



DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

Starting A Food Business

INTRODUCTION

The University of Arkansas Institute of Food Science and Engineering and the Cooperative Extension Service get many inquiries from Arkansans interested in establishing a small food processing business. Some of these people may be restaurant owners with a special product their customers have urged them to offer to a wider market. Some are people with a favorite family recipe they think would be a marketable product. And some are people with an interesting idea they think has a niche in the retail food market.



New products are evaluated for several quality attributes.

DR. STEVEN C. SEIDEMAN
Extension Food Processing Specialist (CES)

DR. PAM BRADY
Foods Specialist (IFSE)

MIKE HEILMAN
Program Coordinator (IFSE)

DR. JUSTIN MORRIS
Director (IFSE)

Persons interested in starting a food processing business can spend a great deal of time looking for information on such topics as regulations, safety, labeling, ingredients and packaging. In addition, information is generally needed on financial aspects of starting a business and marketing products.

This publication is an introduction to these topics and should be a starting point for establishing a new business. While this publication will not answer all your questions, it will be useful in helping you determine the feasibility of starting a food processing business.

GETTING STARTED So You Have An Idea for A Food Product

Every year there are about 15,000 new food products developed. Only about 10 percent of them ever last more than 1 year and even less return the investment made to introduce them to the marketplace. To increase the possibility of success for a product you have developed, consider several important factors. First, people are creatures of habit. They tend to eat what they are accustomed to. The average retail store in the United States has literally hundreds of food items and the competition is fierce. You may have a great tasting product, but how do you get someone to pick it up and try it?



Institute of Food Science and Engineering

During the past decade, interest in the production of “value-added” products from agricultural commodities has increased. Value-added products result when raw commodities are further processed to produce a benefit to the consumer. Examples are precooked meats, processed entrees, etc., where all the consumer needs to do is “heat and serve.” The food service segment (restaurants, fast food establishments – food served away from home) is the most fertile area for value-added foods. Due to the rising cost of labor and the concern over food safety, restaurant operators are looking for precooked, preportioned, etc., products so that all the kitchen staff needs to do is “heat and serve.”

Developing Formulations and Preparation Schedule

Once you have an idea for a food product which you believe will appeal to consumers in the marketplace, you need to develop a detailed description of your product. This description should include what the product is, where you will obtain all your ingredients, a formula (recipe), a method of preparation, processing procedures and packaging.

If you are uncertain about any of the details needed in this plan, help is available. Contact your county Extension office about your interest in starting a food processing business. They can arrange a meeting for you with the staff of the Institute of Food Science and Engineering (IFSE) who can help you in the initial product development stages.

Bring to this meeting as many of the details about your product as you have, including a sample of the product. The product will be evaluated and classified by the IFSE staff regarding the type of processing needed.

Transferring recipes for food products made in small batches or in a home kitchen to commercial size formulas that can be manufactured in large batches using commercial equipment is not an easy task. Frequently, simply multiplying ingredient amounts to get larger batches does not result in a product comparable to that made with smaller recipes. Plan on contracting with a state approved facility to manufacture a fairly large quantity of your best formulation(s). This will give you the opportunity to revise and adjust your formula so that your final product is exactly the way you want it. The county Health Department may be able to help you with information about facilities located in your county.

Locate Equipment and Ingredient Suppliers

Reliable suppliers for equipment, ingredients and supplies are critical to the operation of a successful food processing business. Identification of reliable suppliers is an important step prior to beginning operation of your business.

The Arkansas Department of Economic Development can provide you with a list of companies in Arkansas.

You may find that almost all of your needs can be met by Arkansas

companies, thereby

reducing time and cost for

transporting supplies long distances. If you have any problems with this, the IFSE can also be of help.



IFSE researchers use a state-of-the-art sensory laboratory to evaluate appearance, taste, texture and aroma of new products.

Arkansas Department of Economic Development
1 State Capitol Mall
Little Rock, AR 72201
501-682-2301

REGULATIONS AND REGULATORY AGENCIES

The Arkansas Department of Health (ADH) requires that all foods prepared/processed for sale must be manufactured in an approved facility. To be approved, the facility must meet requirements related to such things as kinds and number of sinks, location of restrooms, and materials used in flooring, walls and counters. Home kitchens or ranges placed in garages will not be approved for commercial food preparation.

Prior to beginning production, contact your county office of the ADH to assure the production facility you plan to use is approved. The county sanitarian at your county Department of Health has two publications that will help you with the regulations regarding an approved food processing facility.

- 1) *Plan Review Guidelines for Food Related Establishments*
- 2) *Rules and Regulations Pertaining to Good Manufacturing Practices for Food Processing Establishments*

If you are planning to build a new facility or remodel an existing one, you must submit a copy of your building plans to ADH for approval. A description of the information you must submit can be obtained from your county office of the ADH. Your county sanitarian can work with you on this process. Obtaining approval of this plan prior to starting construction will assure that you do not waste time and money on construction that will not meet ADH requirements. The ADH charges \$50-\$500 for this review depending on the size of the building.

If you plan to process and sell food only in Arkansas, you will be under state regulations established by the Arkansas State Board of Health and enforced by the Arkansas Department of Health. The state regulations are created under the authority of the Arkansas Food, Drug and Cosmetic Act. A copy of this act and specific regulations can be obtained from the ADH.

Arkansas Department of Health State Office
4815 West Markham
Little Rock, AR 72205
501-661-2171

If there is any possibility that you will be selling your food product out of the state, you must comply with federal regulations as stated in the Federal Food, Drug and Cosmetic Act enforced by the Food and Drug Administration (FDA). The federal regulations are more numerous and complex than the ADH regulations. This is particularly true in the areas of how some products are made, methods of measuring quality, minimum quality defects and labeling.

With the exception of the somewhat stricter requirements in the Federal Food, Drug and Cosmetic Act, the provisions of the Arkansas Food, Drug and Cosmetic Act and those of the federal act are essentially the same. Thus the ADH and the FDA have a good working relationship and food plant inspections may involve ADH and/or FDA inspectors.

David Arvelo
Small Business Representative
Federal Food and Drug Administration, Suite 900
Dallas, TX 75204
214-253-5228
www.fda.gov/ora/fed_state/small_business/sb_guide/default.htm

Both the ADH and FDA have in effect a code for food processing known as “Good Manufacturing Practices” (GMPs). Although the state and federal codes differ slightly, they are essentially the same. If your business will be strictly within Arkansas, you will operate under the state GMP regulations. If your business will cross state lines, federal regulations will also apply. You should obtain a copy of the applicable regulations and have a thorough understanding of the contents.

If your food product contains more than 5 percent meat, you must have a U.S. Department of Agriculture (USDA) Food Safety and Inspection Service inspector present during processing. You must also comply with the USDA regulations whether the food product is sold in Arkansas only or out of the state; however, neither the ADH or FDA regulations apply to a USDA inspected plant.

As your company grows, you may have to deal with several other regulatory agencies. These include the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA) and others. Make it a point to become familiar with all of the government agencies with roles in the food processing industry and your responsibilities in working with them. The publication entitled *Food Safety: A Team Approach* is available from the FDA and also provides an overview of the various agencies and their roles. (Call 888-463-6332 or visit the web site at www.cfsan.fda.gov/list.html for copies.)

Product Code

The Arkansas Department of Health requires that food processors provide meaningful coding of the product. This code must show the plant where the product was manufactured, the date and year the product was made, the product and batch number. The codes should be on both the individual containers and on cases. The codes should be kept in records pertaining to the product and should be written on invoices to identify distribution. The codes provide a means of tracking product should there be complaints or if a recall should be necessary.

Labeling Your Product

The label is the means by which consumers identify your product, so time and thought should be given to developing your label. Both the ADH (if your product is sold only in Arkansas and has less than 5 percent meat), the FDA and USDA have specific regulations concerning label regulations. You should contact the appropriate agency regarding information you must include on the product label.

All food agencies require nutritional labeling if you do more than \$50,000 in business. The regulations for nutritional labeling are quite extensive with very specific requirements about information to include and the format for presenting this information. Details of these requirements can be obtained from any FDA office, the FDA web site or the FDA Small Business representative (see address on page 3).

Universal Product Code (UPC)

If you plan to sell your product through retail stores, you should plan to display a UPC on the label. This barcode provides a means for automated identification of your product. Brokers, wholesalers and retail buyers will not handle a product without a UPC.

Uniform Code Council, Inc.
 7887 Washington Village Dr., Suite 300
 Dayton, OH 45459
 937-435-3870

It is your responsibility to obtain a UPC for each product that you produce. The first 6-9 digits are issued by the Uniform Code Council and will be unique to you as a manufacturer. You assign the second 5 digits to

The "Nutrition Facts" panel must give the nutrients in the food "as packaged" (i.e., before consumer preparation). However, manufacturers are encouraged to add a second column of nutrition information showing calories, calories from fat and the percent Daily Value for the combination of foods eaten. Quantitative amounts (i.e., g/mg) need only be given for the packaged food. However, as shown in this example, a footnote can be added to show the amount of nutrients in the added food. Alternatively, the quantitative amounts of the prepared food may be included immediately adjacent to those for the packaged food (e.g., "Sodium 200 mg, 265 mg").

Nutrition Facts

Serving Size 1 cup (59g)
 Servings Per Container about 10

Amount Per Serving	Cereal with 1/2 cup Cereal Skim Milk	
	Cereal	Skim Milk
Calories	190	230
Calories from Fat	10	10
% Daily Value**		
Total Fat 1g*	2%	2%
Saturated Fat 0g	0%	0%
Cholesterol 0mg	0%	0%
Sodium 300mg	13%	15%
Potassium 340mg	10%	15%
Total Carbohydrate 47g	16%	18%
Dietary Fiber 8g	31%	31%
Soluble Fiber 1g		
Sugars 20g		
Other Carbohydrate 19g		
Protein 4g		
Vitamin A	15%	20%
Vitamin C	0%	2%
Calcium	2%	15%
Iron	35%	35%
Vitamin D	15%	30%
Thiamin	35%	40%
Riboflavin	35%	45%
Niacin	35%	35%
Vitamin B6	35%	35%
Folate	35%	35%
Vitamin B12	35%	45%
Phosphorus	20%	30%
Magnesium	20%	25%
Zinc	15%	20%
Copper	15%	15%

*Amount in Cereal. One half cup skim milk contributes an additional 40 calories, 65mg sodium, 200mg potassium, 6g total carbohydrate (6g sugars), and 4g protein.

**Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

INGREDIENTS: WHOLE GRAIN WHEAT, RAISINS, WHEAT BRAN, SUGAR, CORN SYRUP, SALT, WHEAT FLOUR, MALTED BARLEY FLOUR, HONEY.

VITAMINS AND MINERALS: REDUCED IRON, NIACINAMIDE, ZINC OXIDE (SOURCE OF ZINC), VITAMIN B6, VITAMIN A PALMITATE, RIBOFLAVIN (VITAMIN B2), THIAMIN MONONITRATE (VITAMIN B1), FOLIC ACID, VITAMIN B12, VITAMIN D.

designate the product that you produced. Contact the Uniform Code Council to apply for a UPC assignment. There is a fee based on the size of business that you do, but the minimum fee for a UPC number is \$750.

BUSINESS CONSIDERATIONS

Now that you have a product to sell and an understanding of the manufacturing regulations, it is time to go into probably the most difficult, yet most important aspect of starting a food processing business. A majority of companies that go into business go broke the first couple of years, and usually it is not because they have a bad product but because the entrepreneurs did not fully understand the marketplace or the financial realities of the business.

Before entering the food processing business, you should develop a comprehensive business plan. This business plan should include detailed descriptions as to the following;

- Organization of the business
- The product(s) to be produced
- Market analysis and marketing plan
- The financial plan
- Operational characteristics and management plan

Such a plan can help in determining the feasibility of the enterprise and will likely be required when seeking outside financing. Knowledge in this case is power. Information can make it much easier to overcome various obstacles to entry and financial success, allowing one to reduce the uncertainty in decisionmaking and thus reduce risk. The two most important areas to be considered as you decide whether or not to enter the food processing business are marketing and finance.

Marketing

The most important marketing consideration is to simply understand your product and its place in the marketplace.

- What are the characteristics of your product which will make it appeal to its target market?
- Who are the constituents of the target market?
- Consider the demographics of your target market. Is the market for your product likely to grow?
- Is the production, distribution and/or promotion of your product seasonal or restricted by geographic or other factors?

An important concern is competition.

- What is the availability of the same or similar products?

- Are substitutes available?
- Why would a consumer buy your product rather than that of a competitor?
- How many competitors exist, and what is their size?
- Are competitors willing to protect their market share by cutting prices?

Distribution and promotion of your product are critical concerns.

- Will your product be distributed through direct sales, mail order, wholesalers, specialty shops or larger retailers?
- Do the characteristics of your product fit your distribution channel?
- What is your advertising plan?
 - How do you differentiate your product from the competition?
 - Which media are you going to use? Do these fit your distribution channel(s)?
 - Will you accept the costs of introductory discounts, coupons, slotting fees or other promotional tie-ins?

Several questions of a financial nature also arise when developing a marketing plan.

- What will be the price of your product, and will it sell at that price?
- Does the market for like goods exhibit relative price stability?
- Are the costs of producing the product likely to remain relatively stable?
- **Can the product be produced, distributed and sold at a profit?**

Finances

While help is available in answering questions about financial issues, one is well-advised to seek competent professional financial advice when attempting to address the issues below.

The first question to answer is that of the form of business organization: sole proprietorship, partnership, limited liability company or corporation? Each has different characteristics with respect to ease of formation, liability, accounting and tax reporting requirements, ability to raise external capital and succession of ownership. Any organization which has employees, regardless of its form of organization, must meet a

number of federal and state reporting and tax requirements. Additional requirements, such as workmen's compensation insurance, also exist.

- Capital intensity: Is your business characterized by high fixed costs or high variable costs?
- Start-up costs
- The level of inventory
- The level of accounts receivable
- Sales forecast

Consideration of these factors will determine the financing needed. Analysis of cash flow is critical to the success of the enterprise. Projected financial statements (Income Statement, Balance Sheet and a Cash Flow Statement) allow for the determination of the amount and timing of additional funds that will be needed. The next step is to consider the sources of this funding.

Financing can be from internal or external sources. One can use personal funds to begin the enterprise and expect sufficient cash to be generated from operations (internal financing) to meet cash needs. Most likely, external funding will be required. This financing can be equity financing (the use of an owner's personal funds, or the sale of partnership interests or corporate stock) or debt financing (the sale of bonds, equipment financing or commercial loans). Most start-ups will seek to obtain external financing from a commercial bank. As stated above, a business plan is likely to be a requirement to obtain a loan from a commercial bank. At a minimum, projected financial statements of the enterprise will be required, as well as a personal financial statement of the owner(s).

The projected financial statements must present a clear, detailed picture of the expected operating results and cash needs of the enterprise. When asking to borrow money, remember that banks or investors require a fairly substantial equity investment (on the order of 20-25 percent of total financing, increasing with increased perceived risk). The cash flow projection should indicate a comfortable cushion with respect to debt service; earnings should be projected as some multiple of the amount required to make principal and interest payments on the debt. The financial history of the owner(s) should be clean; in most start-up cases, the lender will require that the debt of the enterprise be a personal obligation of the owner(s) as well.

Commercial banks are often unwilling to loan money to a start-up business. In this case, it may be possible to arrange for some government or other agency to guarantee your debt. This guarantee allows the commercial bank to pass along the risk to the guarantor. The most important resource here is the U.S. Small Business Administration, and the business plan is a required part of the process.

U.S. Small Business Administration
2120 Riverfront Dr., Suite 100
Little Rock AR 72202-1747
501-324-5871
www.sba.gov

While the marketing and financial considerations are extremely important, a clear discussion of operations, management talent and other resources available is important in formulating the business plan. The business plan is an invaluable way to determine the enterprise's potential. Free brochures and consulting on starting a small business are available at the Sam M. Walton School of Business at the University of Arkansas.

Lance Sexton, Center Director
Small Business Development Center
Sam M. Walton School of Business
140 Reynolds Center
Fayetteville, AR 72701
479-575-5148
<http://waltoncollege.uark.edu/sbdc>

THE INSTITUTE OF FOOD SCIENCE AND ENGINEERING

The Institute of Food Science and Engineering will provide assistance for a nominal fee to existing or entrepreneur food processors on the technical end of the business. The Institute can assist you with labeling, taste panels, equipment and ingredient suppliers, processing layouts, refining an idea, etc. Visit the Institute of Food Science and Engineering web site at www.uark.edu/depts/ifse. There is also a web site/newsletter for food processing at www.uark.edu/ua/foodpro.

The Institute of Food Science and Engineering
2650 North Young Avenue
Fayetteville, AR 72704
479-575-4221
seideman@uark.edu

A more detailed discussion of the above topics can be found in *Starting a Food Processing Business*. This three-ring notebook can be purchased for \$40 through the Cooperative Extension Service.

To order the notebook *Starting a Food Processing Business*, MP 436, send \$40 for the book and \$1 shipping/handling fee to the following address. Make checks payable to Cooperative Extension Service. There are a number of free extension publications on the extension web site under "Publications." See the extension web site at www.uaex.uada.edu.

There is another notebook available entitled, *Adding Value to Arkansas Agriculture: Getting Started*. It goes into product development, innovation resources available, etc. It is for sale for \$10 through the Institute of Food Science and Engineering (see previous address).

Cooperative Extension Service
Business Office
P.O. Box 391
Little Rock, AR 72203
501-671-2161

CONCLUSION

Having a solid idea for starting a food processing business is a good start, but knowledge of the regulatory, production, marketing and financial aspects of starting such a business is an integral part of the overall process. This publication has covered some of the available resources you can use to get started.

For additional information, contact your county agent or:

Institute of Food Science and Engineering
2650 North Young Avenue
Fayetteville, AR 72704
479-575-4040 Fax 479-575-2165

University of Arkansas
Division of Agriculture
Dale Bumpers College of Agricultural, Food and Life Sciences
Arkansas Agricultural Experiment Station
Arkansas Cooperative Extension Service

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DR. STEVE SEIDEMAN is the Extension Food Processing Specialist, University of Arkansas Cooperative Extension Service. **DR. PAM BRADY**, Food Specialist; **MIKE HELLMAN**, Program Coordinator; and **DR. JUSTIN MORRIS**, Director, are with the Institute of Food Science & Engineering.

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