Clostridium Perfringens, Food Poisoning

Every year, millions of people get foodborne illnesses. Foodborne illnesses are caused by harmful bacteria in your food. There are different types of these bacteria. They can be identified with scientific testing.

ILLNESS CAN BE PREVENTED BY:

- Controlling the initial number of bacteria present.
- Preventing the small number from growing.
- Destroying the bacteria by proper cooking.
- Avoiding re-contamination.

Poor personal hygiene, improper cleaning of storage and preparation areas, and unclean utensils cause contamination of raw and cooked foods. **Always clean all surfaces that have been in contact with raw meat, poultry and eggs.** The temperature range that most bacteria grow is between 40° F (5° C) and 140° F (60° C). Raw and cooked foods should not be kept in this danger zone any longer than absolutely necessary. Under-cooking or improper processing of home-canned foods can cause very serious food poisoning.

C. PERFRINGENS is found in soil, dust and the gastrointestinal tracts of animals and man. When food containing a large number of *C. perfringens* is consumed, the bacteria produce a toxin in the intestinal tract that causes illness. *C. perfringens* may survive cooking and grow to large numbers if the cooked food is held between 40° F (5° C) and 140° F (60° C) for an long time period. Meat and poultry dishes, sauces and gravies are the foods most often involved.

PREVENTION

The first step in preventing food poisoning is to **assume that all foods may cause foodborne illness**. Follow these steps to prevent food poisoning:

- Wash hands, food preparation surfaces and utensils thoroughly before and after handling raw foods. This will prevent re-contamination of cooked foods.
- Keep refrigerated foods below 40° F (5° C).
- Serve hot foods immediately or keep them heated above 140° F (60° C).
- Divide large volumes of food into small portions for rapid cooling in the refrigerator. Hot, bulky foods in the refrigerator can raise the temperature of foods already cooled.
- Reheat food to 165º F (73.9º C) prior to serving.
- Remember the danger zone is between 40° F (5° C) and 140° F (60° C).
- Follow approved canning procedures.
- Heat canned foods thoroughly before tasting.
- **When in doubt, throw it out.**
- Infants, older persons, women who are pregnant, and anyone with a poor immune system are especially susceptible to foodborne illness. These people should never consume raw fish, raw seafood, or raw meat products.
- You are the key to preventing foodborne illness. **By observing the simple rules of good handling, food poisoning can be stopped.**

SYMPTOMS

The toxin produced by C. perfringens causes cramps and diarrhea within 12 to 24 hours.

HOME CARE INSTRUCTIONS FOR *NAUSEA* (FEELING SICK TO YOUR STOMACH) AND VOMITING

- **For infants:** use oral rehydration solution or suitable options for fluid restoration. After correction of *dehydration* (loss of body fluids), other clear liquids that are appealing to the child may be added.
- **For infants and children:** Record fluid intake and urine output. Dry diapers for longer than usual may indicate dehydration. Diet may be added to as tolerated.

- **For children and adults:** Drink small amounts of fluids often, so that you are drinking at least 2 quarts a day for an adult, or as your caregiver suggests for a child. Take sips often. Do not overload your stomach with too much fluid at one time as this may worsen the nausea.
- Only take over-the-counter or prescription medicines for pain, discomfort, or fever as directed by your caregiver. **Do not give aspirin to children** because of the link with Reye's Syndrome.

HOME CARE INSTRUCTIONS FOR DIARRHEA

Avoid:

- Milk
- Tobacco
- Alcohol

Follow a low fiber diet until your diarrhea stops. A low fiber diet includes refined grain products, well-cooked fruits and vegetables with the skins removed, or other foods with 2 grams of fiber less per serving.

Add cultured food products such as low-fat yogurt and buttermilk. They will help to restore the normal *bacterial* balance in your bowel.

Wash your hands well after using the bathroom to avoid spreading bacteria or viruses.

SEEK IMMEDIATE MEDICAL CARE IF:

- You are unable to keep fluids down.
- Vomiting or diarrhea develop and last.
- Belly (*abdominal*) pain develops or increases. (Right sided pain can be appendicitis and left sided pain in adults can be diverticulitis.)
- You develop a high fever, an oral temperature above 102° F (38.9° C), or as your caregiver suggests, for over 3 days.
- Diarrhea becomes too much or contains blood or mucous.
- You have excessive weakness, dizziness, fainting or extreme thirst.
- You have major weight loss. Check weight 2 - 3 times per day in babies and children. This will help show adequate fluid replacement. The weight should go up or remain the same. Your caregiver will tell you what loss should concern you.
- Record your weight today. Compare this to your home scale and record time and date weighed and all weights. Try to check weight at the same times every day.

MAKE SURE YOU:

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.

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