

CATTLE CULTURE

by Lindsay King, assistant editor

Waste Not, Want Not

A process born out of necessity is easily adapting to a culture focused on convenience, palatability and nutritional value. Canning and gardening have long gone hand-in-hand, but “canners” have been thinking outside the jar for quite some time.

Preservation pastime

A quick Google search confirms the stories eloquently spread across a host of canning and gardening blogs strewn over the internet. Basically, Napoleon Bonaparte is to thank for funding a contest asking inventors to efficiently feed his troops. Nicolas Appert won the contest in 1810 with the earliest methods of canning.

“Most early developers of canning believed the lack of oxygen was the key, which in some ways it was, but it’s actually heat that seals the deal on these cans,” says Marisa McClellan, author of the *Food in Jars* blog and various cookbooks. “The process has evolved significantly over the last 150 years, but it was in the 1850s when the patented screw-top mason jar lid really changed things for food preservation techniques.”

Though the glass jar remains the same as its roughly 300-year-old counterparts, it’s the lid making all the difference. The first ones were either glass or cork, sealed with wax. It can only be inferred this was not easy to open or reuse after the can was popped, so to speak.

Placing certain foods in highly acidic environments and then boiling the closed cans or jars is what actually preserves the food inside.

“Something people learned the hard way during the early evolution of canning is how dangerous the presence of botulism spores can be when preserving low-acid foods,” McClellan says. “Botulism spores are not killed at the boiling point and if there is not enough acid present to inhibit the growth of those botulism spores, you can create an

environment that is hospitable to the botulism toxin.”

The traditional method for canning is known as water-bath canning, while the more modern version is pressure canning. Some foods require the pressure system to be safe for consumption down the road.

Two types of canning

Canning, no matter which process (water bath or pressure), is fairly simple and requires very little equipment. Most items needed come standard in your nearest cupboard.

Water-bath canning starts with a pot, large enough to hold anywhere from one to 10 jars. The one item some might not own off the bat is a rack for the bottom of the pot or the jar lifter. Any type of rack will do, but McClellan uses a silicone trivet.

“Once the pot is ready, place the clean jars inside and fill with water,” McClellan explains of the age-old yet relevant process. “The jars should be fully submerged in the water. Then you just bring the water to a boil. Then it’s time to dump the water out and fill with your food.”

McClellan twists an aluminum ring and lid on “finger tight” to her mason jar full of tomatoes before submerging it back in the hot pot of



water. A round of boiling sterilizes the jars and the food they contain. It also vents the oxygen from the jar to create a vacuum that keeps the food safe for long-term storage.

“If you don’t have a lot of experience with canning, it is a good idea to take classes, watch video tutorials or get help from someone with experience in it,” McClellan advises. “It helps to have someone who is comfortable with the process teach you how to do it.”

Canning truly is a simple procedure, however, each step in the process is just as important as the next. Meticulous attention to the details, explained at length on McClellan’s blog and in kitchens across the globe, are vital to the health and safety of the food. The National Center for Home Food Preservation website, www.nchfp.uga.edu, provides recipes that are tested safe. Some recipes used in the past might not meet today’s safety standards, this site can shed some light on which ones are safe to use.

“Pressure canning is mostly the same as the water-bath method,” McClellan says and notes that the later method is an investment as it requires the purchase of a pressure canner. “You can pressure cook in a pressure canner, but you can’t pressure can in a pressure cooker. The difference between the two devices is the gauge pressure canners come with that allows you to see how much pressure the contents of the pot are under.”

The initial investment of water-bath canning is relatively low. Canning jars can be purchased at garage sales or thrift stores for cents on the dollar. An entry-level pressure canner sells for less than \$100, but quickly pays for itself in food savings when used correctly.

Signs of Spoilage in Canned Foods

- ▶ If the container is leaking, bulging or swollen;
- ▶ If the container looks damaged, cracked or abnormal;
- ▶ If the container spurts liquid or foam when opened; or
- ▶ If the food is discolored, moldy or smells bad.

When in doubt, throw it out.

Source: Centers for Disease Control and Prevention

No green thumb needed

Though canning and gardening are the perfect pair, much like salt and pepper, they don’t necessarily have to co-exist. Independently, they can be just as great, or better, as they are with the linked counterpart.

“I see canning as an opportunity to buy low, sell high,” McClellan says about how she saves money on food throughout the year by canning products when they are in season. This business-minded canner knows she can capture the flavor and most of the nutritional value of a vegetable when it’s ripe and reap the benefits of this months later.

“I know a number of people who like to can beef,” McClellan says. “One major benefit of that is you don’t have to rely on your freezer to keep your food from spoiling, especially if something happens to your power for a few days.”

One downside of canning meat is the need for the pressure canner. The low acidic environment inside the jar of meat presents the opportunity for bacteria to grow. Although, a jar of

canned ground beef slides into the skillet much faster than the frozen tube does.

“Canning meat is also really great for tougher cuts, the pressure process is a way to tenderize those fibrous cuts,” McClellan says while adding canned meat is great for camping trips or to send with college kids who have very little freezer space.

The original image of canning portrays a long weekend slaving over the stove making batch after batch of canned items. McClellan finds she needs to dispel this myth so people understand canning does not need to be such a daunting endeavor.

“You don’t have to do giant batches; you can do smaller, more manageable batches that fit into your normal kitchen work flow,” McClellan says. “Canning is something that can fit into the home-cooking work flow in a way that makes it easier to make food down the road.” 

