Every year, nearly 48 million people in the United States—1 in 6—get sick from eating food contaminated with germs. While Salmonella, Campylobacter and Norovirus cause the most illnesses, Listeria monocytogenes is a less-common but often deadly foodborne bacteria.

Safe food handling is especially important for older adults, pregnant women and persons with immune-compromising conditions. Almost all cases of listeriosis occur among these three groups.

Below, you’ll find useful information to help you discuss with consumers the importance of maintaining a refrigerator temperature of 40 °F or below to reduce the risks of foodborne illness at home.

**High-Risk Groups**

**OLDER ADULTS:** After age 75, many adults have weakened immune systems, increasing the risk of contracting foodborne illness.

**MOTHERS-TO-BE:** Pregnant women are 10 times more likely to contract listeriosis than other healthy adults.

**Thermometers Are Important**

**THE FACT:** Refrigerator thermometers are tools that stay in the refrigerator and display the actual temps (separate from temperature control dial).

**THE SCIENCE:**
- Almost half (43%) of observed homes had a refrigerator that was too warm (>41 °F).
- Just 4–9% of domestic refrigerators were observed to have a thermometer (that tells the temperature in degrees).
- Bacteria that can cause illness grow rapidly in the “danger zone” between 40 °F and 140 °F.
- The predicted number of cases of listeriosis would be reduced by more than 70% if all home refrigerator temperatures stayed at 40 °F or below.

**THE ACTIONS:**
- Keep home refrigerator at or below 40 °F as measured with a thermometer.
- See Go 40 °F or Below brochures for more on the importance of refrigeration to food safety.

**Storing Food**

**THE FACT:** Proper storing of food in a refrigerator at 40 °F or below helps to reduce the risk of food poisoning.

**THE SCIENCE:**
- Compared to other food-handling behaviors, consumers consider adhering to recommended time/temperature for food storage as least likely to contribute to risk of illness.
- 25% of people surveyed said they had stored refrigerated leftovers for 4 days or longer.
- Up to 99% of customers observed stored raw meat, fish or poultry above or next to ready-to-eat foods.

**THE ACTIONS:**
- To prevent cross-contamination, foods should be completely covered and securely wrapped in the refrigerator.
- Consume or freeze refrigerated leftovers within 3-4 days. Toss after 4 days.
- See Go 40 °F or Below brochures for more consumer food storage safety tips.

The CDC estimates that listeriosis causes about 1,600 illnesses and 260 deaths in the U.S. annually.
**Smart Thawing**

**THE FACT:**
Thawing and marinating foods in the refrigerator is the safest way.

**THE SCIENCE:**
- 50–65% of consumers thaw raw meat, fish or poultry incorrectly (at room temperature and/or in stagnant water).\(^5\)
- On average, consumers thaw raw meat at room temperature for 5 hours.\(^5\)

**THE ACTIONS:**
- According to the USDA, planning ahead for safe thawing is key. Even small foods can take up to a day to thaw in the refrigerator.
- See Go 40 °F or Below brochures for smart thawing tips.

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**Refrigerator Cleanliness**

**THE FACT:**
Frequent refrigerator cleaning and sanitizing can help to minimize the likelihood of bacterial cross-contamination.

**THE SCIENCE:**
- 12% of consumers report cleaning their refrigerators once a year or less.\(^6\)
- 34% of consumers report cleaning their refrigerators only 2–3 times per year.\(^6\)
- Consumers report cleaning their fridges with substances that do not adequately clean/sanitize, including:
  - 2–14% plain water\(^5\)
  - 10% vinegar\(^5\)
  - 16–35% baking soda\(^5\)

**THE ACTIONS:**
- Regulary clean the inside walls and shelves. Sanitize surfaces and bins in your refrigerator using a spray solution of one tablespoon liquid chlorine bleach to one gallon of hot water.
- See Go 40 °F or Below brochures for smart refrigerator cleaning tips.

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**Average Home Refrigerator**

In observational research, average home refrigerator temperature was > 40 °F in:

- **9%**
  - OF TOP SHELVES\(^2\)
- **21%**
  - OF BOTTOM SHELVES\(^2\)
- **55%**
  - OF REFRIGERATOR DOORS\(^2\)

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3 USDA/FDA joint risk assessment September, 2003
4 Personal communication: S Godwin in-person survey of 551 respondents
5 P. Borrusso; results compiled from 33 studies that investigated consumer knowledge, attitudes and behavior.