

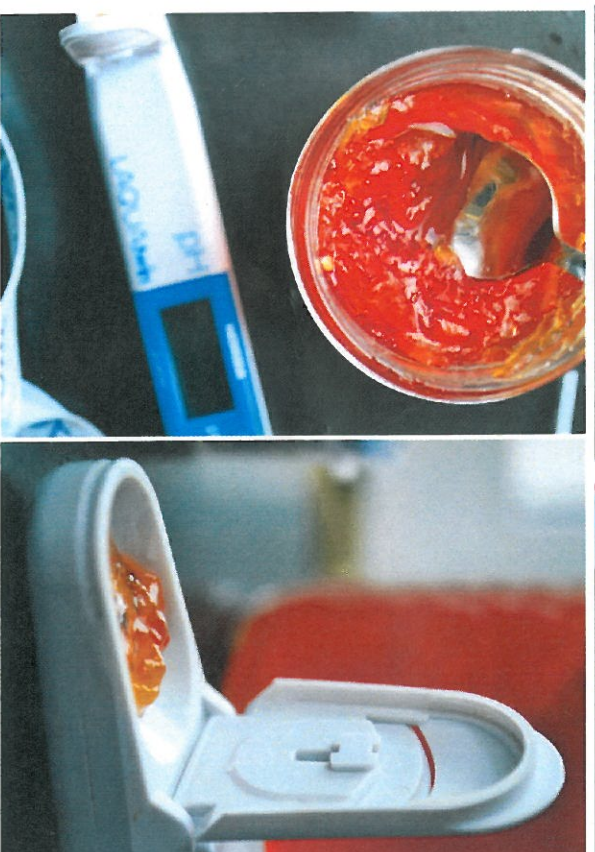
Testing home canning with the LAQUAtwin pH meter



Disclosure: I was not paid to write this review. My opinions are based solely on personal interest in this product.

Scanning online canning group discussions I occasionally read something like this: "I've been water bath canning tomato sauce for years without added acid and no one's ever died." They should buy a lottery ticket. The reality is pH - the measure of acidity or basicity of a food - plays a vital role in safe canning, and unless you use a tested recipe it can be difficult to know for sure if your canned tomatoes or homemade cucumber relish or spicy salsa have a safe pH for water bath canning. But sending preserves for lab testing is expensive and unrealistic for most home canners. Enter the LAQUAtwin pH meter by Horiba.

When it comes to pH, foods at 4.6 pH or lower can be safely water bath canned, while foods above 4.6 pH must be pressured canned to reach temperatures above boiling. Most tomatoes are in the border zone, caught between foods that are safely in the acid category like berries, pickles and most North American tree fruits, and foods that are in the low acid category such as vegetables in water, meat and fish. Because of this, tomatoes should have a little added acid in the form of lemon juice, citric acid or vinegar to safely preserve in a water bath canner.



I recently asked Horiba if I could try out their LAQUAtwin pH meter and was thrilled when they agreed to send me one. This mini pH lab can fit in your pocket (or at least around your neck on the provided lanyard) and is incredibly easy to use following the step-by-step instructions. Before testing a sample, the meter is easily calibrated by squirting a few drops of the provided standard pH solution on the flat sensor and hitting the calibrate button. Calibration is key because it means getting an accurate reading every time. The meter allows you to test liquid, gel, and solid foods, and even powders, paper, textiles and films. The LAQUAtwin also lets you test to within one 100th of a point. So, while a pH test strip might tell me my grapefruit marmalade is somewhere between 3 and 4 pH, the LAQUAtwin can tell me it is exactly 3.53 pH.

To new home canners, this pH stuff might sound a little scary, but I promise you it's not. Beginners can safely preserve foods by using recipes from sources they trust. For those of us who develop new recipes for publication or personal use, produce unique preserves for market, or simply want to test an old family recipe, a portable pH meter helps us to do that safely and responsibly.

Of course safe canning isn't just about pH. It's also about temperature, processing time, a proper seal and safe storage. But having a tool like the LAQUAtwin, combined with a solid understanding of safe canning practices, means personalizing preserves with confidence.