

# Brining

The Best Information Available From The Smoking Pros  
On The Internet and the USDA



*Assembled and Compiled by DeeJay 2006*

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# All About Brining

## What is Brining?

Brining is a popular method for improving the flavor and moisture content of lean meats like chicken, turkey, pork and seafood. This topic explains how brining works, which cuts of meat benefit most from brining, and concludes with a couple of recipes to get you started.

### Background On Brining

Historically, brining has been used as a method to preserve meat. Meat is soaked for many days in a very strong saltwater solution with the addition of sugar, spices, and other ingredients. This curing process binds the water in the meat or removes it altogether so it's not available for the growth of food-spoiling microorganisms.

With the advent of mechanical refrigeration, traditional brining became less popular for food preservation, but is still used today in the production of some meat products.

## Introducing Flavor Brining

While traditional brining was meant to preserve meat, the purpose of flavor brining is to improve the flavor, texture, and moisture content of lean cuts of meat. This is achieved by soaking the meat in a moderately salty solution for a few hours to a few days. Flavor brining also provides a temperature cushion during cooking--if you happen to overcook the meat a little, it will still be moist.

At a minimum, a flavor brine consists of water and salt. Other ingredients may include sugar, brown sugar, honey, molasses, maple syrup, fruit juices, beer, liquor, bay leaves, pickling spices, cloves, garlic, onion, chilies, citrus fruits, peppercorns, and other herbs and spices. Many recipes call for bringing the ingredients to a boil to dissolve the sugars and bring out the flavor of herbs, then cooling the mixture to below 40°F before use.

Sometimes a small amount of a curing agent like sodium nitrite or Morton Tender Quick (a mixture of salt, sugar, sodium nitrate, sodium nitrite and other ingredients) is added to a flavor brine. These curing agents create a color and taste reminiscent of ham and help prevent the growth of botulism. This is important when cold smoking brined meat at temperatures below 140°F or when smoking a large brined turkey that might not reach 140°F internal temperature within the first 4 hours of cooking. Sodium nitrite and Morton

Tender Quick can be purchased at butcher supply stores or from suppliers like [Allied Kenco](#).

It's important to point out that not everyone likes the effects of brining on meat. Some people don't like the texture that results, while others complain about the flavor, saying that it makes everything taste like ham (especially if sodium nitrite or Morton Tender Quick has been added to the solution) or that the meat tastes too salty. You'll have to judge the results for yourself.

### **How Brining Works**

Pick up any book or visit any Web site that describes how brining works and you'll probably see the principles of diffusion and osmosis mentioned.

Diffusion is "the process whereby particles of liquids, gases, or solids intermingle as the result of their spontaneous movement caused by thermal agitation and in dissolved substances move from a region of higher to one of lower concentration." Merriam-Webster defines osmosis as "movement of a solvent through a semipermeable membrane (as of a living cell) into a solution of higher solute concentration that tends to equalize the concentrations of solute on the two sides of the membrane."

There is general agreement among food scientists and writers that the processes of diffusion and osmosis are involved in achieving equilibrium between the flavor brine solution and the meat--in other words, that these processes attempt to balance the difference between the amount of water, salt, and flavorings in the flavor brine solution and the amount of water and dissolved substances inside the meat cells. However, opinions differ as to the mechanics of this balancing act.

The most commonly offered explanation is that the flavor brine solution contains a higher concentration of water and salt than the meat, so the solution passes into the meat cells through their semi-permeable membranes, adding water and flavor to the inside of the meat cells.

### **Why Should I Brine**

Well, to get the perfect grilled chicken, brining is THE way to go. To get a juicy tasty turkey, brining is ALSO the ONLY way to go.

Brining also simply injects loads of flavors into meats. Brining will give your meats the most amazing flavor and texture. It should also be the moistest poultry you have ever eaten.

You will get similar results with Pork roasts, etc.

One last point - LEFTOVERS.

Leftover regular poultry is usually even drier and has that typical day-old taste. But brined poultry will still taste moist and fresh.

### **What's in the Brine ?**

The brine is mostly water, some salt at a minimum and some sugar and spices and herbs and onions and garlic at a maximum.

What does the brining process do for my chicken or turkey ?

The brining process forces water into the muscle tissues of the meat by a process known as diffusion and osmosis. This additional moisture causes the muscle tissues to swell and hold more water. The resulting water in the muscle tissues will make the meat more moist and tender. Any spices, herbs or other flavorings you add to the brine solution will get taken deep into the meat with the water. See section 10.5.4 of the BBQ-List FAQ version 2.0 for more information on brining (brining a chicken is similar to brining a turkey).

### **What do I use for a brine ?**

As a general starting point, take one gallon of water and add 3/4 (preferable - but you can use up to a cup) of salt (kosher is best !), 1/2 cup of sugar and then the rest is up to you. Sliced onions are nice, a few cloves of crushed garlic add a nice flavor and then there's the spices and herbs.

### **Ready For Brine Time**

Salt and spices put old-fashioned flavor back into modern meats.

In a growing number of restaurant and home kitchens, brining is putting the juice back into pork chops and at least some taste back into factory-raised chickens. By soaking the meat

for hours or days in a seasoned salt-water solution, cooks find that they can transform lean pork and poultry with minimal cost and effort.

Chickens raised to market weight quickly on carefully formulated feed don't have the flavor of those old-time barnyard hunt-and-peckers. Nor does pork have the taste appeal it used to. Bred for leanness to accommodate contemporary concerns about fat, American pigs are 50 to 70 percent leaner than they were 20 years ago, says East Bay sausage maker Bruce Aidells. Fat, whatever its other failings, contributes moisture and flavor.

Because there's more salt in the brine than in the meat, the muscle absorbs the salt water. There, the salt denatures the meat proteins, causing them to unwind and form a matrix that traps the water. And if the brine includes herbs, garlic, juniper berries or peppercorns, those flavors are trapped in the meat, too. Instead of seasoning on the surface only, as most cooks do, brining carries the seasonings throughout.

Brines vary considerably from chef to chef, as do recommended brining times. But generally speaking, the saltier the brine, the shorter the required stay. And, logically, the brine will penetrate a Cornish game hen or duck breast much faster than it will penetrate a thick muscle like a whole pork loin or turkey breast. Meat left too long in a brine tastes over seasoned and the texture is compromised, producing a soggy or mushy quality.

Most cooks start their brine with hot water, which dissolves the salt and draws out the flavor in the herbs and spices. But they caution that the brine should be completely cold before adding the meat or it will absorb too much salt.

By playing around with the liquid base and the seasonings, chefs give their brine personality. Some use apple juice or beer for some or all of the water. The smoked turkey that Jeff Starr of Stags' Leap Winery produced for a food editors' conference in Napa Valley last year was brined in orange juice, rice wine vinegar and apple cider vinegar; some who tasted it swore they would never cook a turkey any other way again.

Seasonings can run the gamut from thyme, rosemary, bay leaf and garlic to cinnamon stick, star anise or vanilla. Many cooks put some sugar in their brine to sweeten the meat and make it brown better when cooked. Others avoid sugar, arguing that it makes everything taste like ham.

Whatever their recipe, brining advocates keep looking for other uses for their favorite technique. Anderson says some people brine shrimp for half an hour; she herself has begun soaking chicken parts in salted buttermilk before frying to get the benefits of brine with the tenderizing effect of the buttermilk. If cooks like Anderson and Aidells continue to preach the gospel of brining, diners can kiss sawdust chicken goodbye.

## What The Pros Know

--A heavy-duty plastic tub, earthenware crock, stainless-steel bowl or even a re-sealable plastic bag can work as a brining container as long as the meat is fully submerged. Weight with a plate if necessary to keep the meat fully covered by brine.

--To determine how much brine you'll need, place the meat to be brined in your chosen container. Add water to cover. Remove the meat and measure the water.

--Start your brine with hot water to dissolve the salt (and sugar if using) and to draw the flavor out of any herbs and spices. Chill brine completely in the refrigerator before adding meat.

--Although some cooks prefer lighter or heavier brines, 1 cup of salt per gallon of water is a happy medium. Use kosher salt that has no additives.

Try LESS Kosher salt. Maybe 3/4 to 2/3 cup per gallon.

Do NOT try and use sea salt.

--Experiment with seasonings. Salt is essential, but everything else is optional. Consider garlic, ginger, fresh herbs, juniper berries, clove, cinnamon stick, vanilla bean, mustard seed, coriander seed, star anise, hot pepper flakes or Sichuan peppercorns. To give pork a sweet edge and encourage browning, add 1/2 cup sugar to each 2 quarts of water.

--Rinse meat twice after removing it from the brine solution.

--Don't salt brined meat before cooking; it is already salted throughout.

--Don't reuse brine.

## How Long To Brine

The thickness of the muscle, the strength of the brine and your own taste determine how long to brine an item. For a moderately strong brine (1 cup salt to 1 gallon water), the following brining times are rough guidelines. If you aren't ready to cook at the end of the brining time, remove the meat from the brine, but keep the meat refrigerated.

### Time For Food To Be Left In Brine

shrimp	30 minutes
whole chicken (4 lbs)	8-12 hours
chicken parts	1 1/2 hours
chicken breasts	1 hour
Cornish game hens	2 hours
whole turkey	24 hours
pork chops (1 1/4 to 1 1/2 inch thick)	12-24 hours
Whole pork tenderloin:	12 hours
whole pork loins	2 to 4 days



## "Turkey: To Brine Or Not To Brine"

By Dan Gill

"Turkey and chicken may be slow smoked but the skin is rubbery and not very good.

They don't need a great deal of smoke flavor, so temperatures of 275° to 325° are ideal. Use lighter flavored woods such as cherry and apple.

If you smoke a turkey at temperatures of 180° to 225° F., you need to brine it or risk making everyone very sick because the bird spends a lot of time in the danger zone (40° to 140° F.). At 250° F. and above the risk decreases dramatically. List members (starting with me) discovered that brined birds are moist and taste really good. Many of us have publicly declared that we will not cook another turkey without brining it first.

Some people are sensitive to salt and find that birds subjected to the full treatment are too salty for their tastes. To reduce the saltiness, add sugar, decrease salt, decrease brining time or soak the bird in fresh water for an hour prior to cooking. You can brine just with salt but since salt takes flavors in with it, why not take advantage. Sugar moderates the salty taste and helps keep the birds juicy. Most of the people who have commented that their birds were too salty did not use enough sugar. The garlic, ginger and maple flavors are very subtle but enhance the flavor of the bird. For safety, I would definitely recommend using the brine full strength when cooking below 200° F. At higher temperatures, you can cut the salt in half if you are salt sensitive.

Do not over cook! Brined birds cook faster so be careful and use a real thermometer inserted into the thickest part of the breast. Cook to 170° internal. There is no need to cook with the breast down because the bird will be plenty juicy.

## Super-Juicy Roast Chicken With Garlic & Thyme

Even the breast meat is moist in this simple roast chicken, which spends half a day in brine. If desired, brine it overnight, then remove it from the brine in the morning but keep refrigerated until dinner time.

### INGREDIENTS:

1 chicken, 3 1/2 to 4 pounds  
1 lemon, halved  
1 gallon boiling water  
1 cup kosher salt  
1/2 bunch fresh thyme  
4 garlic cloves, peeled and halved  
1 tablespoon coarsely cracked peppercorns

**INSTRUCTIONS:** To make the brine: Combine all brine ingredients in a bowl, small crock or heavy-duty plastic container just large enough to hold the chicken. Stir to dissolve the salt. Cool, then refrigerate until completely cold. Place the chicken breast-side down in the brine. Weight with a plate if necessary to keep the chicken completely submerged. Refrigerate for 12 hours.

Preheat the oven to 425 degrees.

Remove chicken from brine and allow to air-dry at room temperature.

Squeeze 1 of the lemon halves in the cavity, squeeze the other over the skin, then put both halves in the cavity. Truss the bird with string.

Place breast-side down on a rack in a roasting pan; roast for 30 minutes. Turn breast-side up and continue roasting until the juices run clear, about 30 minutes longer. Transfer the chicken breast-side down to a platter and let cool for 30 minutes. Remove the string and discard the lemons. Carve the chicken into serving pieces and spoon any collected juices over them.

Serves 3 or 4.

## 42 Degrees' Restaurant Cider-Cured Pork Chops

### INGREDIENTS:

4 center-cut pork loin chops, 1 1/4 to 1 1/2 inches thick

Olive oil

#### Brine

4 cups water

2 cups hard cider

1/2 cup salt

1/2 cup light brown sugar

10 whole peppercorns

4 bay leaves

1/2 bunch fresh thyme

1 onion, chopped

1 carrot, peeled and chopped

1 celery rib, chopped

1 apple, peeled and chopped

**INSTRUCTIONS:** To make the brine: Combine all brine ingredients in a saucepan. Bring to a boil over high heat, then remove from heat and let cool. When cool, refrigerate until cold.

Add the pork chops to the cold brine. Weight with a plate if necessary to keep the chops completely submerged. Refrigerate for at least 1 day or up to 2 days.

To cook: Remove the chops from the brine and pat them dry. Heat 2 skillet over moderately high heat. Add just enough oil to coat the bottom of each skillet. When the skillet are hot, add the chops and reduce heat to moderately low. Cook for 10 minutes, then turn and cook until the chops are no longer pink at the bone, about 10 minutes longer. Serves 4. The calories and other nutrients absorbed from brines vary and are difficult to estimate. Variables include the type of food, brining time and amount of surface area. Therefore, these recipes contain no analysis.

## Nancy Oakes' Vanilla Brine

This recipe makes enough brine for a 4- to 6-pound boneless pork loin, or six 1 3/8- to 1 1/2-inch-thick center-cut pork loin chops, or 4 pork tenderloins, 1 to 1 1/4 pounds each. The recipe is from a forthcoming cookbook on meat by Bruce Aidells.

### INGREDIENTS:

9 cups boiling water  
1/2 cup sugar  
1/2 cup kosher salt  
2 tablespoons coarsely cracked black pepper  
2 1/2 teaspoons pure vanilla

**INSTRUCTIONS:** *Combine all brine ingredients in a bowl, small crock or heavy-duty plastic container; stir to dissolve the salt and sugar. Let cool, then chill thoroughly in the refrigerator.*

*Add pork of choice (see headnote). Weight with a plate if necessary to keep the meat completely submerged.*

*Refrigerate 3 days for pork loin, 1 to 2 days for chops and 12 hours for tenderloin. Stir the brine each day and turn the pork occasionally.*

*Roast or grill pork loin or tenderloins. Grill chops or pan-fry according to directions in Cider-Cured Pork Chops.*

## Boulevard's Staff Turkey

If you're feeling flush, says Boulevard chef Nancy Oakes, substitute apple juice or cider for the water, and reduce the honey to 1/2 cup.

### INGREDIENTS:

1 bone-in turkey breast half, 3 to 3 1/2 pounds  
1 tablespoon olive oil Honey Brine  
2 quarts water  
3/4 cup honey  
1/2 cup kosher salt  
2 tablespoons Dijon mustard  
1 1/2 teaspoons hot red pepper flakes  
1 rosemary sprig, about 4 inches long

**INSTRUCTIONS:** To make the brine: Bring water to a boil, then pour into a container just large enough to hold the turkey breast; cool for 5 minutes. Add honey, salt, mustard and pepper; whisk until honey dissolves. Add rosemary. Refrigerate until well chilled.

Add turkey breast to the chilled brine. Weight with a plate if necessary to keep it completely submerged. Refrigerate for 1 to 2 days.

Remove the turkey breast from the brine, place in a roasting pan and bring to room temperature. Preheat the oven to 350 degrees.

Roast the turkey for 30 minutes, then brush with the olive oil. Continue roasting until the internal temperature reaches 150 degrees on an instant-read thermometer, about 30 minutes longer, basting occasionally with the drippings. Remove from the oven and let rest for 30 minutes before carving.

Serves 6.

## Dan Gill's Basic Bird Brine

Estimate how much liquid will be required to completely cover the bird(s).

for each gallon (which should cover one 16# whole bird or two 8# breasts), mix:

1 1/2 cups salt

1/2 cup molasses

1 1/2 T crushed or minced garlic (or garlic powder)

1/2 T onion powder

1/4 cup pepper

1/2 cup lemon juice

1/2 oz maple flavoring

I also usually throw in about 12 oz ginger ale. Alternatively, use 1/2 T ginger (ground, minced or whatever) in place of the garlic and onion.

Cover birds completely with brine and refrigerate overnight. In the morning, remove from brine and drain while preparing smoker. Smoke at around 275 (measured at grate level) to an internal temp of 170 basting with butter every few hours to give you the golden brown skin."

## Deejay's Apple/Maple Syrup Brine

Great for Ham, Bacon and Poultry.

1 cup Diamond kosher salt (OR 3/4 cup Morton K-salt or 1/2 cup non-iodized table salt)

1 cup brown sugar

1/2 cup PURE maple syrup (not pancake syrup - but it will work in a pinch)

2 quarts apple juice (or cider)

2 quarts water

Mix the brine well, and chill it - you want it ice cold when the meat goes in it. Soak the meat in the brine for at least 16 hours in a non metal food grade container covered in the fridge.

## Excellent Brining Recipes

### Honey Brine for Poultry

1 gallon water  
1 cup salt ( sea or kosher)  
1 oz tender quick (2 tbsp)  
1 cup honey  
3 bay leaves  
1/4 tsp ground cloves  
1/2 tsp pickle spice

Mix ingredients and bring to boil, allow to cool to room temp and brine recommended times in the brine post.

### Basic Soy Brine

1 gallon water  
3/4 cup salt( sea or kosher)  
3/4 cup sugar  
1/4 cup soy sauce  
1/4 cup molasses  
2 tbsp black pepper  
1 tbsp thyme  
1 tbsp oregano  
bring mix to boil and allow to cool to room temp.

You can do your own other ingredients like maple syrup, garlic, onion, allspice, ginger, or spices you like can be used.

## Big Wheel's Prize Winning Brine !

### 1. Prize-Winning Brine Ingredients

- 1 gallon water
- 1 cup kosher salt
- 1 cup white sugar
- 1/2 cup cider vinegar
- 1/2 cup pure maple syrup or molasses
- 2 T. black pepper
- 1 T. mustard seeds
- 1/2 cup soy sauce
- 1/4 cup chopped garlic (from the jar) (or 2 Tablespoons granulated garlic)
- 1 T. Tarragon
- 1 T. Oregano

2. Split the chickens down the middle and rinse.

3. 12 hrs. is about right on time ... a few hours either way wont hurt a thing.

4. Make sure the brine is "cold" before you place the birds in it or they will absorb too much salt.

5. Make sure you use glass, ceramics, plastic or stainless steel for brining cause it is highly reactive.

6. I usually make this up in half gallon batches which fit nicely into empty half-gallon bottles of Ezra Brooks (Wife drinks the stuff ... I'm a teetotaler myself)

### 7. Procedure

I then get the bottles of brine cold in the icebox.

Put 2 chicken halves in each bag and dump a half gallon of cold brine on top of each.

Then stick the whole mess into an ice chest with ice.

Massaganate about once an hour or so ... (nothing critical ... just give them a shake now and then) while you help empty more bottles for future brining episodes.



## Joe Simone's Brine-Cured Roast Chicken

2 tablespoons kosher salt  
2 tablespoons granulated sugar  
2 tablespoons brown sugar  
1 tablespoon whole fennel seeds  
1 tablespoon coriander seeds  
12 black peppercorns  
3 sprigs fresh thyme  
2 sprigs fresh rosemary  
2 cups boiling water  
4 cups ice water  
1 whole chicken (about 3 1/2 pounds) - cut into 6 pieces  
2 tablespoons olive oil  
1 fresh lemon - cut in half

In addition to roasting, Joe Simone of Tosca in Hingham often grills these brine-cured chicken pieces (8 to 10 minutes on each side). The delicate flavor of the brine allows the natural taste of the chicken to shine through.

Combine the salt, sugars, fennel and coriander seeds, peppercorns, thyme and rosemary in a large nonreactive container.

Whisk in the boiling water and continue whisking until the sugars and salt are dissolved.

Whisk in the ice water and let the brine cool.

Add the chicken to the brine, making sure all the pieces are submerged.

Cover the container with plastic wrap and refrigerate for at least 24 hours, but no more than 36 hours.

Preheat the oven to 400 degrees.

Remove the chicken from the brine and lightly pat dry.

Rub with the oil and shower with lemon juice. Season with several pinches of salt and place in a roasting pan.

Roast for 25 minutes, or until the chicken is just cooked through.

## Brine-Cured Tuna over Frisee with Champagne Vinaigrette

For the tuna:

1/4 cup sugar

1/4 cup kosher salt

2 cups boiling water

1 dried chipotle chile - coarsely chopped

1 1/2 teaspoons cumin seeds - toasted

1 pound fresh tuna - Approx 1 inch thick

Canola oil - For brushing tuna

For the salad:

1 clove garlic - minced

2 teaspoons fresh thyme - chopped

6 tablespoons Champagne vinegar

2/3 cup canola oil

1/2 teaspoon sugar

Salt and freshly ground black pepper - to taste

2 small heads frisee (or other delicate salad green) - rinse and pat dry

At Tremont 647, Andy Husbands smokes the tuna after soaking it in a stronger version of this brine.

Since the tuna in this recipe is going to be fully cooked, the brine contains less salt and sugar.

For the tuna: Combine the sugar, salt, and boiling water in a large nonreactive container.

Stir to dissolve the sugar and salt.

Add the ice water, chipotle, and cumin seeds, and let the brine cool.

Add the tuna to the brine, making sure it is submerged.

Cover the container with plastic wrap and refrigerate for 6 hours.

For the salad: Place the garlic, thyme, and vinegar in a small bowl.

Slowly whisk in the oil to emulsify the dressing.

Whisk in the sugar and season with salt and pepper to taste.

Place the frisee in a salad bowl and toss with half of the dressing.

Transfer the dressed frisee to 6 salad plates.

Prepare a grill or broiler.

Remove the tuna from the brine and gently pat dry.

Lightly brush with the oil.

Grill or broil to desired doneness (approximately 6 minutes per side for 1-inch-thick tuna rare in the center).

Cut the tuna into thin slices and arrange over the salads.

Drizzle the remaining dressing over each salad.

## Maple and Dill Brined Salmon

1 quart cold water  
2 tablespoons kosher salt  
2 tablespoons real maple syrup  
1 large bunch dill - coarsely chopped  
2 cloves garlic - smashed  
1/4 teaspoon freshly ground black pepper  
1 salmon fillet - About 2 pounds  
1 tablespoon olive oil

this delicate brine performs magic on a sparkling-fresh fillet of salmon. It plumps the fish with moisture and produces the most tender, succulent salmon I have ever eaten.

Combine the water, salt, and maple syrup in a large nonreactive container.

Stir to dissolve the salt.

Blend in the dill, garlic, and pepper.

Place the salmon, skin side up, in the brine, making sure it is submerged.

Cover the container with plastic wrap and refrigerate for 6 hours.

Turn on the broiler.

Remove the salmon from the brine and lightly pat dry with a paper towel.

Place on a foil-lined baking sheet, skin side down, and coat with the oil.

Broil for 15 minutes, or until just cooked through.

## George Germon and Johanne Killeen's Brine-Cured Pork Chops

1 cup fresh herbs (rosemary, oregano, thyme,  
and - coarsely chopped  
1/2 cup brown sugar  
1/4 cup kosher salt  
2 tablespoons fennel seed  
10 coriander seeds  
10 black peppercorns  
5 juniper berries  
5 bay leaves  
1 quart hot water  
3 quarts ice water  
12 pork chops - 1 inch thick  
2 tablespoons olive oil

Since brining partially cooks the pork, the finished chops will be rosy inside and very tender.

George Germon and Johanne Killeen often serve these pork chops with pickled pears. Caramelized onions or any kind of sweet-and-sour chutney would also make a nice accompaniment.

Combine the fresh herbs, sugar, and salt, fennel and coriander seeds, peppercorns, juniper berries, and bay leaves in a large nonreactive container.

Add the hot water and stir to dissolve the sugar and salt.

Stir in the ice water.

Add the pork chops to the brine, making sure they are submerged.

Cover the container with plastic wrap and refrigerate for 18 to 24 hours.

Prepare a grill or broiler.

Remove the pork chops from the brine and pat dry.

Lightly brush with the oil and grill or broil for about 8 minutes on each side.

Place on a platter and let rest 5 minutes.

## Benjamin Nathan's Orange-Soy-Chile Brine-Roasted Duck

3 quarts ice water  
3 cups soy sauce  
1 1/2 cups mirin  
3 tablespoons canola oil  
1 1/2 unpeeled oranges - slice into half moon  
1 1/2 peeled onions - slice into half moon  
6 whole garlic cloves  
1/3 cup fresh peeled ginger root - chopped  
1/4 cup garlic chili paste  
3 dried Thai chiles  
1 1/2 tablespoons whole Szechuan peppercorns  
1 1/2 tablespoons coriander seeds  
3 tablespoons kosher salt  
1 5 pound duck

This brine infuses the duck meat with a delicate, savory flavor and makes it velvety and moist. It's good warm from the oven or cold the next day. Note that the duck must soak in the brine for 3 days - prepare it on a Wednesday night for a dinner party Saturday night.

Combine the ice water, soy sauce, and mirin in a large nonreactive container.

Put the oil in a large nonstick skillet over medium-high heat.

When hot, add the orange slices, onions, garlic and ginger.

Saute until browned, about 5 minutes.

Stir in the garlic chili paste and saute for 2 minutes more.

Transfer to the soy mixture and stir to combine.

Preheat the oven to 450 degrees.

Place the duck on the rack in a roasting pan.

Roast for 20 minutes and then reduce the heat to 275 degrees.

Roast the duck for 1 hour more, occasionally pouring off the fat as it accumulates in the bottom of the roasting pan.

Transfer the duck to a platter and let cool slightly before slicing.

## Honey and Apple Smoked Turkey

By Marlene Rausch

You don't have to brine a turkey before smoking it, but it does provide you with a moist, succulent bird. I prepared four turkeys before getting this recipe right and it is quite delicious. It turns out slightly sweet and salty, nicely smoky and is one of those mahogany visions that would be the envy of any every gourmet magazine food stylist. You could probably use maple syrup for this instead of honey. I also tried a glaze of brown sugar and water, applied every hour or so, during smoking and got great results.

1 turkey (10 to 12 lbs.)

### BRINE

16 cups of water - approximately  
4 cups hot water  
3 cups pickling salt  
1/2 cup white sugar  
1 tablespoon garlic powder  
2 tablespoons onion powder  
2 tablespoons pickling spice  
1 teaspoon saltpetre (optional)

### DRY RUB

2 tablespoons paprika  
1 teaspoon Old Bay seasoning  
4 teaspoons kosher salt  
1/2 teaspoon white pepper  
1/2 teaspoon garlic powder  
1 cup maple syrup  
2 apples, quartered

### SMOKER PREPARATION

Pre-soaked apple and/or maple chunks  
apples, about 3 medium, quartered  
water

24 hours ahead: brine turkey. Fill a large, non reactive container such as a large stock pot with 16 cups of water. In another bowl, stir the four cups of hot water with the salt,

sugar, onion powder, garlic powder, pickling spice and saltpetre (if desired). Stir into cold water in stock pot to dissolve salt and sugar.

Immerse turkey in salted, spiced water and weigh down to keep submerged. (I used a brick wrapped in a ziplock bag). Refrigerate overnight or at least 4-6 hours. Once in awhile, swish turkey around (this is called "overhauling").

Meanwhile, soak about 12-20 medium large chunks of maple and apple hardwood in water overnight (or at least a couple of hours).

Next day, remove turkey from brine. Dry very well. Mix dry rub seasonings together: paprika, Old Bay, salt, pepper, and garlic powder. Pat all over turkey.

Fill turkey cavity with a couple of quartered apple sections.

Prepare smoker according to manufacturer's instructions. Add apple pieces to water tray.

Once briquettes are hot, place 4-6 wet wood chunks on top.

Place turkey on cooking grate and close lid. Baste with maple syrup during the last three hours (every 45 minutes or so).

Smoke cook, about 4 1/2 - 6 1/2 hours, until turkey temperature reads 160-165 F. Technically, turkey is thoroughly done when a meat thermometer inserted into the thigh reads 180 F. However, I found if you actually keep it on the grill until that point it will dry out. At 160-165 F., the temperature continues to climb rather quickly - even as you remove the turkey. Taking it off at 160 F. ensures it will not be overdone and dry.

The first three turkeys I smoked were taken off between 170 and 180 F. They were flavorful but rather dry. The last one, removed at 160 F., was perfect. For safety's sake, please note that many home economists are emphatic about the 180 degree minimum.

Remove turkey from smoker, drain inside cavity. Cool to warm before placing in fridge to "mature". (24 hours is best. Overnight is okay).

Eat and Enjoy !



## Apple Cider Brined Turkey

Courtesy Of Marlene Rausch

4 gal. Apple cider  
4 oz. Kosher Salt  
1 ea. Onion (diced)  
2 ea. Heads Garlic split  
4 oz. fresh ginger, chopped  
3 pcs. Star Anise  
4 bay leaves  
4 ea. Oranges quartered

Method (In a large stock pot):

Sautee the onion, garlic, ginger, and anise together in a little canola oil, until lightly browned. Add the bay leaves and the oranges. Sautee another 2-3 min. Add the cider and the Kosher salt. Bring to a simmer for 1 minute. Remove from heat, transfer to another container and chill completely (use an Ice bath if possible).

Rinse and dry bird. Place bird in a large vessel to marinate in. Pour the well chilled brine over the bird and turn to coat well. Place a weighted plate or something of the sort over the bird to keep it immersed. Cover and refrigerate while marinating. Turn the bird daily. Marinate a minimum of 48 hours. Reserve some of the brine to baste with if you like.

Proceed with roasting as usual ( I like to start with the breast side down).

I made this much brine to marinate (2) 14# birds.

I highly recommend this brine and recieved rave reviews with it last year. I will do it again this year. Please let me know how it turned out for you !

## Zippy Smoked Chicken

Here's a little hopped-up brine that I did for 6 chickens yesterday. Smoked at 230 for 3 1/2 hr .... was scrumptious. Did with hickory. Fishing time is here now and the boy and his friend caught a few brookys threw them in the brine after the chickens came out. Grilled them ...and they were outstanding. Brined the chickens 14 hrs.

### Chicken Brine

5 gal water  
4 cups salt  
4 heaping tsp garlic powder  
4 heaping tsp onion powder  
3/4 bottle liquid smoke (just do it)  
1 1/4 cup packed brown sugar  
3 tbl oregano  
4 heaping tsp black pepper  
1 tsp cayenne  
1/2 cup olive oil  
5 bay leaves  
4 heaping tbl pickling spice  
1/2 26oz can whole jalepeno plus juice  
(snaped jalepenos in half)  
3 tsp celery salt

Put all the dry spices in warm water for half hour or so. Then place chicken in brine for appropriate time.

Wash chicken thoroughly afterwards

## Duck Pastrami

Recipe By Emeril Lagasse

1 tablespoon black peppercorns  
3 teaspoons dried thyme  
3 bay leaves - crushed  
1 teaspoon whole cloves  
2 tablespoons garlic - minced  
1 teaspoon whole juniper berries  
1/3 cup crushed juniper berries  
4 cups water  
1/2 cup light brown sugar - packed  
1/2 cup kosher salt  
1 duck breast, boneless, split ~2.25 lbs  
1/4 cup coarsely ground pepper

In a small mixing bowl, combine the peppercorns, thyme, bay leaves, cloves, garlic, and whole juniper berries. In a saucepan, over medium heat, combine the water, brown sugar and salt. Bring to a boil and stir to dissolve the sugar and salt. Remove from the heat and add dry spice mixture and steep for 1 hour. Place the duck breast in a glass or plastic container. Pour the seasoned brine to cover the breasts completely. Cover and refrigerate for 48 hours, turning the breasts a couple of times. Remove the duck breasts from the brine and rinse thoroughly with cool water. Pat dry with a towel. Preheat the oven (smoker) to 250 degrees. Combine the crushed juniper berries and ground black pepper in a small bowl. Using the palm and heel of your hands, press 2/3 of the berry and pepper mixture into the underside of the breasts. Press the remaining mixture onto the skin side. Place the breasts, skin side down, on a rack in a roasting pan in smoker) and roast for 1 hour. Remove and let cool for 30 minutes. Wrap the breasts tightly in plastic wrap and place in an airtight container. Store in the refrigerator for at least 1 week before using. To serve, remove the meat and slice thin.

He serves this on french bread with provolone, mustard and onion marmalade.

## Dan's Chicken Marinade

Recipe By Our Own Dan Gill !

ginger ale  
vinegar  
ginger  
garlic powder  
salt  
turmeric  
hot sauce  
cayenne powder  
Old Bay seasoning

For chicken, I use a marinade and mop based on ginger ale and vinegar with ginger, garlic powder, salt, tumeric, hot sauce, cayenne powder, and Old Bay for flavor. These are my standard and favorite spices but I also look through the cabinet to see if anything else sounds good at the time. No measurements - I just pour in what I think is right for the amount of chicken. When the mixture passes the smell and taste test, I dump in the chicken. After the chicken has marinated, I boil the liquid (for safety) and use it as a mop.

## Illustrations and Tables

**Time For Food To Be Left In Brine**

shrimp	30 minutes
whole chicken (4 lbs)	8-12 hours
chicken parts	1 1/2 hours
chicken breasts	1 hour
Cornish game hens	2 hours
whole turkey	24 hours
pork chops (1 1/4 to 1 1/2 inch thick)	12-24 hours
Whole pork tenderloin:	12 hours
whole pork loins	2 to 4 days

### **Salt Equivalent Measures**

Table salt and kosher salt do not have the same saltiness in a flavor brine when measured by volume--but they do when measured by weight.

Table salt weighs about 10 ounces per cup, while kosher salt weighs 5-8 ounces per cup, depending on the brand. If using kosher salt in a brine, you must use more than a cup to achieve the same salt flavor you would get from a cup of table salt.

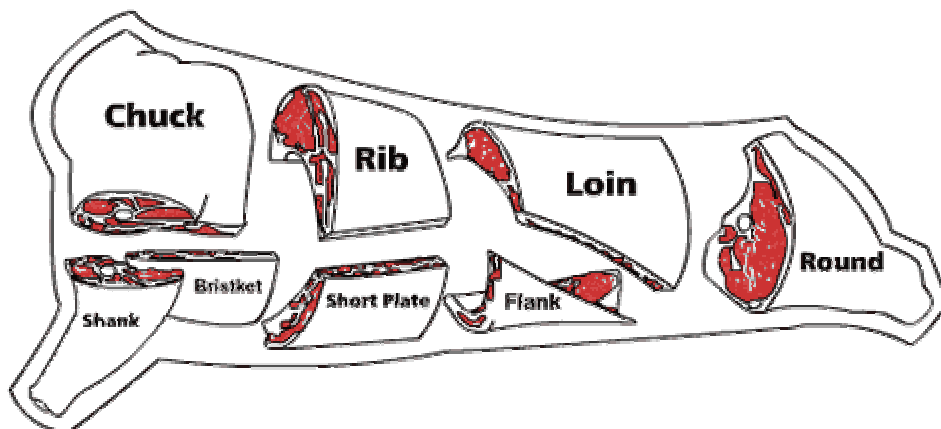
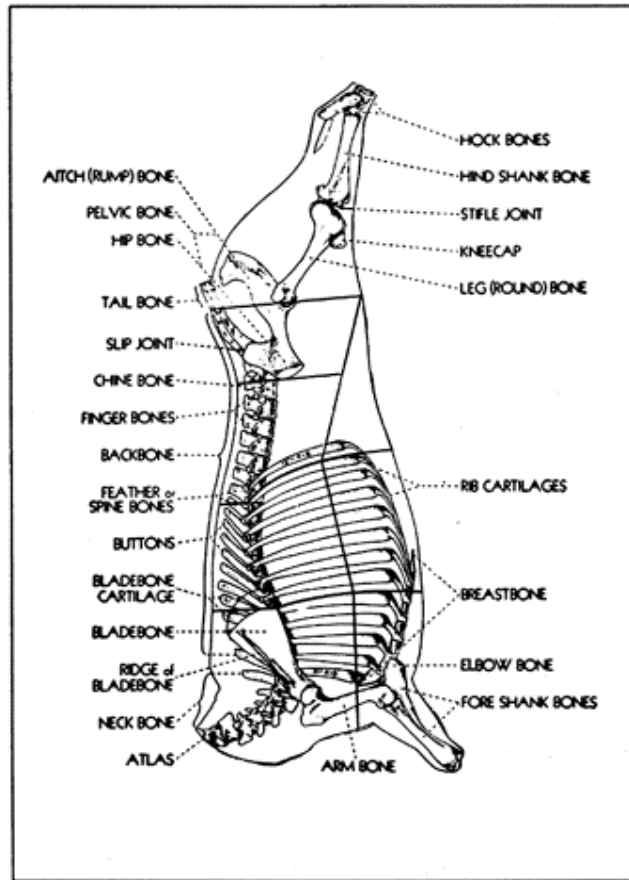
The chart below shows equivalent amounts of table salt and the two most popular brands of kosher salt.

<b>Table Salt</b>	1 cup
<b>Morton Kosher Salt</b>	1-1/2 cups
<b>Diamond Crystal Kosher Salt</b>	2 cups

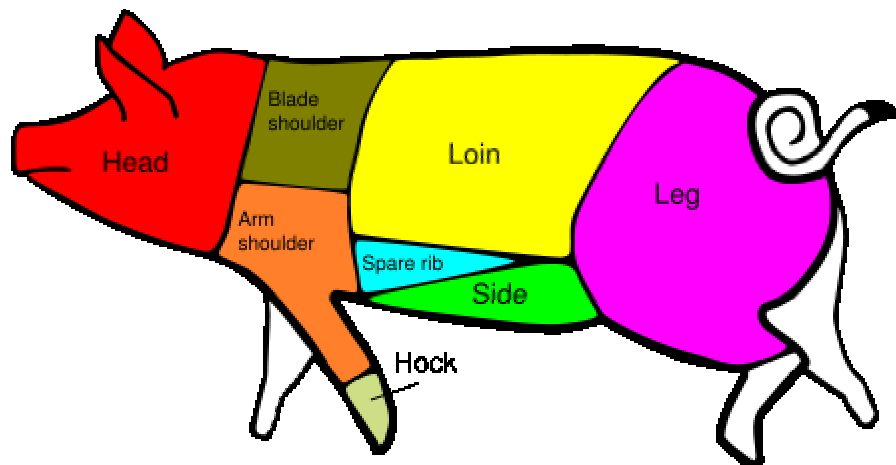
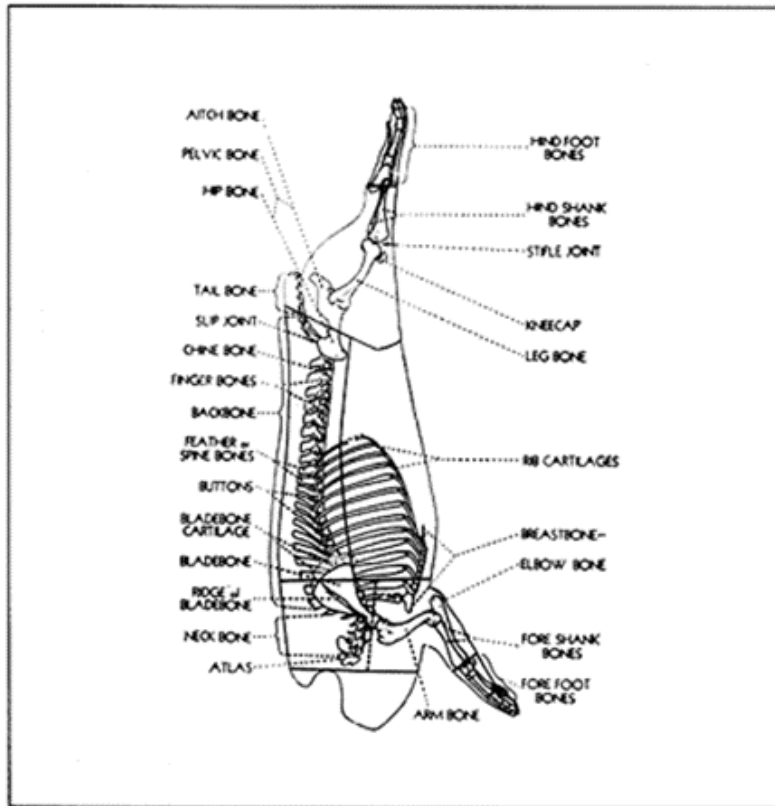
Morton Kosher Salt weighs about 7.7 ounces per cup, making it three-fourths as strong as table salt. Diamond Crystal Kosher Salt weighs about 5 ounces per cup, making it half as strong as table salt.

What if you're using something other than Morton Kosher or Diamond Crystal Kosher salt? Regardless of the type of salt—sea salt, pickling salt, and any other brand of kosher salt—just measure 10 ounces of it on a kitchen scale, and you will have the equivalent of 1 cup of table salt.

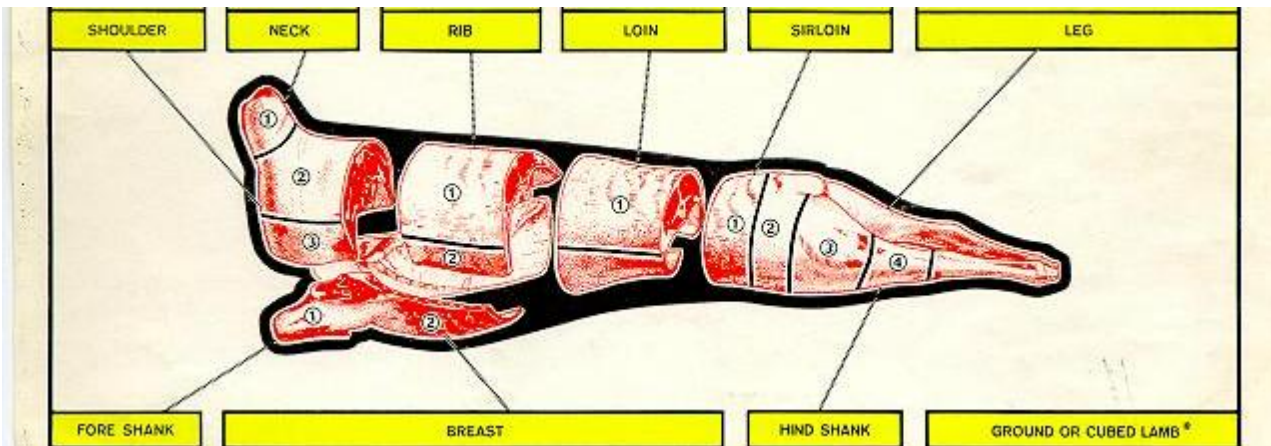
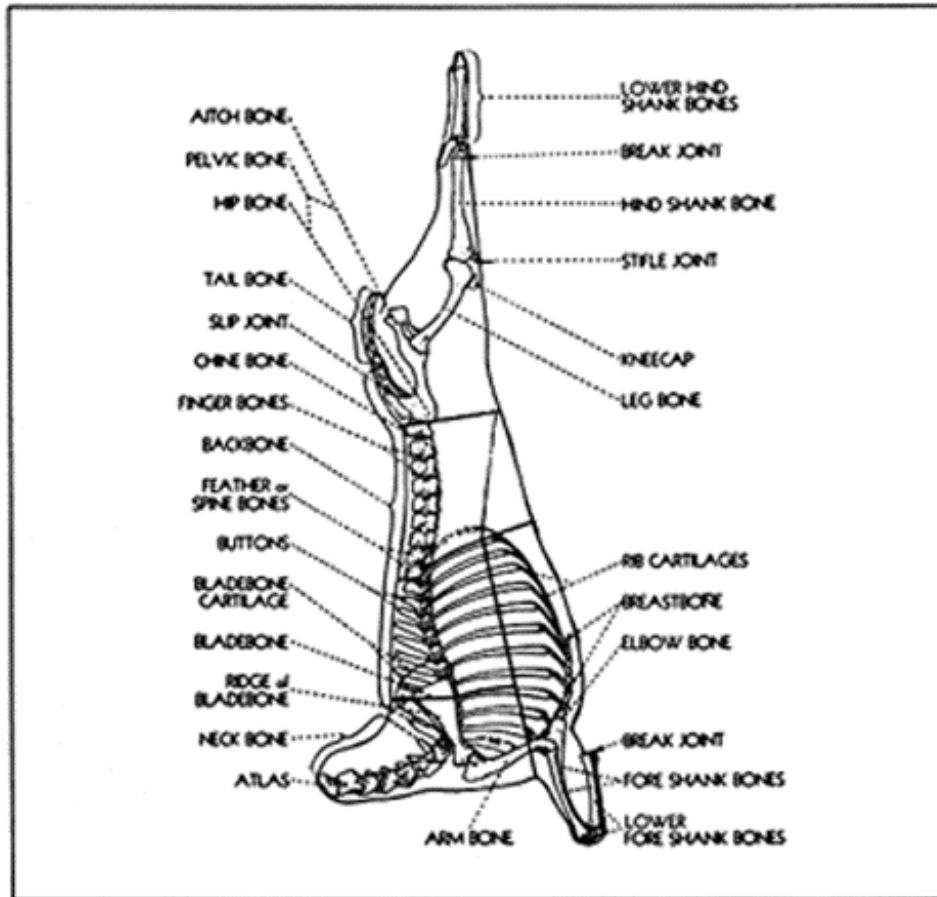
# Beef



# Pork

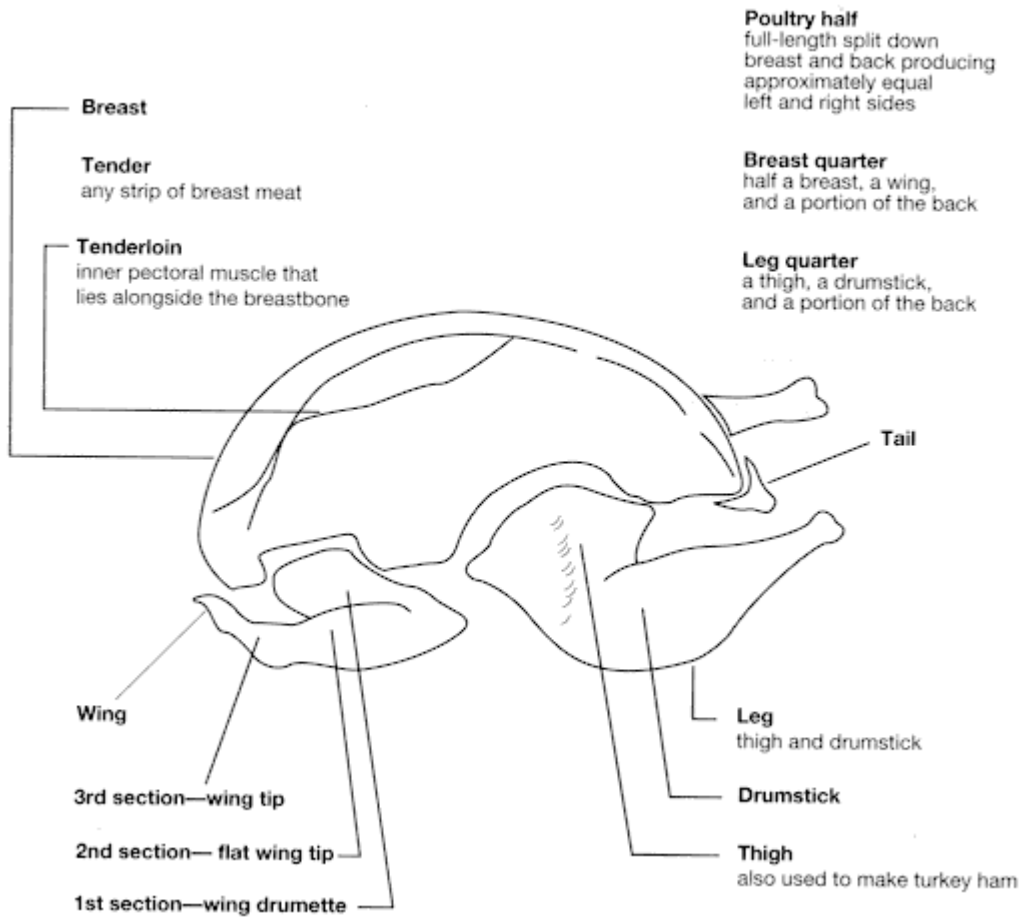


# Lamb





## Poultry



## Sources and Resources

<http://www.smoking-meat.com/> - forum

<http://www.homebbq.com/> - forum

<http://www.bbq-porch.org/> - Info Site

<http://www.askthemeatman.com/> - Butcher Shop

<http://www.dizzypigbbq.com/> - Store and Info

<http://www.fao.org/> - The Food and Agriculture Organization of the United Nations

<http://www.grizzly.com/> - Tools, Grinders, Sausage Stuffers

<http://www.northerntool.com/> - Tools, Grinders, Sausage Stuffers

<http://www.eatwild.com/index.html> - Find Local Organic Food Anywhere in the US

<http://www.geocities.com/BourbonStreet/9802/recipes1.htm> - Sausage

<http://www.designasausage.com/> - Supplies for Meat Curing BBQing & Sausage

<http://www.onestopjerkysshop.com/> - Supplies for Meat Curing BBQing & Sausage

<http://www.leeners.com/> - Supplies for Meat Curing BBQing, Sausage, Cheese & Beer

<http://www.swanville.com/> - Swanville Sausage Company

<http://www.geocities.com/Heartland/Cottage/1288/> - Cheese

<http://www.junketdesserts.com/> - Rennet for Cheese