

**WTNS Radio OSU Extension Update for July 11, 2022**  
**Healthy People. Healthy Finances. Healthy Relationships.**

On today's OSU Extension update for Healthy People, Healthy Finances, & Healthy Relationships we'll talk about canning those old family recipes, and as always look at some upcoming programs from OSU Extension.

Last week I taught a salsa class. No dancing involved. This was a class about making and preserving salsa. Sometimes I am asked about how to safely preserve family recipes that have been canned for decades. The answer is almost always a disappointment, because unless the recipe is very similar to a published, researched recipe, then it is difficult to know whether it is safe to can and keep as a shelf-stable product.

The National Center for Home Food Preservation and the USDA are our main authorities for research-based questions related to the safety of canning practices. They have tested many recipes over the years for both safety and quality. When it comes to salsas and other tomato-based sauces, one of the keys for a product that will be shelf-stable (not need refrigeration) is that it contains enough acid to make it safe.

Tomatoes are relatively high in acid. However, different varieties can vary in acidity. Besides genetics, environmental conditions like soil type and rainfall/ watering practices, can also impact how acidic tomatoes will be.

We can measure how acidic a substance is by testing its "pH." More acid means closer to 0 on the pH scale. Less acid means closer to 14 on the pH scale. Something neutral like water has a pH of 7. When it comes to food safety, there is a magic number on the pH scale. Foods that measure below 4.6 are considered high-acid foods, and foods that measure above 4.6 are considered low-acid foods.

This is a special number because almost all disease-causing microorganisms, or pathogens, will not grow in foods that are acidic. *Clostridium botulinum* will grow in foods that are slightly acidic, but once the pH gets below 4.6, it will not grow. This is important because *C. botulinum* causes botulism. It grows in environments without oxygen. Therefore, a jar of green beans or tomato sauce has the opportunity to be a lovely place to multiply.

The key then is our recipe and how we process our vegetables when canning. Any vegetable with high pH ( low acid) must be pressure canned to ensure a safe product. Pressure canning allows the food in the jars to reach a temperature higher than that of boiling water, which is critical for killing any botulism spores.

Tomatoes are often right around the 4.6 measurement on the pH scale. By adding a little more acid to the jar, we can drop the pH level below 4.6 and then use a boiling water bath process. The recommendation is to always add lemon juice, citric acid, or vinegar to whole, crushed, or juiced tomatoes. For best taste lemon juice and citric acid are preferred. One tablespoon of bottled lemon juice should be added directly to a pint jar or 2 tablespoons to a quart jar. Only one-quarter teaspoon of citric acid is needed per pint of a half teaspoon per quart.

All of this is why canning our own salsa recipes could potentially be unsafe. The amount of low-acid veggies we are adding, like peppers and onions, compared to the amount of tomatoes will affect the final pH of the product. If you have a favorite recipe that does not seem to compare to recipes recommended by USDA, then consider freezing these instead of canning.

And now let's look at some upcoming programs from OSU Extension. I hope to catch you at our next Food Preservation Class. We will be Making Pickles on August 4 at 6:00 PM at the OSU Extension Office, 724 S. 7th St., Room 110, Coshocton. You can come in person or view the class from your own kitchen over Zoom. Register for the in-person class or register for the Zoom link at our website [Coshocton.osu.edu](https://coshocton.osu.edu).

At this time, registration is full for the Dining with Diabetes classes in August. You can sign up for the waitlist by calling OSU Extension at 740-622-2265. You can find details about future programs related to financial wellness, food safety, and more at our website [coshocton.osu.edu](https://coshocton.osu.edu).

In closing, at OSU Extension, we are proud to work for Coshocton County to help educate and improve our families, farms, and businesses. Please feel free to contact OSU Extension for more information at 740-622-2265 or visit our website at [coshocton.osu.edu](https://coshocton.osu.edu). Make it a healthy day!