



## MAJOR CANNING ERRORS

### Potentially Deadly

What	Why it is unsafe
Making up your own canning recipe or using untested recipe.	Without scientific testing, you will not know how long the product needs to be processed to be safe.
Adding starch, flour or other thickener to recipe.	This will change the rate of heat penetration of the product and can result in under-processing.
Adding <b>extra</b> onions, chili, bell peppers, or other vegetables to salsas or stewed tomatoes.	The extra vegetables dilute the acidity and can result in botulism poisoning.
Using oven or steam canner instead of water bath for processing.	The product will be under-processed since air is not as good a conductor of heat as water.
Not making altitude adjustments.	Since boiling temperatures are lower at higher altitudes, the products will be under-processed.
Not venting pressure canner 10 minutes before processing.	Lack of venting can result in air pockets which will not reach as high a temperature.
Using recipe for pickles with inadequate vinegar-to-water ratio.	A 1:1 ratio of vinegar-to-water is needed to prevent botulism poisoning.
Not having dial gauge pressure canners tested annually.	If the gauge is inaccurate, the food may be under-processed.
Failure to acidify canned tomatoes.	Not all tomatoes have an adequate acid level, especially if the vine is dead. This can result in botulism poisoning.
Cooling pressure canner under cold, running water.	Calculations for cooking time includes the residual heat during the normal cool-down period as part of the heat process.
Letting food cool before processing in the recipes that call for “hot pack.”	The heat curves are based on the food being hot at the beginning of the processing. Product could be under processed.

## Economic Loss..... but Hazard not Deadly

Use of mayonnaise jars.	The jar may blow-up, especially if used in a pressure canner, and it may be more difficult to obtain a good seal. However, if it seals, it is safe to use.
Use of paraffin on jams and preserves.	Small air holes in the paraffin may allow mold to grow. Also paraffin can catch on fire if overheated. If there is mold growth, throw out the product.
Cooling too slowly after removing from canner. (Example: stacked jars close together.)	There are a group of harmless organisms called thermophiles which can survive canning. This results in the defect known as "flat-sour," a harmless, but very undesirable flavor.
Storing food longer than recommended.	Lengthy or overly hot storage will decrease quality and some nutrients but the product will still be safe to eat.

### General Rules

1. Always **exactly** follow a scientifically tested recipe. (Exceptions listed below.)
2. Make altitude adjustments by adding more time to water bath canning or increasing pressure for pressure canned products.
3. Unless you are sure that everything was perfect in the processing, boil the product for 10 minutes before eating it.

### Exceptions to the **NEVER** change anything in a canning recipe rule.

Feel free to:

- Change salt level in anything except pickles.
- Change sugar level in syrup used for canned fruit.
- Add extra vinegar or lemon juice.
- Decrease any vegetable except tomatoes in salsas.
- Substitute bell peppers, long green peppers or jalapeno peppers for each other in salsa recipes as long as you do not increase the total amount.

Extension programs and employment are available to all without discrimination. Evidence of non-compliance may be reported through your local Extension office.