SUMMERILL

WASHINGTON, DC

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Joseph Summerill

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PROPOSED

March 7, 2012

Sheriff Don Albrecht Macoupin County Sheriff's Office 215 South East St Carlinville, IL 62626

RE:

REVISED PROPOSAL - Assisting Macoupin County Negotiate A Per Diem Rate

For Housing U.S. Marshals Service Federal Prisoners

Sheriff:

Thank you again for meeting with me to discuss my interest in assisting Macoupin County in the negotiation of a per diem rate for housing Federal prisoners. The following is a REVISED proposal which, if accepted, will serve as the contract between The Summerill Group, LLC and Macoupin County, Illinois for this project.

SUMMARY OF PROPOSAL.

Under this project, The Summerill Group, LLC shall --

Perform an economic audit and calculate a Federal per diem rate for Macoupin County Jail focusing on the standard allowable and allocable costs outlined in OMB Circular A-87.

Research neighboring Federal per diem rates and make a strategic recommendation regarding the submittal of a proposal to the Office of the Federal Detention Trustee (OFDT) and U.S. Marshals Service (USMS).

Upon approval, submit a proposal to OFDT and start working with OFDT officials to ensure that the proposal is reviewed, approved and sent to USMS for negotiations.

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Negotiate a new per diem rate with USMS for Macoupin County and work with USMS officials to ensure timely execution of new eIGA.

TIME FRAME FOR THIS PROJECT

The Summerill Group, LLC shall expedite this project. We shall perform our audit and calculate Macoupin's costs before April 13, 2012; we shall submit a proposal to USMS on April 20, 2012. We anticipate negotiating with the DOJ's Office of the Federal Detention Trustee by April 27. We anticipate negotiating with USMS in May 2012; and then the award of a per diem rate to Macoupin County in June 2012.

GOAL

Based upon a population of 20 -30 US Marshals prisoners, it is anticipate that Macoupin County will generate between \$400,000 and \$600,000 annually.

COMPENSATION FOR CALCULATING & NEGOTIATING NEW PER DIEM

In consideration for the services rendered by The Summerill Group, LLC to the Macoupin County related to assisting the Sheriff in the negotiation of a Federal per diem rate, the Parties agree Macoupin County shall pay The Summerill Group, LLC a firm fixed fee of \$60,000.00.

PAYOUT OF COMPENSATION

The Parties agree that The Summerill Group, LLC's compensation shall be paid as follows:

Payment of \$20,000.00 shall be paid to The Summerill Group, LLC on September 1, 2012.

Payment of \$20,000.00 shall be paid to The Summerill Group, LLC on October 1, 2012.

Payment of \$20,000.00 shall be paid to The Summerill Group, LLC on November 1, 2012.

Work performed on the project will not be broken down on the invoice. Instead, the invoices by The Summerill Group, LLC shall read: "For Services Rendered to Macoupin County, Illinois, In Connection With the Formation and Execution of an Intergovernmental Agreement Between Macoupin County and the U.S. Marshals Service."

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PROSPECTIVE WAIVER OF CONFLICTS.

The Parties confirm our mutual agreement that The Summerill Group, LLC may represent other present or future clients on matters other than those for which we had been or then are engaged on your behalf, whether or not on a basis adverse to you or any of your affiliates, including in litigation, legal or other proceedings or matters, so long as the matter is not substantially related to our work or will not have any adverse impact to our work for you.

Obviously, without your further prior written consent, we cannot and will not represent another client adverse to you if we have obtained confidential information of a nonpublic nature from you as a result of our representation that, if known to the other client, could be used in the other matter by the other client to your material disadvantage. The waivers and agreements in this letter will continue in effect upon the termination of this engagement.

CONCLUSION.

Sincerely,

Sheriff, thank you again for considering hiring me on this project. Upon your approval, we will move forward with our financial audit.

JOSEPH SUMMERILL
202-261-3588

cc: James Clayborne, Jr II,

Accepted and agreed to this _____ day of ______, 2012 for Macoupin County, Illinois

By:

Title:

WASHINGTON D.C.

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ILLINOIS DEPARTMENT OF PUBLIC HEALTH OFFICE OF HEALTH PROTECTION DIVISION OF FOOD, DRUGS AND DAIRIES

TECHNICAL INFORMATION BULLETIN

DESCRIPTION:

Technical Information Bulletin / Food # 44

SUBJECT:

Frequently Asked Questions – Cottage Food Operations

EFFECTIVE:

January 1, 2012

AUTHORIZED BY:

William Beaty, Chief (Acting)
Division of Food, Drugs and Dairies

On August 16, 2011, Governor Quinn signed three pieces of legislation that support Illinois' Agriculture industry and increase access to farmers' markets for the growing cottage food industry. Public Act 097-0393 (Senate Bill 840) will allow certain homemade foods to be sold at Illinois farmers' markets.

P. A. 097-0393, effective January 1, 2012, amends the Food Handling Regulation Enforcement Act, 410 ILCS 625 and the Sanitary Food Preparation Act, 410 ILCS 650, to exempt a "cottage food operation" from regulation by the Illinois Department of Public Health (IDPH) and the Illinois Department of Agriculture (IDOA) provided the cottage food operation meets all the conditions and requirements of exemption in 410 ILCS 625/4(b).

The intent of the P.A. 097-0393 is that all local health departments will register cottage food operations operating in their jurisdiction provided that all the conditions of P.A. 097-0330 law are met as outlined in Section 4 (b) of the Public Act. Section 4(d) allows a local health department to charge a fee for that registration so that the new registration would not be a new unfunded mandate. The additional information in Section 4(d) was added to give local health departments the tools needed in the case of a foodborne illness or food safety issue.

Under the Public Act, food that is not potentially hazardous may be produced in the kitchen of the person's primary domestic residence for direct sale to customers at farmers' markets. The Public Act only provides for direct sale by the owner or the family member to customers at farmers' markets. Thus, cottage food operation products cannot be sold to retail stores, restaurants, over the Internet, by mail order, or to wholesalers, brokers or other food distributors who resell food. A cottage food operation shall comply with the labeling requirements of the Illinois Food, Drug and Cosmetic Act.

http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1577&ChapterID=35

Draft 12/05/2011 Draft

The following is a list of questions and answers regarding the cottage food operation provisions of the Food Handling Regulation Enforcement Act [410 ILCS 625/4] and the Sanitary Food Preparation Act [410 ILCS 650/11] which allow for the sale of certain food that is not potentially hazardous and produced in a home kitchen.

TYPES OF FOOD PRODUCTS ALLOWED FOR SALE

What products that are made in a home kitchen can be sold under the "cottage food operation" provisions?

Food that is not a potentially hazardous such as baked goods, jam, jelly, preserves, fruit butter, dry herbs, dry herb blends or dry tea blends and that is intended for end-use only, shall be sold by the owner or a family member using safe food handling practices that reduce the risk of contamination.

Jams, Jellies and Preserves:

The following jams, jellies and preserves are allowed: apple, apricot, grape, peach, plum, quince, orange, nectarine, tangerine, blackberry, raspberry, blueberry, boysenberry, cherry, cranberry, strawberry, red currant or a combination of these fruits.

The presence of low sugar or sugar substitute in jams, jellies and preserves, can make a difference in the shelf stability of the product. With lower sugar and pectin levels, spoilage organisms are more likely to survive the cooking process. The best practice for low sugar jams and jellies is that they be processed only in a boiling water canner for a minimum of ten minutes and not by any other methods unless water activity is determined by a commercial lab to be less than 0.85.

Other jams, jellies, or preserves not listed may be produced if the cottage food operator's recipe has been tested and documented by a commercial laboratory (at the expense of the cottage food operation) as being not potentially hazardous, containing a pH equilibrium of less than 4.6. (See prohibited items).

Fruit Butters:

The following fruit butters are allowed: apple, apricot, grape, peach, plum, quince, and prune. Fruit butters not listed may be produced if the cottage food operator's recipe has been tested and documented by a commercial laboratory (at the expense of the cottage food operation) as being not potentially hazardous, containing a pH equilibrium of less than 4.6. (See prohibited items).

Baked Goods:

The following baked goods, including, but not limited to the following, are allowed: breads, cookies, cakes, pies and pastries. Only high-acid fruit pies that use the following fruits are allowed: apple, apricot, grape, peach, plum, quince, orange, nectarine, tangerine, blackberry, raspberry, blueberry, boysenberry, cherry, cranberry, strawberry, red currants or a combination of these fruits. Fruit pies not listed may be produced if the cottage food operator's recipe has

been tested and documented by a commercial laboratory (at the expense of the cottage food operation) as being not potentially hazardous, containing a pH equilibrium of less than 4.6. (See prohibited items).

Dried Foods:

The following dried foods are allowed: dried herbs, dried herb blends, or dry tea blends.

Prohibited Items:

The following items are prohibited from production and sale by a cottage food operation: pumpkin pie, sweet potato pie, cheesecake, custard pies, and cream pies, as well as pastries with potentially hazardous fillings or toppings. Pumpkin, banana, and pear butters are not allowed. Also, rhubarb, tomato, pepper and watermelon jellies or jams are not allowed.

Can cottage food operators sell a "take-n-bake product"?

No. These products would require temperature control to prevent bacterial growth and are not allowed for sale by a cottage food operation.

MARKETING COTTAGE FOOD OPERATION PRODUCTS

Where can "cottage foods" be sold?

Products can only be sold at farmers' markets, which are defined by the Public Act as a "common facility or area where farmers gather to sell a variety of fresh fruits and vegetables and other locally produced farm and food products, directly to consumers."

Can products be sold at a year-round or indoor farmers' market?

Yes, as long as the products meet the "cottage food" requirements of the Public Act.

Can products be sold at retail outlets (i.e., local grocery stores or retail markets)?

No, the Food Handling Regulation Enforcement Act "cottage food operations" provisions clearly identify farmers' markets as the only venue where "cottage food" products may be sold. Cottage foods cannot be sold to a retailer for resale or to a restaurant for use or sale in the restaurant. Cottage foods cannot be sold over the Internet, by mail order, or to wholesalers, brokers or other food distributors who will resell the cottage foods.

TESTING AND DOCUMENTING BY A COMMERCIAL LABORATORY

What is a commercial laboratory?

A commercial laboratory is a laboratory which performs fee for service analysis. It accepts samples from the public. Such a laboratory may be certified in one or more categories of

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accreditation. The Illinois Department of Public Health laboratories will not perform these services.

Which commercial laboratories do food testing?

A list of laboratories that conduct food testing is included in Attachment A. This list is not all inclusive and the operator may do an Internet search for commercial labs that perform food testing.

What food testing is involved with the testing and documenting of a recipe?

Any product that is not listed as allowed in the jam, jelly, preserve, fruit butter or baked goods shall be tested and documented by a commercial laboratory, at the expense of the cottage food operation, as being not potentially hazardous, containing a pH equilibrium of less than 4.6.

Does each product need to be tested and documented?

Yes, each product that is not listed as allowed shall be tested and documented.

If a cottage food operation has already had their product tested and documented as being not potentially hazardous, and they want to give their recipe to another cottage food operation, does the recipe have to be approved again?

No, if documentation is available and no change to the recipe has been made. However, if no documentation or changes to the recipe have been made, testing would be required.

LABELING REQUIREMENTS

What information must be included on the label of a cottage food product?

The basic information that must be on the label is as follows:

- Name and address of the cottage food operation.
- The common or usual name of the food product (All capital letters or upper/lower case are both acceptable).
- The ingredients of the cottage food product, including any colors, artificial flavors, and preservatives, listed in descending order of predominance by weight. If you use a prepared item in your recipe, you must list the sub ingredients as well. For example: soy sauce is not acceptable, soy sauce (wheat, soybeans, salt) would be acceptable, please see the label below for further examples.
- The following statement: "This product was produced in a home kitchen not subject to public health inspection that may also process common food allergens."
- The date the product was processed.
- Allergen labeling as specified in federal labeling requirements.
 http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabelingNutrition/FoodLabelingGuide/default.htm

Here is an example of a label:

THIS PRODUCT WAS PRODUCED IN A HOME KITCHEN NOT SUBJECT TO PUBLIC HEALTH INSPECTION THAT MAY ALSO PROCESS COMMON FOOD ALLERGENS

Chocolate Chip Cookie

Net Wt. 3 oz (85.05 g)

Ingredients: Enriched flour (Wheat flour, niacin, reduced iron, thiamine, mononitrate, riboflavin and folic acid),

butter (milk, salt), chocolate chips (sugar, chocolate liquor, cocoa butter, butterfat (milk), Soy lecithin as an emulsifier), walnuts, sugar, eggs, salt, artificial vanilla extract, baking soda Contains: wheat, eggs, milk, soy, walnuts

> Artie Pinkster 123 Foodstuff Lane Casserole City, IL 60000 Production Date: 10/19/2011

Hand-printed labels are acceptable if they are clearly legible, written with durable, permanent ink, and printed large enough to be easily read.

In addition, at the point of sale a placard must be displayed in a prominent location that states the following: "This product was produced in a home kitchen not subject to public health inspection that may also process common food allergens."

What does allergen labeling, as specified in federal labeling requirements, mean?

It means the operator must identify if any of the ingredients are made from one of the following food groups: milk, eggs, fish, crustacean shellfish, tree nuts (such as almonds, pecans or walnuts), wheat, peanuts, and soybeans. So, if there is an ingredient made with a wheat based product, the operator has the following two options:

- 1. Include the allergen in the ingredient list. For example, a white bread with the following ingredient listing: whole wheat flour, water, salt and yeast. In this example, the statement 'whole wheat flour', meets the requirements of federal law.
- 2. Include an allergen statement ("Contains:") after the ingredient list. For example a white bread, with the following ingredients: whole wheat flour, water, sodium caseinate, salt and yeast. Contains wheat and milk.

The "Contains" statement must reflect all the allergens found in the product. In this example, the sodium caseinate comes from milk.

Are there any special requirements for tree nuts labeling for allergens?

Yes, if the cottage food product has tree nuts as an ingredient you must identify which tree nut you are using. For example, if you made Nut Bread, an acceptable ingredient list would be: Ingredients: wheat flour, water, almonds, salt, yeast.

The following would not be acceptable:

Ingredients: flour, water, nuts, salt, yeast.

Does the cottage food operator have to include home address on product labeling or is a post office box sufficient?

The physical address of the home kitchen must be on the product label, not a post office box. The purpose of including an address on product labels is to be able to locate the business in case of a recall or traceback associated with a foodborne illness complaint or outbreak. The Public Act specifies that the name and address of the business of the cottage food operation shall be included on the label.

COTTAGE FOOD OPERATION REGISTRATION

Does the cottage food operation have to be registered with the local health authority?

Yes, the cottage food operation shall register with the local health department (LHD) where the cottage food operation resides. Failure to register with the LHD will subject the cottage food operation to regulation by IDPH and/or IDOA.

Out of state cottage food operations are not allowed as the Public Act only applies to businesses where the home kitchen (primary domestic residence) is physically located in Illinois.

If a Cottage Food Operation cannot meet the requirements of the Public Act, they would fall under current regulation by IDPH, IDOA or LHD as a retail food operation.

A sample registration form is included in Attachment B.

Does the cottage food operator need to be certified as a Food Service Sanitation Manager?

Yes, the person preparing and selling products as a cottage food operation must have an Illinois Food Service Sanitation Manager Certification, 410 ILCS 4(b)(6). Courses can be found on the IDPH website at the following link: http://dph.illinois.gov/fssmccourses

Can a cottage food operation be required to pay a registration fee?

Yes. The Public Act permits the LHD to charge a reasonable fee for registration, provided the cottage food operation can meet all the conditions for exemption. However, neither IDPH nor IDOA may charge a fee.

What information do Local Health Departments need to provide to IDPH?

Annually, LHD' that have decided to regulate Cottage Food Operations in their jurisdiction shall provide a written statement to IDPH, Division of Food, Drugs and Dairies stating that the LHD is regulating the cottage food operations located within their jurisdiction. The Department will accept the statements via email.

Recommendation for Local Health Departments:

It is recommended that a LHD issue a certificate of registration to Cottage Food Operations that NO DETA Base

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Www.uga.edu/nchfp/

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OTHER RESOURCES

FDA - A Food Labeling Guide www.fda.gov

The University of Georgia, Cooperative Extension, "Preserving Food: Processing Jams and Jellies". Attachment C.

National Center for Home Food Preservation www.uga.edu/nchfp/

Attachment A

Commercial Laboratories - Food Testing

This list is not all inclusive and IDPH does not endorse any of the following laboratories.

2011

Food Testing

Covance Laboratories 3301 Kinsman Boulevard Madison, WI 53704 Phone (608) 241-4471 www.covance.com/food

Toxin Technology ##
7165 Curtiss Ave.
Sarasota, FL 34231-8012
Phone (941) 925-2032
www.toxintechnology.com

Q Laboratories Inc. 1400 Harrison Ave. Cincinnati, OH 45214 Phone (513) 471-1300 www.qlaboratories.com Food Safety Net Services, LTD 199 W. Rhapsody San Antonio, TX 78216 ## Phone (210) 308-0675 Grand Prairie Lab Phone (972) 602-2078 Phoenix Lab Phone (602) 385-4030 Green Bay Lab ## Phone (920) 465-4165 www.foodsafetynet.com

Exova (FPL) 12003 N.E. Ainsworth Circle Suite 105 Portland, Oregon 97220 Phone (800) 375-9555 www.exova.com ABC Research Corp 3437 SW 24th Ave. Gainesville, FL 32607-4502 Phone (352) 372-0436 www.abcr.com

Deibel Labs 103 S. 2nd Street Madison, WI 53704 Phone (608)241-1177 www.deibellabs.com Deibel Labs (Main Lab) 7120 N. Ridgeway Ave. Lincolnwood, IL 60712 Phone (847) 329-9900 www.deibellabs.com

Key Laboratory Services 2363 E. Federal Dr Decatur, IL 217-875-2691

Accugen Labs 50 W. 75th St Willowbrook, II 630-789-8105 Metro Diversified Labs 10024 W. Roosevelt Rd Westchester, II 708-865-1400

Silliker Labs Chicago, IL 312-938-5151 Attachment B
Sample Cottage Food Registration Form

Draft 12/05/2011 Draft

<Local Health Department>

<Local Health Department address>

<Local Health Department Telephone Number> APPLICATION FOR COTTAGE INDUSTRY REGISTRATION

Name of Business:	Phone #:
Owner Name(s):	
Address where food is being prepared:	
Mailing address is different from above:	
Food Service Sanitation Manager Certification	
NAME	ID NUMBER (issued by IDPH)
PRODUCTS (please circle the items you will be making and selling)	
Dry herb, dry herb blend or dry tea blend intended for end-use only:	
Jam/ Jelly/ Preserves/ Fruit Pie: apple apricot grape peach plum quince orange nectarine tangerine blackberry raspberry blueberry boysenberry cherry cranberry strawberry red currants combination of the above:	
Fruit Butter: apple apricot grape peach plum quince prune	
Breads/ Cookies/ Cakes/ Pastries:	
The following product(s) have been tested by a commercial laboratory and deemed "Not Potentially Hazardous" with a pH below 4.6. Attach a copy of laboratory results. Item:	

PRODUCT LABELING

- The name and address of the cottage food operation
- The common or usual name of the food product
- All ingredients including colors, artificial flavors, preservatives, listed in decreasing order of prominence by weight
- Statement "This product was produced in a home kitchen not subject to public health inspection that may also process common food allergens."
- The date the product was processed
- Allergen labeling as specified in federal labeling requirements

Owner's Statements	
I,, agree to grant access to the local health department to conduct an inspection of my cottage food operation's primary domestic residence in the event of a consumer complaint or foodborne illness outbreak.	
Signature(s) of Owners:	
Deter	
Date:	

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Attachment C

Preserving Food: Processing Jams and Jellies



Preserving Food: Processing Jams and Jellies

Even though sugar has a preservative action in jams and jellies, molds can still grow and spoil these products. Mold growth causes product to be lost when it occurs. In addition, some research indicates that mold growth on fruit products may not always be as completely harmless as believed in the past. USDA and the Cooperative Extension are endorsing a boiling water canning process for jams and jellies which will make the potential for mold spoilage as small as possible. The cost of ingredients is high enough to make any preventable loss unacceptable.

Paraffin or wax sealing of jars is no longer considered an equally acceptable choice for any sweet spread, including jellies. Any pinholes, shrinkage or cracks in the wax paraffin allow airborne molds to contaminate and grow on the product. In addition, leaks or holes in the paraffin can allow product to seep out during storage. Once on the surface, this seeping product will provide nutrients for molds to grow on the surface and enter into the jam or jelly in the jar.

Follow These Steps in Making Jam or Jelly at Home:

- 1. Prepare the boiling water canner before starting to cook the jam or jelly. Fill the canner at least half full with clean, warm water. Enough water is needed so that the level will be 1 to 2 inches over the tops of the filled jars once they are added. Center the canner over the burner. The burner and range should be level. If the jars are to be pre-sterilized (see the next step), do not heat the water before adding the empty jars. If the jars will not be pre-sterilized, preheat the water to about 180 degrees F. (simmering) to prepare for processing filled jars. The water should not be boiling when it is time to add the filled jars.
- Wash Mason canning jars (half-pint or pint size) in hot water with detergent and rinse well by hand, or wash in a dishwasher. If directions call for pre-sterilized jars, sterilize the cleaned jars by boiling them completely submerged in boiling water for 10 minutes. The easiest way is to stand the empty jars upright on a rack in a boiling water canner filled with clean water. There should be enough water to fill the jars and still come to a level 1-2 inches above the tops of the jars. Bring the water to a boil and boil for 10 minutes. (If you are at an altitude of 1000 feet or more, add 1 minute of sterilizing time for each 1000 feet of altitude.) Keep the jars in the hot water until they are ready to be filled. If you do not pre-sterilize jars, keep the washed, rinsed jars hot until they are filled.
- Prepare the canning jar lids according to the manufacturer's recommendations.

- 4. Prepare the jam or jelly according to recipe directions. Boil for the recommended time in the recipe and then quickly skim off foam (if needed or desired).
- 5. Remove pre-sterilized jars from the hot water one at a time, tilting them to quickly empty them into the canner. To make sure they are completely drained, they may be turned upside down on a clean towel on the countertop. Fill either the pre-sterilized or hot, clean jars quickly with the hot jelly or jam mixture, leaving 1/4 inch headspace. Wipe the sealing surface of the jars with a clean paper towel, dampened with hot water, to remove any jelly, jam or sugar crystals. Adjust lids.

Work quickly to insure that the filled jars stay as hot as possible until all are filled and ready to load into the canner for processing. However, remember the jam or jelly mixture is <u>very</u> hot and take precautions not to burn yourself.

- 6. Load the filled jars, fitted with lids, into the canner one at a time, using a jar lifter. Make sure the jar lifter is securely positioned below the neck of the jar and ring band. Keep the jar upright at all times. Tilting the jar could cause the hot jelly or jam mixture to spill into the sealing area of the lid, which should remain clean and undisturbed. The water in the canner can be close to boiling when the jars are added, if you have made sure the filled product has remained very hot until the canner load is ready.
- Turn the burner under the canner to its highest heat setting, cover the canner with its lid and heat until the water comes to a full boil. If the jars were pre-sterilized, boil the jam or jelly gently for 5 minutes. If hot, clean jars were used, process the jam or jelly for 10 minutes. (If you are at an altitude of 1000 feet or more, add 1 minute of sterilizing time for each 1000 feet of altitude.) The water level in the canner should be 1 to 2 inches above the tops of the jars. The water in the canner must remain boiling during the entire 5- or 10- minute process time, so keep a tight lid on the canner.
- 8. When the jars have been processed in boiling water for the recommended time, turn off the heat and remove the canner lid. Wait 5 minutes before removing jars from the canner to allow the boiling and jar contents to settle. This waiting period is not required for safety of the food, however.
- 9. Remove jars from canner; use a jar lifter and keep jars upright. Carefully place them directly onto a towel or cake cooling rack, leaving at least one inch of space between the jars during cooling. Avoid placing the jars on a cold surface or in a cold draft.
- 10. Cool jars <u>upright</u> for 12 to 24 hours while vacuum seal is drawn and the jam or jelly sets up. Let the jars sit undisturbed while they cool. When using the standard two-piece metal canning lid system, do not tighten ring bands on the lids. Also, do not push down on the center of the flat metal lid until the jar is completely cooled. For other lid systems, follow the manufacturer's directions.
- 11. Remove ring bands from sealed jars. Put any unsealed jars in the refrigerator and use first.
- 12. Wash jars and lids to remove all residues. Label and store in a cool, dry place out of direct light.

Do I have to pre-sterilize the jars?

If the jars are not pre-sterilized, the process time in the boiling water canner is 10 minutes. (At altitudes of 1000 feet or more, add 1 minute of sterilizing time for each 1000 feet of altitude.) Jars should still be washed in hot water with detergent and rinsed well by hand, or washed in a dishwasher, and kept warm until they are ready to be filled.

Pre-sterilization of jars (and thus the five minute process time) is preferred when the fruits may not be naturally high in pectin, since the longer process time in the canner without pre-sterilized jars may weaken these gels.

Are there other methods of sealing jars?

Some other methods of sealing jars call for inverting a closed, filled jar of hot product for anywhere from thirty seconds to one hour. (Inverting is turning the filled jar upside down on its lid.) While this inversion process can be successful in producing a sealed jar, it works best with very hot product. Individual variation in practicing this procedure or unexpected interruptions can result in delays between filling jars, getting lids screwed on, and inverting the jars. If the product cools down too much, the temperature of the product can become low enough to no longer be effective in sealing jars or preventing spoilage.

When the inversion process does work, the vacuum seals of filled jars still tend to be weaker than those produced by a short boiling water canning process. A larger amount of retained oxygen in the headspace may allow some mold growth if airborne molds contaminated the surface of the product as the jar was filled and closed. More complete removal of oxygen from the headspace also offers some longer protection from undesirable color and flavor changes with some types of fruit products. A weak seal may be more likely to fail during storage.

The canning process is therefore a more foolproof method of making jams and jellies that will not spoil. In addition, although no cases of burning have been reported in the news media, experience has shown that some people will experience leaking of the hot product from the jar when it is turned over if the lid wasn't put on just right. If hot enough, someone could get burned. Even if it doesn't cause burns, leaking means product is lost.

Should I worry about mold?

But is there a safety hazard in some molding of a jam or jelly? The best answer is that there is a *potential* risk. However, we want to make a recommendation that minimizes all potential problems and hazards. Some molds growing on fruit products made at home have been shown to produce "mycotoxins", or mold poisons. The danger to humans from consuming mycotoxins, as well as the actual expected incidence of mycotoxins from moldy jars of jams, are issues with no easy answers. But, animal studies indicate there is the potential for poisonous effects of some mycotoxins in humans. Patulin is one mycotoxin detected in a few tested jars of homemade apple jam and juice. Patulin has been shown to be carcinogenic in animals, but its role in causing human disease is not all that clear. It is also difficult to assess the actual health risk from consuming moldy jam or jelly because not all molds produce mycotoxins, and molds which do produce them vary in consistency of production when conditions change some.

Nevertheless, the USDA advice for handling moldy jars of jam or jelly is to discard the contents of the whole jar. (See "Molds on Food: Are They Dangerous," USDA-FSIS, retrieved June 6, 2011 from http://www.fsis.usda.gov/Fact_Sheets/Molds_On_Food/index.asp and http://www.fsis.usda.gov/PDF/Molds_on_Food.pdf.)

Summary

Because we are interested in recommending jam and jelly making procedures that offer the highest quality, the least health and safety risks, and the lowest chance of losing product, all Extension recommendations for jams and jellies include a boiling water canning process for room temperature storage of sealed jars. Standard canning jars used with self-sealing flat metal lids and ring bands, pre-sterilization of clean canning jars, hot filling of product into the jars, and processing for 5 minutes in a boiling water canner are recommended for highest quality and to prevent mold growth.

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Elizabeth L. Andress, Ph.D., Professor and Extension Food Safety Specialist

The University of Georgia and Ft. Valley State University, the U.S. Department of Agriculture and counties of the state cooperating. The University of Georgia Cooperative Extension and the Colleges of Agricultural and Environmental Sciences & Family and Consumer Sciences offer educational programs, assistance and materials to all people without regard to race, color, national origin, age, sex or disability.

An Equal Opportunity Employer/Affirmative Action Organization Committed to a Diverse Work Force

FDNS-E-37-1

Revised June 2011