



Special Publication 15-02

Starting a Jams, Jellies and Preserves Business in Nevada

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There is renewed interest in producing foods as a sideline income or for a living with the strong support for local foods. Knowing what is required to start a jams, jellies and preserves food business can be confusing. This document is a brief guide that outlines the resources and topics that should be considered to produce and sell jams, jellies and preserves in Nevada. This publication concentrates on how to start production through the Nevada Cottage Food Law, since it can be a simple and economical path to selling food.



Introduction

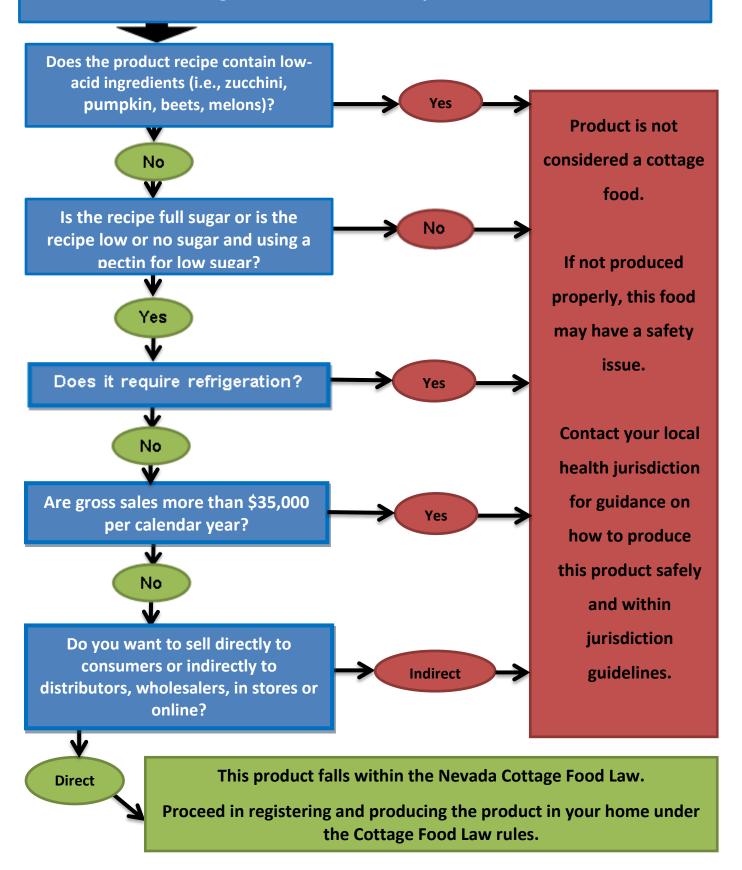
A growing number of Nevadans are interested in turning their well-loved recipes into quality food products to sell from the convenience of home. The Nevada Cottage Food Law effective July 2013 allows for the start-up of these small businesses and the potential for future growth. There are a few easy steps required to start a cottage food enterprise, including the cottage food application process; obtaining the proper business licensing from city, county and/or State entities; food-safety

procedures; packaging and labeling; and marketing. Nevada State Environmental Health Services does not require any permits for Cottage Food Operations. This publication will outline the process by which small-food entrepreneurs can safely produce jams, jellies and preserves to sell to the public. The topics in this paper will provide the information needed to get started in producing jams, jellies and preserves (acid canned goods) for sale to the public.

Cottage Food Producer Checklist

☐ Identify whether your product is a Nevada cottage food or not. (See flow chart.)
☐ Apply for a cottage food license.
Residents of Carson City or Douglas, Washoe, and Clark counties should direct inquiries to: Douglas & Carson City: http://gethealthycarsoncity.org/environmental-health/cottage-food/ Washoe: http://www.washoecounty.us/health/ehs/fs.html Clark: http://www.southernnevadahealthdistrict.org/cottage-food-operations/index.php
Residents of all other Nevada counties should direct inquiries to: http://health.nv.gov/BFHS EHS.htm
☐ Address business requirements.
https://www.sba.gov/category/navigation-structure/starting-managing-business
Obtain licenses
Obtain insurance
 Create a simple business plan
\square Understand Cottage Food and other health department requirements.
☐ Find food ingredients.
Approved sources
• Select, store and prepare
LifespanHandling frozen ingredients
č č
☐ Implement needed safety when creating jams, jellies and preserves.
Workspace preparation Program hand qualified to shariouses.
 Proper hand-washing techniques Procedures to ensure food safety and quality
☐ Create a label for cottage foods.
☐ Select packaging for jams, jellies and preserves.
☐ Price and market your food product to gain a net income.
☐ Producing beyond cottage food.

Is this canned product suitable to be produced under Cottage Food Law or regular commercial food production?



Nevada Cottage Food Law

The checklist on Page 2 outlines the considerations and steps discussed throughout this document. A variety of jams, jellies and preserves that are not potentially hazardous and do not require time and temperature controls for food safety are allowed to be manufactured in a Cottage Food Operation as long as they fit within the cottage food guidelines. The flow chart on Page 3 will help you determine whether your canned food product falls under the Nevada Cottage Food Law, or if it should be produced for sale in accordance with State and local health regulations for food processing in a certified kitchen.

According to NRS 446.886, a Cottage Food Operation is "a person who manufactures or prepares food items in his or her private home, a non-food establishment setting, for direct sale to an end customer" and "whose gross sales of such food items are not more than \$35,000 per calendar year" (http://www.leg.state.nv.us/NRS/NRS-446.html). This means any resident of a Nevada community may manufacture food items that fall within the list of foods approved by the State of Nevada and sell them directly to consumers once registered with Nevada or a county health department as a cottage food business and while they follow NRS 446.886. The full text of NRS 446.886 is included in the Appendix of this document. Cottage Food Operators should be familiar with the Nevada Cottage Food Law and ensure the law is being followed.

Residents of Carson City, Douglas County, Washoe County and Clark County with cottage food questions should contact:
Carson City Health and Human Services, 775-887-

Carson City Health and Human Services, 775-887-2190, for Carson and Douglas, see http://gethealthycarsoncity.org/environmental-health/cottage-food/;

Washoe County Health District, 775-328-2400, for Washoe County, see

http://www.washoecounty.us/health/ehs/fs.html; and Southern Nevada Health District, 702-759-0588, for Clark County, see

http://www.southernnevadahealthdistrict.org/cottage-food-operations/index.php.

Residents of other counties can obtain the Cottage Food Law and pertaining documentation, including the application and guide, on the State of Nevada's Health and Human Services website (http://health.nv.gov/BFHS_EHS.htm). The form may be printed to complete and mail in or be filled in online and emailed to the State. The form is simple, and some of the information requested includes name and physical address of establishment, owner name, contact information and the specific cottage food items to register. The State does not currently have registration fees in place; however, county or city entities may have additional registration and/or food-safety requirements, including fees and training. Be sure to follow what is required by local county and city health districts or authorities.

You Have Been Approved - Now What?

Selling food from your home is a business. A business needs some basic planning, especially food businesses, since there are low margins, and most entrepreneurs that do not do basic planning lose money. The Small Business Administration agency (https://www.sba.gov/category/navigation-structure/starting-managing-business) provides excellent business resources online that provide guidance on areas that businesses need to consider, such as licensing, insurance, taxes, etc. In Nevada, business development support is provided in person by Small Business Administration offices (http://www.sba.gov/offices/district/nv/las-vegas) and the Nevada Small Business Development Centers (http://nsbdc.org/).

As a business, all necessary business licenses need to be obtained. Cottage Food Operators must obtain a proper business license from city, county, and/or State entities before products may legally be sold.

Cottage food businesses may be exempt from the requirements of the state business license if they fit within the home-based business exemption found in NAC 76. Chapter 76 defines a home-based business as "a natural person who operates a business from his or her home and whose net earnings from that business are not more than 66 ²/₃ percent of the average annual wage"

(<u>www.nvsos.gov/index.aspx?page=273#383</u>). Currently, $66^{2}/_{3}$ percent of the 2013 annual wage is \$26,900. Cottage food businesses meeting this exemption must still submit the State Business

License form without the fee, stating the specific exemption. County and city entities have their own business licensing requirements, and Cottage Food Operators need to contact those offices to determine what is required for the location of their cottage food businesses.

Food Safety Is for Everyone Cottage Food Production Safety

Just as any restaurant or food manufacturer needs to follow food-safety regulations, Cottage Food Operators should consider food-safety practices and the importance of food safety should be understood.

Why is food safety important for Cottage Food Operators? Though the State only requires Cottage Food Operators to include a prominent label on each product stating "MADE IN A COTTAGE FOOD OPERATION THAT IS NOT SUBJECT TO GOVERNMENT FOOD SAFETY INSPECTION," if someone were to contract a foodborne illness from a cottage food product, that person has the right to report the illness and Cottage Food Operator to the State. This is why contact information is required to be placed on food product labels. The "Cottage Food Guide for Rural Nevadans" states: "Although food safety information is available on our web site for Cottage Food Operation applicants, it is highly recommended that applicants further educate themselves about safe food handling principles and practices. According to SB206, a Cottage Food Operation may be held financially responsible for the cost of the complaint and/or foodborne illness investigation, if found to be valid." Ingredients and products produced and sold should be tracked with a simple system. When proper food-safety procedures are followed, they help to prevent the spread of foodborne illness, protecting consumers and manufacturers.

The State has provided basic sanitation and food safety guidelines for Cottage Food Operators in the "Cottage Food Guide for Rural Nevadans" found at http://www.health.nv.gov/PDFs/CottageFoodsGuide.pdf.

These guidelines include the following:

- The preparation, packaging and handling of cottage foods should take place separately from other domestic activities, such as family meal preparation, dishwashing, clothes washing, kitchen cleaning or guest entertainment.
 - a. Do not allow smoking during a Cottage Food Operation.
 - Do not allow anyone with a contagious illness to work in the Cottage Food Operation while ill.
 - Wash hands and exposed portions of arms before any food preparation or packaging.
 - d. Minimize bare-hand contact of food by using utensils, single-use gloves, bakery papers or tongs, especially when preparing and packaging ready-to-eat foods.



- 2. Keep all kitchen equipment and utensils used to produce cottage food products clean and in good condition.
 - a. Wash, rinse and sanitize all food contact surfaces, equipment and utensils before each use.
 - Ensure water used during the preparation of cottage food products meets potable drinking water standards.
 - c. Keep all food preparation and food and equipment storage areas free of rodents and insects.
- 3. Keep all food that is manufactured, produced, prepared, packed, stored, transported and kept for sale free from adulteration and spoilage.

- a. Get ingredients from approved sources.
- Protect food from dirt, vermin, unnecessary handling, droplet contamination, overhead leakage or other environmental sources of contamination.
- Prevent cross contamination of foods and ingredients with raw animal products and chemicals.
- d. Prepackage all food to protect it from contamination during transport, display, sale and purchase by consumers.



Where Can You Get Food Ingredients?

Purchase produce and other food ingredients from approved sources only. Approved sources include licensed farms (valid Nevada producer's certificate), commercial grocers and commercial food suppliers. It is important to know where food ingredients come from, and whether the supplier follows food-safety protocol. Licensed suppliers comply with State and federal regulations in order to maintain their licenses. These processes help ensure customers that their food products are safe. Recalls of food products due to safety issues often occur for ingredients due to contamination, missed labeling of allergen ingredients, or contamination by pathogens or debris. By tracking the ingredients used, you will be able to determine if your product contains the dangerous recalled ingredients or if your product is safe.

Safely Selecting, Storing and Preparing Ingredients

Ingredient selection, storage and preparation contribute to food safety. Select ingredients that are in sound condition and check for spoilage, contamination and adulteration. Promptly store ingredients that need refrigeration. Throw away leftover cut produce that is left at room temperature longer than two hours.

Dry ingredients, such as pectin and sugar, should be stored in air-tight containers in a cool, dry environment. This should help prevent spoilage and the infestation of weevils. Weevils are tiny beetles that may infest grain and rice foods. They can chew through paper or plastic packaging. If any ingredient shows signs of weevils and/or their eggs, do not use it when preparing cottage food products.

Wash all fresh fruits and vegetables with cool tap water before using. Wash produce before peeling in order to prevent dirt and bacteria from transferring from the peeler or knife onto the fruit or vegetable. In order to reduce bacteria that may be present, dry produce with a clean cloth or paper towel.



If you shop using reusable grocery bags, clean them regularly. Wash canvas and cloth bags in the washing machine, and wash plastic reusable bags thoroughly with hot, soapy water.

Life of Ingredients

Many food products have dates stamped onto their packaging. These dates are not required by the

federal government; however, providing dating on food packaging can be useful to consumers. There are different dates to be aware of:

- A "Sell-By" date tells a store how long to display the product for sale. Products should be purchased before this date expires.
- A "Best if Used By (or Before)" date is recommended for best quality and flavor.
 This date does not indicate product safety.
- A "Use-By" date is the last date recommended for use of the product at peak quality. The manufacturer determines this date. This refers to best quality and not product safety.

These product dates do not always pertain to use after purchase and storage at home, with the exception of "Use-By" dates. If the other dates expire during home storage, a product should be safe and of good quality if handled properly.

Foods may develop an off odor, appearance or flavor due to bacteria spoilage. If a product has these characteristics, do not use it. If foods are mishandled, the chances of bacteria and pathogens increase, as does the risk of foodborne illness – before or after the date on the package. Examples of mishandling include food being left unrefrigerated longer than two hours or being handled by someone who does not practice proper sanitation practices. Be sure to follow handling and preparation instructions on product labels to ensure quality and safety.

Safely Using Frozen Foods

When using frozen fruits, vegetables or other foods, it is important to be aware that as soon as these foods begin to thaw and become warmer than 41 F, any bacteria present before freezing can begin to multiply. Frozen foods must remain frozen until ready to thaw and use.

The USDA recommends three safe ways to thaw foods:

1. in the refrigerator,

- 2. in cold water (in a leak-proof bag and changing cold water every 30 minutes),
- 3. or in the microwave.

Never thaw frozen foods on the countertop.

Prepping Your Workspace

Another food-safety consideration is how to properly clean the kitchen and utensils before preparing cottage foods. Having a clean workspace is integral to preventing the spread of contaminants and foodborne illness. Keep kitchen surfaces such as countertops, utensils, cutting boards and appliances clean with hot, soapy water. Consider using natural cleansers to avoid possible sensitivities to chemicals such as bleach, though bleach is often recommended for disinfecting surfaces. Immediately clean counters with drips or spills of raw egg and dispose of or change the cloth

used. Do not use unclean or smelly dishcloths, towels or sponges, as this is a sign of potential bacterial growth.



Dishcloths and towels should be washed often and in the hot cycle of the washing machine. Hot pads should be washed frequently. Utensils should be washed in hot, soapy water or run in the dishwasher on the hot wash setting.

It is recommended to have a cutting board specifically for produce in order to prevent cross-contamination between raw meats and fresh produce. Always use a clean cutting board and wash it thoroughly in hot soapy water after use. Cutting boards may also be washed in a dishwasher. To disinfect a cutting board, a fresh solution of 1 tablespoon of unscented, liquid chlorine bleach per gallon of water may be used. Flood the surface with the bleach solution and let stand for several minutes. Rinse with water and let air dry.

When using bleach as a cleaning and disinfecting agent, be sure to check the percentage on the bottle is 5 percent sodium hypochlorite, as some generic brands sell bottles of bleach with a lower percentage.

Canning Equipment

Canning equipment, including jars, lids, rings or any other equipment should be clean and in proper working order. Avoid using pans or utensils that have rust on them. Use ingredients that have been stored correctly, such as sugar that has been stored according to package directions. Following these guidelines will help to minimize risk of foodborne illness.

Boiling-water canners are made of aluminum or porcelain-covered steel and have removable perforated racks and fitted lids. The canner must be deep enough for submerged jars to have at least 1 inch of boiling water over the top. If using an electric range, the canner must have a flat bottom no more than 4 inches wider in diameter than the heating element in order to ensure the uniform processing of all jars. Flat or ridged bottom canners may be used on ranges with gas burners.

There are a variety of canning tools that help make canning easier. These tools include: lid wrenches, funnels, tongs, jar lifters, magnetic lid-lifters, colanders and plastic or silicone spatulas. A ruler may be useful to measure headspace in filled jars. A timer helps indicate when processing is finished.

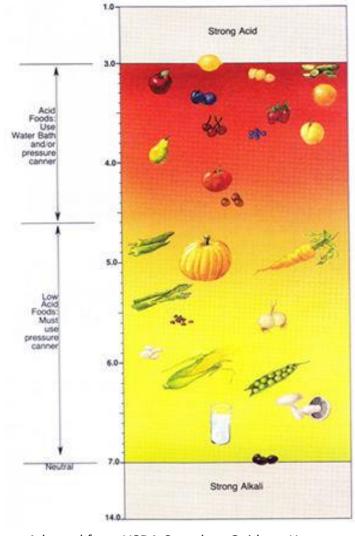
Canning Practices

When making and canning jams, jellies and preserves, it is important to be aware of current proper canning practices to further food safety. These include carefully selecting and washing fresh fruit, peeling some fresh fruit, hot packing many foods, adding acids (lemon juice or vinegar) to some foods, using acceptable jars and self-sealing lids, processing jars in a boiling-water canner for the correct period of time at your elevation, and proper storage. When practiced collectively, these processes prevent the growth of bacterium, yeasts and mold, and help protect the product from spoilage.

Canned foods may be prone to the bacteria *Clostridium botulinum*, which is known to cause botulism – a deadly form of food poisoning. *C. Botulinum* spores are on most fresh food surfaces; however, because they grow only in the absence of air, they are harmless on fresh foods. Washing fresh food reduces bacteria numbers only slightly. The vital controls are the canning methods and being sure to use the USDA-recommended research-based processing times. These recommended processing times ensure the greatest number of expected heat-resistant microorganisms will be destroyed.

In order to know whether a food should be processed in a boiling-water or pressure canner, it is important to understand the acidity of the food being canned. Acid foods have a pH of 4.6 or lower. Cottage canned products can only contain high-acid (pH below 4.6) food ingredients. A lower pH value means there is a higher acid content. The pH of a food can be looked up on the following Food and Drug Administration list:

http://www.foodscience.caes.uga.edu/extension/documents/fdaapproximatephoffoodslacf-phs.pdf. Most fruits are naturally acidic. Acid foods contain enough acid to either block the growth of bacteria or destroy them more rapidly when heated. Due to most fruits being acidic in nature, jams, jellies and preserves can be processed in a boiling-water canner.



Adapted from USDA Complete Guide to Home Canning 2009 (Bulletin No. 539).

Jams, jellies and preserves also have low water availability that keeps them safe. Water availability is the amount of water that can be used by microbes, and sugar or a gel-like consistency makes the water unavailable to microbes. Bacteria require water activity of 0.91 or greater, and fungi require water activity of 0.6 or greater, in order to grow. Water activity can be measured by expensive lab equipment used by processing authorities. Lowsugar jams, jellies and preserves must use pectin designated for low sugar because it lowers the water availability.

The jars used must be cleaned before filling. Before each use, wash empty jars in hot, soapy water and rinse well by hand or wash in a dishwasher on a hot cycle. All jams, jellies and preserves with a processing time of less than 10 minutes should be

filled into sterile jars. After washing jars, submerge them in a boiling-water canner with a rack in the bottom. Be sure to submerge them right side up, ensuring the jars fill with water. Add enough water so it is 1 inch above the tops of the jars. Bring to a boil, and boil for 10 minutes at altitudes less than 1,000 feet. For higher elevations, boil one additional minute for each additional 1,000 feet in elevation. For example, if the altitude is 4,000 feet, boil the jars for 14 minutes. Reduce the heat and keep the jars in the hot water until it is time to fill them. Remove and drain one jar at a time, leaving the water in the canner for processing. A dishwasher may be used to sterilize jars if washed on a hot cycle and left inside to remain hot until use (USDA Complete Guide to Home Canning, Dec. 2009).

Prepare recipe according to directions, fill jars and process. The time needed to safely process acid foods in boiling-water canners varies from five to 85 minutes, based upon variables such as size of jar and altitude. Water boils at lower temperatures as altitude increases, and so it is important to increase canning times if you are processing at elevations higher than 1,000 feet. Lower boiling temperatures are less effective in killing bacteria, thus an increased processing time at higher altitudes compensates for lower boiling temperatures. Use the longer recommended processing time for canning food at your elevation, or the product may become spoiled.

Boiling-Water Canning Altitude Adjustments for Processing Time		
Altitude	Processing Time (Pints and Quarts)	
1,001 to 3,000 ft.	Increase by 5 minutes	
3,001 to 6,000 ft.	Increase by 10 minutes	
6,001 to 8,000 ft.	Increase by 15 minutes	
8,001 to 10,000 ft.	Increase by 20 minutes	

After the processing time, turn off the heat and let the canner cool with the lid off for five minutes. Remove the jars and set them in an undisturbed place for 24 hours to cool. After jars have cooled, remove the screw bands and test the seals using one of the following methods:

- Press the middle of the lid with a finger or thumb. If the lid springs up when finger is removed, the lid is unsealed.
- Tap the lid with the bottom of a spoon. If the jar is properly sealed, it will make a high-pitched ringing sound. If unsealed, it will make a dull sound, though if food is touching the bottom of the lid, it will also make this sound.
- Hold the jar at eye level and look across the lid. The lid should be concave, meaning it should be curved down slightly in the center. If the center is flat or bulging, it may not be sealed properly.

If a lid did not seal properly, refrigerate and reprocess within 24 hours of the first attempt. Reheat the jam, jelly or preserve; pour it into a clean, warm and sterile jar; cover with a new sealing lid; and reprocess.

If lids are tightly and properly sealed, remove the screw bands then wash and dry the lid and jar to remove food residue. Do not replace screw bands. Apply the appropriate labeling, being sure to include the date, and store them in a clean, cool, dark, dry place. Canned food that is properly sterilized will be free of spoilage if the lids seal properly and the jars are stored below 95 F. Home canned foods have a suggested shelf life of one year and should be used before two years.

Product Traceability

Knowing where ingredients come from allows
Cottage Food Operators to know where sources of
possible contamination originate if there were to
be a complaint about a food product. It is highly
recommended to create a simple system to record
what ingredients are used and their sources for
every batch of product produced.

Commercial operations are required to develop detailed documentation and records for each product produced and sold. By following State and

federal regulations, these records detail the how, where and when of the safety practices for each product. These records are not required for Cottage Food Operations; however, by becoming familiar with what is required by State and federal regulations for commercial food production, Cottage Food Operators will better understand what is needed to keep cottage food products safe for consumers. By keeping simple records that include details of where each ingredient is sourced from, creating batch numbers for each batch of products produced, and recording food-safety practices, food operators will be prepared to identify possible sources of contamination, if they occur, or simply be reassured of the steps taken to produce a high-quality, safe product. Additionally, they will be better prepared to transition from cottage food production to commercial production in a licensed kitchen.

Handwashing

Proper handwashing is important to food safety, and the following handwashing steps are useful to put into practice:

How to Wash Your Hands		
Rinse hands under clean running water.	Rinse hands thoroughly under clean running	
C	water.	
Apply soap.	Dry hands thoroughly	
Rub hands vigorously	Dry hands thoroughly with a clean towel or	
for 10 to 15 seconds,	single-use disposable	
removing dirt from	towels.	
under fingernails,		
surfaces of hands and	If possible, use a towel to	
exposed portions of	turn off the faucet.	
arms.		

Wash Hands Before You	Wash Hands After You
Handle or prepare food	Prepare food Touch raw food, especially meats Switch food preparation tasks Touch eggs Use the restroom Cough or sneeze Handle dirty dishes or garbage Pet animals Smoke Use the phone Touch hair, face, body or other people Touch a sore or cut



Telephone calls and many other distractions can cause your hands to become contaminated. It is important to clean your hands or change your gloves again before handling food. Take precautions to avoid contamination of work areas during food production.

Labeling Requirements and Considerations for Cottage Food Products

NRS Chapter 446 has specific labeling requirements for foods prepared in a Cottage Food Operation. The foremost label required must state: "MADE IN A COTTAGE FOOD OPERATION THAT IS NOT SUBJECT TO GOVERNMENT FOOD SAFETY INSPECTION." This label must be prominently affixed to each product.

Additional required labeling information should be prominent and conspicuously in English. Print size should be at least 1/16 of an inch based on the lowercase letter "o." Label information must include the following:

- Statement of identity the common name (i.e., strawberry jam) or the descriptive identity of the packaged food item (i.e., Delilah's Delightful Strawberry Jam).
- Net quantity of contents net weight in ounces, pounds or grams; or net content in fluid ounces, pints or liters; or number of pieces.
- Ingredient statement a list of ALL ingredients, in descending order of predominance by weight. This includes listing all ingredients of an ingredient that in itself contains more than two ingredients.
- The name and physical address where the product was manufactured, packaged or distributed.
- Declaration of any food allergen contained in the food, unless the food source is already part of the common or usual name of the product or clearly identified in the ingredient list.

Apple Jam

8 oz.

Ingredients: Apples, sugar, lemon juice.

Contains: (allergen would be here if there was one)

MADE IN A COTTAGE FOOD OPERATION THAT IS NOT SUBJECT TO GOVERNMENT FOOD SAFETY INSPECTION

Desert Wonders by George 100 Goodie Road, Caliente, NV 89008

Sample Cottage Food Label

Major food allergens include milk, eggs, fish, crustacean or bivalve shellfish, tree nuts, wheat, peanuts and soybeans, and any ingredient that contains protein derived from any one of these ingredients or additives.

Allergen information must be included in one of two ways:

- In parentheses following the name of the ingredient, for example: lecithin (soy), flour (wheat) and whey (milk); or
- Immediately after or next to the list of ingredients in a "contains" statement.
 Example: Contains wheat, milk and soy.

Food allergens are critical. Follow the guidelines pertaining to food labeling closely.

Federal guidelines for food product labeling differ and should be taken into consideration if moving from cottage food production to commercial production. The Food and Drug Administration guidelines for food labeling can be found at http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm2006828.htm.

Pricing and Marketing Your Product

Determining a price and plan to market a local food is often challenging because there are many variables that should be considered (University of Maryland, 2014). The price of a product can be set according to the value that it provides for the customer. You need to know your customers' likes, needs and willingness to pay for the product. Each product must provide a solution for your customers. For example, a local food may remind customers of a pleasant past when it tastes like food their Grandma made, has a story that creates a connection back to nature, or is developed with healthy ingredients to fulfill a health need or desire. It is important to provide a product that is more than just food, because the small scale of local foods makes them higher priced to make than similar products in the grocery store.



Although calculating your costs and returns is considered a burden to many small business managers, it can create peace of mind to determine how to receive an income for all of the work.

The price must cover your cost of producing the product and the desired net income for the business. Many small businesses ignore this step, which results in losing money over time. A simple calculation of costs can ensure that the product will make an income and not lose money.

Calculation for pricing of jam

Cost for 8 pints jam ingredients: berries, sugar, pectin = \$7.28

Packaging: 8 pint jars and lids = \$5.25

Processing labor: 33 minutes X \$11.50/hour =

Total cost of goods = \$7.28 + \$5.25 + \$6.325 = \$18.855

\$18.855 cost for 8 jars equals \$2.357 per pint.

16 pints of jam are $^{1}/_{8}$ of total goods sold at market.

Transportation: 36 miles roundtrip to market x = 50.56/mile = \$20.16

Marketing and selling labor: 15 minutes on social media and 3 hours for market x \$11.50 = \$37.375 Cost of selling at the market

\$20.16 + \$37.375 = \$57.535

Market cost attributed to the jam

\$57.535/8= \$7.19

Market cost for jars of jam \$7.19/16 = \$ 0.45 per jar.

Market cost \$0.45 + cost of goods per container \$2.357= \$2.807 per pint

50% additional costs: damaged and unsold product, kitchen costs, advertising, signs, etc. = \$ 1.404

Market space fee 5% of sales:

Price per container of a pint of jam will need to be at least \$2.95 + \$1.48 = \$4.43/pint

Using this calculation will help to determine which foods can provide an income and have a cost of production within the range that customers are willing to pay (Lewis, 2013). Some local foods cost more to produce than customers are willing to pay.

You must know where you can position the product information and sales to access the targeted customers. In order to sell your product to the

targeted customers, they must learn enough about the product to want to buy it, and then be able to conveniently buy it. It is important to plan for time and costs associated with gaining access to customers (Gatzke, 2012). Knowing your customers' habits will help determine where to access them.

Modern customers with interest in local food want to know the story behind the product, such as who produced it and how it provides a solution for their needs (Ettenson et.al, 2014). Customers can find products for cheap prices at large stores. With Internet access, what customers seek is to be educated on what they can get to solve their query. They will be willing to pay more for a product with which they feel connected.

The higher cost to make local food requires making a food that is unique and exceptionally high quality, provides something to learn and a solution to the customers' desires, and is conveniently available for purchase. More detailed and accurate information to help price a local food will be available in a Special Publication, Pricing and Marketing Local Foods, in 2015.

Sales may be made from the Cottage Food Operator's private property or site of manufacture; or from a farmers market, swap meet, flea market, church bazaar, garage sale or craft fair. Foods cannot be sold at or through another business or permitted food establishments, or sold for resale. For example, cottage foods may not be sold from or to restaurants. Farmers markets and/or swap meets are regulated by the health authority; however, cottage food products may be sold there if they remain in durable packaging with proper labeling affixed.

Advertising is great for any business, and cottage food businesses are no exception. Advertising may be done however the registered operator sees fit, including online and by phone. Orders may be received online, such as through email, or by phone, but **products are not allowed to be mailed to consumers**. Cottage food products must be sold directly and in person to consumers.

Handing Out Samples to Consumers

If no one has tried a particular recipe, how will they know they want to buy it? Cottage Food Operators are allowed to give out samples of cottage food products to consumers. These samples must be individually pre-portioned in closed, disposable containers at the Cottage Food Operation kitchen before distribution at the sale site. Contact the health inspector covering the region in which you are handing out samples to ensure you are in compliance.

Storage, Transport and Sales of Cottage Foods

Finished cottage food products may be stored in your residence that is registered with the State as the Cottage Food Operation. The storage area may include your kitchen, a spare room or a basement that is free of water or dampness, pests and any other insanitary conditions. The best practices guide indicates storage should not be in any exterior building, including garages, sheds or barns, for cottage food product storage (*Regulatory Guidance for Best Practices, Cottage Foods, April* 2012).

What Recipes Do Not Fit in Cottage Food Production?

Most full-sugar jams, jellies and preserves are safe from foodborne illnesses because they are made from acid foods and have low water availability.

Any food that has any major ingredient with a pH higher than 4.6 is not a cottage food. Examples of these foods include preserves with vegetables (for example, zucchini, beets, onions, cucumbers, peppers), salsas, relishes, tomato or other sauces, and pickles or pickled foods. Recipes where acid like vinegar or lemon juice is added with higher pH

ingredients (i.e., pickling) to bring the pH below 4.6 are called acidified and do not fit under the Cottage Food Law.

Any food that has ingredients low in sugar and does not use the recommended pectin for low sugar is a not cottage food. Examples of these foods include jams, jellies or preserves with low sugar and regular or no pectin added. These recipes are not permitted under Cottage Food Law and must be registered and approved by the health department before being sold.

Considerations for Selling Food Outside of the Cottage Food Laws

Perhaps the jams, jellies or preserves are a great success, and the time has come to consider selling out of state, to stores or distributors; or you want to produce a canned good exempt from the Cottage Food Law. In order to sell commercially outside of the Cottage Food Law, each product must be registered through the local health department. Each situation is considered on a product-by-product basis, and your local health department will provide the specific information you need.

Some recipes include a mixture of acid and lowacid foods with the addition of an acidifier, such as lemon juice, citric acid or vinegar to make the food acidic enough to process in a boiling-water canner. Although tomatoes are usually considered an acid food, some are known to have a pH slightly above 4.6. If tomatoes are to be canned as acid foods, they must be acidified to a pH of 4.6 or lower with lemon juice or citric acid. Properly acidified tomatoes can be safely processed in a boiling-water canner; however, these recipes need approval from the State.

The following are some topics that may be considered when producing acid canned foods for regular commercial production:

Contact your local health department.
 Speak with the person that addresses processed foods in your region, and this

person will inform you on what is required to produce and sell your product.

Find a licensed commercial kitchen for food

- preparation.

 Commercial products must be processed in an inspected kitchen certified by the local health inspector. Before building a kitchen
 - health inspector. Before building a kitchen, it is recommended to rent one to gain experience and to figure out what equipment is needed. Larger cities may have incubator or community kitchens available for rent by the hour. Sometimes a local certified kitchen in a senior center, school facility or restaurant can be rented. Make sure that the kitchen is or can become approved for processing your products by discussing this with the local health inspector. If a certified kitchen is not available to rent, consider outsourcing to a co-packer. A co-packer is a company willing to produce your product for you. Look for a co-packer that has the capability and experience to make your product. There are very few co-packers in Nevada.
- Complete food-safety training.
 At least one person in the kitchen at all times must have food-safety (Servsafe) training. The local health agency can direct you to local classes.
- Get recipes and procedures approved through a food processing authority. The State of Nevada requires some processing procedures to be approved by a processing authority. Processing authorities provide product testing to determine if the process by which it is made is safe. They keep up-to-date on national food safety regulations in order to ensure products they test fulfill these standards. To find a processing authority, contact the local health inspector or search online. Processing authorities must be recognized independent labs that have the expertise to run the tests required to show the safety of a food product, specifically pH, water

Sample Hazard Analysis and Critical Control Points (HACCP) Jam Recipe

<u>Hazard Analysis and Critical Control Points</u> <u>Strawberry-Rhubarb Jam</u> Yield: 12 half-pints

Ingredients:

4 1/4 cups diced rhubarb

4 ½ cups sliced strawberries

2 tbsp. lemon juice

2 packages powdered fruit pectin

10 cups white sugar

12 ½-pint canning jars (with lids and rings)

Method:

- Combine rhubarb, strawberries, lemon juice and fruit pectin into large kettle over medium heat; stir to help juice start to form.
- Add sugar (1 cup at a time), stirring constantly until juice starts to simmer.
- Increase heat to medium-high, bringing mixture to a boil. Cook and stir 1 minute. (Critical Control Point 1- This mixture must reach a temperature of 212 F or higher throughout. Measure with thermometer. If the temperature is not 212 F continue heating until a temperature of 212 F is reached. Record final temperature in log.)
- Skim off any foam that forms.
- Ladle into hot, sterilized jars, remove air bubbles, leaving ¼ inch headspace.
- Water bath process 10 minutes (processing at 4,000 to 5,000 ft.).
- Remove and let rest until cooled, without touching. (Critical Control Point 2- Discard unsealed jars. Record number of unsealed jars in log.)
- Select a sample jar and test for pH and Water Activity. (Critical Control Point 3-Discard the entire batch if the pH is higher than 4.1 AND Water Activity is greater than 0.85. Record test results in log.)

Verification Process:

Outline this process by discussing it with your health department. Determine if and how to verify that the procedure is following your process. Does a regular inspector cover this need or do you need to test or have an independent test of batches? Discuss any change in ingredients and procedures with the health department to ensure it is still approved.

availability and microbial analysis; as well as provide written reports to validate a process or result. Seek out a good working relationship and check into pricing. Some simple and safe products can be reviewed and approved just by the Nevada Health Department.

 Develop a plan outlining food-safety procedures and critical control points for each product, as well as standard operating procedures (food handling, hygiene, facility, etc.).

A production plan shows the procedures followed during every production run that keep the product safe. The critical procedures that prevent microbial growth are the critical control points (CCP), such as boiling in the water bath for the appropriate time. The standard cleaning and hygiene procedures for the workers and surfaces in the production facility are outlined. The food-safety procedure, the recipe and the tracking of products combine to become the Hazard Analysis and Critical Control Points plan. The processing authority can help develop this plan simply. Each food product created should have a detailed paper trail for all ingredients in the food item being processed. Create a document that outlines the in-house handling of ingredients, including the date they enter the kitchen, how they are cared for (refrigeration, etc.), the way they are processed (temperature), the way they are packaged, how they are cared for post processing, and how they are properly labeled. A paper trail should also be created that documents the distribution of products to purchasers. If an ingredient is tainted, these details allow for the origin to be found and any purchasers to be alerted. In addition to the documentation above, the State of Nevada requires a Hazard Analysis and Critical Control Points (HACCP) plan for products packed in reduced-oxygen packaging.

Create labels for each food product following federal and State guidelines (http://www.fda.gov/Food/GuidanceRegula tion/GuidanceDocumentsRegulatoryInform ation/LabelingNutrition/ucm2006828.htm). The label of your product needs to be sent in with the State registration. When creating food product labeling, it is important to keep the label as simple as possible. Avoid any health claims on the label or anywhere on the packaging, as it requires extensive paperwork with an additional agency. Small-scale production allows an exemption from full labeling. If this applies, file for the exemption. Labels can be made in-house on specialty printers or ordered from printer companies. The choice will depend upon need due to volume, cost and convenience. The simplest label requires: Name of product Weight/volume List of ingredients Care of product (such as refrigerate after opening)

Contact information leading back to processor (such as website, physical address, etc.).

Mimic labels on approved products as there are specifics in format and design. The Food and Drug Administration has a food labeling guide available online that outlines federal labeling requirements. It can be found at www.fda.gov/FoodLabelingGuide.

Remember to make a professional label, as many consumers buy based on the product's look. Run it past others with keen judgment in the area. Ensure the product has a tracking or batch code on it. Research what QR and bar scan codes you may want on your label. Most stores insist on them, and smartphones have apps to use the information.

 Submit approved recipes from processing authority, product plans/documentation and proposed product labels to the State health authority for registration. Discuss your product with the local health department to gain an understanding of what needs to be considered. Once recipes and procedures have been developed with Hazard Analysis and Critical Control Points plans and required product labels have been created, it is time to submit everything to the State for registration. Differing registration procedures and costs will correspond with the differing food products and their food safety situation. After receiving your application, the health department will send back a formal response indicating the areas that need to be addressed to gain approval. Discuss and reply to the health department with the changes needed. Contact the health department at any time for further clarity. Their goal is to help you become a successful and safe food business.

- Obtain any federal approvals required. The local health department will assist in identifying the federal approvals required for your product. For high-acid or acidified canned products with a pH below 4.6, approval is required from the Food and Drug Administration (FDA) and the application forms are 2541 and 2541a. Lowacid canned products require much more regulation and likely would have to be produced in a co-packer facility.
- Obtain any and all suggested State, county and city business licenses and insurance.
 Consider requirements for running a business.

Nevada state business license website: http://nvsos.gov/index.aspx?page=4

Business areas that need to be addressed: https://www.sba.gov/category/navigation-structure/starting-managing-business

Appendix

Cottage Food Operations NRS 446.866

Exemption from certain requirements; certain local governing bodies prevented from prohibiting Cottage Food Operations; registration; fee; inspection.

- 1. A Cottage Food Operation which manufactures or prepares a food item by any manner or means whatever for sale, or which offers or displays a food item for sale, is not a "food establishment" pursuant to paragraph (h) of subsection 2 of NRS 446.020 if each such food item is:
- (a) Sold on the private property of the natural person who manufactures or prepares the food item or at a location where the natural person who manufactures or prepares the food item sells the food item directly to a consumer, including, without limitation, a farmers' market licensed pursuant to chapter 244 or 268 of NRS, flea market, swap meet, church bazaar, garage sale or craft fair, by means of an in-person transaction that does not involve selling the food item by telephone or via the Internet;
- (b) Sold to a natural person for his or her consumption and not for resale;
- (c) Affixed with a label which complies with the federal labeling requirements set forth in 21 U.S.C. § 343(w) and 9 C.F.R. Part 317 and 21 C.F.R. Part 101;
- (d) Labeled with "MADE IN A COTTAGE FOOD OPERATION THAT IS NOT SUBJECT TO GOVERNMENT FOOD SAFETY INSPECTION" printed prominently on the label for the food item;
- (e) Prepackaged in a manner that protects the food item from contamination during transport, display, sale and acquisition by consumers; and
- (f) Prepared and processed in the kitchen of the private home of the natural person who manufactures or prepares the food item or, if allowed by the health authority, in the kitchen of a fraternal or social clubhouse, a school or a religious, charitable or other nonprofit organization.
- 2. No local zoning board, planning commission or governing body of an unincorporated town, incorporated city or county may adopt any ordinance or other regulation that prohibits a natural person from preparing food in a Cottage Food Operation.
- 3. Each natural person who wishes to conduct a Cottage Food Operation must, before selling any food item, register the Cottage Food Operation with the health authority by submitting such information as the health authority deems appropriate, including, without limitation:
- (a) The name, address and contact information of the natural person conducting the Cottage Food Operation; and

- (b) If the Cottage Food Operation sells food items under a name other than the name of the natural person who conducts the Cottage Food Operation, the name under which the Cottage Food Operation sells food items.
- 4. The health authority may charge a fee for the registration of a Cottage Food Operation pursuant to subsection 3 in an amount not to exceed the actual cost of the health authority to establish and maintain a registry of Cottage Food Operations.
- 5. The health authority may inspect a Cottage Food Operation only to investigate a food item that may be deemed to be adulterated pursuant to NRS 585.300 to 585.360, inclusive, or an outbreak or suspected outbreak of illness known or suspected to be caused by a contaminated food item. The Cottage Food Operation shall cooperate with the health authority in any such inspection. If, as a result of such inspection, the health authority determines that the Cottage Food Operation has produced an adulterated food item or was the source of an outbreak of illness caused by a contaminated food item, the health authority may charge and collect from the Cottage Food Operation a fee in an amount that does not exceed the actual cost of the health authority to conduct the investigation.
 - 6. As used in this section:
- (a) "Cottage Food Operation" means a natural person who manufactures or prepares food items in his or her private home or, if allowed by the health authority, in the kitchen of a fraternal or social clubhouse, a school or a religious, charitable or other nonprofit organization, for sale to a natural person for consumption and whose gross sales of such food items are not more than \$35,000 per calendar year.
 - (b) "Food item" means:
 - (1) Nuts and nut mixes;
 - (2) Candies;
 - (3) Jams, jellies and preserves;
 - (4) Vinegar and flavored vinegar;
 - (5) Dry herbs and seasoning mixes;
 - (6) Dried fruits;
 - (7) Cereals, trail mixes and granola;
 - (8) Popcorn and popcorn balls; or
 - (9) Baked goods that:
 - (I) Are not potentially hazardous foods;
 - (II) Do not contain cream, uncooked egg, custard, meringue or cream cheese frosting or garnishes; and
 - (III) Do not require time or temperature controls for food safety.

(Added to NRS by 2013, 512)

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