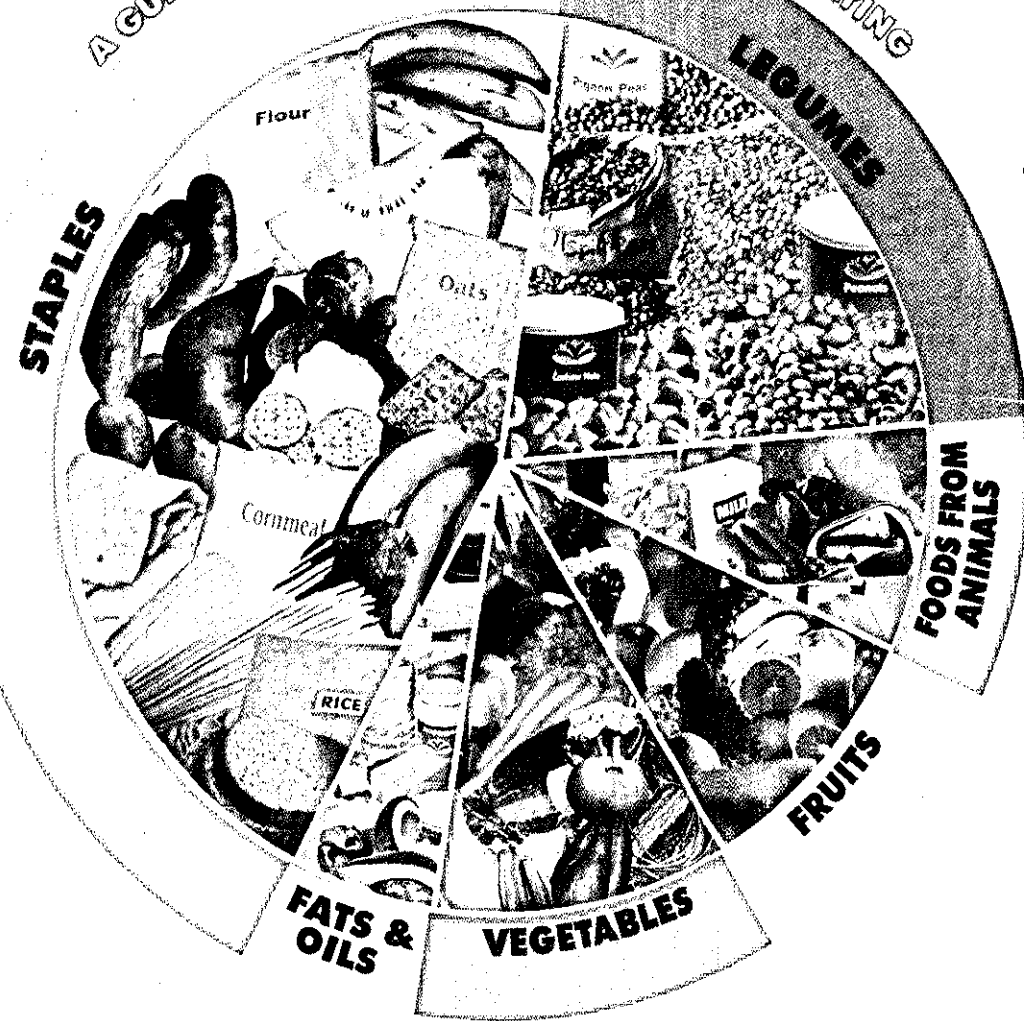
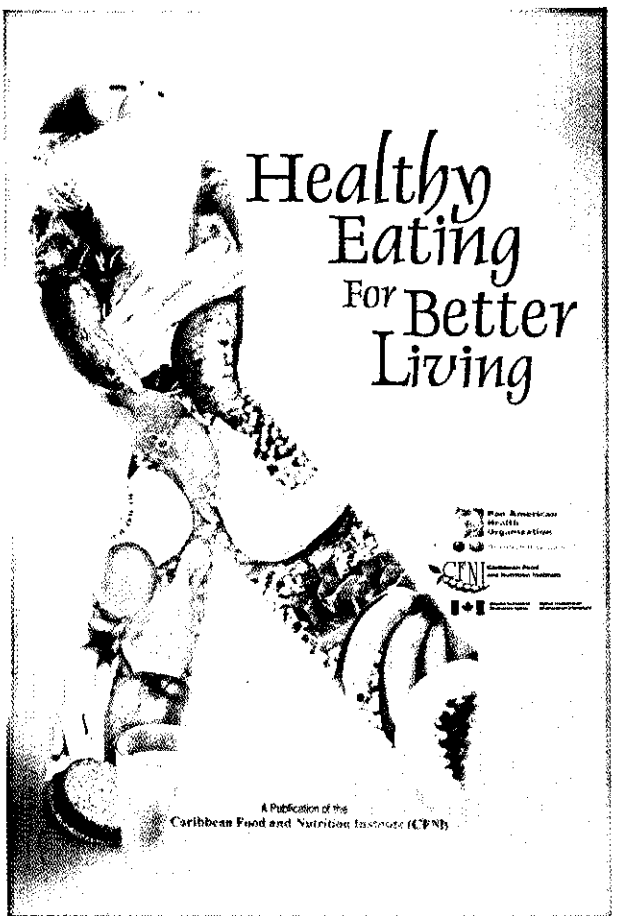


# CARIBBEAN FOOD GROUPS

A GUIDE TO MEAL PLANNING FOR HEALTHY EATING



## Food Safety and Hygiene



**CFNI** Caribbean Food and Nutrition Institute

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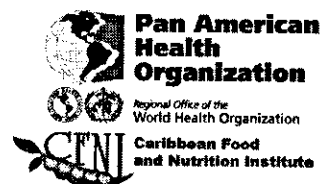
## Remember...

- Keep cold food cold and hot food hot.
- Avoid letting raw food make contact with cooked food.
- Cook meat, poultry, fish and eggs until well done.
- Do not eat raw eggs, meat, seafood or fish alone or mixed with other foods.
- Wash all fresh fruits and vegetables before cooking or eating them.
- Make sure that you use safe water for drinking.
- If you are not sure where food comes from or how it has been prepared, it is safer not to eat it. If you have any doubt, do not eat it.
- When in doubt, throw it out.
- Always wash your hands with soap and clean water before touching your food.

# HEALTHY EATING FOR BETTER LIVING

## Food Safety and Hygiene

A Booklet on Good Nutrition and Healthy  
Eating for People Living with HIV/AIDS



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Food safety standards are not the same everywhere. When you travel, you come into contact with new germs that your body is not used to. Your immune system is not prepared for this and it can become a problem, even for healthy people. Diarrhoea is a common occurrence. When your immune system is weakened by HIV/AIDS, it is easy to get sick from food and water that does not cause problems in an uninfected person. The following advice is useful:

- 
- 



- Take extra care when traveling or eating out. It is advisable to drink water only after it has been boiled and bottled or canned. Do not use ice in drinks; the water used for this could be unsafe.
- Avoid foods sold from the roadside (Street foods), especially if they are not properly cooked, stored safely before and after cooking, and heated or reheated properly. Otherwise, these could be a source of food poisoning.

## Clean and Safe Water

- Make sure you drink water only from a safe source. If you use rainwater or water from a river, well, or spring, drink the water only after boiling it for at least 5 minutes.
- Use the bleach method to make the water safe when it is not possible to boil the water.
- Store clean and safe water in a clean container with a lid or covered with a cloth.
- Chilled drinks or ice cubes should be made with water that is clean and safe to drink.

Add 1 teaspoon (5 ml) to 6.5 gallons (25 litres or 26 quarts) of water. Mix it well and let it stand for 2 hours (or preferably overnight) before using it.



## Eating Out and Travelling

Eat only food that is properly cooked. Do not be shy about asking that it be done the way you want it.

Avoid food from salad bars, raw vegetables and fresh fruit with skin.

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# Introduction

**H**ealthy eating for better living is important for everyone. It is the backbone for being in good nutritional status as well as living healthier. For persons living with HIV, healthy eating is even more important because the virus can affect your nutritional status and health which depend on more than just having enough quality food to provide you with the needed energy and nutrients. Your nutritional health also includes using clean and safe water, and paying attention to food hygiene and food safety. Also important is matching your food choices and intake with your anti-retrovirals and other drugs, as well as managing any problems that you may experience.

Since the widespread distribution of the 2002 publication "**Healthy Eating for Better Living, A Caribbean Handbook**", many users have provided us with invaluable feedback. This has resulted in the creation of 7 booklets for easier use by HIV-positive persons and your care-providers. We have kept part of the original title, "Healthy Eating for Better Living" and each booklet now has one of the following subtitles:

- (1) What is Good Nutrition for HIV?
- (2) About Nutrition and HIV
- (3) Planning A Healthy Diet

- Some foods do not freeze well. These include cooked eggs, cooked potatoes, most salads and some fresh vegetables, fried foods and sandwiches with mayonnaise.

## Suggested Time for Foods That Freeze Well

| Food                                       | Storage Time (months) |
|--|-----------------------|
| <b>Cooked Fruit (pies, crisps, sauces)</b> | 6                     |
| <b>Meat, Poultry, Seafood &amp; Fish:</b>  |                       |
| • broiled, roasted, frozen without gravy   | 1                     |
| • broiled, roasted, frozen with gravy      | 2-3                   |
| • fish with sauce                          | 1-2                   |
| • meat loaf (cooked)                       | 1-2                   |
| • pasta sauces, stews, casseroles, lasagne | 2-3                   |
| <b>Soups</b>                               | 4                     |
| <b>Vegetables:</b>                         |                       |
| • cooked with sauce                        | 1                     |
| • cooked, mashed or puréed                 | 1                     |
| <b>Grain Products:</b>                     |                       |
| • cooked rice                              | 1                     |
| • breads                                   | 1                     |
| • muffins                                  | 1                     |

## Looking After Your Leftovers

Refrigerator temperatures do not kill bacteria; they only slow down the speed at which bacteria grow. If food looks or smells odd/strange/funny throw it away.

- Cover and refrigerate or freeze food that you are not going to eat right away.
- Do not eat leftovers if they have been in the refrigerator for more than three days.
- If leftovers are to be eaten cold, take them out of the refrigerator just before eating.
- If you want to eat your leftovers warm, reheat them thoroughly. Once the food is hot, keep it hot for 10 minutes.
- If you are reheating soups, stews or sauces, bring them to a boil and let them simmer for 10 minutes.

## Freezing

- Label all food with the date, contents and number of servings.
- When using frozen foods, choose the oldest package first.
- You can freeze food in plastic wrap, aluminum foil, and plastic or metal containers. Some glass containers also go in the freezer. Be sure about this before you use the glass.

- (4) Keeping Healthy and Living with HIV
- (5) Dietary Tips for Coping with Problems that Could Affect Your Nutritional Health
- (6) Food Safety and Hygiene
- (7) Getting the Best from Your Food and Drugs

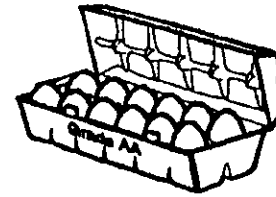
Each booklet allows you to focus on one topic at a time. However, we suggest that you keep all of them handy as quick references that can help to make life and living better. We hope that you will continue to find the information useful. Remember that the information provided in these booklets is not intended to be used in place of any individualized treatment you will require from your doctor, dietetics or any other healthcare professional. In addition, mention of any product does not mean any expressed or implied endorsement. If you have questions or need additional information, we encourage you to consult your doctor, nutrition or dietetics professional or nurse.

*Dr. Fitzroy Henry*  
*Director, CFNI*

## Acknowledgements

The Caribbean Food and Nutrition Institute (CFNI) gratefully acknowledges the invaluable and outstanding contributions of many individuals and institutions whose commitment and support ensured that these booklets were adapted from the original publication: "Healthy Eating for Better Living, A Caribbean Handbook" (2002).

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### Eggs

- Always cook eggs until both the white and yolk are firm.
- Avoid any food that contains raw eggs. Examples are some salad dressings and sauces, home-made ice cream, eggnog, punches, ponche de creme, and mayonnaise.
- When baking, do not taste raw dough or batter if it contains uncooked egg.
- Hard-cooked eggs can be kept safely in the refrigerator for 7 days.

### Fruits and vegetables

- Wash vegetables and fruits thoroughly under safe running water before eating or cooking.
- If it is not possible to wash them properly, peel your fruits and vegetables.

**A mixture of one teaspoon (5 ml) of bleach added to 4 cups (1 litre) of clean water can be used to wash fruits and vegetables.**



- Cook fish and other seafoods until they are well done and flake easily.
- Do not eat raw meat or uncooked seafood such as clams, oysters, sushi or fish.
- If you buy pre-cooked foods, be sure to reheat them thoroughly until they are hot right through.
- If you cook meat on an open fire or coals, you should pre-cook it before you grill it to make sure it is cooked right through.
- The best way to know that meat is cooked all the way through is to use a meat thermometer. Always insert it into the thickest part of the meat. It should not touch the bone.
- Measure the temperature of meats cooked in the microwave at the end of the standing time.

### *Safe Temperatures for Cooking*

| Food             | Temperature  |
|------------------|--------------|
| Fish             | 140°F (60°C) |
| Beef, Lamb, Pork | 170°F (75°C) |
| Veal             | 180°F (80°C) |
| Chicken & Turkey | 185°F (85°C) |

# Food Safety and Hygiene

## Foodborne Illness and HIV

Many people can get sick from eating food that contains harmful germs. Most persons recover quickly, but for people with a weakened immune system, like people with HIV, foodborne illness (or food poisoning) is very dangerous. It can cause diarrhoea, nausea, vomiting, abdominal pain, cramps and other symptoms. It can even be a threat to your life.



Food safety includes knowing what foods not to eat and knowing how to prepare and store food properly. These are important to know because eating safely can prevent illness and can even save your life. Do not rely on your senses of sight, smell or taste to protect you from getting sick from spoiled food. Unfortunately, it is almost impossible to tell if food has been contaminated just by looking at it, smelling it or tasting it.

You can begin by paying attention to the 5 keys to food safety as suggested by the World Health Organization (WHO). These are:

1. Keep Clean
2. Separate Raw and Cooked Food.
3. Cook Thoroughly
4. Keep Food at Safe Temperatures.
5. Use Safe Water and Raw Materials.

## Buying Food Safely



Eating safely begins when you buy the food. Do not buy from shops or markets that look unclean. Take your groceries home right after shopping and store them in a refrigerator, freezer or cool place.



- NOTE:**
- If only one cutting board is available, clean it well with soap and hot water after cutting each type of food.
  - Cutting boards made of plastic or marble, and not wood, are the safest.
  - Replace your cutting board when it becomes badly scratched and difficult to clean.

## Thawing meat

- Thaw frozen meat on a tray in the refrigerator, never at room temperature. Place the tray or platter at the bottom of the fridge to ensure that no drippings touch other food.

**NOTE:** You can also thaw meat under running water or by placing the sealed packaged in a container with cold water. Change the water every 20-30 minutes.

## Cooking for Safe Eating



Always cook food well. Cooking thoroughly kills bacteria in raw foods. Do not taste food before it is fully cooked or completely reheated.

## Meat, poultry, seafood and fish

- Cook meat and poultry right through until they are well done. Red meat is done when it is brown or gray inside. The juice from poultry should be clear after piercing. If it is still pink inside, it is not safe for you. When eating in a restaurant or at a friend's house, ask that your meat be well done.

- Wipe counter tops often.
- Use hot, soapy water to wash counter tops and cutting boards that have touched raw meat, poultry, seafood, fish or eggs. Then rinse and disinfect with this bleach solution and then rinse again with hot water.



#### Bleach Solution

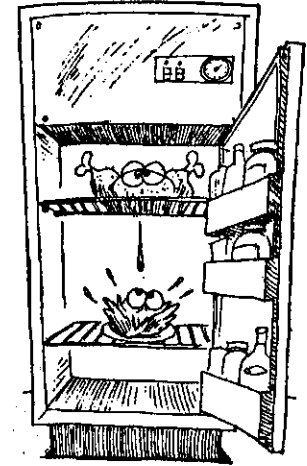
**Mix one half teaspoon (2 ml) bleach with 2 cups of water (500 ml). Keep the solution handy for use in your kitchen.**

- Keep this bleach solution and a pair of rubber gloves within easy reach. Using this bleach solution should become part of your kitchen routine. To make it handy and convenient to use, pre-mix a small amount and keep it in a plastic spray bottle.
- If you have an oven, microwave or refrigerator, keep it clean.

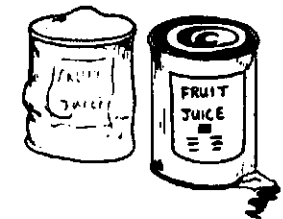
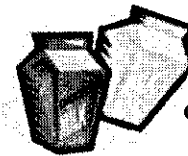
- Keep and use one cutting board for raw foods.
- As much as possible, use one cutting board for meat, chicken and fish and another one for vegetables and bread. It is not safe to cut meats or other foods on the kitchen counter.

## Fresh meat, poultry, seafood and fish

- Buy your foods in amounts that can be eaten before they spoil. It is sometimes cheaper to buy food in bulk, but without a fridge or freezer for safe storage this is not a good idea.
- When you buy raw meat or poultry, put them in a separate plastic bag or container so that the drippings do not contaminate other foods.
- If unwrapped, cooked meat is touching unwrapped raw food, do not buy it. The bacteria from one could contaminate the other.
- Look for the "expiry" "best before" or "used by" date on the package. The fresher the food the better. It is not safe to buy or eat foods that have been sitting on a shelf for too long, or after they have expired.

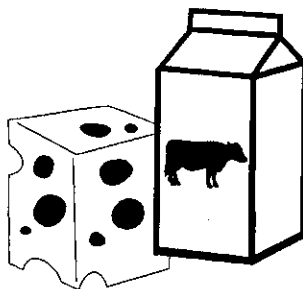


- Do not buy or use food if the packaging is bulging, dented or leaking. Do not be tempted by discounts.



## Dairy products

- Make sure you buy only pasteurized milk and cheese made from pasteurized milk. The pasteurizing process kills harmful bacteria. Look for the word "Pasteurized" on the label.
- It is not safe to drink raw (unpasteurised) milk. Boil before using.
- Always check the date on the package. The more recent the date, the fresher, the product. Fresher is better.
- Throw away mouldy cheese. Cutting off the mouldy part of the cheese is not good enough.
- Avoid cheeses made from unpasteurized milk because they may contain harmful bacteria.
- Avoid blue-veined and soft cheeses like Brie and Camembert which contain live moulds. They are not considered safe for people with HIV/AIDS.



## Eggs



- Buy only refrigerated eggs that are clean and without cracks. Do not buy from the roadside or community market.
- Always check for the "expiry" or "best before" or "use by" date on the container.

- Use paper towels rather than cloth towels for cleaning and wiping your hands. If you use cloth towels, wash them often and thoroughly in hot soapy water.
- If you use cloth towels in the kitchen, use two: one for your hands and the other for counter tops.
- If you have cuts, bruises or sores on your hands, be especially careful to wash your hands well and use rubber gloves when handling food.
- Wash your hands and cooking utensils even more carefully when you are sick with the flu, a cold or diarrhoea.



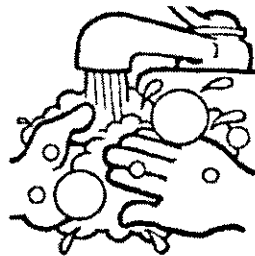
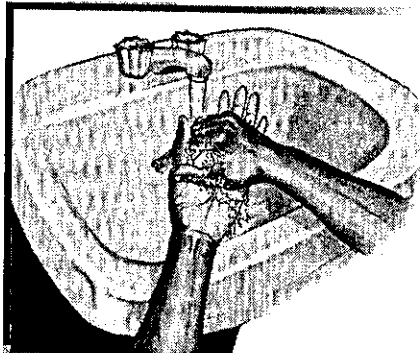
## Keep equipment, utensils and counters very clean

- Use hot water (preferred) for washing utensils and cleaning counters.
- Wash plates and utensils with hot soapy water and rinse with very hot water. Change water often and continue your washing. Be sure you have enough hot water to wash and rinse your dishes thoroughly. This will help to kill many germs.
- Use paper towels or let your clean dishes drip dry rather than wiping them with a cloth towel.

## WASH HANDS FREQUENTLY...

With soap and clean running water...

- AFTER USING THE TOILET
- AFTER TOUCHING HAIR
- AFTER TOUCHING FACE
- AFTER TOUCHING SKIN
- AFTER HANDLING RAW FOODS
- AFTER TOUCHING SOILED EQUIPMENT
- AFTER HANDLING MONEY
- AFTER SMOKING (If you smoke)
- AFTER USING TELEPHONE
- AFTER TOUCHING PETS



## Vegetables and fruits

- It is best to pick or buy vegetables and fruits in small quantities as you need them.
- Avoid bruised or very ripe fruits and vegetables. Bacteria can pass more easily through the damaged surface or their thin skins.



## Storing Food Safely

The temperature in your refrigerator should be set no higher than 4°C (40°F).

Your freezer should be set no higher than -2°C (30°F).

- Do not take a chance with eating mouldy food. Wrap it up and throw it away.

If you have a refrigerator, cooler or ice-box, it is safest to keep the temperature just slightly above the freezing point at 2°C to 6°C (35°F to 40°F). Bacteria can grow quickly at temperatures between 4°C and 60°C (40°F and 140°F).

See diagram on page 6.

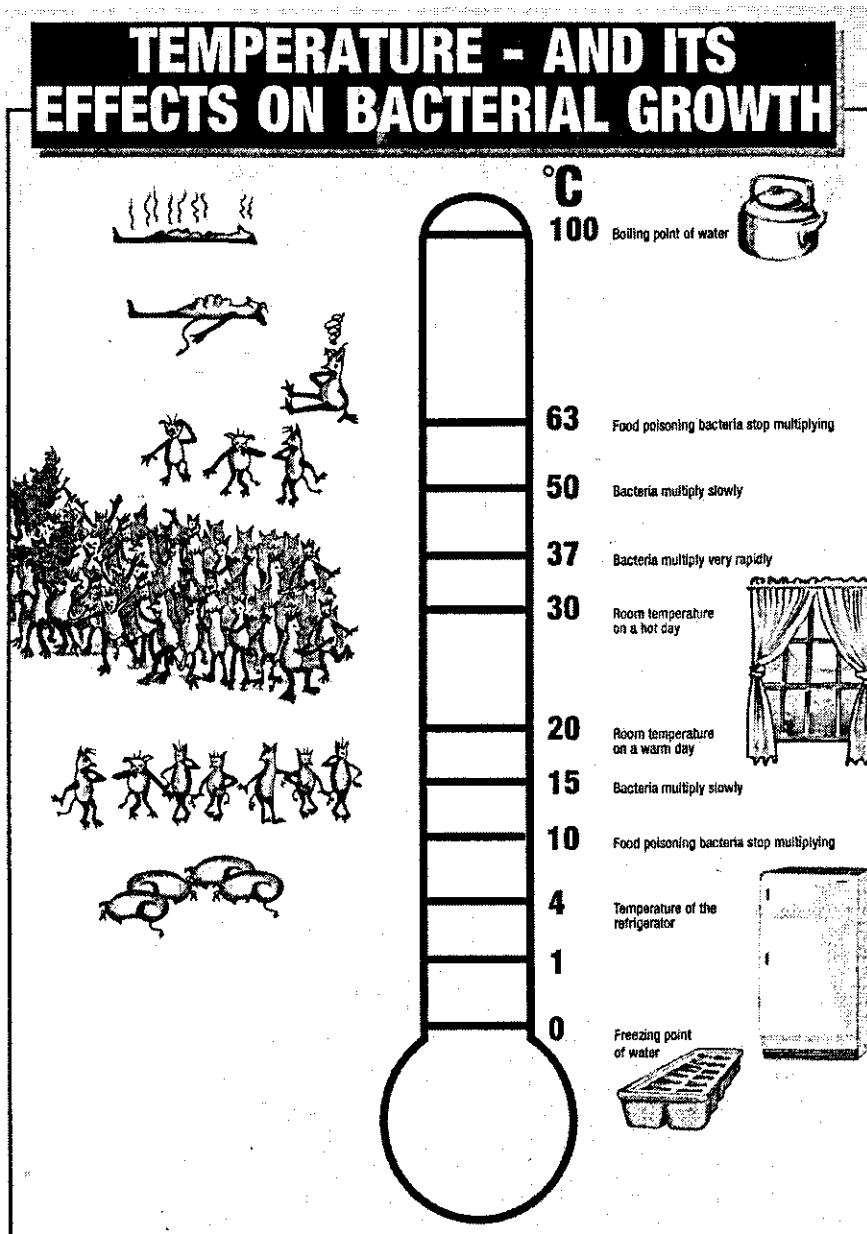
- Discard food that has not been used by the "best before" date.
- Keep raw meats, fish and eggs separate from all other foods and make sure that drippings do not fall onto other foods.

To change °C to °F

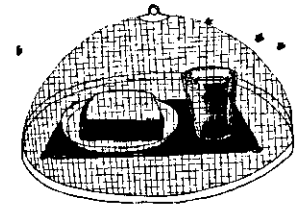
$$(^{\circ}\text{C})(1.8) + 32 = ^{\circ}\text{F}$$

To change °F to °C

$$^{\circ}\text{F} - 32 = ^{\circ}\text{C} \times 1.8$$



- Store leftovers in clean covered containers in the refrigerator or freezer.
- Do not re-use plastic bags. They may contain food particles that help mould and bacteria grow.
- Keep liquid milk in a refrigerator, cooler or icebox after opening.
- Refrigerate eggs in the main part of the fridge, not on the door. If you find a cracked egg, throw it away.
- Keep fruits and vegetables in the refrigerator. They will last longer.
- Poke air holes in plastic bags used to store fruits or vegetable to allow for air to circulate.
- Keep potatoes in a cool, dark, well-aired place instead of plastic bags. If you must, poke air holes in the plastic bag.
- Throw away potatoes that become green or soft and shriveled.
- Cut away all green spots or sprouts that develop on potatoes.
- Protect foods from flies, insects, rodents and other animals.



## Preparing Food Safely

### Wash your hands often

- Wash your hands with soap and water before touching food and after touching raw meat, poultry, seafood, fish or eggs.