Section 3: Risk Management

Is Risk Management Necessary?

Donations provide the majority of food for most food programs. This allows food programs to fill an important need in the community.

It also creates a problem, however, since food programs have no control of food quality before it comes through their door. This makes risk assessment and quality control in the food program important.

Definition: Risk management, as discussed in this Section, is the evaluation of food safety

Food programs must have a good risk assessment program. This Section will explain how to perform risk assessment.

Food packaging is designed to protect food. Contamination occurs when damaged or opened packages expose food to bacteria, viruses, molds, insects, rodent droppings and urine, cleaning products and other toxins, broken glass, contaminated water or sewage, etc. The assessment protocol on the following pages focuses on container integrity, the possibility of contamination and any signs of infestation.

Risk assessment deals with food safety, not food quality. Quality standards should be set up in addition to the safety standards contained in this booklet. For example, moldy bread is not safe and should be discarded. Stale bread, however, is safe but may not taste good. Whether or not you keep stale bread will depend on the size of your bread supply and your clients' demand for bread.

The degree of inspection should differ depending on the source.

- Food that you purchase may require only minimal inspection. Inspection of donated food will be much more intensive.

After reading this Section, if you still have questions about whether or not a donation should be accepted, there are several sources available to you. The Washington Food Coalition can help you identify your County Extension Agent, County Sanitarian or others who may be able to assist you.

General Principles

Several general principles apply when determining whether to keep donated food. Three important things to remember are:

- User your eyes and nose as first-round guides. Spoiled food may be slimy, off-color or moldy. If food looks or smells suspicious, throw it out.
- Remember, however, that not all spoiled foods will smell or look bad. That's why the protocol in the rest of this book is so important.
- **Never taste a donated product to determine food safety!** Remember you can't see microorganisms. Botulinum toxin is the most potent toxin known to man and the amount that would fit on the head of a pin can kill you.
- Foods should always be sorted (using the risk analysis principles in this Section) before being put into storage. Do not store unsorted food near sorted food where it may be mistakenly used.

Assessment Process

Step 1: Discard the food in any obviously damaged packages in a safe manner. Rejected food may be donated to pig farmers or local composting groups. Food that is discarded in the trash should be denatured (see below). You should discard the following:

- Packages with tears
- Bottles with popped safety seals
- Jars that have been opened
- Medicine containers without safety strips
- Leaking containers
- Packages with insect or rodent holes
- Stained paper and cardboard packages, or packages that smell of a foreign material
- Products with missing or opened seals

- Any item which has been opened before it arrived at the food program
- Unlabeled or illegally labeled products
- Home canned foods

More specific information on assessing damaged containers begins later in this Section.

Denaturing

- definition: intentional adulteration of food or drink rendering it unfit for consumption while remaining suitable for other uses
- how-to: douse rejected food with soap or bleach so that it won't be re-salvaged from your garbage can and reused.

Step 2: Separate remaining items into groups such as:

- Human food
- Pet food
- Cleaning products
- Medicines or cosmetics

Step 3: Separate each group into package types such as:

- Bottles and jars
- Cans

Step 4: Decide if food products are to be kept according to the guidelines for that type of food in this Section.

- See charts later in this Section

Step 5: Mark the date received on all cases of product and on all undated individual items. This will help you maintain product rotation and keep food only for a safe period of time.

Step 6: If labels are damaged or dirty, re-label the product with the following information. Use masking tape or self-adhesive labels and a permanent marker.

- Manufacturer
- Product
- Ingredients
- Weight
- Expiration date - If the product does not have an expiration date, assign one of your own using the keep date guidelines in this Section.

Step 7: Clean any products that are not contaminated, but dirty.

Cans, bottles and jars may be cleaned in the following manner:

1. Wipe with a clean, soapy cloth.
2. Wipe with a rinsing cloth.
3. Wipe with a disinfectant (100 ppm chlorine) as explained in Section 2 of this manual.
4. Be careful not to submerge screw-type closures.

It's All On The Label

Labels provide valuable clues to the usefulness of donated food. For example:

- Weight: A can that is significantly lighter than the advertised weight may have been compromised (punctured and leaked).
- Ingredients: Ingredients are critical after an item has been stocked to check against a client's food allergies.
- Source: State regulations require labels to include the packager's address. All food should come from a licensed,

inspected source.

- Lot Numbers: Lot numbers are important tracking devices for manufacturer food recalls.
- Product Age: Age is important in determining how long you may safely keep a product.

Donation Diplomacy: To maintain good public relations, be diplomatic about donations. Look for opportunities to inform your donors on what items you can and cannot distribute. Once you've received a donation, sort out rejectable items such as home-canned goods after the donor has left

Evaluating Cans

Canning preserves food by heating it to temperatures that destroy harmful microorganisms and spores. After food has been heated, it is sealed into airless containers to prevent exposure to bacteria on the outside of the containers. Since most microorganisms need oxygen to live, the sealed containers also prevent growth of any microorganisms inadvertently left in the containers.

Using this method, food can be stored for long periods of time.

Containers with even minor damage can allow bacteria to enter and multiply, causing food to spoil. Remember, bacteria are tiny and could easily enter holes that are too small to see. Because of this, cans with certain types of dents are considered unsafe.

Clostridium botulinum bacteria can grow without air. Although botulism is most likely to occur in foods that have little natural acid, any can that bulges or moves easily on the ends should be discarded. The bulging is caused by gas, which C. botulinum leaves as a waste product.

Because home-canned foods have so much potential to cause food-borne illness, food programs can only accept commercially canned foods.

The following types of cans are unsafe and should be refused or discarded.

- Home-canned goods. You have no way of knowing if home-canned foods have been properly handled.
- Cans with swollen or bulged ends (except carbonated beverages where bulged ends are normal).
- Cans with ends that flip, indicating internal pressure. Press firmly on the top of the can; if you can move it, or if the opposite end bulges, throw it out.
- Cans with sharp dents, points or severe creasing anywhere (especially on the side or end seams).
- Cans with any dents at the juncture of the side or end seams.
- Cans that are so badly dented that they can't be stacked or opened by a manual can opener.
- Cans that have excessive or pitted rust (rust that won't rub off).
- Cans with obvious leaks or cans that are light in weight. For example, if a carbonated beverage can is soft and easy to compress, it has lost its carbonation and should be rejected.
- Cans with pop-up seals that have been popped up. Only accept these cans if the seal is intact.
- Cans with no labels or labels missing any of the following components:
  - o Product name,
  - o Ingredients,
  - o Net weight, or
  - o Name and address of manufacturer.

- Discolored cases or cans that cannot be cleaned (indicating contamination from a spill).
- Cans with holes, pinholes, pits, cracks, punctures.
- Cans with buckled or pinched tops.
- Cans with improperly formed seams (incomplete, blown-out or miswelded).
- Cans with misformed rims or loose tops.

Evaluating Bottles and Jars

It is important to inform your clients to avoid cans that spurt liquid or have an "off" odor when opened.

The following types of bottles and jars should be rejected.

- Any home-canned products
- Clear liquids which have turned milky
- Cracked jars or bottles showing any sign of leakage
- Loose lids with no safety seal. Check by tightening the lid. If it moves more than a fraction, reject it. If the lid to a jar or bottle is cracked or broken, open the jar or bottle. If it has an inner seal and that seal is intact, replace the lid. If the jar or bottle does not have an inner seal, or if the inner seal is compromised, dispose of the product.
- Jars or bottles on which the safety button is up. This is especially important if the product requires refrigeration after opening.
- Jars or bottles that are missing any contents.
- Any jar or bottle which includes a foreign substance such as dirt, mold, webs or insect skins under the lid. Hold glass containers to a light. If foreign objects, mold, discoloration or unusual product separation is present, discard the product. Some products, such as salad dressings, contain an oil that may cause normal product separation. Mold may be present in fruit juice. It may appear long, stringy, ropy or clumpy.

Evaluating Cardboard or Paper Packages

Single-layer package should be discarded if:

- It has rips, tears, holes or open corners.
- Product has leaked out.
- Significant taped repairs were made prior to arrival at food program.
- It has been contaminated by other products (stains, odors, etc.)
- Rodent gnaw marks, droppings or urine are present or can be seen with black light.
- The package includes insect bore holes, insects in package seams, movement or spots in the product, insect skins or chaff in the bottom of the container.

Boxes with an inner bag should be accepted only if:

- The inner bag is undamaged and has an airtight seal and well-formed seams.
- The package is not stained and does not contain foreign material.

⋯► If the inner package is in good repair, you may repair the outer package with tape.

⋯► If the outer package is too damaged to repair, place the inner bag into a new plastic bag, insert the label and seal the bag.

Evaluating Refrigerated and Frozen Food Containers

In assessing products that require refrigeration, use the following guidelines.

- Discard any refrigerated food that is not cold and any frozen product that is not frozen.
- Discard any packages that have violated the manufacturer's instructions.
- Keep refrigerated products refrigerated and frozen products frozen during assessment and storage.
- When possible, use a calibrated thermometer to check he temperature of refrigerated products upon receipt.

Packages must have complete and legible labels.

Risk Assessment Exercise

Using what you have learned form the last several pages,

Decide if you would keep or discard the following packages.

Item	Keep?	Discard?
A jar of Aunt Jane's home-canned green beans		
An unopened box of cookies		
A sack of flour with small, irregular holes around the base		
A can of nacho cheese with a slight dent located away from the seams		
Plastic, dented bottle of juice with no leaks		
Commercially canned peas with bulging ends		
A sack of three-day old bread		
A box of cereal with a torn box and intact liner		

Storage Times, General Information

The following pages give general recommendations on how long food can safely be stored at your food program. The suggested time limits deal only with food safety, not with how appetizing the food may be.

The life length of any product has a lot to do with how the product is handled and stored before, during and after it is in the food program.

Recommended dates in the following charts or on the product "use by" date may not be accurate if foods have been stored at the wrong temperature.

If foods have been consistently stored at correct temperatures, they may be safe well after the "use by" date printed on the product. The dates in the following charts can be used to determine how long you can keep products after you receive them, or the printed "use by" date. If you cannot understand the date code, label the product with the date you received it. This should only be done if you also indicate that the new date is a 'received on' date and not a new 'use by date'.

Unless otherwise specified, the times on the charts in the following pages provide the MAXIMUM recommended storage times for unopened packages.

When determining how long to keep food, always be alert for mold, discoloration, slime and damaged packaging. These are sure signs that the food should be discarded. Also be aware that the nutrient content of fresh or packaged food decreases over time.

Shelf Storage Guide for Dry or Canned Foods

FOOD	Maximum Storage Time at 50 - 70°F
Baking Powder	24 months
Baking Soda	26 months
Baby Formula	12 months
Baby Food (jars)	12 months
Beans, Peas, Lentils (dried)	36 months
Bottled Foods	36 months
Boullion Cubes or Envelopes	12 months
Bread, fresh*	2 weeks
Bread Crumbs (dry, sealed)*	6 months
Cakes, Donuts	2-10 days
Canned Goods, general	24-36 months
Chili sauce, opened	1 month
Cereal Grains, whole	
···► cornmeal or grits*	12 months
···► oatmeal	18 months
···► barley, etc.	36 months
Cereals	
···► cold type	
boxes, unopened	12-18 months
boxes, opened	2-3 months
repackaged	12 months
···► hot type	
unopened	18 months
repackaged	12 months
individually packaged (instant)	18 months
Cheese, Grated Parmesan	10 months
opened*	1-2 months
Chocolate	
···► dark* & semisweet	18 months
···► mild chocolate*	12 months
···► unsweetened	24 months
···► syrup	24 months
···► syrup, opened	12 months
···► cocoa and cocoa mixes	24 months

Shelf Storage Guide for Dry or Canned Foods

FOOD	Maximum Storage Time at 50 - 70°F
Coconut	18 months
Coffee	
···► regular or instant, unopened	18 months
···► regular, opened*	12-18 months
···► instant, opened	24-36 months
Coffee Lighteners (creamer powder)	18 months
opened	6 months
Condiments	
···► ketchup, mustard, relish, mayonnaise	12 months
···► opened condiments	6 months
···► sauces: hot pepper, Worchestershire, steak and meat sauces	24 months
···► opened or repackaged sauces	12 months
Cookies	
···► bakery	1-2 weeks
···► packaged	12 months
···► packaged, opened	1 month
Cornstarch	24 months
Crackers	12 months
opened	2 months
Diet Products, instant breakfasts	12 months
Dressings	
···► Mixes	36 months
···► Prepared, dairy-based	18 months
···► Prepared, other	36 months
···► Prepared or mix, opened	3 months
Dry Goods, general	18 months past date
Flour	
···► white	18 months
···► whole wheat*, rye*	12 months
Frosting	
···► canned	12 months
···► mix	18 months

Shelf Storage Guide for Dry or Canned Foods

FOOD	Maximum Storage Time at 50 - 70°F
Fruit and Juice	
···► citrus, canned**	12 months
···► other, canned**	36 months
···► dried*	24 months
Gelatin	
···► flavored	18 months
···► unflavored	36 months
Honey	36 months
Jellies, Jams**	36 months
Meat and Fish	
···► canned	36 months
···► canned ham*	18 months
Milk**	
···► condensed, evaporated*	12 months
···► nonfat, dry	24 months
···► nonfat, dry, opened*	9 months
···► condensed or dry, hydrated*	5 days
Mixes	
···► casserole, gravy, soup, pancakes, biscuits, cookies, cakes, muffins, pie crist, puddings, soup, potato, etc.	12-18 months
···► drinks (Kool-Aid, lemonade)	18 months
Molasses	36 months
···► canned or packages, opened	3 months
Nuts	
···► canned	24-36 months
···► in shell or packaged	6 months
···► canned or packaged, opened*	3 months
Oils and Shortening	36 months
opened*	6 months
Pasta	
···► spaghetti and macaroni	36 months
···► egg noodles	24 months

Shelf Storage Guide for Dry or Canned Foods

FOOD	Maximum Storage Time at 50 - 70°F
Peanut butter	24 months
opened*	3 months
Pectin, liquid or powdered	24 months
Pickles, olives	24 months
Pies and pastries, packaged	3-10 days
Popcorn and Chips	
···► unpopped popcorn	36 months
···► popped popcorn and chips	6 months
···► popcorn and chips, opened or repackaged	1 month
Rice	
···► white	24 months
···► brown*	3 months
···► flavored or herb	6 months
Seasonings	
···► herbs and spices	36 months
···► pepper, salt	36 months
···► vanilla and other extracts	24 months
···► vanilla and other extracts, opened	12 months
Soft Drinks	12 months
Soup, canned	
···► tomato or tomato based	12 months
···► other	24 months
Snacks	
···► bagged	6 months
···► canned	36 months
Sugars	
···► white, artificial sweetener	36 months
···► brown, confectioners	24 months
Syrups	
···► corn, maple, berry, etc., unopened	24 months
···► corn syrup*, opened	6 months
···► maple syrup*, opened	12 months
Tea Bags or Instant Tea (jar)	36 months
Toaster pop-ups	3 months

Shelf Storage Guide for Dry or Canned Foods

FOOD	Maximum Storage Time at 50 - 70°F
Vegetables	
···► canned or dried, general	36 months
···► tomatoes and sauerkraut, canned	18 months
···► fresh	
onions or potatoes	8 months
squash, hard shelled	8 months
Vinegar	24 months

*** Store in refrigerator for best quality or longer storage time.**

*** * Must be refrigerated after opening.**

Refrigerator and Freezer Storage Guide

FOOD	Max Storage Time Refrigerated at 34 - 40°F	Max Storage Time in Freezer at 0°F
Baked Goods		
···► cakes		6 months
···► cheesecake	5 days	1 month
···► cookies	12 months	
···► custard filled pastries	2-3 days	Not Recommended (NR)
···► donuts		6 months
···► fruit cake	12 months	
···► pies, pastries		6 months
···► pie shell, unbaked		6 months
···► quick bread, cakes		4 months
···► yeast bread, rolls		6 months
Bread		
···► fresh	1 month	12 months
···► frozen dough		6 months
Butter	6 weeks	12 months
Cheese		
Soft Cheeses		
···► cottage cheese	2 weeks	NR
···► ricotta	2 weeks	6 months
···► cream	3 weeks	4 months

Refrigerator and Freezer Storage Guide

FOOD	Max Storage Time Refrigerated at 34 - 40°F	Max Storage Time in Freezer at 0°F
Hard Cheeses		
···► Swiss. Cheddar, etc.		6 months
unopened	6 months	
opened	1 month	
chunks, opened	1 month	
slices	2 weeks	
···► Parmesan, Romano	12 months	
Cream	7 days	NR
Eggs		
···► in shell	6 weeks	NR
···► whites, yolks	3 days	12 months
Fish		
···► uncooked	2 davs	6 months
···► cooked	2 days	3 months
Frozen Desserts (ice cream, etc.)		6 months
Fruits		
···► Fresh		
blueberries, cherries	1-2 weeks	24 months
strawberries	7 days	24 months
bananas	1-2 weeks	
apples, cranberries	8 months	24 months
melons and pears	2 weeks	24 months
avocados, grapes, peaches	2 months	
citrus fruit (grapefruit, tangerines, oranges, lemons, limes)	2 months	6 months
other fruit	2-4 weeks	12 months
canned, opened	1 week	NR
Game Meat		
···► deer	3-5 days	18 months

Refrigerator and Freezer Storage Guide

FOOD	Max Storage Time Refrigerated at 34 - 40°F	Max Storage Time in Freezer at 0°F
Game Meat (continued)		
···► rabbit	3-5 days	12 months
···► duck, goose (whole, wild)	3-5 days	6 months
Jellies, Jams		
···► opened	6 months	NR
Juices	1 week	30 months
Margarine	12 months	30 months
Mayonnaise	3 months	NR
Meat (beef, pork, lamb)		
···► fresh		
chops, roast, steaks	3-5 days	24 months
ground, stew or variety	1-2 days	12 months
···► cooked meat & meat dishes	5 days	6 months
···► gravy & meat broth	5 days	6 months
···► cured		
bacon, frankfurter, etc. (unopened)	14 days	6 months
bacon, frankfurter, etc. (opened)	7-10 days	NR
sausage, fresh/smoked	3-5 davs	6 months
canned ham, unopened	6-9 months	NR
canned ham, opened	3-5 davs	3 months
···► casseroles, mixed dishes	3-5 days	6 months
···► dried	12 months	
···► processed, packaged		
lunch meat, unopened, vacuum-packed	25 days	6 months
lunch meat, unopened, not vacuum-packed	14 days	6 months
hot dogs	2 months	12 months
ham	1 week	6 months
···► sausage, fresh pork	1 week	6 months
···► variety (liver, etc.)	2 days	6 months
···► Milk (whole, skim)	10 days	3 months
buttermilk	14 davs	3 months
···► Nuts (shelled or unshelled)	6-12 months?	18-24 months

Refrigerator and Freezer Storage Guide

FOOD	Max Storage Time Refrigerated at 34 - 40°F	Max Storage Time in Freezer at 0°F
···► Poultry		
fresh (whole chicken, turkey)	3-5 days	12 months
fresh (chicken, turkey pieces)	2-3 days	9 months
duck & goose (whole)	3-5 days	6 months
giblets	2-3 davs	4 months
-cooked, covered, with broth or gravy	2 days	6 months
-pieces not in broth or gravy	3-4 days	6 months
casseroles, mixed dishes	3-4 days	6 months
fried chicken	3-4 days	6 months
Seafood		
···► fish steaks and fillets	1-2 days	6 months
···► shellfish	1-2 davs	6 months
Sour Cream	3 weeks	NR
T.V. Dinners & Main Dishes	2 days	6 months
Tofu	7 days	4 months
Vegetables, fresh		
···► carrots, Jerusalem artichokes	3 months	
···► sweet potatoes, cabbage	8 months	
···► uncut squash	12 months?	
···► asparagus, cauliflower, mushrooms, green peppers, tomatoes, broccoli, green beans, green peas, spinach, cut squash	4 weeks	
···► lima beans, lettuce, cucumbers	1-3 weeks	
···► sweet corn, eggplant (ripe)	7-14 days	
···► salad greens	1-2 weeks	
Vegetables, canned, opened	5-7 davs	NR
···► frozen, commercial		24 months
Yogurt	2-3 weeks	NR

Section 3 Self Test

How long could you keep a bottle of Ranch Dressing that is already 2 months past its expiration date?

a) 18 months b) 16 months

c) 12 months d) 36 months

What senses should you use to examine food?

a) Sight b) Sound

c) Smell d) Taste

Which of the following are signs that a product should be discarded?

a) Mold c) Slime

b) Discoloration d) All of the above

Which of the following bread conditions are safety concerns?

a) Moldy b) Flattened

c) Stale d) Crumbly

Which of the following materials can be used to denature food?

a) Ivory soap b) Hot water

c) Bleach d) Cold water