

Freezing Cooked Foods

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Food Preparation

Making your own frozen prepared foods can be a great way to utilize leftovers and plan ahead for times when busy schedules don't allow much time for cooking complete meals. For best results, remember that freezing maintains but does not improve quality. Keep track of items you have frozen and use them within 2–3 days for best quality. Remember to use only fresh, high-quality food ingredients. Under-ripened fruits and vegetables lack flavor, and over-ripened ones are flat and tough or soft and mushy after freezing. Meat or poultry that is tender before freezing will stay tender after freezing if it is properly prepared, packaged, frozen and stored. Even more importantly, freeze the items in quantities that you will use later. For example, if you are looking for lunch items, consider using a muffin tin for individual servings or a cookie sheet to freeze smaller portions rather than a whole casserole. Think about the end use, when you make a plan for your food to be frozen. Be sure to label your items so that they can be quickly identified and reheated appropriately. Use caution to not over-cook when reheating the food.

You may use many of your own favorite recipes for freezing. Prepare the food in the usual way. Cook thoroughly, and cool quickly for safety and freshness. Once the item is placed in a freezer-safe container, it can be placed in an ice bath for rapid cooling and then placed in the freezer. Keep track of your frozen, prepared items by

making a list and posting it on your freezer. Then, you can cross off items as you remove them and keep an accurate inventory of your items for use.

Cleanliness

Observe strict cleanliness in preparing food for the home freezer. Freezer temperatures of 0 F or below do not kill bacteria in food; they simply stop bacteria from multiplying. After the frozen food is thawed, bacteria will grow and multiply again. Strict cleanliness keeps the number of bacteria at a minimum before foods are frozen.

Foods That Do Not Freeze Well

The flavor and texture of some foods become poor during freezing. Avoid using these foods:

- Cooked egg white toughens or becomes soft and spongy.
- Cooked pasta loses its texture.
- Mature potatoes become grainy, watery or darken. New ones freeze better, but for best results, consider adding fresh potatoes to the soup or stew as it's reheating.
- Fried foods tend to be soggy and taste stale.
- Mayonnaise, sour cream, cream sauces and wheat or egg-thickened sauces tend to separate.
- Raw apples and grapes tend to get mushy.
- Cabbage, celery, cucumbers, lettuce, tomatoes and other salad vegetables become limp and water-logged.
- Soft-cooked meringues get tough, shrink and might weep.
- Cheese or crumb toppings get soggy. Package separately and add during reheating.
- Gelatin-based foods weep and separate quickly when frozen.
- Spices such as pepper, cloves, garlic, green pepper, imitation vanilla and other herbs tend to develop strong off-flavors when frozen.
- Salt tends to lose its flavor and increases rancidity of foods containing fat.
- Artificial sweeteners (except sucralose or Splenda) should be added at the time of serving.



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Cooling Foods

Cool large quantities of liquid-based foods, such as soups and stews, in an ice bath before putting into plastic freezer containers. This will retard the growth of bacteria and help retain the natural flavor, color and texture of the food. To cool solid food quickly, put it into serving-sized pans lined with parchment paper. Pack food tightly to avoid air pockets. Cool in the refrigerator.

Packaging Your Foods

Proper packaging prevents loss of nutrients and moisture, changes in color and flavor, and transfer of strong flavors and odors among foods. Coated or laminated freezer paper, plastic wrap and heavy-weight aluminum foil are good wrapping materials for freezing. Use wraps specifically labeled for freezing.

Choose packaging that is moisture-resistant, as the more air in the container, the more quickly the quality of the food will deteriorate in color, flavor and texture. Wide-mouth glass jars work well for freezing, as contents can be removed easily when only partially thawed.

If you are freezing single items, wrap with clinging plastic film, smooth to remove as much air as possible and place into a plastic freezer storage bag. Remove air from the bag, and freeze. When freezing combination main dishes, line baking pans with freezer wrap. Allow enough extra wrap to fold over the top of the dish, and remove food from the dish once it's frozen. Use a nonmetallic wrap for acid foods such as those made with tomato sauces. Label with the name of the food, date and "use-by" date. It is also helpful to include the temperature, time and other directions for reheating and completing the dish.

Reuse of commercial plastic containers is not recommended. Cottage cheese, yogurt, ice cream and similar containers are not moisture-vapor resistant enough for freezing, and the lids are not strong enough to prevent airtight freezing.

Ceramic, metal, microwave plastic or glass containers may be used for hot or cold foods, but be mindful to avoid extreme, quick temperature changes.

Freezing Your Foods

Spread the pans or packages of food in the freezer so food will freeze rapidly. Allow a 1-inch space around packages for air circulation, and note that food will freeze quickest around the sides or against the refrigerated surfaces of the freezer. Refer to your manufacturer's directions if you have questions about the coldest section of your freezer. Put only the amount of food that will freeze within 24 hours, which as a general guide, is 2 to 3 pounds per cubic foot. Leave the food for 24 hours or until it is completely frozen. Then, remove wrapped food from the pans. Check the wrappings to make sure they are airtight and secure before stacking.

Store the frozen food at 0 F or below. Unfavorable changes in eating quality take place more rapidly when foods are stored at temperatures above 0 F. Slow growth of microorganisms can occur at temperatures above 10 F, causing foods to lose color, flavor, characteristic texture and nutritive value. Combination main dishes are best used within 3 months.



Tips for Successful Freezing

- Season lightly. Some seasonings become stronger or bitter during frozen storage; others weaken. Add seasoning just before serving.
- Package in serving sizes that you will use. Thaw frozen food quickly, as it doesn't keep long.
- In sauces and gravies, Clear Jel, a modified starch, is recommended. When flour is used, thoroughly combine flour and fat. These might appear curdled when thawed but will usually recombine when stirred. Cornstarch might be less successful.
- Add unbaked pastry toppings to stews before freezing meat pies.
- Package poultry and dressing separately for freezer storage.
- Freeze soups or broths in ice cube trays. Remove and store in a freezer bag for use in small amounts.

For a more complete list of foods and suggested storage times, visit nchfp.uga.edu/publications/uga/FreezingPreparedFoods.pdf.

Thawing and Cooking

Conventional Oven

Thawing your frozen dish first in the refrigerator or the microwave might give better quality or texture. If you are using a glass dish, be careful not to place a cold dish into a hot oven, unless it is manufacturer-approved for freezer-to-oven safe. If you choose to heat your dish from a frozen state, use the temperature of your original

recipe and allow about one-third to one-half more cooking time than if it were fresh. Remember, all food needs to be reheated to at least 165 F for food safety; use your food thermometer to ensure accuracy. Instructions for specific items can be referenced at the National Center for Home Food Preservation website: nchfp.uga.edu/publications/uga/FreezingPreparedFoods.pdf.

Microwave

Foods to be cooked or reheated in a microwave might require thawing on defrost cycle to avoid uneven heating and overcooked portions. Remove wrapping and place food in microwave or ovenproof baking dish. Cover with waxed paper or a glass lid. Check the microwave manufacturer's guidelines for instructions on reheating frozen combination foods. In some cases, it might be necessary to rotate foods during heating. Cook to at least 165 F, rotating or stirring as needed.

References

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