

## MEAT PREPARATION AND PRESERVATION IN COLONIAL AMERICA\*

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INTRODUCTION

Let us turn back the hands of time to the Colonial era of American history, which we will define as the period covering 1600-1800. Let us focus on the preparation and preservation of meat in the diet of those earliest settlers and their successors during that time span. During this period of colonial development and inspiration, precisely from 1607 to 1776, many of our finest traditions and heritages were established and the methods of meat preparation and preservation have been ripened by some 350 intervening years of adaptation as each of the thirteen colonies contributed its own unique recipes to American cooking.

From the meager supply of food and meat in particular that the Jamestown Colony of 1607 and the Plymouth Colony of 1620 experienced to the vast selection of today causes one to reflect on the progress of three centuries and the composite of recipes brought to our shores by peoples of many lands and traditions that have blended their lives and their foods into a style and a uniqueness that can only be described as "American." That was a time when no automobiles, airplanes, movies, TV or other distractions that we know today were present as a challenge to the family as an entity. The hearth then drew the group within the circle of its warmth and illumination.

The earliest Virginia settlers lived off the native wildlife until they could establish some domestication. By 1609, 60 pigs and 500 chickens were inventoried in the colony. Captain John Smith wrote in his "General History of Virginia" that "we daily feasted on fish, fowle and diverse sorts of wild beasts, as fat as we could eate them." (9)

In 1610 Lord Delaware brought a good stock of cows, oxen and goats. By 1656, John Hammond was extolling the fact that Virginia's "cattle and hogs are everywhere, which yield beef, veal, milk, butter, cheese and other made dishes, porke, bacon----and as sweet and savory meat as the world affords." (9)

Meanwhile, in the Massachusetts Bay Colony white-tailed deer and wild turkey furnished most of the meat supply for those early settlers. Squirrel and rabbit were also plentiful. The beaver was considered tough and dry except for its tail. The polecat was sweet; the racoon, higher in relish than mutton; the wildcat, comparable to veal, but sweeter and more delicate; wild boar meat was savory and "least apt to rise in the stomach." The first game laws were instituted in 1646 in

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Portsmouth, Rhode Island, when deer season was limited to six months. In 1636 a hog reeve (catcher) was appointed in Boston and in 1666 a hog pound (for strays) was established in Newport, Rhode Island. Wild duck, grouse, quail, rabbits and black bear and fish were also plentiful until domesticated livestock became established with the importation of cattle in 1624 followed by goats, sheep and swine in 1630.

### MEAT SELECTION

The early colonists brought with them Thomas Tusser's "Five Hundred Pointes of Good Husbandrie," first printed in 1573, which recommended, for example, "to sow peason and beans, in the wane of the moon," but this was too general a reference for most Colonial housewives. "Country Contentments" written in 1615 by Gervase Markham included a section which was often bound separately as "The English Housewife: Containing the Inward and Outward Vertues which ought to be in a Compleat Woman." This book proved invaluable to the Colonial housewife.

It was not until 1796, however, that the first cookbook of American authorship was published. Amelia Simmons' "American Cookery or the Art of Dressing Viands, Fish, Poultry and Vegetables----" (24). This book, as did earlier works, included a section on "How to choose Flesh." For example:

Beef--the large stall--fed ox beef is the best; it has a coarse open grain and oily smoothness; dent it with your finger and it will immediately rise again; if old, it will be rough and spungy, and the dent remains. Veal--brought to market in carriages is to be preferred to that brought in bags and flouncing on a sweaty horse. Lamb--if vein in neck is blue, and if in the head the eyes are full and bright, it is fresh; if the neck vein is green or yellow, if the hindquarter has a faint disagreeable smell or the knuckle is limber and/or if the eyes are sunken, it is stale.

Elizabeth Hammond's "Modern Domestic Cookery and Useful Receipt Book Adapted for Families in the Middling and Genteel Ranks of Life" (13) recommends for choosing provisions: Finest ox beef is open grain, agreeable carnation colour and of white suet. Cow beef is not so open in grain nor red so pleasant a colour. Bull beef is clammy, rank, closely grained, dusky red and tough in pinching. Mutton and lamb will always prove the best, the legs and shoulders of which are short shanked. Pinch the flesh with your fingers: if it regains its former state in a short time it is young; otherwise it is old and the fat clammy and fibrous.

Veal flesh of the cow calf is not so bright a red nor so firmly grained as that of the bull calf, neither is the fat so much curdled.

Pork flesh should be cool and smooth. Put a finger under the edge bone and if flesh be tainted you will immediately discover it by smelling to your finger. Smell carefully to the belly and the loin, under the kidney which always taints first. Pork with short, thick necks are the best.

Hams are best selected with short shanks. Try it with a sharp pointed knife, which thrust into the flesh as near the pope's eye as possible. If it comes out only a little smeared and smells well you may be assured that the ham is good, but, if otherwise, it is good for nothing.

Beef is never out of season all the year round, though for salting and hanging it is best from Michaelmas to Lady-day.

Mutton is in season from Mid-August till May; grass lamb, May till September; house lamb is in high season at Christmas but very good from October to May.

Pork comes in season at Michaelmas and continues so till April; but hams and bacon are never out of season when carefully cured.

Veal from its speedy decay in hot or close weather is generally allowed to be best from Christmas to June.

### CARVING

The carving knife should be light, yet of a sufficient size, and the edge very keen. In using it, no great personal strength is a requisite, as constant practice will render it an easy task to carve the most difficult articles, more depending on address than force; but in order to prevent trouble, the joints of mutton, veal, lamb, etc., should be divided by the butcher...and in joints of beef and mutton the knife should always be passed down the bone by those who wish to carve with propriety and great attention paid to help every person to a portion of the best parts.

### COOKING FACILITIES

#### THE FIREPLACE

The kitchen was the heart of the home and the fireplace its center. Here life was sustained with food and warmth and love. The early homes were actually built around great stone fireplaces that served for both heating and cooking. The warmth and love that emitted from the open hearth made it the focal point of family life. It was the center of attention and survival providing heat, light and cooking source. Initially all living, eating and sleeping was in the large single space facing the fireplace. In the north the fireplace may have been on the outer wall and later built in the center of the house for greater heat utilization. In the south, the fireplace eventually was only in an adjacent food preparation building separated from the main-house as were the other out-buildings for slaughtering, smoking and storage of meat. Some northerners built summer kitchens at the rear of the house to reduce heat within the home and permit one to work in a cooler environment. The outer kitchen permitted the family to be "pleasantly removed from the heat and odors of cooking."

Built into some of the huge fireplaces were benches where one could sit for warmth and fellowship. Many fireplaces had small, elevated brick ovens built within the fireplace. These usually did not have their own flues. When a fire was built in them the smoke would go up the main chimney. When adequately heated, the brick oven would be raked out and the items to be baked, such as beans, some meats and breads and pastries would be placed in reverse order to their removal time, and the mouth closed with a wooden or metal door. Later brick ovens were built in the side or front of the fireplace and had their own flues.

Later innovations to the fireplace included the addition of the "tin kitchen" or "Yankee baker," a reflector of bright tin that hastened the cooking process by reflecting heat from the rear of the fireplace onto the roast. The Dutch oven, a rounded tin oven open at the rear, which was exposed to the fire, with a spit and turning handle and a hinged viewing door at the front was a later adaptation of the tin reflector. The Franklin stove introduced in 1745 and the manufacture of the first American cookstove, cast in 1765, gradually led to the demise of the fireplace or hearth as an American way of cooking.

#### UTENSILS

Within the chimney was built a lugstick, usually a green timber, and later iron rods, which supported the trammel or pot-hangers which were adjustable to some degree. These in turn suspended the various cooking vessels at desired heights. Later, cranes were installed on the side of the fireplace to support these cooking utensils. In time they were built to swing into and out of the firepit to eliminate scorched eyebrows, smokey eyes and burnt aprons as well as burned through lugpoles that in time released their entire burden onto the fireplace occasionally scalding the cook and by-standers as well as requiring replacement of the lugpole.

#### COOKING IMPLEMENTS

"The usuall proportion the Virginia Company doe bestow upon their Tenants they send" (27) was:

1 Iron pot	1 Gridiron
1 Kettel	2 Skillets
1 Frying Pan	1 Spit

and platters, dishes and spoons of wood as household implements for a family of six.

Only four spits were listed in the inventories filed in 1640. Within the next ten years 12 spits were listed, three of them being "jacks" (mechanically turned). The spit was basically a sharpened iron rod thrust through meat, some used skewers passed through slots in the rod to position the roast and prevent the rod from turning within the

roast. Three types of spits were in common use, namely the pronged, skewered and basket design. The hand spit was usually turned by a perspiring child who roasted nearly as fast as the meat. Later a treadmill spit powered by a dog was introduced and then several ingenious clockwork and smoke activated jacks were invented. A fore-runner to these was the "danglespit" a twisted rope which rotated as it unwound and rewound itself.

The pots, cauldrons and kettles were of cast iron initially and later of copper in some households. They were suspended by their stout swinging bales or handles. Frying pans, skillets, posnets and griddles were also of cast iron and were very long handled to prevent burning the attendant. They may have been footed (three legged) to raise them above the burning coals or they may have been flat-bottom and rested on trivets for the same purpose. The gridiron, which was barred was also footed and long handled and often was accompanied by a spatular shaped long-handled salamander for searing the meat. With these basic culinary tools, then the early Colonial housewife was expected to satisfy the robust appetites of her active hard-working, "sun-up to sun-down" family. With the stage set, let us turn our attention to the actual methods of meat cookery that were practiced under these early American conditions.

#### MEAT COOKERY

"She that is ignorant in cookery, may love and obey, but she cannot cherish and keep her husband." The English Housewife by Gervase Markham, (1615). Colonial housewives were warned of the faults of meat, such as: 1. Meat too new, served up too fresh, with all the toughness of animal muscle yet warm. 2. Woeful lack of nicety in the butcher's work of cutting and preparing meat coarse, roughly-hacked strips of bone, gristle and meat. 3. Cookery: a. those whose object is to extract the juice and dissolve the fiber (1) soups (2) stews, b. That desired to keep the juices within the meat (1) baking or roasting, (2) broyling, (3) frying. "One great law governs all these preparations: the application of heat must be gradual, steady, long protracted, never reaching the point of active boiling. Hours of quiet simmering dissolve all dissoluble parts, soften the sternest fibre and unlock every minute cell in which nature has stored away her treasures of nourishment. There is no animal fibre that will not yield itself up to long continued, steady heat. Meat fast boiled is meat half spoiled." (4)

#### MOIST HEAT COOKERY

##### Boiling

Boiling was considered the "most easy of digestion but not the most nutritious." It was the easiest way to cook meat as it required "less Nicety and Attendance" which permitted the housewife to go about her many other chores while the pot gently simmered its contents. Usually this process was started with cold water, especially for salted meats.

The fresh meat was added after the water boiled whereas the cured meat was covered with the cold water then heated. Fifteen minutes per pound was recommended cooking time.

A cook cannot make any greater mistake than to let any sort of meat boil fast, since it hardens the outside before it is warm within and contributes to discolour it. Start with cold water. Keep surface well skimmed and use clean sauce pans. Meat eats much better if "suffered to hang" a few days. Meat during the summer months should be well-examined to discover the fly blows, which should be carefully cut off and the part then washed.

Parboiling consisted of placing a large cut of meat, such as a leg, loin, breast, neck, rump or haunch in cold, salted water and over a large, clear fire for steady even cooking for 15 minutes per pound until boiling time. Remove the scum until clear. It is done when "bone on the under part comes off with ease." Some examples of Colonial boiled meats were: Spring or hand of pork (shoulder): Fill the pot with sufficient quantity of soft water. Boil slowly. Leg of veal: The slower it boils the whiter and plumper and juicier it will be.

### Simmering

Soups and stews were a major and important daily menu, utilizing the bones and trimmings from the carcasses combined with vegetables to provide nourishing, satiating meals. The soup was always "on" in the Colonial kitchens and a little more water added to the pot would always "stretch" the menu to serve unexpected guests. A popular stew of the day consisted of 1 pound beef, 3/4 pound pork, 1/2 pound veal, and 1/4 pound lamb cut into cubes, cooked in one kettle. Potatoes, carrots, onions and celery, cooked in sequence in another and then the meat and vegetables combined with seasoning to simmer together.

To cook tough beef it was recommended to use eight pounds of beef in four quarts of water with two tablespoons of salt, 1/2 teaspoon of pepper, 3 teaspoons of vinegar and 4 teaspoons of sugar. Put on at 8 a.m. and simmer until the water is half gone, skim off grease, set in oven until the water is all gone except for a teacup full, for gravy.

## DRY HEAT COOKING

### Roasting or Baking

Roasting meat to perfection depended on:

1. Cleanliness of the equipment, especially being free of rust and rancid oil.
2. Quality of the fire; being clean and brisk and clear at the bottom.

3. Distance of the meat from the fire, which came largely from experience.
4. Frequency of basting, producing the flavor, texture and appearance. Meat should never be salted before being placed on the spit as salt "draws out all the gravy."

Buttered paper was often used to cover the roast in the early stages of cooking and later the roast was dredged with flour and turned quickly a few times "to make a fine froth."

"When the steam from the meat is drawn toward the fire, 'tis a sign it is near done."

Roasting was reserved for the more tender cuts of meat. The key to good roasting technique was to "turn often and baste often."

A thin or small roast required a brisk fire to be done quickly and nicely. A large joint needed a large fire kept constantly free from ashes at the bottom and the fire should never be stirred during roasting. If that were necessary the meat and spit should be removed to a greater distance. All meat should be washed then dried well before placing on the spit. Paper the fat, baste well then dredge with flour. Raise the skin (fell) on a pork loin and cut across (score) to make the cracklings eat better. A leg of pork should be scored and the knuckle stuffed with sage and onion chopped fine.

A dripping pan was used in roasting to catch the drippings to which water was added for basting. When the roast was nearly done the drippings were not diluted but allowed to concentrate for gravy.

### Broiling

Broyling (broiling) consisted of cooking on a gridiron made of seven parallel iron bars in a frame, standing on short legs and equipped with a long handle. These bars, when heated, were rubbed with clean mutton suet to prevent the meat from sticking and discoloring. It was then placed directly over the bed of coals or upon a brandreth (iron trivet or tripod with longer legs). Successful broiling depended upon: (1) a clear fire (coke cinder preferably) (2) a clean gridiron (3) a quick eye to watch (4) a ready hand to turn (5) never baste (6) serve hot; "immediately from the gridiron".

### Frying

"It is a coarse and greasy kind of cookery, in fashion in the country, where there are great appetites and strong stomachs, but is at presently left off in genteel families, except for nice things (beef steaks cut thinner than for broyling; cutlets of veal and pork, tripe) and in a particular manner" (9).

Frying was considered the most slovenly and unhealthful mode of cooking. If it must be employed it was recommended to use hot fat, lard or suet; cook on a griddle and pour off the fat. Another source suggested a clean pan with plenty of drippings or hog's lard.

Poaching, as frying was also called, was considered dangerous, requiring closer attention for fear that splattering fat or grease could cause the fire to flare unduly or scald the attendant.

A favorite Colonial dish known as "Bubble and Squeak" was composed of fried beef and cabbage, best described by the ditty:

"When midst the frying pan in accents savage,  
The beef so surly quarrels with the cabbage."

Generally, meat for frying was mechanically tenderized prior to cooking by one of several methods prevalent then. One common means was to beat or hack the meat with a rolling pin or the back of a knife. Axe handles and hammers were sometimes used as meat tenderizers, also. An example of this was Collops: "cut meat in thin slyces and lay on table, beat with back of knife, steep in vinegar or verges, lay in frying pan, put to them a strong broth and halfe a pinte of faire water, add herbs and spices and boyle till their meat be tender." (16)

#### RECIPES

Early American recipes reveal much about the customs and habits of the period. America was a "hodge podge" of nationalities. In 1776 more than 40 percent of the white Colonials were non-English, namely Dutch, Finnish, French, German, Irish, Scot, Spanish, Swedish, Swiss and Welsh. Additionally, the black influence was also reflected in the food preparation methods especially in the Southern colonies. So the greatest influence on American cooking was ethnic and initially was specific to the colony where the people usually represented only a single nationality. Thus one notes the menu, meat and cookery preference of the English settlements in New England, Maryland and Virginia; Dutch in New York and Pennsylvania; Swedish in Delaware; German in the Carolinas and Pennsylvania where the Rhinelanders, Moravians, Mennonites and Crefelders settled; Scots in New Jersey; and French (Hugenots) in Georgia and the Carolinas, plus the contribution of other nationalities sprinkled throughout the colonies.

Many sources cited in the bibliography list specific recipes of these many peoples. These are too numerous to enumerate here but it is interesting to note a few of the typical and some unusual ones by title or description at this time.

Calf head  
Calf livers marinated  
Chine of lamb and collops  
Chump of veal  
Collared veal



Cow heel pudding  
 Dowlet (veal) pye  
 Fricassey of double tripe  
 Fricassied sheep's trotters  
 Haunch of venison  
 Hog chitterlings  
 Lambs head and appurtenances  
 Mock turtle  
 Mutton hams  
 Patty of calves' brains  
 Pigs' ears ragoo'd  
 Pork griskin  
 Ragoo of beef palates  
 Ragoo of veal sweetbreads  
 Saddle of mutton with kidneys  
 Savory lamb pye  
 Stewed ox cheek  
 Stewed rump of beef  
 Tongues and udders roasted

A few detailed recipes follow:

To Turtle a Calf's Head: The Calf's head must be scalded and not flead, cut in slices about the size of a crown piece. Take also some neats foot, stew these in good veal broth, put it to an onion, a faggot of sweet herbs, half a pint of maderia and a teaspoonful of red pepper, keep it stewing till quite tender, and serve it up in your tureen with forced meat balls and yolks of eggs boiled hard.

To Pot Beef (or Venison): Take what's left that's tender of a haunch of beef (venison), pick out all the sinews, fat, etc., put in a stone mortar, beat it well, when it grows hard put in some melted butter to soften it, beat it to a paste and till there are no strings left and pour clarified butter over it, then set it in an oven after bread is drawn and let it stand 20 minutes.

A Terrine of Mutton Tails: Stew them well in a saucepan, when thoroughly done put some turnips well fried to them, put them in a strong broth or the juice the tails were stewed in, add some strong gravy and stew them all together taking care the sauce is not too liquid, add lemon juice to your taste and serve it.

Boeuf Tremblant: Put a brisket of beef in a pot, cover it with water and when it boils, scum it thoroughly, then add 4 onions, 4 bay leaves, a faggot of thyme, and parsley, 4 good handfuls of salt, cover it very close, let it stew for about 7 hours till its so tender you may run a straw through it and put a little liquor over it.

Roast Leg of Mutton: Lay a leg of mutton in a quart of vinegar for three days, slice in 4 onions or garlic, a handful of sweet herbs and a small quantity of mace and cloves pounded. Lard your mutton with bacon rubbed in pepper, roast it and bast it with what it lay in, put to it a strong brown gravy for sauce.

The dinner menus for every week at Rhode Island College in 1773 included:

- 2 meals of salt beef and pork, with proper sauce and vegetables
- 2 meals of fresh meat, roasted, baked, broiled, or fried, with proper sauce and vegetables
- 1 meal of soup and fragments
- 1 meal of boiled fresh meat with proper sauce and broth
- 1 meal of salt or fresh fish, with brown bread

Certainly the American menus over the centuries have evolved from the customs and traditions of many people from many lands and are a reflection of their socio-economic-religious influences during their early days on this continent and their successors since. "When we forget our past we weaken our heritage" (17). Our unique menus should constantly remind us of our past so our heritage should be strong and appreciated.

#### MEAT PRESERVATION

"The very discovery of the New World was the by-product of a dietary quest." Arthur M. Schlesinger, author of Paths to the Present.

The need for spices from the Orient to season and preserve the meats of Europe was a major incentive for the search for sea-going routes to the Spice Islands that led to the discovery of America. One of the most formidable problems faced by the American pioneers was the preservation of meat. The most widely practised methods were salting, pickling, and drying. In New England, the "three S's," salt, smoke and snow were the standard meat preservatives. The brine of the pork barrel, the smoke from corn cobs and the icy chilliness of winter cold rooms saw many a northern colonial family through what might otherwise have been a disastrous year.

Fresh meat was seldom eaten in the summer. If slaughtering was done in warm weather the meat was divided among neighbors or given in payment to physicians, lawyers or clergy for immediate consumption. Return in kind was expected from neighbors before September.

#### SHORT TERM STORAGE

For storing fresh meat for a short time the colonists relied on the coolness of the well or the cellar to reduce spoilage during warm weather. Some recommended washing fresh meat with milk and water, drying it "perfectly with cloth till there is not the least damp remaining then dust ground pepper over every part, this is a good preservative against the fly. When dressing, wash with lukewarm water and wipe dry." (15) The herb Tansy was highly esteemed as a medicine, a cosmetic, a flavoring and ingredient in cooking. It was rubbed over raw meat to keep the flies away and prevent decay.

## SALTING

"You better put your killing in brine for about six weeks; the shoulders and hindquarters for ham, the fat pieces alongside for bacon. They'll taste uncommon good if you do them right." (11)

Salted meats were the mainstay of the diet of the first settlers both enroute crossing the Atlantic Ocean as well as when first living in the New World. Relying primarily on the hunt for their meat supply, the earliest settlers consumed fresh that which they could utilize before spoilage set in and packed the remainder in salt. Some settlements were founded because of their proximity to salt licks or salt beds. Each household had a big barrel filled with brine in which butchered meat was steeped.

Dry Cure

For dry salting meats several examples included:

Salt Beef (13)--sprinkle well with salt; six hours later hang up to drain; then rub well with salt and lay in a salting tub, closely covered turn daily. Salvage brine by boiling and scumming.

Salt Pork (13)--cut into pieces to fit pan, rub well with saltpetre, then take two pints of common salt and rub well. Put layer of common salt at bottom of vessel, cover pack with salt; add salt as it melts; lay coarse cloth over vessel, place a board over that and a weight on top of the board. Cover closely and it will keep the whole year.

Salt Bacon (25)--cut your flitches of bacon very smooth. To about three score pounds of bacon, ten pounds of salt; dry your salt very well and make it hot, then rub it hard over the outside or skinny part, but on the inside lay it all over, without rubbing, only lightly on, about half an inch thick. Let it be on a flat board, that the brine may run from it, nine days; then mix with a quart of hot salt, four pennyworth of saltpetre and stew it all over your bacon; then heat the rest of your salt and put over it and let it lie nine days longer, then hang it up a day, and put it in a chimney where wood is burnt and there let it hang three weeks or more, as you see occasion.

Curing Hams (13)--rub one ounce saltpetre into each ham, one-half ounce of sal-prunella pounded, and one pound common salt. Lay them in salt pans for ten days, turn once and rub with common salt. Lay another ten days, turning daily. Then take out, scrape clean and dry well with cloth. Rerub with salt, hang to dry, but not in too warm a place.

Bacon (13)--rub with salt, both sides; lie for week, then take a pint of bay salt and four ounces saltpetre, beat them fine, two pounds coarse sugar and one-quarter pack of common salt, rub, lay in tub and baste every day for fortnight, then hang in woodsmoke. Then hang in dry place not touching other meat or walls.

Hams (13)--moisten with molasses; for every 100 pounds of hams use one quart fine salt, four ounces saltpetre, rub in thoroughly; place in tight cask for four days, then rerub and restore for four days, repeat process for third and fourth times and then smoke. Total process 16 days.

Best Bacon (24)--use one ounce saltpetre, one pint bay salt, one pint molasses and shake together with bacon for 6-8 weeks. Baste with liquor every day, take out to dry, smoke three weeks with cobs or malt fumes. For transportation or exportation double the period of smoking.

Hunter's Beef (13)--bone a round and hang it 4 days. Take four ounces of coarse sugar, four ounces saltpetre, two ounces cloves, two nutmegs, one ounce allspice and one-half pound of common salt and reduce these ingredients to a fine powder, which must be rubbed well into the meat. Turn and rub beef daily for one month. Wash off loose spice, then bind up well and put into an earthen pan with one-half pint water at bottom and cover with finely chopped suet. Then cover all with thick coarse crust and brown paper. Place in oven and bake for 7-8 hours. Remove paste and binding and serve.

It was said that "North of the Potomoc one may find good beef and bad bacon; and south of the Potomoc, good bacon and bad beef." (7)

### Brine Cure

In contrast to the dry salt cure most popular in the south, the colonists to the north used a brine cure more frequently. One brine or pickle for 100 pounds of beef curing (13) consisted of four quarts rock salt, pounded fine; four ounces of saltpetre; and four pounds of brown sugar mixed well and water added.

Another brine or pickle for corning or curing was composed of two pounds rock salt, two ounces saltpetre, one quart molasses to which four gallons of water was added and into this brine the meat was immersed for six weeks.

Westphalia Bacon (25)--was produced by making a pickle from a mixture of a quarter peck of bay salt, a quarter peck of white salt, one quarter pound of saltpetre, one pound of petre salt, one pound coarse sugar and one ounce socho tied up in a rag in a gallon of pump water. Boil all of these, then allow to stand till 'tis cold. Put pork into this brine for a fortnight. Remove and dry over sawdust.

Yorkshire Ham (13)--take 3 middling sized hams, beat them well then mix half a peck of salt, three ounces saltpetre, one-half ounce sal -prunella and five pounds coarse salt. Rub well, lay three days and then hang. Make pickle to bear and egg. Then boil and strain brine. Immerse pork for a fortnight, rub well with bran and then dry. When smoked, hang for one or two months in a damp place to make them mouldy. Then wrap well in brown paper and hang in a very dry place. Place in cold water on fire for four hours before boiling. Skim pot well and often before it boils. Then boil for two hours.

## DRYING AND SMOKING

The American Indians contributed much to the sustenance and survival of the earliest settlers through their friendly gestures of food, shared hunting skills and meat preparation and preservation methods. One of these was that of drying meat on racks in the sun or over fires. Smoking of meats imparted both a drying and flavoring effect which was soon utilized for cured meats.

A "meat house" was one of the first buildings erected by the colonists and it served both for smoking and storing smoked meats. The smoke house was the early butcher shop. One source (11) stated "Be sure your smokehouse is airtight, then make a fire in the pit, of good hickory wood. Let it smoke away until the ham is sure smoked through and then you'll taste that special flavor that only old hickory can give."

Smoke closets were built into many houses, connected with the great chimney, generally on the second floor or attic where they caught the escaping smoke from the hearth below and used it to smoke the meats hanging from iron rods and hooks.

## OTHER METHODS

Vinegar was widely used as a preservative but generally for short term storage of a few weeks to a month. Meat was kept immersed in the vinegar and turned periodically.

Concentrating some items, such as soup, was another method employed. "Pocket soup" or "cake soup" was made (26) by gently boiling a leg of veal until the liquor made a strong jelly when cold. This gel was strained and poured into cups and gently boiled until it became "thick as glue." It was then cooled and turned onto a piece of new flannel and could then be carried in the pocket or in a lady's handbag ready for easy reconstitution in hot water. One pound of this "pocket soup" would "keep a body in good heart" for about a month.

Potting was widely practiced for cooked meats to preserve them for an extended period. Basically this consisted of placing the meat in earthenware crocks and sealing them with clarified butter.

John Winthrop in his Journal refers to feasting with Governor Endecott of the Salem Colony on "a good venison pasty and good beer" in June, 1628. He describes the venison pasty as being prepared by cooking the venison in the oven in pots sealed with pastry, drain off the broth; let pot and meat cool, then repack the pot with the meat, over which you pour "butter very well clarified" to a height of 2 inches above the meat. The next day "binde it up very close with a piece of sheeps leather so that no air can get it. After which you may keep it as long as you please."

The Lady's Companion (22) offered a recipe for potting meat by cutting into pieces to make collars, lard with strips of bacon, then season with pepper, nutmegs, cloves, and mace beaten and mixed with as much salt as will make the spices greyish in color. Roll up collars, place in earthen pot with good quantity of butter; cover pot with coarse paste and bake for five or six hours, stand till cool, pour off gravy, place in clarified butter. "It will keep good a year."

Other potting recipes (6) include beef baked, with usual seasonings and plenty of butter, and thoroughly drained. The meat is then beaten in a mortar, with fresh butter, until it becomes a fine paste. Then it is pressed down close in a pot, sealed with clarified butter and stored in a cool, dry place. When used, cut out in slices and serve garnished with curled parsley. Pork sausage, fried in cakes or balls, was potted in much the same manner but sealed with melted lard, rather than butter. Frequently smaller amounts were placed in jars and sealed with oil, butter or mutton fat and the jar mouth capped with a bladder or coarse cloth.

A recipe for "very fine sausage" is a modification of the "potting" method.

Take a leg of pork or veal; pick it clean from skin or fat, and to every pound of lean meat put two pounds of beef suet, picked from the skins; shred the meat and suet severally very fine; then mix them very well together, and add a large handful of green sage shred very small, season it with grated nutmeg, salt and pepper; mix it well, and press it down hard in an earthen pot, and keep it for use. When you use them, roll them up with enough egg as will make them roll smooth, but use no flour; in rolling them up, make them the length of your finger, and as thick as two fingers; fry them in clarified suet, which must be boiling hot before you put them in. "Keep them rolling about in the pan; when they are fried through they are enough."

#### SUMMARY

"The heritage of the past is the seed that brings forth the harvest of the future." National Archives, Washington, D.C.

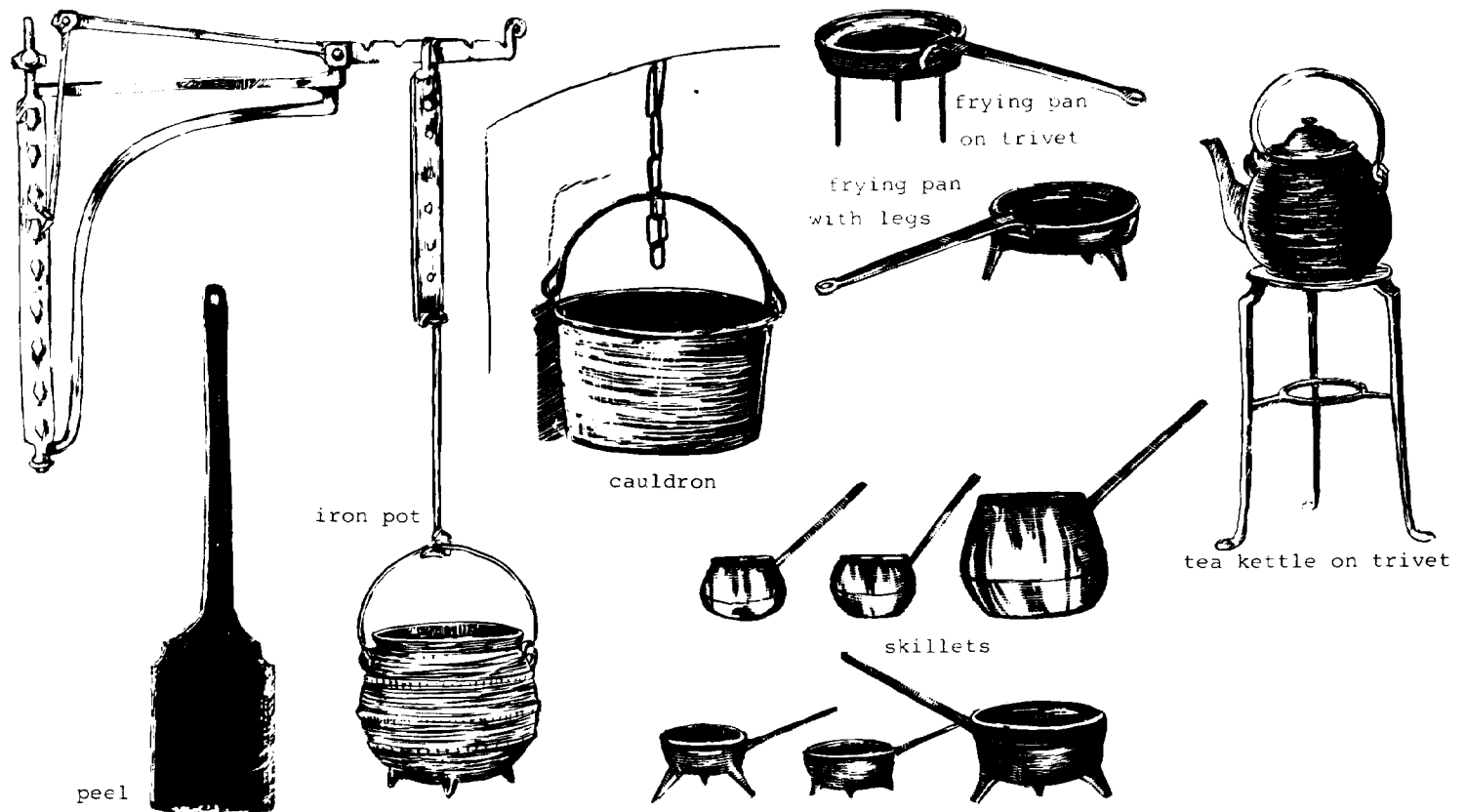
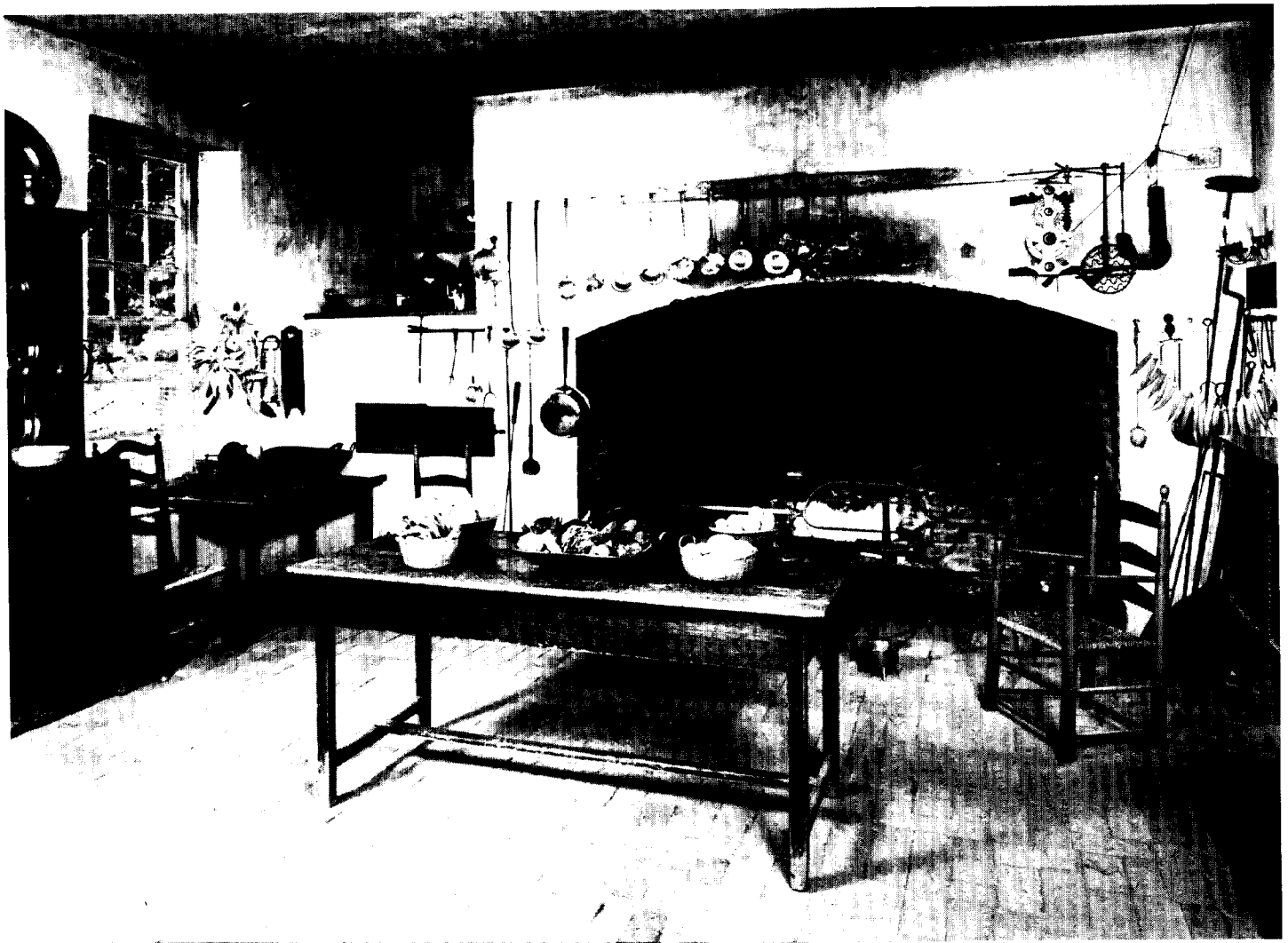
In retrospect, meat preparation and preservation, as we know it today, is not too greatly different basically from that practiced by our early American forefathers. Meat cookery today is of two fundamental methods: dry heat consisting of roasting and broiling, and moist heat, utilizing braising and simmering or cooking in liquid, just as they were employed two and three centuries ago in Colonial America. Granted, our equipment and utensils are much more sophisticated and our heat source and controls much more convenient, but the same basic principals apply to proper meat cookery.

Meat preservation methods have changed more or been expanded with the introduction of artificial refrigeration which affords the modern American the great advantage of holding fresh meat for a much longer period of time. Furthermore, by freezing meat below 0° F we enjoy another great advantage over our ancestors. Other means; such as canning, freeze-drying and radiation preservation are more recent innovations that offer us even greater flexibility today. However, curing and smoking and drying of meats as practised during the early development of this country was, in principal, not greatly different than that done in the industry today, except for pumping products and the environment in which this is accomplished.

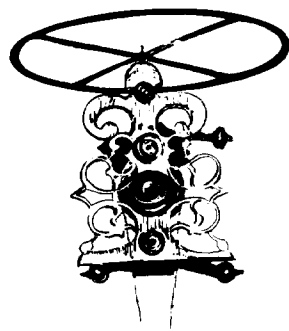
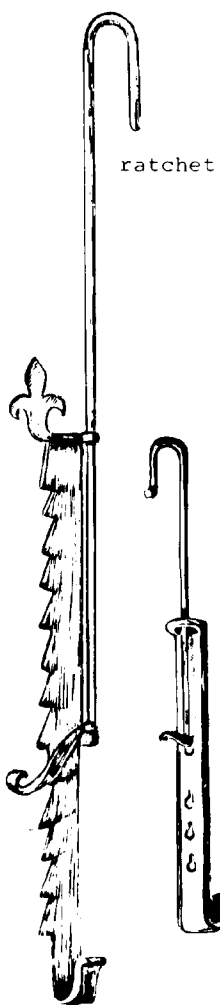
We are truly the beneficiaries of our heritage and as we reflect, in this Bicentennial Year, we must acknowledge the hardships overcome by the devotion and ingenuity of our predecessors. We must appreciate the blending of customs and traditions of many countries in the formation of what we term "American." Certainly we owe an everlasting debt of gratitude to those dedicated, hardworking, persevering, God-fearing people who developed the great nation we know today. This was made possible to a great degree by the wonderful pioneer women whose family health was based largely on the nutritious meals she supervised or prepared with the meat portion as the focal point of the menu. We must give heed to a great patriot and thinker of our Colonial era, Benjamin Franklin (12) who wrote: "If thou art dull and heavy after Meat, it's a sign thou hast exceded the due Measure; for Meat and Drink ought to refresh the Body, and make it cheerful, and not too dull and oppress it."

#### EARLY AMERICAN MEAT GLOSSARY

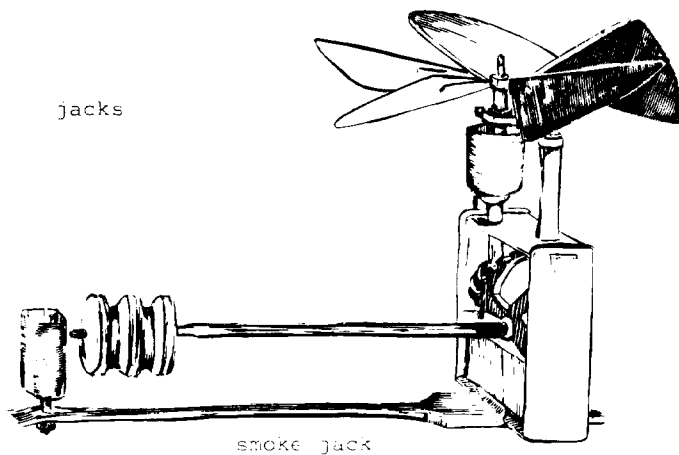
Bay salt--coarse salt crystals from seawater evaporation.  
 Best end or chump end--loin.  
 Chine--out of meat that includes any section of backbone and adjacent flesh.  
 Collar--prepare meat by rolling it into a coil or tight cylinder and binding or tying it with a string.  
 Dressing--preparing meat for cooking.  
 Flea--to skin or beat meat.  
 Flitch--thick slice of side of meat, such as bacon.  
 "Forced meat"--remove large part of meat from inside the cut, chop or grind it with a pestle, combine with egg yolk, suet, bread crumbs, herbs, spices and other seasonings to form a stuffing.  
 Fricassee--cooking method whereby meat is cut into serving sizes then fried or stewed in its own gravy.  
 Froth--to heat to bubbling or to brown just before serving.  
 Griskin--loin (or pork)  
 Haslet--edible internal organs of animals.  
 Haunch--leg and part of the loin, i.e. venison, mutton.  
 Hung meat--suspended above ground for curing.







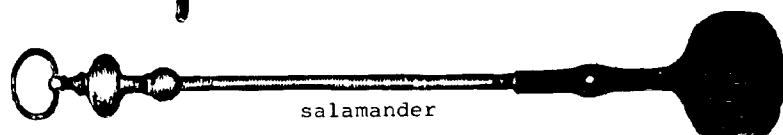
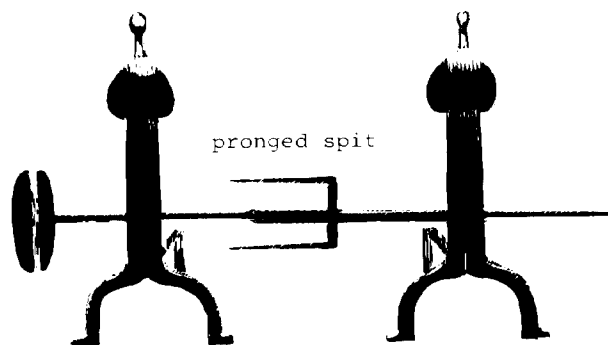
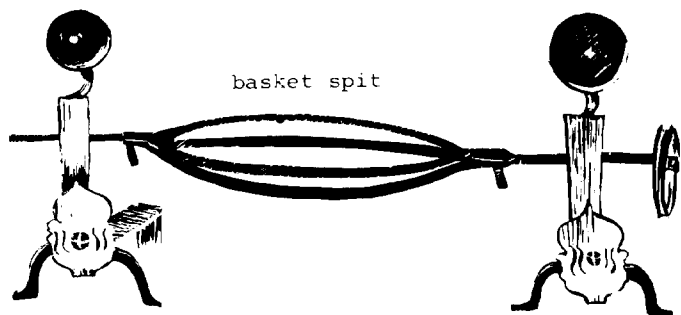
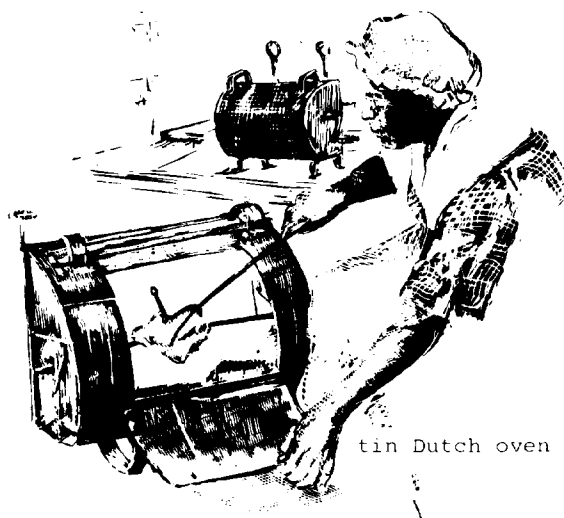
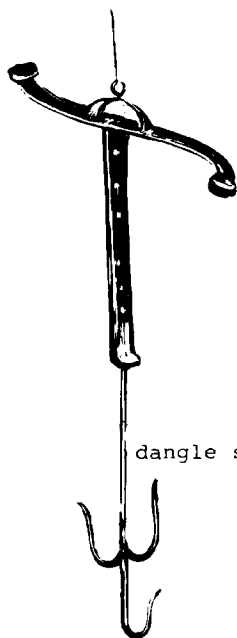
jacks



hook-and-eye



chain



Middling--pork cut from the center portion of a pork carcass.  
 Neat--bovine (cows, oxen, bulls).  
 Palates--meat cuts that include the roof of an animal's mouth and throat.  
 Peter-salt--unrefined saltpetre.  
 Pot--preserve in container.  
 Ragout--highly seasoned stew of meat and vegetables.  
 Rand--long strip of meat; in beef, the section between the flank and the buttock.  
 Saddle--two loins.  
 Scrag--lean piece of meat, such as a neck or back.  
 Suet--crumbly fat around the kidneys and loins of cattle and sheep.  
 Trussing--tieing or skewering meat for cooking.  
 Wallop--to boil vigorously.

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Larry Borchert: Thank you very much, Don, for your presentation. Don, along with the rest of our speakers, will be back for a discussion period at the end of this session. Hopefully, you'll have some very interesting questions for them.

I once introduced our next speaker with..."this man needs no introduction. I give you Evan Binkerd." Bink is extremely mentally alert and he took the podium and promptly put me down by saying: "he really didn't mind that short introduction, but his mother would have been extremely upset with it." I hope that I don't upset anyone today, Bink.

Mr. Binkerd is Vice President and Director of Research of Armour Food Company. He received his academic training at Iowa State University, graduating in 1942. He is extremely active in the Institute of Food Technologists, being on their Executive Committee. He serves the American Meat Institute as a member of the Scientific Advisory Committee.

Bink has a long-standing personal interest in our native American heritage. When we learned of this interest, we asked him if he wouldn't make a presentation on Native American foods. But in keeping with our program policy of being very concise and comprehensive, he chose to give a very specific report on Pemmican. So, with a great deal of pleasure, we present Mr. Evan Binkerd to tell us about Pemmican.

Evan Binkerd: Thank you, Larry. I guess one of the things I might have done to get a little better into costume, as Don did, would be to take off my shoes, because I'm going to talk a little bit about fur trappers and Indians.

There's a little bit more to the story about why I'm here today, and talking about the subject of Pemmican than even Larry understands. We have in our company an abiding interest in various types of meat and food products, not the least of which is a category called Intermediate Moisture Foods. On one occasion, we were visited by a man that many of you may know at the University of Minnesota, Ted Labuza. I asked Ted if it were true that the Fig Newton was one of the earliest, if not the earliest, intermediate moisture foods that man produced. He quickly responded by saying, "Oh, no. That isn't true. It was pemmican." That leads to the interest that I have in pemmican because, at that point, I also knew that in our files that we still maintain were records of Armour and Company's involvement of making commercial pemmican. Going on that, plus a little bit of the fascinating history of the fur trade and the Indians and the residents of the northwestern area of that time, strangely enough, that is not too far different timewise from what Don Kinsman was talking about. Let me give you a little bit of background on the field of pemmican and update you today about its production.