



# Food Entrepreneurship Series

**EXPERT  
REVIEWED**

## Using a Home Kitchen to Prepare Food for Sale



### Katherine Clayton

*food science Extension  
outreach specialist*

### Mark Morgan

*food process engineer and  
professor of food science*

### Kevin Keener

*food process engineer,  
Extension specialist, and  
professor of food science*

*Department of Food Science  
745 Agriculture Mall Drive  
West Lafayette, IN 47907*

*www.foodsci.purdue.edu*

*Purdue Extension*

**Knowledge to Go**

1-888-EXT-INFO

### Introduction

Entrepreneurs who prepare food for sale must follow strict guidelines that regulate what types of food they can prepare, where they can prepare it, how it can be packaged, and where they can sell their products.

Prior to 2009, entrepreneurs who used their home kitchens were only allowed to prepare honey, maple syrup, sorghum, and uncut produce for selling directly to customers. Preparation and sale of any other type of food required an individual to have a “food establishment,” such as a restaurant, convenience store, or grocery store. If the entrepreneur didn’t have a food establishment, then another option was for the entrepreneur to use an approved kitchen that was held to numerous regulations by the state, including registration, licensing, and health department inspection. (For more information on this topic, see *Using an Approved Kitchen to Prepare Food for Sale*, Purdue Extension Publication FS-17-W.)

However, in 2009 the Indiana General Assembly created a **home-based vendor** (HBV) exemption with House Enrolled Act 1309. This exemption allows an individual to produce “non-potentially hazardous food products” in a home kitchen to sell only at farmer’s markets and roadside stands. No HBV foods may be sold (or re-sold) at other venues, including retail food establishments, festivals, carnivals, or any other event.

### Home-based vendor or food establishment?

A vendor must be designated as either a home-based vendor or a food establishment—not both. Entrepreneurs who produce food that is non-potentially hazardous AND food that is potentially hazardous must not commingle production activities of these two food types. If a vendor plans to sell food products other than those that are allowed to be produced in a primary residence, then that vendor would need to become a food establishment and meet all the requirements for that designation.



## 2

Food Type	pH		Water Activity ( $A_w$ )
<i>Non-potentially hazardous</i> (other than whole, uncut produce)	Less than or equal to 4.6	<b>OR</b>	Less than or equal to 0.85
<i>Potentially hazardous</i>	Greater than 4.6	<b>AND</b>	Greater than 0.85

### ***What makes a food potentially hazardous or non-potentially hazardous?***

Foods that may create a public health risk are considered **potentially hazardous foods** and may NOT be produced and sold under the HBV exemption. A potentially hazardous food product includes a food that is natural or synthetic and requires temperature control because it is in a form capable of supporting the growth of disease-causing bacteria. In general, any food that has ingredients, packaging, and/or storage conditions that could lead to a human health risk is considered potentially hazardous. Six basic factors affect bacteria growth—including the food ingredients, acidity, time, temperature, oxygen, and moisture—but acidity and moisture are the two most critical factors used to control bacteria growth for products stored at room temperature.

Acidity is measured by pH, while moisture is measured by water activity. Water activity measures the amount of water in a food product that is available for use by microorganisms. Critical limits have been established for water activity and pH to differentiate between potentially hazardous and non-potentially hazardous foods.

Government regulations only require a pH less than or equal to 4.6, but most commercially produced acidic foods have a measured pH of less than 4.2 to minimize any risks. It is recommended that a home-based vendor who produces acidic foods (pH less than 4.6) purchase and use a pH meter to regularly test and document the pH of products. After calibrating the pH meter, a representative sample of the product should be taken and measured using a pH probe. All measurements, including pH and water activity, should be taken three times with a calibrated measuring device. Taking three new or unique samples is good laboratory practice for verifying results and accuracy of the sample.

Several handheld pH meters are available for purchase for approximately \$100 each. In addition, independent laboratories are available for pH and water-activity testing as well as numerous other tests (e.g., nutritional analysis, etc.). A link to a list

of laboratory contacts can be found at [links.foodsci.purdue.edu/laboratories](https://links.foodsci.purdue.edu/laboratories). Home-based vendors should direct specific questions about their products to their local health departments.

### ***Which foods are considered potentially hazardous?***

The list on page 4 of this publication demonstrates a few examples of potentially hazardous foods as well as non-potentially hazardous foods, but it is not a comprehensive listing. As mentioned above, all non-potentially hazardous foods have a pH of less than or equal to 4.6 OR water activity of less than 0.85.

## **Labeling Requirements for Home-Based Vendors**

All HBV foods must have the following statement printed at a minimum type size of 10 points on product labels: ***“This product is home produced and processed and the production area has not been inspected by the State Department of Health.”***

HBV foods must also include the following on their labels:

- name and address of the producer (HBV),
- common or usual name of the food product,
- ingredients included in the food product listed in descending order by weight (largest to smallest),
- net weight and volume of package, and
- date on which the food product was processed.

This labeling must be present with and/or on the food at the point of sale regardless of whether or not the product is packaged. For unpackaged products, in place of a label it is acceptable to use easily readable signs that include all of the information required for labels. Labeling (or a sign) is not required for whole, uncut produce.

## **Recommended First Steps for the Home-Based Vendor**

1. Test pH and/or water activity of product using a personal device or an independent laboratory. Laboratory options include:

## 3

- a. available testing laboratories:
  - <http://links.foodsci.purdue.edu/laboratories>
- b. Purdue University Food Science Department
  - Contact Katie Clayton, Extension specialist, at: [katie-clayton@purdue.edu](mailto:katie-clayton@purdue.edu) or 317-771-6695.
2. Determine if your food product is a non-potentially hazardous food product, based on pH, water activity, and information provided in the table on page 2.
3. Contact your local health department for any specific questions:
  - a. Indiana health departments listing: <http://www.in.gov/isdh/24822.htm>
4. If the food product is non-potentially hazardous, proceed with preparation and sale of your product only at farmer's markets and roadside stands.
5. If the food product is a potentially hazardous food (pH greater than 4.6 AND water activity greater than 0.85), the food product may not be produced or sold under the HBV exemption, so it would be necessary to pursue another option. To produce these types of products, you must complete *all* of the following steps:
  - Produce product in an establishment licensed for food production, which includes but is not limited to a commercial kitchen, or in conjunction with a co-packer, which is a commercial producer who regularly produces a similar product and is available for contract production.
    - > <http://links.foodsci.purdue.edu/commercialkitchens>
  - Attend Purdue Extension Better Process Control School.
    - > <http://www.ag.purdue.edu/foodsci/Pages/extension.aspx>
    - > [http://www.ag.purdue.edu/foodsci/Documents/workshops/bpcs\\_brochure.pdf](http://www.ag.purdue.edu/foodsci/Documents/workshops/bpcs_brochure.pdf)
  - Contact a process authority to review the canning process (also called "scheduled process").
    - > <http://links.foodsci.purdue.edu/processauthorities>

- File the scheduled process with the U.S. Food and Drug Administration using Form 2541.
  - > Instructions for filing: <http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/AcidifiedLow-AcidCannedFoods/EstablishmentRegistrationThermalProcessFiling/Instructions/ucm2007436.htm>
  - > Electronic submissions: <http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/AcidifiedLow-AcidCannedFoods/EstablishmentRegistrationThermalProcessFiling/ElectronicSubmissions/default.htm>

## References

"Guidance for Uniform Use of House Enrolled Act 1309," Indiana State Department of Health, 11 June 2009, [http://www.in.gov/isdh/files/HEA\\_1309\\_guidance\\_final\\_6\\_11\\_09.pdf](http://www.in.gov/isdh/files/HEA_1309_guidance_final_6_11_09.pdf) (accessed October 2011).

Information Maintained by the Office of Code Revision, Indiana Legislative Services Agency, <http://www.in.gov/legislative/ic/code/title16/ar42/ch5.html> (accessed October 2011).

***For more information, please refer to other publications in the Food Entrepreneurship Series:***

**FS-14-W**, Organic Foods

**FS-15-W**, Food Preservation Methods

**FS-16-W**, Regulations for Indiana Food Processing

**FS-17-W**, Using an Approved Kitchen to Prepare Food for Sale

All of these publications are available at the **Purdue Extension Education Store**, [www.the-education-store.com](http://www.the-education-store.com).

*Please see the next page for examples of non-potentially hazardous foods and potentially hazardous foods.*

## 4

Type of Food	<b>Non-Potentially Hazardous</b> (may be sold by home-based vendor [HBV])	<b>Potentially Hazardous</b> (may NOT be sold by home-based vendor [HBV])
<i>Baked Goods</i>	Cookies, cakes, fruit pies, cupcakes, fruit breads, dessert bars, baguettes	<ul style="list-style-type: none"> <li>• Products containing meat, poultry, and/or aquatic animals</li> <li>• non-baked dairy products, including cheese, butter, and yogurt</li> <li>• non-baked, egg-containing products and fresh shell eggs</li> </ul>
<i>Fruits and Vegetables</i>	Unprocessed, whole and uncut produce, e.g., oranges, cherries, berries, tomatoes, corn, lettuce, green beans, peppers, etc.	<ul style="list-style-type: none"> <li>• Any cut produce, e.g., cut tomatoes or melons</li> <li>• Raw seed sprouts</li> </ul>
	Fermented vegetables, i.e., vegetables placed in a brine (saltwater) solution in which bacteria produce lactic acid to acidify the product and do not require refrigeration	<ul style="list-style-type: none"> <li>• Non-fermented, pickled vegetables (e.g., pickles, beets, etc.) that are acidified (i.e., vinegar added) and do not require refrigeration. <b>Note: Vegetables that require the addition of any acid (e.g., vinegar) are NOT considered fermented.</b></li> <li>• Garlic in oil mixtures</li> <li>• Herb and oil mixtures</li> </ul>
<i>Fruits/Canned Fruits</i>	Traditionally prepared fruit-based jams and jellies, e.g., grape, strawberry, blueberry, raspberry, blackberry, etc.	<ul style="list-style-type: none"> <li>• Fruit butters (e.g., apple, pear, pumpkin) and “low sugar” or “no sugar added” jams and jellies</li> </ul>
<i>Canned Foods</i>	Only naturally acidic products (i.e., natural pH below 4.6). These may include fruit-based products (e.g., grape, strawberry, blueberry, raspberry, blackberry, etc.) and some other non-chunky sauce products (e.g., barbecue sauce). <b>Note: The pH of all canned food products should be verified before sale.</b>	<ul style="list-style-type: none"> <li>• Acidified and low-acid canned foods (i.e., in hermetically sealed containers including cans, glass jars, plastic containers, etc.); examples include canned vegetables, salsas, chutney, chow-chow, pickles, beets, and other pickled vegetables, etc.</li> <li>• Foods in reduced-oxygen packaging (i.e., vacuum packaging)</li> </ul>
<i>Meat, Poultry, Seafood</i>	---	<ul style="list-style-type: none"> <li>• All meat, poultry, or aquatic animal products</li> </ul>
<i>Syrups</i>	Honey, maple syrup, sorghum, and molasses	---
<i>Tree Nuts and Legumes</i>	Peanuts, almonds, cashews, walnuts, pistachios, etc.	---
<i>Candies and Confections</i>	Caramels, chocolates, fudge, peanut brittle, chocolate-covered fruits and/or nuts, and bonbons.	---