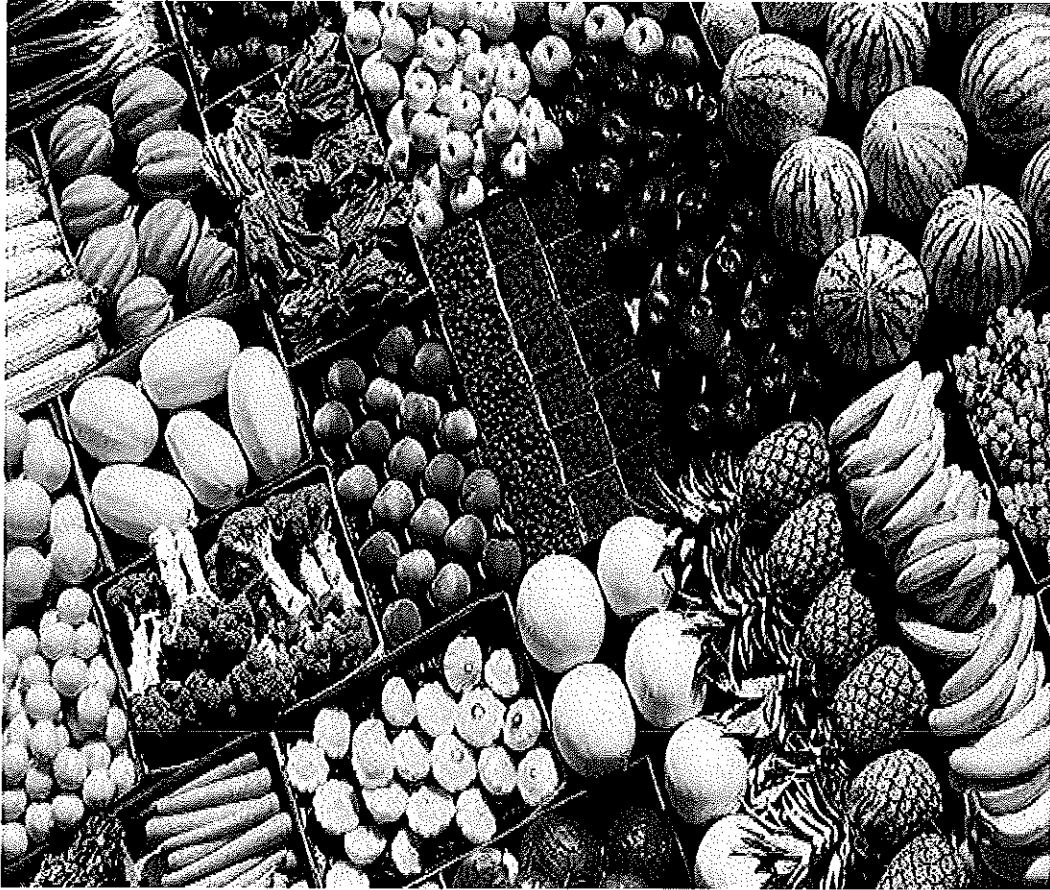


Safe Food Handling



Presented by

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SAFE FOOD HANDLING

Freezing and Food Safety

Foods in the freezer — are they safe? Every year, thousands of callers to the USDA Meat and Poultry Hotline aren't sure about the safety of items stored in their own home freezers. The confusion seems to be based on the fact that few people understand how freezing protects food. Here is some information on how to freeze food safely and how long to keep it.

What Can You Freeze?

You can freeze almost any food. Some exceptions are canned food or eggs in shells. However, once the food (such as a ham) is out of the can, you may freeze it.

Being able to freeze food and being pleased with the quality after defrosting are two different things. Some foods simply don't freeze well. Examples are mayonnaise, cream sauce and lettuce. Raw meat and poultry maintain their quality longer than their cooked counterparts because moisture is lost during cooking.

Is Frozen Food Safe?

Food stored constantly at 0 °F will always be safe. Only the quality suffers with lengthy freezer storage. Freezing keeps food safe by slowing the movement of molecules, causing microbes to enter a dormant stage. Freezing preserves food for extended periods because it prevents the growth of microorganisms that cause both food spoilage and foodborne illness.

Does Freezing Destroy Bacteria & Parasites?

Freezing to 0 °F inactivates any microbes — bacteria, yeasts and molds — present in food. Once thawed, however, these microbes can again become active, multiplying under the right conditions to levels that can lead to foodborne illness. Since they will then grow at about the same rate as microorganisms on fresh food, you must handle thawed items as you would any perishable food.

Trichina and other parasites can be destroyed by sub-zero freezing temperatures. However, very strict government-supervised conditions must be met. Home freezing cannot be relied upon to destroy trichina. Thorough cooking, however, will destroy all parasites.

Freshness & Quality

Freshness and quality at the time of freezing affect the condition of frozen foods. If frozen at peak quality, thawed foods emerge tasting better than foods frozen near the end of their useful life. So freeze items you won't use quickly sooner rather than later. Store all foods at 0° F or lower to retain vitamin content, color, flavor and texture.

Nutrient Retention

The freezing process itself does not destroy nutrients. In meat and poultry products, there is

lose juiciness. Emulsions such as mayonnaise or cream will separate and appear curdled.

Ideally, a food 2-inches thick should freeze completely in about 2 hours. If your home freezer has a "quick-freeze" shelf, use it. Never stack packages to be frozen. Instead, spread them out in one layer on various shelves, stacking them only after frozen solid.

Freezer - Refrigerator Temperatures

If a refrigerator freezing compartment can't maintain zero degrees or if the door is opened frequently, use it for short-term food storage. Eat those foods as soon as possible for best quality. Use a free-standing freezer set at 0 °F or below for long-term storage of frozen foods. Keep an appliance thermometer in your freezing compartment or freezer to check the temperature. This is important if you experience power-out or mechanical problems. The temperature in the refrigerator should be set at 40 °F or below. Check the refrigerator temperature with an appliance thermometer.

Freezer Storage Time

Because freezing keeps food safe almost indefinitely, recommended storage times are for quality only. Refer to the freezer storage chart at the end of this document, which lists optimum freezing times for best quality.

If a food is not listed on the chart, you may determine its quality after thawing. First check the odor. Some foods will develop a rancid or off odor when frozen too long and should be discarded. Some may not look picture perfect or be of high enough quality to serve alone but may be edible; use them to make soups or stews.

Safe Thawing

Never thaw foods in a garage, basement, car, dishwasher or plastic garbage bag; out on the kitchen counter, outdoors or on the porch. These methods can leave your foods unsafe to eat.

There are three safe ways to thaw food: in the refrigerator, in cold water, or in the microwave. It's best to plan ahead for slow, safe thawing in the refrigerator. Small items may defrost overnight; most foods require a day or two. And large items like turkeys may take longer, approximately one day for each 5 pounds of weight.

For faster thawing, place food in a leak proof plastic bag and immerse it in cold water. (If the bag leaks, bacteria from the air or surrounding environment could be introduced into the food. Tissues can also absorb water like a sponge, resulting in a watery product.) Check the water frequently to be sure it stays cold. Change the water every 30 minutes. After thawing, cook immediately.

When microwave-defrosting food, plan to cook it immediately after thawing because some areas of the food may become warm and begin to cook during microwaving.

transfer foods to a friend's freezer until power is restored. Use an appliance thermometer to monitor the temperature.

To determine the safety of foods when the power goes on, check their condition and temperature. If food is partly frozen, still has ice crystals, or is as cold as if it were in a refrigerator (40 °F), it is safe to refreeze or use. It's not necessary to cook raw foods before refreezing. **Discard foods that have been warmer than 40 °F for more than 2 hours.** **Discard any foods that have been contaminated by raw meat juices.** Dispose of soft or melted ice cream for quality's sake.

When it is freezing outside and there is snow on the ground, the outdoors seems like a good place to keep food until the power comes on; however, frozen food can thaw if it is exposed to the sun's rays even when the temperature is very cold. Refrigerated food may become too warm and foodborne bacteria could grow. The outside temperature could vary hour by hour and the temperature outside will not protect refrigerated and frozen food. Additionally, perishable items could be exposed to unsanitary conditions or to animals. Animals may harbor bacteria or disease; never consume food that has come in contact with an animal.

Frozen Cans

Cans frozen accidentally, such as those left in a car or basement in sub-zero temperatures, can present health problems. If the cans are merely swollen — and you are sure the swelling was caused by freezing — the cans may still be usable. Let the can thaw in the refrigerator before opening. If the product doesn't look and/or smell normal, throw it out. **DO NOT TASTE IT!** If the seams have rusted or burst, throw the cans out immediately, wrapping the burst can in plastic and disposing the food where no one, including animals can get it.

Frozen Eggs

Shell eggs should not be frozen. If an egg accidentally freezes and the shell cracked during freezing, discard the egg. Keep any uncracked eggs frozen until needed; then thaw in the refrigerator. These can be hard cooked successfully but other uses may be limited. That's because freezing causes the yolk to become thick and syrupy so it will not flow like an unfrozen yolk or blend very well with the egg white or other ingredients.

CANNED FOOD SAFETY & STORAGE

Know about the canned food safety and storage and also some canned food facts. Here are some tips for using canned food.

All of us have used canned food once in our life time. **Canned foods** are the most prominently used packed food all over the world. We can see the canned food in each house hold. People use them because **they are easy to be maintained & need less time to be cooked**. Moreover they don't lose their natural taste as well. But to keep their taste & quality for long time certain care should be taken while using them. Moreover there are certain limits to how long food quality can be preserved. You must be asking why? It's because several factors limit the shelf-life of canned foods such as:

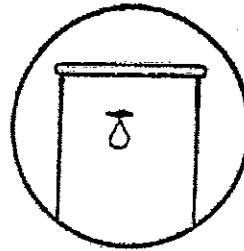
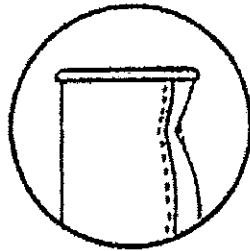
- Cans or glass jars with metal lid can get rusted if not used properly i.e. touched by wet hands or spoon & when rust will be deep enough, tiny holes open in the can or lid may let spoilage agents in & will spoil the food. That's why we should avoid water contact from can.
- Cans could even corrode, if food will chemically react with metal container. Especially highly-acid food like canned tomatoes and fruit juices gets easily corroded. When - kept or used for several years causes change in taste and texture. It eventually lowers down the nutritional food value also. So this type of food should not be kept for very long time in home
- Temperatures over 100 degrees Fahrenheit are harmful for canned foods. If the storage temperature rises, the risk of spoilage of food jumps sharply. There are high chances of loosing nutrient of the caned food, if stored at above 75 degree for very long period. In the glass jars the light can cause color changes and nutrient losses in foods. That's why we are advised to use the older canned food earlier than the newer one i.e. we should follow the technique of LIFO (last in first out).
- We should never use foods from containers with the spoilage warning signs given on the container. So before taking the can check for statements written along the top, side or bottom seam.
- You should never take loose or bulging lids on jars; leaking or badly dented can or foods with a foul odor. These all are the symbols of old or poor packaging of food. If the packaging will be old the product inside the can can't be used for longer time period.
- If the cans doesn't show any sign of spoilage or damage than also you should take care as an edible inside it may deteriorate in color, flavors & nutritive value. So don't go on packaging but check out the date.

There are certain points which should be kept in mind while storage of the canned food. For better & prolonged use of canned food we must keep them in mind. It will solve your purpose of keeping canned food at your home. So be ready to apply them in your kitchen & enjoy your food as longer as you want.

Guidelines for Evaluating Canned Food Containers

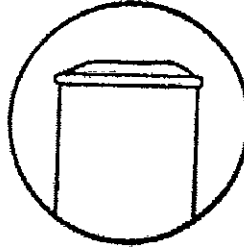
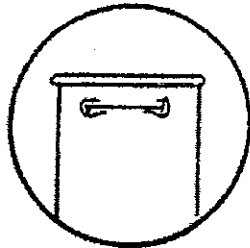
Discard Cans With:

Severe dents on side seam **1**



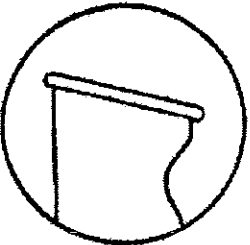
5 Leaks

Sharp dents parallel to rim **2**



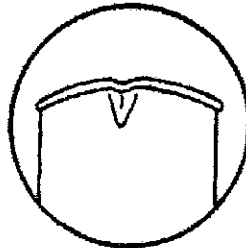
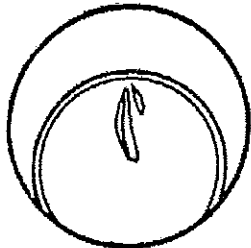
6 Bulges or puffed ends

Sharp dents in the sides that prevent stacking **3**



7 Ends that give or flip and bulge on the other end when pushed

Buckled or pinched tops and bottoms **4**



8 Severe dent on the rim, seams or bent rims

IF IN DOUBT, THROW IT OUT

Adapted from materials developed by *Second Harvest* National Food Bank Network



Purdue University Cooperative Extension Service

Evaluating Container Integrity

Serious Defects: DISCARD	
FDA and FA standard:	AFDO standard:
Cans with bulged ends, except for carbonated beverages and dry foods (ground coffee, powdered beverage mixes).	Cans with bulged lids due to severe dents/buckles, except for dry goods (ground coffee and powdered-beverage mixes, provided that the container is intact).
Cans with holes or any visible evidence of product leakage (stained labels may indicate product leakage).	N/A
Pull-top containers with obvious fractures or dents on the lid score lines or in the rivet area.	N/A
Cans that are rusted with any pits that show a danger of imminent perforation.	N/A
Cans crushed to the point where they cannot be stacked, except for carbonated beverages, ground coffee and powdered beverage mixes, and acid food products.	Cans crushed to the point where they cannot be stacked or opened with manual can openers, except for ground coffee, powdered beverage mixes, provided container is intact.
Cans dented severely at juncture of the side and end seam.	Cans moderately or severely dented at juncture of side and end seam.
Cans that are cut or fractured through the metal on end seam.	N/A
Cans severely dented on the double seam or score.	Cans severely dented on any seam or score.
Cans whose ends can be flipped back and forth by pressing on them (flippers), and when depressed, spring back (springers), except for carbonated beverages, dry foods (ground coffee, powdered beverage mixes, acid food products).	Cans whose ends can be flipped back and forth by pressing on them (flippers), and when depressed, spring back (springers), except for dry foods such as ground coffee and powdered beverage mixes.
Cans with deep body dents (not affecting closure or score) where there is evidence of a fracture.	Cans with deep body dents where can may be fractured.
Cans with improperly formed seams or with seam defects (e.g., vees, droops)	N/A
Aesthetic Defects: SAFE TO DISTRIBUTE as salvaged food	
FDA and FA standard:	AFDO standard:
Cans with moderate flat rim dents on the double seam not involving the juncture of the side seam and the end seam.	Cans with moderate flat rim dents on double (top) seam as long as the juncture with side seam is not involved.)
<ul style="list-style-type: none"> • Moderate body dents which may slightly reduce can's height, but not severe enough to distort it or make it unstackable. • Rust that will wipe off. • Slight to moderate dents on or near double seam, or slight dents involving side seam juncture. • Slight to moderate paneling (flattened) on sides. • Flat rim dents on the double seam such that they do not alter the contour of the container. 	N/A

Paper Goods and Food Service Items: EXAMINE

Generally, paper products may be redistributed. However, rules on contamination and infestation apply to them as well as food. A broken container may have allowed dirt to infiltrate the product or provided harborage. *Examine carefully.* Tape all breaks and store away from food products.

Cleaning Supplies: SALVAGE OR DISCARD

Soaps and other cleaning supplies are highly desired by affiliates. They often arrive as salvage, the victims of a stock person's errant razor. Cleaning products are primary sources of cross-contamination due to their toxic, abrasive, or liquid nature. **Salvage:** Torn containers of dry or powdered soap. (They may be taped.) **Discard:** Containers of liquid soaps and other cleaning supplies that are leaking or broken.

Personal Care and other Non-Food Items: DISCARD WHEN APPROPRIATE

Certain items, such as diapers, feminine hygiene products, toothpaste, and mouthwash, whose containers are torn or broken, shall be automatically discarded. Aerosol cans or other containers that are pump-operated or pressurized, and are missing the outer cap, should be discarded.

Over the counter Drugs: COMPLY WITH STATE REQUIREMENTS

Affiliate must determine/comply with any state or local restrictions or licensing requirements for the distribution of over the counter drugs. The product must:

- Be within code.
- Have **all** label information intact and readable (product's description, ingredients, net weight, distributor, data regarding dosage, antidotes, etc.)
- Have tamper-resistant packaging intact.
- (Over-the-counter medication) Be segregated and stored securely prior to distribution; receive a final quality control check at the time of distribution to verify that it still meets requirements, particularly the code date requirement.

Product Consumption Requirements

Meat (all meat must be frozen on or before the expiration date)

Product:	Requirement and expiration/code dates:	Non- acceptable condition:
Fresh or frozen meats, processed, packaged meats	Freeze at 0° F or below on/before expiration date. If frozen on/before expiration date, can be consumed up to 1 year past exp. date.	<ul style="list-style-type: none">• Defrosted product• Severe freezer burn• Discolored product
Processed fully cooked meats.	Defrosting/refreezing is strictly prohibited. If frozen on/before expiration date, can be consumed up to one year past expiration.	<ul style="list-style-type: none">• Unfrozen past expiration date• Damaged or compromised packaging.

Dry and Canned Good Consumption		
Product:	Requirement:	Unacceptable condition:
Cereal	Must contain a label with: <ul style="list-style-type: none"> • Description of item • Ingredients • Net weight • Distributor, 	<ul style="list-style-type: none"> • Insects • Mold • Stale product • Damaged or compromised packaging. • Not packaged in food grade packaging.
Crackers	All product must be labeled and contain: <ul style="list-style-type: none"> • Description of item • Ingredients • Net weight • Distributor. 	
Dried beans	Store in a well ventilated and climate controlled area.	
Pasta	All product must be labeled and contain the following information: <ul style="list-style-type: none"> • Description of item • Ingredients • Net weight • Distributor. Can be consumed up to 3 years past its expiration date.	
Mayonnaise (shelf-stable)	Store in a well ventilated and climate controlled area. Discard if discolored or if it has an off odor Can be consumed up to 3 years past expiration date.	<ul style="list-style-type: none"> • Leaking jars • Open • Broken seal • Discolored • Off odor
Refrigerated dressing/mayonnaise	Store in a well ventilated and climate controlled area. Discard product if discolored or it has an off odor. If stored correctly, can be consumed up to 3 months past expiration date	
Shelf-stable jarred foods	Store in a cool, dry, clean area. Labels on original jars and/or cases should be fully intact. They must include: <ul style="list-style-type: none"> • Description of item • Ingredients • Net weight • Distributor 	<ul style="list-style-type: none"> • Opened, punctured, or bulging jar top. • Broken seal (button indicator identifies break in seal). • Visible signs of leakage or spoilage. • Broken or chipped glass.

Retail Store Donation Manual

INTRODUCTION

This manual is intended to help food shelves evaluate market and implement supermarket retail store donation programs. The information contained within is a collection of lessons gleaned from existing retail store perishable donation programs. It is important to be flexible when trying to meet each retailer's needs, but safe food handling and storage guidelines must never be compromised in the process.

DONATIONS: WHAT TO EXPECT

Most store donation programs recover all or some product from the following departments. Below are details about what you can expect to find in each department.

MEAT DEPARTMENT: WHAT TO EXPECT

The meat department usually includes random weight meats, prepackaged meats and hanging meats.

At some grocery chains, the meat department may include seafood and specialty (gourmet cuts) meats.

- **Random Weight Meats:** beef, chicken and pork packaged fresh either at a plant or in the store. This may include prepackaged meat with a pre-determined weight such as tube packed ground beef. Retailers with specialty meat departments may also include product wrapped in butcher paper. This product is only acceptable if a label is attached identifying the contents and the sell-by-date.
- **Hanging Meats (also known as hard pack):** lunch meats, prepackaged bacon, sausages and hot dogs and vacuumed packaged ham and turkey breast are the most common items in this category. Many products in this category will be merchandised on pegs, thus the term hanging meats. Packages are also often hard plastic, which is where the term "hard pack" comes from. These products are generally part of the meat department and should not be confused with random weight meats that are more commonly found in the deli department.
- **Frozen Meats:** beef, chicken, pork and seafood that are shipped, stored and merchandised in a frozen state. These products may be ready to serve, may contain prep work such as breading, or may have spices already added.

SEAFOOD DEPARTMENT; WHAT TO EXPECT

At some retail chains, seafood may be a department that stands alone. In most cases, the meat department manager oversees the seafood department.

- **Random Weight Fish and Shellfish:** packaged fresh either at a plant or in the store.

PRODUCE DEPARTMENT: WHAT TO EXPECT

This department is pretty straightforward; fresh fruits and vegetables. Produce departments carry bulk and prepackaged product. Some produce departments will carry dried fruits and gourmet salad dressings as well.

- Can I estimate the amount of product the program will generate?
- What are our equipment needs (vehicle, pallet jack, cooler, freezer)?
- Do we have enough cooler and freezer space?
- Do we have a funding source to acquire the necessary equipment?
- What are the staff and/or volunteer needs?
- Will we need to hire a driver?
- Will we need someone to manage the program?

STORE DONATION: Basic Process

The retail donor sets aside the product to be donated at the end of each business cycle. Meat department products should be frozen on or before their sell-by date and held in the freezer for pick up. Dairy products should be held in the cooler. See the "Store Donation Handling Guidelines" for product.

Specific guidelines: The food shelf picks up the product at each retail store location on a predetermined pick-up schedule. The product is transported and stored in an active temperature controlled device or using passive temperature controlled devices ("freezer blankets") and ultimately distributed to clients.

EQUIPMENT

- Truck or van – Preferably refrigerated ("reefer" truck)
- Passive temperature controlled device – freezer blanket. (If the partnering agency is picking up product from a location that does not require the product be out of an active temperature controlled device for more than 30 minutes, then most donors will allow the use of a passive temperature controlled device such as a pallet cover or large commercial cooler.)

Optional Equipment

- Pallet jack for transporting product from store receiving to truck
- Scale with 150 pound capacity for weighing product
- Storage bins for presort of perishable products
- Name badges
- Donation receipts should be left with donor

**Member agencies will need to store all meat products at 0° F.

**Member agencies should have someone on staff with food safety certification.