

Food Safety and Keeping Our Customers Alive

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The most important part of cooking is not getting people sick. Avoiding food poisoning is paramount to any food service business. Now, this should generally be called Food Borne Illness. For the most part, it is bacteria found in food, which develops as the food is mishandled, that will get people sick. Up until about 1950, it was presumed that food went bad because of “ptomaines”, which were present in meat products. Thus “Ptomaine Poisoning” was the prevalent name for what happened when you let a bad cook cook.

About 60 years ago scientists discovered and quantified some of the agents that caused gastronomical distress, specifically bacteria and viruses that are allowed to grow in food, and cause illness. Thus, this article is about Foodborne Illness.

The CDC (Center for Disease Control) estimates that 76 Million Americans contract a food borne illness each year.

325,000 Americans are hospitalized each year for food related illnesses

5,000 die each year from foodborne illness

You would figure that with all the press about food safety and all the training that is available, most people who have cooked for more than a few years would have a good basic knowledge of sanitation and safety. Unfortunately, I do not think this is the case.

Anyone who cooks should be aware of the potential hazard of preparing and serving food to the public. Every food service establishment should have a person certified in Food Safety on staff, and every person in that kitchen should have at least rudimentary training in avoiding foodborne illness.

The Smell Test

There is no smell test to see if food is safe.

All you're testing for is if the food doesn't smell bad. If you are sniffing it to see if it is bad, it probably is. Throw it out. If you have any questions about the safety of product, do a little research into that product's life. How long has it been stored since being cooked, how was it stored, how was it reheated?

If in doubt, throw it out. It is a terrible feeling to think you may have served food that could get someone sick. It is a more terrible feeling if people actually get sick.

The Danger Zone

The danger zone for bacteria growth is approximately 40° to 140°. Everyone who handles food should know these numbers.

Bacteria will grow at these temperatures and will not be killed unless properly heated over 140°. The rule for reheating product is 2 minutes at 165°. This is not a matter about which to be casual, use a thermometer to be certain.

Bacteria will not be killed by freezing, it will only be annoyed. The bacteria will continue to live and will flourish if brought into the danger zone.

B. Cereus

Everyone knows about the big name foodborne illnesses and their related agents, like Salmonella, E. Coli, Staph, and Botulism. Most people will say that the most dangerous foods are chicken, seafood, and meat, and in general they are correct. These diseases can kill. However, the incubation period for most of these diseases can be up to 21 days. Thus, you can get a deadly disease from a bad cook, and not know where it came from.

One of the lesser known, but very prominent bacteria affecting food is Bacillus Cereus. This grows mainly in rice or pasta, and is not generally deadly. It can, however, kill your business. This bacteria will have your customers over the sink or on the toilet within hours, and they will know exactly where they got it from. Bacillus Cereus will incubate to a sickening level in 1 to 6 hours.

Examples of some interesting bugs that we deal with:

E. Coli – incubation period of 1-10 days – generally found in beef

Salmonella – incubation 1-21 days – generally found in chicken and eggs,
but prevalent in many raw food products

Bacillus Cereus – 1-6 hours – generally found in pasta and rice

Botulism – 2-10 days – Anaerobic bacteria, mostly in canned foods

Staph – 2-6 days – from surface contamination, raw wounds, person to person

Gloves

There are always questions about gloves. Most people don't like them, and most people don't know how to use them. There is one simple rule: From my hands to your mouth. If there is product that you are going to handle, and it will be served without being cooked, you need gloves.

You can avoid wearing gloves and still be very sanitary and in compliance with state and local regulations. Simply do not touch the food with your hands; use tongs, spatulas, spoons, or scrapers. Make sure the tools are clean, and be careful not to cross contaminate.

As a Chef or Manager, I would have gloves available at every station, in every size that is needed. If someone doesn't want to use them, then have them use utensils. Or require that one glove be used, like Michael Jackson, just don't handle food with the ungloved hand.

Gloves are cheap. Your staff should not wear gloves for any length of time, as they are dirty. Throw them out, wash your hands, and get new ones. They are not just for show, they serve a serious purpose; prevention of staph infections and cross contamination.

Cross Contamination

Avoiding cross contamination, along with good temperature and storage practices, will be the most effective way to avoid foodborne illness. Cross contamination is when a hazardous item, such as raw chicken, is prepared in such a way that the juices will contact an item to be served raw, like cole slaw. Unwashed hands are a prime carrier of cross contaminants.

This could happen if your prep cook pounds chicken breast on a table in such a way that juices fly towards raw product. Or if he or she works chicken on a cutting board or table, and does not properly sanitize that surface before using it for the next product. In is how cole slaw can contain raw chicken bacteria. Give this a day or two and it could be deadly.

Think of it as adding perfectly diced, nicely seasoned raw chicken to your cole slaw. Nice though, huh? Both the cole slaw and the raw chicken are good wholesome products, but the combination could kill your customer. The same can happen if you are not extremely careful about any raw meat products in your kitchen and the surfaces on which they were prepared.

Towels

A primary source of cross contamination is kitchen towels. Think about it; this towel was used for wiping up raw chicken and to dry off a cutting board, or to wipe up the floor and to clean out a mixing bowl. Not a pretty thought.

All towels should be kept on a low surface in a Sanitizing Solution. This is generally a water bath with some Iodine or Chlorine added to kill all bacteria and viruses in the towel. When they are too dirty they should not be used. The solution should either be tested for effectiveness or renewed often. Towels are not sanitized by running them through the dishwasher; that only sanitizes surfaces.

The use of sanitizing spray is not effective with a dirty towel. A clean towel is still needed. If in doubt, sanitizing spray with a paper towel works well.

Wash Your Hands

I don't see enough hand washing in kitchens. Your staff cannot wash their hands often enough.

Change a job, wash your hands. Touch your hair, smoke a cigarette, or eat; wash your hands. Wash your hands publicly and often. Put up signs, make sinks and soap available. Make sure towel dispensers are full and working. Ask people if they've washed their hands recently; every 20 minutes at a minimum.

Would you want to eat food prepared by people with dirty hands? I assure you that your customers will appreciate this effort.

Sanitation and Keeping it Clean

A clean kitchen will breed better food handling practices. If the kitchen crew is expected to clean their work areas and to leave a work zone in shining condition, it may indicate that that crew will monitor the food handling all around. Temperatures are more important than a clean floor to keep your customers

from getting sick, but a dirty floor probably means the crew just doesn't care. Or they may think that management doesn't care about food safety.

It is of primary importance to keep areas where customers can see into the kitchen shining and bright. Paint is a good way of brightening up a kitchen and stainless steel cannot be under emphasized.

A rule of thumb, which I will attest to, is if the bathrooms in a place are dirty, the kitchen is too. The public restrooms have to be constantly monitored. Plus, the physical condition of bathrooms need to be addressed regularly. Falling tiles and smelly surfaces do not make for happy customers.

The Ice Machine

A frequently overlooked part of the kitchen and bar is the ice machine. If you think about it, ice is a food. It's used in most drinks, in many recipes, to cool pasta and other products, and can be easily contaminated.

The ice machine should be cleaned frequently. It should be emptied on a regular basis, weekly or every other week, and then sanitized. If contaminated water is used in an ice machine, or if bacteria contaminate the ice, then the bacteria goes right to the customer.

Nothing should ever be put into the ice, except for the ice scoop. The ice scoop should be stored clean and dry, and not allowed to be used for anything else. The buckets used to transport ice to the kitchen or to the bar should be clean and should be used only for ice.

HACCP

This is an often used and misunderstood system of food safety procedures. It is an acronym which stands for "Hazard Analysis and Critical Control Points". It is pronounced Ha-Sip.

In a HACCP certified facility, every step of every process in food preparation is judged for safety and effectiveness. The steps include manufacture, transportation, storage, preparation, heating, serving, storage of leftovers, and re-service. Any step in the process could endanger the consumer.

A good house will keep HACCP in mind at all times. Product should be delivered at the proper temperature and stored properly. If you buy, ground beef, and it is delivered to you at 85°, instead of the proper 35°, any products you make from that ground beef will be suspect. The preparation, heating, and service temperatures should be noted and logged.

It is prudent to keep daily logs of cooler and freezer temperatures. If you are suspected of causing a foodborne illness, good temperature logs can help you immediately with the Board of Health.

Be Ever Vigilant

Don't become a victim of poor food handling practices. Your business and your job are at stake here. You have a lot to lose if a customer becomes sick due to bad food handling practices. We can afford to be casual about some kitchen practices, but never about food safety.