



G4G TECHNICAL GUIDELINES

Making Every Dollar Count: Strategies to Make Food Last Longer

Overview

It's a great service to provide recipes with nutrient-dense ingredients, such as fresh produce, nuts, seeds, and whole grains for your diners. Facilities with action stations, salad bars, and other station-style feeding set-ups often provide and require more fresh foods daily. Some drawbacks to using more fresh foods are their limited shelf life and the potential for more food waste. Each year, 40% of purchased food goes uneaten in the U.S. It can be challenging to forecast and serve the right amount of food per meal period. In military dining facilities, there can be a continuous rotation of new diners. Factors such as units going to or returning from deployment, trainings, and work schedules can lead to vastly different numbers of diners on a given day.

Unused leftovers can impact your facility's budget. But you don't necessarily need to throw out leftovers before a weekend or holiday. Luckily, there are many ways to get the most out of every ingredient in your kitchen or pantry while saving money and boosting the flavor of your dishes. You can help manage your dining facility's food budget with strategies to reuse, save, and preserve ingredients that might otherwise get thrown away.

Strategies To Make Food Last Longer

The most important strategy to avoid throwing out food is to store it properly. For example, fats found in foods like bread, flours, nuts, seeds, and whole grains go rancid over time. If these ingredients are not part of your daily menu, it can quickly become costly to replace them if they're not stored properly. Basic strategies to extend the lifespan and quality of your ingredients:

- ▶ Many shelf-stable foods last longer when stored in a fridge or freezer.
 - If you don't have space in your fridge or freezer, use a dark pantry or storage room without direct sunlight.
- ▶ Direct sunlight will cause these foods to go bad quickly at room temps.
- ▶ Store in an airtight container or glass jar.
- ▶ Wrap bread in a zip-top bag or plastic wrap.
- ▶ Always label and date stored foods.



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Table 1: Storage Strategies for Common Foods

Ingredient	Storage Guideline
Bread	Room temperature: 1 week Fridge: 2 weeks Freezer: 6 months
Flour	Room temperature: 3 months Fridge: 6 months Freezer: 1 year
Nuts and Seeds	Room temperature: 3 months Fridge: 6 months
Whole Grains (brown rice, quinoa, etc.)	Room temperature: 3 months Fridge: 6 months Freezer: 1 year

1 FREEZE

MEAT

Any animal protein from a whole chicken to bacon, ground meat to chuck for stews, and even perfectly trimmed cutlets, will freeze well and keep for months at the proper storage temperature (0°F). While it is safe to unfreeze and refreeze meats, it will decrease the quality of the protein and increase the risk for freezer burn. Follow these steps to optimize meat storage:

- ▶ You can store meat in its original packaging up to 2–3 months, but after that it's best to remove it from the original packaging.
- ▶ Separate your meat into the portion sizes you will most likely use for a recipe.
 - For example, a smaller facility might only use 5 lbs of ground beef at a time, while a larger facility might need 25 lbs.
- ▶ Wrap your portioned and cut meats in plastic wrap twice. Then, if possible, place in a zip-top freezer bag with a label and date.

Table 2. Recommended Limits for Freezing Animal Proteins

Item	Months
Bacon and Sausage	1–2
Casseroles	2–3
Egg whites or egg substitutes	12
Frozen dinners and entrees	3–4
Gravy, meat or poultry	2–3
Ham, hotdogs, and lunch meats	1–2



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Item	Months
Meat, uncooked roasts	4-12
Meat, uncooked steaks or chops	4-12
Meat, uncooked ground	3-4
Meat, cooked	2-3
Poultry, uncooked whole	12
Poultry, uncooked parts	9
Poultry, uncooked giblets	3-4
Poultry, cooked	4
Soups and stews	2-3
Wild game, uncooked	8-12

Reference: <https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/freezing-and-food-safety>

When using frozen meat, keep in mind that 5 lbs will thaw much faster than 25 lbs, so plan your production schedule accordingly. In the event of freezer burn, cut off the burned pieces before cooking. You might need to discard entire pieces if they are badly freezer burned.

Butter

Butter is an easy product to freeze for later use:

- ▶ Keep butter in its original packaging
- ▶ Wrap in plastic wrap or aluminum foil
- ▶ Date and label
- ▶ Freeze *unsalted* butter for up to 6 months, *salted* butter for up to 12 months
- ▶ To use, remove from the freezer and thaw at room temperature

Fruits And Veggies

Dining facilities often use various fruits and veggies throughout the day to create recipes, stock serving stations, and flavor dishes. Some produce, like berries, go bad quickly, so freezing these fruits helps make every dollar count. Fresh citrus juice and zest are more flavorful than bottled versions, even after freezing.

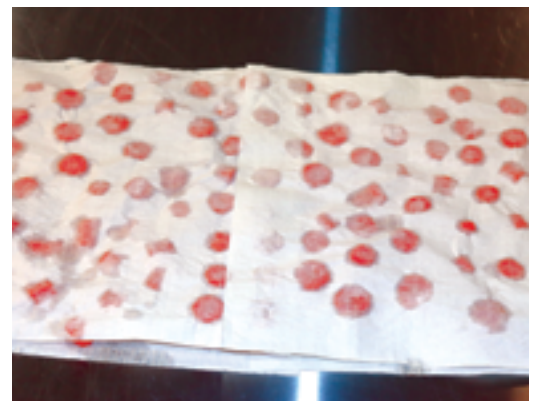
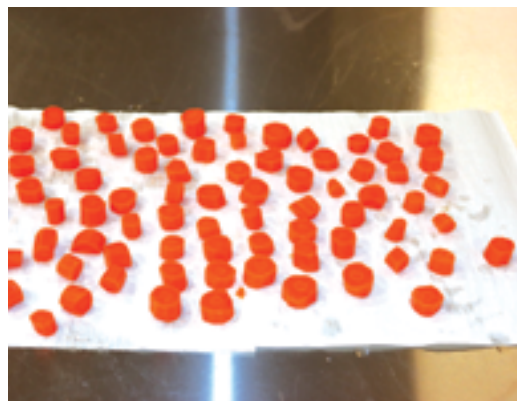
Use frozen fruits and veggies for smoothies, as ice (in lemonade, tea, or flavored water), in baked goods (muffins and pies), and stews, soups, and sauces. Keep in mind that white, starchy fruits (apples and pears) and other fruits high in water (melons, citrus, or grapes) don't freeze well. Avoid freezing unless they will be served frozen.



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For best results, “blanch and shock” veggies prior to freezing.

- ▶ Blanch
 - Bring a large pot of salted water to a boil or use a steamer basket
 - Add your veggies
 - Remove from hot water or steamer once the color is vibrant and veggies have started to tenderize. Veggies can easily overcook and become dull looking.
 - Peas, corn: 1 minute
 - Asparagus, green beans, brussels sprouts, broccoli: 1–2 minutes
 - Carrots: 3–4 minutes
- ▶ Shock
 - Immediately place veggies into a container of ice and water
 - Remove from ice bath once veggies are fully cooled





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Table 3. Ways to Freeze Fresh Produce

Berries			
Technique	Storage	Storage Guidelines	Photo
<p>Check berries for mold or signs of spoilage.</p> <p>Remove stems, wash, and dry.</p> <p>Lay berries on a sheet tray, freeze for 3–4 hours.</p> <p>Remove and place in an airtight container or zip-top bag.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Label and date.</p>	<p>Freezer:</p> <p>Up to 6 months</p>	

Citrus (lemons, limes, oranges)			
Technique	Storage	Storage Guidelines	Photo
<p>Zest: Use a microplane to remove all bright yellow, green, or orange exterior.</p> <p>Don't zest into the white part, it's extremely bitter.</p> <p>Juice: Remove zest, then juice and strain out pulp.</p>	<p>Zest: Portion into recipe-size amount (example: 1 Tbsp), put into an airtight container, label and date.</p> <p>Juice: Place in an airtight container, label and date.</p>	<p>Zest:</p> <p>Fridge: 1 week Freezer: 6 months</p> <p>Juice:</p> <p>Fridge: 2–3 days Freezer: 3 months</p>	




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Stone and Tropical Fruits (pineapple, mango, peaches, bananas)			
Technique	Storage	Storage Guidelines	Photo
<p>Peel and thinly slice your fruits to desired thickness.</p> <p>Lay out on a sheet tray and freeze for 3–5 hours.</p> <p>Remove and place in an airtight container or zip-top bag.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Label and date.</p>	<p>Freezer:</p> <p>Bananas: 2–3 months</p> <p>Mangos: 10–12 months</p> <p>Peaches/pineapple: 12 months</p>	

Vegetables			
Technique	Storage	Storage Guidelines	Photo
<p>Peel (if needed), slice veggies to desired size.</p> <p>“Blanch and shock,” then dry completely with clean paper or kitchen towels.</p> <p>Lay on a sheet tray and freeze.</p> <p>Remove and place in an airtight container or zip-top bag.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Label and date.</p>	<p>Freezer:</p> <p>Broccoli: 8–10 months</p> <p>Brussels sprouts: 10–12 months</p> <p>Carrots: 10–12 months</p> <p>Cauliflower: 3–4 months</p> <p>Corn: 6–8 months</p> <p>Green beans: 6–8 months</p> <p>Peas: 6–8 months</p>	




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Fruit or veggie juice			
Technique	Storage	Storage Guidelines	Photo
Remove container lid since juice expands when frozen.	Place juice (without lid) upright in the freezer. Once juice has fully frozen, place the lid on top. Label and date.	Freezer: 6 months	

HERBS


Using fresh herbs can take your food to new heights, but you rarely need an entire bunch or package at once. Store fresh herbs such as cilantro, dill, parsley, thyme, and basil in the freezer for later. Fresh herbs, even when frozen, are more flavorful than commercially-prepared dried herbs. There is no need to defrost or thaw frozen herbs. Add frozen herbs to sauces, casseroles, or marinades to build bright, fresh flavors.


Table 4. Ways to Freeze Fresh Herbs


Cilantro			
Technique	Storage	Storage Guidelines	Photo
Wash whole, including stems. Pat dry with a paper towel or use a salad spinner. Lay on a sheet tray and freeze for 1–2 hours. Remove and place in an airtight container or zip-top bag.	Airtight container or zip-top bag, remove excess air. Label and date.	6 months	



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Dill			
Technique	Storage	Storage Guidelines	
<p>Wash whole dill sprigs.</p> <p>Pat dry with a paper towel or use a salad spinner.</p> <p>Lay on a sheet tray and freeze for 1–2 hours.</p> <p>Remove and place in an airtight container or zip-top bag.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Label and date</p>	<p>Freezer:</p> <p>8–10 months</p>	

Parsley			
Technique	Storage	Storage Guidelines	
<p>Remove leaves, discard stems.</p> <p>Wash leaves and pat dry or use a salad spinner.</p> <p>Once completely dry, keep whole or chop to desired size. Place in an airtight container or zip-top bag.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Label and date.</p>	<p>Freezer:</p> <p>6 months</p>	

Thyme			
Technique	Storage	Storage Guidelines	
<p>Remove leaves, discard stems</p> <p>Wash leaves under cold water, lay out and pat dry with paper towels.</p> <p>Once completely dry, place leaves in an airtight container or zip-top bag.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Label and date.</p>	<p>Freezer:</p> <p>6 months</p>	



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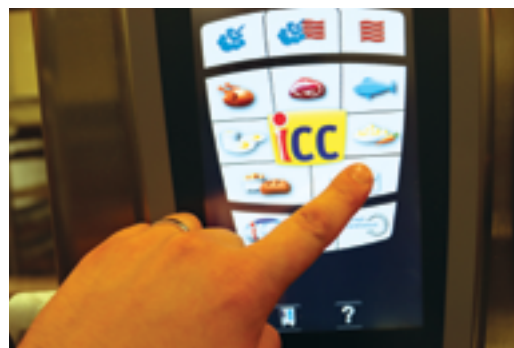
Basil		
Technique	Storage	Storage Guidelines
<p>Remove leaves from stems.</p> <p>“Blanch and shock.” Blanch for 10 seconds, then remove from hot water using tongs.</p> <p>Dry with paper towels then lay out on a sheet tray and place in the freezer.</p> <p>Lay on a sheet tray and freeze for 20 minutes.</p> <p>Remove and place in an airtight container or zip-top bag.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Label and date.</p>	<p>Freezer: 4–6 months</p> 

You can also add fresh herbs to ice trays filled with olive oil then store in the freezer. When you’re ready to use, simply pull out a cube with your desired herb and toss it in the recipe to add fresh herb flavors.

2 DEHYDRATE

You can dehydrate leftover fruits, veggies, and herbs and store for 6–12 months. Dehydrated veggies can be a great alternative to chips or as a crunchy topping for grain bowls or tacos. They also rehydrate well in a soup or stew to give the texture and flavor of fresh veggies. Dehydrated fruits and veggies work well as salad toppers.

The best machine to use is a dehydrator. However, many dining facilities don’t have these onhand. You can use a Combi oven, which has a specific setting to properly dehydrate various foods. Use a sheet tray lined with a cooling rack, a silicone baking mat, or parchment paper. Dehydrate food between 100–135° F and flip at least once to ensure even “cooking.”




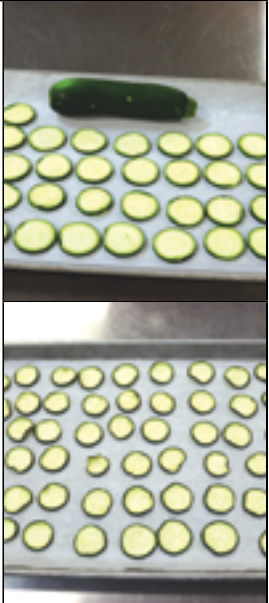


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It's not recommended to use convection or conventional ovens to dehydrate items in the dining facility because of the required time, need for constant monitoring, and lack of proper temperature and air flow control. Due to their low water content, herbs can be hung up by their stems in a cool, dry room and will dehydrate in 1–2 weeks.

Table 5. Ways to Dehydrate Fresh Fruits, Vegetables, and Herbs

Fruit (apples, peaches, nectarines, pineapples, bananas)			
Technique	Storage	Storage Guidelines	
<p>Slice or cut using mandolin into uniform pieces.</p> <p>You can leave the peel on fruits that are normally eaten (apples, etc).</p> <p>Set a dehydrator or Combi-oven to dehydrate at 110–125°. Use a “low fan” setting.</p> <p>Dehydrate for 6–12 hours depending on fruit moisture and thickness of cut.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Store in a cool, dry place.</p> <p>Label and date.</p>	<p>Room temperature: 6–12 months</p> <p>To check freshness, smell, break, or taste before use.</p> <p>If the fruit is no longer crispy enough to break and crack, discard.</p>	

Vegetables			
Technique	Storage	Storage Guidelines	
<p>Slice or cut using mandolin into uniform pieces.</p> <p>“Blanch and shock” brightly colored veggies.</p> <p>“Pierce” veggies like squashes and zucchinis to avoid a thick skin.</p> <p>Set a dehydrator or Combi oven to dehydrate 105–120°F. Use a “low fan” setting.</p> <p>Dehydrate 6–12 hours depending on vegetable moisture content and thickness.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Store in a cool, dry place.</p> <p>Label and date.</p>	<p>Room temperature: 6–12 months</p> <p>To check freshness, smell, break, or taste before use.</p> <p>If the veggie is no longer crispy enough to break and crack, discard.</p>	



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Herbs

Technique	Storage	Storage Guidelines	
<p>Air dry by hanging in a dry room or outside.</p> <p>Package when herbs are crisp and falling apart to the touch.</p>	<p>Airtight container or zip-top bag, remove excess air.</p> <p>Store in a cool, dry place.</p> <p>Label and date.</p>	<p>Room temperature: 12 months</p>	