Food Safety Update

This publication will keep operators of food service establishments up to date on food safety, regulations and foodborne illness. Content is generated as a collaboration between Fraser Health and Vancouver Coastal Health.

Health Protection | Ensuring Healthy People and Healthy Environments

Mechanically Tenderized Beef

New Federal Labelling Requirements

As of August 21 2014, mechanically tenderized beef (MTB) products sold in Canada must be clearly labelled as "mechanically tenderized" and include instructions for safe cooking. Mechanical meat tenderizing uses needles and blades to penetrate steak and roasts. It is a common practice used by the food industry on raw cuts of beef so that the meat is more tender after being cooked.

However, the mechanical tenderizing process drives bacteria such as *E. coli 0157:H7* on the surface of the meat into the centre making it harder to kill during cooking. By following the cooking instructions, the risk of getting sick from *E. coli 0157:H7* is much lower.

What are the New Requirements?

The following statements (as shown exactly below in quotations) must be included on the label of the package containing the mechanically tenderized beef:

- "Mechanically tenderized"
- "Cook to a minimum internal temperature of 63° C (145° F)"

And, in the case of steaks, an additional safe cooking instruction must also be on the principal display panel:

"Turn steak over at least twice during cooking"

What Businesses do the New Requirements Apply to?

The new labelling requirements apply to all food businesses that sell mechanically tenderized beef to other food businesses or to consumers in an uncooked, solid cut form. This includes, but is not limited to, meat processors, importers, grocery retailers, butcher shops, cut and wraps, and delis.

What about Restaurants?

The labelling aspects of these requirements do not apply to advertisements or to menu labelling in food service establishments (e.g. restaurants, schools, hospital cafeterias,



catering operations, etc.). However, these requirements will ensure that foodservice establishments that purchase uncooked beef will know the meat has been mechanically tenderized. The food service establishments must follow the safe cooking procedures and temperatures so that their customers can enjoy a safe meal.

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Food Grade Equipment What is it?

In the food industry, efficiency is a key focus for daily operation. Many operators try to reduce costs and simplify work flows whenever possible. Sometimes, this can cause the misuse of food equipment or the use of equipment that is not food grade.

Non-food Grade Plywood Prep Table



Photo courtesy Fraser Health, Health Protection

The term "food grade" means the equipment is designed for use in

food preparation. Typically, this refers to qualities that would prevent it from contaminating food products. This includes being durable, nonabsorbent, non-toxic, smooth, and easy to clean. Stainless steel is often the material of choice since it fits all of these criteria. For machinery and more complex equipment, food grade means it is intended to come in contact with food and be sanitized frequently. When non-food grade equipment is used, paints can leach out, pieces may break off, or it may not be possible to sanitize the equipment. All of these scenarios can cause food contamination.

Reputable suppliers will often have their equipment approved by certification bodies. Some examples are the Canadian Food Grade Stainless Steel Prep Table



Standards Association (CSA), the National Sanitation Foundation International (NSF), and the Underwriters Laboratories of Canada (ULC). If you are unsure about a piece of equipment, call your local Environmental Health Officer before you make the purchase!

Making Changes to Food Premises

What you need to know

If you plan to make changes in the type of food services you offer or if you plan on remodelling your food premises you should first discuss these changes with your Environmental Health Officer.

Your current health approval is based on factors such as the existing size and layout of the premises, the menu and food preparation methods. An Environmental Health Officer must review and approve all subsequent changes to make sure that the alterations comply with the Food Premises Regulation.

The following are some examples of changes that must be approved by an Environmental Health Officer:

- Expansion of food preparation methods to include canning, smoking, bottling or frying of foods.
- Changes in food service such as on-site and off-site catering or significant changes to the menu.
- Remodelling the food premises.
- Installation of specialized food preparation equipment or the removal of critical pieces of equipment.

After reviewing your proposal, the Environmental Health Officer may approve the changes or request additional information such as floor plans or details on new food processing methods. In some cases, the Environmental Health Officer may be unable to approve your proposal.

Proceeding with changes before obtaining the necessary approvals may cause unnecessary delays and expenses if the Environmental Health Officer is unable to approve those changes or if unsafe food preparation practices cause a foodborne illness. You may be required to:

- Destroy or recall prepared foods.
- Close your food premises.
- Alter completed renovations.

Contact your local Environmental Health Officer for more information.

Bug Spotlight: Campylobacter

What is Campylobacter?

Campylobacter is a group of bacteria commonly found in the intestines of animals including poultry, cattle, pigs, puppies and kittens. Last year it was the most commonly reported gastrointestinal disease in British Columbia and the highest rates were reported in Vancouver Coastal Health.

People may become infected with *Campylobacter* after eating undercooked poultry, meat, or contaminated food and by drinking unpasteurized (raw) milk or untreated drinking water. Food handlers can transmit *Campylobacter* to others if they do not follow good food handling practices.

Symptoms occur on average 2 to 5 days after exposure but can range from 1 to 10 days. Most individuals recover within 5 days. Symptoms may include stomach pain, diarrhea, nausea, vomiting and fever.

What is important to know as a food handler?

- Cook meat and poultry to a proper internal temperature and use a probe thermometer to check the temperature. For example, the minimum internal temperature for chicken is 74°C and hamburger is 71°C.
- Wash your hands before handling any food and after handling raw poultry and meat.
- Store raw meat and poultry on the lowest shelving unit in the refrigerator.
- Thaw raw meat and poultry in the refrigerator, under cold running water, or in the microwave.
- Thoroughly wash and sanitize all equipment and utensils used for preparing food.
- Always use treated drinking water and pasteurized products such as milk and juices – always wash fruits and vegetables.
- If you are experiencing vomiting or diarrhea do not handle or prepare foods.

FOODSAFE Level 1 Update

The FOODSAFE Level 1 program has been revised and



now includes the following units:

- The Causes of Foodborne Illness
- Microbes and Foodborne Illness
- Food Safety Plans & HACCP
- Food Handler Hygiene & Health
- Receiving & Storing Food Safely
- Preparing Food Safely
- Serving Food Safely
- Cleaning, Sanitizing and Pest Control
- Premises Requirements

The course also features a new graphic design as well as updated videos.

If you hold a valid FOODSAFE Level 1 certificate you do not need to complete the new course until your certificate expires. If your certificate does not have an expiry date printed on it, the certificate expires on July 29, 2018.

Sous Vide Style Cooking Safety

Sous vide is a french term that means *under vacuum*. Sous vide style cooking of vacuum packaged foods is typically done in a water immersion circulator for longer times and lower temperatures than conventionally cooked foods. This cooking style is becoming more common in BC restaurants, as foods retain better flavor and colour. Individual portions can be cooked ahead of time, refrigerated, then warmed for service. Questions about how to safely prepare, store and serve sous vide style foods are addressed in a new guideline that was developed by Chefs, Environmental Health Officers and food specialists. Cooking temperatures for meats and poultry, acceptable practices for refrigerated storage, cooling, and warming for service are described. The guideline explains food safety issues associated with sous vide style cooking, provides food flow charts, time and temperature requirements and guidance for creating and evaluating food safety plans. Contact your Environmental Health Officer for additional information. Sous vide style cooking requires specialized equipment and you must obtain approval from your Environmental Health Officer.

The guidelines are now available on the BC Centre for Disease Control (BCCDC) web-site food guidelines page at www.bccdc.ca/foodhealth/foodguidelines.

Sous vide style chicken in an immersion circulator at 60°C



Photo courtesy of Chef T. MacDonald, Vancouver Community College

Food Temperature Control While Shopping



Did you know that shopping for perishable foods at your local grocery store, if not done correctly, may cause a foodborne illness? Commercial suppliers The a may f warm

cause a foodborne illness? Commercial suppliers deliver foods at a safe temperature of 4°C or colder by using a refrigerated vehicle. When you shop for foods this temperature rule also applies; foods must be stored at 4°C or colder. However, food temperatures are difficult to maintain, and will gradually increase, when unrefrigerated. The average temperature in your car is ideal for the growth of microorganisms which can multiply to dangerous levels in a short period of time.

Here are two easy ways to keep foods safer while shopping:

- Transport unrefrigerated perishable foods to your premises in 2 hours or less. Bacteria will have insufficient time to multiply to dangerous levels.
- Transport food at 4°C or colder. Bacteria will grow very slowly and will not multiply to dangerous levels.

To prevent food temperatures from increasing rapidly use a portable cooler, packed with ice, or a 12 V travel cooler that plugs into the cigarette lighter of your car. Here are two ways you can limit the amount of time that foods remain unrefrigerated:

- If you have multiple errands, make shopping for perishable foods the last stop.
- If you have many items to pick up at the grocery store, shop for refrigerated and frozen foods last, just before checking out.

When you return to your food premises make sure you store perishables in the refrigerator and freezer immediately. If your trip will be longer than 2 hours, such as cross border shopping, make sure you use a portable cooler and take the temperature of the food when you return to your premises. If food has not been stored safely it must be thrown out.

When perishable foods are maintained at 4°C or colder you lower the chances that one of your customers will experience a foodborne illness. You may also notice an improvement in food quality and a decrease in waste.

Refrigeration Temperatures

The air temperature in a refrigerator may fluctuate between seasons. During warmer months the equipment must work harder and the temperature of foods may increase. This is a food safety concern and must be corrected immediately. During colder months, foods stored in the refrigerator may freeze; this is not a safety concern.

Adjusting the thermostat in the refrigerator may help solve the problem.

- If the air temperature in the refrigerator is greater than 4°C, adjust the thermostat to a colder setting. Use an accurate thermometer to monitor the temperature and if it does not drop below 4°C do not store perishable foods in the refrigerator until it is repaired.
- If food is freezing, adjust the thermostat in the refrigerator so that the air temperature increases a degree or two. This may help to preserve food quality. Use an accurate thermometer to make sure the temperature does not rise above 4°C.

Monitor refrigeration units at least once a day and more frequently after making temperature adjustments. Temperature control is the most effective method for reducing the growth of bacteria in perishable foods and is critical for maintaining the safety of foods.

Feedback

Tell us what you think of our Food Safety Update and topics you would like to see in future issues. Contact liz.postnikoff@fraserhealth.ca or Claudia.Kurzac@vch.ca.

This update has been prepared and published as a collaboration between Health Protection departments in Fraser Health and Vancouver Coastal Health. Editors: Steven Eng, Inderjeet Gill and Liz Postnikoff, Fraser Health; Claudia Kurzac, Vancouver Coastal Health.

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