



## How to Safely Make Infused Oils

A method of preparing a select list of fresh herbs or garlic has been tested that will allow the home food preserver to safely prepare infused oils for long term shelf storage.

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Martha Zepp, The Pennsylvania State University

Oils that are flavored with fresh herbs or garlic can be a source of food-borne illness—specifically botulism. Because of this, this method of preservation has not been recommended for the home food preserver. However, researchers at the [University of Idaho](#) have developed specific guidelines for the home food preserver. This involves acidifying the fresh herbs or garlic before adding them to the oil to absorb the flavor. Other methods of infusing oils involve using fresh herbs and refrigerating

the product to use within 2 to 4 days or preparing the oils using dried herbs and refrigerating the oil for up to three months.

## Safety of Infused Oils

Herbs, garlic, and other vegetables used to flavor oils are low acid foods and can be a source of *Clostridium botulinum* spores. When these spores are surrounded by oil an oxygen free environment is created that encourages the growth of the spores at room temperature. As the spores grow, they can begin to produce the botulism toxin, which if consumed can cause botulism, a type of food-borne illness causing serious illness or death. *C. botulinum* spores do not grow in an acid environment or at cool temperatures. If buying infused oils at a store or gift shop, always check the label to be sure that it has been acidified to be safe or other microbial inhibitors have been used.

## A New Method of Acidifying Infused Oils

Researchers at the University of Idaho developed guidelines for infusing oils with garlic and basil, oregano, and rosemary; and a Pacific Northwest Extension publication on [Making Garlic-and Herb-Infused Oils at Home](#) provides detailed information on the process.

**Note: Use this method only for those items listed. Do not use this method with other vegetables or herbs.**

## Key Points in the guidelines:

### Acidifying ingredients

- Immerse raw chopped garlic (chopped into ¼ inch pieces) or stems of basil, oregano, and/or rosemary in a 3 percent solution of citric acid. Citric acid is available where canning supplies are sold.
- To make the citric acid solution, stir 1 tablespoon citric acid into two cups water.
- Soak 1-part peeled garlic, chopped into ¼ inch pieces to 3-parts 3% citric acid solution (⅔ cup coarsely chopped garlic cloves) to 2 cups citric acid solution.
- Soak 1-part fresh herbs with the leaves still attached to stems to 10 parts 3% citric acid solution or 1½ cups (1.7 ounces) herbs to 2 cups citric acid solution for at least 24 hours before draining the acid solution away.
- Keep the herbs or garlic submerged in the citric acid solution by applying a weight; placing a smaller bowl on top works well. The color of the green herb will change when it is acidified.

- Less concentrated solutions or shorter soaking times can result in an unsafe product.
- You may use one type of herb or a mixture of the basil, oregano or rosemary, but you cannot mix the garlic with the herbs because the ratio of infusion differs.

## Select an oil

- Olive oil complements the flavor of herbs and garlic.
- If you prefer the herb flavor predominate, use a milder oil such as canola oil.
- Olive oil and canola oil contain fewer polyunsaturated fatty acids than many other vegetable oils and will turn rancid less quickly.

## Infusion

**The strength of the infusion depends upon the amount of acidified herb or garlic used and the temperature of the oil.**

- The researchers used 1-part acidified garlic or herb to 10-parts oil. Experiment to determine the conditions that produce a result suited to your taste.
- Infuse the oils at room temperature for 1 to 10 days—the intensity of the flavor increases over time.
- Oil may be heated to 140°F for 5 minutes to more quickly infuse the oil. Avoid higher temperatures that could damage the flavor of the oil.
- Remove the acidified garlic or herb from the oil when it has reached the desired flavor. It will not harm the product to leave the herb in the oil but may become strong.
- Do not add a new sprig of fresh herb to the oil because it will not be acidified.

## Storage of Infused Oils

- Protect the oil from heat and light.
- While they can be safely stored at room temperature, the quality will be better for a longer period if stored in the refrigerator or freezer.
- Dark-colored bottles will protect the oils from light. Make sure the bottles or jars are clean and food grade.