Canning Tomatoes? Acid levels are key, says food scientist
K-State’s Blakeslee suggests canning or freezing tomatoes this fall

By Maddy Rohr, K-State Research and Extension news service

MANHATTAN, Kan. — As the end of the growing season approaches, preserving tomatoes is at the top of many gardener’s to-do list. Kansas State University food scientist Karen Blakeslee, recommends canning or freezing tomatoes depending on ripeness and variety.

“The safety of canning tomatoes primarily rests on the pH, or acidity, of the tomatoes themselves,” Blakeslee said.

Acidification of tomatoes is the key to canning any variety of tomato and often is added in the form of citric acid, bottled lemon juice or vinegar.

“To be considered a high acid food, the pH needs to be below 4.6,” Blakeslee said. “Many (tomatoes) are above that pH level and into the 5.0 or above pH range.”

Acidification is essential to the canning process, and it is encouraged that all tomato varieties are acidified to a pH of 4.6 or below. Unripe, green tomatoes can be preserved in the same manner as ripe tomatoes. Blakeslee suggests:

- Pickled green tomato relish.
- Pickled sweet green tomatoes.
- Piccalilli.
- Fall garden relish.
- Rummage relish.
- Oscar relish.
- Green tomato pie filling.
- Tomatillo green salsa.
- Spiced green tomatoes.

Unripe tomatoes can be allowed to ripen off the vine or be frozen for later use.
Overripe tomatoes, or tomatoes that are on dead or frost killed vines, can pose issues if they are canned because they are less acidic. Blakeslee said the canning process is for tomatoes on healthy vines and at peak ripeness. Discard damaged or moldy tomatoes that could lead to the growth of pathogens when the tomato is canned.

Blakeslee, who also is coordinator of K-State’s Rapid Response Center for food science, publishes a monthly newsletter called You Asked It! that provides numerous tips on being safe and healthy. More information is also available from local extension offices in Kansas.

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FOR PRINT PUBLICATIONS: Links used in this story

K-State Rapid Response Center, https://www.rrc.k-state.edu

Preserve it Fresh, Preserve it Safe: Tomatoes, https://www.bookstore.ksre.ksu.edu/pubs/MF1185.PDF

You Asked It! newsletter, https://www.rrc.k-state.edu/newsletter/

K-State Research and Extension local offices, https://www ksre.ksu.edu/about/statewide-locations.html

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