

# Federal and State Regulations on Selling Pickled Vegetables



## Introduction<sup>1,2</sup>

Pickling is an ancient method of food preservation dating back to 3rd century BC China.

Unfermented pickles are typically put into an airtight jar with acid and flavorings and heated to kill any potential bacteria on the fruit or vegetable that may cause illness or spoilage. After a few days, the pickles are ready for consumption. The biggest concern about pickled foods is *Clostridium botulinum*.

*Clostridium botulinum* is a microorganism that produces a fatal toxin in anaerobic environments with a pH above 4.6. The toxin causes botulism, a serious paralytic illness that can be fatal and is considered a medical emergency. Be sure to follow recipe directions and use recipes from reputable sources such as universities.

## Recipes

**Recipe 1:** <https://catalog.extension.oregonstate.edu/pnw355>

**Recipe 2:** <https://hgic.clemson.edu/factsheet/pickled-cucumbers/>

**Recipe 3:** [extension.colostate.edu/topic-areas/nutrition-food-safety-health/making-pickles-9-304/](https://extension.colostate.edu/topic-areas/nutrition-food-safety-health/making-pickles-9-304/)

## Standards of Identity/Definitions

**Acidified foods<sup>3</sup>**—low-acid foods to which acid(s) or acid food(s) are added; these foods include but are not limited to, beans, cucumbers, cabbage, artichokes, cauliflower, puddings, peppers, tropical fruits, and fish. They have a water activity greater than 0.85 and have a finished equilibrium pH of 4.6 or below. These foods may be called “pickles” or “pickled \_\_\_\_\_”.

**Low-acid foods<sup>4</sup>** - any foods, other than alcoholic beverages, with a finished equilibrium pH greater than 4.6 and a water activity ( $a_w$ ) greater than 0.85. Tomatoes and tomato products having a finished equilibrium pH less than 4.7 are not classed as low-acid foods.

**Pickles<sup>3</sup>**—pickles are considered an acidified foods as they have a water activity ( $a_w$ ) greater than 0.85 and have a finished equilibrium pH of 4.6 or below.

*The information in this document pertains to specific types of manufacturers. Manufacturers that sell their product directly to consumers through farmers’ markets, roadside stands, or other similar venues should direct their attention to the “For Manufacturers Selling Directly to Consumers” portion of this document. Manufacturers that do not sell directly to consumers (those that sell to restaurants, grocery stores, or other manufacturers) should view the “For Manufacturers Not Selling Directly to Consumers” portion of this document, directly below.*

## For Manufacturers Not Selling

### Directly to Consumers

#### Federal<sup>5</sup>

All pickle and relish producers are required to follow current Good Manufacturing Practices [21 CFR Part 117, Subpart B, and 21 CFR 117.4 (Qualifications of individuals who manufacture, process, pack, or hold food.)]. If the manufacturer sells less than \$500,000 in the preceding 3 years, that business is exempt from Hazard Analysis and Risk-based Preventive Controls [21 CFR Part 117, Subparts C and G]. If the manufacturer sell more than 50% of their food directly to consumers within 275 miles of the production facility, that business is exempt from Hazard Analysis and Risk-based Preventive Controls [21 CFR Part 117, Subparts C and G]. Current Good Manufacturing Practices are practices that minimize the likelihood of allergen/



chemical, microbial, and physical contamination of foods. Personnel must be trained on food safety as it relates to their job duties. The plant, grounds, equipment, utensils, and processing lines must be kept in good sanitary condition. The canning process must be adequate to create a safe pickled product.

In addition to pickle and relish producers requirements to follow 21 CFR Part 117, acidified foods operations must also follow 21 CFR Part 114. These operations must have a supervisor who has attended an FDA recognized training course specifically designed for canning acidified foods (21 CFR 114.10). The most widely available approved course is the Better Process Control School. Anyone working on the processing and packaging side of an acidified foods operation must be under supervision by the trained individual during all operating hours.<sup>3,6,7</sup>

The food safety plan required by 21 CFR Part 117, Subpart C, must contain a written hazard analysis. This hazard analysis identifies hazards requiring preventive controls or must give a justification as to why a hazard does not require a preventive control. If a hazard requiring a preventive control is identified, written documentation of the preventive control, monitoring procedures, corrective actions, verification procedures, including validation information for process preventive controls, and a recall plan are required.

## For Manufacturers Selling Directly to Consumers

### Illinois<sup>8</sup>

**Pickles**– Any vegetables that are canned must include a step that raises the acidity, by pickling, fermenting, or other means of adding acid. Producers must use a USDA– or Cooperative Extension– tested recipe or submit a Cottage Food Safety Plan for Acidified/Fermented Foods (which includes pH testing).

**General Guidance**– Labeling and Signage requirements must be met. The name and residence of the person preparing and selling products as a cottage food operation must be registered with the county health department of a unit of local government where the cottage food operation resides. A fee may be charged for registration. The person preparing and selling products as a cottage food operation needs [Certified Food Protection Manager \(CFPM\) certification](#).



### Indiana<sup>9</sup>

**Non-fermented, pickled vegetables**– For example pickles, beets, etc. that are acidified (i.e., vinegar added) and do not require refrigeration may not be sold by a Home-Based Vendor. Pickles processed in a traditional method (e.g. fermentation) may be sold by Home-Based Vendors.

Note: Vegetables that require the addition of any acid (e.g., vinegar) are NOT considered fermented.

**General Guidance**– Labeling requirements must be followed. All Home-Based Vendors must obtain a food handler certificate from a certificate issuer that is accredited by the American National Standards Institute.

### Iowa<sup>10, 11</sup>

**Pickles and salsa**– Home-canned pickles and salsa may be sold at a farmers' market under the 2022 Cottage Food Rule. Each batch must be tested for pH or Aw and labeling requirements must be followed.

### Kansas<sup>12</sup>

**Home canned pickles** (includes pickled vegetables and pickled eggs), canned vegetables or meat, and sauerkraut- are not allowed to be sold without proper licensing.

## Michigan<sup>13</sup>

**Canned pickled products**– items like corn relish, pickles or sauerkraut must be produced in a licensed kitchen.

## Minnesota<sup>14</sup>

**Pickled products**– products with an equilibrium pH value of 4.6 or lower and heat treated to kill vegetative cells are exempt from licensing. Examples, including but not limited to: Pickled asparagus, Pickled beets, Pickled cantaloupe, Pickled carrots, Pickled chow chow, Pickled corn relish, Pickled cucumber, Pickled green beans (Dilly Beans), Pickled green tomatoes, Pickled okra, Pickled relish, Pickled summer yellow squash, Pickled three-bean salad, Pickled watermelon rinds, Pickled zucchini, and Pickles, sweet or dill.

**General Guidance**- Cottage food producers must register with the MDA before selling exempt food regardless of the amount of food sold and register each year. Producers must take an approved food safety course once every three years while actively selling cottage food. Labeling requirements must be followed. Sales limits apply.

## Missouri<sup>15</sup>

**Salsa, pickles, and BBQ sauce**- These foods are common examples of acidified or low acid canned foods that require a license and must be produced in an inspected facility. A producer must attend a Better Process Control School and have their process reviewed by a process authority.

## Nebraska<sup>16</sup>

**Meat, fruits, vegetables (green beans, tomatoes), pickles (all low acid canned foods)**- The producers must have a permit to sell these home canned products.



## North Dakota<sup>17, 18</sup>

The ND Cottage Foods Act allows for the sale of uninspected, homemade cottage food products to an informed, end consumer for at-home consumption.

**Pickled foods**- The following items are allowed if acidified and the equilibrium pH is less than 4.6, verified using a calibrated pH meter: Pickles, salsa, sauerkraut, kimchi, fruit chutney, and applesauce.

**General Guidance**- Labeling and Handling Instructions guidelines must be met.

## Ohio<sup>19</sup>

**Pickles and pickled products**- must be produced in a licensed facility.

## South Dakota<sup>20</sup>

**Home-canned foods**– foods having an equilibrium pH value below 4.6 and meeting standards that destroy bacteria, yeast, and molds to a required level may be produced in a home kitchen. These includes pickled and fermented vegetables.

**General Guidance**- All products must have official verification from a third-party processing authority in writing. All products must be properly labeled.

## Wisconsin <sup>21, 22</sup>

A person is not required to obtain a license to sell at retail food products that the person prepares and cans at home in Wisconsin if the person follows the guidance below.

**General Guidance-** Products must be sold at a community or social event or a farmers' market in Wisconsin. Sales limits apply. Labeling and signage requirements must be followed. The Division of Food Safety strongly encourages attending proper training and the use of standardized recipes for canning allowable products.



## Resources

<sup>1</sup> <https://catalog.extension.oregonstate.edu/pnw355>

<sup>2</sup> [https://nchfp.uga.edu/how/can6b\\_pickle.html](https://nchfp.uga.edu/how/can6b_pickle.html)

<sup>3</sup> 21 CFR 114 <https://www.ecfr.gov/current/title-21/chapter-I/subchapter-B/part-114>

<sup>4</sup> 21 CFR 113 <https://www.ecfr.gov/current/title-21/chapter-I/subchapter-B/part-113/subpart-A/section-113.3>

<sup>5</sup> 21 CFR 117 <https://www.ecfr.gov/current/title-21/chapter-I/subchapter-B/part-117#sp21.2.117.b>

<sup>6</sup> [http://ucfoodsafety.ucdavis.edu/Better\\_Process\\_Control\\_Schools/](http://ucfoodsafety.ucdavis.edu/Better_Process_Control_Schools/)

<sup>7</sup> <https://foodbusiness.ces.ncsu.edu/acidified-foods-manufacturing-school/>

<sup>8</sup> <https://extension.illinois.edu/food/selling-food>

<sup>9</sup> <https://ag.purdue.edu/department/foodsci/home-based-vendors.html>

<sup>10</sup> <https://dia.iowa.gov/food/farmers-market-requirements>

<sup>11</sup> <https://dia.iowa.gov/cottage-food-law>

<sup>12</sup> <https://bookstore.ksre.ksu.edu/pubs/MF3138.pdf>

<sup>13</sup> [http://www.michigan.gov/mdard/0,4610,7-125-50772\\_45851-240577--,00.html](http://www.michigan.gov/mdard/0,4610,7-125-50772_45851-240577--,00.html)

<sup>14</sup> <https://www.mda.state.mn.us/food-feed/cottage-food-law-guidance>

<sup>15</sup> <https://health.mo.gov/safety/foodsafety/pdf/FarmersMarketsBrochure.pdf>

<sup>16</sup> [https://nda.nebraska.gov/publications/foods/food\\_safety\\_farmers\\_markets\\_craft\\_shows.pdf](https://nda.nebraska.gov/publications/foods/food_safety_farmers_markets_craft_shows.pdf)

<sup>17</sup> [https://www.health.nd.gov/sites/www/files/documents/Files/HR/FL/Cottage%20Foods/Summary%20of%20Cottage%20Foods%20\\_Final%20Document%2021220.pdf](https://www.health.nd.gov/sites/www/files/documents/Files/HR/FL/Cottage%20Foods/Summary%20of%20Cottage%20Foods%20_Final%20Document%2021220.pdf)

<sup>18</sup> <https://www.health.nd.gov/regulation-licensure/food-and-lodging/cottage-food>

<sup>19</sup> <https://agri.ohio.gov/wps/portal/gov/oda/divisions/food-safety/resources/cottage-food>

<sup>20</sup> <https://doh.sd.gov/food/farmers-markets.aspx?>

<sup>21</sup> [https://datcp.wi.gov/pages/programs\\_services/FSHomeCannedFoods.aspx](https://datcp.wi.gov/pages/programs_services/FSHomeCannedFoods.aspx)

<sup>22</sup> <https://datcp.wi.gov/documents/homecannedfood%20fd-pub-61-web.pdf>

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