

Passive cooking with a pressure Cooker

Text and photos by Diana Walstad

The beauty of a PC (pressure cooker) is that it traps and holds high heat. The trapped heat cooks food long after you've turned the burner off. This "passive cooking" not only saves electricity, but it simplifies cooking. I use passive cooking now to prepare pasta, rice, potatoes, stews, etc.

For example, cooking spaghetti pasta ordinarily involves continuously heating a large pan of boiling water for about 10 minutes. That means an uncovered pan is spewing steam and heat into the kitchen for 10 minutes. (If the air conditioner is on, it's a positively outrageous waste of energy.) If you aren't careful, the water often foams over onto the stove and makes a mess.

Instead, I simply put the dry pasta into a PC

and cover the pasta with about an inch of water. With the burner on High, I bring the PC almost to its full pressure (15 pounds-force-per-square-inch or psi). Then I turn the burner off. The pasta fully cooks during the next 10 minutes. (As long as the PC holds some pressure, the water inside is at a temperature above boiling.) I carefully release the remaining pressure. (Study your cooker's instructions for how best to release the pressure before opening.)

I routinely cook the following foods (listed with their passive cook time in minutes): white rice (20 minutes), brown rice (30), soaked black beans (30), beef stew (30), split-peas (25), and pasta (cook time specified on the package). For mixed dishes, you should select foods that have similar cooking times.

Large food pieces like potatoes, split chicken breasts, and turkey drumsticks can be problematic. You can bring the PC to 15 psi, but it won't hold any pressure more than a few minutes. That's because the large food mass is still relatively cold and acts as a "heat sink"



I have a larger PC (6-quart Presto) for cooking a whole chicken, pork neck bones, etc. Here I'm getting ready to cook up three turkey drumsticks. I purchased this PC online for about \$50. Large, stainless steel pressure cookers (Fogor, Presto and other brands) are available in some ACE hardware or Target stores. Both my PCs are made of stainless steel with a 3-ply construction on the bottom that prevents scorching. I would not recommend aluminum PCs.

within the PC. Here's where I turn the burner back on and bring the PC back up to 15 psi. Then I turn the burner off. Once the food inside warms sufficiently, the PC should be able to hold some pressure—without the burner on—for the 20–30 minutes required to actually cook the food.

Another method for cooking large food pieces is to gently pre-heat the food for 10–20 minutes. I use a medium-low burner setting that doesn't pressurize the PC. When the pre-heating time is up, I start the cooking. As an example, for cooking three large split-chicken breasts, I would first pre-heat them 15 minutes in the sealed, 6-quart PC with a little water and seasonings. Then I crank the burner up to High and bring the PC to 15 psi. When the PC reaches 15 psi, I turn off the burner, cover the PC with a folded towel and time it for a 30-minute passive cook time.

Passive cooking with a PC has many benefits other than just saving electricity. If I only used my small 3-liter PC to prepare pasta and rice, I would consider it fully worth its initial cost. It shortens the cooking time of brown rice such that I now routinely cook this tasty and nutritious rice. Because the PC is sealed while cooking, there's little water loss and rice doesn't dry out, scorch or stick to the bottom. Because food cooks with the burner off, pressure cooking is ultimately safer. With passive cooking, you don't have to stand by the stove. 🕒

Diana Walstad is a retired research technician in Chapel Hill and a member of Piedmont EMC. She is writing a cookbook.



Vegetable Mix

I layer the bottom of the small PC with 1 cup egg noodles, then 2 cups mixed frozen vegetables, and then slices of pre-cooked turkey sausage. I pour one 14-ounce can of diced tomatoes over the layers. I close up the PC and turn the burner on High. After the water starts to boil and the PC starts to pressurize, I turn off the burner and set the timer for 8 minutes.