Study Finds Electric Pressure Cookers Not Consistently Safe For Canning



Preliminary research conducted by Utah State University Extension professors shows that using electric pressure cookers for small batch, low acid canning may not destroy the bacteria that is responsible for botulism poisoning.

Electric pressure cookers such as the Instant Pot and the Power Pressure Cooker XL have become increasingly popular in recent years. These devices are hailed for their versatility, with some users and manufacturers claiming they can even be used for pressure canning. However, USU Extension has conducted canning experiments in Utah and determined that electric pressure cookers do not always reach or sustain the temperatures necessary for canning low-acid food safely at Utah altitudes. Low acid foods include vegetables, beans, meats, poultry, fish and soups.

"We knew from previous USU Extension research that altitude affects temperatures in electric pressure cookers, and we've heard rumors of community groups having classes about pressure canning in 'smart cookers,' so we knew it was time to do some research," said Cathy Merrill, USU Extension faculty in Utah County and project lead for the research. "The United States Department of Agriculture (USDA) has recommended against electric pressure cookers being used for canning, and now we have our own data showing that they just don't hit the high temperature needed for canning safely at our altitudes."

If the correct temperatures are not met while canning low-acid food, an odorless, tasteless poison called botulism toxin can form. According to the Mayo Clinic website, symptoms of foodborne botulism poisoning include difficulty in breathing or swallowing, blurred or double vision, nausea, vomiting, abdominal cramps and paralysis. Ultimately, botulism poisoning can cause nerve damage and even death.

USU Extension experts suggest traditional stove-top pressure canners be used for USDA-approved, low-acid home pressure canning. For resources, classes and information on safe canning techniques, visit https://extension.usu.edu/canning/ or call your local USU Extension office.