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# Recipe to Market: How to Start a Specialty Food Business in Maine

Bulletin #3101

*Prepared by Extension Food Science Specialist and Assistant Professor Beth Calder and Professor Alfred Bushway*

Do you have a recipe that has been passed through your family for generations? Do family and friends rave about a food product that you make and encourage you to start your own food business? Are you an entrepreneur who sees a niche market for your food product? Are you a small-scale farmer who wants to develop value-added food products? Are you a caterer or restaurant owner who would like to provide one of your signature products to the retail market?

Specialty food producers—often operating home-based microenterprises—are a growing Maine industry. Yet starting a Maine home-based food business will require you to face challenges including licensing, food safety, and business skill-building. In addition, some recipes and food products for sale may need to be reviewed by the Maine Food Processing Authority. We have developed this publication to answer the questions that we are most frequently asked about starting a small food business in Maine.



## 1. Is starting a specialty food business right for me?

It's okay to decide against owning a food business after reading this publication. Starting a food business is a huge commitment. Also, not all food products can be easily converted to retail items. Marketing research may show that your food product does not have enough demand. But if you choose to proceed, having the right personality and a solid business plan will help you to be successful.

## 2. Where do I begin?

Everyone asks, "How do I start, and where do I turn as I begin the process of starting my own food business?"

We answer this question with a question: where are you in your process? Do you have a recipe in mind? Have you developed a business plan? Do you have a recipe?

When cooking for family and friends, most cooks have their recipes memorized, or they use a pinch of this or that. When developing a food product for customers, you have to develop a concrete recipe with exact temperatures and times noted during the process. This information will be helpful for the [Food Processing Authority](#), who will determine whether you are processing your food product safely. Keep in mind that customers will want a consistent food product that has the same flavor and texture each time they buy it.

Recipes should be formulated on a weight basis to ensure batch-to-batch consistency. A gram scale will help you convert cups and teaspoon measurements to grams. You can purchase a gram scale (which should have an accuracy of 0.1 g), or other necessary equipment such as a pH meter (which should have an accuracy of 0.01–0.1 pH units), online, or from a supplier of scientific

### Definition of a Food Processing Authority

"The person(s) or organization with the expert knowledge and authority to enforce the requirements for food safety, including sealed containers, facilities for making



## 6. In what cases will the Maine Department of Agriculture deny a home food processor license

Depending on the type of product that you want to sell, you may not be able to safely process your food product at home. Agriculture defines some products as “potentially hazardous foods.” If your food product falls into this category, you will have to use a commercial processing facility, hire a co-packer, or find another commercially licensed facility or shared-use kitchen to process your product.

Jams, jellies, pickles, relishes, and baked goods (unless they use cream fillings or cream cheese frostings) are examples of products that can be safely processed in your home kitchen.

## 7. What makes a food “potentially hazardous”?

This term may seem strange, but it’s actually the label for food products that are dependent on refrigeration to reduce microbial growth. Foods are categorized as potentially hazardous based mainly on their pH and their water activity value ( $a_w$ ). A perfect example is pesto. Pesto with a pH above 4.6, has an  $a_w$  of greater than 0.85, and requires refrigeration to retard microbial growth. If you were interested in producing pesto, you would have to produce it in a commercial facility, not in your home kitchen. For more information regarding this definition, see “Potentially Hazardous Purpose and Definitions” in the [State of Maine Food Code](#).<sup>5</sup> If you have further questions, please contact the Maine Department of Agriculture.

## 8. Are there special considerations in producing low-acid canned foods and acidified foods?

The answer is yes! Improperly processed low-acid canned foods or acidified foods present life-threatening hazards.

### Acidified foods

Acidified foods have an added acid such as vinegar or lemon juice, or an added acidic food such as tomatoes or blueberries. The equilibrium pH is below 4.6.

If you are producing pickled foods, salsas, or other acidified foods, you will need to have the Food Processing Authority handle your food process with the FDA, if your product will be sold outside of Maine. You must also register your facility with the FDA. The FDA’s registration process can be accessed at the FDA’s [Instructions for Establishment Registration and Processing of Low-Acid Canned Foods](#).<sup>6</sup>

Acidified food needs to be tested by the Food Processing Authority’s lab to ensure that the equilibrium pH is below 4.6, with no detectable growth of *Clostridium botulinum*, the bacterium that can produce botulism. You should buy an accurate pH meter to test your product.

Acidified foods need to be tested 16 to 24 hours after they were produced and the equilibrium pH of each batch documented. You can produce acidified foods in your home kitchen if the Food Processing Authority’s testing shows that your product falls within the required pH range (less for every component within 24 hours of thermal processing). The Food Processing Authority can provide a letter to the Maine Department of Agriculture if you need to have documentation.

### Low-acid canned foods

Any food (other than alcoholic beverages) with a finished equilibrium pH greater than 4.6 and a water activity greater than 0.85, and tomato products having a finished equilibrium pH less than 4.7, is considered a low-acid food. Low-acid canned foods such as carrots, have to be processed in a commercial facility. (Green beans have a pH above 4.6 and are considered a naturally low-acid food.)

Be sure to register your facility with the FDA, which is required under the Bioterrorism Act for both domestic and foreign facilities that process and/or pack food for human or animal consumption. (Note: Farms and home-based food processors are exempt, as well as food processors who fall under the jurisdiction of USDA—that is, facilities handling only meat, poultry or egg products.) You can register your facility at [FDA Industry Systems](#),<sup>7</sup> or by calling 800-216-7331 or e-mailing [furls@fda.gov](mailto:furls@fda.gov).

### Suggestions for Success

If you are considering processing low-acid canned and/or acidified foods, the FDA requires that a supervisor from your operation obtain Better Process Control School certification to ensure that foods are properly processed and container closures are properly sealed. This certification course is offered in Orono at the University of Maine in odd years in the fall. Please call University of Maine Cooperative Extension at 207-581-2222 for more information.

**If you have** registered your food processing facility or any general food processing questions, feel free to contact Compliance Officer Lori Holmquist at Maine Residency (207) 622-8888 or [lori.holmquist@maine.gov](mailto:lori.holmquist@maine.gov).

Extension at 207-581-2788 if you are interested in taking this course.

## 9. What do I need to have on my food label?

All food producers must list the following items on their food labels:

- the statement of identity (name of food product),
- net weight of food product (usually measured in both ounces and grams),
- ingredient listing (listed in descending order by weight of ingredients),
- potential allergens in food product, and
- name and address of the manufacturer, packer, or distributor.

Refer to the FDA's [A Food Labeling Guide](#)<sup>8</sup> online, or request a copy from the FDA at 301-436-2373.

The eight food allergens that require an allergen statement are milk, eggs, fish, wheat, crustacean shellfish such as lobster, peanuts, and soybeans. For further guidance on listing allergens, consult the FDA's [Questions and Answers Regarding Food Allergen Labeling and Consumer Protection Act of 2004 \(Edition 4\)](#)<sup>9</sup> (call 301-436-2600 for a hard copy of the document) or contact the FDA with general questions at [industry@fda.gov](mailto:industry@fda.gov).

## 10. Am I exempt from the nutrition label requirement?

If you are a retailer with less than \$500,000 in annual gross sales, or a food producer who sells directly to consumers and then you are exempt from nutrition labeling. You do not have to file a small business nutritional labeling exemption to the FDA in these circumstances.

If you sell low-volume products, employ fewer than 100 employees yearly, and sell fewer than 100,000 units in the U.S. yearly, you are exempt from nutrition labeling. You DO have to file a small business nutritional labeling exemption notice yearly with the FDA.

However, if you sell (in the U.S. only) even lower volumes—if you sell fewer than 10,000 units and hire fewer than 10 full-time employees—you do not have to file a small business nutritional labeling exemption notice with the FDA.

For more information regarding nutrition label exemptions, or to submit a small business nutritional labeling exemption for [Business Nutrition Labeling Exemption](#)<sup>10</sup> or call 301-436-2371.

If you are interested in selling your food products wholesale (such as to grocery stores), you will need to contact [GS1 US](#), an international organization, obtain a bar code.

## 11. Where do I go to get my environmental testing, shelf-life testing, nutrition labeling, and ingredient testing done?

For environmental (facility) testing and shelf-life testing in Maine, choose one of these certified labs:

- [Northeast Laboratory Services](#):<sup>12</sup> 227 China Road, Winslow, Maine, 800 244-8378, [info@nelabservices.com](mailto:info@nelabservices.com)
- [Katahdin Analytical Services](#):<sup>13</sup> 600 Technology Way, Scarborough, Maine, 207-874-2400.  
Northeast Laboratory Services can also contract out to have nutrition labeling done. Other options for nutrition labeling are listed in the following consultants:
- Bill Siedel, 207-284-0220

If you need to have your ingredients analyzed specifically because of nutrient claims (such as wording on your package that says "a good source of a particular nutrient"), there are several certified labs that can conduct food analyses for you. Do a [Wet Lab Technology Buyer's Guide](#).<sup>14</sup>

## 12. What services does the University of Maine offer?

We encourage you to visit UMaine's [Dr. Matthew Highlands Pilot Plant](#),<sup>15</sup> UMaine's food processing facility, consumer testing center, and commercial kitchen. The facilities are available for product and prototype development, trial of commercial equipment, development of value-added products, etc. Fees vary depending upon the scope of your project. These are research and development facilities only, not commercially licensed facilities. Specialists at the facilities can help you find equipment, ingredients, and packaging supplies. Contact the Pilot Plant at [pilotplant@maine.edu](mailto:pilotplant@maine.edu) or 207-581-3139.



Along with the Food Processing Authority's basic testing services, we offer a [variety of consulting services](#)<sup>16</sup> for research-related product development, diagnostic microbial food product testing, pesticide testing, and analytical testing.

We offer sensory testing (such as taste tests) through the [Consumer Testing Center](#)<sup>17</sup> (207-581-1627).

## 13. Where can I get help with improving my business skills, writing a business plan, and marketing my product?

University of Maine Cooperative Extension offers small-business education in selected counties. Contact your [county UM](#). call 800-287-0274 to find your local office. You can also browse UMaine Extension's [small-business education resources](#).

[Maine Small Business Development Centers](#)<sup>20</sup> (207-780-4420) provide small-business development assistance.

[Mainebusinessworks](#)<sup>21</sup> is an on-line business development resource, with a listing of training, financing, and resources for

You can also consider marketing your food product through the Maine Department of Agriculture's [get real. get maine!](#)<sup>22</sup> c

### Other resources:

New England Extension Food Safety Consortium. [Online Support for New England Food Entrepreneurs](#),<sup>23</sup>

LaBorde, L.F. [Food Entrepreneur Resources: Resources for Small Food Processors and Potential Entrepreneurs](#).<sup>24</sup> Unive

Hall, Stephen F., 2005. *From Kitchen to Market: Selling Your Gourmet Food Specialty*. 4th ed. NY: Kaplan Publishing.

Northeast Center for Food Entrepreneurship, 2001. *Small Scale Food Entrepreneurship: A Technical Guide for Food Ven* York State Agricultural Experiment Station.

Includes information on business and marketing, general and specific food products, food safety and sanitation, labeling, equipment. To obtain a copy call 315-787-2273 or e-mail [esk15@cornell.edu](mailto:esk15@cornell.edu).

## 14. What if I need to find a co-packer, commercial kitchen, or shared-use kitchen? Are there any?

We have several co-packers in Maine. Cornell University's Northeast Center for Food Entrepreneurship maintains a [list of kitchens and small co-packers in Maine](#).<sup>25</sup>

- For salsas and other canned items on a small scale, Pemberton's Gourmet Foods in Gray may be the co-packer for you. Call at 207-657-6446.
- For production on a larger scale or organic certified co-packing, you can contact Schlotterbeck & Foss in Portland at 207-751-1111.
- For low-acid canned foods you can call
  - W. S. Wells & Son in Wilton, 207-645-3393; or
  - A.M. Look Canning Company in Whiting, 207-259-3341.

- Other co-packers in Maine include
  - Coastal Creations, Oxford, ME—contact Stuart Littlefield (207) 743-6444;
  - Lukas Foods, Biddeford, ME—contact Gregory J. Willoughby (207) 284-7052.

Another option would be to contact a local restaurant, school, or inn to see if it might be possible to rent their commercial facility during times when their kitchen isn't being used.

There are shared-use kitchens being developed across Maine, in areas including Saco, Bucksport, Farmington, Eastport, and Unity. For more information, please visit [Maine's Shared Use Kitchen Coalition](#).<sup>26</sup>

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- <sup>24</sup> [foodsafety.psu.edu/processor/resources.htm](http://foodsafety.psu.edu/processor/resources.htm)

<sup>25</sup> [www.nysaes.cornell.edu/necfe/CoPackerKitchen/me.html](http://www.nysaes.cornell.edu/necfe/CoPackerKitchen/me.html)

<sup>26</sup> [www.thresholdtomaine.org/Shared%20Use%20Kitchen.htm](http://www.thresholdtomaine.org/Shared%20Use%20Kitchen.htm)

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