# WHAT ARE COTTAGE FOODS?



# COLORADO Division of Environmental

Health & Sustainability

Department of Public Health & Environment

Cottage foods are limited types of homemade food products that can be sold directly to informed consumers without licensing or inspections.

Frequently asked questions regarding these foods are answered below.

## **ELIGIBLE FOODS**

Food products that are eligible to be prepared and sold following the requirements of the Colorado Cottage Foods Act include pickled fruits and vegetables with a finished equilibrium pH of 4.6 or below, spices, teas, dehydrated produce, nuts, seeds, honey, jams, jellies, preserves, fruit butter, flour, baked goods, including candies, fruit empanadas, tortillas, and other foods that do not require refrigeration to maintain product safety.

## **NOT ELIGIBLE**

Examples of food products that are not eligible include:

- Baked goods such as cream pies and pastries that contain cream cheese or custard and frostings such as buttercream that require refrigeration for safety.
- Beverages, salsa, hot sauce, or other condiments such as ketchup, salad dressing, and infused oils.
- Products containing meats, poultry\* or fish, including candied bacon.
- Cut fruit and or vegetables. Fruit purees. Jams, jellies, preserves, or fruit butters made with alcohol or fresh peppers.

\*Poultry is not eligible to be sold under the Act. There are laws that do allow a producer to raise, process, and sell whole poultry to consumers. Contact the Colorado Department of Agriculture, Inspection & Consumer Services Division.

## **STARTING A BUSINESS**

What steps do I need to take to start preparing and selling cottage foods?

- 1) Review the Colorado Cottage Foods Act
- 2) Complete a food safety course
- 3) Contact your local city and county offices to inquire about any required business licenses

## **TRAINING**

What type of food safety training is required? Completing one of following options satisfies the requirement:

1) Completing Food Safety Training for Cottage Food Producers offered by Colorado State University Extension

Visit: www.farmtotable.colostate.edu

2) Obtaining a Colorado Food Handlers Card

Visit: www.statefoodsafety.com

3) Completing a food safety course offered by your local public health agency

Visit: www.colorado.gov/cdphe/find-your-local-public-health-agency

## **EGGS**

What types of shell eggs can be sold? Chicken, quail, duck, and turkey eggs. If a producer sells more than 250 dozen shell eggs per month, specific licensing and registration requirements apply.

For chicken egg sales beyond these limits contact the Colorado Department of Agriculture at 303-477-0076.

For all other types of shells eggs contact the Colorado Department of Public Health and Environment, Manufactured Food Program at 303-692-3645, option 2.

How should eggs be stored? Eggs should be maintained at 41°F or below and stored in new, clean, unused egg cartons.

What information is required on egg cartons? The address at which the eggs originated;

The packaging date;

Any eggs not treated for salmonella must also include the following statement:

"Safe Handling Instructions: To prevent illness from bacteria, keep eggs refrigerated, cook eggs until yolks are firm, and cook any foods containing eggs thoroughly. These eggs do not come from a government-approved source."

Additional information can be found at:

www.colorado.gov/aginspection/egg-producers

## PACKAGING AND LABELING

Do cottage foods have to be packaged and labeled?

Yes. All cottage foods must be packaged and labeled with specific information including an exact disclaimer prior to selling them directly to the informed end consumer.

Can cottage foods be labeled as "Organic"?

Cottage foods labeled as "organic" have to be certified by a United States Department of Agriculture-National Organic Program accredited certification agency. A producer may list an ingredient as "organic" without obtaining certification as long as the term "organic" is not on the primary label.

Contact the <u>Colorado Department of Agriculture</u>, Plants Division.

## FREQUENTLY ASKED QUESTIONS



Can cottage foods be labeled as "allergen-free"?

No. All cottage food products must be labeled with a disclaimer stating they were produced in a home kitchen without regulatory oversight and may also contain common allergens.

## SELLING COTTAGE FOODS

Is there a limit on the sales I can earn? Yes, there is a \$10,000 net revenue limit on each product or type of product you produce (e.g. blueberry muffin, banana muffin, chocolate chip muffin).

Where can cottage foods be sold? Food products produced under the Cottage Foods Act can only be sold in Colorado. Interstate commerce is prohibited.

Can a producer sell their cottage food products at multiple locations and events even if they occur on the same day and at the same time? Yes. A producer or their designated representative can sell and deliver the product directly to an informed end consumer.

Can cottage foods be sold out of a store front or via consignment?

Cottage foods must be sold from a producer or their designated representative directly to an informed end consumer. The store and its employees would need to function as the designated representative. Selling cottage foods to and from retail food establishments or food manufacturers is prohibited.

Can Cottage Foods be sold on the internet?
Yes, internet sales are allowed. The mechanism of direct product delivery can be determined between the producer and the informed end consumer as long as it does not involve interstate commerce.

## **INGREDIENTS**

Can pumpkin, sweet potato, and zucchini be used as ingredients for baked goods? Yes. Pumpkin, sweet potato, and zucchini breads can be sold under the Act. Pumpkin or sweet potato pies cannot be sold under the Act because they require refrigeration to maintain product safety.

Is flour considered a raw agricultural commodity?

No. The grain used to make the flour would be considered a raw agricultural product.

Can hemp seeds be used as an ingredient in baked goods?

Hemp seeds and oil from hemp seeds from an approved industrial hemp manufacturer can be used. However, the use of all other parts of the hemp plant including oil produced from the flower or other parts of the plant other than the seed is prohibited. Can whole fresh peppers be used to make pepper jelly?

No. Whole fresh peppers cannot be used to make fruit preserves, jam, or jelly however dried spices such as cayenne pepper, paprika, black pepper etc. are allowed to be used to make these products.

Can raw agricultural commodities such as honey, vegetables, and fruits from a local farmer or bee keeper be used to prepare cottage foods?

Yes. Sourcing ingredients locally, such as fruits, vegetables and unprocessed honey aligns with the intent of the Act to support Colorado's agricultural economy.

Can I add liquor/alcohol to flavor my baked goods, confections and candies?

Yes, as long as they do not contain more than 5% alcohol by weight. The addition of liquor/alcohol should be included in the ingredients list on the product label. Exceeding this limit would render the product ineligible to be sold under the Cottage Foods Act and subject it to the liquor laws and regulations enforced by the <u>Colorado Department of Revenue</u>.

## **BEST PRACTICES**

Where can I find standardized recipes for pickled fruits and vegetables?

- The Colorado State University Extension website
- The <u>National Center for Home Food Preservation</u> website
- The Ball Blue Book\*
- The Ball Complete Book of Home Preserving\*
- The All New Ball Book of Canning and Preserving\*
- Recipes reviewed by a process authority
   \*Available in bookstores and online

## **SANITATION**

How should I clean my work surfaces? Clean work surfaces with soap and water, rinse them with plain water, and then spray or wipe them down with a sanitizer. A sanitizer solution can be made by mixing 1/8 teaspoon unscented, regular bleach (8.25%) with 16 ounces of water.

My home has a private water system, can I prepare cottage foods there?

Yes. Consider testing private water supplies at least once a year.

Visit: <a href="https://www.colorado.gov/cdphe/lab/generalinfo">www.colorado.gov/cdphe/lab/generalinfo</a>

If I'm ill, can I prepare food?

Never prepare food while sick. Continue when you are feeling better and symptom free for at least 24 hours. Wash your hands often and never handle ready-to-eat food with your bare hands.

# Colorado Cottage Foods Act



## COLORADO

Division of Environmental Health & Sustainability

Department of Public Health & Environment

In 2012, the Colorado Legislature enacted the Colorado Cottage Foods Act allowing limited types of food products to be sold directly to consumers without licensing or inspection. This Law has been modified over the past several years; this is what you need to know.

# Requirements

Below are requirements that apply to all cottage food producers.

## Allowed Foods

Foods that are nonpotentially hazardous, or in other words, do not require refrigeration for safety.

Including pickled fruits and vegetables with a finished equilibrium pH of 4.6 or below, spices, teas, dehydrated produce, nuts, seeds, honey, jams, jellies, preserves, fruit butter, flour, and baked goods, including candies, fruit empanadas, tortillas and other similar products that do not require refrigeration for safety. Up to 250 dozen whole eggs per month may also be sold.

For information regarding poultry, contact the Colorado Department of Agriculture: www.colorado.gov/agmain

## Revenue

Producers can earn net revenues of up to \$10,000 per calendar year from each eligible food product.

## Labeling

Package and label your product with the following:



Identification of the food;



The producer's name, address where the food was produced;



The producer's current phone number or email address;



The date the food was produced;



A complete list of ingredients; and



The following disclaimer:

"This product was produced in a home kitchen that is not subject to state licensure or inspection and that may also process common food allergens such as tree nuts, peanuts, eggs, soy, wheat, milk, fish and crustacean shellfish. This product is not intended for resale."

## Not Allowed Foods

- Those that are not shelf stable or are considered potentially hazardous and require refrigeration for safety.
- Pickled fruits and vegetables with a finished equilibrium pH higher than 4.6.
- Animal products such as fish, meat, dairy products and pickled eggs.
- Other products such as lemon curd, pesto, sauces, salsa, dressings and condiments.
- Beverages including juice and kombucha.

## Training

Complete a basic food handling course provided by or comparable to training offered by Colorado State University Extension or a state or local public health department. Ensure the requirements of the course are met, including any additional classes.

For additional information visit: cofarmtomarket.com

## Selling Cottage Foods



Delivered directly from a producer to an informed end consumer and cannot be resold.



Cannot be sold to restaurants or grocery stores.



Sold only in Colorado and not across state lines.



At the point of sale, conspicuously display a placard, sign or card with the following disclaimer:

## Best Practices

All customers expect a safe high quality product and good sanitation. Below are best practices to meet customer expectations.

## Standardized Recipes

Assure safe pickled fruit and vegetable products and preserves by using recipes from reputable sources such as:

- The Colorado State University Extension
- The National Center for Home Food Preservation website
- The Ball Blue Book\*
- The Ball Complete Book of Home Preserving\* or
- Recipes reviewed by a process authority.
   \*Available in bookstores and online.

## Record Keeping

Keeping production records is a valuable business practice and should include the following:

- Name of the product
- Recipe, including procedures and ingredients
- Amount prepared and sold
- Date of preparation
- Date and location of sale
- Gross sales receipts
- pH test results



## **Definitions**

Informed end consumer

A person who is the last person to purchase any product, who does not resell the product, and who has been informed that the product is not licensed, regulated or inspected.

hazardous

Nonpotentially Foods that do not require refrigeration to maintain food safety.

**Pickled** 

Fruits and vegetables that have been preserved in vinegar, brine or similar solution resulting in a finished product equilibrium pH of 4.6 or lower.

Producer

A person, or their designee, who prepares nonpotentially hazardous foods in a home kitchen or similar venue for sale directly to consumer.

A producer may only be a resident of Colorado or an LLC formed in Colorado, consisting or two or fewer members who are both residents of Colorado.

## Sanitation

- Clean work surfaces with soap and water, rinse, and then sanitize them.
- •Sanitizer can be made by mixing 1/8 teaspoon unscented, regular bleach (8.25%) with 16 ounces of water.
- Wash your hands often.
- Never prepare food while sick.
- Keep pets out of food production areas.
- Consider testing private water supplies at least once a year.



## Testing pH

The pH of your finished pickled fruits and vegetables must be 4.6 or below.

- Test the first batch of each recipe during the production season. You can do this yourself or through a certified food laboratory.
- Review information about pH and the use and calibration of a pH meter here:

www.foodsafety.wisc.edu







Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

#### Colorado Cottage Foods Act: Simple Facts

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Can I sell my cottage foods to restaurants or grocery stores?

No. Cottage food producers are not allowed to sell their products to local restaurants or grocery stores.

These types of sales are considered "wholesale" and are not allowed under the law. Cottage food producers must sell their products directly to the consumer/end-user.

In 2012, the Colorado
Legislature enacted Senate
Bill 12-048, allowing
individuals to sell certain
types of cottage food products produced in an
unlicensed home kitchen.
This law was modified during
the 2013 legislative session
by House Bill 13-1158 and
again in 2015 by House Bill
15-1102 and Senate Bill 15085. Copies of the bills and
law can be found at:

www.colorado.gov/cdphe/ cottage-foods-act



Cottage food operations are not required to obtain a license or permit, nor are they inspected by the Division of Environmental Health & Sustainability (DEHS).

Net sales for each product produced cannot exceed \$10,000 annually.
Allowable products are listed on page 2. Sales by consignment or to retail food or wholesale food establishments are prohibited.

Cottage food products must be labeled as outlined in Section 25-4-1614(3)(a) CRS.

See label requirements on page 3.

Eggs must be handled and labeled in accordance with the requirements outlined in Section 35-21-105 CRS.

Again, see label requirements on page 3.

Rules and regulations are being developed to allow for the production of pickled vegetables. Until these rules are developed, the production of these products is not allowed.



#### Cottage food complaints: Know the rules

DEHS or your local public health agency may investigate complaints received concerning cottage food operations. If your cottage food operation is the subject of a complaint, DEHS or local public health representatives may

contact you to conduct an evaluation of your operation.

If you produce foods that are not allowed under the Colorado Cottage Foods Act, you would minimally need to immediately cease the production and distribution of the disallowed product.

If you have any questions regarding the production of a particular cottage food product please contact the Division of Environmental Health & Sustainability at (303) 692-3645.

You can also contact your local health department or government to ensure you meet any business license requirements they may have.

#### What types of Cottage Foods can I produce?

As a cottage food producer, you are allowed to prepare certain food items which are considered non-potentially hazardous. An exception to this is whole eggs; however, the number sold cannot exceed 250 dozen per month.

To the right, a list of acceptable cottage food products is provided.



### What about a list of not allowed food products?

Unless the product is of the type mentioned, it is NOT permissible to be sold under the Cottage Foods Act. If you have any questions regarding the production of a particular cottage food product, please contact the Division of Environmental Health and Sustainability at (303) 692-3645 or visit <a href="www.colorado.gov/cdphe/cottage-foods-act">www.colorado.gov/cdphe/cottage-foods-act</a>

### What about canned or pickled vegetables?

These products will be allowed in the future. Rules and regulations are being developed by DEHS along with stakeholders and community members. Until these regulations are developed, production of these products is not allowed.



#### **Acceptable Cottage Food Products**

Whole Eggs

Spices

Teas

Dehydrated Produce

Nuts

Seeds

Honey

Jams, Jellies and Preserves

Fruit Butter

Flour

Fruit Empanadas

Tortillas

Candies

Certain Baked Goods



#### Did you know?

Raw, uncut produce can be sold in Colorado without licensing or registration. The FDA's Good Agriculture Practices is a good resource for safe practices to assure produce is safe for consumption.

www.fda.gov/food/ resourcesforyou/consumers/ ucm114299





#### **Frequently Asked Questions**

**Question**: How do I sell my cottage food products?

Answer: You may sell your products directly to the consumer in locations such as your residence, roadside stand, farmers' market, community supported agriculture organization, or other similar venue.

**Question:** Am I able to deliver my cottage food products?

**Answer**: Yes, you may deliver your cottage food products directly to the consumer.

**Question:** Do I need a permit or license for my cottage food operation?

Answer: No, you do not need a state permit or license for your cottage food operation. However, you should check with your city or county for any other requirements or recommendations they may have.

Question: Is there any limit to how much I can earn from my cottage food operation?

Answer: Yes, cottage food producers are limited to \$10,000 in net sales per product each year. It is the producers responsibility to comply with applicable laws, rules and regulations regarding the collection of sales tax.

#### Terms and Definitions

Home - Means a primary residence occupied by the producer producing the food allowed by the Colorado Cottage Foods Act.

Non-potentially hazardous - Means any food or beverage that, when stored under normal conditions without refrigeration, will not support the rapid and progressive growth of microorganisms that cause food infections or food intoxications. Does not include low-acid or acidified foods.

Producer - means a person who prepares non-potentially hazardous foods in a home kitchen or similar venue for sale directly to consumers pursuant to this section. A producer may only be:

- (I) An individual who is a resident of Colorado; or
- (II) A limited liability company formed in Colorado consisting of two or fewer members, and of which all members are residents of Colorado.

Tier one foods - are limited to spices, teas, dehydrated produce, nuts, seeds, honey, jams, jellies, preserves, fruit butter, flour, and baked goods, including candies, fruit empanada and, tortillas.

Tier two foods - are limited to pickled vegetables that have an equilibrium pH value of 4.6 or lower.





#### Cottage Food operations requires training

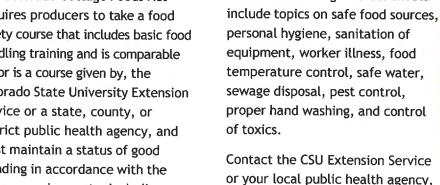
The Colorado Cottage Foods Act requires producers to take a food safety course that includes basic food handling training and is comparable to, or is a course given by, the Colorado State University Extension Service or a state, county, or district public health agency, and must maintain a status of good standing in accordance with the course requirements, including attending any additional classes if necessary.

Safe food handling courses should personal hygiene, sanitation of equipment, worker illness, food temperature control, safe water, sewage disposal, pest control, proper hand washing, and control

or your local public health agency. who may offer this training.

Additional cottage food materials are posted on the Colorado Farm to Market website at:

http://cofarmtomarket.com/









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> 4300 Cherry Creek Drive South Denver, CO 80246 www.colorado.gov/cdphe/dehs

### Labeling Requirements for Cottage Foods

The cottage food law requires specific labeling for the sale of these food products.

A cottage food operation may only sell products which are offered with a label containing the following information (printed in English):

- The identification of the cottage food product;
- The producer's name and the address at which the cottage food was produced;
- The producer's current phone number or email

- The date on which the food was produced;
- A complete list of ingredients; and
- The following statement:

"This product was produced in a home kitchen that is not subject to state licensure or inspection and that may also process common food allergens such as tree nuts, peanuts, eggs, soy, wheat, milk, fish and crustacean shellfish. This product is not intended for resale."

See the labeling example below for guidance.



Can I Make Salsas or Barbecue Sauce?

No. Production of low-acid foods by retort, canning or "acidifying" is not allowed by a cottage food producer. These types of products must be commercially processed and are subject to federal and state regulations and licensing requirements.

#### Chocolate Chip Cookie

Joe Baker 123 Safe Food Ave. Anywhere, CO 12345 (303) 555-1234 jbbaker@cookie.com

Manufacture date: March 15, 2012

Ingredients: Enriched flour (wheat flour, niacin, reduced iron, thiamine, mononitrate, riboflavin and folic acid), butter (milk, salt), chocolate chips (sugar, chocolate liqueur, cocoa butter, butterfat (milk), soy lecithin as an emulsifier), walnuts, sugar, eggs, salt, artificial vanilla extract, baking soda

DISCLAIMER: This product was produced in a home kitchen that is not subject to state licensure or inspection and that may also process common food allergens such as tree nuts, eggs, soy, wheat, milk, fish and crustacean shellfish. This product is not intended for resale.

#### Selling of Eggs



Eggs can be sold directly from the person's own premises, roadside stand, farmers' market, community supported agricultural organization, or any similar venue without health

department licensing or inspection.

The number of eggs sold is limited to 250 dozen per month and must be handled in accordance with the requirements of Section 35-21-105, C.R.S.

The label on the egg package must contain the address at which the eggs originated, the date of packaging as well as the statement, "These eggs

do not come from a government-approved source."

Any eggs not treated for salmonella must also include the following statement on the package:

"Safe Handling Instructions: To prevent illness from bacteria, keep eggs refrigerated, cook eggs until yolks are firm, and cook any foods containing eggs thoroughly."

Please refer to the Colorado Department of Agriculture's website for more information:

www.colorado.gov/pacific/ aginspection/egg-producers

# Growing beyond cottage foods

As a cottage food producer you are limited to selling certain foods, at specific locations within Colorado and your net revenue is restricted to \$10,000 per product. As your business expands beyond these limits, you will need to register with the Colorado Department of Public Health and Environment (CDPHE) as a food manufacturer and or become licensed as a retail food èstablishment. More information is provided below to help you grow a successful business beyond cottage foods.



## Retail Food Establishments are required to:

- √ Use an approved commercial kitchen.
- √ Comply with the Colorado Retail Food Establishment Rules and Regulations.
- √ Pay an annual license fee.

## Retail Food Establishments can:

- Produce and sell unlimited types of foods.
  Have any business structure and unlimited net revenue.
- Cater events.
- Sell products directly to end consumers within and outside of Colorado.

### For more information visit:

https://www.colorado.gov/cdphe/restaurants-and-grocery-stores



## Food Manufacturers are required to:

- √ Use an approved commercial kitchen.
- √ Comply with the Colorado Wholesale Food and Shellfish Regulations.
- √ Comply with the Food Safety Modernization Act (FSMA).
- √ Register with the Food and Drug Administration (FDA) if you have incoming or outgoing products and or ingredients that move in interstate commerce.
- √ Pay an annual registration fee.

## Food Manufacturers can:

- Produce and sell unlimited types of foods.
  Have any business structure and unlimited net revenue.
- Sell products to consumers and other businesses for resale within Colorado and beyond its borders when registered with the FDA.

### For more information visit:

https://www.colorado.gov/cdphe/food-manufacturing-and-storage

https://www.fda.gov/Food/GuidanceRegulation/FoodFacilityRegistration





				ND VEGETABLES PRODUCED UNDER THE CO		Pick-Up
acility Name	Address	City	Contact	Email	Phone	Day
elta County						
lealth						
epartment	255 W 6th St	Delta	Pat Sullivan	psullivan@deltacounty.com	970-874-2183	Monday
unnison Valley						
ospital	711 N Taylor	Gunnison	Tina Wilson	tinawilson@gvh-colorado.org	970-641-7259	Monday
it Carson						
emorial	204 444 64	B. Harris	Lab (Jeanie	No. of a balance	740 244 4720	
lospital	286 16th St	Burlington	Tracy)	jtracy@kcchsd.org	719-346-4730	Monday
ongmont	1050 W Mountain View	Longmont	Datty Trums	patty trump@lubcaros org	202 451 5075	Monday
nited Hospital lesa County	1950 W Mountain View	Longmont	Patty Trump Sarah	patty.trump@luhcares.org	303-651-5075	Monday
ealth Dept	510 29-1/2 Rd	Grand Junction	DeBrucque	sarah.debrucque@mesacounty.us	970-683-6620	Monday
Controse County	310 29-172 Ru	Grand Junction	Debrucque	saran.debrucque@mesacounty.us	770-003-0020	Moriday
P	1845 S Townsend	Montrose	Carmen Mora	cmora@montrosecounty.net	970-252-7053	Monday
oudre Vallev	10.13.3.10111136114	Morrerose	carrier mora	emora@monerosecounty.net	770 232 7033	Monday
lospital	1024 Lemay Ave	Ft Collins	Ashley Luzano	ashley.luzano@uchealth.org	970-495-8729	Monday
ueblo City			,			1
ounty Health			Lab (Kathy		719-583-4300,	
epartment	101 W 9th St.	Pueblo	Nelson)	kathy.nelson@pueblocounty.us	option 6	Monday
an Juan Basin						
lealth						
epartment						
Ourango)	281 Sawyer Drive	Durango	Kristi Stump	kstump@sjbhd.org	970-335-2016	Monday
an Luis Valley						
egional Medical	404 Planas Ava	A1	Lab (Mara Direct)	and the second second second	740 500 2544	AAd -
linic	106 Blanca Ave	Alamosa	Lab (Mary Rice)	mary.rice@slvrmc.org	719-589-2511	Monday
alley View	1906 Blake Ave	Glenwood	Nicole Fisher Janette Refior	nfisher@vvh.org	970-384-7611 970-384-7590	Monday
ospital Yeld County	1900 Dlake Ave	Springs	Janette Kenor	jrefior@vvh.org	9/0-304-/390	Monday
ealth						
eattii epartment	1555 N 17th Ave	Greeley	Mark Thomas	mthomas@weldgov.com	970-400-2273	Monday
ampa Valley	1333 IV 17 ULAVE	Greetey	maik illoillas	minomaseweragov.com	770-400-2273	Moriuay
ledical Center	1024 Central Park Dr	Steamboat	Paul Hill	paul.hill@yvmc.org	970-879-1322	Monday

#### **Bleach Sanitizer Dilutions**

Approved concentration range for sanitizing food contact surfaces is 50-200 ppm\* using bleach containing between 5.25% to 8.25% hypochlorite. **Bleach residue on food contact surfaces above 200 ppm is considered toxic, so never exceed this amount.**\*ppm=parts per million



Sanitizer Concentration 50-200 ppm			
Concentration (ppm)	Amount Bleach using 5.25% to 8.25% hypochlorite	Amount Water	
50	1/2 tsp	1 gallon/16 cups	
50	1/8 tsp	1 quart/4 cups	
50	1/16 tsp	1 pint (2 cups)	
100	1 tsp	1 gallon/16 cups	
100	1/4 tsp	1 quart/4 cups	
100	1/8 tsp	1 pint (2 cups)	
200	2 tsp	1 gallon/16 cups	
200	1/2 tsp	1 quart/4 cups	
200	1/4 tsp	1 pint (2 cups)	
Per CO Dept. Publi	c Health and Environment	(CDPHE)	

#### You will need:

- 1. Unscented, regular chlorine bleach (NOT 'no-splash' type), with concentration range of 5.25%-8.25%. *Concentrations less than this range are not recommended.*
- 2. Designated spray bottle and/or open container properly <u>labeled</u>.
- 3. Measuring spoons OR labeled dropper bottle-measure first to know number of drops to use (approx. 3 droppers full = ¼ tsp. bleach).

#### Steps:

- Carefully measure into your spray bottle the correct amount of bleach to water amounts, according to
  the table above. A concentration range between 50-100 ppm advised, as bleach is corrosive to surfaces
  in high concentrations, as well as toxic if bleach residue is ingested through contact with food.
  - a. Solution stored in closed spray bottle should remain active for up to one week.
  - b. Solution stored in open containers must be made fresh daily (or as more often as needed during food preparation).
- 2. To apply, follow correct procedure both before and after food preparation: Wash/Rinse/Sanitize/Air Dry.
  - a. Wash counter tops with hot soapy water.
  - b. Rinse with clean water. Spray with sanitizer solution-allow 1 minute contact time.
  - c. Air dry or wipe with clean paper towel.
- 3. Always store sanitizer and other chemicals away from food.

Note: If using a commercial sanitizer, be sure label states that product is "safe for use on food contact surfaces."



#### A Cottage Food Budgeting Example

Producing strawberry jam in home kitchen:



- Using 2 water bath canners on stove top
- Comparing 3 different sources for ingredients
- Using tested recipe from Ball for very small batches (test your own recipe for larger batches!)
- Budgeting to produce 500 ½ pints (8 oz jars) in 32 jar batches (16/canner)
- Comparing sales locations

This example is based on water bath processing of strawberry jam, but you can construct a similar budget for dehydrating, roasting or baking a product too. Note that all expenses in this example are calculated per product line as well as per individual unit of product produced. This is designed to make the example more realistic since it is unlikely that anyone would just sell one product such as strawberry jam; rather they would have several product lines.

#### Your investment costs

Item	Unit price	Total cost	Expected life of item
Purchase of 2 water bath canners	80.97	161.94	10 years
Canning equipment	21.99	21.99	5 years
ServSafe Food Manager training	125.00	125.00	5 years
Sales tax license (fee + \$50 deposit)	68.00	68.00	One-time expense
Insurance premium	500.00	500.00	1 year
Time spent on licensing & training (10 hours)	11.42	114.15	5 years

Note: These are estimated start-up costs for home production, assuming you already have some small equipment on hand, such as pots, ladles, etc.

Amortizing these costs over their expected useful life provides the following breakdown of fixed expenses:

Item	Cost per year	Estimated cost per product line	Cost per ½ pint of jam
Purchase of 2 water bath canners	16.19	3.24	0.01
Canning equipment	4.40	0.88	0.00
ServSafe Food Manager training	25.00	5.00	0.01
Sales tax license (fee + \$50 deposit)	68.00	13.60	0.03
Insurance premium	500.00	100.00	0.20
Time spent on licensing & training (10 hours)	22.83	4.57	0.01

The costs of produce used to make your cottage food product will vary, depending on where you obtain it. The table below shows per unit prices for strawberries purchased from three different sources:

Strawberry purchase location	Price per quart	Price per pound	
Home grown	\$1.33	\$1.73	Costs of small-scale field production
			Average USDA Agricultural Marketing
Retail store	\$1.58	\$2.06	Service prices for strawberries, for May
			5 through July 5, 2012
Farmars' market	¢0.00	¢10.40	Colorado State University Extension's
Farmers' market	\$8.00 \$10.40		farmers' market price reporting data

Your potential costs of production:

Item cost	Based on production of 500 jars
Labor: processing (based on a labor rate of \$10/hour + payroll costs)	\$ 267.54
Water	\$ 3.28
Electricity for preparation	\$ 3.75
Jars and lids	\$ 395.42
Produce costs (using homegrown strawberries as an example)	\$ 208.43
Pectin	\$ 116.12
Lemon juice	\$ 70.31
Sugar	\$ 116.67
Jar labels	\$ 22.96
Sales tax on product sold at market	\$ 67.50
Other marketing costs (for attending 1 farmers' market for the season)	\$ 404.72 *
Total variable costs	\$ 1,676.70

<sup>\*</sup>Note: Costs are spread over 5 different product lines.

Your net return on your product will depend on where you sell it, as illustrated below.

#### 1. Sell your product at a farmers' market:

	Source of strawberries:			
Summary:	Your own produce	Produce purchased from retail grocery	Produce purchased at farmers' market	
1. Fixed costs per 1/2 pint	\$ 0.25	\$ 0.25	\$ 0.29	
2. Variable costs per 1/2 pint	\$ 3.35	\$ 4.01	\$ 5.44	
3. Total costs per 1/2 pint	\$ 3.61	\$ 4.26	\$ 5.72	
4. Expected revenue per 1/2 pint	\$ 6.00	\$ 6.00	\$ 6.00	
5. Expected returns per 1/2 pint	\$ 2.39	\$ 1.74	\$ 0.28	
Net return on 500 jars	\$ 1,195.00	\$ 870.00	\$ 140.00	

#### 2. Sell your product from your home:

Source of strawberries:			es:
Summary:	Your own produce	Produce purchased from retail grocery	Produce purchased at farmers' market
1. Fixed costs per 1/2 pint	\$ 0.25	\$ 0.25	\$ 0.29
2. Variable costs per 1/2 pint	\$ 2.67	\$ 3.33	\$ 4.76
3. Total costs per 1/2 pint	\$ 2.93	\$ 3.58	\$ 5.04
4. Expected revenue per 1/2 pint	\$ 6.00	\$ 6.00	\$ 6.00
5. Expected returns per 1/2 pint	\$ 3.07	\$ 2.42	\$ 0.96
Net return on 500 jars	\$1,535.00	\$1,210.00	\$ 480.00

Fact Sheet

### **Sampling Safely at Farmers Markets**

Also applies to farm stands and related events

5 Gallon Container

5 Gallon Discard

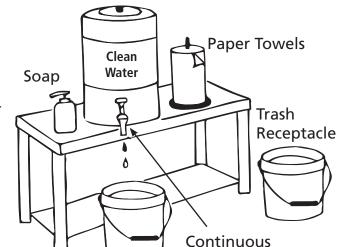
Bucket



Londa Nwadike, Kansas State University/ University of Missouri Extension Food Safety Specialist

#### **Sampling regulations**

- Regulations vary by location. Some localities may require food handlers certificates, licensing, or other requirements for sampling. Check with your local health department for specific details.
- Wash produce before cutting and offering.
- If cutting off site, you should cut at an inspected location.
- If cutting on site, the vendor needs:
  - To use gloves or utensils to prevent bare hand contact with food that will not be cooked before eating,
  - Handwashing facility, and
  - Washing/sanitizing station
    - Use this before and during process



**Example Handwashing Station** 

Flow Spigot

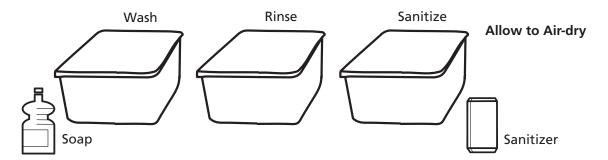
#### Hand wash station estimated costs

Item	Options	Where to buy	Cost
Mater dispenser	1: Insulated 10 gallon water dispenser (hands free spout)	Discount store	\$45
Water dispenser	2: Insulated 5 gallon water dispenser	Discount store	\$20
Bucket to catch water	5 gallon - can be second-hand	Second-hand store	\$5
Paper towel holder		Discount store	\$2.50
Paper towels		Any grocery/store	\$1
Liquid hand soap		Any grocery/store	\$1
Bin to collect trash	Any trash container	Discount store	\$5

1

#### Washing and sanitizing station

- Use potable warm water (>110°F) in all 3 tubs. Use dish soap in the wash tub and only clean water in the rinse tub.
- For the sanitizing tub, use an approved sanitizer and the recommended test kit to test the concentration of the sanitizer. Contact your local health department for more specific information.
  - Generally, if using chlorine bleach, use 1 teaspoon unscented bleach to one gallon of water.
- Allow to air dry on clean paper towels or racks.



#### Washing and sanitizing station estimated costs

Item	Options	Where to buy	Cost
Dishpans - 3	Buckets also OK	Discount or other	\$2 each
Dish soap	Any	Any store	\$2
Dishrags	Must be clean	Any store	\$1
Approved chemical sanitizer	Bleach (can also use other approved sanitizer)	Any store	\$1



#### **Sampling Regulations**

- Provide individual servings, separate from sales food
  - Use toothpicks or individual cups
  - Public should not touch anyone else's sample
- Cut produce must be kept below 41°F or discarded after more than 2 hours if above 41°F.
  - Check temp hourly with thermometer
  - Put out small amounts

#### **More Sampling Regulations**

- Sampling should be done under a cover
  - Tent or umbrella as necessary
- Keep insects, etc. off
  - Fan, fly screen, cover or other means
- Trash receptacle nearby



Reviewed by Nancy Beyer, Quality Assurance and Recall Coordinator of the Missouri Department of Health and Senior Services. Please contact your local public health inspector or the Missouri Department of Health (tel: 573-751-6090) for more information.

**Extension** 

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## **Division of Environmental** Health & Sustainability

Department of Public Health & Environment

# **Cottage Foods Checklist**

Use the checklist below to verify whether or not a producer is eligible to sell their products under the Cottage Foods Act. Additional market, food product liability insurance, business license, tax, and zoning requirements may vary.

cottage food producer must:
☐ Be a Colorado resident
Operate a cottage food business as a single person proprietor or an LLC of 2 or fewer owners
$\square$ Be present or have a designated representative available, in-person to
answer questions and sell product(s) directly to the informed end consumer
☐ Complete an approved food safety course that includes basic food handling and renew their training as required by each course
(Having a copy of their food safety training certificate posted or available at their point of sale is a best practice)
☐ Not exceed a net revenue of \$10,000 per product
nere can cottage foods be sold?
☐ Producer's Residence
<ul> <li>The producer should confirm that a home-based business is authorized by their home owner's association and local zoning requirements.</li> </ul>
Internet
<ul> <li>Shipping or delivery of the product(s) outside of Colorado is prohibited.</li> </ul>
☐ Farmers' market or similar venue such as a road side stand, community supported agriculture program (CSA), or a store front such as a gift shop or clothing store
★Cottage foods cannot be sold from a retail food establishment or food manufacturer such as a restaurant, mobile unit, grocery store, a co-packer or commercial food producer or distributor selling licensed and inspected food(s) for resale.
$\square$ All points of sale whether on the internet or in-person must provide a visible placard or
sign that states:
"This product was produced in a home kitchen that is not subject to state licensure or inspection. This product is not intended for resale."
w do cottage foods need to be packaged and labeled?
☐ Products must be pre-packaged in food grade material and labeled with:
☐ Product name
☐ Producer name
□ Physical production address
□ Producer's current e-mail or phone number
□ Production date
Complete list of ingredients, in descending order by weight
☐ Disclaimer statement:
"This product was produced in a home kitchen that is not subject to state licensure or inspection and that may

also process common food allergens such as tree nuts, peanuts, eggs, soy, wheat, milk, fish, and crustacean

shellfish. This product is not intended for resale."

## Eligiblity, Samples, & Contact Information

### What foods are eligible?

- Candies and confections including cotton candy and fudge
- Canned fruits in syrup
- Certain baked goods including non-perishable breads, muffins, fruit pies, fruit empanadas, cookies, cakes, and tortillas
- Dehydrated produce and dried pasta
- Dry mixes such as cake, cookie, donut and spice blends
- Eggs up to 250 dozen whole shell eggs, per calendar year; eggs must be maintained cold at 33°F 41°F and sold in new and properly labeled cartons
- Flavored vinegar and bitters
- Flour
- Freeze dried produce
- Honey
- Jams, jellies, marmalades, compotes, chutneys, conserves, preserves & fruit butters
- Nuts & seeds
- Pickled fruits & vegetables including some fermented fruits and vegetables such as kimchi and sauerkraut with a pH of 4.6 or below (Having a copy of the pH test results available is a best practice; storing fermented fruits and vegetables at 41°F or below to maintain quality is a best practice)
- Syrups
- Roasted coffee beans
- Spices and teas



### The following products are ineligible to be sold under the Cottage Foods Act:

- Foods that require refrigeration for safety
- Meat products, bacon, jerky, chicharron, poultry, fish and shellfish products; these products are also prohibited from being used as ingredients or toppings
- Baked or fried goods having cream, custard or meringue fillings or toppings, cakes or pastries with buttercream frosting or cream cheese icing or fillings; or other frostings requiring refrigeration for safety
- Beverages
- Pumpkin or sweet potato pie, cream pies
- Sauces and condiments including barbecue, pizza, hot, pasta, chili, ketchup, mustard, salsa, or salad dressing
- Canned vegetables or pumpkin butter
- Cut fresh fruits and vegetables, fruit or vegetable juices or concentrates, fruit or vegetable purees
- Fresh pasta
- Flavored oil
- Pepper jelly and fruit preserves, jams, or jellies made with fresh peppers or homemade dehydrated peppers
- Fruit preserves, jams, or jelly made with alcohol
- Cannabidiol (CBD) and Tetrahydrocannabinol (THC) containing products

## Can food samples be provided?

Yes, as long as food grade gloves, tissues, tongs, toothpicks, or other items are used to avoid bare hand contact with food. Handsink requirements may vary at each point of sale and from county to county. Preparing samples at home is a best practice. Contact <u>your local public health agency</u> for handsink requirements.

## Who can I contact with questions, concerns or complaints?

For questions, concerns, or complaints regarding the Cottage Foods Act contact the <u>Colorado Department</u> of <u>Public Health & Environment</u> by phone at 303-692-3645, option 3 or email <u>cdphe\_iepu@state.co.us</u>

For information about food safety training contact your local extension office: <a href="https://extension.colostate.edu/field-offices/">https://extension.colostate.edu/field-offices/</a>

Last Updated January 2020



#### Food Allergens Information for Cottage Foods Producers

#### Eight allergens cause 90% of food allergies:

Milk; Eggs; Peanuts; Tree Nuts; Soybeans; Wheat; Fish and Shellfish

#### What is an allergic response to a food?

- An allergic reaction occurs when the immune system mistakenly attacks a food protein
- Allergic responses can range from mild discomfort to fatal reactions
- Different than a food intolerance (abnormal response to a food, but does not involve the immune system)

#### What are the symptoms of a food Allergy?

**Symptoms-** typically appear within minutes or up to two hours after eating a food to which someone is allergic. Symptoms can include:

- Hives, itching, skin rashes
- Swelling of the lips, face, tongue or throat
- Wheezing, nasal congestion, trouble breathing
- Abdominal pain, diarrhea, nausea, vomiting
- Dizziness, lightheadedness, fainting

#### How do I avoid foods that may contain an allergen?

Identifying allergens is not always easy for consumers. Many food allergens have multiple names or are present in non-obvious food products.

- List each food ingredient clearly and accurately on the food label
  - · i.e. Whey is a component of milk and chicken soup base that can contain wheat and soy ingredients

#### Colorado Cottage Food labels must include a <u>disclaimer statement</u> that addresses allergens:

• **DISCLAIMER**: This product was produced in a home kitchen that is not subject to state licensure or inspection and that may also process common food allergens such as tree nuts, peanuts, eggs, soy, wheat, milk, fish, and crustacean shellfish. This product is not intended for resale.

#### What Precautions Should a Cottage Food Producer Take to Avoid Food Allergens?

- Proper food handling and storage are important to avoid <u>cross-contact</u> with a potentially allergenic food item.
   Know what ingredients you use that contain possible allergens
- Have a separate storage and food preparation areas for allergen-free ingredients
- Should an allergen spill or come in contact with other food items, clean and sanitize as well as possible and disposal of all contaminated materials to ensure product integrity

#### **Gluten-Free Food Preparation**

To make gluten-free products you do not have to be in a gluten-free kitchen, but it is important to take steps to protect your gluten-free foods from contact with gluten.

- Use separate equipment as much as possible-especially for items that may be hard to thoroughly clean
- i.e. Colanders are hard to clean to completely remove gluten (Color coding with a permanent marker can help keep all kitchen utensils separate)
- Avoid cross contact (ie. flour dust can float in the air for several hours and contaminate your gluten-free products
- Clean and sanitize all surfaces, utensils, knives, pans, grills, thermometers, cloths, and sponges carefully after each use and before cooking gluten-free foods
- Store gluten-free foods <u>away from or above</u> gluten-containing foods in the refrigerator and storage areas
- Use pure spices rather than blends; Avoid purchasing staples from bulk bins

## Fruits & Vegetables Start Fresh • Stay Safe!



Have a plan. Colorado produce is harvested at peak quality so most fruits and vegetables from farmers' markets should be enjoyed within a few days after purchase. Preserve excess produce by freezing, canning, or dehydrating to enjoy in the off-season.

**Be diverse.** Eat a wide variety of fruits and vegetables to reap their vitamin and phytochemical benefits! This may also help limit exposure to any pesticide residues associated with a particular crop.

**Wait to wash.** Washing produce before storing may promote bacterial growth and speed up spoilage, so it is generally recommended to wait and wash fruits and vegetables just before use. If you choose to wash before storing, dry produce thoroughly with clean paper towels.

**Store safely.** Produce that requires refrigeration should be stored at 35-40°F in vegetable bins or containers on shelves above raw meats, poultry, or seafood to prevent cross contamination. Storing fresh produce in cloth produce bags or perforated plastic bags will allow air to circulate.

**Trim well.** Cut away damaged areas and remove torn outer leaves of leafy vegetables before washing.

**Start clean.** Bacteria from the outside of produce can be transferred to the interior during cutting or peeling so the

best approach is to start with clean hands, cutting boards, and utensils before washing and preparing fresh produce.



#### Learn more.

Visit Colorado State University Extension's **Farm to Table Colorado** website for more information on selecting, storing, and preserving fresh produce.



farmtotable.colostate.edu

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### Guide to Washing Fruits & Vegetables

#### Apples, cucumbers, and other firm produce.

Wash well under running water and scrub with a vegetable brush, including the stem area, before peeling and cutting.

**Grapes, cherries, and berries.** Store unwashed until ready to use, but discard spoiled or moldy fruit before storing to prevent the spread of spoilage organisms. Wash gently under cool running water right before use.

**Herbs.** Rinse by swishing in a bowl of clean, cool water or under running water and dry with paper towels.

Leafy green vegetables. Separate and individually rinse the leaves of lettuce and other greens, discarding the outer leaves if torn or bruised. Immersing leaves in a clean bowl of cool water for a few minutes helps loosen attached soil. After rinsing in a bowl or under running water, blot dry with paper towels or use a salad spinner to remove excess moisture.

**Melons.** The rough, netted surfaces of some types of melon can harbor microorganisms which transfer to the flesh during cutting. To minimize the risk of cross contamination, use a vegetable brush and wash melons thoroughly under running water before slicing or peeling. Hot water has been shown to reduce bacteria on the surface of melons.

**Mushrooms.** Refrigerate, unwashed in a paper bag. When ready to use, clean with a soft brush or wipe with a wet paper towel.

**Peppers.** Wash well under running water. When washing hot peppers, keep hands away from eyes and face; wash hands well afterwards or wear gloves.

Peaches, plums, and other soft fruits. Wash under running water and dry with paper towel.

**Root vegetables.** Peel potatoes, carrots, turnips, and other root vegetables, or clean them well with a firm scrub brush under running water.



### Guide to Washing Fruits & Vegetables

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#### **High Altitude Food Preparation**





Newcomers to Colorado or those traveling to the mountains are often surprised when favorite recipes made perfectly at sea level fail to produce expected results when made at higher elevation. Whether boiling eggs, preparing a roast or baking cookies, small adjustments can often improve the results. More complex foods may require additional modifications. Researchers with Colorado State University's Extension and Department of Food Science and Human Nutrition have a long tradition of baking research and development of altitude-tested recipes, available in the Resource section.

At altitudes above 3,000 feet, preparation of food may require changes in time, temperature or recipe. The reason— lower atmospheric pressure due to a thinner blanket of air above. At sea level, atmospheric pressure is 14.7 pounds per square inch (psi), at 5,000 feet it's 12.3 psi, and at 10,000 feet only 10.2 psi - a decrease of about 1/2 pound per 1,000 feet.

### Decreased pressure affects food preparation in two ways:

- 1. Water and other liquids evaporate faster and boil at lower temperatures.
- 2. Leavening gases in breads and cakes expand more quickly.

Table 1: Approximate boiling temperatures of water at various altitudes		
Altitude Temperature		
Sea Level	212 degrees F	
2,000 ft.	208 degrees F	
5,000 ft.	203 degrees F	
<b>7,500 ft.</b> 198 degrees F		
10,000 ft.	193 degrees F	



#### **Cooking**

The temperature at which water boils declines as elevation rises (Table 1). Because of this, foods prepared by boiling or simmering cook at a lower temperature at high altitude than at sea level, and thus, require a longer cooking time. This includes vegetables, legumes, pot roasts, soups and stews.

- Meats cooked by simmering or braising may require one-fourth more time at 5,000 feet than at sea level.
- Oven temperatures, however, are not affected by altitude, so sea-level instructions work for oven-roasted meats.
- Hard-cooked eggs will take longer to cook. A "3-minute" egg may take 5 minutes to cook at 5,000 feet.
- High altitude areas are also prone to low humidity, which causes the moisture in foods to evaporate more quickly during cooking. Covering foods during cooking will help hold in moisture.

#### **Deep-fat Frying**

The lower boiling point of water in foods requires lowering the temperature of the fat to prevent food from over browning on the outside while being under-cooked on the inside. The decrease varies according to the food being fried, but as an estimate:

• Lower the frying temperature about 3 degrees F for every increase of 1,000 feet in elevation.



#### **Microwave Cooking**

Due to faster evaporation of liquids at high altitude, microwave cooking times may need to be adjusted. Follow your recipe or package instructions and use a food thermometer to determine if the safe minimum internal temperature has been reached, cooking longer if necessary.

#### **Slow Cookers**

At high altitudes, the slow cooker simmers at a lower temperature, making it more difficult for the food to reach a safe temperature and for bacteria to be destroyed. If your slow cooker has an adjustable temperature control, select a setting that will maintain the food at 200°F or higher. If your slow cooker has both a high and low setting, start the food cooking on high for the first hour; then either continue to use high or turn it to the low setting for the remainder of cooking. Allow longer cooking times at high altitudes and do not remove the lid. It can take 20 minutes or longer for the lost steam and heat to be regained each time the lid is lifted.





#### Candy, Syrup and Jelly Making

Both humidity and altitude affect candy making. To prevent excessive water evaporation during the cooking of sugar mixtures at altitude, cook to a "finish" temperature that is lower than that given in sea-level recipes.

If you use a candy thermometer, first test the temperature at which your water boils, then reduce the finish temperature by the difference between the temperature of your boiling water and 212 degrees.

This is an approximate decrease of 2

degrees for every increase of 1,000 feet in elevation.

You may also use the cold-water test, which is reliable at any altitude. Cook jellies to a finish temperature that is 8 degrees above the boiling point of your water.

#### **Puddings and Cream-Pie Fillings**

Above 5,000 feet, temperatures obtained with a double boiler are not high enough for maximum gelatinization of starch. Therefore, use direct heat rather than a double boiler.

#### **Freezing**

An important step in preparing vegetables for freezing is heating or "blanching" before packing. At 5,000 feet elevation or higher, heat 1 minute longer than the blanching time given for sea level.

#### **Canning**

Fruits, tomatoes and pickled vegetables can be safely canned in a boiling water bath. However, because the temperature of boiling water is lower at higher elevations, follow these guidelines for boiling water bath canning at elevation:

- Increase processing time by 1 minute for each 1,000 feet above sea level if the sea level processing time is 20 minutes or less.
- If the sea level processing time is more than 20 minutes, increase by 2 minutes per 1,000 feet.

Other vegetables, meats and poultry (low-acid foods) must be canned in a steam pressure canner at 240 degrees F for the appropriate time to destroy heat-resistant bacteria. At sea level to 2000 feet, 11 pounds of steam pressure will produce this temperature. Above 2,000 feet, steam pressure must be increased to reach 240 degrees F as illustrated in Table 2.

Table 2: Pressure required to reach 240 degrees F			
Altitude Pressure Require			
Sea Level-2,000 ft.	11 lb.		
2,001-4,000 ft.	12 lb.		
4,001-6,000 ft.	13 lb.		
6,001-8,000 ft.	14 lb.		
8,001-10,000 ft.	15 lb.		





#### **Yeast Breads**

High altitude has its most pronounced effect on the rising time of bread. The shortened rise period can interfere with flavor development, thus less yeast may be used to slow the rise time. Also, the dough can be proofed twice to allow more time for the gluten to fully develop. Dough should rise only until just double in bulk, as over-proofing can result in a heavy, collapsed loaf.

Flours tend to be drier and thus able to absorb more liquid in high, dry climates. Therefore, less flour or possibly additional liquid may be needed to moisten the dough to proper consistency.

#### **Bread Machines**

Many bread machine manuals offer tips and special setting options for high altitude. General suggestions using bread machines at altitude may include:

- Decrease yeast by ½ to ½ tsp. for every package (2 ½ tsp.) called for in the recipe.
- Add 1 to 2 T. of additional liquid per cup of flour in the recipe. However, be careful not to add too much liquid. The dough must come clean from the sides during the final stages of mixing.
- Perhaps use a longer mixing cycle to allow the gluten to develop more fully.

#### **Pie Crusts**

Although not generally affected by altitude, slightly more liquid may improve

texture. To prevent a soggy crust, bake in the lower third of the oven, closer to the heating element.

### Biscuits, Muffins and Quick Breads

Quick breads vary from muffin-like to cake-like in cell structure. Although the cell structure of biscuits and muffin-type quick breads is firm enough to withstand the increased internal pressure at high altitudes without adjustment, a bitter or alkaline flavor may result from inadequate neutralization of baking soda or powder. If this occurs, reducing the baking soda or powder slightly will usually improve results.

Quick breads with a cake-like texture are more delicately balanced and usually can be improved at high altitudes by following the adjustment recommendations given for cakes.

#### **Cookies**

Many cookie recipes contain a higher proportion of sugar and fat than necessary, even at low altitudes, causing cookies to sprawl on the baking sheet. Although many sea-level cookie recipes yield acceptable results at high altitudes, they often can be improved by:

- a slight increase in baking temperature,
- a slight decrease in baking powder or soda, a slight decrease in fat and/or sugar, and/or
- a slight increase in liquid ingredients and flour.



#### **Practical Baking Tips**

- Do not assume that your sea level recipe will fail. Try it first. It may need little or no modification. That said, the higher the elevation, general rules of thumb may not apply. Make one modification at a time to know what works best.
- For improved nutrition and a heartier texture, use whole wheat pastry flour in place of half the all-purpose flour called for in cookies, cakes and pies.
- Foods tend to taste blander at higher elevations, so at 7,000 ft. or above, add extra spices to enhance flavors of baked goods.
- Take non-stick precautions seriously! At higher altitude, baked goods have a tendency to stick to the pan.

#### Cakes

Above 3,000 feet, decreased atmospheric pressure may result in excessive rising of cakes. The cell structure stretches, making the texture coarse, or breaks the cells, causing the cake to fall. Table 3 illustrates adjustments to make. Try the smaller adjustment first, as this may be all that is neeed.

- Leavening: Measure accurately and reduce alike both baking powder and/or baking soda.
- Increase baking temperature by 15 to 25 degrees F to help "set" the batter before cells formed by the leavening gas expand too much.

### Extension

- Excessive evaporation of water at high altitude leads to high concentration of sugar, which weakens the cell structure. Therefore decrease sugar in the recipe and increase liquid.
- In making rich cakes at high altitudes, you might have to reduce shortening by 1 or 2 tablespoons. Fat, like sugar, weakens the cell structure. Also, increasing the amount of egg strengthens the cell structure and may prevent the too-rich cake from falling.

#### **Angel Food and Sponge Cakes**

The leavening gas for these is largely air. Beat egg whites only until they form shiny peaks that droop slightly - not stiff and dry, which will cause collapse of cells. Strengthen cell structure by using less sugar and more flour, and a higher baking temperature.

#### **Cake Mixes**

Adjustments usually take the form of strengthening the cell walls of the cake by adding all-purpose flour and liquid. Suggestions for high-altitude adjustments are provided on most cake mix boxes.

Table 3: Cake-recipe adjustment for high altitude			
Adjustment	3,500 to 6,500 ft.	6,500 to 8,500 ft.	8,500 to 10,000 ft.
Reduce baking powder, for each tsp., decrease:	1/8 tsp.	1/8-1/4 tsp.	1/4 tsp.
cup, decrease:		0-2 Tbsp.	1-3 Tbsp.
Increase liquid, for each cup, add:	1-2 Tbsp.	2-4 Tbsp.	3-4 Tbsp.



#### Resources

#### **CSU Extension Fact Sheets**

Visit the CSU Extension Farm to Table website for printable high altitude food preparation and preservation fact sheets:

Cost of Preserving and Storing Food Food Preservation Without Sugar or Salt Making Jellies Canning Fruit

Canning Vegetables

Canning Tomatoes and Tomato Products

Making Pickles

Making Pickled Peppers

**Processing Chili Peppers** 

**Botulism** 

Freezing Fruit

Freezing Vegetables

**Drying Fruits** 

**Drying Vegetables** 

Leathers and Jerkies

Smoking Poultry Meat

Gluten-Free Baking

#### http://farmtotable.colostate.edu

#### **CSU Extension County Offices**

Family & Consumer Sciences Extension agents can assist you with:

- Food safety information and classes
- Food preservation workshops
- Master Food Safety Advisor volunteers
- Pressure canner gauge testing
- Cottage food business product support and more!



The following resources are also available for purchase from the CSU Extension Resource Center:

www.csuextstore.com/store/pc/home.asp

- *High Altitude Baking booklet*; revised 2010. This 32 pg. booklet is a condensed version of the complete guide with recipes tested for altitudes between 3,000-7,000 feet. (\$5.00)
- A Complete Guide to High Altitude Baking; 2005. Editor P. Kendall, Colorado State University Extension. A collection of 200 delicious recipes and tips for perfect high altitude cookies, cakes, breads and more. (\$15.95)

#### eXtension Ask an Expert

For expert answers and help from Extension/University staff and volunteers from across the United States, go to:

https://ask.extension.org/ask

#### References

USDA High Altitude Cooking & Food Safety Fact Sheet at:

http://www.fsis.usda.gov/PDF/High\_Alt itude\_Cooking\_and\_Food\_Safety.pdf

Developed by Patricia Kendall, CSU Food Science & Human Nutrition professor and Extension specialist; revised 2013 by CSU Extension.

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### Home Kitchen Food Safety Best Practices Check-Up

**Part A**: How clean is your kitchen? What grade would a food inspector give it? To find out, take a few minutes to complete this check-up. Check the box beside each number if **all** of the bulleted points are **TRUE** for your kitchen.

#### KITCHEN FACILITIES

- □ 1) Countertops and Cutting Boards:
  - Countertops and cutting boards have a smooth, corrosion-resistant, nonabsorbent, and easily cleanable surface.
  - Countertops and cutting boards do **NOT** have pits, chips, scratches, deep grooves, distortion, or stains.
  - Countertops and cutting boards s are clean to sight and touch.
  - Countertops and cutting boards are always sanitized before and after food preparation.
- □ 2) Food Preparation Equipment:
  - Equipment is clean to sight and touch.
  - Microwave oven seals and inside cooking space are free of debris (e.g., stains, crumbs, old food, dust).
  - Can opener is clean and free of debris.
- □ 3) Cleaning Equipment & Materials:
  - · Hot water works.
  - Kitchen sponges/brushes/dishrags look fresh, clean, and visibly free of debris.
  - Paper towels are available.
  - Automatic dishwasher is available and functions.
  - Soap and/or sanitizer is available near kitchen sink.
  - Hands are dried only with paper towels or designated dishtowel that is NOT used for other purposes.
- ☐ 4) Overall Cleanliness:
  - Garbage is covered, or if exposed, is in an area at least a few feet from food preparation areas and is **NOT** overflowing from the container.
  - Pets are never in kitchen area or on food preparation surfaces (e.g., counters).
  - There is **NO** evidence of rodents (e.g., droppings) or insects (e.g., brown spots on or near baseboards).

**PERISHABLE FOODS** (e.g., dairy, eggs, meat, poultry, fish, and take out foods)

- □ 5) Transporting Perishable Foods:
  - Cold perishable foods are transported quickly from the grocery store and, once home, are immediately refrigerated or frozen.
  - Take-out and hot foods are transported quickly from the grocery store or restaurant and, once home, are immediately eaten, refrigerated, or frozen.

#### □ 6) Preparing Perishable Foods:

- Frozen meat, fish, and poultry are thawed in the refrigerator, microwave oven, or in cold water.
- Frozen meat, fish, and poultry are totally thawed before they are cooked.
- A food thermometer is used to be sure raw ground meat, chicken, and leftovers are heated to at least 165°F.
- Only pasteurized eggs are used in recipes calling for eggs that are not cooked until the yolk is solid.
- Immediately after cooking, large containers of hot food (e.g., soup, stews) are served or placed in shallow containers and cooled in the refrigerator or freezer.

#### □ 7) Holding Perishable Foods:

- Perishable foods, including those in picnic and packed lunches, are never left at danger zone temperatures (41°F to 135°F) more than 2 hours.
- Perishable foods are discarded if left at danger zone temperatures (41°F to 135°F) more than 2 hours.

#### □ 8) Refrigerated Foods:

- Refrigerated foods are spaced to allow air to circulate freely.
- Eggs are stored in their original carton.
- Raw meat/fish/poultry is stored in sealed, non-leaking containers placed below produce and other ready-to-eat food.
- NO refrigerated food is past its expiration date.
- Leftover foods are labeled with date of preparation (or date purchased).
- Leftover foods are eaten or discarded within 7 days.

#### □ 9) Refrigerator:

- has a working thermometer.
- has a temperature between 32 to 40°F.
- is cleaned and sanitized regularly.

#### □ 10) Freezer:

- has a working thermometer.
- has a temperature less than or equal to 0°F.

#### **STORAGE**

- □ 11) Dry Foods (e.g., packaged and canned foods):
  - appear to be wholesome and safe to eat.
  - are in tightly closed packages (packages are NOT torn or damaged; canned foods do NOT have dents in a seam or edge, deep dents in any part of the can, or bulging lids).
  - are stored in clean, cool, dry locations and NOT stored under a sink or near drains/pipes.
  - are stored at least 6-inches above floor.
  - are rotated on a first-in, first-out basis (i.e., one box is used up before another is opened).
- □ 12) Poisonous Substances (e.g., household cleaners, sanitizers, and other household chemicals):
  - are stored away from foods to prevent contamination of food and food preparation equipment or utensils.
  - are in their original containers; containers are intact and clearly labeled.
  - when used, insect/rodent-bait stations are covered and tamper resistant.

#### PERSONAL HYGIENE

- □ 13) Handwashing:
  - You always wash your hands with soap & water
    - · BEFORE preparing food or eating.
    - AFTER handling raw meat/poultry/fish or raw produce.
    - · AFTER smoking, eating, or drinking.
- □ 14) Food Preparation:
  - You minimize touching foods with your bare hands and avoid preparing food when you are sick (i.e., have diarrhea, fever, vomiting, open sores, or persistent cough/sneezing/runny nose).
  - Raw produce is washed thoroughly. Melons are washed before being sliced.

Available from Rutgers website at:

http://njaes.rutgers.edu/foodsafety/kitchencheckup/

#### So, just how food safe is your home kitchen?

Count the number of boxes you marked for Part A, and then check your grade! If you got anything less than an A, look over the items you **did not** check and make changes to get your **whole** kitchen as food safe as it can be!

Score	Grade	Evaluation
0-3	F	<b>FRIGHTENING!</b> Don't make another meal until you do some serious cleaning and improvement of your behaviors! The many food safety violations in your kitchen are hazardous to your health. Review the items you <b>did not</b> check and immediately make changes.
4-6	D	<b>DANGER!</b> Your kitchen and food habits pose many food safety dangers. Review the items you <b>did not</b> check and make changes right away!
7-9	С	<b>CAUTION!</b> Some parts of your kitchen and your behaviors are food safe, but not all. Review the items you <b>did not</b> check and make changes to get your <b>whole</b> kitchen and self in top food safety shape.
10-13	В	<b>BETTER!</b> Overall, your kitchen and habits are in good shape; but there are areas where you can improve. Take steps to get your <b>whole</b> kitchen and self in awesome food safety shape.
14	Α	AWESOME! KEEP UP THE GOOD WORK!

Part B: What do you know about safe food? Answer these questions and find out!

	,	
To make ground meat, chick internal temperature is at least	en, and leftover food safe to eat, coo ast:	k until its
□ a) 140°F	□ b) 165°F	
	r, eggs, dairy, and cooked foods sa these danger zone temperatures n □ b) 41°F and 135°F	
3) The 3 ways to safely defrost meat, fish, and poultry are:  □ a) on the counter, in the sink, in the microwave  □ b) in the refrigerator, in cold water, in the microwave		Score mostly A's? Hit the books and learn more about food safety.
<ul> <li>4) The best way to sanitize a sponge or dish cloth/towel is to:</li> <li>□ a) soak it in hot water for 10 minutes</li> <li>□ b) wet it, then microwave it for 1 minute</li> </ul>		Score mostly B's? Good, but review the ones you missed.
5) The correct recipe for making a sanitizing solution is:  □ a) 2 Tablespoons chlorine bleach in 1 gallon of water		Score all B's? Right on, smarty pants! Now share

the knowledge.

□ b) 1 teaspoon chlorine bleach in 1 gallon of water

Note: #5. modified by CSU Extension

Major Pathogens That Cause Foodborne Illness (Bacteria, Parasites, Viruses)			
Pathogen	Methods of Transmission	Symptoms and Potential Impact	
Campylobacter jejuni	<ul> <li>Contaminated water</li> <li>Raw milk</li> <li>Raw or undercooked meat, poultry, or shellfish</li> </ul>	<ul> <li>Fever, headache, and muscle pain followed by diarrhea (sometimes bloody), abdominal pain, and nausea that appear 2 to 5 days after eating; may last 7 to 10 days.</li> <li>May spread to bloodstream and cause a serious life-threatening infection.</li> </ul>	
Clostridium perfringens	<ul> <li>Called the "cafeteria germ" because many outbreaks result from food left for long periods on steam tables or at room temperature.</li> <li>Meats, meat products, and gravy</li> </ul>	<ul> <li>Intense abdominal cramps and diarrhea begin 8 to 22 hours after eating; usually lasts 24 hours. In the elderly, symptoms may last 1 to 2 weeks.</li> <li>Complications and/or death occur only very rarely.</li> </ul>	
Escherichia coli O157:H7 One of several strains of <i>E. coli</i> that can cause human illness	<ul> <li>Undercooked beef, especially hamburger</li> <li>Unpasteurized milk and juice</li> <li>Contaminated raw fruits and vegetables, and water</li> <li>Person-to-person</li> </ul>	<ul> <li>Severe diarrhea that is often bloody, abdominal cramps, and vomiting. Usually little or no fever.</li> <li>Can begin 1 to 8 days after food is eaten; lasts about 5 to 10 days.</li> <li>Some, especially the very young, have developed hemolyticuremic syndrome (HUS) that causes acute kidney failure or even death.</li> </ul>	
Listeria monocytogenes Can grow slowly at refrigerator temperatures	<ul> <li>Contaminated hot dogs, luncheon meats, cold cuts, fermented or dry sausage, and other deli-style meat and poultry</li> <li>Soft cheeses and unpasteurized milk</li> </ul>	<ul> <li>Fever, chills, headache, stiff neck, backache, sometimes upset stomach, abdominal pain, and diarrhea. May take up to 3 weeks to become ill.</li> <li>At-risk patients (including pregnant women) may later develop more serious illness from this bacteria that could result in death.</li> <li>Pregnant women who think they have eated contaminated food should seek medical advice.</li> </ul>	
Noroviruses (and other calciviruses)	<ul> <li>Shellfish and fecally contaminated foods or water</li> <li>Ready-to-eat food touched by infected food workers, e.g., salads, sandwiches, ice, cookies, fruit</li> </ul>	<ul> <li>Nausea, vomiting, stomach pain, fever, muscle aches, and some headache usually appear within 1 to 2 days and may last 1 to 2 days.</li> <li>Diarrhea is more prevalent in adults, and vomiting is more prevalent in children.</li> </ul>	
Salmonella (over 2,300 types)	<ul> <li>Raw or undercooked eggs, poultry, and meat</li> <li>Raw milk or juice</li> <li>Cheese and seafood</li> <li>Contaminated fresh fruits and vegetables</li> </ul>	<ul> <li>Stomach pain, diarrhea, nausea, chills, fever, and headache usually appear 8 to 72 hours after eating; may last 4 to 7 days.</li> <li>A more severe illness may result if the infection spreads from the intestines to the bloodstream. Without treatment, death</li> </ul>	
Staphylococcus aureus	<ul> <li>Contaminated milk and cheeses</li> <li>Salty foods; e.g., ham</li> <li>Sliced meat</li> <li>Food made by hand that require no cooking; e.g., puddings, sandwiches</li> <li>Foodworkers who carry the bacteria and contaminate food</li> </ul>	<ul> <li>Nausea, vomiting, stomach cramps, and diarrhea usually occur within 30 minutes to 6 hours after eating contaminated food.</li> <li>Symptoms typically last 1 to 3 days; the young and the elderly may have a more severe illness.</li> </ul>	
Toxoplasma gondii	Accidental ingestion of soil contaminated with cat feces on fruits and vegetables; raw or undercooked meat	<ul> <li>Flu-like illness usually appear 5 to 23 days after eating; may last months. Those with a weakened immune system may develop more serious illness.</li> <li>Can cause problems with pregnancy, including miscarriage.</li> </ul>	
Vibrio vulnificus	<ul> <li>Undercooked or raw seafood, such as fish and shellfish</li> </ul>	Diarrhea, stomach pain, and vomiting may appear within 1 to 7 days and last 2 to 8 days. May result in a blood infection; can result in death for those with a weakened immune system.	

Colorado State University Extension does not endorse this company or product, but provides this information as an example of product liability insurance available to Colorado Cottage Food Producers.

#### FOOD LIABILITY INSURANCE PROGRAM

QUESTIONS? <u>844.520.6992</u>

#### COTTAGE FOOD LAW INSURANCE

Lots of people cook from home, but not all of them sell the food afterwards. During the past few years, many state legislatures have passed laws, commonly known as cottage laws, to regulate the industry. These rules apply to those who prepare the products in their own kitchens and then offer what they cook to the public for purchase, whether it is sold in the home or somewhere else. As a home food vendor, you might think the risks of cooking in your own home are not that high, but there are issues you need to consider.

What would happen if one of your customers claimed they had an allergic reaction to your food and they want you to pay the medical bills? Do you have enough money saved to cover the costs of a customer who might be injured on your premises? In both of these situations, and others like them, you may be held liable and be forced to pay damages out of your own pocket.

Unless, that is, you have home cottage business insurance. Liability coverage decreases the likelihood that you will have to pay for damages out of your own pocket. Our Food Liability Insurance Program (FLIP) could be what you are looking for and offers you 12 months of cottage food operation insurance to help you with your profession.

You can have the protection that a cottage food operator needs to have peace of mind as you go about your work - whether that is at home or some other remote location.

#### PROGRAM HIGHLIGHTS

- General Liability
- Products and Completed Operations Coverage
- · Personal and Advertising Injury Coverage
- Damage to Premises Rented Coverage
- Business Personal Property Coverage
- Identity Recovery Coverage

#### PROGRAM BENEFITS

- No Quote Process
- 24/7 Access to Policy Documents
- Convenient Online Purchasing
- Licensed In All 50 States
- A+ Rated Insurance Carrier

#### WHAT IS FLIP?

FLIP was created to offer the most affordable liability insurance to food vendors without sacrificing coverage. By creating an online program, long and expensive underwriting processes were shortened, allowing FLIP to offer quality insurance policies at reduced prices compared to more traditional methods of processing. In addition, the online presence gives food vendors more control over their policies at their convenience.



- Create and retain jobs
- Increase sales
- Manage your finances
- ▶ Secure funding

- Write a business plan
- Create a marketing strategy
- Win government contracts
- Manage your employees

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### **Food Safety News**

Breaking news for everyone's consumption

## Should Farmers Market Vendors Carry Product Liability Insurance?

Why should you care?
By Cookson Beecher | November 20, 2012

You're there at your favorite farmers market. As always, you stop by one of the farm stands where you regularly shop to buy some fresh veggies and fruit. The farmer greets you with a welcoming smile and asks how you liked the food you bought from him last week. Giving him a strong affirmative nod, you ask how things are going out at the farm.

As you put the fresh produce in your bag, you can't help but feel glad to be part of a growing movement to buy from local farmers. Not only is it a way to help keep them in business, it also helps protect farmland from being developed.



But have you ever asked the farmers you buy from at a farmers market if they carry product liability insurance? And why would that be important to know? Isn't knowing their names and where their farms are good enough?

#### What is Product Liability Insurance?

In the case of farmers, product liability insurance helps protect them should a food they produce for sale harm consumers. The word "lawsuit" comes immediately to mind, since lawyers are often called in to sue the offending party.

But there's another side of the coin to consider. For the victims of a foodborne illness, one of the main worries is the medical expenses, which can be staggeringly high — sometimes up to \$1 million or more.

Foodborne illnesses are caused by bacteria, viruses or protozoa on or in contaminated food. Salmonella, E. coli, listeria, and campylobacter are examples of these pathogens. The young, the elderly and those with weakened immune systems are the most likely to fall victim to foodborne illnesses and the most likely to suffer the most harm from them.

According to the federal Centers for Disease Control and Prevention, each year roughly 1 in 6 Americans (or 48 million people) gets sick, 128,000 are hospitalized and 3,000 die as a result of foodborne diseases.

With news about foodborne illness outbreaks linked to types of foods sold at farmers markets, such as milk, cheese, fruits and vegetables – and even meats – being reported on a regular basis, the benefits of following good agricultural practices (GAPs) and carrying product liability insurance come to the fore.

During last year's Focus on Farming Conference in Everett, WA, food safety attorney Bill Marler (publisher of **Food Safety News**) was a keynote speaker. Marler told a Washington State Department of Agriculture official that while doing food safety planning and getting Good Agricultural Practices certification reduces the chances that a farmer will get someone sick, it wouldn't protect the farmer from a lawsuit.

"That's why you need product liability insurance should you get sued," he said. "By doing that, you're protecting yourself as an individual."

General liability, meanwhile, is designed to cover risks that may include bodily injury or property damage caused by direct or indirect actions of the insured; for example, it would cover a market canopy falling over during a windstorm and injuring a customer.

#### What About Farmers Markets?

Many farmers markets — but not all — require their vendors to carry product liability insurance. And many farmers carry it anyway.

Susan Schuh, co-owner of Schuh Farms near Mount Vernon, WA, said she's always had it — for about 25 years now — even before her farm started selling at farmers markets.

"It has always been part of our insurance package," she said. "We sell to the public. It's not just our friends and neighbors who are eating our food."

Although the farm has never been associated with a foodborne illness, Schuh likes knowing that the insurance she carries gives her customers "an added layer of protection."

On a financial level, the insurance is also necessary, she said, "because we have a net worth."

She said she'd like to see all farmers markets require that their vendors carry product liability insurance.

"It would be good if they did," she said.

#### But We're Too Small . . .



Many small-scale farmers say they wouldn't be able to afford the insurance — that their profits are so slim that buying insurance would put them out of the game.

This is particularly true for the farmers who sell at farmers markets. Some of them are farming on five acres or less. Farmers market managers fear that if they require vendors to get insurance, some of them will drop out. And in some areas, getting enough farmers to sell at local farmers markets is already a challenge.

Bottom line: a farmers market without farmers is not a farmers market. Customers come to buy locally grown food. If there isn't enough of it, they won't come back.

Many of these small-scale farmers say they take special care to make sure they're doing what's necessary to prevent their food from being contaminated by pathogens.

"We follow good farming practices," said Tom Hohmann, co-owner of The Walled Garden Produce in Western Washington, and one of the main farm vendors at the Sedro-Woolley Farmers Market. "We're very meticulous about cleanliness. We keep the vegetables cool. We don't use manure. We sterilize all surfaces and sinks, and we're always washing our hands."

Because he and his wife Lynn do all of the picking, they don't need to rely on outside help, which is yet another safeguard to preventing potential food-safety problems. Following organic farming standards is also a plus when it comes to food safety, he said.

"We want to keep the food we grow healthy for our family and our customers," he said.

While organic standards don't equate to good agricultural practices (GAPs), the food safety standards for growing product, having organic certification necessarily means a farmer is taking certain food safety precautions.

When asked if he'd get insurance if the Sedro-Woolley Farmers Market were to require it, he didn't have a ready answer.

"It's a pretty substantial amount to pay," he said, referring to a ballpark figure of \$250 to \$425 per year. "It would make us think twice."

#### The Amateur Farmer

But as well-intentioned as some small-scale farmers may be, some of them can make innocent mistakes, said Bradley W. Sullivan, a California attorney who specializes in defending farms, growers and shippers. And while he won't refer to the case specifically, he said one of the worst cases he was involved in was a farmers market case.

The problem, he said, is that some of the farmers who sell at farmers markets are what could be called "amateur farmers." And just as in sports or literature, for example, amateurs can make serious mistakes.

He saw that firsthand in a case that involved people who ate some "artisan salad greens" and came down with Hepatitis C. That happened, he said, because a farmer had unknowingly used compost made from human sewage sludge that hadn't been thoroughly composted.

Sullivan said that the farmer, who bought the compost at a farm supply store, assumed it was the perfect thing to add to her raised beds where she grew salad greens. She hadn't known that she should have asked to see a certificate of analysis to make sure it was properly composted.

Referring to the medical expenses that can result from a foodborne illness, Sullivan cited the steep costs associated with complications that can come with E. coli. If, for example, a person's kidneys shut down, a condition called hemolytic uremic syndrome, medical expenses quickly mount.



Sullivan said it can cost as much as \$5,000 to \$6,000 a day to be in critical care, not to mention that a patient can be there for two weeks or more.

"People don't realize the expenses involved in foodborne illnesses," Sullivan said. "Some of them can come to a million dollars or more."

And then there are the expenses that can come when a victim's relatives sue because a relative has died. In last year's listeria outbreak caused by cantaloupe from a Colorado farm, more than 30 people died from eating contaminated cantaloupe.

With that outbreak in mind, the Greeley, Colorado Farmers Market decided this year to require all of its vendors to carry at least \$600,000 in general and product liability insurance. But like at other farmers markets, the worry there was that some of the smaller farmers would drop out of the market.

Now that the market has finished its first season with the new requirement in place, Karen Scopel, an official with the City of Greeley, which operates the market, said she knows of only one vendor who dropped out "purportedly due to the insurance." But she also said that the vendor had indicated there were some health issues involved in the decision.

"While we had fewer vendors than in prior years, I cannot directly link that to the insurance requirement," she told **Food Safety News**.

As it turned out, most of the farmers at the market either had insurance already or acknowledged that this was something they knew they needed to have.

The City of Greeley operates the market and is self-insured for any claims that arise from its own actions.

Scopel said that product liability insurance is intended to protect vendors from personal loss due to claims related to their products.

As for other farmers markets in Colorado, Scopel said that the majority have product liability insurance requirements for their vendors.

"We were several years behind most in requiring it," she said.

#### A Manager's Perspective

Jerry Lami, executive director of the West Coast Farmers Market Association in California, told **Food Safety News** that all of the vendors who sell at the markets in the Association have to have product liability insurance.

"There are certain expenses when you own a business," said Lami. "If you can't afford them, you can't afford to have your own business."

Product liability insurance is important, he said, because it covers medical expenses should a customer come down with a foodborne illness. It also helps protect a farmer from losing the farm.

Formerly a vendor at a farmers market himself, Lami said you don't want to put anyone at risk, and that includes the shoppers, the landlord, the cities, and public facilities such as schools, libraries, and parks hosting the markets.

"Any location hosting a farmers market wants insurance," he said. "They're the ones with the deepest pockets. They're the ones the lawyers will go after. They're making sure that I indemnify them. I have to be sure everyone's safe."

As for the market shoppers, Lami said he doesn't think most of them think about insurance.

"You only think about it when something goes wrong," he said.

In Massachusetts, Martha Sweet, operations manager for the Federation of Massachusetts Farmers Markets, said that while most of the farmers markets in the state require vendors to carry product liability insurance, not all of them do.

The three farmers markets the federation manages requires all vendors to carry \$100,000 in insurance.

"It's a flat-out requirement," Sweet said. "Sure, there are some people who risk it, but not with us. For us, it's a black-and-white policy."

Pointing out that insurance rates can be competitive, she always advises farmers to shop around.

Galena Ojiem, administrative assistant at the Farmers Markets Federation of New York, said farmers markets in the federation normally require that vendors carry the insurance.

She does know, however, that it can be financially difficult for some small-scale farmers to buy the insurance.

"But it's not worth not having it," she said. "If you can't afford it, a farmers market is the wrong place for you to be."

Her organization runs an insurance program that services all of the farmers markets in the federation. She said that for the vendors, the insurance protects them from "bankrupting the farm."

Policies through the federation's insurance program run about \$300 per year.

But when it comes to the customers, Ojiem said that most don't think about whether the vendors carry product liability insurance.

"They think that because the food is fresh and local it should be better for them," she said. "I don't think insurance is something they think about."

In Washington state, Karen Kinney, interim director of the Washington State Farmers Market Association, said product liability is something "we're all trying to figure out."

"Everyone takes food safety so seriously," she said. "Everyone is concerned."

And while all of the Association's markets must carry general and product liability insurance, Kinney said that there's no such requirement for the vendors.

"But we're coming out stronger and stronger for food vendors to carry it," Kinney said. "It's a real Catch 22. So many of the farmers are just little farmers. But I think we're coming to a crossroads point where we realize we have to figure out a solution."

Along those lines, Kinney said the association is educating farmers about getting coverage for their businesses.

#### A Trend, or Not?

Larry Spilker of Campbell Risk Management in Indianapolis, which offers product liability to farmers market vendors, says he hasn't seen a strong upward trend in farmers market vendors getting product liability insurance.

"It stays pretty steady," he says, "but I think there's more awareness about it out there. Everyone's entertaining the idea of getting it."

Spilker also stresses the problem of costliness of insurance for small farmers.

"By the time they pay their fees to be in the market and then add insurance to that, they're paying more to be in the market than they make in sales," he said.

Or, as Kinney of the Washington State Farmers Market Association, says: "They're trying to operate in a system that's not priced for it."

#### **How Expensive Is It?**

Rates for product liability can vary. The Campbell Risk Management's National Farmers Market Vendor Liability Insurance Program's premiums, negotiated at a group rate, vary from \$250 to \$425 per year, depending on the state, for vendors who generate less than \$100,000 total annual sales at the markets listed. For vendors who generate more than that in annual sales, the cost of the policy will increase at a rate of approximately \$5 per thousand in sales.

The insurance provides \$1 million per occurrence in both general and product liability coverage with no deductible and a \$2 million annual aggregate limit.

The coverage applies to all markets the vendor participates in as long as each market is disclosed on the insurance application form.

The products can include anything seen at a typical farmers market — even items such as mushrooms, homemade cosmetics, home-processed poultry or other meats, eggs and crafts. However, the vendor must follow all applicable federal, state and local permitting requirements.

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