



National Center for Home Food Preservation



Burning Issue: Pre-Sterilizing Jars before Canning



Do I need to pre-sterilize my jars for canning?

New canning jars out of the box are not sterile. Being in a box or covered in plastic wrap is not the same as a sterile environment. In addition to contamination by microorganisms that cannot be seen with our bare eyes, packaged jars may accumulate dust, small bits of debris, and even chips of glass in the case of breakage (which does happen sometimes in all the steps of transport from factory to store to home).

Whether brand new or re-used many times over, you should always *clean* jars just prior to filling them when canning. Wash jars in a dishwasher or by hand, using detergent and rinsing well. Clean jars should then be kept warm prior to filling. You can leave them in the closed dishwasher after the cycle, or use your canner as it is preheating, or create a separate water bath that will keep the jars both clean and warm.

Washing is also a good time to inspect jars for any cracks or chips, discarding or re-purposing those jars for non-canning uses if any imperfections are found. If you see scales or film from hard water left on your jars, then remove this by soaking jars for several hours in a solution containing 1 cup of vinegar (5% acidity) per gallon of water.

In order to actually *sterilize* jars, they need to be submerged in (covered by) boiling water for 10 minutes. When the process time for canning a food is 10 minutes or more (at 0-1,000 feet elevation), the jars will be sterilized **DURING** processing in the canner. Therefore, when process times are 10 minutes or more at this altitude, *pre*-sterilization of jars is not needed. It doesn't hurt your product to do it anyway, but it does require additional time and energy and is unnecessary.

To pre-sterilize jars, place the cleaned jars right-side-up on a rack in a canner and fill the jars and canner with water to 1-inch above the tops of the jars. Bring the water to a boil and then boil for 10 minutes at altitudes less than 1,000 feet elevation. Add 1 additional minute for each additional 1,000 feet of elevation. When you are ready to fill the jars, remove the jars one at a time, carefully emptying the water from them back into the canner. This will keep the hot water in the canner for processing filled jars.

Sometimes people choose to increase a 5-minute process time (at 0-1,000 feet elevation) for certain jams and jellies to 10 minutes so that they do not have to pre-sterilize the jars. The extra process time is not harmful to most gels and spoilage should not be an issue as long as the filled jars get a full 10-minute treatment in boiling water. (And remember your altitude adjustments to increase this process time as needed.)

So, in summary: Is a 5-minute process time enough to sterilize jars? No. If you are using a process time of only 5 minutes, such as for some jellied products, then you need to pre-sterilize jars before filling them (or increase the process time to the equivalent of 10 minutes at 0-1,000 ft elevation).

If a process time is 10 minutes or more then will the jars be sterilized? Yes, if you are at 0-1,000 feet

elevation, but be sure to wash and rinse them well, and keep warm, before filling them with food. If you are processing above 1,000 feet elevation, then you need to consider the altitude adjustments needed to sterilize jars so you use the equivalent to 10 minutes of boiling at 0-1,000 feet elevation.

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