).

The above-mentioned areas of Truth-in-Menu, Analogue Foods, Nutritional Labeling and Consumer Give-Aways are becoming of more and more concern to the aware consumer. Advocates of the consumer are beginning to ask those questions not previously asked and are asking that the foodservice operator prove what is being stated.

Many of these same consumer groups are encouraging and/or lobbying for legislation against consumer fraud in the foodservice industry. Enforcing such regulations are not just governmental consumer agencies but health departments.

In the State of California health departments are responsible for this consumer-related legislation in the foodservice industry. One could expect that this might establish a trend that would spread to other political jurisdiction. There could be a good bit of discussion, not only as to need of such legislation, but also as to what agency should be responsible.

PUBLIC DISCLOSURE OF FOODSERVICE INSPECTION RECORDS

This is a rather sensitive issue both to the foodservice manager and to health department personnel. Most local law departments have ruled that the foodservice inspection reports should be considered as public records and made available upon request.

Recently in a newspaper article in the Cleveland Plain Dealer (3) a Denver, Colorado assistant city attorney ruled that the foodservice inspection records would no longer be available to the public. He indicated that they were investigatory files for law enforcement purposes and that their publication in the newspaper was contrary to the public interest. The news article went on to indicate that the local newspaper didn’t agree and would take legal action, if necessary, to gain access to the reports. This will be an interesting case to follow!

This brief overview is a way of looking at the evolution of the foodservice inspection. Why it was necessary in the first place, what changes have occurred and are occurring in the foodservice industry that may modify the original intent and a look into the future to see what else we should be concerned about.

The “principles” of food inspection may need to stray away from the words in the original law. I don’t suggest that we lose sight of those basic health concerns of cleanliness, sanitation, refrigeration, dishwashing, etc., but that we also become interested in and concerned about those consumer-related issues that are also important. The foodservice industry and public health officials all have a stake in ensuring that each foodservice is a safe and honest place to eat.

REFERENCES