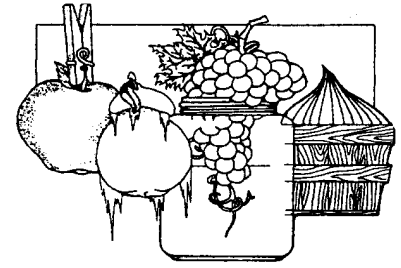


Quality for Keeps



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Information for those who produce and preserve food

The cost of preparing and storing produce

Many people preserve food at home because it allows them to control what goes into their food. There are approved recipes that allow the home canning of many foods without salt and sugar. However, if you are preserving food at home just to save money, all the costs involved should be considered.

Costs to consider when figuring the economics of food preservation include:

- ☞ produce and ingredients
- ☞ equipment and supplies
- ☞ fuel consumption
- ☞ capital outlays
- ☞ time and energy and
- ☞ the cost of similar food preserved commercially according to the Colorado State University Extension.

If you have had home canned or frozen foods for many years, the cost may not be a major factor. Many people prefer the flavor or texture that they are used to in foods preserved at home.

When you grow your own produce, there is usually the desire to save some of the food to enjoy later. You have already had costs with seeds, watering, pest control, and fertilizer, so it is understandable that you would like to use as much of the food as possible. Occasionally we have generous family members or

neighbors that give their excess produce away, but if you have to buy the produce to preserve it may not be cheaper than purchasing the food in the store.

Many of the expenses associated with preserving food at home will be reasonable if the equipment is used for several years. Before making big purchases, you may want to ask yourself if this is something that I plan to do for several years. If you are buying a freezer just to store garden produce, you can estimate that it will last 20 years. That means that even if the food is “free”, you have the cost of the freezer divided by 20. The University of Colorado estimates that it costs \$123.27 per year to run a 15 foot frostless freezer at seven cents per kilowatt hour. A 15 cubic foot conventional defrost chest type freezer will cost approximately \$81.37 to operate for the same energy cost. The amount of energy will be affected by the room temperature, the amount of food in the freezer, and frequency of opening the door.

The next biggest cost is probably going to be packaging. Reusable containers or jars will cost less when used for several years. After the cost of purchasing container, the only cost will be cleaning the containers and buying new lids for the jars.

Home canning does not have the storage cost, but has other costs involved. A new pressure canner costs around \$100 dollars, but will last for 15 to 20 years. A large water-bath canner will be in the \$20 to \$40 range, if you are only preserving high acid foods. Jars can also add to the cost, but many times they can be found at auctions or garage sales. If using old jars, check them carefully for chips or cracks, because you will lose your food if the jar breaks or fails to seal properly. New lids must be used each year. Don't forget to consider the cost of sugar, salt, vinegar and other seasonings when preparing foods for canning.

Drying food may be the most economical way to preserve food. Dehydrators vary widely in costs. Drying in the oven can use a lot of energy, so don't forget to consider that.

For more detailed information on figuring the cost of preserving food, go to <http://www.ext.colostate.edu/pubs/foodnut/08704.html>.

Inside this issue:

- Food safety recalls..... 2
- Freezing home prepared foods.. 3
- Easy-as-pie freezer pies 4

Food safety recalls

It is beginning to seem like the recalls are never ending. All the media attention from the national recalls have left many people wondering about the safety of the food supply.

There are many safe guards in place to keep our food supply safe. The US Department of Agriculture inspects meat and poultry, and the Food and Drug Administration oversees the safety of the other food products. Only two tenths of the food supply has caused illness, but due to the millions of pounds of food consumed in the US each year, even this small percentage seems to create a lot of problems.

A recall is a voluntary removal of the food from distribution by the producer. There are approximately 188 food recalls each year in the US. In 2006 only seven recalled items were distributed in Missouri. So far in 2007, there have already been at least eight recalls that affected Missouri. Normally the number of recalls in Missouri is between 20 and 30 per year.

The most common reason for a recall is when an un-declared allergen might be in the food. If milk, eggs, soy, or nuts could be in the food or have come into contact with the food and it is not listed on the label, this could be very dangerous to people with these allergies. The food would not be unsafe, unless you have an allergy to the food that was not listed on the label. Since the undeclared allergens could be life threatening to some people these foods are subject to a recall.

Another reason for a recall is when break downs and mistakes occur in the food processing allowing the food to be contaminated with bacteria or some other substance that could cause illness. This was the case in the spinach and peanut butter recalls. In these cases, bacteria that are toxic to humans and have the potential to cause illness came into contact with the food. The illness may be limited to diarrhea and vomiting for most people, but can lead to more

matching. A few years ago the spinach or the peanut butter outbreaks may not have been identified. Recalls are issued for additional reasons, for instance, undeclared allergens may not have resulted in a recall in the past.

The food industry has made changes resulting in recalls that affect more people. It is considered a national recall if 11 states are involved. Today many products would be distributed over an 11 state area. Ingredients for a product

may be brought in from many places throughout the country and then distributed even more widely across the country.

The food processors are also more aware of the risk associated with food borne illness or allergic reactions. Huge financial settlements are causing companies to go further

than regulations require, to avoid potential financial settlements.

In addition to growers and producers, problems with food safety can also result during transportation, at supermarkets, in restaurants, and even at home. If you suspect a problem with food, or wish to check on foods being recalled, the website is <http://www.recalls.gov/food.html>.

Some information was supplied by Russell Lilly, EPHS V, Bureau of Environmental Regulations and Licensure Division on Community and Public Health, Missouri Department of Health and Senior Services.

How do I insure my food is safe?

Be aware

- Know about recalls

Take recalls seriously

- Don't eat food involved in a recall

Practice safe food handling practices

- Check cooking temperatures
- Don't cross-contaminate foods

serious complications, and possibly even death for other people. The effects of these bacteria are usually worse for elderly, chronically ill people or children. Meat and poultry are responsible for more outbreaks of food borne illness. However, the contamination of fresh produce affects a larger number of people.

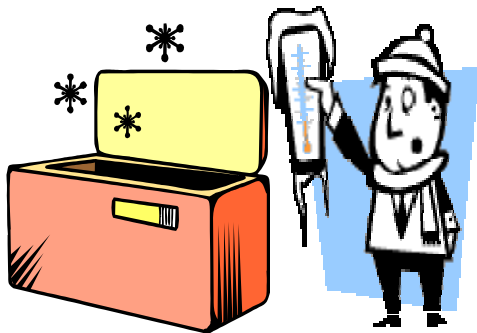
The number of recalls has increased dramatically since 1997. There are several reasons why there are more recalls. One reason that there are more recalls is the amount of food produced has increased. There is also better surveillance due to better lab detection capabilities and better computer tracking and

Freezing home prepared foods

Convenience foods allow the busy homemaker to fix meals in a shorter amount of time. Few people have the luxury of enough time, or have the desire to cook every food from “scratch” for each meal.

Many of the processed and convenience foods in the grocery store are high in sugar, fat, and/or sodium. It is possible to freeze many prepared foods to have your own convenience foods when there isn't enough time to prepare a meal.

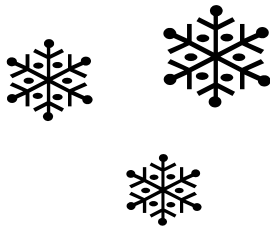
It is best to try freezing a small amount of a recipe to see if the frozen product is acceptable after storage. When making main dishes with a combination of foods, make the food as usual, but keep the fat to a minimum.



Foods should be slightly under cooked to allow for reheating. Omit potatoes from the recipe for soups, stews, and meat pies. The food needs to be cooled rapidly. The food can be frozen in a foil lined casserole dish, then removed and wrapped for longer storage.

Home made casseroles can be stored for three months. Pies can be stored frozen for eight months. Home made breads, cakes, and cookies will retain their quality for about three months in the freezer.

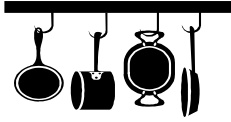
Freeze the foods in amounts that will be needed for a meal or portion. If the food is cooled properly, and excess air is removed before tightly sealing in a moisture/vapor resistant package, the likelihood of freezer burn will be greatly reduced. If you are planning to microwave the food choose a container that can be put into the microwave. Be sure to date and label the packages. The food should remain safe indefinitely, but the quality will be best if not stored too long.



Foods that do not freeze well include:

- ✎ cooked eggs
- ✎ cooked chunks of potatoes
- ✎ custards and puddings
- ✎ potato salad
- ✎ watery vegetables such as lettuce, cucumbers and radishes (tomatoes, celery, and cabbage may be satisfactory in a casserole or soup)
- ✎ yogurt and sour cream
- ✎ Mayonnaise may separate
- ✎ sauces and gravies made with flour or cornstarch
- ✎ fried foods may lose their crispness
- ✎ crumb toppings may become soggy.

THE RECIPE BOX



Baked Meatballs

- ¼ cup onion, minced
- ¼ cup of milk
- 1 Tbsp. Vegetable oil
- 2 lbs. lean ground beef
- 2 eggs
- 1/2 teaspoon pepper
- 2 teaspoons onion powder
- 1/2 teaspoon garlic powder
- ¾ cup cracker crumbs

Sauté onion in oil until tender. Mix all ingredients together until well blended. Shape mixture into 1 to 2 inch meatballs and place on a greased baking sheet.

For use later the meatballs should be placed in the freezer until firm. Remove the meatballs from the cookie sheet and seal in an air tight container. Store in the freezer for 2 to 3 months. Thaw in the refrigerator.

Bake on a well greased cookie sheet in a preheated 400° oven until thoroughly cooked, about 20 minutes if thawed. The meatballs could also be baked before freezing. Makes 8 servings.

Easy-as-pie freezer pies

Freezers store the goodness of harvest, but also provide instant convenience, made-to-order for every household. Pies are easy to pull from the freezer. Freeze just the crusts, or boxes of fruit filling, or the whole pie. Allow two pounds of apples for one nine-inch apple pie. One pound of apples will yield about 2-3/4 cups apple slices.

Unbaked pastry. Prepare regular pastry or crumb crust. Put into pie pan. Generously prick pastry that will be baked unfilled.

Stack pie pans with a double layer of freezer paper between them. Or store flat rounds of pastry on foil covered cardboard separated by two layers of freezer paper. Overwrap with freezer bags or heavy-duty aluminum foil, seal and freeze.

Bake when pie shell is still frozen at 475 degrees Fahrenheit until light brown, or fill and bake as per recipe.

Length or freezer storage: 6 to 8 weeks.

Baked pastry. Prepare and bake pastry as usual. Cool, package and freeze. Thaw in wrapping at room temperature. Length of freezer storage: 2 to 3 months.

Unbaked fruit, mince, and nut pies. Frozen unbaked pies have a better fresh fruit flavor than frozen baked pies, but bottom crust tends to get soggy.

Thicken fruit fillings with instant tapioca and cool before pouring into crust. The filling for frozen pies should be slightly thicker than usual.

Do not cut vents in top crust. Tray freeze, package and return to freezer immediately.

Cut vent holes in upper crust and bake, without thawing on baking sheet, at 450 degrees Fahrenheit for 15 to 20 minutes.

Reduce heat to 375 degrees Fahrenheit for 20 to 30 minutes or until top crust is brown and pie bubbles.

Length of freezer storage: 8 months for fruit pies, 6 to 8 months for mince pies, and 3 to 4 months for nut pies.

Fruit pie fillings. Freeze separately in rigid containers, leaving 1/2-inch headspace. Thaw in refrigerator just until it can easily be spread in pastry. Length of freezer storage: 6 to 8 months.

Pumpkin pie. Prepare pie shells and filling as usual. Add cold filling to unbaked cold pie shell. Tray freeze, package, and return to freezer immediately.

Bake without thawing at 400 degrees Fahrenheit for 10 minutes. Reduce heat to 325 degrees Fahrenheit to finish baking until set. Length of freezer storage: 4 to 5 weeks.

Source: Freezing Prepared Foods, University of Missouri Outreach and Extension. 1987

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Mary Schroepfer

Mary Schroepfer
Nutrition & Health Specialist
116 W. Main
Union, MO 63084
Ph: (636) 583-5141
Fax: (636) 583-5145
Email: SchroepferM@missouri.edu

Judith Lueders

Judith Lueders
Nutrition & Health Specialist
321 N. Main, Suite 1
Perryville, MO 63775
Ph: (573) 547-4504
Fax: (573) 547-4535
Email: LuedersJ@missouri.edu

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