

Your Food: How Safe Is It?

Rebecca Lwin offers advice on how to avoid intestinal upsets (and worse) through simple food hygiene rules.

Food safety and sanitation is a concern in every country, but here where wet markets thrive and refrigeration seems to be a novelty rather than the rule, this issue becomes more “in-our-faces” than ever. Ever wondered why so many employees call in sick with “LBM” and Imodium is one of the best-selling over-the-counter drugs in this country? We need not look far for the answer: most intestinal maladies are caused by food-borne illness, or “food poisoning.”

Food-borne illness is caused by either bacterial infection (such as Salmonella, E. coli, and trichinosis) or bacterial intoxication, such as botulism.

Bacterial infection is caused by the bacteria itself wreaking havoc on the intestinal system, while intoxication is caused by the bacteria producing an endo- or neurotoxin that will have a hey-day in your digestive and nervous system. Symptoms of both types of illness vary from bacteria to bacteria but can include vomiting, diarrhea, fever, nausea, abdominal pain, cramping, even seizures or convulsions. I’m sure we have all experienced these nasty little bugs in one way or another, and have maybe even attributed the cause to “flu” or “a virus.” But the real cause of most of these problems is in what we put in our mouths every day.

Most foods, especially meat, chicken, fish, eggs, milk, cheese, yogurt (of course the bacteria added on purpose to ferment the yogurt are *supposed* to be there), and cooked vegetables &

grains, contain bacteria. With this long list of foods that are potentially harmful, how are we ever supposed to avoid food-borne illness? By remembering that bacteria need three things to survive and multiply:

- 1) **Temperature:** at temperatures between 4 and 60 degrees Celsius (40-140 degrees Fahrenheit), bacteria thrive, multiplying rapidly to toxic levels. (I like to call this range the **Temperature Danger Zone [TDZ]**, and to treat it as something for foods to pass through [on their way to being cooked or cooled] as quickly as I like to pass by the meat counter at Makati Supermarket.)
- 2) **Moisture:** nearly all cooked and prepared foods, as well as the raw foods mentioned above, are nice, wet environments for these bacteria to achieve critical volume to put you in bed (or the hospital!) for several days.
- 3) **Time:** the longer bacteria-containing foods are in the **TDZ**, the more they will multiply and cause risk of infection. As a general rule, foods should be in this zone no longer than two hours. This includes transportation time from the market to your refrigerator, preparation time, cooling time after initial service, and each time the prepared food is reheated.

What should we do to minimize our risk of infection from food-borne bacteria? Here is a list of tips and suggestions:



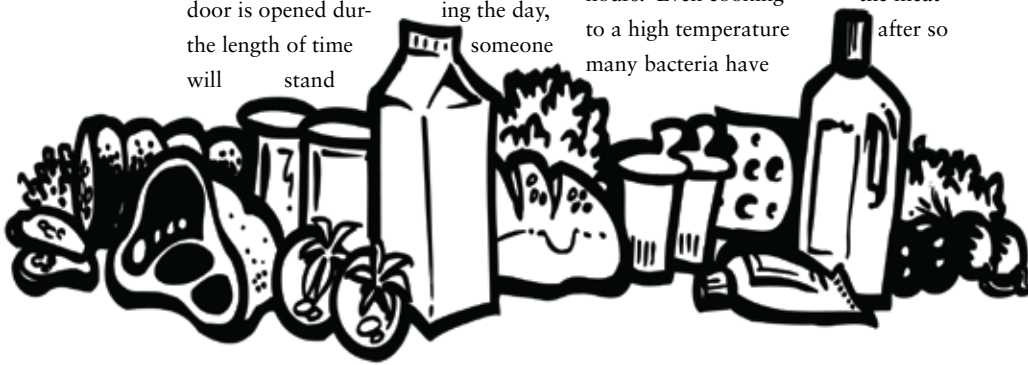
1) **Keep hot food hot.** Cook food thoroughly. This is really not the best place to enjoy steak *tartare*, eggs “over easy”, or tuna sashimi (though even I am guilty of this one.) You never know what happened to that meat or fish or egg before it got to your grocery store, or even *in* the grocery store. (Remember Typhoon Milenyo? You think those grocery stores got rid of their stock even if it sat at room temperatures “for awhile” while the power was out?) Cook meat, chicken and pork until no pink remains in the center. Cook fish until it flakes easily with a fork. Cook eggs until the yolk is firm and the white is no longer transparent. When reheating foods, heat to a temperature greater than 60 degrees C (140 degrees F) and try to minimize the number of times a food is reheated by taking out only the portion that will be consumed at that time. (My former cook was famous for reheating an entire vat of chili for just two servings!)

2) **Keep cold foods cold.** This can be a big problem too. Ambient room temperatures around here are so much warmer than in cooler climates that refrigerators have to work extra-hard to keep proper temperatures. Add to this the number of times the refrigerator door is opened during the day, the length of time someone will stand

in front of the open ref, whether it be your teenage son, your toddler, your maid (who probably does not have refrigeration at home), or your husband, staring into the ref to see what is there or just trying to pull something out, and you have the makings for a ref that does not keep foods below 4 degrees C. This is especially true for foods kept near the front of the ref or on the door. This significantly reduces the time that foods will stay fresh. A simple guideline for keeping foods is as follows:

- a. **Raw meats, fish, & poultry:** 1 day (store in the freezer if not going to use the same day.)
- b. **All cooked dishes:** 3-5 days (3 days if reheated more than once, 5 days if not reheated or reheated only once)
- c. **Cured meats (hot dogs, ham, bacon):** 5-7 days (for an opened package)
- d. **Raw eggs, most cheeses, unopened packages of cured meats:** 2 weeks
- e. **Mayonnaise, creamy spreads:** 4-6 weeks

3) **Thaw foods in the ref, not the counter.** I know we have all been desperate and put the dinner chops on the counter to thaw at 11am, but it is really not safe. By the time the inside of the meat thaws, the outside layer has been in the dreaded **TDZ** for several hours. Even cooking the meat to a high temperature after so many bacteria have



multiplied can sometimes leave toxins behind.

4) *Cool and store foods properly.* I have had a big problem getting my helpers to put hot cooked foods in the ref soon enough, their strong belief being that it harms the refrigerator to put a hot food in it. They want to leave the hot food on the counter or stove (usually covered to keep bugs out) until it comes to “room temperature” (which is still quite warm.) This process can take all afternoon- what a nice incubator! Store hot food immediately in a shallow container *in the ref* so it will cool quickly. Don’t worry about the hot food heating up your ref; if it’s stored in a shallow container, it will not add significant heat to your ref. Tell your maids this because it is usually they who are cleaning up from your dinner.

5) *Keep chopping blocks clean and segregated.* It is difficult to thoroughly clean chopping blocks here, because no one has water hot enough (i.e., a dishwasher) to kill the bacteria that reside in the blocks. My best advice regarding chopping blocks is to clean them as thoroughly as possible using hot soapy water and a lot of scrubbing, and air dry completely before using again (unless of course it’s for the same meal.) In addition, keep separate blocks for foods that will remain raw (salads, fruits, nuts, etc) and foods that will be cooked. (This has the added advantage of keeping your fresh sliced mangoes from tasting like the garlic in your dinner!)

6) *Sanitize or replace your cleaning cloths/sponges regularly.* Sponges and

cleaning cloths never have a chance to dry here, partly due to the high humidity and partly due to the fact that dishes are being washed so frequently! Ambient room temperatures are perfect bacterial breeding grounds, especially in nice wet cleaning cloths that have been scrubbing up bacteria all day long. To help combat risk of infection from your cleaning cloths and sponges, you have several options:

a. *Use cloth cleaning rags that can be laundered often.* Wash after using for one day. (Of course this means you will have to invest in a pile of cleaning cloths! Fortunately, they are cheap here...)

b. *Disinfect sponges with one capful of bleach per 4L water.* Disinfect every night (sponges can soak in bleach solution) and replace every couple of weeks.

c. *Buy antibacterial sponges.* These resist bacteria more than regular sponges do, but they too should be disinfected once a week and replaced after 2-3 weeks.

With all these rules and regulations it’s a wonder we’re not all sick all the time! Rules can certainly be broken, many times with no consequences. But it’ll be that one time... Ultimately, the more we can do to ensure the health and safety of our families, the better off we’ll be. Adopting or modifying our habits of food safety and sanitation now will pay off in the end. (Even writing this article has inspired me to be stricter around my own kitchen!) Good luck and safe eating!

Do you have any questions for our resident Dietician?

Just contact Rebecca Lwin to ask and if it is of interest to members she’ll cover it in this monthly feature. thelwins@pldtdsl.net