

PRESERVING FOODS CONT.

Acidified foods are foods such as salsas, pickles, relishes or hot sauces. Usually, acidic foods like vinegar, citric acid or commercially canned tomatoes are added to the product to create an acidic environment that limits bacterial activity. Acidified foods do not require canning in a pressure cooker or retort. A process that uses acids to penetrate chunky foods, like fresh tomatoes, peppers and onions that are not naturally acidic, will need to be reviewed by a process authority to determine if the food is being properly acidified.

Low-acid canned foods such as vegetables must be retorted under heat and pressure to destroy the bacteria present. These foods do not depend on the pH of the food to protect consumers from botulism.

Contact your local public health agency at:



Missouri Department of Health and Senior Services
Bureau of Environmental Health Services
P.O. Box 570
Jefferson City, MO 65102-0570
573-751-6095
health.mo.gov/safety/foodsafety/index.php

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER
Services provided on a nondiscriminatory basis. 07/12

ACIDIFIED FOOD REGULATIONS

There are federal regulations enforced by the U.S. Food and Drug Administration and the state health department that cover acidified foods. These regulations can be found in 21 CFR 108.25 and 114.

It is very important that any manufacturer of these types of foods understands these regulations. One of the keys to producing a safe food is having a consistent process that has been proven to work. Once the process is developed, the manufacturer has to produce the item the same way each time. Variations in the process make it possible for mistakes that produce an unsafe food.

There are some foods that are exempt from these regulations. Foods that are specifically exempt from the acidified foods regulations include:

- Alcoholic beverages
- Carbonated beverages
- Fermented foods such as sauerkraut
- Foods with water activity (aw) of 0.85 or below
- Foods stored, distributed and retailed under refrigerated conditions
- Jams, jellies or preserves covered by 21 CFR 150

ADDITIONAL RESOURCES

Meat and Poultry Products

United States Department of Agriculture, 785-841-5600, usda.gov or
Missouri Department of Agriculture, 573-751-4762, mda.mo.gov

Milk or Other Dairy Processes

Missouri State Milk Board, 573-751-3830, mda.mo.gov/animals/milk

Agricultural Products

Missouri Department of Agriculture, 573-751-4762, mda.mo.gov

Acidified Foods

Missouri Department of Health and Senior Services, Bureau of Environmental Health Services, 573-751-6095, health.mo.gov

General Information on Food Safety

Food and Drug Administration (FDA), 1-888-723-3366, fda.gov



Safe Preparation of Salsa and Other Acidified Foods

Missouri Department of Health and Senior Services

Acidified Foods

FACILITY REQUIREMENTS

The Missouri Food Code allows some non-potentially hazardous foods to be prepared in a home kitchen to be sold directly to the end consumer, at venues like a farmer's markets. The food code does **not** allow acidified foods to be made in a home kitchen. Requirements for a regulated kitchen include:

- smooth, easily cleanable, durable floors, walls and ceilings
- safe and adequate water supply
- sanitary wastewater disposal
- sink(s) to wash, rinse and sanitize utensils
- separate sink dedicated for handwashing

This kitchen may be in a private home but must be separated from the home kitchen and living quarters.

Plans for building a regulated kitchen should be discussed with the health department before construction begins. This can avoid costly mistakes.

PROCESS AUTHORITY AND BETTER PROCESS CONTROL SCHOOLS

To be approved as a manufacturer of acidified or low-acid canned food, you must have your process reviewed by a process authority. You also must attend a Better Process Control School.

A process authority is defined as a person or organization that scientifically establishes thermal processes for low-acid canned foods or processing requirements for acidified foods. The process authority must have

expert scientific knowledge of thermal and/or acidification processing requirements and have adequate experience and facilities for making such determinations.

Better Process Control Schools certify supervisors of thermal processing systems, acidification, and container closure evaluation programs for low-acid and acidified canned foods.

Information on approved schools can be found by calling the Missouri Department of Health and Senior Services (DHSS), Bureau of Environmental Health Services at 573-751-6095.

Once these steps have been accomplished, the food processor is required to file their process with the FDA.



Salsa, Pickles, BBQ Sauce and Other Acidified Foods

Pickles, salsa and barbeque sauce are just a few of the common examples of acidified foods that may be found at farmer's markets. However, Missouri regulations prohibit the sale of most home-canned food. Processors of these foods must take additional measures to assure they are being produced safely. These foods must be produced in an approved facility.

Contact your local public health agency or the DHSS Manufactured Food Program for details on becoming approved.

SAFE PREPARATION FOR RETAIL SALE

When foods are packaged in sealed containers like jars or cans and they are not properly processed, one of the biggest risks is botulism. There are a number of ways to successfully deal with these hazards.

One option is to use high heat and pressure to kill any bacteria or their spores that may be present. This is the process used to can low-acid foods like corn, green beans or other vegetables. Because these heating procedures are complex, these foods must be processed in a commercial retort with sophisticated temperature measuring and monitoring controls.

Another common way to eliminate the threat of botulism from sealed foods is through the use of acids to lower the pH. The pH scale is used to measure the acidity of food products. (pH is measured on a scale of 0 to 14.)

Acidified/low acid food manufacturers must:

- have their process reviewed by a process authority;
- complete a Better Process Control School;
- operate in a facility that meets requirements of all applicable regulations; and
- contact the DHSS Manufactured Foods Program for more detailed information on inspections.

PRESERVING FOODS

The regulations regarding acidification were established to assure the safety of canned foods. The amount of acid in a food or the addition of an acid to a food can be used to control the growth of dangerous bacteria such as the one that produces the toxin that causes botulism. From the regulatory point of view, foods are categorized as:

- Acid foods (pH naturally below 4.6)
- Acidified foods (final pH of 4.6 or below by adding acid or acidic ingredients to product)
- Low acid foods (pH above 4.6 for raw or initial product)

Acid foods are naturally acidic foods such as tomato juice or grapefruit. Individuals manufacturing acid food products will need to keep records of the pH of each batch that they produce. If the pH is below 4, they may use pH test strips for measuring the pH. If the pH of the product falls between 4.0 and 4.6, a quality pH meter is needed. If a pH meter is used, it must be calibrated at least weekly and records kept.