



High Altitude Recommendations for Electric Programmable Pressure Cookers

Debra Proctor, USU Extension FCS Associate Professor

Ellen Serfustini, USU Extension FCS Associate Professor

Susan Haws, USU Extension FCS Assistant Professor

Teresa Hunsaker, USU Extension FCS Educator

Karin Allen, PhD, USU Extension Food Quality & Entrepreneurship Specialist

Stove-top pressure cookers have been used for decades. Electric Programmable Pressure Cookers (EPPCs) are relatively new to the market (Carter, 2011). EPPCs use a pre-set pressure regulator while a stove top pressure cooker uses a weighted gauge.

that “at high altitudes, the pressure cooker is an essential kitchen tool. By cooking under pressure you are in effect increasing the atmospheric pressure and therefore, increasing the boiling temperature of water. Food will cook faster and more thoroughly” (USDA).

Boiling Point of Water		
Altitude	Celsius	Fahrenheit
Sea Level	100°	212°
2900 ft.	97°	206.6°
4600 ft.	95°	203°
5600 ft.	94°	201.2°
7700 ft.	92°	197.6°

The altitude in the State of Utah varies from 2900 feet in Washington County to over 7,000 feet in San Juan and Wayne Counties (Carlson, 2011). “As altitude increases and atmospheric pressure decreases, the boiling point of water decreases. To compensate for the lower boiling point of water, the cooking time must be increased. Turning up the heat will not help cook food faster. No matter how high the cooking temperature, water cannot exceed its own boiling point — unless using a pressure cooker. Even if the heat is turned up, the water will simply boil away faster and whatever you are cooking will dry out faster” (USDA).

Electric Programmable Pressure Cooker	High	Low
Cuisinart CPC-600	15 psi	5 psi
Deni 9760	10 psi	5 psi
Fagor 670040230	9 psi	5 psi
Nesco PC6-25P	10 psi	5 psi

Utah State University Extension tested four of the most popular brands of 6 quart EPPCs at varying altitudes.

EPPCs have two pressure settings, high and low. The United States Department of Agriculture states

All four EPPCs were tested in St. George (2860 ft.), Logan (4535 ft.), Heber (5600 ft.) and Heber Valley Camp (7700 ft.). These elevations represented the majority of the altitudes where people live in Utah.

Based on the results of this study, it is recommended that consumers increase cooking time when using electric programmable pressure cookers. Add 2 to 3 minutes at first, then quick release pressure and check for doneness. Repeat if needed. This is especially important when cooking meat. A meat thermometer should always be used to verify a safe internal temperature has been reached. It is recommended that above 5000 ft. only 15 psi EPPCs should be used.

References

Carlson, A., and Allen, K. 2011. Understanding High Altitude Cooking. Retrieved from http://extension.usu.edu/files/publications/publication/FN_FQE_2011-01pr.pdf

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United States Department of Agriculture. 2013. High altitude cooking and food safety. Fact sheet retrieved from <http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/safe-food-handling/high-altitude-cooking-and-food-safety/>

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