

DISASTERS AND FOOD SAFETY

Every year many countries in the Caribbean are affected by adverse weather, tropical storms and hurricanes. The heavy rains and winds can cause damage to life and property. Even in countries such as Guyana where there is no threat from a hurricane, communities still experience flash floods and landslides due to torrential downpours that occur with very little if any warning. It is important that we are adequately prepared to face these types of disasters. The focus here is on what to do after the floods and how to prepare for future disasters in securing your food supply.

THE PRESENT– WHAT TO DO AFTER THE FLOODS

1. Unrefrigerated Food Items

- Foods not stored in water proof containers that have come in contact with flood waters should be discarded.
- Undamaged commercially canned foods that have been in contact with flood waters may be saved by removing the labels, thoroughly washing the cans, and then disinfecting them with a solution of ¼ cup of bleach per gallon of water. The cans may then be relabeled, including an expiration date, using a permanent marker.
- Food containers with screw-caps or snap lids, should be discarded if they have come in contact with flood water because they cannot be disinfected.
- Cooking utensils and other items that cannot be disinfected and have come into contact with flood waters should be discarded. This would include wooden cutting boards and plastic utensils as well as baby bottle nipples and pacifiers (soothers).
- Metal and ceramic utensils and dishes must be washed thoroughly with soap and hot water and sanitized by boiling or soaking for 15 minutes in a solution of ¼ cup bleach per gallon of water before they are used.

The following items must be discarded if they have come into contact with flood waters:

- Paper, cloth, fibre or cardboard boxes, even if the contents seem dry.
- Dried cereals, macaroni, spaghetti, rice, and any “sealed” packages of crackers, cookies or mixes, within a larger paper box.
- Cans with dented seams, bulges, rusty spots, or leaks.
- Cans which have been tossed about and are found far from their normal storage spot. Seams on these cans may have been weakened or their seals broken, causing contamination or spoilage.
- Jam or jelly sealed with paraffin. Even if they appear intact, their seals may have been broken.
- Containers with non-sealed, fitted lids, such as cocoa or baking powder.
- Commercially bottled carbonated beverages, if the cap is crusted with silt; don't attempt to wash, since pressure in bottles may cause an explosion.
- Foil or cellophane packages.
- Flour, oats, rice, cornmeal, sugar, salt and coffee in canisters or bags.

Once you have determined which of your foods are safe, it is important that you know how to use them efficiently.

- Use fresh foods first, and save your tinned and canned items for later, especially if it appears that you will be without electricity for a long period.
- Try to cook just as much food as you need. If there is no electricity, you will not be able to keep leftovers safely.
- Use only potable water for cooking and for washing fruits and vegetables.
- Water may be scarce but Do Not neglect to wash fruits and vegetables before using them especially the ones that may be eaten raw.
- Try to cook meals that require little water. For example, try to add just enough water to rice when boiling so that you don't have to strain, thus wasting water and throwing away valuable water soluble nutrients.

2. Frozen Foods

If there is loss of electricity keep your freezer closed at all times. If the freezer is full food may be kept safe for approximately two days, a half filled freezer will keep foods safe for one day but it could be filled with ice to ensure the safety of its contents for a bit longer.

Foods that have been thawed but still have ice crystals may be refrozen safely and stored. Ice cream should never be refrozen. If the foods have thawed completely but have been kept at 40°F (4°C) or less for no more than one to two days and appear and smell as though they are still good, they may be thoroughly cooked and eaten. Keeping freezers locked tightly helps to keep foods at lower temperatures in power outages for longer periods.

If you have been affected by flooding, you need to assess the safety of your stored foods.

3. Loss of Electricity

Even if you have been spared major or minor damages, you may still need to assess the safety of refrigerated foods if there has been a power outage. The following guidelines can be used to determine which food should be used and which should be discarded. Remember never to taste foods to determine if they are good. Foods that taste fine can still have enough bacteria to make you ill.

Discard the following items if your refrigerator temperature has been at more than 40°F (4°C):

- Milk, cream, yogurt
- Bologna, salami, hot dog sausages
- Meat, poultry, fish [eggs whether cooked or uncooked]
- Casseroles, soups stews
- Cooked macaroni, spaghetti, potatoes, or rice
- Cream filled pastries, custards
- Cheese pies, pizza
- Creamy salad dressing
- Open bottles of juice
- Open jars of mayonnaise, tartar sauce.

The following items can be kept (can be stored at room temperature for a few days):

- Butter, margarine, peanut butter
- Processed and hard cheese (e.g. Cheddar, Swiss, Parmesan)
- Fresh fruits and vegetables, fruit juices
- Fruit pies, bread, rolls and muffins
- Cakes, except cream cheese-frosted or cream-filled
- Dried fruits and coconut
- Vinegar-based salad dressings, jelly, relish, taco sauce, barbecue sauce, mustard, ketchup, olives and peanut butter
- Flour and nuts
- Fresh herbs and spices.

THE FUTURE – WHAT TO DO BEFORE THE CRISIS

Food

The security of your food supply starts long before you even begin to hear that flood waters are rising. It is suggested that you store canned items, dried foods and condiments and pre-packaged foods. As much as possible look for foods that do not require a lot of water to cook, as well as invest in some air tight, water tight containers to

store items such as rice, flour. Identify a cool dry storage space to keep your stocks. It may be better to store these foods in a top cupboard as opposed to a bottom cupboard to avoid having to move them when flood waters threaten. In case of a flash flood there may not be time to secure your food supplies.

With respect to hurricanes it should start at the beginning of the hurricane season in June. Be sure to check that you have all your hurricane supplies on hand in addition to the appropriate types of food. This would include a first aid kit, a battery powered radio, flash lights, batteries and a non electrical means of cooking foods along with an adequate supply of the appropriate fuel, in addition to having a food supply on hand.

The possibility of flash flood in your areas, when there is heavy rainfall, means that you should have your emergency food supply available year round or at least during your country's rainy season. The foods you store do not have to be bought all at once and once you have built up your store, the foods contained should be rotated so as to avoid spoilage and wastage, even tinned foods have an expiry date. Every few months use some of the foods in your emergency store and replace them immediately so that as much as possible you have a fresh supply of food. Some countries have two rainy seasons every year and we should be aware of them and prepare for them.

SUGGESTED FOOD ITEMS FOR YOUR EMERGENCY FOOD SUPPLY

nuts	canned fish (tuna, mackerel, sardines, herring)
canned juices	canned chicken
boxed juices	canned meats (corned beef, sausages)
snack and energy bars	canned peas, beans
peanut butter	canned soups
powdered milk or canned evaporated milk	dried soup mixes
infant formulas if necessary	canned vegetables
small bottles of mayonnaise and salad dressing	crackers/biscuits
bouillon cubes	dried fruit e.g. raisins, prunes
sugars	coffee and tea
syrops and honey	jams and jellies
vinegar	
onions	Non-food Items
potatoes	bottled water (one gallon per person per day)
rice	napkins
flour, cornmeal, other cereals	paper and plastic utensils
macaroni, spaghetti	garbage bags
tinned cheese	manual can opener
spices	foil
salt	
cooking oil	
pepper	
coconuts	

WHEN IS YOUR RAINY SEASON?

Antigua & Barbuda	April- June, November - December
Bahamas	May- June, September - October
Barbados	June- November
Belize	June- August
Dominica	June- November
Grenada	June- December
Guyana	May- June, December - January
Jamaica	May- October
St Kitts Nevis	May- October
St Lucia	June- November
St Vincent	July- October
Trinidad & Tobago	June- September

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