FOOD SAFETY INFORMATION

FOOD SAFETY PRECAUTIONS
Meat, Poultry and Seafood

Foods rich in protein, such as meat, poultry and seafood, are more frequently involved in foodborne illness outbreaks than non-protein-rich foods for two reasons:

1. Protein-rich foods tend to be of animal origin, and the bacteria from the animals can be found in these foods.

2. Animal foods are rich in proteins, which are an important nutrient source for some bacteria. In addition, if hands, cutting boards, dishes, utensils, and surfaces are not thoroughly and properly cleaned after coming in contact with these raw foods, the bacteria from these foods can be transferred to ready-to-eat foods.

HUMAN PATHOGEN ASSOCIATIONS
- Campylobacter jejuni (beef and poultry)
- Clostridium botulinum (seafood)
- Clostridium perfringens (meat)
- Escherichia coli O157:H7 (ground beef and pork)
- Listeria monocytogenes (pork, poultry and seafood)
- Norwalk Virus (seafood)
- Salmonella (beef, pork, poultry and seafood)
- Staphylococcus aureus (beef, pork and poultry)
- Vibrio cholerae (seafood)
- Vibrio vulnificus and other vibrios (seafood)
- Yersinia enterocolitica (meat and seafood)

FOOD SAFETY PRECAUTIONS (ALL MEAT, POULTRY AND SEAFOOD)
Meat, Poultry and Seafood

- Always wash hands, cutting boards, dishes, and utensils with hot, soapy water before and after they come in contact with raw meat, poultry, or seafood.
- Separate raw meat, poultry and seafood from other foods in your grocery-shopping cart, refrigerator and while preparing and handling foods at home.
- If possible, use one cutting board for raw meat products and another one for fresh fruits and vegetables.
- Place cooked food on a clean plate. If you put cooked food on an unwashed plate that previously held raw meat, poultry or seafood, bacteria from the raw food could contaminate the cooked food.
- Don't use sauce that was used to marinate raw meat, poultry or seafood on cooked foods, unless it is boiled before applying.
- Cook raw meat, poultry and seafood to safe internal temperatures. Use a clean food thermometer to check and wash it with hot, soapy water between uses. For the recommended cooking temperatures, see the "Apply the Heat" chart. See below.

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FREQUENTLY ASKED QUESTIONS

If cooked meat and poultry look pink, does it mean that the food is not done?

The colour of cooked meat and poultry is not a sure sign of its degree of doneness.
For instance, hamburgers and fresh pork can remain pink even after cooking to temperatures of 71°C (160°F) or higher.
The meat of smoked turkey is always pink because components within the smoke bind to the muscle pigment to form a stable pink pigment.
Only by using a food thermometer can you accurately determine that meat has reached a safe internal temperature.

Do I have to cut off the government grade or inspection stamp on meat before cooking it?

No, the ink stamp is a harmless vegetable dye. Therefore, it is safe to eat.

What gives a slice of ham an iridescent sheen? Is this a sign of food spoilage bacteria?

The glistening, greenish, rainbowlike color that appears from a cut surface of a ham slice is a sign of oxidation and not necessarily spoilage.
When the meat is exposed to oxygen or light, some of the nitrate-modified iron content of the meat undergoes a chemical change that alters the ham's pigmentation.

How can I tell if fish is fresh?

To be sure the safety of seafood is being properly preserved, only buy fish that is refrigerated or properly iced.
Fish should be displayed on a thick bed of fresh ice that is not melting, and preferably in a case or under some type of cover.

- Fish should smell fresh and mild, not fishy, sour, or ammonia-like.
- A fish's eyes should be clear and bulge a little (except for a few naturally cloudy-eyed fish types, such as walleye pike).
- Whole fish and filets should have firm, shiny flesh and bright red gills free from slime. Dull flesh could mean the fish is old. Note: Fish fillets that have been previously frozen may have lost some of their shine, but they are fine to eat.
- The flesh should spring back when pressed.
- Fish fillets should display no darkening or drying around the edges. They should have no green or yellowish discolouration and should not appear dry or mushy in any areas.

Is it safe to eat Japanese foods like sushi and sashimi?

It depends. People in the at-risk groups should not eat raw or partially cooked fish or shellfish. Sashimi is a Japanese specialty that always has raw fish, but not all sushi contains raw seafood. Some sushi is completely vegetarian.
The two main safety concerns for people who eat raw or uncooked seafood are parasites and harmful microorganisms.
Parasites in some undercooked fish species can harm both healthy and at-risk people. Commercially-prepared raw fish species that can harbour parasites may have been previously frozen to kill any parasites, but not all such fish may have been treated.
However, freezing does not kill all harmful microorganisms. It is always best to cook seafood thoroughly to minimize the risk of foodborne illness.
(For more information on raw fish consumption, see Raw Finfish and Shellfish below.)

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FOOD SAFETY PRECAUTIONS (SPECIFIC FOODS)

Ground Meat

Meat can have harmful bacteria on the surface from the slaughter process, equipment from the processing plant, or germs on hands, utensils, or kitchen surfaces. When meat is "ground up" at the supermarket and handled at home, this surface bacteria can end up inside the meat. This is what makes ground beef, for example, particularly at risk for E. coli O157:H7 contamination.

Proper cooking will kill harmful bacteria on the surface of a solid cut of meat, such as steak, because the surface gets direct heat. However, harmful bacteria on the inside of the meat are less likely to be killed by cooking if proper internal temperatures are not achieved.

That's why it's important to be especially careful that the internal temperature of ground meat reaches a high enough degree to kill bacteria. To destroy harmful bacteria that may be present in ground meat:

- All consumers should cook ground meat to at least 71°C (160°F). Use an accurate, instant-read food thermometer to check. Make sure the food thermometer goes straight into the meat, but does not come out the other side and touch the pan.
- The Centers for Disease Control and Prevention link eating undercooked, pink ground beef with a higher risk of illness. If a thermometer is not available, do not eat ground beef that is still pink inside.

Pork

Consumers may contract trichinosis (a disease caused by the parasite Trichinella spiralis) from eating undercooked pork. Pork must be cooked to a safe internal temperature to eliminate disease-causing parasites and bacteria that may be present.

Pork must reach an internal temperature, measured with a food thermometer, of 71°C (160°F), for medium or 77°C (170°F), for well done.

Poultry

Bacteria can be found on raw or undercooked chicken. To keep poultry safe:

- Cook poultry to a minimum internal temperature of 74°C (165°F). Consumers may wish to cook poultry to a higher temperature for personal preference.
- Avoid purchasing whole poultry that's pre-stuffed but not cooked. If the product is left out at room temperature, the warm environment, along with the raw meat juices mixing with the stuffing, present a perfect environment for bacterial growth.

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Raw Finfish and Shellfish
(including oysters, clams, mussels, and scallops)

Generally, seafood is very safe to eat, but raw or undercooked seafood can be unsafe.
Seafood grown or collected from contaminated water can get colonized by viruses in the water. Shellfish foods, such as oysters, pump a lot of water through their bodies each day and filter out microorganisms. Thus, they are very likely to collect viruses from the water. Some oysters, for example, are eaten raw or lightly cooked, which increases the risk of foodborne illness.
And viruses are not the only culprits. Bacteria and parasites are threats to raw seafood, as well.

To keep seafood safe:

- Buy only fresh seafood that is refrigerated or properly iced.
- Cooking fish until it's opaque and flaky helps destroy any existing pathogenic bacteria that may be present.

It's always best to cook seafood thoroughly to minimize the risk of foodborne illness. However, for people who choose to eat raw fish anyway, one rule of thumb is to eat fish that has been previously frozen. Some species of fish can contain parasites, and freezing will kill any parasites that may be present. However, freezing does not kill all harmful microorganisms, so the safest route is to cook seafood.

Some people are at greater risk for foodborne illness, and should not eat raw or partially cooked fish or shellfish. These susceptible groups include pregnant women, young children, older adults, people whose immune systems are compromised and people who have decreased stomach acidity.

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Inside the DANGER ZONE

It's important to keep food below or above the danger zone, the temperatures at which bacteria can grow. This is usually between 4°C and 60°C (40° and 140°F).

Some pathogenic bacteria can grow at 0°C (32°F), the temperature at which water freezes. So, remember the "2-hour rule": Discard any perishable foods left out at room temperature for longer than 2 hours, but when temperatures are above 32°C (90°F), discard food after 1 hour!

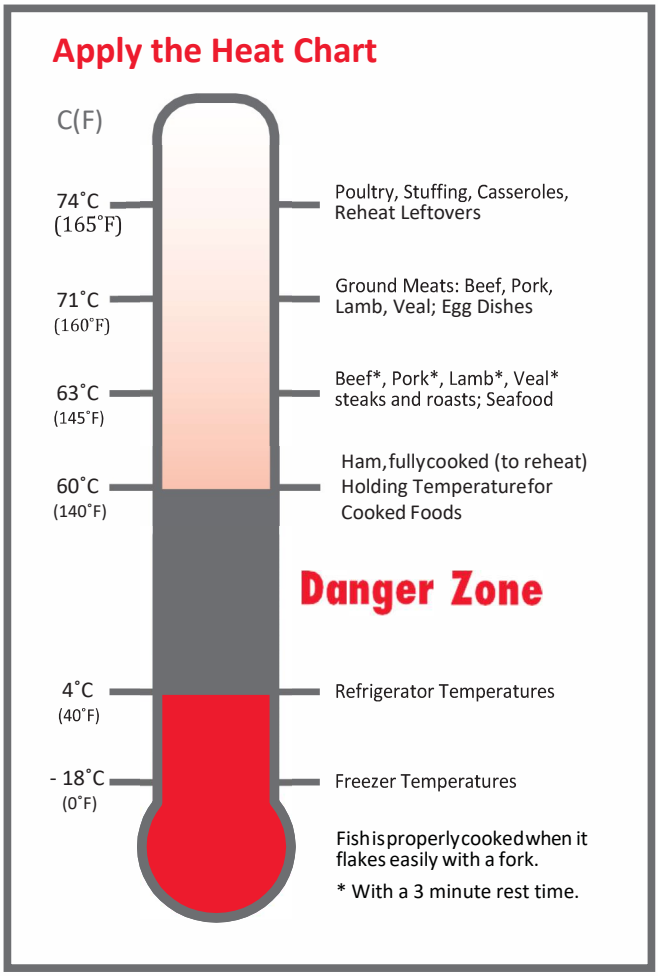
The temperatures shown in the chart at right are recommended for consumer cooking. They are not intended for processing, institutional or food service preparation.

Putting the 2-Hour Rule into Action

HOT FOODS: When you purchase hot cooked food, keep it hot. Eat and enjoy your food within 2 hours to prevent harmful bacteria from multiplying.

If you're not eating a food within 2 hours and you want to keep it hot keep the food in the oven with the temperature set at or above 60°C (140°F). Use a food thermometer to check the temperature. Side dishes, like stuffing, must also stay hot in the oven. Covering food will help keep it moist.

COLD FOODS: should be eaten within 2 hours of preparation or refrigerated or frozen for eating at another time.



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