

- Flavored oils can also be a concern. When herbs, garlic, tomatoes, etc. are placed in oil, botulism spores on the plant material can start producing the deadly toxin in this oxygen-less environment.



Q: SO WHAT CAN I DO? I MAKE THE WORLD'S MOST DELICIOUS fill in the blank, **AND I WANT TO SHARE IT!**

You can hire a co-packer. A co-packer is a state and/or federally inspected company that can prepare, package and process your product safely and label it according to FDA requirements. *They can help you take your special recipe from an idea to the store shelves!*

Local co-packers:

Small batch: 30-35 gallon range

Pop's Pepper Patch

Owner, Bill Kamman

www.popspepperpatch.com

425 E. Burnett, Louisville, KY 40217
(502) 523-6154

Medium batch: 100-150 gallon range

Bloemer Food Sales Co., Inc.

www.bloemerfoods.com

925 S. 7th Street, Louisville, KY 40203
(502) 584-8338

Large batch: 500-1000 gallon range

FlavorCraft LLC

flavorcraftllc.com

2123 Watterson Trl, Louisville, KY 40299
(502) 240-0076
Toll free: 888-246-0076

Yes, your family, friends and neighbors all LOVE your special recipe, so love them back... protect them!

Be safe!
Not sorry!

For more information contact:

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Information about botulism obtained from
<http://www.pickyourown.org/botulism.htm>
and the CDC

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**May I Produce, Can,
and Sell my
Super-Delicious Homemade**

(fill in the blank)

**at a Farmer's
Market?**

(or anywhere else, for that matter...?)



In 2009, Indiana's Governor Mitch Daniels signed House Enrolled Act 1309, which **allowed certain non-potentially hazardous foods to be made in a private residence and then be sold at farmer's markets and roadside stands.** Foods include cakes, cookies, breads, fruit pies, candies, honey, molasses, maple syrup, jams, jellies, whole unprocessed produce, and other similar offerings.

Potentially hazardous foods (PHFs) are foods that, because of their ingredients, packaging, or storage requirements, may allow disease-causing bacteria to grow, potentially leading to human illness.

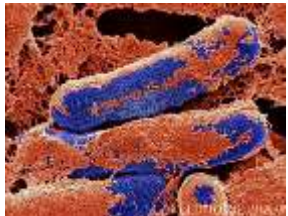
Home canned foods that are shelf stable in hermetically sealed containers are considered to be potentially hazardous by the FDA and the Indiana State Department of Health.

Q: Why are home canned foods considered to be potentially hazardous?

A: Because of the risk of botulism.

Q: What is botulism?

A: Botulism is a type of food poisoning caused by consuming the toxins produced by the bacteria *Clostridium botulinum*. Botulism is a rare, but serious, foodborne illness. It can be fatal.



from SciencePhotoLibrary.com

Q: Where does botulism come from?

A: *C. botulinum* is found in soil all over the world. The bacteria form a spore (like a tiny, microscopic seed) that is very resistant to heat and chemicals. The bacteria grow best anaerobically (without air). Spores activated in the absence of air (as in a jar or

can of sealed food) produce a toxin. This toxin is the most deadly known to food scientists.

Q: How common is botulism?

A: Home-canned vegetables are the most common cause of food-borne botulism in the US. An average of 145 cases of botulism are reported to the CDC each year; 15% of those are food-borne.

Q: What are the symptoms of botulism?

A: Symptoms usually occur 12–38 hours after consuming the toxin. They include dry mouth, double or blurred vision, difficulty swallowing, muscle weakness, drooping eyelids, difficult breathing, slurred speech, vomiting, urinary incontinence and sometimes diarrhea. These symptoms lead to paralysis. The respiratory muscles are affected, which may cause death due to respiratory failure. In all cases, illness is caused by the toxin produced by *C. botulinum*, not by the bacterium itself.

Q: Why is botulism a concern in home canned foods? My kitchen is clean!

A: *Clostridium botulinum* bacteria exist either as spores or as vegetative cells. The spores, which are dormant and comparable to plant seeds, can survive harmlessly in soil and water for many years. When ideal conditions exist for growth, the spores produce vegetative cells which multiply rapidly and produce the deadly toxin within three to four days in an environment consisting of:

- moist, low-acid food (like meats, almost all vegetables – including peppers, tomatoes, green beans, corn, etc.)
- a temperature between 40° and 120°F
- less than 2% oxygen (which occurs in any jar of canned food)

Botulism spores are present on most fresh food surfaces. Because they grow *only* in the absence of air, they are harmless on fresh foods.

Q: But I wash all of my produce, sterilize all of my equipment, and process my filled jars in boiling water for 45 minutes until they are sealed.

A: Most bacteria are difficult to remove from food surfaces. Washing fresh food reduces their numbers only slightly.

To kill the *botulinum* spores, temperatures above 250°F must be held for a period of time. Water bath canning equipment only reaches about 240°F. Time is also a factor; low-acid foods would have to boil in a home canner for 7 to 11 HOURS!



These are all reasons why home canned foods CANNOT be sold.

Also of concern for botulism is:

- Honey for infants. Bees can pick up the spores from flowers or soil. The spores are not destroyed by honey



processing. They can then grow in the baby's intestinal tract and produce the toxin. Infant botulism accounts for 65% of the botulism cases reported to the CDC each year. After the age of one year, this is no longer a concern because of the increased acid produced in the baby's stomach. **Do not give honey to babies less than one year old!**