

Electric Pressure Cookers



Make meals and individual ingredients in a fast, hands-off way with electric pressure cooking.

How do Electric Pressure Cookers Work?

Electric pressure cookers have an inner pot and a tight-fitting lid that can be sealed. The pressure inside the cooker increases as the food cooks since no air or steam escapes. The combination of high pressure, high temperature, and moisture means foods cook fast. The built-in computer has pre-programmed functions or can be programmed manually.

What is a Traditional Pressure Cooker?

A traditional or non-electric pressure cooker is a small saucepan-sized appliance. This pressure cooker also has a tight-fitting lid that can be sealed. The lid weight “jiggles” to indicate pressure is reached. A traditional cooker is controlled manually based on heat from a stove top.

Foods That Cook Well

Foods that use water or absorb moisture as part of cooking are candidates for electric pressure cookers. This can include:

- Grains like oatmeal, rice, pasta, or quinoa.
- Beans, on their own or as part of recipes like soup or chili.
- Animal proteins, like eggs, meat, poultry, and fish.
- Some fruits and vegetables.
- Desserts.

Foods That Don't Cook Well

- Foods that need dry cooking methods, such as breaded foods, cookies, or hamburgers.
- Avoid adding milk or cheese to recipes under pressure. Add these at the end of cooking after the appliance has been depressurized.



What is a Multi-Cooker?

Some electric pressure cookers have settings allowing for more than pressure cooking, including sautéing, steaming, and slow cooking.

Purchasing Guide

Electric pressure cookers come in a variety of styles and sizes. Consider capacity, cost, size, and features before purchasing. Expect to pay \$50 for compact models with few features to \$200 to \$400 for larger, multi functional models.

Similar to slow cookers, electric pressure cookers are often measured in quarts. Smaller 3- and 4-quart cookers are good for small households of one or two people. Larger 6-quart cookers are suitable for families of four to six people. Some brands sell very large 10- and 12-quart cookers.



Converting Recipes to Electric Pressure Cookers

Recipes cooked in slow cookers convert well to electric pressure cookers. Also, ensure the recipe you want to convert has enough liquid, so your electric pressure cooker functions properly. Every brand of appliance is slightly different; try this conversion:

Slow cooker on low for 8 hours or high for 4 hours = electric pressure cooker at 25-30 minutes.

Cooking Tips

- If the appliance gets too hot, a “hot” or “burn” notice may appear on the screen. Often, the appliance has turned off to prevent further overheating.
- Cooking frozen meat is safe in an electric pressure cooker, provided the meat reaches safe internal temperatures as measured by a food thermometer.
- Do not overfill the inner pot. Most appliances have a max-fill line.

Safety Tips

- Do not force lid off while appliance is still under pressure.
- Do not use an electric or traditional pressure cooker to can foods.
- Read appliance manual before using for the first time. This will help you understand how to manually program the appliance and what the pre-programmed features do.
- If using for the first time, practice with just water to get more comfortable with the appliance.
- Add enough liquid per your manual. Most electric pressure cookers need a minimum amount of water or other liquid to pressurize correctly.
- A quick release, while the appliance is under pressure, will release steam. Keep hands away from the steam. If needed, position the appliance so steam is not released to the underside of cabinets or near walls.
- Keep release valve clear of obstructions and open lid away from yourself to avoid steam.

Cleaning and Maintenance

- Before cleaning, unplug and let appliance cool.
- Steam condenses on underside of lid and silicone gasket. Dry with clean towel or let air dry before storing.
- Clean inner pot after every use with soap and water. Avoid abrasive cleaning materials on pots with non-stick coatings.
- When visibly dirty, wipe exterior with a wet kitchen towel and wash silicone gasket.
- Cleaning and maintenance recommendations may vary between brands. Always consult the instruction manual.

Common Language

- **Floating valve or pin.** While the designs differ, all lids have a valve that seals the lid when the appliance is under pressure and will open when the appliance is depressurized.
- **High pressure.** A pressure setting that is often the default. Most recipes use this setting.
- **Low pressure.** Some foods have a better texture when cooked at low pressure, such as vegetables.
- **Natural release.** When the cooking cycle finishes, the appliance is left to depressurize on its own. If not depressurized entirely on its own, a natural release can be combined with a quick release.
- **Quick release.** When the cooking cycle finishes, the release valve on the lid is immediately turned or pushed. This releases all pressure inside the appliance and prevents overcooking of foods. Some recipes use a natural release for a certain number of minutes and follow up with a quick release to release any remaining pressure.
- **Pot-in-pot cooking.** A method of cooking food directly in the serving vessel rather than using the cooker's inner pot. For larger cookers, this method can accommodate layering of containers to cook multiple foods at once.



References

Mississippi State University Extension Service. [Electric Pressure Cookers](#). Publication P3564. 2021.

Pacific Northwest Extension Publications. [Guide to Using and Caring for Your Electric Programmable Pressure Cooker](#). 2022.

University of Florida Extension. [The Misconceptions about Electric Pressure Cookers](#). 2023

University of Maine Cooperative Extension. [Tips for Cooking with Electric Pressure Cookers](#). 2022.

Utah State University Extension. [Study Finds Electric Pressure Cookers Not Consistently Safe for Canning](#). 2019.

Colorado State University Extension. [How to Convert Slow Cooker Recipes for Electric Pressure Cooking](#). 2020.

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