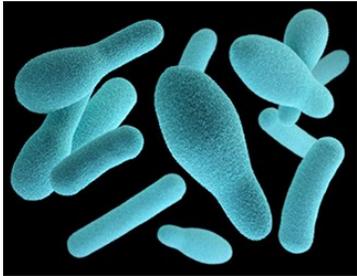


BOTULISUM

Clostridium botulinum (*C. botulinum*) is a very common bacteria found in soil and water, which under the right conditions, can produce a lethal toxin. The toxin causes the illness Botulism with symptoms first appearing as double vision, slurred speech, and muscle weakness. It can quickly progress to shutting down the body's ability to breathe for itself and ultimately leads to death without medical intervention.

Today, Botulism is uncommon but is still just as lethal. Most commonly associated with improperly prepared canned foods, it is also a concern with such things as improperly thawed vacuum packed frozen fish and improperly prepared sausages. There are some small things you can do to help make and serve safely preserved foods.



PRESERVATION TRADITIONS

Preserving traditional foods to eat and share later in the year is one of the hallmark activities of each season. Whether it's freezing whitefish fillets or canning fiddlehead ferns. Few things can match the rewarding feeling and security of knowing you have nutritious traditional foods for the year ahead. This brochure includes some important considerations to help harvest and preserve foods safely.

Jams and Jellies Photo Credit: The Fruit Guys

Canned Fish Photo Credit: Washington State University

Clostridium Botulinum Image Credit: The Centers for Disease Control and Prevention

This brochure was produced as a part of a grant funded by the Administration for Native Americans.



Botulism



Reducing the risk of deadly bacteria when canning and vacuum sealing foods



TIPS TO LOWER RISK:

BEFORE PRESERVING

Knowledge is the most powerful food safety tool. Each food and preservation method carries food safety risks. It's important to be familiar with the risks associated with your chosen food and preservation method.

Select whole, undamaged food items for preserving. Damaged, over-ripe or rotting food which you won't want to cook up and eat fresh may result in an unsafe preserved food product.

Choosing and using the right tools. Canning jams and meats are the same process but require very different tools to create a safe product. Meats should **ONLY** be canned in a *pressure canner*. Make sure you have the correct tool and know how to use it prior to preserving your foods. Local university extension agents can help answer questions.

Select and use only tested recipes. Techniques we once thought safe have been found to carry more risk than first understood. Universities are working hard to test food preservation recipes, especially for canning. University extension websites and staff can help find safe recipes for canning or food preservation questions.



WHILE PRESERVING



Can fish in pint jars. Quart size jars do not consistently get hot enough to can fish safely. Pint or smaller sizes are recommended to safely can fish.



AFTER PRESERVING



Open before thawing. Before thawing your VACUUMED packed fish, cut open the bag and thaw under refrigeration or cool running water. Fish frozen in zipper locking bags with air pressed out by hand or completely surrounded by water have enough oxygen to neutralize *C. botulinum*.

