Home Canned vs Store Bought Canned Food

http://canning.falbepublishing.com/

Objectives

- Understand the advantages and disadvantages of home canned food
- Understand the process of home canning
- Understand safety issues with home canned food.

Anticipatory Set: Students will compare and contrast home canned food in the beginning of class to gain and understanding of what they already know. Students will also be able to try home canned peaches and store bought peaches.

Information used to teach the lesson

How preserving food at home helps you:

1. **Excellent quality and taste** – When you use quality produce and perform the canning process correctly, you will create superior products to those for sale at the supermarket. Many recipes for home canned food are delicious and literally the quality is something that money can’t buy. You have to make these luscious foods yourself.

2. **Control over the ingredients** – With home canning, you will know exactly where your food is coming from. Ideal sources of produce are your own garden and fruit trees, local organic farms, and any local farm. From any of these sources you will be able to hand select your produce at the peak of ripeness. With home canning you will also reduce your exposure to Bisphenol A that lines the cans of many mass produced food products. Bisphenol A is an endocrine disruptor and people are becoming increasingly aware of its potential harm to humans.

3. **Support of the local economy** – By directly buying produce from local growers, you are putting money into the hands of local people. Local growers love selling from their own farms or market stands because they are not at the mercy of the big commodity buyers who set prices. This also allows local growers, especially small ones, to remain profitable, which is good for the local economy.

4. **Lower your carbon dioxide footprint** – Great amounts of energy are used to produce and transport the food eaten by society. Highly industrialized agriculture also relies on pesticides, herbicides, and petrochemical fertilizers. All of these things are bad for the environment and degrade the ability of soils to produce food in the future, which means greater scarcity, lower quality, and higher commodity prices. When you buy local food and can it at home, you are eliminating a huge percentage of the transport costs from burned fuel associated with shipping food across continents. Yes, home canning requires an energy input, but it does not compare to food being trucked halfway across the country to stock a shelf in a store. Reducing the amount of food you eat from distant places reduces the amount of fuel you are causing to be burned. Also when buying local food, try to focus on those growers who use sustainable growing practices that do not poison the environment.

5. **Sense of accomplishment** – Once you begin canning food, you will be thrilled with yourself. You will feel like you did something very meaningful to your existence because you did! For most of human history most people focused a great deal of time and energy on securing their food supplies. I’m not suggesting we all go back to digging for roots in the field, but people in
general have a deep need to participate in the gathering and preparation of food. Sitting in an SUV for drive-through fast food does not satisfy. It only promotes outrageous energy consumption for low quality products.

**Disadvantage of Home canned foods**

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 canned 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 a edible inside it may deteriorate in color, flavors & nutritive value. So don't go on packaging but check out the date.

**Safety and Process of home canned food**

Food preservation in canning jars is accomplished by killing spoilage causing agents with heat, removing air from the food products, and sealing the jars so that air and yeasts, molds, and bacteria cannot be reintroduced to the food.

**Four Causes of Food Spoilage**

- **Enzymes** – Destroyed at 140 degrees F
- **Molds** – Destroyed at 140 degrees F to 190 degrees F
- **Yeast** – Destroyed at 140 degrees F to 190 degrees F
- **Bacteria** – Many types of bacteria exist. The toxins produced by some bacteria are also a hazard. Bacteria and associated toxins are destroyed in heat ranges from 190 degrees F to 240 degrees F.

Some bacteria are very tough and resist death even at high temperatures. The toughest bacterium is Clostridium botulinum, whose spores cause the deadly botulism. This bacterium is killed at 190 degrees F and its toxic spores are destroyed at 240 degrees F.

This bacterium thrives in low-acid or nonacid foods in the absence of air. Foods in this category include corn, beans, peppers, poultry, fish, and meat. This is the main reason that these types of foods require the higher temperatures achieved during pressure canning.
Please note that by boiling canned low-acid or nonacid foods for 10 to 20 minutes before eating them will destroy potential lingering toxins. This added step will give you one more reason to feel safe about eating home canned low-acid or nonacid foods.

**Keeping and Storing of Home Canned Foods**

**Tips For Using Canned Food**
- You should always store cans in a cool, clean & dry place where temperatures must be below 85 degrees. It is advisable to keep temperature between 50-70 degrees but not at the freezing temperatures.
- Foods should be rotated so the older one is used first & later one at last. Moreover you should not try to keep canned foods more than one year because the edibles may get spoiled after such a long period.
- As like other food canned foods, canned meats and seafood must be used within 12 months.
- The high-acid canned foods must be used within 6-8 months as they can easily react with metal.
- Canned fruit juices can be stored up to 3 years but keep check on it. They should be kept at right temperature, what is prescribed on the can.
- Before storing the food you must read the instructions given on the can. It will help you out in storing the food at right temperature & right place.

These all points or safety measures will help you out in keeping your canned fresh & usable for longer period. You can feel free in using the canned food if you will keep them carefully. So handle the canned food with care & enjoy the nature fresh food anytime, anywhere.