Thermal Shock

JAR BREAKAGE – IT'S SHOCKING! (BUT AVOIDABLE)

There are many reasons that canning jars can break during the canning process. One common cause for jar breakage is **thermal shock**, caused by a temperature differential between hot and cold. The break is characterized by a crack that runs around the lower part of the jar and sometimes up the side.

Thermal shock can occur for several reasons. Fortunately, a few "good canning practices" can help eliminate jar breakage – and a resultant loss of product.

- Jars should always be hot before filling. Keeping jars in the canner (with pre-heated water) until you're ready to add the food can help keep them hot.
- Don't use the oven to pre-heat jars. Canning jars are not tempered for the dry heat of an oven, which can cause the jars to break or shatter.
- Pre-heat the water in the canner to 140°F for raw-packed foods or 180°F for hot-packed foods. Once all filled jars are loaded into the canner, cover it and then bring the water in the canner to a full boil/steam or correct pressure.
- Be sure to use a rack of some kind inside the canner and set the jars securely on it. Jars should never sit directly on the bottom of the canner.
- Don't put a hot jar on a cold surface. When removing jars from the canner after processing, set them on a rack or thick towel. Conversely, don't put a cold jar (e.g., one you've just taken out of the freezing garage) directly into hot water; allow it to first come to room temperature before washing it.
- Allow processed jars to cool naturally away from cold drafts. Try to keep jars away from windows, and never use a fan to try to rush the cooling process.

For further information on canning, visit the National Center for Home Food Preservation (NCHFP) at https://nchfp.uga.edu or contact your local Cooperative Extension office.

Brought to you by the UCCE Master Food Preservers of El Dorado County
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