

Why Do We Refrigerate?

Do you ever wonder why we really have to refrigerate cold potentially hazardous foods at or below 41°F?

Here are some reasons why...



- Bacteria, viruses, and parasites (pathogens) usually grow very slowly under cold conditions. If you think about it, pathogens are kind of like us - we are uncomfortable and cannot do much when we are in a cold environment.
- When a potentially hazardous cold food rises above 41°F, pathogenic organisms begin to grow and multiply - even at 45°F (just 4 degrees warmer), many bacteria grow 10 times as fast as they would at 41°F.

So why do I have to keep cold food below 41°F?

Listeria

- *Listeria monocytogenes* is a pathogenic (harmful) bacterium that causes the disease Listeriosis. *Listeria* can grow in food over a wide range of temperatures, from 33°F to 113°F. Often *Listeria* can be found in things like cold deli meats, hard and soft cheeses, and ice cream. This poses a problem because these kinds of foods are typically not cooked or heated before consumption.
- Did you notice that *Listeria* can grow below 41°F? At this point you may be wondering why you do not have to hold cold food at 33°F. *Listeria* grows very slowly at 41°F. That is why you have to date-mark cold foods. Once you open or prepare a cold food, you have 7 days to use or discard the food. If held at or below 41°F, the growth of organisms such as *Listeria* will be minimal during those 7 days. After 7 days, the food may be harmful.
- Even 4 degrees makes a difference - if cold food is held at 45°F, after only 4 days *Listeria* may multiply to a harmful level.

Listeria causes Listeriosis... What's the big deal?

The Bad: You get sick! Typically, flu-like symptoms begin within 9 to 48 hours. Symptoms can include fever, muscle aches, nausea, and diarrhea.

The Very Bad: Elderly people or those with weak immune systems are at a higher risk for prolonged illness, difficult recovery, or even death.

The Really Bad: Pregnant women are 20 times more likely to be infected by *Listeria* than other healthy adults. *Listeria* can have devastating effects on a mother and unborn child - it can cause the miscarriage and stillbirth of an unborn child.