

# Restaurant Ground Beef Handling and Cooking

## EHS-Net Study Findings and Recommendations

*E. coli*, a germ often found in raw ground beef, causes many foodborne illnesses each year. Hamburgers made from ground beef are often the source of these germs. These germs can make people sick if burgers are undercooked (not cooked to a high enough temperature to kill the germs). These germs can also make people sick if they get into other food or onto other surfaces (cross contamination).

We don't know much about how restaurants prepare and cook ground beef for hamburgers. If we know more about these practices, we can improve them and lessen the number of foodborne illnesses.

### What the Study Described

This study described how restaurants prepare and cook ground beef.

### What the Study Found

Many restaurants prepared ground beef in ways that could lead to undercooking or cross contamination. Undercooking and cross contamination can lead to foodborne illness.

### Study Results

#### **Ground beef cooking temperature**

Eight in ten managers said their workers do not always take a final temperature of hamburgers with a thermometer.

Many managers said their workers always or often check if hamburgers are ready in ways other than using a thermometer. They check the color of the hamburger, how it looks, and how it feels.

About one in ten hamburgers were undercooked (cooked to less than 155°F).

#### **Cross contamination**

In many restaurants, workers were seen preparing raw ground beef in a way that could lead to cross contamination. Workers

- Did not wash their hands in between touching raw ground beef and touching other foods (six in ten restaurants).

EHS-Net found that many restaurants prepare and cook beef in ways that could lead to undercooking or cross contamination.



This study was conducted by the Environmental Health Specialists Network (EHS-Net). EHS-Net is a federally funded collaboration of federal, state, and local environmental health specialists and epidemiologists working to better understand the environmental causes of foodborne and waterborne illness. Visit EHS-Net at <http://www.cdc.gov/nceh/ehs/EHSNet>.

- Used the same utensil on raw ground beef and other foods without washing in between (one in three restaurants).
- Used the same utensil on raw ground beef and cooked ground beef (without washing in between) (four in ten restaurants).
- Wiped their hands on cloths/aprons after touching raw ground beef (four in ten restaurants).

In over half of restaurants, workers were seen doing two or more of these things that could lead to cross contamination.

### EHS-Net Recommends

Restaurant management and food-safety programs should work to reduce practices that could lead to undercooking and cross contamination of raw ground beef. Efforts should focus on policies and training about

- Measuring the final temperature of ground beef using a thermometer or using standard cooking methods that always cook ground beef to 155°F.
- Preventing cross contamination by proper hand-washing and equipment cleaning.



### Key Terms

**Cross contamination:** spread of germs from one surface or food to another by contact.

**Environmental health specialists:** public health workers who enforce health and safety standards related to food and other consumer products.

***E. coli:*** an illness caused by germs in food.