

# ALHFAM Food Safety Manual

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## The dilemma of the historic cook

As historic cooks and living history food interpreters, we want to demonstrate how things were done in the past so we can more fully understand the present. We also want to promote safety as well as historical knowledge. As it has been said, "Let us recreate history, but not the bloody flux."

We respect the past, but in the context of our present knowledge. Before you begin a foodways program, it is important to determine what will happen to the food after you prepare it. If it is going to be eaten by the public, then public health guidelines **MUST** be followed. If volunteers or staff will consume the food each site must determine the risks and benefits of sharing the food, and under what circumstances it is permissible. How much risk, if any, are they are willing to take? It is always advisable to have liability insurance to protect the institution and the staff and volunteers against law suits.

## The difference between then and now

We currently have a great deal of knowledge about infectious illness and food borne disease. We also know how to apply heat to food to make it more digestible. But along the way we have lost a lot of flavor, and the knowledge of how to prepare and preserve fresh food from scratch. Years ago people thought nothing of demonstrating hearth cooking and feeding it to the public, not just in museums, but in many public forums (county fairs, 4H presentations, church events, etc.). The awareness of food safety has grown in the past few decades, but so has the threat of lawsuits from problems traced to food borne illness. That being said, the rules have really changed whenever you feed the public, and things that used to be accepted, today are a serious liability risk for your institution.

## Eating the food we cook--is it safe?

The food we cook over the hearth or on the cast iron stove will not satisfy the letter of the public health law if you read current food safety guidelines. Although we may be comfortable about consuming what we cook over the hearth, we leave ourselves open to litigation if we do not practice current food safety. I've never known anyone to get sick from eating hearth-cooked food but this is not an adequate defense against a law suit.

## Feeding the public

It is difficult to get into our flawlessly recreated historic clothing, and then don a hairnet and latex gloves. It certainly ruins the impression we are trying to create. The only reasonable decision to be made is NOT to feed the public anything cooked in an historic cooking demonstration. If the public must be fed, for example during a fund-raiser, the food must be prepared under modern sanitary conditions. You can add depth to their experience by demonstrating how food would have been cooked in the past, but that food is NOT for their consumption.

When you decide that feeding the public at your site will be done, ALWAYS check with your local health officials. They determine what is allowable in your area and you will find that each geographical location has different rules. You must abide by them so that your insurance covers your activities. Do not feed the public if you do not have a license to produce food for public consumption. Do not feed the public if you cannot adhere to the basic safety standards listed below.

If you wish to feed staff/employees/volunteers associated with the site, please obtain permission, preferably in writing, prior to the event from those participating. Make sure that management knows that, at a minimum, if there is a problem, they may be responsible for any medical bills associated with food borne illness.

If you want to serve a commercially produced item (i.e. cookies) to feed the public, make sure it is away from any raw or uncooked foods, not in your food preparation or presentation area. Again, check with local health department to determine what is permissible.

It is advisable for every historic site that has a foodways program to have at least one staff member with current FOOD SAFETY CERTIFICATION. This means that they would have taken a course and passed the test which certifies their knowledge. (Different tests for different states? Different levels of tests?) Our understanding is that there are several different guidelines for food safety. Each site must determine for themselves under which one they fall. Sometimes the state regulations hold, sometimes the local ones do.

Our ancestors did not understand germ theory as we do. They knew bad food and bad water could make you sick. We have an advantage in that we understand which microorganisms are to blame for infectious illness, and we know how to limit and even eliminate their presence in our food. Food safety guidelines are based on this scientific knowledge.

Because microorganisms are forms of life, they adhere to predictable patterns. By interfering with those patterns, we can control or even eliminate them and the diseases they cause. One of the modern problems we have created for ourselves is that by industrializing food production, we now have a circumstance where hundreds of people may get food poisoning rather than just one family or a single farm as in the past.

By demonstrating historically correct food preparation and preservation techniques, we want to teach the public how their ancestors did things. We also want to convey the wisdom of "eating locally and seasonally"--which is the mantra of the Slow Food Movement. Our ancestors had no choice.

## Hands-on cooking classes

We have all heard the generally accepted notion that if someone participates in cooking the food they are allowed to eat it. It seems to be the catch-all safety net of cooking classes. This may be allowed by some local health authorities--but is not a legal defense if someone becomes ill or decides to sue. Prior to your cooking class always send participants a list of the recommended attire for safely cooking over a fire. This would include containment of hair, short nails, closed toe shoes, natural fibers in clothing and no dangling jewelry.

If you have students bring their own items (i.e. knives, cutting boards,) demonstrate how to wash and sanitize them. Everything should be washed in hot soapy water for at least 20 seconds, followed by dipping in a rinse water and then dipped in a sanitizing solution (1 gallon hot water to 1 tablespoon bleach). Air dry. Do not use a kitchen towel as this may spread germs from one person or one item to another.

Before beginning your classes plan some time to go over all methods of cleaning, show them where cleaning products are, and where firewood and most importantly where fire extinguishers are. If you are cooking with fat, review methods of extinguishing a fat-based fire. A woolen blanket can also be used to extinguish a fire. Go over basic knife safety and correct hand washing procedures. Keep cold foods cold and hot foods hot, before and after preparation. Bacteria grow very quickly between 40 and 135 degrees. If you are working in an area that does not have modern refrigeration, bring an ice chest and ice in which to keep items cold. It can be placed under a cloth to hide it from public view. It is preferable to have at least two small ice chests – one for meats and one for produce.

Make sure whoever is tending the fire knows how to work with a fire and when to add fuel without causing sudden sparks, flare ups or dislodging burning logs. The same holds for adding coals to bake kettle lids, forming new “burners” on the hearth, etc. Similar care is needed for coal placement in stoves. Teach them before you begin the process of cooking. If cooking outside, allow for possible veering wind, gusts, etc. and their effect on your fire.

## Guidelines for food safety:

The following checklist is designed primarily for foodways programs and activities (such as concession stands, historic dinners, etc.) where food will be consumed **BY THE PUBLIC**. While many of these same rules are good practice even in demonstration settings, sometimes they are not practical while remaining true to your period. Be aware in the latter cases the

resulting food should NOT be consumed by the public, and if possible warn visitors that they should not try doing it this way at home (i.e. old canning practices). Keep food out of the reach of the public, who may perceive food on the table as free samples.

Personal Preparation: for all cooking participants

1. Make sure you are physically clean (take a shower).
2. Wash your hair. If it is long enough, tie it back. It is best to wear a hair net or period cap or head wrap (African American or Hispanic).
3. Wear clean clothing, especially a clean apron.
4. Wear single-use plastic gloves, if possible. Gloves must never be used instead of hand washing. Hands must be washed before putting on gloves and when changing to a new pair. Never wash and reuse gloves. Some states have a no bare hand contact regulation on prepared food for the public.
5. Wear closed toed shoes and clean socks. Shoes should be durable enough to protect feet from fire and dropped pots.
6. Wear long garments, such as pants and a long sleeve shirt. Most historically correct clothing takes into account the safety of the cook, and should be made of natural fibers like wool and linen. A cap or historic head wrap contains the hair, and stays guarantee correct posture and serve as a back brace to protect your back from fatigue and incorrect bending.
7. Don't wear jewelry.
8. Keep nails short, if possible, or at least clean under your nails.
9. It is always preferable not to sneeze or cough on the food you are preparing. Please remember to cough, etc. into shoulders, but remember to wash your hands afterwards.
10. If wearing glasses, clean lenses periodically of sweat and splatters.
11. Wash your hands for at least 20 seconds. After washing your hands avoid touching exposed body parts (face, upper arms, hands, hair...). If you do touch exposed body parts you must rewash your hands.
  - Wet hands and forearms – Running water should be at least 100°F.
  - Apply soap.
  - Scrub hands and arms vigorously – Clean under fingernails and between fingers.
  - Rinse hands and arms thoroughly.
  - Dry hands and arms – Use paper towel or hand dryer.

## Cooking Site Preparation:

1. Live animals are not allowed where food is being prepared or served.
2. If in a building, you should be in a contained space, a room with four walls and a door that can close (off limits to the public). Close windows. Check all flues and chimneys yourself, to insure proper settings and ventilation.
3. If outside, place fire site downwind of tents, buildings and a safe distance from potentially flammable items or trees. Use shovel to turn turf back in squares (and save, to replace when fire is out). Site fire so it has ventilation without major drafts; a pit is desirable to contain live coals and prevent them from blowing around.
4. If outside or in a camp situation, mark with colored plastic or cloth strips all poles, tent pegs, ropes, etc. Ensure that canvas and ropes do not obstruct public viewpoints.
5. Plan how to properly extinguish fire when done, according to site regulations (banking, smothering, etc.). Leave fire site as you found it.
6. When demonstrating inside, have an evacuation plan for public and for cooks, with at least 2 exits. Tell everyone on the demonstration/cooking team of the plan.
7. Insure safe, clear footing for cooks and visitors at all times – thoroughly mop up any spills, dampness, etc. If outside, avoid mud or slippery grass.
8. Check fuel for adequate supply, proper type (no rotted or wet wood), ease of use, proper configuration to heat source and proper equipment (poker, coal shovel, etc.). Anthracite (hard) coal is preferable, as is hardwood, thoroughly dried and split.
9. Make sure work space is clean.
10. Sweep the floors before and after food preparation.
11. Wash floor after with hot water and soap.
12. Wash down all work surfaces with HOT water and bleach. Use 1 Tablespoon bleach to 1 gallon water
13. If possible, send all pots, bowls, knives, utensils and other cooking implements through modern dishwasher before use to sanitize. (This should obviously not be done for historical equipment.)
14. If you are using wooden buckets for water, do not put bleach in the water you intend to use for human consumption. Make sure fresh water buckets are clearly marked.

15. Set up your work space so that all activities are visible to public, but not accessible. Have a sensible layout to save the cook steps.

16. Make sure you have adequate and appropriate utensils, cooking vessels and serving gear for all items to be cooked. Try to avoid double duty (cross-contamination) for platters, ladles, knives, etc. Always keep separate utensils for meats and vegetables, and for raw meats and cooked meats.

17. Have a place or space for everything and ensure that everything is in its place (e.g., grater with nutmeg, adequate space to roll out pastry, etc.)

18. Keep all utensils, especially knives, far beyond public reach.

## Food Preparation and Storage:

1. Wash (and/or scrub with soft brush) all produce before using it in food preparation (i.e. apples when making apple cider).

2. If possible, post list of dishes and ingredients being prepared, so public can avoid airborne problems such as nut allergies, etc. Especially important if serving finished food to public (nut, gluten, lard allergies, etc.)

2. All dairy, meat and fresh products need to be refrigerated. Meat needs to be kept separate from the other items. It needs to be kept on the bottom shelf of a refrigerator to insure no contamination from dripping blood. Place meat in a plastic washable container. Bacterial growth occurs rapidly between 70 and 126 degrees F, but can continue to occur between 40 and 140 degrees

3. Have a refrigerator thermometer placed in the warmest part of the refrigerator. The temperature should be 41° F or lower. (Where should it be located? The top?)

4. All grocery items (flour, sugar, spices) need to be kept in metal containers (what about tightly sealed, sturdy plastic containers e.g. King Arthur Flour ??) and clearly marked. Original plastic containers for spices are fine, but you should move flour and sugar into new, clean containers with lids.

5. Defrost all meats in a refrigerator, not on a counter. If you use a microwave make sure to use the items immediately. Meats should be cooked until they have reached the following internal temperatures, as measured by an instant read thermometer. (You should use this even in an historic setting, if feeding anyone.):

Poultry: 165 degrees F. (74 degrees C.)

Ground meats: 155 degrees F. ((68 degrees C.

Injected meats (like ham)	155 degrees F. (68 degrees C.)
Pork, Beef, Veal, Lam:	145 degrees F. (63 degrees C.)
Fish	145 degrees F. (63 degrees C.)
Fresh Shell eggs	145 degrees F. (63 degrees C.)

6. If cooking or demonstrating outside, keep all food, raw and cooked, upwind of smoke and outside contaminants such as porta-potties, manure piles, barns, parking lots, etc. Do NOT eat displayed food (raw or cooked) if it is outside in the sun, etc. It has been at unsafe temperatures too long for safety. If doing repeated demonstrations, make new small batches of food. (Exceptions can be made for food kept at steady, continuous heat such as sugaring off, making apple butter, etc.)

7. NEVER re-freeze meats after they have been defrosted.

8. Garbage and scraps should be contained in a waste container with a lid. Empty garbage after the day is over. Spray inside of can with soap and water if possible. Make sure knife blades are sharp. Dull knives cause accidents.

9. Knife handles should be free from grease. They should be placed flat on a board when not in use. Wipe with blade away from you when cleaning. Clean knife thoroughly before and after use. Let knives air dry before putting them away.

10. Be careful when putting your hands into soapy water. Someone may have left a sharp object in the water which you cannot see.

11. Clean hard wood cutting and plastic cutting boards thoroughly before and after every use. Sanitize with bleach water. Wipe wooden boards down with mineral oil once a month to keep them in shape. Soft wood cutting boards should not be used.

12. You should have three distinctly marked cutting boards: Raw Meat, Cooked Meat, and Vegetables. If you are using plastic cutting boards, color coding is helpful: Green for vegetables, red for meats, and yellow for chicken. Do not cross use boards.

13. If any cooking implement falls on the floor do not use it again until it has been thoroughly washed and sanitized.

14. Treat ALL injuries immediately. Always have a first aid kit on hand. CHECK the first aid kit, before and after each program, and replace used items promptly. At a minimum it should contain gauze pads, band-aids, gauze rolls, adhesive tape, an ace bandage and hydrogen peroxide. It is also helpful to have waterproof bandages, Neosporin, butterfly closures (for bad cuts), eye wash (cinders), sunburn cream, insect repellent, and insect bite ointment.

15. Always have a way to call for outside help in an emergency, i.e. a cell phone or land line and obtain all appropriate phone numbers BEFORE the event or demonstration. When on site, be able to explain to outside help how to reach your area quickly and safely.

16. If tasting as you go, use a clean spoon every time, not the same one repeatedly. Tasting spoons should never be shared among people. Also, be sure hot food is cooled before serving.

## Cooking Presentations where public will be in the room where you are cooking

1. Do not let visitors stand by the fire. Most visitors will be wearing modern fabrics, such as poly blends which melt and cause serious burns if a spark lands on them. You should not allow open toed shoes or exposed skin. Simply block access to the fire by moving a table or some other object in their path. Even if the object is small (i.e. a stool) it will be a visual 'stop', and will often be enough to stop visitors from coming over to your work area. If you find the need, you can run rope to block off area.

2. Be aware of special needs folk (e.g. on O2, with inhalers, etc.) and remember that smoke and odors can aggravate allergies and coughing. Breathing smoke is not good for anyone, so make sure your fire is drawing properly and the room is adequately ventilated.

3. Be sure there are a fire extinguisher and/or bucket of water close to your fire. A wool blanket is also helpful to have to smother a fire.

4. Always make sure you have pot holders within easy reach. Oiled, pliable leather potholders are preferable to cloth.

5. Make sure you have adequate space to rest hot items such as bake kettle lids, pot lifters, ladles, etc. at a safe distance from public and working cooks.

6. Keep ingredients as close to you as possible. Cover them with something if possible (i.e. cloth provides a good cover, or leather cover). Visitors are very curious and will look and touch everything they can reach and freely sample any food they can reach.

7. Cheesecloth makes a good cover against insects.

8. If an ingredient falls on the floor throw it out, EVEN if you are not going to eat the item yourself.

9. Have a container with a lid for garbage. You can often have it under the table with a cloth over it to hide it. All garbage containers should be covered.

10. Be sure you have a cup with water for you own use. Only eat and drink in designated areas. Some regulatory authorities allow food handlers to drink from a covered container while in prep



areas. If you are working by a fire all day and talking continually to the public, it is very important to stay adequately hydrated. Have an historically appropriate cup or mug from which to drink.

11. Always insure that ALL participants have regular hydration and rest breaks. Avoid alcoholic or soda type liquids, as they will dehydrate persons further.

12. Avoid too many people around hearth or stove at one time, even if you are used to working together.

13. Make sure all participants keep flammable items such as napkins, paper notes or recipes, etc. well away from fire.

14. (CANNOT BE SAID ENOUGH !!!!) You CANNOT leave a live fire, PERIOD. Have a way to close off the kitchen if you have to leave, or be sure to arrange for someone to supervise the fire.

15. If you do allow the public to help with the food preparation (e.g. grinding corn) do not use these particular ingredients to cook with. It is better to use ingredients that have been properly prepared under separate and sanitary conditions. This is especially important if any of this food will be consumed by the public. If you are going to have a hands-on element, it is best to have one produced by the public (which will be discarded) and a separate one for anything you plan to consume.

2/2016