



[Home](#) [News+Biz](#) [Travel](#) [Sports](#) [Forums+Chat](#) [Cams+Radio](#) [Living](#) [Entertainment](#)

[SEARCH](#)

[FIND A BUSINESS](#)

CLASSIFIEDS

Get The Best Local...
[Jobs](#) | [Autos](#) | [Real Estate](#)
[All Classifieds](#) | [Place An Ad](#)

ENTERTAINMENT



» More From The Ann Arbor News
Entertainment News

What a pickle to be in

Too much garden produce? Try pickling instead of canning

Wednesday, September 8, 2004
BY LOIS MAHARG
News Special Writer

To can or not to can: That is the question as - with beans in the pantry and green tomatoes on the vine - gardeners consider preserving the harvest. Pickling is a good alternative to canning, say local cooks and produce vendors, and it's fit for more than just the common pickling cucumber and the beet.

"The great thing about pickling is that you can pickle any vegetable," said Chris Misiak, certified executive chef and instructor in the Schoolcraft College Culinary Arts program, adding that green beans, red cherry peppers, banana peppers, green tomatoes, carrots, turnips and daikon radishes are among the produce that can be pickled.

Pickling also lends itself to combinations of vegetables.

"You can really experiment," Misiak said. "Because of the quick turn-around time with some of these pickles, you can find out your results really quickly," he said.

There's an art and a science to pickling. The science involves the chemical reaction that occurs when vegetables are fermented or submerged in vinegar.

▼ From Our Advertiser

INSIDE Entertainment

- » [Ann Arbor News](#)
- » [Acoustic Cafe](#)
- » [Arts & Events](#)
- » [Books](#)
- » [Food & Drink](#)
- » [Fun](#)
- » [Movies](#)
- » [Music](#)
- » [Personals](#)

► [SEND THIS PAGE](#)

► [PRINT THIS PAGE](#)

SPEAK UP!

- » [Entertainment Forum](#)
- » [Local Bands Forum](#)
- » [Ticket Exchange](#)
- » [More Forums](#)
- » [Log On to ChatXtra!](#)

► **GET YOUR
LOCAL EDITION**

» [Win a Grand Hotel Getaway!](#)



FROM OUR ADVERTISERS

» [Want to see a movie? Celebration Cinemas -- Click here!](#)
» [Win 4 Tickets to the New Ford Rouge Factory Tour!](#)

» **Advertise With Us**

Vinegar works as a preservative because it's high in acid, Misiak said.

"It's the acidity that protects the product," he said.

"Bacteria don't like things outside of the center of the pH scale." (The pH scale goes from 0 to 14, with acidic substances registering a low pH and basic substances registering a high pH.)

"There's a magic number - 3.5 pH - that bacteria cannot multiply in. Vinegar is somewhere in the 2's."



The Ann Arbor Farmers' Market is full of vendors who routinely pickle their produce in vinegar.

Esther Kapp of Kapp Farms in Stockbridge, who grew up watching her parents pickle everything from pickling cucumbers to watermelon rinds, uses both white vinegar and cider vinegar.

Lenore Hosler, who works with Kapp at the farmers' market and pickles green and yellow beans, prefers the cider vinegar.

"It just gives them a better flavor than regular vinegar," Hosler said. "The cider vinegar gives them a little zip."

Either type of vinegar will induce the appropriate chemical process, Misiak said. All commercial vinegars are acidic enough to kill off undesirable bacteria. According to several Internet sources, vinegars used in pickling should contain at least 5 percent acetic acid. Homemade vinegars may not be high enough in acid, so Misiak recommends using ready-made vinegar when pickling.

There's also science in fermentation. Under favorable conditions, a vegetable will create its own acids, effectively preserving itself.

Salt is the primary agent in the fermentation process, Misiak said. It inhibits the growth of putrefying bacteria, enabling other bacteria in the vegetable to convert starches and sugars into lactic acid. This acid in turn preserves the vegetable.

Fermentation is an anaerobic process, so vegetables must be deprived of air and their containers tightly sealed. Also, to speed the process along, in the first few days of fermentation the temperature should be between 59 and 68 degrees Fahrenheit, according to Sue Shephard, author of "Pickled, Potted and Canned: How the Art and Science of Food Preserving Changed the World."

Karen Simon, who works with Garden Works Organic Vegetables, uses the fermentation method to preserve pickling cucumbers and beets. It requires making a simple brine.

"You're basically dissolving salt in water and putting it into a jar," she said. Simon prefers the slower fermentation method to the more rapid method of pickling with vinegar because, she said, fermented foods contain vitamins, enzymes and other beneficial substances which promote health.

Ann Arbor residents Norihiro and Junko Kowada, who make a Japanese

pickle called "nukazuke," have a similar interest in the nutritional value of fermented foods.

Nukazuke is made by fermenting whole pickling cucumbers, carrots and turnips in a paste of rice bran, salt and water. Not only is lactic acid produced, but the bacteria in the rice bran and the yeast from the cook's hands (the paste is traditionally mixed by hand) also add large amounts of B vitamins and niacin to the vegetables, Norihiro said, adding, "So they're very good for your health."

While the science of pickling is what enables preservation, it's often the promise of flavor - and sometimes appearance - that inspires us to make pickles ourselves rather than buying them at the store.

This is where the art of pickling comes in. Pickles made in vinegar are affected by the type of vinegar used. According to Misiak, the majority of pickles in The United States are made with distilled white vinegar.

Europeans, on the other hand, prefer flavored vinegars, Misiak said - apple cider vinegar, balsamic vinegar and red wine vinegar.

The art of pickling also has to do with additional ingredients such as herbs and spices, which can be added to both vinegar-based and fermented pickles.

"The spices you'll use are unique to each vegetable," Misiak said. Among the traditional pickle flavorings are hot peppers and red pepper flakes, garlic, dill and allspice. Coriander seed and curry powder are just two of many more spices that can enhance the flavor of pickles, he said. For recommendations on which herbs and spices to combine with each vegetable, Misiak suggested consulting pickling recipes at www.cdkitchen.com or in "The Joy of Pickling," by Linda Ziedrich.

© 2004 Ann Arbor News. Used with permission

» Send This Page | » Print This Page

MORE ENTERTAINMENT

- RECIPES
- What a pickle to be in
- Shuttle bus will route art lovers to triple-threat of U-M displays

[More Stories](#) | [14-Day Archive](#) | [Complete MLive Entertainment Coverage](#)

MORE FROM THE ANN ARBOR NEWS

Today's News, Links & Archives

[The Best Local Classifieds:](#) [Jobs](#) | [Autos](#) | [Real Estate](#) | [Place An Ad](#)

Special Home Delivery Offers!



[Ann Arbor News](#) | [Bay City Times](#) | [Flint Journal](#)
[Grand Rapids Press](#) | [Jackson Citizen Patriot](#) | [Kalamazoo Gazette](#)
[Muskegon Chronicle](#) | [Saginaw News](#)

[About Us](#) | [Help/Feedback](#) | [Advertise With Us](#)

Use of this site constitutes acceptance of our [User Agreement](#). Please read our [Privacy Policy](#).

