



Charcuterie

Sausages/Pates/Accompaniments

FRITZ SONNENSCHMIDT

Charcuterie

Sausages, Pâtés, Accompaniments

Fritz Sonnenschmidt C.M.C

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Charcuterie: Sausages, Pâtés and Accompaniments**Fritz Sonnenschmidt**

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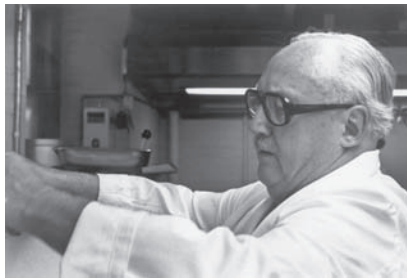
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*I dedicate this book to Albert Metz, CMC
A Mentor to Many
Master Sausage Maker and Master Chef
1912–1988*



*A master is a person who thinks.
An assistant is a person who makes it work.
But everybody is an apprentice.*

Albert Metz

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Foreword

The art of making sausages is as old as the art of cooking itself. Throughout Europe this art has enjoyed a rich history and tradition and to this day the practitioners of this art are among the most respected professionals in the world of food.

From the rustic Alpine regions of Austria, northern Italy, Switzerland, and Bavaria to the northern regions of Central Europe, the “butcher” not only provided the primary cuts of meat but also developed a very refined regional tradition of providing an almost unlimited array of recipes utilizing ground meats. This book, *Charcuterie: Sausages, Pâtés, and Accompaniments*, captures this art for generations to come.

With true culinary passion and dedication, “Fritz” Sonnenschmidt not only introduces us to a host of tasty recipes but also educates the reader on the techniques of making sausages without difficulty. He explores the history and traditions of the art from bratwurst to weisswurst (the traditional Bavarian sausage), mettwurst to salami. Even the elegant pâtés and terrines are explored. Fritz takes

us on a journey into one of the most delicious and tasty sides of the culinary experience.

Born and raised in his beloved Bavaria, a hotbed of sausage making, Fritz learned this art very early in his training. This experience has left an incredible impression on him and he developed a great passion for preserving his art. Throughout his esteemed career he continued to refine and hone his skills and became an internationally respected chef, educator, and consummate professional. We are fortunate to be able to enjoy this book as a testament to his skills, passions, and most importantly, his ability to produce and enjoy the recipes.

I believe this book is a must for any serious culinarian, but it will also serve as a great resource for all those who simply enjoy cooking. In addition, educators will find this book to be a most valuable tool to assist them in their effort.

Thank you, Fritz, for your continued passion.
Karl J. Guggenmos

Preface

For some time now I have felt the need for a comprehensive and detailed book on preparing sausages, pâtés, aspics, and salsas the easy way, as my masters taught me. Most chefs, cooks, and hobby culinarians are afraid to tackle these delicious morsels, because they have not been taught and are therefore unsure and have forgotten that the same culinary principles as used in cooking or baking are applied in sausage making. My formulas follow this principal, are easy to calculate into small or large batches, and the preparation methods are simple and easy to follow.

The art of sausage was established when man started to hunt and domesticate animals, especially the pig. When pigs were slaughtered, the tribal elders invited all friends and neighbors and together they cooked, smoked, and prepared all parts of the animal. Then they celebrated for days, enjoying the fruits of their labor. My recipes and methods are built on these early preparations, and I have, with the help of my 50 years' experience, edited them from the use of hand tools into today's machine age. Either at home, in the classroom, or in the professional kitchen, these recipes are easy to execute and the end result is spelled *success*.

Each chapter gives you a thorough explanation of how and why. I have broken down the art of charcuterie, in other words sausage making, into categories of cooked sausages, raw spreadable sausages, and raw sliceable sausages, (mettwurst, salami, cervelat, poached sausages, bratwurst, pâtés and terrines, headcheeses and savory aspics, curing and brining of whole meat muscle, and finally salsas to accompany these delicious foods.

I am sure you will learn, enjoy, and have fun following the formulas and recipes and taste your creations at breakfast, brunch, lunch, dinner, and at family gatherings. The aromas will be tempting scents from far away and the beautiful textures and colors will excite and tempt the appetite.

Have fun, but always remember that cooking, baking, and sausage making are an art, a science, a service, and a way of sharing.

Have a flavorful experience.

Fritz

Acknowledgements

Thank you

To my wife Debbie for her patience, the sharing of her taste buds, and cleaning the kitchen after sausage production.

To Maryann Monachelli, still the only person who can read my handwriting for typing this book.

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To Nicole Calisi for her dedication and input to make this book a success.

To Rick Perez for his support and dedication to me and our food industry.

To Cengage Learning for bringing the great art of sausage making to the forefront and publishing a fantastic educational book.

To Teresa Christie for coordinating the production of the book.

To the copyeditor Martha Williams for correcting the words and sentences and making a humble immigrant look good.

And to my colleagues Fred Von Husen and Jacques De Chantaloupe for their dedication and teaching our trade to future chef charcutieres.

The American Culinary Federation (ACF) for promoting and giving purpose to all American chefs.

About the Author

Fritz Sonnenschmidt is a Certified Master Chef, teacher, author/editor of *The Professional Art of Garde Manger*, *Dining with Sherlock Holmes*, *The American Harvest*, and *Tastes and Tales of a Chef: Stories and Recipes*. He is also a television personality, appearing on PBS in six seasons of *Cooking Secrets of the CIA*, in five seasons of *Grilling Maestros* and as a guest chef for two seasons on *Seasoning*. His lectures and cooking demonstrations are immensely popular, especially culinary history, garde manger, and charcuterie/sausage making, as well as his lectures on basic culinary fundamentals.

Chef Fritz started his culinary career with an apprenticeship in Munich, Germany, under the tutelage of Chef Anna Eichner, Chef Joseph Stumpf, and Chef Pierre Ruelle. This led to extensive international work experience in hotel and club kitchens, including that of executive chef at the Sheraton Hotel in New York City. He joined the faculty of

The Culinary Institute of America (CIA) in New Haven, Connecticut, in 1968 and retired as Culinary Dean from the CIA campus in Hyde Park, New York, in 2002. He is a past national chair of the American Academy of Chefs (AAC), the honor society of the American Culinary Federation, and presently he is chair of the past chairs council.

Chef Fritz is a repeated gold medalist at the Culinary Olympics (IKA) in 1976, 1984, 1988 and various international culinary competitions, receiving the Jerusalem Gold Medal for Culinary Excellence for kosher style food in 1977 and the Geneva Gold Medal for cold food display in 1980. Chef Fritz is one of the most recognized chefs among his peers and in 2004 he was inducted into the American Academy of Chefs Culinary Hall of Fame and in 2007 he was awarded the Lifetime Achievement Award of the Academy.

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KEY TERMS

- Boning Knife
- Botulism
- Certified Pork
- E. Coli
- Paring Knife
- Pork Kidney
- Salmonella
- Trichinosis
- Santoku Knife



1

Equipment Selection, Sanitary Care, and Usage

In today's hobby or professional sausage kitchen, most equipment is operated electrically. Even so, you still find some of the antique hand-operated tools and machinery at flea markets and, of course, on the Internet. However, especially because of our hectic daily work schedules, I suggest you start working with electrically operated meat grinders, food processors, choppers, mixers, sausage stuffers, and ice crushers. They not only make it easier and more enjoyable to make sausages, but more importantly, they also produce sausages whose quality is superior to those made by the labor-intensive processes of the kitchen of the past.



did you know?

Botulism can grow and produce its toxin without a foul odor or other signs of contamination to warn of its danger.



Meat grinder with a set of grinding plates and knife



Mixer with whip, paddle and hook



Food processor with bowl, lid and cutting knife



Ice crusher

Guidelines

Ensure the equipment you use is in excellent condition. Evaluate and check every machine before usage. Consider its functionality, but more importantly, its safety features.

Make sure the grinder plates and knives are sharpened before using. Check cords and plugs for damage and make sure all are safe and fully functional.

Store all your sausage machinery, attachments, and utensils in a safe and clean environment. I converted an old cabinet into a storage cupboard for all my equipment.

Sanitation in Sausage Making

It is important that the equipment is scrupulously clean before you start your fabrication process. Every part of the machines (except electrical motors), knives, bowls, and so on must be cleaned and sanitized between usages and refrigerated or kept in ice water. Cross-contamination is a serious problem, in both the hobby and professional kitchen, especially for foods as highly processed and handled as forcemeats for sausages.



Chill any part of a machine used for your sausage production. Place equipment such as knives, processor bowls, and grinders in the freezer or refrigerator or chill them in ice water. This will give you better quality forcemeat (brat), as heat can break your emulsion and bring down the quality of the end product, the sausage.

Practice the 3 Cs: Keep it clean, keep it covered, and keep it cold.

Precautions for Preventing Contamination

1. Wash and rinse the surface of your work station for food production.
2. Keep fresh meats and meat products under 40°F (the out of danger zone) and properly wrap them when stored.

3. Prevent cross-contamination by washing and sanitizing all cutting boards and food contact surfaces between handling of different foods.
4. Cook or poach all products to an internal temperature of 160°F–165°F.

Botulism

Botulism is a rare, but very serious, type of food poisoning caused by an extremely potent and fatal neurotoxin produced by the *Crostridium botulinum*, which is an amoebic spore. The toxins are very heat resistant. Low-acid improperly canned foods are most susceptible to botulism. The first scientifically investigated report of a botulism outbreak was related to sausage products.

Prior to slaughter, the edible meat of a healthy animal is sterile because it is protected from contamination by the animal's skin. But once the animal is slaughtered, and the skin is removed and the meat cut up, contamination begins.

did you know?

The requirements to trigger food poisoning are lack of oxygen, moisture, and temperatures in the range of 40°F to 140°F.

Meat is high in water content (70–80 percent). Bacteria can survive in meat under the following “right” conditions:

1. Exposure to air (incorrectly wrapped).
2. Exposure to incorrect temperature.
3. Prolonged holding time in the fresh state.

Even when wrapped in air-tight containers meat can also be contaminated through cross-contamination, for example by various chemicals.

Today botulism is prevented in sausages and cured meats by the use of nitrates and nitrites in curing,

You can prevent botulism contamination in various stages of production by taking the following steps:

1. Cold smoking: Add nitrates to items that are cold smoked and not cooked for a long period of time.
2. Vacuum packing: Use cry o vac for any foods that will be held for a period of time, especially if they

are not to be cooked or heated properly before consuming. (Cry o vac is a process that removes [vacuums] air from packages of meats and sausages to keep them from spoiling, prevent freezer burn, and maintain freshness longer.)

Salmonella

There are about 1800 different known types of salmonella, and each is considered to be pathogenic to humans.

Warm-blooded animals are known to serve as hosts to the microorganisms that can be found in the intestinal tracts of poultry and large meat animals without showing any effects to the animal. Salt and acidity in prepared meat products help to keep the growth rate of these pathogens down.

E. Coli

E. coli is a very serious pathogen. It is found in the intestinal tract of cattle and can be transferred through contact with raw ground beef.

Precautions for preventing E. coli contamination include

1. Avoiding cross-contamination
2. Cooking all ground beef products thoroughly

Trichinosis

Trichinosis is a small worm found in the muscles of infected animals and humans. The parasite completes its life cycle in one host. Humans or animals can become contaminated by ingesting the larvae in raw or partially cooked meat products (usually pork, deer, and beef). The larvae invade the mucus of the small intestine and mature for 5 to 7 days. There they produce more larvae that infiltrate the bloodstream through the muscles and travel to other organs. The larvae then end up encysted in striated muscle tissue.

Precautions for Preventing Trichinosis Contamination

Cook fresh pork properly. Trichinosis can be eliminated by exposing the parasites to a temperature of 138°F for 10 minutes. (I recommend a temperature of 155°F to remove the pink color.)

If you produce fermented dry sausages or other pork products, they will not be cooked to the proper temperature. I suggest the following options:



Certified pork

Sausages must contain 3½ percent or more salt and be held in a dry room for 14 days for each 1-in. diameter of product and up to 50 days for a 6-in. diameter of product.

If the product is ¾-in. thick or less, use only pork that has been freed of trichinosis by freezing and certified using the guidelines in the following table:

How to Certify Pork

Minimum Freezing Temperature	Minimum Freezing and Holding Time
-5°F	20 days
-10°F	12 days
-20°F	6 days

Note: Store cubed pork at no more than a depth of 6 inches in freezer containers.

Professional Tools

Choose the right tools for the job and use my formulas. They allow you to calculate the size of each batch, starting with 2 lb for a food processor and 5 to 10 lbs for a chopper (Berkel or Hobart) or even for larger machinery like a Blitz (chopper with three-inch to 6-in. blades).

tip *Never overload your processing machinery as the motor will overheat.*

Hand Tools

Choosing the correct knives for everything you prepare in the sausage kitchen is very important for

the outcome as they are used to cube, chop, trim, bone, slice, and shape.

Always remember the knife is an extension to your hand and helps in the preparation of the fats and meats or any garnishes needed to beautify the sausage.

For this purpose you need

1. A boning knife to trim and remove bones and other tissues

2. A santoku knife or a 9" or 7" French knife to cube, chop, slice, and dice
3. A paring knife with a 4"-straightedged blade to slice, peel, and shape
4. A spatula to spread, press, and smooth forcemeats
5. A sharpening steel, a knife sharpener, electric sharpener, or a Stein or porcelain cocotte
6. A two-prong fork to lift and check for tenderness



Left to right: Ceramic bowl, straight edge paring knife, boning knife, santoku knife, slicer, two prong fork, top honing steel, electric sharpener



Sharpening boning knife on ceramic bowl

What to Look for When Selecting a Quality Knife

Blade	High-carbon steel blades will hold a sharp edge much longer and, at the same time, retain their finish and long-lasting beauty.
Handle	Look for a handle that is well balanced and feels comfortable in your hand—one that will give you a good grip as you work. The handle should be smooth and made of a nonporous material for cleanliness. If it has rivets, they should be ground flush.
Edge	Conventional straightedge knives and chef's knives are best for paring and boning. Knives, like trimmers and carving knives, should have a recessed edge to allow for easy cutting and they will stay sharp through years of use. Knives with recessed edges (unlike serrated edges which rip and tear food and cannot make a clean cut) can, if needed, also be sharpened by the manufacturer.
Storage	Proper storage is essential to keep knives sharp and looking professional year after year. Cutlery that rattles around in wood or metal drawers gets dull and damaged. Store knives safely in a wood block or in trays designed to protect knives.
Guarantee	To protect your investment, look for a solid guarantee from the manufacturer. Often the length of the guarantee is a good indicator of how long you can expect the knife to provide the satisfaction you paid for.

Cutting Board

We suggest you use wooden cutting boards as they do not slide on stainless steel work tables and are safer to work with than plastic boards. It is important to sanitize them before and during sausage preparation. When buying your board, determine the size you need based on the counter space or table available in your kitchen. (The average home kitchen has space for 18" × 24" boards).

Additional Equipment

In order to produce the perfect charcuterie item, you will need the following additional equipment:

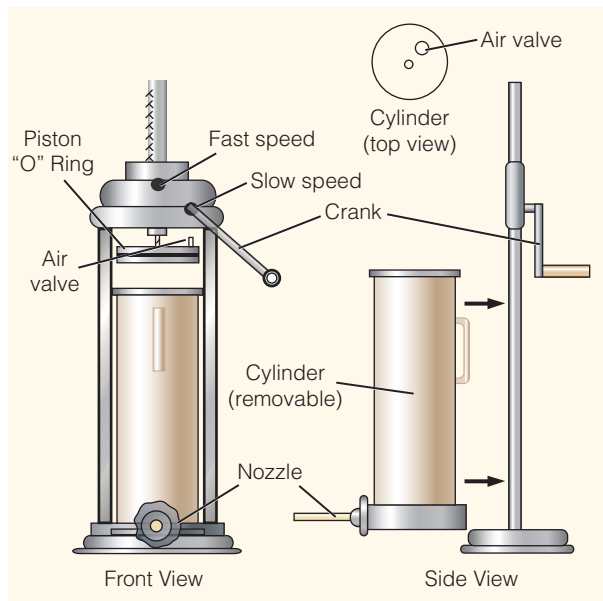
- Bowls of many different sizes
- ½ size hotel pans/shaving dishes
- Poaching pots
- Hand or digital thermometer
- Heavy round wood disk to keep sausages submerged while poaching
- Skimmer
- Spider
- Ladles
- Scale showing ounces and metric weights
- Brine tester (sal meter)



Hand thermometer, digital thermometer



Left to right: Ruler, sausage fork, spider, pricker, hand sieve, small strainer ladle, natural hair brush, plastic scrapers



Sausage stuffer with tubes



Stainless steel mixing bowls, rubber spatula, plastic funnel and tubes



Hand scale, electronic scale



Electric slicer



Sanitary handy wipes, anti bacterial cleanser, anti bacterial hand soap rubber gloves

Summary

After reading this chapter you will have a basic understanding of what types of machinery and utensils are needed to successfully master sausage making. You will also know how to use and care for these tools and vessels.

You will understand the various contamination agents that are unhealthy for human consumption (salmonella, botulism, E. coli and trichinosis) and how to prevent their occurrence.

Always remember the 3Cs: Keep it cold, keep it clean, and keep it covered.

IN REVIEW

1. What is botulism?
2. In what area of production does botulism contamination occur?
3. What is E. coli?
4. State two precautions for preventing E. coli contamination.
5. What is trichinosis?
6. How can trichinosis be prevented?
7. What is certified pork?
8. What temperature is needed to freeze pork for 20 days?
9. Name the three types of knives needed in sausage making.
10. What kind of steel is needed to keep a knife sharp over time?



KEY TERMS

Beef Chuck

Cooked Sausages

Cured Sausages

Game Birds

Poached Sausages

Pork Bellies

Pork Butt

Pork Liver

Pork Shoulder

Pork Tongue

2

Meat, The Raw Base of Sausage Making

In this chapter, the basic types of sausages and the raw materials needed to produce them successfully are presented.

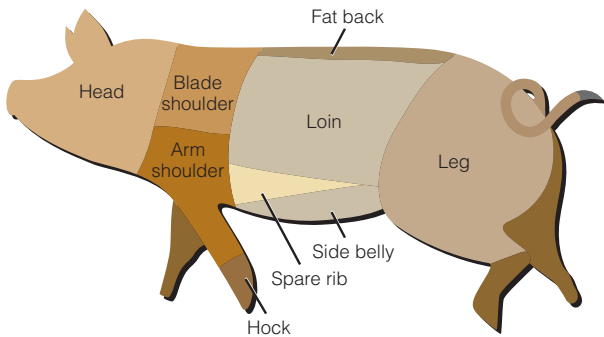
Sausages are divided into four categories:

- 1. Raw sausages (mostly bratwurst)*
- 2. Cooked sausages (mostly liverwurst, blood sausages)*
- 3. Poached sausages (mostly cold cuts)*
- 4. Cured and air-dried sausages (salami)*



did you know?

Raw sausages (bratwurst) are not poached. They are only cooked to order. Sausages in the "poached" category are cooked to an internal temperature of 155°F–160°F.



American cuts of pork

Raw Sausage

Raw sausages are made by grinding the preprepared and preseasoned meats with a fine, medium, or large grinding plate and then mixing them well in a bowl with a paddle to extrude the protein. In this state they are referred to as either bulk sausages (loose) or linked sausages (encased). These types of sausages should be stored in a refrigerator and are usually served sautéed, grilled/broiled, baked, or braised.

Cooked Sausages

Cooked sausages are made from precooked meats and fat that are ground like raw sausages, but while still warm, they are mixed well with salt and seasonings, piped into casings, and poached in a 160°F to 170°F meat broth to an internal temperature of 155°F to 160°F. The broth is used to prepare the famous metzel soup (butcher soup), a hearty bread soup.

Poached Sausages

Poached sausages are sometimes lightly smoked when raw. They are then poached at 160°F–170°F to an internal temperature of 155°F–160°F and chilled

in cold water to an internal temperature of 140°F and refrigerated. They can be sliced for cold cuts or they can be carved to order and served warm. I do not include poached bratwurst in this category, even though its preparation is similar to that of poached sausages, because its use and cooking finish have different applications. Bratwurst is discussed separately in Chapter 10.

Cured Sausages

Cured sausages are made only from raw materials and seasoned with Instacure #2 curing salt (tinted curing salt–TCM). They are then cured in the refrigerator for 24 hours and incubated for 72 hours at an air temperature of 70°F and air dried in a dark, airy, cool room for up to 6 weeks or longer. Cured sausages include salami and lightly smoked cold sausages such as cervelat or land jaeger (see Chapters 7 and 8).



Starting clockwise at noon: Leberkäse, gelbwurst, Neapolitanian sausage, krackauer, gelbwurst, cooked salami, bologna, center black pudding

Meats and Fats Used in Sausage Making





<p>Pork</p> <ul style="list-style-type: none">Fat pork bellyLean pork bellyPork buttPork shoulder	 <p><i>Left to right: Pork butt, fat pork belly, lean pork belly, pork shoulder</i></p>
<p>Pork Fat</p> <ul style="list-style-type: none">Fat backPork caul (crépinette)Pork jowls	 <p><i>Left to right: Fat back, pork caul, pork jowls</i></p>
<p>Specialties</p> <ul style="list-style-type: none">Pig's feetPig's knuckles	 <p><i>Left to right: Pig's foot with knuckle, knuckle and pig's foot, split pig's feet</i></p>

(continues)

did you know?


Nonskeletal muscles and organs, such as livers, hearts, and kidneys, of butchered animals that fall out when cut open are called "offal meats."

(continued)

<p>Specialties</p> <p>Pork tongue Calf's liver Chicken gizzards Chicken liver Pork kidneys Pork liver</p>	 <p><i>Top, left to right: Chicken liver in buttermilk, chicken gizzards, calf's liver Bottom, left to right: Fresh chicken liver, pork kidneys, pork liver</i></p>
<p>Beef</p> <p>Chuck</p>	 <p><i>Lean chuck</i></p>
<p>Turkey and Other Poultry</p> <p>Turkey breast Turkey thigh</p>	 <p><i>Left to right: Turkey breast, turkey thigh</i></p>
<p>Lamb</p> <p>Shoulder Trim</p>	 <p><i>Lamb shoulder</i></p>

(continues)

(continued)

<p>Game Birds</p>	<p>Partridge Pheasant Grouse</p>	 <p>Leg of venison</p>
<p>Other Meats</p>	<p>Venison/deer Bison/buffalo</p>	

did you know?

It has been said that trichinosis may be one of several factors that led to religious prohibition by Judaism and Islam against eating pork. This prohibition is referred to in the Kashrut or the Dhabila Halal dietary laws.

Certified Pork

In order to prepare sausages that are safe for consumption without trichinosis or other parasites, it is important to freeze all raw pork or game, especially if it is used for salami, cervelat, land jaeger, or raw prepared sausages. This technique is called “certifying pork.”

How to Certify Pork

<p>If your freezer is -5°F</p>	<p>Freeze for 20 days</p>
<p>-10°F</p>	<p>Freeze for 10 days</p>
<p>-20°F</p>	<p>Freeze for 6 days</p>

Note: Meat must be cut into 6-inch cubes and layered 6 inches deep. If your freezer is not cold enough, ask your butcher to freeze the pork for you or order certified pork.



Frozen Pork on a sheet pan (CERTIFIED)

Trichinae are also killed at an internal (temperature of 138°F when sausages are poached or cooked. (See Chapters 1 and 6). If you poach, bake or hot smoke the sausages, I suggest playing it safe and bringing the internal temperature to 160°F.

For cured sausages, follow the directions in Chapters 7 and 8.

Summary

This chapter described the meats, fats, and offal meats used to produce the four categories of sausages—raw sausages, cooked sausages, poached sausages, and cured air-dried sausages.

IN REVIEW

1. List the four categories of sausages.
2. Explain the term “cooked sausages.”
3. What are poached sausages?
4. What is “cured” salami called?
5. Are cured sausages brined in a wet or dry cure?
6. How many hours are needed to incubate cured sausages?
7. What kind of fat is the pork belly strip?
8. What is hard pork fat called?
9. Name two types of livers used in sausage making?
10. To what internal temperature are sausages cooled in running water?

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KEY TERMS

Fermento

Milk Powder

Plum Powder

Soy Protein
Concentrate

Sugar/Dextrose

TCM

Water

3

Seasonings, Binders, and Curing Salts

It is very difficult for us modern cooks and sausage makers to imagine the immense variety of fresh seasonings and seasoning mixtures used by our forefathers. We tend to forget that the knowledge of how to season was indispensable to the medieval cook and has been handed down to us over the centuries.

In the days before refrigeration aromatic seasoning blends were used to hide the bad taste and odor of food that was no longer fresh. Pepper and other spices not only masked distasteful flavors but also delayed the process of decay for up to 24 hours.

Top to bottom, left to right: Curly parsley, flat leaf parsley, leaf coriander, curry powder, ground coriander seeds, fresh oregano, fresh sage leaves, bay leaves, fresh thyme, dry thyme leaves, dried oregano, fresh chives, fresh marjoram, powdered marjoram, cinnamon sticks, powdered cinnamon, mélange of peppercorns.



Spices Through the Ages

Spices were once both rare, and expensive: For example, pepper was worth its weight in gold and some businesses, from the days of Cleopatra of Egypt, to the era of Vanderbilts, made their fortunes in the spice trade. One pound of nutmeg cost as much as seven fattened oxen, as noted on a price list from 1393. Spices became a status symbol and prominent families showed their wealth by having their cooks create dishes to serve to their guests. One account by a sixteenth-century Burgundy nobleman related how his cook had used 160 pounds of pepper preparing a dinner.

Christopher Columbus, Vasco da Gama, Magellan, Hernando Cortés, and others explored different parts of the world, looking not only for gold, but also for spices, which were more in demand than gold itself. Columbus set out to find India, the pepper country but found instead the tomato on his second trip in 1400. Cloves came from the Moluccas Islands, ginger from India, chili from the Americas, and allspice from Jamaica and Cuba.

Even from these few examples, you can see the importance of spices and how almost every food dish is affected by these flavoring seeds, barks, and berries from around the world. You can become an explorer yourself by researching the historic spice route, sometimes also referred to as the “Silk Road”, where Marco Polo, and many other explorers traveled to find these marvelous wonders of nature.

It is also interesting to read about the wheeling and dealing that went into producing good sausages and pâtés as their ingredients became more costly as time went on. To keep prices high, the Dutch restricted the planting of nutmeg trees in their controlled Spice Islands and other superpowers did the same. As spice prices went up, European cooks became inventive and cost conscious: They created seasoning mixtures by combining more of the affordable herbs available to them with the expensive spices in order to cut down on the cost. Today, availability and easy access make it easy to use affordable spices and herbs in sausage making.

With approximately 15 different spices and herbs, which you most likely have on your kitchen shelf, you can create a basic seasoning mixture to experiment with. It is fun and satisfying to create your own combination of seasonings for small or

large batches. One thing is certain: You should store large batches of seasoning mixtures in the freezer, as herbs and spices lose their oil and aroma at room temperature, especially when combined and mixed. That’s why I suggest you make only enough seasoning mixture as you need. This also minimizes a “mistake” or the loss of expensive spices or herbs through evaporation of the aroma oils.

Remember, sometimes a mistake can become a new flavor revolution. As the old saying goes, “Chefs make no mistakes . . . they make new creations.” But without the potent and powerful aroma of spices there is no flavor.

I have put together different flavor and aroma combinations for sausages in all categories throughout the book for you to experiment with. Juniper berries are great flavor enhancers in game sausages or pâtés; marjoram and garlic add zest to sausages of wild boar, buffalo, or game birds. Or try black or white pepper, smoked paprika, powdered ginger, mace, rosemary, cardamon, or others spices and herbs.

As you know, without “seasoning” there is no aroma or taste. It is the seasoning mix, that makes one sausage better than the other. With the help of notes from my apprenticeship, and the teaching of many of my masters and the knowledge they shared with me, I have created exciting flavor mixtures. The beauty is they are not written in stone and can be changed by adding or taking away spices or herbs to create your own flavor line.

In 1950, when I learned this interesting trade, some of the sausage makers did not share their “secret seasoning mixtures,” but by watching them closely and with some research, I prevailed. As my hero, Sherlock Holmes said, “Elementary, my dear Watson, there shall be no secrets.” So, elementary it is and I will share all the secrets I have gathered over the years as well as my successes with you.

In addition to the spice mixture water (ice) is added to the sausage forcemeat to dissolve seasoning mixtures and add moisture to compensate for moisture lost during hot smoking or drying. Water fills up with salt-soluble proteins that aid in binding meat mixtures.

Water can be replaced by meat broth or wine. Water in the frozen stage will maintain colder

did you know?

In the late eighteenth century Americans became more directly involved with the spice trade, as the clipper ships of New England began to dominate world trade. Many voyages from New England to Sumatra were taken to bring back the prized pepper, and by 1843 the price dropped below 3 cents per pound, a disastrous slump that affected many aspects of food manufacturing.

When piracy in the Java and China Seas made the voyages to get pepper too dangerous and the spice trade fell, the American spice business, like the rest of our country, was moving west. In 1835 American settlers in Texas developed chili powder by combining various red peppers from Mexico, forever changing the American taste. Chili powders can add new and exciting flavor dimensions to regional sausages.

In 1889 food researchers in Watsonville, California, developed the technique of dehydrating onions and garlic.

After the Gold Rush had subsided, farmers began to grow herbs commercially in California and mustard seeds (a flavor marriage with sausages) in North Dakota and Montana.

From the beginning of recorded history the most powerful nations have controlled the spice trade. The same is true today. America is now the world's leading distributor of spices, followed by Germany, Japan, and France.

temperatures during the emulsion process of the forcemeats (brat).

The Salt of the Earth

Ancient people discovered the secret power of salt—its ability to preserve food for a long time. They found salt to be a dehydrator, extruding moisture from the tissue and drying it, and thereby creating an environment that inhibits the growth of harmful bacteria. For our ancestors, salt became an essential ingredient, highly prized, and fiercely guarded. As a matter of fact, the first recorded biblical war (Genesis 14:10) was fought over the rights to control salt pans. Salt in the early days, used to preserve meat and fish, was sometimes more costly than buying the meat. The old saying, “not worth its salt” originated at that time. Salt was needed to preserve the food for long overseas voyages and in this way allowed the great explorers like Columbus to colonize the New World and change the history of the world.

Salt Is More Than a Spice

Without salt (sodium chloride) there could be no sausage (emulsion) production. But, not enough salt is as bad as too much salt. Salt, especially curing

salts, help to control bacteria (botulism) and bind proteins, which are especially important in the execution and success of forcemeat (brat). The base amount of salt or curing salts per 2 pounds of forcemeat is 12 grams, or as directed.



From left to right: Different salts; (kosher, sea salt, TCM)

did you know?

There are 30 references to salt in both the Bible and the Talmud on the need for salt.

The first animal domesticated by man was the pig. In order to preserve it, man used salt. The

reddening effect on the meat was noticed, and this phenomenon was first mentioned during the latter years of the Roman Empire. I'm sure more research will reveal that this discovery occurred much earlier. Nitrate is present in the evaporated salt harvested from the sea. Salt alone does not produce the red color, but as discovered in the 1900s, sodium and potassium nitrates present in pure salt do.

This discovery proved that potassium nitrate was converted into sodium nitrate by bacteria found in meat and then converted into nitric oxide. Hence, the more myoglobin present in meat, the more the red color shows. Chicken and turkey have the lowest myoglobin content. Beef has the highest.

But, more important than color enhancement or eye appeal, nitrates prevent botulism in uncooked cured and smoked products.

Basic Curing Agents

Tinted cure mix (TCM), or Instacure #1 is the basic curing agent for cooked, poached, and smoked sausage. It is also used for ham, salmon, corned beef, turkey, and bacon. TCM consists of 94 percent sodium chloride (salt) and 6 percent sodium nitrate) per 100 pounds of TCM.

Four ounces of TCM are needed to cure 100 pounds of sausage meat to prevent the growth of the botulism organism and stabilize the pink or cured color in the lean muscle tissue of meat.

TCM or Instacure #2 is a curing agent that dissipates over a period of time. It is commonly used for dry cured sausages like salami, cervelat, or meats like ham, prosciutto, bacon, and smoked fish.

Salt, sodium nitrite, and sodium nitrate are other curing agents that are used in dry and dry fermented products such as cervelat, salami, pepperoni or land jaeger.

Cold Smoking or Vacuum Packing

Cold smoking (also known as vacuum packing) contributes to the characteristic flavor of cured meats and retards lipid oxidation (rancidity) in products and prevents a stale taste.

tip You can use the full amount of curing salt, but I prefer a mixture of 4 grams of curing salt (TCM) and 8 grams of kosher salt for each 2 pounds of meat or as directed by the recipes.

Salt should be stored in airtight containers in a dry area to prevent it from becoming moist and watery.

Important Ingredients

Cane, Root Sugar, and Grape Sugar (Dextrose)

Sugar is used in processing semidry cured sausages. I recommend the use of dextrose rather than cane or root sugar as it is absorbed faster by the cells of the meat, helping to speed up fermentation. It also provides a tangy flavor. Cane and root sugar



Left to right: Ground sugar, cane sugar, dextrose



Corn syrup solids, soy protein concentrate, milk powder, plum powder, baking powder, Fermento

can be used as substitutes, but these sugars are not as sweet as dextrose.

Sugar is very important in preserving and prolonging freshness, especially if natural spices and herbs are used. Sugar (dextrose is available in powdered form) is an ideal nutrient for lactic acid organisms that assist fermentation in an array of sausages like salami and cervelat. Sugar also adds a tang of flavor, but it must be carefully measured—approximately 2 grams to each 2 pounds of seasoning mixture.

Note: Too much sugar will affect the balance of taste.

Binders

Soy Protein Concentrate

Soy protein concentrate can be used in cooked, poached, and smoked sausages. It binds the fat and meat to create a smoother consistency. This product cuts shrinkage in the smokehouse as well as in poaching by improving moisture retention.

Corn Syrup Solids

Corn syrup solids assist in holding the cured color of semidry and dry-cured sausages for a longer period. This product also helps bind meat, adds flavor, and helps in the fermentation process.

Plum Powder

Plum powder is a new product that has taken the market by storm. A natural product, it acts the same as soy protein concentrate and corn syrup solids and adds extra flavor. I recommend using 4 to 6 grams of plum powder and 4 grams of corn syrup solids for a 2-pound mixture.

Fermento

Fermento is a fermentation/curing aid used in sausage making, especially for salami, land jaeger, and cervelat. It accelerates the curing/fermentation process and creates a more consistent sausage. For best results use 20 grams per 2-pound mixture, or as directed.

Binders, like soy protein concentrate, dry milk powder, or plum powder help against loss of moisture (a binder will absorb as much as 50 percent of its weight in water). Use approximately 4 to 5 grams per 2-pound mixture, or as directed. To process approximately 50 pounds, use 1½ pounds of binder.

did you know?

Baking powder has a similar effect on the binding of force-meats as soy protein concentrate.

did you know?

In the thirteenth century Marco Polo reported that the soldiers of the Emperor Kublai Khan carried sun-dried milk powder with them on their long expeditions.

Binders should be added with the salt and seasonings to the semifrozen meat and fat mixture before grinding.

For raw dried sausages like cervelat, land jaeger, or salami, use fermento, corn syrup solids, or a starter culture to assist in the fermentation. Fermentation is the secret to making quality semidry or dried cured sausages, as it creates the customary tangy European flavor expected in these types of sausages. Using fermento, corn syrup solids, or culture starters also shortens the long fermentation process of the past. They are easily obtained through mail-order houses or on the Internet.

Spices and Herbs

Pepper

White pepper is the ripe peeled seed from the pepper bush and comes from Southeast Asia, West Africa, India, and South America.

Black pepper is the unripe dried berry of the same bush. The question is often asked: Which pepper—white or black—is better to use for the flavor or eye appeal of the sausage?

By rule of thumb, white pepper is used in white or pink forcemeats, like white bologna, or cooked salami, bologna, weisswurst, and bratwurst.

Black pepper on the other hand, is used in dark-colored or robust sausages like salamis, cervelats, and sausages made with beef, goose, or lamb.

The suggested amount is 1.5 to 2.5 grams of pepper per 2-pounds of mixture.

Juniper Berries

Juniper berries are harvested from the juniper bush. They are freeze-dried and used in marinades, brines, dry cures, and regional sausages. Used in smoking, they add excellent flavor when crushed and mixed with hickory sawdust (1 to 4 parts).

did you know?

Paprika was found in South America and came to Europe in the fifteenth century.

Marjoram

This spicy herb is used powdered; it brings out strong flavor, especially in liverwurst or rustic

bratwurst. Use approximately 1 to 2 grams per 2-pound mixture.

Thyme

Thyme has a much more pungent aroma than marjoram and is used in some regional flavor profiles. If needed, use 0.5 gram per 2-pound mixture.

Vinegar

Plain distilled white 5 percent vinegar or any wine vinegar is used in jellied sausages like white pres-sack, savory aspics, aspic plates, or headcheeses.

Coriander

This powerful spice comes from southern Europe. It has berries similar to peppercorns and is used ground. Use approximately 0.5 gram per 2-pound mixture.



Top to bottom, left to right: Lemon peel, roasted onion, paprika, ginger, saffron, white pepper, parsley, nutmeg, granulated garlic, mace, mélange of peppercorns, black peppercorns, juniper berries, caraway seeds, chili powder, ground cardamom

Paprika

Paprika comes from Hungary and South America. There are different types: sweet, hot, and now smoked paprika (schreiber). We recommend using the smoked version as it gives a light, pleasant smoked flavor. Suggested use is 1 to 2.5 grams per 2-pound mixture, or as directed.

did you know?

Always store paprika in the freezer as it prevents the paprika oils from evaporating and will keep the color vibrant red.

Ginger

Ginger comes from Southeast Asia and is available fresh, dried, and ground. It is often used to give some additional flavor kick to sausages. Suggested use is 0.5 gram per 2-pound mixture.

did you know?

Garlic bulbs were found in 1923 in the Tomb of the Egyptian Pharaoh Tutankhamen who lived in 1350 B.C. It is believed garlic was used for currency.

Cardamon

The spice of spices, cardamon, assists in bringing out the traditional sausage flavors. It comes from Southeast Asia. Suggested use is 0.25 gram per 2-pound mixture.

Onions

There are many types of onions: red, white, Spanish, Vidalia, shallots, and others. They must be blanched or sautéed before using them in sausages (cooking turns the acidity of the onion into dextrose). You can also use granulated or powdered onions.

did you know?

Onions shrink. Onions with a raw weight of 50 grams will shrink to 25 grams when cooked.

One to two grams of powdered onion give as much flavor as 25 grams of cooked onions.

Garlic

Garlic is a very good flavor enhancer for most sausages. Its use is optional as some people like it, and others do not. It is mostly used in ethnic sausages, like French or Italian sausages. If used fresh, roast the garlic first, then purée into paste or use powdered garlic. Use: up to 6 grams of fresh garlic paste per 2-pound mixture; use 1 to 2 grams of powdered garlic per 2-pound mixture.

Lemon and Lime

Grated zest of citrus fruits is often used in sausages like bratwurst or weisswurst. As a substitute, use lemon or lime juice, as directed by the recipe.

did you know?

In 1493 the lemon crossed the Atlantic with Columbus and arrived in Haiti.

Mace

Mace is the bright red, lacy covering of the nutmeg seed. It comes from the Moluccas Islands, discovered by Vasco da Gama who claimed the islands as a Portuguese territory. Today mace, a side product of nutmeg, comes mostly from the island of Granada which is referred as the "Nutmeg Island."

I have described only a few of the major spices used for sausage making. There are, of course, many more possibilities by using other spices and herbs that add flavor, especially in regional and cultural sausage making. The opportunity to create new aroma and flavor sensations is yours, but you must think the combinations through until they make sense, and then test and taste them.

Create new flavor sensations with sense and feeling. For example, exotic tastes in sausages can be created by curry, chilies, and other spices of your choosing. Or use various herbs in specialty sausages, like Buffalo sausage with cheese, or Chinese air-dried sausages with anise seeds or star anise. For color, use fresh or freeze-dried chives, leaf parsley, fresh or freeze-dried dill weed, or for the ultimate taste and eye appeal, use peeled pistachio nuts or walnuts.

Summary

This is the most important chapter of the entire book, as it gives insights into the art of creating flavors and aromas with herbs and spices. After reading it, you will understand the fascinating history of the spice trade and how spices have affected the taste buds of today's eating public. It discusses the importance of sodium, either natural or mixed with sodium nitrite and/or sodium nitrate, the function of sugar in the fermentation of cured sausages, and it gives basic information about the most often used spices.

IN REVIEW

1. Give the reason medieval cooks started using aromatic spice blends?
2. What island in the Caribbean is known for its nutmeg harvest?
3. What is mace?
4. Where should ground paprika be stored?
5. What is the purpose of using salt in sausage forcemeats?
6. What is the ratio of natural salt to sodium nitrate in tinted curing salt?
7. Name two types of sugar used in sausage making.
8. What is black pepper?
9. What is the weight of a 50-gram onion after it is cooked?
10. Why is it recommended to cold-smoke cured meats?



Spice grinder



Top to bottom, left to right: Lemon peel, roasted onion, paprika, ginger, saffron, white pepper, parsley, nutmeg, granulated garlic, mace, mélange of peppercorns, black peppercorns, juniper berries, caraway seeds, chili powder, ground cardamom



KEY TERMS

- Beef Bung
- Collagen Casings
- Hank/Bundle
- Natural Casings
- Nozzle
- Piping/Stuffing
- Set
- Synthetic Casings

4

Sausage Casings

Animal intestines are used for a variety of different purposes, for example, surgical strings, strings for musical instruments, human food, pet food, tallow, fertilizer, and, of course, sausages.

Ground or emulsified meats often require some type of casing to hold the forcemeat intact while it is processed, precooked, smoked, air-dried, or poached. The experienced sausage maker has the option of using natural casings, reconstituted collagen casings, or artificial casings made with cellulose.

Animal casings have the advantage of contributing to an “Old World” appearance and are often edible. They also have physical and chemical properties that make them very desirable containers for any type of sausage.

Natural, synthetic, and collagen or cellulose casings can easily be purchased through the Internet or mail-order houses.

Sausage stuffer in action



did you know?

A 25-mm casing equals approximately 1 in.

Natural Casings

Natural edible casings are the processed intestines of hogs, sheep, and cattle. The hog stomach is used for tongue sausage and the sheep stomach is used for haggis, a Scottish specialty. Beef provides casings called middles and rounds that are used for bologna, mortadella, liverwurst, salami, and other sausages. Beef bung is used for veal sausage, large bologna and cooked salami.

After being harvested, the intestines are cleaned and calibrated by inflating them with air to check for holes and then stretched and sized to the dimension needed to fill (pipe) with forcemeat, or liquid-like aspic or blood. They are packed in plain salt or a salt brine solution for preservation.



One hank of sausage casings

Casings from large intestine are measured in inches; casings from smaller intestine are measured in millimeters. A measured length is called hank or bundle.

Hobby or professional cooks can easily purchase natural edible pork, beef, and sheep casings in the meat section of the supermarket, on the Internet, or by mail order. Natural casings are available in hanks or bundles; they are measured in yards, feet, or meters to specify the amount of sausage they can produce.

For example,

Natural hog casings ($1\frac{1}{8}$ – $1\frac{1}{4}$ in./29–32-mm in diameter) are used for frankfurters, Italian sausage, kielbasa, and breakfast sausages. Stuffing capacity of 1 hank: 90–100 pounds of sausage.

Natural hog casings ($1\frac{3}{8}$ – $1\frac{1}{2}$ in./32–35 mm in diameter) are used for bratwurst, kielbasa, knockwurst, and Italian sausage. Stuffing capacity of 1 hank: 100–115 pounds of sausage.

Natural hog middle casings ($2\frac{1}{4}$ in./55–60 mm in diameter) are used for traditional sausages like sopressata, mettwurst, and black pudding. Stuffing capacity of 1 hank: 100–125 pounds of sausage.

Natural sheep casings ($\frac{3}{4}$ –1 in./22–24 mm or $1\frac{1}{16}$ – $\frac{1}{8}$ in./24–26 mm in diameter) are used for German frankfurters, white frankfurters, chipolata, breakfast links, and pork sausage. Stuffing capacity of 1 hank: 50–60 pounds of sausage.

Natural beef bung ($4\frac{1}{2}$ in./101–114 mm in diameter) is used for bologna, mortadella, cooked salami, and jellied sausages. Stuffing capacity of one bung: 8–10 pounds of sausage.

Natural beef middle ($1\frac{1}{4}$ – $2\frac{1}{2}$ in./57–63 mm in diameter) is used for cervelat, gelbwurst (white bologna), bologna, and cooked salami. Stuffing capacity of 1 bundle or set (57 feet long): 80–90 pounds of sausage.

Natural beef round (1½–1⅝ in./30–40 mm in diameter) is used for kielbasa, bologna, mettwurst, black pudding, and derma. Stuffing capacity of one bundle or set: 72–94 pounds of sausage.

Before being used, natural casings should be washed in lukewarm water. Carefully force the water through to flush out impurities (see photo on page 34) and rinse them on the outside to remove all salt. Then soak them for one hour in warm water so they will soften and become tender.

Note: Make sure the rinsing water is lukewarm. If the water temperature is too hot, the casing will break; if the water is too cold, the casing will tend to be tough and most likely will not be lubricated enough to slide on and off the stuffing tube.

Unused casings should be repacked in kosher salt and stored covered in the refrigerator.

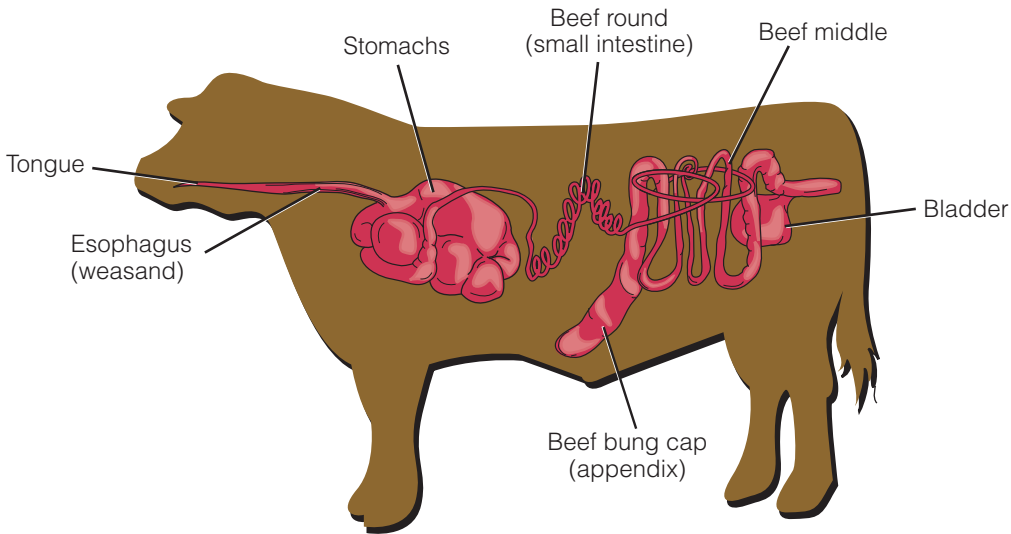
Advantages and Disadvantages of Casing Types

Advantages and Disadvantages of Casing Types

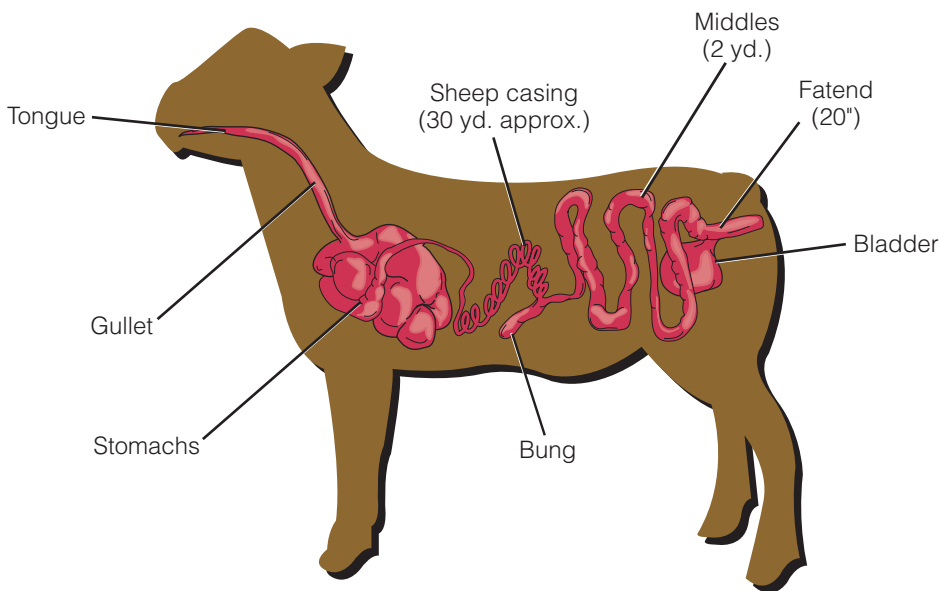
	Natural	Collagen	Synthetic/Cellulose
Cost per pound	Most expensive	Less expensive	Less expensive
Need for refrigeration storage	Yes	Yes	No
Degree of tenderness	Most tender	Less tender	Nonedible
Likelihood of breakage during processing	Most likely	Less likely	Least likely
Casing preparation	Time consuming	None	None
Need for soaking and flushing	Yes	No	Sometimes (soaking)
Smoke penetration	Most penetration	Less penetration	Least penetration
Finished product yield, per foot of casing	Least	Less	Best
Finished product uniformity	Least	Less	Best
Edible	Yes	Yes	No
Old World appearance	Best	Less	None

did you know?

*Sheep and hog casings are sold by the hank or bundle. They are salted and can be used for up to one year
Beef middle and beef round casings are sold by the set.*

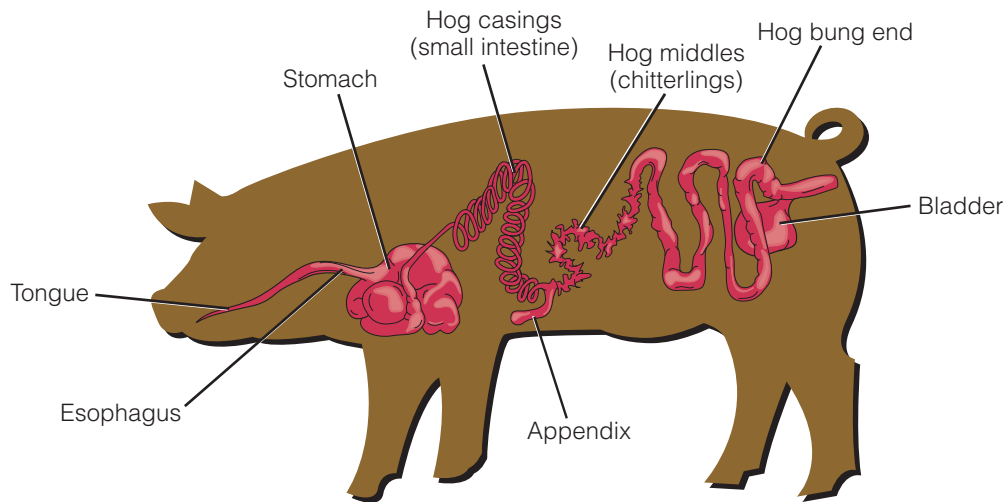


Item	size	length	capacity	sausages
Beef round	43–46 mm (Tight curl)	100 ft. per set	70–80 # (15"/per #)	Ring liver and bologna sausage kielbasa, black pudding, mettwurst
Beef middle (large intestine)	60–65 mm	57 ft. per set	70–80 # (8"/per #)	Ham bologna, white bologna, dry and semi dry salamis/cervelate, cooked salami, turkey sausages, deriva
Beef bung cap (Appendix)	120 mm	23–27 inches	17–20 #	Large bologna, cooked salami, mortadella, ham bologna, tongue sausage



Sausage Casings

Item	size	length	capacity	sausages
Lamb casing	18 mm or less	100 yds./hank	38-41 #	Cocktail franks, chipolata breakfast sausage
Lamb casing	24-26 mm	100 yrd./hank	60-64 # (4 ft. per #)	Frankfurter, brat wurst
Lamb casing	28 mm and up	100 yrd./hank	65-70 #	Knock wurst, pork sausages



Item	size	length	capacity	sausage
Hog casing (small intestines)	32-35 mm	100 Yrd./hank	105-125 # (2 feet per #)	Breakfast sausage, large franks, pepperoni,
Hog middles (Chitterlings)	4 inches	12 feet (27 ft. set)	up to 8 #	Mett wurst, liver wurst
Hog bung end	2 inches and up	4 feet long	up to 5 #	Tongue sausage, mortadella
Stomach	for large any type sausages			



Synthetic or Cellulose Casings

In commercial sausage making synthetic fibrous casings are the norm, and they can also be used in the hobby kitchen. They are available in an array of colors: red for bologna-style sausages, white for liverwurst, and clear or frosted for salami. Synthetic casings can be purchased on the Internet and from mail-order establishments.

These casings are usually lined on the inside with a coat of protein, which allows the synthetic casing to shrink with the sausage filling, for example, air-dried sausages. These casings are less expensive than their natural counterparts. They are also easier to store and need not be refrigerated or cleaned but must be soaked in a warm water/vinegar solution (1 part vinegar to 5 parts water) for 30 minutes before using.

From left to right: Hog casing 1 1/8 in. – 1 1/4 in., for frankfurters, breakfast sausage; hog casing, 1 1/2 in. – 1 3/4 in., for kielbasa, pepperoni, knockwurst; sheep casing, 3/4 in. – 1 in., for white frankfurters, chipolatas, mini franks; beef middle, 2 1/4 in., for liverwurst, bologna, cooked or dry-cure salami; hog middle, 2 1/4 in., for mettwurst, sopressata, black pudding; artificial hog stomach, for tongue sausage, red and white Pressack; 1 hank of hog casing, 1 1/2 in. – 1 3/4 in.; rewound soaked hog casing ready to use; rewound hog casing salted, 1 1/4 in. – 1 1/8 in., for bratwurst, Italian sausage, fresh and smoked sausages



Rinsing natural casing



Left to right: Red-colored synthetic fibrous casing (bung size), flat clear collagen casing (2 in.-diameter), synthetic casing for salami or game sausage, protein-lined clear casing, round fresh collagen casings (edible), colored flat collagen casing with string, colored fibrous casing with string, clear flat collagen casing (3 in.-diameter), synthetic casings soaking in warm water

did you know?

Edible collagen casings are made from the corium layer of hides. They are swelled in acid, sieved, filtered, and extruded in 25 to 50 foot lengths. They are good for frankfurters, bratwurst, Italian sausage, and larger sausages.



Closing sausage with metal clip and pliers



Piping bratwurst



Hand twisting links



Tying bratwurst



Strands collagen casing

When buying synthetic casings, follow the manufacturer's directions. Synthetic/cellulose casings are not edible.

Collagen Casings

Collagen casings were developed as early as the 1920s, but it wasn't until 1960 that collagen casings were introduced. They are similar to animal casings but have the uniformity of a manufactured product. This uniformity enables sausage makers to accurately predict the consistency of the sausages and control cooking times.

The hide of cattle consists essentially of collagen. The corium layer of USDA-approved cattle hides is extruded from the area between the grain (hair) layer and the fat and muscle layer. Protein and water are mixed with lactic acid and the cellulose fibers, causing them to swell and form slurry. This acid-swollen slurry is de-aerated under vacuum and then homogenized and filtered to tease the collagen fibers apart. The resultant slurry is again de-aerated and stored to chill in tanks.

The slurry is next extruded through a die with counterrotating sleeves, which "weaves" the collagen fibers together as they pass through the die. The slurry, which is now in the form of a casing, passes directly through a concentrated coagulating solution of inorganic salt. The casing is chemically treated in a processing machine to cross-link the fibers and give the casing integrity. The casing is washed, plasticized with glycerin, dried, and partially rehumidified and wound on reels.

These reels are taken to a shirring machine where the collagen casing is shirred to regenerate the cellulose. The casings are now ready to be used. Follow the manufacturer's direction when using them.

Edible Collagen Casings

Two types of edible collagen casings are available:

1. Collagen casings with a thin skin for fresh sausages
 - $\frac{3}{4}$ in./22 mm—for breakfast sausages
 - $1\frac{1}{2}$ in./23 mm—for Italian sausage, bratwurst, and chorizos
2. Collagen casings with a thicker skin for smoked sausages (These casings provide strength when sausages are hanging in the smoke chamber.)

$\frac{3}{8}$ in./15 mm—for dried sausage sticks and land jaeger

$1\frac{1}{4}$ in./32 mm—for bratwurst, pepperoni, Italian sausage, and smoked breakfast sausages

$1\frac{1}{2}$ in./38 mm—for kielbasa, knockwurst, or pepperoni

Nonedible Collagen Casings

Nonedible flat collagen casings do not need to be kept refrigerated and can be stored at room temperature. They are a very good substitute for natural casings but must be soaked in salted (1 tsp per quart of water) lukewarm water for 30 minutes before using them. Sizes range from $2\frac{1}{2}$ in. \times 24 in./65 mm) with a stuffing capacity for 2 pounds of sausage to $3\frac{3}{8}$ in. \times 20 in. with a stuffing capacity for $5\frac{1}{2}$ pounds of sausage.

Stuffing the Casings



Filling hog casing for boudin and ready cooked boudin

To stuff (pipe) the sausages:

1. Set up the hand or electric sausage stuffer as directed. Make sure the nozzle and work table or sheet pan are well lubricated with cold water to prevent the sausages from sticking and tearing. All parts of the stuffer that will be in contact

with the forcemeat must be sanitized, clean, and well chilled. Fill the sausage stuffer with forcemeat by pressing or tapping down with a rubber spatula to remove all possible air pockets.

2. Slide the open end of your casing over the moistened nozzle. Pipe the sausage forcemeat (brat) into the prepared casing.
3. Support the casing with your full hand as the forcemeat is piped into the nozzle casing.
4. After all sausages are measured into links, rings, or any other shape, pierce them with a thin needle or piercing fork to remove any air pockets inside the casing.

For bratwurst or frankfurter-type sausages, curl the stuffed sausage into a tight roll and then twist or tie it into the appropriate length or weight.

Beef middle casings are premeasured and pretied before piping in the forcemeat. To finish, tie with a bubble knot (see illustration).

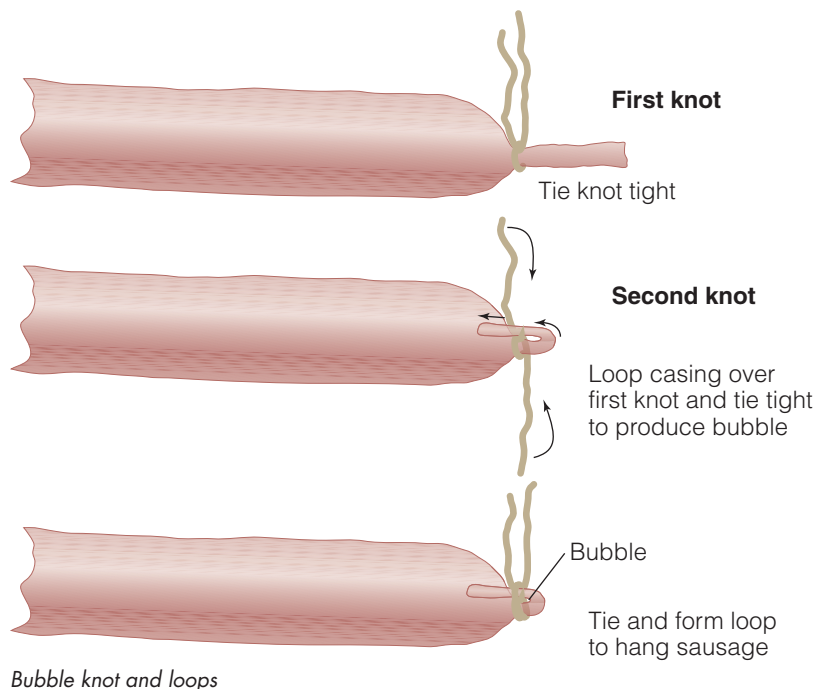
Smoking the Sausages

After the preprepared forcemeat (brat) has been piped into the casing and fully tied, the sausages are ready for smoking (see Chapter 5).

1. To cold smoke: Hang the sausages made without curing salts to dry for 1 to 2 hours in a 70°F room.
2. To hot smoke: Hang the cured sausages to incubate in a 70°F room for 12 to 24 hours and smoke them following your directions for time and temperature. The sausages are now ready to be poached.

did you know?

- 1) Cooking time for poached sausages is 25 minutes for every 1 inch in diameter.
- 2) Cooking time for cooked sausages is 28 to 30 minutes for every 1 inch in diameter.
- 3) Cooking time for blood sausages is 35 minutes for every 1 inch in diameter.



Making a bubble knot for large casings

Poaching the Sausages

For successful poaching use a large, possibly oversized pot. Have a hand or digital thermometer to monitor the temperature of the poaching water at all times. If the water temperature is too high, the sausages will burst; if too low, the sausages may lose flavor. The starting temperature given for each recipe is 160°F–170°F with a finishing internal temperature of 155°F to 160°F.

The cooling process for sausages with natural casings is started in cold running water. When synthetic casings are used, I recommend starting the cooling process in lukewarm water and slowly finishing in cold running water.

When cooling liverwurst, I suggest starting in warm water. Massage the liverwurst and rotate it slowly until it is cold. This will prevent any fat buildup on the casing wall.

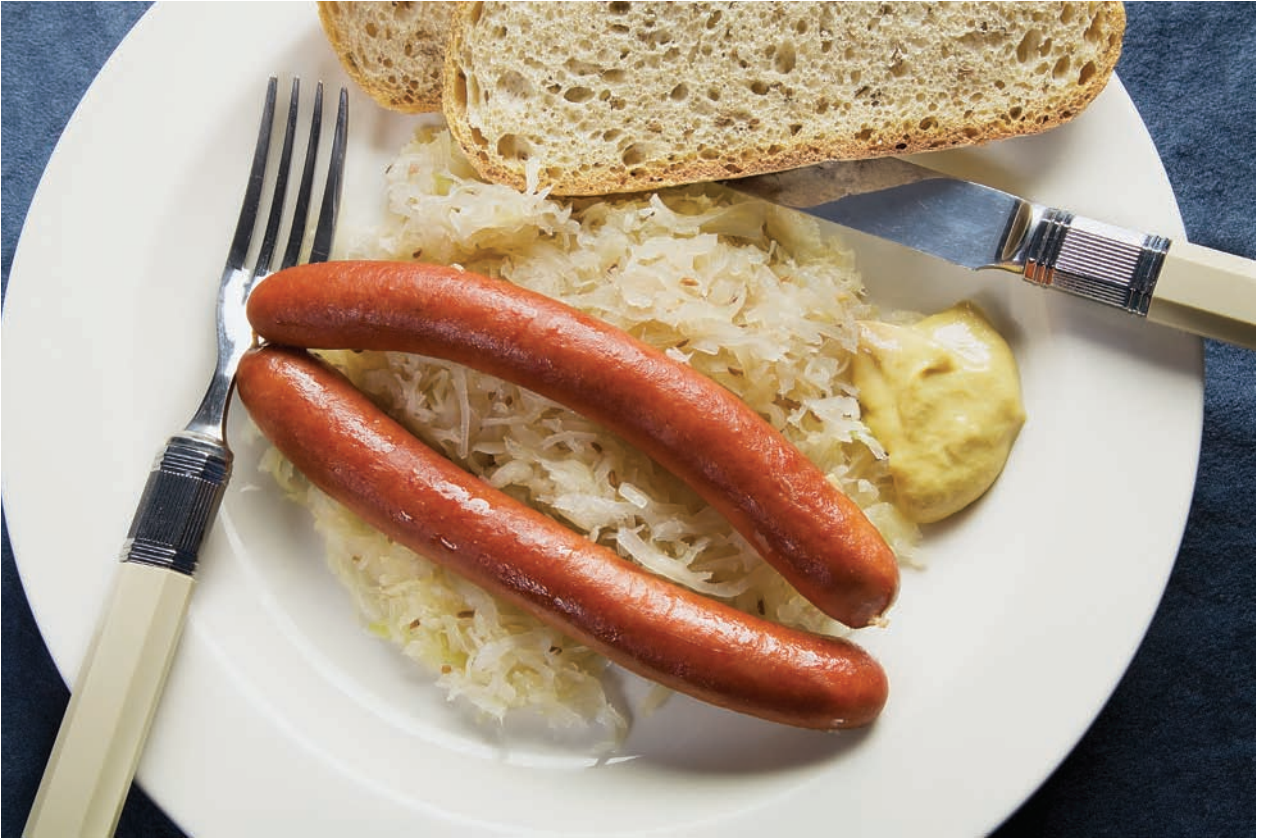
All sausages must be refrigerated or frozen before use.

Summary

After reading this chapter, you will understand the differences among the various casings—natural, synthetic, and collagen—and how to work with them. You will learn how to prepare casings for filling (piping, or stuffing) and how to tie them. You will also know how to poach and cool sausages as complete directions, including the best temperatures, are provided.

IN REVIEW

1. How are links formed for fresh sausage and smoked or cooked sausage?
2. What is an artificial casing?
3. How are sheep and hog casings purchased?
4. What are the varieties of artificial casings?
5. How are beef rounds and middle casings prepared before stuffing?
6. What type of knot is used for beef middle, round, or bung casings and why is it important?
7. How are sheep or hog casings handled before being attached to the nozzle of the sausage stuffer?
8. How are beef round and middle casings purchased?
9. In what part of the intestine is bung located?
10. What are five sizes of natural casings?
11. Name two items made with each of the five sizes of natural casings.



German Frankfurter with sauerkraut



KEY TERMS

Cold Smoking
POWER INDICATOR

Hot Smoking

BISQUETTE
ADVANCE

Oxidation

Pellicle



5

Smoking Sausages and Meats

Our forefathers knew that smoking meat over an open hearth extended its freshness, and, in addition, gave the meat a pleasing aroma and flavor. Salting and brining meats and then smoking or drying them in fresh alpine air or caves were the means of preserving meats and sausages before the invention of the refrigerator.

Today with our sophisticated refrigeration systems, smoking is used to create additional aroma and flavors with the help of woods like hickory, oak, apple, cherry, mesquite, or specialty seasoning mixtures. The smoke is also used to preserve the meat and maintain its freshness.

A smoker is a box (see photo) that has the capacity to smoke 20 to 50 pounds of sausage whereas a smokehouse is a room specially built to smoke 100 pounds or more.

With very little effort and equipment the sausage maker can achieve taste and aroma by smoking. In this chapter, I will not explain how to build a smokehouse/smoker; many books have been written on how to do it. I simply use a hot and cold smoker bought from a mail-order house. It suffices for me. However, if you want to build your own smokehouse/smoker, by all means do so. Or, if you prefer, buy a smokehouse/smoker of your own choosing.

The art of smoking foods is a chemical process achieved by burning whole wood or sawdust, which creates a vapor of smoke. Combined with the dry or wet curing process, the moist carbon compounds in the smoke will change the meat pigments to the familiar reddish color and give the smoky aroma and taste we expect in these foods.



Why Smoke?

Smoke is applied to meat for the following reasons:

1. To preserve: Phenolic compounds and formaldehyde (both found in smoke) have antimicrobial action that prevents the smoke from penetrating deeply into the meat and protects the surface of the meat from bacterial and yeast spoilage. In addition, the smoke emits a number of acids that cling to the outside of the meat or sausage and form an outside layer or skin. The acids help coagulate the protein on the surface of the meat or sausage and also help preserve them.
2. To add flavor and aroma: Phenols, carbonyl compounds, and organic acids in the smoke create the smoky flavor. Excessive smoke can create a bitter flavor.
3. To add color: Carbonyl compounds combined with free amino groups and meat protein form furfural compounds that are brown in color and translucent. When added to the reddish/pink meat pigments, they give it the reddish-brown color characteristic of smoked products.
4. To maintain freshness: Smoke enables the meat to maintain its freshness.
5. To protect against oxidation: Smoking meat and sausage prevents lipid oxidation, an unpleasant stale, fatty taste.

did you know?

Dry herbs and spices can be used for smoking. For example, Jasmine tea or peanut shells can be used for Chinese sausages.

did you know?

All hot or cold smoked products must be cured with curing salts (tinted curing mixture/TCM) to protect against botulism and other bacterial spoilers.

For successful smoke absorption, all sausages or meats, especially those with natural casings, need to be air dried, before being placed into the smoker or smokehouse. Air drying allows smoke vapor to cling to the surface and helps a more pleasing color to develop.

Warm Smoking

Sometimes, especially for light, tender seafood like salmon, trout, catfish, shrimp, and lobster, it is necessary to use a warm temperature for the smoking. Warm smoking is done by maintaining a temperature of 85°F to 120°F.

Hot Smoking

Hot smoking is done at temperatures high enough to cook the meat and sausages, while adding an interesting mild and pleasant smoky aroma. In other words, it is actually a type of smoke roasting at a temperature of 120°F–180°F. This smoking process can take two to three hours or longer.

did you know?

If your smoker is not able to finish the cooking/smoking process, after smoking the meat or sausage for one to two hours, poach in water at 160°F–170°F or as directed, or finish in a 350°F oven.

Cold Smoking

Cold smoking imparts aroma and flavor. Some drying and loss of weight of the sausage or meat will occur, but consider it a benefit, as it assists in giving a desirable aroma, texture, and taste. The temperature for cold smoking is 70°F–90°F or below; a higher temperature will cause the fat in the meat to liquefy and possibly cause rancidity.

The Process of Smoking

As smoking is not an exact science and no formula can be precise, it is, therefore, difficult to give clear and exact instructions. The thickness of the meat or sausage, the humidity, the type of wood, the density of the smoke, the amount of meat in the smoker, and the smoking temperature will all make a difference.



Smoking requires close attention: Check temperatures at all times by using an instant-read thermometer to monitor the meat's temperature in the smoker. Some smokers have a built-in instant-read thermometer; if not you can purchase one through a mail-order house or on the Internet.

For cold smoked items, the internal temperature should be 90°F or below. For hot smoked items, the internal temperature should be 155°F to 160°F. The smokehouse temperature should be between 170°F for sausages and up to 180°F for meat.

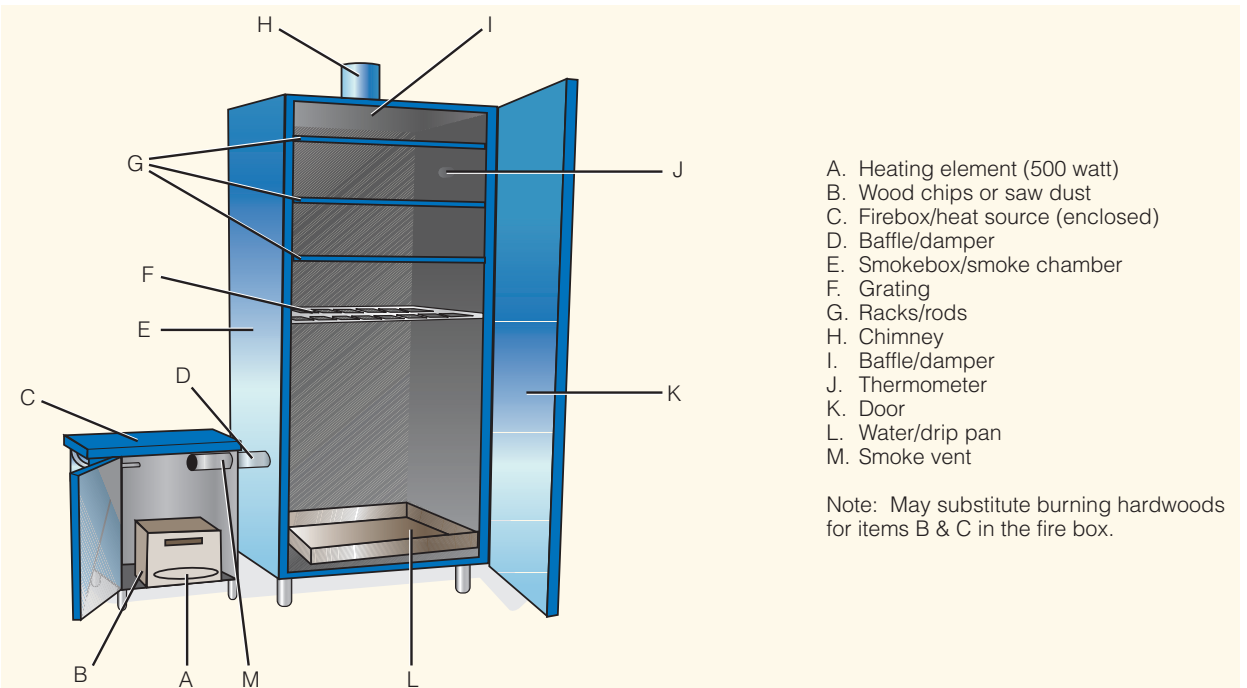
Hardwoods are best for smoking. Never use backyard wood such as poison oak or sumac or wood from furniture or boards that can be impregnated with chemicals.

Smokehouses/Smokers

There are many types of homemade and commercial smokehouses/smokers (see mail-order sources in Appendix C). They range in price from \$300 to \$2000; capacity varies from 20 lbs to 50 lbs or more. If you purchase a smokehouse/smoker, follow the directions that come with it, as they do not all work the same way.

When working with a smokehouse/smoker, make sure to open the damper wide to allow the moisture to escape and keep sausages from sweating (smoke will not stick to a wet surface).

Note: Never overload your smokehouse/smoker as this will affect the quality of the smoke aroma and color.



Smoker

How a Smokehouse Operates

Smoke is generated in the smoke chamber, travels up into the smokehouse, and exits through the damper. The correct temperature for cold smoking is 70°F; the temperature for hot smoking should be 170°F to 180°F.

Wood selection is an important factor, as the resin present in the wrong types (cedar, pine, or spruce) creates undesirable aromas and colors. This resin compound will give the sausages or cured meats a black, sooty, unpleasing appearance and will impart bitter aroma and flavors. The best wood to use comes from hardwood trees, as they will impart special recognizable aromas and flavors. As with everything else, the adage to remember is “less rather than more.” This phrase also applies to the smoking process, as oversmoking will damage flavor and aroma.

Some suggestions for choice of wood are presented in the following table.

Wood	Flavor	Use With
Apple	Delicate and fruity	Chicken, pork, salmon
Cherry	Mild and fruity	Pork, poultry, beef, salmon
Alder	Mild and sweet	Game, game birds, pork, chicken
Birch	Light and sweet	Often used by native Americans, Game birds, chicken, pork, turkey
Hickory	Strong and pungent	Beef, game, turkey
Oak	Medium	Turkey, goat, game
Mesquite	Strong and sweet	Game, beef, game birds
Maple	Sweet and mild	Chicken, pheasant, pork, turkey

To create other aromas and flavors, I suggest using a mixture of woods; for example, for game, game birds, or poultry, I use a mixture of apple and birch woods (2 parts apple, 1 part birch or 3 parts oak or birch and 1 part crushed juniper berries).

After smoking and/or poaching, the sausages are cooled in cold water to an internal temperature of 140°F and then refrigerated.

Note: If sausages should become shriveled, place them in hot water, simmer them for 1 to 2 minutes, and then rinse them in cold water.



Kosher salt, sea salt, and curing salt (TCM)

Sodium nitrite is used in curing meats and sausages to prevent the growth of botulinum toxin and other noxious organisms. Fresh raw sausages and some poached sausages do not require the addition of curing salts because they are kept refrigerated or frozen and are cooked at high enough temperatures to kill any bacterial activity.

Hobby cooks and professional chefs should buy prepared curing salt [4 ounces nitrites with 100 pounds of kosher (natural) salt and tinted with red dye—therefore the name, tinted curing mixture (TCM)].

did you know?

The pellicle provides an ideal surface to which the smoked flavor can adhere and helps seal in the remaining moisture throughout the smoking process. This prevents the fats and oils in the meat or fish from rising to the surface and spoiling.

Preparing Salmon for Smoking



Salmon with intestines removed



Making an incision around the salmon's head



Continuing the cut over the bone and removing the fillet; the cut is repeated on the other side



Removing the pin bones.



Salting the salmon



Smoking the salmon

Recipes

Smoked Salmon

Ingredients

1 4–6 lb (2–3 kg)	cleaned fresh salmon
1½ cups (14 oz)	coarse kosher salt
½ cup (4.5 oz)	light brown sugar
1–2 Tbsp	whiskey or brandy

Preparation

1. Fillet the whole salmon and remove the soft bones with pliers or tweezers. Rinse and dry fillets well. (Use the bones for fish broth.)
2. Mix the salt and sugar together. Sprinkle a layer approximately ¼-in. thick into a porcelain or plastic dish. Lay one fillet skin side down on top of the salt mixture. Sprinkle the fillet with a ½-in. thick layer of the mixture making sure it is thinner toward the fillet's tail.
3. Place the second fillet skin side down on top of the first and sprinkle with the remaining salt mixture. Cover with plastic wrap and weight down with a board or a brick or stone wrapped in plastic. Refrigerate for 3 to 5 hours.
4. Remove the fillets and rinse under cold water. Dry well with paper towels. Brush with whiskey or brandy. Insert a wooden skewer into the back (skin) end of the fillet. Attach some butcher twine.
5. Place on a mesh tray and store in a cool, dry, dark airy place for 24 hours or until a shiny, slightly tacky skin (pellicle) forms on the surface.
6. Hang or place the fillets in the smokehouse and cold-smoke for 1 to 2 hours or more at approximately 80°F–110°F maximum. Cool in the smoker. Remove and brush with olive oil. Wrap in plastic and refrigerate for 24 hours.

Note: For smoked trout do not bone the fish. Sprinkle the salt mixture inside and outside the trout and refrigerate for 2 to 3 hours. Then follow the procedure for smoked salmon.

did you know?

Salmon can also be hot smoked. Smoke for 1 to 2 hours at a temperature between 215°F to 225°F in the smoke chamber. Serve warm or cold with a salad and San Francisco sour dough bread.

Gravad Lax Swedish Style

Ingredients

2 salmon fillets, approximately 5 lbs
5 oz kosher salt
2 oz sugar
2 oz crushed black peppercorns
1 bunch fresh dill, coarsely chopped

Preparation

1. Combine salt, sugar, and peppercorns.
 2. Cover all sides of the salmon with the mixture. Place one fillet skin side down in a porcelain dish. Sprinkle dill evenly over the fillet and place the second fillet skin side down on top of first fillet.
 3. Cover with plastic wrap and weight down. Refrigerate for 2 to 3 days.
 4. Remove and rinse; scrape off the cure, dry with a paper towel, and place in the refrigerator for 1 to 2 hours to form pellicle. Brush with extra virgin olive oil and refrigerate overnight.
-

Gravad Laks Norwegian Style

Ingredients

1 salmon fillet, approximately 2½ pounds
2.5 oz finely ground sea salt
½ tsp TCM (tinted cure mixture)
2 oz sugar or dextrose
1 Tbsp crushed white peppercorns
1 Tbsp crushed coriander seeds
½ Tbsp crushed juniper berries
2 fresh bay leaves cut fine, julienne style (optional)
Zest of ½ lemon and juice
Zest of ½ orange and juice
½ bunch coarsely chopped dill

Preparation

1. Combine salt, TCM, sugar, peppercorns, coriander seeds, juniper berries, lemon and orange zest, dill, and bay leaves. Mix well.
2. Squeeze lemon and orange juice over fillet. Spread cure mixture evenly all over fillet and place skin side down in a porcelain dish.
3. Cover with plastic wrap and weight down. Cure in a refrigerator for up to 3 days.
4. Remove and rinse well under running water. Dry with a paper towel and place in a refrigerator overnight to form pellicle. Then brush with olive oil.

Note: Both gravad recipes can be cold smoked if desired.

Gravad Lox Russian Style

1. Use the above cure mixture without orange juice. Finely grate 1 medium-sized peeled beet, and mix it with 1 ounce vodka.
 2. Rub the mixture all over the fillet and follow the procedure for Gravad Laks Norwegian Style.
-

Smoked Shrimp

Ingredients

3 lb (1.5 kg)	large shrimp (raw)
8 cups (2 qts)	water
1 Tbsp	kosher salt
1 bunch	fresh dill or 2 Tbsp dried dill
2–3 Tbsp	olive oil
Brine	6 cups (3½ pints) water ¼ cup kosher salt

Preparation

1. Wash shrimp in cold salted water; drain for 30 minutes in a colander and place in a bowl.
2. Prepare brine; make sure all salt is dissolved.
3. Pour brine over shrimp. Weight down with a plate, making sure that all shrimp are submerged.
4. Marinate for 30 minutes, remove shrimp, and drain well. (Save brine.)
5. Heat brine, add dill, and simmer for 15 minutes: Add the shrimp and simmer for 2 to 3 minutes.
6. Remove shrimp and cool on a wire rack and cold-smoke at 70°F–90°F for 1 hour.
7. Remove shrimp and brush with olive oil. Store covered in a refrigerator.
Serve with fresh risotto, pasta, or as a snack.

did you know?

Apple and cherry woods bring out the flavor of shrimp. Calamari, octopus, oysters, or clams can be substituted for shrimp.

did you know?

Lox is cured or smoked salmon. It is called lox in Yiddish, lax in Swedish, laks in Norwegian, and lachs in German.

Summary

This chapter describes how to smoke meat and sausages. It explains the flavors various woods impart to the smoked foods. It also teaches the importance of proper temperatures for cold, warm, and hot smoking and gives scientific insight into how the smoking process works.

IN REVIEW

1. How does a smokehouse work?
2. What is the effect of smokehouse residue on meat products?
3. What is smoke?
4. Explain the term pellicle.
5. How are sausages finished when they are hot smoked?
6. What are the internal temperatures of hot smoked items?
7. How do you prepare food products for smoking?
8. What types of woods are used for smoking?
9. Other than wood, what ingredients can be used to create a smoke flavor?
10. What temperatures should be used for hot and cold smoking?



KEY TERMS

Beef or Pork Blood

Boudin Noir

Cracklings

Liver

Metzel Soup

Jowls

Pork Brei

6

Cooked Sausages

Cooked sausages include liverwurst, blood pudding, boudin noir, headcheeses, and aspic sausages. The preparation of these types of sausages takes more time than the preparation of any other sausages. All meat and fat need to be fully cooked until tender. The broth is used to poach the sausages and can then be used as a base for soups, especially the famous “metzel soup,” a delicious rustic, but simple bread soup. The gelatinous broth can also be added to some of the recipes to strengthen flavor and create a smoother texture.

All cooked materials for blood puddings, aspic sausages, and headcheeses are cut by hand to give a more homemade appearance. As these materials are greasy and bloody, the workspace needs to be cleaned often to make sure that sanitary conditions are maintained.

*Top, left to right: warm liverwurst, boudin noir
Bottom, left to right: classical black pudding, country style liverwurst, black pudding, Papa Metz’s liverwurst, tongue sausage, braunschweiger liverwurst, red pressack, white pressack, fine calf’s liverwurst*



did you know?

Many cultures use blood or blood-related products like sausages to supplement their diets. Marco Polo reported in his diaries that the Mongolian soldiers always kept blood sausages in their packs on long military trips. Nomadic Massai tribes in Kenya still eat cooked or raw animal blood for its nutritional value.

Basic Components of Cooked Sausages

Pork or Beef Blood

Blood is used in the production of boudin noir (blood sausage), black pudding, and red aspic sausage. Pork or beef blood can be purchased pre-prepared and homogenized from mail-order houses or meat markets. (See Appendix C for addresses.)

Pork Skin

Pork skin, lovingly called the “clue,” is cut off the pork with as little fat on it as possible. The skin of the fatback, the pork belly, and the pig’s feet are best as they create a strong (gelatinous) bind in headcheeses, aspics, and liver sausages. I suggest cooking the skin in a large sachet (bag), or tied in cheesecloth, for easy removal.

The Pig’s Head



Left to right: Pork jowl, pig’s head, fat belly strip

The pig’s head is great to work with but must be ordered in advance to allow slow defrosting. I suggest you buy them cut in half. If fresh, rinse them well with warm water; if frozen, defrost them slowly in the refrigerator and rinse them in cold water. Simmer them in a large pot until tender or the meat is loosening from the bone. Pigs’ heads are used in headcheese, jambon persillée (parslied ham), and red or white pressack (aspic sausage). The broth, after cooking the pig’s head or pork skin, is full of natural gelatin and if clarified makes a strong-flavored natural aspic gelée.

Pig’s Jowls

Jowls are the fatty cheeks of the pig and are used not only in the production of cooked sausages, but also in poached sausages and pâtés. If they are not available, you can substitute fatback or the belly strip.

The Belly Strip



The Belly Strip

The belly strip is the fatty strip of the pork belly. With the skin removed, it is used as a substitute for pigs jowls and as the main ingredient in making boudin noir, black pudding, liverwurst, and rillettes.

Pork Tongue

Pork tongues are used, when fresh, as a garnish for red or white pressack or pickled for tongue sausages or headcheeses. The gray skin of the tongue is removed (peeled) after the raw tongue is blanched in 180°F water. Always peel the tongue while warm after fully cooking it until tender. (See page 70.)



Pork Tongue

The Heart



Pig's Heart

Pig's hearts or calf's hearts are used fully cooked in sausage production, mostly as garnish. They are cleaned and rinsed and after all the blood is removed, they are cooked until tender. After cooking, trim all parts of the aorta and cube as needed.

The Liver



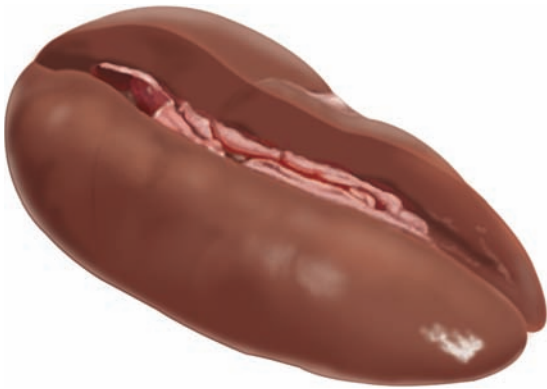
Pork Liver

Pork liver can be substituted for calf's liver or turkey liver but must have the gall bladder removed (organ with green to yellow appearance). Livers are used in their raw state, sometimes blanched, but never cooked as cooking will destroy their binding power and create an unappetizing black-gray appearance and gritty texture.

In some cases, directions will call for blanching or stiffing the liver before adding it to the preparation mix.

Note: Before blanching I suggest soaking the liver in buttermilk for 1 hour or overnight. This will remove some of the heavy, bitter liver taste. Rinse it well before using.

Pork Kidneys



Pork Kidneys

Pork kidneys are used mostly as a garnish for classic blood sausages. I suggest soaking them in either cold water or buttermilk for 2 hours or overnight in a refrigerator.

The Fatback



The Fatback

Fatback is the major ingredient in cooked sausages as well as in salamis, cervelats, land jaeger (sliceable raw sausages), mettwurst, teawurst (spreadable raw sausages), poached sausages, and bratwurst. Two ways to prepare fatback for cooked sausages are poaching and rendering cracklings.

Poaching

1. Cut the fatback into small cubes ($\frac{1}{4}$ in.) and drop in boiling water and simmer for up to 20 minutes, stirring often. Drain and add while still hot to the blood sausage or black pudding mixture.

Rendering Cracklings

1. Cut the fatback into large cubes ($\frac{1}{3}$ in.) and place them in a large skillet.
2. Add a little water and slowly simmer until the water has evaporated and the cubes are crisp and evenly golden in color.
3. Drain the liquid fat and set aside for other uses in the cooked sausage production.
4. Shock cracklings in ice water to stop the cooking process.
5. Drain well, squeeze dry, and store in the refrigerator.

Cracklings are less fatty than fresh pork fat and give more pork flavor.

Note: The rendered fat can be used in rillettes, in cooking and flavoring other dishes like sauerkraut, or served as a spread.

Additional Meats Used in Cooked Sausages

To use beef chuck or shoulder clod in sausages, all fat and sinews need to be removed. The beef tongue and heart are used as described in the pork section.

Beef Liver

Beef liver is not recommended for sausage products. It is too dark, the texture too coarse, and it has pronounced beefy liver flavor.

Veal Shoulder



Veal Chuck/Outside Shoulder

Not often used in today's noncommercial sausage kitchen, veal shoulder is very expensive and mostly of poor quality. Turkey is a great substitute.

Meat from Sheep and Goats

The liver of young sheep and goats is good to use as it has a fresh sweet flavor. The liver of older animals is not recommended as it is too bitter and has strong offensive aromas.

Poultry and Rabbits

Turkey, geese, duck, or rabbit are great to use for cooked sausages. They have excellent texture and flavor; the livers and hearts are excellent sources of flavor and texture. If the livers are not fresh, rinse them with cold water and soak overnight in buttermilk or milk, rinse with cold water, and dry on paper towels before using. This procedure will remove some of the bitter taste and lighten the dark liver color.

Pork Skin Brei



Counterclockwise: Pork brei, cooked pig's feet, cooked pork skin, pork broth

The pork skin from the fatback, pork belly, or pig's feet is simmered in water for 2 to 4 hours or until tender. When the skin is removed from the liquid, the broth is set aside for other uses. Cut the tender pork skin into strips while warm and grind through a large (3/8-in./or 10-mm) grinding plate. Combine 1 part cooked ground pork skin with 1 part of the pork broth and purée in a food processor to a fine constituency.

Note: Pork skin brei can be used in all sausages.

Metric Conversions and U.S. Equivalents

Unless you have finely calibrated measuring equipment, conversions between U.S. and metric measurements will be somewhat inexact. It is important to convert the measurements for all the ingredients in a recipe to maintain the same proportions as the original.

Sausage making is a science and weights need to be exact! If your scales are not accurate, please see Appendix A for a metric conversion chart.

Recipes



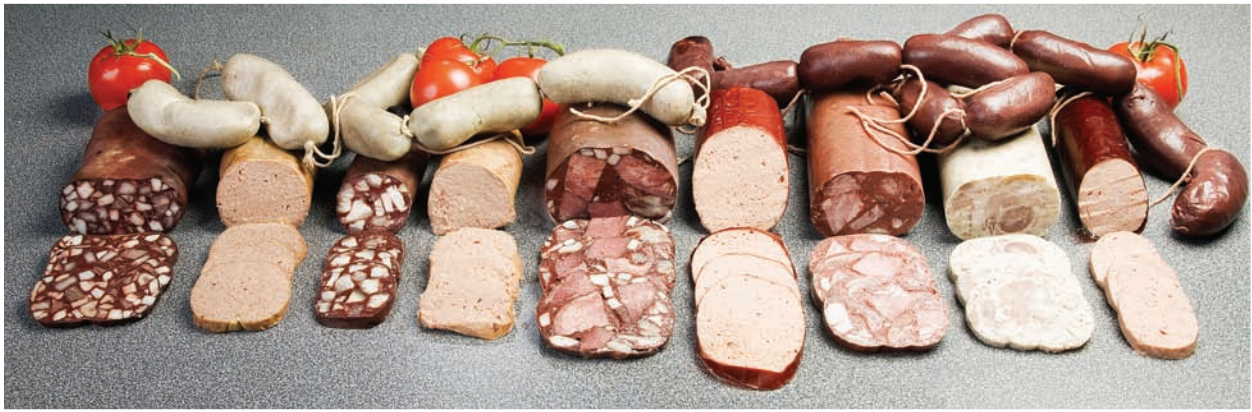
Pumpernickel bread with Boston lettuce, braunschweiger liverwurst, red onions, and Russian dressing

Braunschweiger Liverwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
45.0%	Liver (pork, calf's, turkey, or chicken)	14.5 oz
26.5	Smoked slab bacon	8.5 oz
18.5	Pork butt or shoulder	6.0 oz
10.0	Crushed ice	3.4 oz
100.0%		32 oz
Curing Mix for 2-lb Mixture		
8 g	kosher salt	
4 g	TCM	
1 g	sugar/dextrose	
Seasoning Mix for 2-lb Mixture		
1 g	onion powder	
1.5 g	ground white pepper	
0.5 g	ground allspice	
0.5 g	ground cloves	
0.5 g	powdered sage	
0.5 g	powdered marjoram	
0.5 g	ground nutmeg	
0.5 g	powdered ginger	
10 g	powdered milk or soy protein concentrate	
Garnish		
8 g	pistachio nuts	
5 g	small truffles, diced	

Preparation

1. Cube liver and mix with one-third of the curing mix. Refrigerate for 1 to 2 hours, then grind through a medium plate ($\frac{3}{16}$ in./5 mm).
2. Cube bacon and pork butt and semifreeze. Remove from freezer. Fold in rest of curing mix and $\frac{2}{3}$ of the seasoning mix and grind through medium grinding plate ($\frac{3}{16}$ in./5 mm).
3. Place chilled ground liver, ground pork, and bacon into a food processor. Add crushed ice and purée for 3 to 4 minutes. Check temperature and continue processing until mixture reaches an internal temperature of 45°F–55°F. Scrape into a bowl and fold in garnish.
4. Pipe into pretied beef middle casings (2 $\frac{1}{4}$ in./55–60 mm) or synthetic fibrous casings. Finish tying with a bubble knot.
5. Hang overnight to dry in a refrigerator or cool room. Smoke in a smokehouse/smoker (optional) at 140°F–160°F, for 1–2 hours until a golden color.
6. Poach in 170°F water for 1 hour or to an internal temperature of 160°F. Cool in room temperature water. Massage sausage until cold (140°F) to keep fat from separating and creating a fatty ring. Refrigerate.
7. Garnish with nuts and truffles when serving.



Top row, left to right: hot liverwurst, boudin noir.

Bottom row, left to right: classic black pudding, red liverwurst, black pudding, Papa Metz's liverwurst, tongue sausage, braunschweiger liverwurst, red presssack, white presssack, fine calf's liverwurst

Country Style Liverwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Pork liver or turkey liver	16 oz
50	Pork belly strip without skin or fatback	16 oz
100%		32 oz
Seasoning Mix for 2-lb Mixture		
8 g	kosher salt	
4 g	TCM	
1.5 g	ground white pepper	
0.5 g	ground nutmeg	
1.5 g	powdered marjoram	
0.5 g	powdered ginger	
0.25 g	ground cardamom	
1–2 g	onion powder	

Preparation

1. Cook pork belly strip or fatback until tender.
2. Blanch liver for 30 seconds.
3. Cool and mix cooked pork belly or fatback and liver with salt and spices. Grind through medium (¼ in./6 mm) grinding plate into a mixing bowl and mix for 2–3 minutes with a paddle (slow speed).
4. Pipe mixture while warm into pretied beef middle casings. Tie with a bubble knot (see page 37, Chapter 4) then poach in water at 170°F for 2 hours or to an internal temperature of 160°F.
5. Remove and cool in running water. Store in refrigerator.

Note: For smoked flavor, place sausage overnight in a refrigerator to dry. Smoke using warm smoke for 1–2 hours or until golden brown. Then poach as described.

Red Liverwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
65.0%	Pork belly (50% fat, 50% meat)	20.5 oz
13.0	Pork butt or shoulder	4.5 oz
19.5	Liver	6 oz
3.5	Blanched onion	1 oz
100.0%		32 oz
Seasoning Mix for 2-lb Mixture		
4 g	kosher salt	
8 g	TCM	
1 g	sugar	
1.5 g	ground black pepper	
0.5 g	ground ginger	
0.25 g	ground mace	
0.25 g	ground thyme	

Preparation

1. Cook pork butt until tender.
2. Cube liver and pork belly and refrigerate.
3. Blanch onions in salted water for 2 minutes. Remove and grind with cooked pork butt, pork belly, and liver through a large grinding plate ($\frac{3}{8}$ in./10 mm) place in a food processor add salt and seasonings. And pure fine.
4. Pipe into pretied beef or hog middles.
5. Tie with a bubble knot and poach in water at 160°F–170°F for 40 minutes or to an internal temperature of 155°F–160°F. Cool in cold water.
6. Hang to dry for 2 hours to dry and then refrigerate.

Note: If smoke flavor is desired, hang sausage before smoking for 2 hours or overnight in a cool room or refrigerator. Then warm-smoke for 1–3 hours and poach.



Pea soup with Papa Metz's Liverwurst

Papa Metz's Liverwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
31.0%	Pork belly, no skin	10 oz
15.5	Pork jowls	5.5 oz
6.0	Pork butt	2 oz
15.5	Coarse diced onion	4.5 oz
31.0	Pork liver, calf's liver, or turkey liver	10 oz
100%		32 oz
Seasoning Mix for 2-lb Mixture		
7 g	kosher salt	
5 g	TCM	
1.5 g	ground marjoram	
0.4 g	powdered thyme	
0.5 g	ground mace	

Preparation

1. Cube pork belly, jowls, and pork butt and cook in water until tender (approximately 1 hour).
2. Heat some lard or oil in a casserole and sweat onions for 5 minutes.
3. Grind cooked pork belly, jowls, pork butt, liver, and onions through a hamburger grinding plate ($\frac{3}{16}$ in./5 mm) into a bowl.
4. Add salt and seasonings and mix with a paddle for 5 minutes on low speed. If mixture is too thick, add some hot pork broth. Taste to adjust seasoning.
5. Pipe while warm into pretied beef middles. Tie with a bubble knot (see page 37, chapter 4) into 10-in. long sausages and finish with a bubble knot.
6. Poach in water at 160°F–170°F for 90 minutes or to an internal temperature of 155°F–160°F. Cool in water and refrigerate.

Note: Rotate the liverwurst while cooling. This will prevent fat buildup inside the casing. This sausage can also be smoked before poaching at 160°F for 2 hours to give additional flavor and aroma.

Calf's Liverwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
30%	Calf's liver or turkey, chicken, or rabbit liver	9.5 oz
30	Veal or turkey	9.5 oz
40	Pork belly strip without skin	13 oz
100%		32 oz

Seasoning Mix for 2-lb Mixture

8 g	kosher salt
4 g	TCM
1.5 g	white pepper, ground
1 g	ground mace
0.5 g	smoked paprika
0.5 g	powdered ginger
4 g	onions, sliced

Preparation

1. Blanch turkey and pork belly for 5–10 minutes.
2. Blanch liver for 50 seconds.
3. Slice onions and sauté until golden.
4. Grind pork belly, liver, veal, or turkey, and onions through a fine grinding plate ($\frac{3}{16}$ in./5 mm). Add salt and seasonings and place in a food processor.
5. Add some hot broth. Start with 2 oz and add more if necessary. Purée to a fine consistency (should be loose).
6. Pipe into pretied beef middle or synthetic casing while warm. Measure casing to 10 inches long and close with a bubble knot (see page 37).
7. Poach in water at 160°F–170°F for 90 minutes or to an internal temperature of 160°F.
8. Cool in room temperature water and massage slowly to prevent fat buildup. Refrigerate.

Note: This sausage can be cold-smoked for up to 2 hours before poaching.

Chef Karl's Eldorado Liverwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
22.0%	Pork liver, calf's liver, or turkey liver	7.5 oz
33.0	Pork belly or jowls	10.5 oz
15.0	Pork shoulder	5 oz
11.5	Pork brei	4 oz
14.5	Pork broth	4.5 oz
4.0	Blanched onions	1.5 oz
100%		32 oz
Seasoning Mix for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground black pepper	
3 g	powdered marjoram	
0.25 g	ground mace	
0.25 g	ground ginger	

Preparation

1. Cube pork belly and pork shoulder and cook until tender.
2. Blanch liver for 1 minute. Grind onions, fat, and meat through a $\frac{3}{16}$ -in./5-mm grinding plate into a bowl. Add warm pork brei and hot pork broth. Add salt and seasonings and mix well.
3. Fill pretied and rinsed beef or pork middle casings. Tie with a bubble knot.
4. Poach in water at 160°F–170°F for 50 minutes or to an internal temperature of 155°F–160°F.
5. Cool in cold water, rotating the sausage until cooled.
6. Hang to dry for 2 hours and cold-smoke (optional) for 2 hours.



Tartin of sauerkraut, sautéed boudin noir, potato, mustard, horseradish, and bean sprouts.

Boudin Noir (Blood Sausage)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
100%	Blood	32 oz
Garnish		
24.5%	Fatback	8 oz
Seasoning Mix for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground black pepper	
2–3 g	powdered marjoram	
1 g	powdered thyme	
0.5 g	ground cardamom	

Preparation

1. Mix blood with salt and seasonings, and whip in a double boiler until it is the consistency of maple syrup. Add blanched small cubes of fatback. Mix well.
2. Carefully fill a funnel over a sheet pan or large bowl and pipe into a pretied hog casing. Leave some extra casing space.
3. Using a simple knot or a bubble knot, tie carefully into 4–6 in. links.
4. Poach in 160°F water for 40 minutes or to an internal temperature of 155°F–160°F. Cool in cold water.
5. Refrigerate overnight. Remove and separate the links.

Note: For a change of flavor and texture, add 2 oz of heavy cream to each 2-lb mixture.

Also precheck casings for holes by running cold water through the tied casing.

did you know?

Boudin (blood sausage) is a colloquial reference to the gear (a rolled up small red-blue tent) that used to top the backpack of French Legionnaires.

German Blood Sausage, Metzger Style

Percentage of Ingredients Mixture	Ingredients	2-lb Sausage
60 to 80%	Soft cooked pork skin	19 to 25.5 oz
40 to 20%	Pasteurized pork blood	13 to 6.5 oz
Seasoning for 2-lb sausage mixture		
12 g	kosher salt	
2 g	Black pepper	

Preparation

1. Place Cubed soft cooked pork skin in a large bowl.
2. Add pasteurized pork blood, salt and pepper, mix well with a wooden spoon.
3. For hot sausages carefully fill with a funnel into pre-checked, pre-tied and rinsed hog casing diameter size 1¼ to 1⅜ in. (32–35 mm) leave 6 to 8 inches extra casing and tie with a knot, tie into 5–6 in. links.
For cold sausage fill into pre-tied beef middle diameter size 2¼ in. –2½ in. (57–63 mm) and tie with a bubble knot.
4. Poach in 160°F to 170°F water for 20 to 45 minutes or to 160°F internal temperature.
5. Cool in running water.
6. Refrigerate.
7. Can be eaten hot or cold.

Note: For extra flavor and texture add up to 10% blanched or braised onions or heavy cream.

Black Pudding

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Fatback without skin	16 oz
30	Pork skin (no fat) cooked	19.5 oz
20	Pork blood or beef blood	6 oz
100%		32 oz

Seasoning Mix for 2-lb Mixture

12 g	kosher salt
2 g	ground black pepper
1 g	ground allspice
1.5 g	powdered marjoram
0.5 g	powdered thyme
1 g	powdered onion

Preparation

1. Cube fatback small and blanch in meat broth for 10 minutes. Remove and rinse with hot water.
2. Cube cooked pork skin.
3. Pour pasteurized blood into a stainless steel bowl and place in a double boiler. Add salt and seasonings and whip until it is the thickness of maple syrup.
4. Fold in preprepared small cubed fatback and cooked pork skin.
5. Pipe into a pretied beef middle, tie with a bubble knot, and poach in water at a temperature of 160°F to 170°F for 30 minutes or to an internal temperature of 160°F.
6. Remove carefully and cool down in running cold water. Refrigerate overnight.



Plate with sauerkraut, boudin noir, warm liverwurst, and cooked slab bacon



Potato soup with classic black pudding

Classic Black Pudding

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
11%	Diced fatback	3.5 oz
33	Smoked pork butt or ham	10.5 oz
11	Pork kidneys	3.5 oz
11	Pork heart	3.5 oz
12	Cooked pork skin	3.5 oz
22	Beef or pork blood	7.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
2 g	ground black pepper
0.5 g	ground cloves
1.5 g	powdered marjoram

Preparation

1. Cut fatback, kidneys, and heart into small cubes. Blanch in boiling salt water for 5 minutes and then rinse with hot water.
2. Grind cooked pork skin through a fine grinding plate ($\frac{3}{16}$ in. 5 mm).
3. Combine with 3 tablespoon warm broth, ground pork skin, blood, spices, and salt. Place in a double boiler and whip until the consistency of maple syrup (Hollandaise method). Add cubed blanched fatback, kidneys, and cubed heart and mix well.
4. While warm, fill (using a large funnel) pretied beef casings (1 lb).
5. Tie with a bubble knot and poach in water at 160°F–170°F for 1 hour or to an internal temperature of 160°F. Remove and rinse with warm water.
6. Slowly cool in water and refrigerate overnight. Can be used hot or cold.

Note: Classic Black Pudding can be cold-smoked after poaching 1–2 hours at 85°F or below.

Tongue Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Black pudding base mix	16 oz
50	Pork tongues, brined	16 oz
100%		32 oz
Seasonings for 2-lb Mixture		
2.5 g	black pepper	
0.5 g	ground mace	

Preparation

1. Rinse pickled pork tongue under running cold water and boil for 60 minutes or until fork tender. Remove and while warm, peel off skin and trim. Then cube into large cubes (1/2 in.) and combine with seasonings.
2. Marinate for 2 hours and fold into black pudding mix.
3. With a large funnel or a ladle fill beef bungs or pretied colored fibrous casings. Finish with a bubble knot or metal clip (see Chapter 4).
4. Poach for 90 minutes in water at 160°F–170°F or to an internal temperature of 160°F. Cool in cold water and refrigerate.

Note: This sausage can also be piped into clear or brown synthetic casings.

Red Pig Sausage (Pressack)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
26.5%	Pork butt	8.5 oz
27.0	Fresh pork skin	8.5 oz
25.0	Pork brei	8 oz
2.5	Chopped onions	1 oz
2.5	Blood	1 oz
16.0	Pork broth	5 oz
100.0%		32 oz

Seasoning Mix for 2-lb Mixture

7 g	kosher salt
5 g	TCM
1.5 g	black ground pepper
0.25 g	ground cloves
0.25 g	ground allspice
3 g	powdered marjoram

Preparation

1. Place pork butt and pork skin into boiling water and simmer until tender. Remove and cool. Cut into 1-in. cubes.
2. Blanch onions in broth and add to cubed meat mix with pork brei, salt, and seasonings. Fold in blood and up to 5-oz pork broth and mix well (mixture should have a mashed potato consistency).
3. Pipe or ladle into pretied synthetic casing and tie with a metal clip or bubble knot.
4. Poach in water at 160°F–170°F for 2–2½ hours. Place between two mesh grills and weight down. Refrigerate overnight.

did you know?

The word pressack means “the process of cramming or packing a meat mixture into a natural or synthetic casing.”

White Pig Sausage (Pressack)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
55.0%	Pork butt or neck	17 oz
3.5	Pork skin	1.5 oz
6.0	Chopped onions	2 oz
19.0	Pork brei	6.5 oz
16.0	Pork broth	5 oz
100.0%		32 oz

Seasonings for 2-lb Mixture

12 g	kosher salt
1.5 g	ground black pepper
6–8 g	white vinegar

Preparation

1. Cook pork for 30 minutes or until tender.
2. Cook pork skin in broth until tender.
3. Blanch onions.
4. Cube pork and pork skin, and mix with onions, pork brei, vinegar, salt, and seasonings. Add pork broth and mix well.
5. Fill a pretied synthetic casing and tie with a metal clip or a bubble knot.
6. Poach for 2½ hours in water at 170°F. Remove and place between two mesh grills and press down. Refrigerate overnight.

My Favorite Warm Liverwurst, a Bavarian Specialty

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
43.0%	Pork belly or jowls	14 oz
9.5	Liver	3 oz
31.0	Fatback	10 oz
7.0	Blanched onions	2 oz
9.5	Pork brei	3 oz
100.0%		32 oz

Seasoning Mix for 2-lb Mixture

12 g	kosher salt
4 g	marjoram
1 g	ground thyme
0.25 g	ground mace
0.25 g	ground ginger

Preparation

1. Cook pork belly and fatback until tender.
2. Blanch liver in pork broth for 5 minutes.
3. Grind with onions through a grinding plate ($\frac{3}{16}$ in./5 mm). Mix with pork brei. Add salt and seasonings and mix well.
4. Pipe into pretied small hog casing and tie or twist carefully into 4-in. links.
5. Poach in water at 160°F–170°F for 40–50 minutes. Cool in cold water.
6. To serve warm in water at 170°F for 15 minutes.

Serve with sauerkraut or with butcher's plate.

did you know?

Warm liverwurst can be served with German and Alsatian sauerkraut specialties, for example, choux garni or metzger (butcher's platter) with sauerkraut, or serve just with home-fried potatoes.

Simple Bread Metzel Soup

Ingredients

9 oz	Stale bread, large pieces or cubes
3 ½ oz	Lard
10 oz	Grated cheese, parmesan or smoked cheddar
1 ¼ qt	Meat or sausage broth
6 oz	Sliced onions
2 Tbsp	Chives
	Ground pepper and salt, if needed

Preparation

1. Lightly brown bread in half of the lard in a 400°F oven.
2. Add half the cheese and toss well. Season with pepper only.
3. Spoon into bowls and top with the rest of the cheese.
4. Sauté onions in the rest of the lard until golden. Add to the bread.
5. Pour boiling seasoned hot broth over it. Garnish with chopped herbs.

**did you
know?**

Metzel is a German word for “leftovers.”

Classic Metzel Soup

Ingredients

1	Large onion
3–4 Tbsp	Pork lard
1 qt	Pork broth
4 oz	Warm liverwurst
4 oz	Breakfast sausage or boudin
	1/3 tsp dried marjoram, pinch of grated nutmeg, 1 Tbsp chopped chives, salt and pepper to taste
2 slices	Farmer's bread

Preparation

1. Peel onion, dice coarse and sauté in lard until golden.
2. Add loose breakfast sausage or cubed boudin, strong broth, and liverwurst. Bring to a boil. Adjust seasoning.
3. Bake sliced bread in lard until crisp.
4. Place bread into a soup plate; pour soup over it, and sprinkle with chives. Serve immediately.



Metzel soup



Rye bread torte filled with country-style liverwurst topped with black pudding and brushed with chilled aspic.

My Uncle Hermann's Mountain Onion Liverwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
16.5%	Calf's liver or chicken or turkey liver	5 oz
9.5	White or dark turkey meat	3 oz
64.5	Pork jowls or fatback	25.5 oz
9.5	Onion, chopped coarse	3.5 oz
100.0%		32 oz
Seasoning Mix for 2-lb mixture		
6 g	kosher salt	
6 g	TCM	
1.5 g	white pepper	
0.5 g	mace	
0.5 g	ginger	
0.25 g	cinnamon	
0.25 g	nutmeg	
3–4 oz	meat broth	

Preparation

1. Simmer pork jowls or fatback for 40 minutes in water until tender.
2. Blanch turkey and liver for 5 minutes.
3. Dice onion coarse and sweat in hot oil for 3–4 minutes (no color).
4. Grind meat, jowls, liver, and onion through a fine grinding plate ($\frac{3}{16}$ in./5 mm) into a bowl. Add salt and seasonings and add up to 3-oz pork broth and mix at low speed for 5 minutes.
5. Fill pretied beef middles and tie into 10-in. sections. Finish with a bubble knot.
6. Poach in water at 160°F–170°F for 60–80 minutes or until the internal temperature is 160°F.
7. Cool by starting in warm water. Roll sausage in water until cold. Remove and refrigerate.

Serve as a spread for bread. My uncle spread the liverwurst over a thick slice of homemade bread and then downed a glass of Jaeger Meister.

Liver Parfait

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
44.5%	Chicken livers	14.5 oz
22.5	Chopped onion	7 oz
33.0%	Soft unsalted butter	10.5 oz
100.0%		32 oz

Seasoning Mix for 2-lb Mixture

12 g	kosher salt
2 g	Dijon mustard
3 g	brandy
0.25 g	nutmeg

Preparation

1. Sweat diced onions in some of the butter for 2 minutes (no color).
2. Add chicken livers and sauté until cooked, but not overcooked, 3–5 minutes.
3. Remove and cool to room temperature.
4. Place in a food processor and add butter, mustard, brandy, and seasonings. Process mixture until thoroughly puréed.
5. Place in a crock and chill.

Serve with sliced French bread and coarse cracked black pepper

Crackling Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
15%	Cracklings	5 oz
35	Pork belly without skin	11 oz
25	Fresh defatted pork skin (cooked)	8 oz
25	Pork blood or beef blood	8 oz
100%		32 oz
Seasoning Mix for 2-lb Mixture		
12 g	kosher salt	
2 g	ground black pepper	
2.5 g	powdered marjoram	
1 g	ground allspice	
12 g	onion, blanched	

Preparation

1. Cook pork belly and pork skin until tender. Remove from water, cool, and dice small.
2. Prepare cracklings see how to make cracklings in page 54, Chapter 6.
3. Grind soft cooked pork skin and onion through a medium $\frac{1}{4}$ in./6-mm grinding plate into a bowl. Add small diced pork and cracklings and mix well on low speed. Add pasteurized pig's blood or beef blood.
4. Mix well (low speed) and add salt and seasonings. Taste mixture and adjust the seasoning if needed.
5. Pipe into pretied beef middle or hog middle casings while warm. Tie with a bubble knot.

I recommend poaching the sausage in water at 165°F–170°F for 60 minutes or to an internal temperature of 160°F.

The sausage can also be cold-smoked for 2 hours.

Stuffed Derma, a Jewish Speciality

Ingredients

- 2 cups all-purpose flour
- 1 cup of matzo meal
- 1 – 1½ tsp kosher salt
- ¼ – ½ tsp ground black pepper
- 1 cup rendered chicken or goose fat (schmaltz)
- ½ cup shredded carrots
- 1 Vidalia onion, shredded
- 1 tsp poultry seasoning

For boiling sausage

- 1 gal water
- 1 Tbsp kosher salt
- 1 tsp ground black pepper

Casing

Beef middle, washed, turned inside out, and cut into 12-in. pieces and pretied with a bubble knot (approximately 120 in.)

Preparation

1. Combine all ingredients in a mixing bowl and mix in a stand mixer bowl with paddle attachment for 5 minutes on low speed.
2. Pipe loosely into prepared casings and tie with a bubble knot.
3. Bring a pot of water to a boil and slide derma into it and boil for 10 minutes.
4. Bring 1 gal of water to a boil. Season with salt and pepper and place pre-boiled derma into the boiling water. Reduce to a simmer and simmer for 2–3 hours. Remove and chill.
5. Preheat oven to 400°F and roast derma until golden brown for 1 hour. Hold for 15 minutes.
6. Slice and serve or place chilled derma in the refrigerator overnight and slice into 2-in. medallions and sauté in schmaltz until golden brown on each side.

Serve as an appetizer or as a side dish

Summary

This chapter explains the different meats, fats, blood, and offal meats needed to prepare cooked sausages. It introduces the pork brei prepared from pork skins that is used as a binder. It addresses the importance of measurement in either metric or U.S. equivalents. A variety of easy recipes for cooked sausages, from liverwurst to bloodwurst and pressed sausages are presented.

IN REVIEW

1. Name three cooked sausages.
2. What is a boudin noir?
3. Explain the production of a pork brei.
4. Where on the pig is the jowl located?
5. From what part of the pig does fatback come?
6. What are cracklings?
7. How many grams in 1 pound of meat?
8. What is a metzel soup?



KEY TERMS

Bubble Knot

Corn Syrup Solids

Incubate

Metzger

Teawurst

7

Spreadable Raw Sausages

The term “raw sausage” tells us that raw meat and fat are used in this type of sausages. Freshness is maintained through curing, drying/ripening, smoking, and air drying.

Metzwurst and teawurst are European specialties served as sandwich spreads or appetizers. These cured and fermented morsels are either of coarse texture (similar to a tartare) or fine (like a mousse). I believe they would make terrific additions to picnics, beer festivals, or other outdoor functions. Or you can simply serve them with a bread basket.

I have put together a sample of various types for you to practice on and enjoy eating.

Counterclockwise: Coarse metzwurst, North German metzwurst, metzger metzwurst, teawurst, onion metzwurst, rueggewalder metzwurst



Raw Sausages

There are two types of spreadable raw cured sausages:

1. Mettwurst and teawurst, which are cured and smoked
2. Salami, cervelat, and land jaeger, which are cured and then incubated, dried/ripened, and sometimes smoked (see Chapter 8.)

Mettwurst and teawurst are easy to prepare but have a limited period of freshness—four to five days when stored in a plastic container in the refrigerator. The meat and fat are semifrozen and then mixed with salt and seasonings, ground, and mixed well for 5 to 6 minutes or until sticky (the release of the protein gives a better bind). The mixture is piped airtight into hog casings (1½ in.–1¾ in./38–42 mm), incubated, and hung for three days in a room or box at 70°F. Then the sausages are cold-smoked and refrigerated.

Meats Used in Spreadable Raw Sausages

To get maximum flavor and texture, the following meats and fats will give the best results:

Pork: Leg, shoulder, neck, butt, and lean trimmings

Pork fat: Fresh fatback without skin or pork jowls (for fine mettwurst)

Fresh fatback or the belly strip without skin (for coarse mettwurst)

Pork belly: A good substitute for pork jowls

Other Meats

For a change of flavor, other meats like lamb or pheasant can be substituted. Leg or loin from lamb, sheep, or game also give different textures.

Trim all fat from lamb or sheep, as their meat has a persistent aroma and taste and gritty texture.

If you are using wild game, especially hare or game birds, make sure you remove all pellets and trim bloody bruises. I suggest the use of farm-raised fallow deer or game birds for non-hunters even though they have less flavor (le goût).

Duck and geese are excellent for extra flavor components. The fat especially has excellent flavor and smooth texture.

Coarse Mettwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
40%	Beef chuck or goose or duck	13 oz
60	Pork belly without skin	19 oz
100%		32 oz

Seasoning for 2-lb Mixture

6 g	TCM
6 g	kosher salt
1 g	sugar/dextrose
2 g	ground white pepper
6 g	corn syrup solids some rum (optional)

Preparation

1. Trim beef, removing all skin, sinews, and fat.
2. Cube beef and pork belly and semi-freeze.
3. Fold in salt, seasonings, and rum. Grind through a 3/8-in./10-mm grinding plate.
4. Mix with a paddle or dough hook for 3 to 5 minutes at slow speed.
5. Pipe airtight into pretied and measured lengths (6–7 in.) of hog middle casings (2 1/4 in./55–60 mm) or hog casings (1 1/2 in.–1 3/4 in./38–42 mm). Tie with bubble knot.
6. Hang for 2 days in room at 70°F to incubate.
7. Cold-smoke for 2 to 6 hours.
8. Hang in a cool, dark room at 50°–60°F to ripen for approximately 4 to 6 days.
9. Refrigerate.



Open-faced on sandwich rye bread



Canapés: North German mettwurst on rye wafers with pickled yellow cherry tomatoes and Metzger mettwurst with pimento olives

North German Mettwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
75%	Lean pork shoulder or butt	24 oz
25	Fatback without skin	8 oz
100%		32 oz

Seasoning for 2-lb Mixture

8 g	TCM
4 g	kosher salt
1 g	dextrose/sugar
2.5 g	ground white pepper
0.5 g	ground allspice
6 g	corn syrup solids

Preparation

1. Trim pork and remove sinews and skin.
2. Cube meat and fatback. Semifreeze.
3. Fold in salt and seasonings and grind through large grinding plate (pea-size).
4. Mix for 2 to 5 minutes with a paddle or dough hook at slow speed.
5. Pipe airtight into pretied, prewashed, and rinsed hog middle casings (2¹/₄ in./55–60 mm) or hog casings (1¹/₂ in.–1³/₄ in./38–42 mm).
6. Hang for 2 days to incubate in a room at 70°F.
7. Cold-smoke for 2 to 4 hours and hang for 3 to 4 days in room at 50°F to 60°F. Refrigerate.

Onionwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
30%	Pork butt, duck, or goose	9.5 oz
70%	Lean pork belly without skin	22.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

7 g	kosher salt
5 g	TCM
1 g	dextrose/sugar
2 g	ground white pepper
30–40 g	diced onions, blanched and chilled
6 g	corn syrup solids

Preparation

1. If duck or goose is used, remove bones and skin (save for later use). For pork belly, remove skin and sinews.
2. Cube pork butt, duck and pork belly.
3. Semifreeze and then mix with salt and seasonings.
4. Grind together with onions through a fine grinding plate ($\frac{3}{16}$ in./5 mm).
5. Mix with a paddle or dough hook for 3–5 minutes on slow speed.
6. Pipe into pretied, premeasured 6–8 in.-long hog middle casings ($2\frac{1}{4}$ in./55–60 mm) or hog casings ($1\frac{1}{2}$ in.– $1\frac{3}{4}$ in./38–42 mm).
7. Finish with a bubble knot or metal clip and hang for 8 hours in a room at 70°F. Refrigerate for 2 days.

Note: This sausage should be used within 2 to 3 days.

Note: Instead of piping the mixture into a casing, you may want to put it in a crock covered with plastic wrap or a lid and refrigerate it for 2 to 3 days. It's great on rye bread or as a breakfast spread.

Fine Mettwurst Ruggenwald

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
100%	Pork belly without skin	32 oz
Seasoning for 2-lb Mixture		
6 g	TCM	
6 g	kosher salt	
1.5 g	dextrose/sugar	
2 g	ground white pepper	
2 g	smoked paprika	
0.5 g	ground mace	
6 g	corn syrup solids	

Preparation

1. Cube pork belly and semifreeze.
2. Fold in salt and seasonings and place in freezer for 30 minutes.
3. Grind mixture through fine grinding plate ($\frac{3}{16}$ in./5 mm).
4. Place in bowl and mix with a paddle or dough hook for 2 to 5 minutes.
5. Pipe into pretied and premeasured (6–8 in.) hog middle casings or hog casings ($1\frac{1}{2}$ in.– $1\frac{3}{4}$ in./38–42 mm).
6. Seal with a bubble knot or metal clips.
7. Hang for 2 days in a room at 70°F to incubate. Then cold-smoke 2 to 6 hours and hang in a cool, dark dry room for 2 to 3 days.
8. Refrigerate overnight before serving.



English tea sandwiches with tea sausage garnished with pickled tomatoes and dill pickles

Tea Sausage—English style

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
20%	Beef chuck, duck, or goose	6.5 oz
10	Lean pork butt or turkey	3 oz
70	Pork belly strip without skin or fatback	22.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	TCM	
4 g	kosher salt	
1.5 g	dextrose/sugar	
2.5 g	ground white pepper	
2 g	smoked paprika	
6 g	corn syrup solids	
3 Tbsp	rum	

Preparation

1. Cube beef chuck, pork butt, and pork belly strip and semifreeze.
2. Fold in salt and seasonings and grind through a $\frac{3}{16}$ in./5-mm grinding plate.
3. Place into a bowl and mix with a paddle or dough hook for 3–5 minutes.
4. Pipe into pretied and premeasured 6–8 in. lengths of hog middle casings ($2\frac{1}{4}$ in./55–60 mm) or hog casings ($1\frac{1}{2}$ in.– $1\frac{3}{4}$ in./38–42 mm). Seal with a bubble knot or metal clips.
5. Hang in a room at 70°F for 12 to 24 hours to incubate.
6. Cold-smoke for 2 to 6 hours.
7. Hang in a cool, dark airy room for 2 to 3 days.
8. Refrigerate overnight before serving.

did you know?

Do not freeze cured meats, as they will lose many of their cured traits, such as appearance and flavor, when frozen and thawed.

Braunschweiger Mettwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
24%	Lean beef chuck	7.5 oz
52	Fatback or pork belly without skin	16.5 oz
24	Lean pork loin	8 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	TCM	
4 g	kosher salt	
2 g	honey or sugar/dextrose	
1.5 g	smoked paprika	
6 g	rum (ice cold)	
6 g	corn syrup solids	

Preparation

1. Cube meat and fat and semifreeze.
2. Mix with salt and seasonings and return to freezer for 30 minutes.
3. Grind through a $\frac{3}{16}$ in.-/5-mm grinding plate into a bowl and mix with a paddle or dough hook for 2–5 minutes at low speed.
4. Pipe into preprepared, precut 6–8 in. hog middle casings ($2\frac{1}{2}$ in./55–60 mm). Hang for 12 hours in a room at 70°F to incubate.
5. Cold-smoke 2 to 6 hours or until golden in color. Refrigerate overnight.

Metzger Style Mettwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
41.5%	Pork butt	13 oz
33.5%	Fatback	11 oz
25.0%	Beef chuck	8 oz
100%		32 oz
Seasoning for 2-lb Mixture		
6 g	TCM	
6 g	kosher salt	
1.5 g	sugar	
1.5 g	ground white pepper	
0.5 g	ground ginger	
1.5 g	smoked paprika	
0.25 g	ground cardamom	
6 g	corn syrup solids	

Preparation

1. Mix semifrozen pork butt, fatback, and beef with salt and seasonings. Grind through $\frac{3}{8}$ in./10-mm grinding plate.
 2. Mix with a paddle or dough hook for 2–5 minutes at low speed and refrigerate covered overnight.
 3. Pipe into prepared and premeasured 6–8 in. hog middle casings ($2\frac{1}{4}$ in./55–60 mm). Bubble tie.
 4. Hang for 72 hours in a dry room at 70°F to incubate.
 5. Cold-smoke for 2 to 6 hours. Refrigerate overnight
- Good on rye or crusty country bread with a Weiss beer.

Summary

This chapter introduces you to a new type of sausage—spreadable raw sausages. After reading this chapter, you will have a complete understanding of how to safely prepare raw sausages for consumption. The preparation of mettwurst and teawurst is a preamble to the more difficult sliceable sausages—salamis.

IN REVIEW

1. Explain the term mettwurst.
2. What is the reason for using “certified” meat?
3. What are corn syrup solids?
4. 10 millimeters = _____ inches?
5. What is the recommended temperature for cold smoking?
6. Explain the term incubate?
7. What is teawurst?
8. What is TCM?



KEY TERMS

Air Dry

Cervelat

Fermento

Land Jaeger

Sopressata

8

Sliceable Raw Sausages

Sliceable raw sausages, known as forcemeats, are truly the most difficult sausages to prepare, not only for the hobby sausage maker but also for the professional. There is a big risk of making mistakes that could ruin the sausages.

I do not recommend that beginners make these types of sausages. Wait until you have more experience in sausage making. Start off by preparing mettwurst or teawurst (Chapter 7) and then when you are more adept, you can try making land jaeger and then salami or cervelat.

*Bottom row, left to right: base salami, cooked venison salami, soft cervelat, Italian hard salami, sopressata
Top row, left to right: herb and garlic salami, Hungarian salami, salami stick, peppered French salami, Mexican salami
Hanging, left to right: air-dried Chinese duck sausage, air-dried Chinese pork sausages, air-dried Chinese duck sausage, land jaeger*



Before You Begin

For success, in making these sausages, you must follow all the directions given in this chapter to the letter.

Use *only* the following types of meats in your preparation of raw sliceable sausages:

- Pork: Certified pork butt, pork shoulder, or pork neck
- Beef: Chuck, clod, or lean beef trimmings
- Pork fat: Certified fresh fatback, jowls, or fat belly strip
- Pork belly: Green belly with the skin removed

did you know?

The word “green” used in conjunction with pork means fresh pork

The following suggestions will help you.

If you do not have the proper facilities to ripen and dry sliceable raw sausages, prepare them during the cooler months of the year when the temperature is more user friendly and success is more likely.

During the preparation, follow sanitation and proper personal hygiene measures scrupulously. Keep knives and grinding plates sharp at all times; maintain all machinery and keep it clean.

Carefully trim meat of all sinews and tough skin. The meat and fats must be cubed and sized to fit the grinder opening.

For health safety, keep all raw materials at a temperature of 36°F–45°F and always semi-freeze all meats and fat before grinding.

Preparation

Sliceable raw sausages are made from fresh ground meat which is cured and therefore, it is important that all meat and fat be cubed to the size of the grinder opening. The meat must be semifrozen and then mixed with salt, seasonings, and binders until they are fully absorbed. After grinding, the mixture must be mixed slowly with a paddle or a dough hook. It must bind together until it forms a ball. Then it is cured for 24 hours or longer before it is piped into

natural or synthetic fibrous casings. During the drying/ripening period these sausages lose moisture and the casings will shrink as well and stay tight.

Note: Make sure you pierce the sausage casing to remove any air pockets seen from the surface.

Otherwise, when the sausages are cured or hot-smoked, the air pockets will turn into unappetizing gray or green color spots.

The Raw Materials

The meat and fat used for these sausages should be kept at a temperature of 36°F–45°F in order to minimize any possible buildup of microorganisms. I suggest you use pork belly, pork butt, or pork shoulder. For beef, use chuck or clod and for fat use fatback, pork jowls, or the fat belly strip with the skin removed. Always use good-quality meat.

did you know?

Meat from bulls or older animals is leaner and more muscular and gives a better texture and taste in making forcemeats

Forcemeats



Certified frozen pork butt

Note: Always use certified pork in the preparation of forcemeats.

You begin by properly grinding the raw materials. The meat must be trimmed, all sinews and

gristle removed. Meats must be kept at the proper temperature.

In some cases, meat and fat are ground separately. The size of grind and the seasonings change with the region or country the recipe comes from; for example, cervelat (Germany) requires a fine grind whereas sopressata (Italy) requires a coarse large grind.

Even though these forcemeats can easily be mixed by hand, I suggest that you mix them by machine as they are then more thoroughly combined.

For fine grinds, make sure your grinder is put together properly, as the ground meat is vulnerable to smear (see Glossary) which can lead to a breakdown or curdling of the forcemeat and will result in a dry and tasteless product.

I repeat: Always keep meats and forcemeats at a temperature 36°F to 45°F.

Seasonings

Add kosher salt and seasonings to the cubed semi-frozen meat, grind, and mix thoroughly. This will give a balanced taste throughout the sausage.

Note: If mixing is done by hand, make sure you use plastic gloves.

TCM (Pink Curing Salt)

In the production of sliceable raw cured sausages, the use of natural salt and TCM is essential for the “curing process.” The salt makes the proteins in meat soluble, causing a sticky film (myosin) to form around the fat particles, which in turn creates a stable emulsion. The curing salts are necessary for the dehydration of the forcemeat and prevents food spoilage from the growth of microorganisms.

Starter Cultures

Even though I do not use starter cultures (fermento), I recommend (especially to beginners), using lactic acids. They control a myriad of microorganisms which could spoil the ground meats. In the past these starter cultures were difficult to find, but today they are easily available through the Internet or mail-order catalogs. Always follow the manufacturer’s direction as they differ from product to product.

There are 3 different types of Bactoferm.

1. Bactoferm LHP.

For relatively fast acidification, especially if a pronounced sour flavor is desired. This culture causes the meat PH to drop under 5.0 within 2 days. Good for the production of Pepperoni or Chorizo.

2. Bactoferm F-RM-52

For medium fast acidification, this culture causes the meat PH to drop to under 5.0 in approximately 4 days. Excellent for medium sized Salamis, Cervealtes or Land Jaeger.

3. Bactoferm T-SPX.

This culture is for a relatively slow acidification, it has a less acidic and sour flavor, but it enhances the aromatic flavor of cured and fermented meat products. The primary function is to assist in moisture removal during the drying/ripening. Should be used for products needed at least 1 month’s time for fermentation.

I suggest Bactoferm F-RM-52 a freeze-dried culture that is stored in the freezer. It comes in 1-oz or 28 g packets. One packet will do for 220 pounds of forcemeat. For a 2-lb mixture, I recommend using 0.5 to 1 g. It is said that these cultures give sausages the traditional sour European flavor. When I produce cured sliceable sausages, I use 30 g of fermento to start, with a maximum of 52 g for each 2-pound mixture as I believe this amount gives good flavor and it is easier to work with.

Spices

The purpose of spices and herbs is to impart flavor and aroma into sausages, especially in salami and other raw sliceable sausages. European sausage makers use cracked or ground black pepper, garlic, wine, brandies, fennel, and caraway seeds. In other countries white pepper, green pepper, or pepper blends, cardamom, paprika, cumin, rum or vodka are used for flavor.

To achieve full flavor it is essential to use fresh pungent spices. Ground spices need to be sealed hermetically and stored in a dark cool area. If not maintained properly spices lose their aroma and flavor through evaporation of the volatile oils and their life span is only six to eight months. This can be costly monetarily as well as flavorwise. I suggest buying only small containers of spices.

did you know?

Ground paprika and other volatile spices should be stored in the freezer

The Maturation Process

Salami and other raw sliceable sausages mature in three distinct phases: curing, incubation, and drying/ripening. Each phase requires different temperatures and relative humidity conditions, depending upon the type of sausage you are making. The entire process can take from five weeks to one year.

The Curing Phase

The maturation process begins when you add the curing salts. My Masters always told me to cure the forcemeat in the refrigerator for at least 24 hours. I suggest curing it for 48 hours.

Beside curing the meat, curing salt are necessary to kill any possible trichinosis organisms that may have settled in the muscle of the meat and it also protects against botulism.

I recommend that you keep notes for the entire production process of each type of cured sausage you make. This will help you to evaluate the final product and correct possible mistakes.

When the curing process is complete, the forcemeat is piped or stuffed into beef middle casings (2¹/₄–2¹/₂ in./55–60 mm) or synthetic fibrous casings of your choice.

The Incubation Phase

The casing enclosed forcemeat is next incubated in a dark room at 70°F for one to two days or as directed. The relative humidity should 75%–85%.

When I started making my own cured sausages, I converted an old refrigerator and used a heating lamp to create the necessary conditions.

The Drying/Ripening Phase

After incubation, the sliceable raw sausages are dried (ripened) in a cool dark room at 50°F–60°F. This drying phase reduces the moisture and shrinks the sausage. The sausages can then be kept without refrigeration. I recommend, however, keeping them refrigerated until needed. The drying/ripening phase will take up to eight months depending on the type and size (diameter) of the sausage.

Note: During the drying/ripening phase, the sausage may lose half its weight due to moisture loss. Some mold may also build up on the casings. This is a natural process and may even impact the complexity of the flavor. If you do not like the mold, rub the sausage when mature with a clean cloth and dust with rice flour.



Left to right: Properly cured, incubated, and ripened salami, wrongly cured, incubated, and ripened salami

Base Salami (For Beginners)

Percentage of Meat and Fats	Meat and Fat Ingredients	For 2-lb Mixture
35%	Lean beef chuck	11 oz
35	Lean pork	11 oz
30	Fatback without skin	10 oz
100%		32 oz

Seasoning for 2-lb Mixture

5 g	kosher salt
7 g	prague powder or instacure #2
2.5 g	dextrose/sugar
2.5 g	ground black pepper
40 g	fermento

Preparation

1. Trim and remove all sinews and fat from beef and cube.
2. Trim and remove all skin from pork fat and cube.
3. Cube pork; combine with other meat and semifreeze.
4. Semifreeze pork fat.
5. Toss salt and seasonings with pork and beef and grind through a fine grinder plate ($\frac{3}{16}$ in./5 mm) and return to freezer.
6. Grind fat through a fine grinder plate ($\frac{3}{16}$ in./5 mm) and place together with meat into a bowl and mix at low speed with a dough hook or paddle for 5 to 6 minutes at low speed.
7. Pipe airtight into prepared beef middle ($2\frac{1}{4}$ – $2\frac{1}{2}$ in./55–60 mm) or synthetic fibrous casings ($2\frac{3}{8}$ in./61 mm in diameter, 24 in. long). Tie with a bubble knot or metal clips.
8. Cure, incubate, and dry/ripen (see page 98) and hang in a cool dark room for up to 90 days.

*Canapé of salami with goat cheese and olives*



Salami sticks canapé with mandarin oranges and grapes

Salami Sticks

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
86.5%	Beef chuck or beef clod	27.5 oz
13.5	Fatback without skin	4.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
1 g	garlic powder	
1.5 g	ground white pepper	
1.5 g	dextrose/sugar	
0.5 g	ground nutmeg	
0.5 g	powdered marjoram	
0.5 g	ground caraway seeds	
40 g	fermento	

Preparation

1. Cube beef and pork fat and semifreeze.
2. Toss with salt and seasonings and grind through a medium ($\frac{3}{8}$ -in./10-mm) grinding plate.
3. Place into a bowl and mix at slow speed for 3 to 5 minutes.
4. Place in the refrigerator to cure for 24 hours.
5. Pipe airtight into preprepared 8–10-in. long sheep casings ($1\text{--}1\frac{1}{16}$ in./24–26 mm) or hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Tie with a bubble knot.
6. Incubate in a room at 70°F for 24 hours. Set to dry/ripen in a cool dark room at 50°F–60°F for 6 to 8 weeks.
7. Cold-smoke for 1 to 2 hours (optional). Refrigerate.

**did you
know?**

Canapés are bite size open-face sandwiches.



Peppered French salami and baguette

Peppered French Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
60%	Lean beef chuck	19 oz
40	Pork belly without skin	13 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
3.5 g	ground black pepper	
1	clove garlic	
40 g	fermento	
4 g	brandy	

Preparation

1. Remove skin from pork belly. Cube and semifreeze.
2. Cube beef chuck and semifreeze.
3. Toss with salt and seasonings. Add brandy and grind through a 1/4-in./6-mm grinding plate into a bowl and mix at low speed with a dough hook or paddle for 3 to 5 minutes.
4. Place in the refrigerator to cure for 24 hours.
5. Pipe airtight in precut and pretied beef middle or synthetic fibrous casings (2¹/₄ in.–2¹/₂ in./55–60 mm). Finish with a bubble knot or metal clips
6. Hang to incubate in a room at 70°F for 72 hours and hang to dry/ripen in a cool room at 50°F–60°F for up to 90 days or more, if needed.
7. Peel off casing and brush sausage with aspic (see page 238) and roll in course crushed black pepper.
8. Roll tight in plastic wrap and tie. Refrigerate until used.



Soft cervelat on warm rice salad, with fried pullet egg and caviar

Soft Cervelat (German Salami)

(The first cured sausage my Master allowed me to make)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
30%	Lean beef chuck	9.5 oz
40	Pork butt or shoulder	13 oz
30	Fatback without skin	9.5 oz
100%		32 oz
Seasoning for 2-lb. Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
2.5 g	dextrose/sugar	
2.5 g	ground black pepper	
40 g	fermento	
4 g	kirsch wesrer	

Preparation

1. Cube beef chuck, pork, and fat and semifreeze.
2. Toss with salt and seasonings and grind through a fine/hamburger grinding plate ($\frac{3}{16}$ in./5 mm).
3. Mix in a bowl with a dough hook or paddle at low speed for 3 to 5 minutes.
4. Cure in the refrigerator for 24 hours.
5. Pipe airtight into precut (aprox. 24-in.) beef middle or synthetic fibrous casings. Tie with a bubble knot or metal clip.
6. Hang to incubate for 24 hours in a room at 70°F.
7. Hang to dry/ripen in a cool, dark room for up to 40 to 50 days, or as needed.
8. Cold-smoke for 1 to 2 hours.
9. Remove. Hang overnight and smoke 1 to 2 hours more. Refrigerate.

did you know?

Cured meats will keep for many weeks or months provided

- *you use top-quality meats and ingredients.*
- *you observe sanitary precautions.*
- *you take no shortcuts and are certain the cure reaches the inner parts of the meat.*
- *you exercise care in wrapping and storing the sausage.*

Freddy Maier's Hard German Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
86%	Lean beef chuck or beef clod	27.5 oz
14	Fatback without skin	4.5 oz
100%		32 oz
Seasonings for 2-lb Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
1.5 g	dextrose/sugar	
2 g	ground white pepper	
40 g	fermento	

Preparation

1. Cube beef and pork fat. Semifreeze.
2. Toss with salt and seasonings. Grind through a fine/hamburger grinding plate ($\frac{3}{16}$ in./5 mm).
3. Mix with a dough hook or paddle on low speed for 3 to 5 minutes.
4. Cure in refrigerator for 24 hours.
5. Pipe airtight into prepared beef middle or synthetic fibrous casings. Tie with a bubble knot or metal clips.
6. Hang to incubate in a room at 70°F for 24 hours. Then hang to dry/ripen in a dark room at 50°F–60°F for up to 90 days.
7. Cold-smoke for 1 to 2 hours. Refrigerate.

Brotzeit (Snack) Cervelat (German Salami)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
33.4%	Lean pork loin	11 oz
33.3	Lean beef chuck	10.5 oz
33.3	Fatback, no skin	10.5 oz
100%		32 oz

Seasonings for 2-lb Mixture

8 g	prague powder or instacure #2
4 g	kosher salt
1.2 g	ground black pepper
0.5 g	cardamom
1.5 g	brandy
40 g	fermento
1.5 g	whole white peppercorns

Preparation

1. Cube beef, pork, and fat and semifreeze.
2. Toss with salt and seasonings except white peppercorns.
3. Grind meat and fat through a large ($\frac{3}{8}$ in./10-mm) grinding plate
4. Mix at slow speed with a dough hook or paddle 3 to 5 minutes. Add white peppercorns,
5. Cure for 24 hours in a refrigerator.
6. Pipe into beef middle casings and tie with a bubble knot.
7. Hang to incubate in a room at 70°F for 24 hours. Hang to dry/ripen in a dark cool room at 50°F–60°F for up to 70 days.
8. Cold-Smoke for 1 to 4 hours.
9. Hang for 20 or more days to dry/ripen. Refrigerate.



Canapé with Budapest salami and figs

Budapest Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
30%	Lean beef chuck	9.5 oz
30	Pork butt	9.5 oz
40	Pork jowls	13 oz
100%		32 oz

Seasoning for 2-lb Mixture

8 g	prague powder or instacure #2
4 g	kosher salt
3 g	black pepper ground or coarse ground
4 g	smoked paprika
40 g	fermento
2	cloves of garlic, crushed

Preparation

1. Cube beef, pork, and jowls and semifreeze.
2. Toss with salt and seasonings and grind through a (3/16-in./5-mm) grinding plate.
3. Cure in the refrigerator for 12 hours.
4. Pipe airtight into preprepared beef middle or synthetic fibrous casings. Finish with a bubble knot or metal clips. Or use hog casings (1 1/4 in.–1 3/8 in./32–35 mm) and twist or tie into 5–6 inch links
5. Hang in a room at 70°F to incubate.
6. Hang to dry/ripen in dark cool room at 50°F–60°F for up to 90 days, for beef middle casings and up to 6 weeks for hog casings.
7. Cold-smoke for 1 to 2 hours if desired. Refrigerate.

This sausage can be eaten cold or hot.



Land jaeger with radishes, salt, and butter

Land Jaeger

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Lean beef chuck or shoulder clod	16 oz
50	Lean pork belly	16 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
2.5 g	ground black pepper	
1.5 g	ground caraway seeds	
0.5 g	ground coriander seeds	
½	clove of garlic, crushed	
6 g	corn syrup solids	

Preparation

1. Cube beef and pork belly and semifreeze.
2. Toss with salt and seasonings and grind through a $\frac{3}{16}$ -in./5-mm grinding plate and mix with a dough hook or paddle for 3 to 5 minutes.
3. Place in a refrigerator for 12 hours to cure.
4. Pipe airtight into hog casings (1¼ in.–1⅜ in./32–35 mm).
5. Tie or twist into 2–3-in. links and place between two sheet pans and weight them down to press flat.
6. Incubate in a room at 70°F for 12 hours.
7. Dry and ripen in a room at 50°F–60°F for up to 6 weeks.

If you like the jaeger soft and chewy, dry for 3 weeks and place in a refrigerator for 1 week. If you want the jaeger hard, ripen it for 6 weeks or as needed.

Note: For Ukrainian sausages, substitute coarse black pepper for caraway seeds. Pipe into casings, do not press, and hang for 4 weeks to dry/ripen. Then smoke them for 2 to 4 hours. Serve with braised cabbage or coleslaw.

Land Jaeger with Venison or Bison

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
55.5%	Lean venison or bison chuck or shoulder	17.5 oz
44.5	Pork belly without skin	14.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
2	cloves of garlic, crushed	
2 g	light brown sugar	
1 g	ground coriander seeds	
1 g	ground black pepper	
1 g	caraway seeds	
6 g	corn syrup solids	
3 g	Jaeger Meister or brandy	

Preparation

1. Cube venison or bison, and semifreeze
2. Cube pork belly and semifreeze,
3. Grind venison or bison through a coarse $\frac{3}{8}$ -in./10-mm grinding plate.
4. Grind pork belly through a fine $\frac{3}{16}$ -in./5-mm grinding plate.
5. Combine in a bowl. Add salt and seasonings and Jaeger Meister and mix well with a dough hook or paddle on slow speed for 3 to 5 minutes.
6. Cover with plastic wrap and cure in the refrigerator for 12 hours.
7. Pipe airtight into hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Tie or twist into 6-in. links.
8. Place on a sheet pan covered with parchment paper. Top with a parchment paper and press between two sheet pans.
9. Place in a room at 70°F to incubate. Then place in a cool dark room at 50°F–60°F. Place a heavy weight on top of land jaeger for 1 week.
10. Place on a rack in the smoker and cold-smoke at 85°F–90°F for 3 to 4 hours.
11. Rub with oil and hang in a cool dark room for 3 to 4 weeks or until sausages have lost half of their volume.

did you know?

Land jaeger is a German word for “hunter.” These spicy flat sausages were once the favorite food to take to a hunt.

For good aroma and flavor, use cherry wood chips or dust to smoke.

Italian Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
37.5%	Pork butt	12 oz
33.3	Fatback without skin	10.5 oz
29.1	Lean beef shoulder	9.5 oz
100 %		32 oz

Seasoning for 2-lb Mixture

4 g	kosher salt
8 g	prague powder or instacure #2
2 g	dextrose/sugar
2.5 g	coarse ground white pepper
0.5 g	ground cardamom
½ to 1	clove of garlic, crushed
40 g	fermento
5 g	ice cold red wine

Preparation

1. Cube beef, pork, and fat and semifreeze.
2. Toss with salt and seasonings and grind through a $\frac{3}{16}$ -in./5-mm grinding plate.
3. Cure for 12 hours in the refrigerator.
4. Pipe airtight into beef middles (2¼ in.–2½ in.) or into hog middles (2¼ in./55–60 mm).
5. Hang to incubate in a room at 70°F for 24 hours.
6. Hang to dry/ripen in a cool, airy, dark room at 50°F–60°F for 4 months or longer.

Note: This type of sausage can also be covered with netting or tied by hand.



Salami with Fritz's cheese spread and grapes



Sopressata with mozzarella cheese

Sopressata

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
80%	Lean pork butt or shoulder	25.5 oz
20	Fresh fatback, without skin	6.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
4 g	kosher salt	
8 g	prague powder or instacure #2	
1.5 g	dextrose/sugar	
1.5 g	ground black pepper	
1.5 g	whole black pepper	
40 g	fermento	
1 g	cayenne pepper (optional)	

Preparation

1. Cube pork and pork fat and semifreeze.
2. Toss with salt and seasoning and grind through a $\frac{3}{4}$ -in./18-mm grinding plate.
3. Press into a plastic container (airtight), cover with plastic wrap, and cure for 48 hours.
4. Remove and grind through a $\frac{1}{4}$ -in./6-mm plate.
5. Mix at low speed for 3 to 5 minutes.
6. Pipe into pretied and measured 8-in.–19-in. hog middles ($2\frac{1}{4}$ in./55–60 mm). Tie with a bubble knot.
7. Hang in a room at 70°F to incubate and then cold-smoke at 70°F–80°F for 4 hours (optional).
8. Hang in a dark cool room for 20 weeks, or as needed.

Note: If some mold grows on the casing, wash with room temperature solution of vinegar and water and continue drying/ripening.



Air-dried Chinese sausage stir fry with steamed rice

Chinese Air-Dried Duck Sausage
(A recipe an old Chinese butcher shared with me many years ago)

1 6-lb	Duck, boned with skin left on, legs jointed and boned
10 oz	Pork butt, cubed

Cure

1 cup	light soy sauce
4 Tbsp	honey or dark brown sugar
3	cloves of garlic, crushed
2-inch	piece of ginger, shredded

Seasonings

3 Tbsp	sake or rice wine
3–4	fresh chilies, seeded and chopped
1 Tbsp	kosher salt
½ tsp	prague powder or instacure #2
4–5	finely ground star anise
1 tsp	finely ground Szechuan pepper
1 tsp	finely ground fennel seeds

Preparation

1. Place all meat into a bowl. Pour the cure over the meat.
2. Mix well and cover with plastic wrap. Refrigerate for 24 hours, turning 3 to 4 times.
3. Remove duck breast and cube. Cube legs and drain and pat down with some paper towels. Semifreeze.
4. Grind duck breast through a coarse $\frac{3}{8}$ -in./10-mm grinding plate.
5. Grind duck leg and pork through a fine $\frac{3}{16}$ -in./5-mm grinding plate.
6. Combine and add salt and seasonings.
7. Mix with a dough hook or paddle on slow speed for 3 to 5 minutes.
8. Fill hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Tie or twist into 4- to 6-in. links.
9. Hang in a cool, airy, dark place for 5 to 6 weeks or until the sausages have lost half of their weight.
10. After hanging, for 10 days, brush lightly with peanut oil.

Air-dried Alpine Style Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
34%	Lean pork shoulder or butt	11 oz
33	Lean beef chuck	10.5 oz
33	Fatback without skin	10.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder of instacure #2	
4 g	kosher salt	
1.5 g	coarsely crushed black pepper	
1.5 g	dextrose/sugar	
1–2 g	crushed mustard seeds	
1 g	onion powder	
6 g	corn solids concentrate	

Preparation

1. Cube meat and fat and semifreeze.
2. Toss with salt and seasonings.
3. Grind through a large ($\frac{3}{8}$ -in./10-mm) grinding plate.
4. Place in a bowl and mix with a dough hook or paddle on low speed for 3 to 5 minutes.
5. Pipe into pretied hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm) measured 10-in. long. Close with a bubble knot.
6. Hang in a cool, airy, dark room for 4 to 6 weeks.

Hard Deer Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
33.5%	Deer meat	11 oz
33	Lean pork butt	10 oz
33.5	Fresh fatback without skin	11 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder or instatucure #2	
4 g	kosher salt	
3 g	ground white pepper	
1 g	nutmeg	
1 g	ground caraway seeds	
1	large garlic clove, crushed	
0.5 g	cardamom	
40 g	fermento	
3 g	white rum	

Preparation

1. Cube deer meat and pork and semifreeze.
2. Cube fatback and semifreeze.
3. Grind deer meat through a fine $\frac{3}{16}$ -in./5-mm grinding plate.
4. Grind pork through a $\frac{3}{8}$ -in./10-mm grinding plate.
5. Grind pork fat through a $\frac{1}{4}$ -in./6-mm grinding plate.
6. Combine meats. Add salt and seasonings and mix with dough hook or paddle for 3 to 5 minutes on low speed.
7. Cure in refrigerator for 12 hours.
8. Pipe airtight into pretied and premeasured beef middle or synthetic fibrous casings.
9. Hang in a room at 70°F for 72 hours.
10. At this point the sausage can be cold-smoked for 2 to 4 hours and then hung in an airy dark room at 50°F–60°F to dry/ripen for 90 days.

Note: Casings can be covered with netting or tied with butcher twine.



Platter of assorted cured sliced sausages



Cooked venison salami with corn salad

Cooked Venison Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
80%	Venison	25.5 oz
20	Pork jowls	6.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
2 g	black pepper	
0.5 g	ground nutmeg	
1 g	garlic powder	
0.5 g	cardamom	
1 g	dextrose/sugar	
4 g	soy protein concentrate	

Preparation

1. Cube venison and semifreeze.
2. Cube pork jowls and semifreeze.
3. Grind venison through a 3/8-in./10-mm grinder plate.
4. Grind pork jowls through a 3/16-in./5-mm grinder plate.
5. Combine meat and fat and add salt and seasonings.
6. Mix with a dough hook or paddle on slow speed for 2 to 5 minutes.
7. Pipe airtight into a pretied synthetic fibrous casing (3–3½ in./88 mm). Close with a bubble knot or metal clips.
8. Prick the casing for any possible air pockets. Hang salami in a cool room for 3 to 4 hours.
9. Hot-smoke starting at 155°F for 2 hours. Then increase temperature to 160°F and smoke for 2 more hours or to an internal temperature 155°F.
10. Cool in running water and refrigerate.

Note: If no smoker is available add ½–1 tsp of liquid smoke to venison mixture and bake sausage in an oven at 160°F–170°F to a internal temperature of 155°F (approximately 2 hours). Remove and cool under running water. Refrigerate.



Canapés of Mexican salami with papaya and papaya caviar (papaya seeds)

Mexican Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
85%	Pork shoulder	27 oz
15	Fatback	5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
2 g	light brown sugar	
10 g	tequila or brandy	
4	large red chilies, seeds removed, finely chopped	
2	cloves of garlic, crushed	
5 g	sweet paprika	
2 g	chili powder	
1 g	ground anise seeds	
6 g	corn syrup concentrate	

Preparation

1. Cube pork shoulder.
2. Mix with salt and TCM and add tequila. Cover and refrigerate for 24 hours.
3. Cube fatback small.
4. Grind cured pork through a coarse $\frac{3}{8}$ -in./10-mm grinding plate.
5. Place in a bowl with all seasonings. Add cubed fatback, and mix with a dough hook or paddle on slow speed for 3 to 5 minutes.
6. Pipe into preprepared hog casings ($1\frac{3}{8}$ in.– $1\frac{1}{2}$ in./35–38 mm) precut into 10-in. lengths. Close with a bubble knot.
7. Hang in a room at 70°F for 12 hours and then hang in a cool, airy, dark room to dry/ripen for 5 to 6 weeks or until the salami is half its original weight. Refrigerate.

This salami is good with casseroles and bean dishes.

Note: This is a version similar to Spanish chorizo. It can be used in hot dishes or served cold. Serve at room temperature for best flavor.



Garlic and herb salami baked in brioche dough

Garlic and Herb Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
85%	Lean pork shoulder or pork butt	27 oz
15	Pork fatback	5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	prague powder or instacure #2	
4 g	kosher salt	
8 g	vodka	
3	garlic cloves, finely chopped	
1 g	finely chopped thyme	
1.5 g	black peppercorns	
1 g	ground coriander seeds	
0.5 g	ground allspice	
1 g	ground black pepper	
40 g	fermento	

Preparation

1. Cube pork and fatback and semifreeze.
2. Toss with salt and seasonings, except black peppercorns.
3. Grind through a coarse $\frac{3}{8}$ -in./10-mm grinding plate.
4. Add black peppercorns and mix on low speed mix for 3 to 5 minutes.
5. Refrigerate for 2 to 3 hours.
6. Pipe into prepared hog casings ($1\frac{3}{8}$ in.– $1\frac{1}{2}$ in./35–38 mm) precut into 10-in. lengths. Close with a bubble knot.
7. Hang in a cool dark room for 5 to 6 weeks or until salami has lost half its original weight. Refrigerate.

Note: Do not worry if white deposits start growing on the outside of the sausage. It is a harmless mold and helps to preserve the sausage and gives it better eye appeal.

Dried Lamb Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
80%	Lamb shoulder or lamb trim	25.5 oz
20	Chicken fat	6.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	kosher salt	
4 g	prague powder or instacure #2	
2	cloves of garlic, crushed	
1.5 g	fennel seeds	
1.5 g	smoked paprika	
1 g	dried mint	
1 g	chili powder	
1 g	ground black pepper	
40 g	fermento	

Preparation

1. Cube lamb and fat and semifreeze.
2. Fold in salt and seasonings.
3. Pack airtight into a plastic bowl. Cover with plastic wrap and cure for 12 hours in the refrigerator.
4. Pipe into lamb casings (1 in.–1¹¹/₁₆ in./24–26 mm). Twist or tie into 6–7 in. links.
5. Hang in a cool, dark room at 50°F–60°F for 4 to 5 weeks or until sausages have lost half of their original weight. Refrigerate

This sausage is good for barbeques, stews, couscous, or dishes prepared in a tagine (crock pot).

did you know?

There are different versions of this formula made all over the Islamic world, where pork is not permitted to be cooked or eaten. This sausage can be used in hot dishes or eaten cold.

Bauernwurst
(Old-fashioned Farmer's Sausage)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
60%	Pork shoulder	19 oz
25	Fresh pork fatback	8 oz
15	Beef chuck	5 oz
100%		32 oz

Seasoning for 2-lb Mixture

8 g	kosher salt
4 g	prague powder or instacure #2
1 g	sugar/dextrose
2 g	powdered black pepper
1 g	yellow mustard seeds
2 g	smoked paprika (Schreiber)
1 g	marjoram
1 g	mace
1 g	garlic powder
0.5	crushed caraway seeds
0.5 g	crushed juniper berries
1 g	Bactoferm F-RM-52 diluted with well or bottled water

Preparation

1. Cube all meat and semifreeze.
2. Grind through a medium (1/4-in./6-mm) grinding plate into a bowl.
3. Add Bactoferm dissolved in 1/3 cup of bottled water.
4. Mix well. Add salt and mix again.
5. Refrigerate for 3 hours. Add all the seasonings and mix with a paddle on low speed for 3 to 5 minutes.
6. Pipe into preprepared beef middles or large hog casings. Tie with a bubble knot into a ring and hang either in a refrigerator or cool room until surface is dry.
7. Incubate in a room at 70°F–80°F for 48 hours.
8. Cold-smoke for 3 to 4 hours. Refrigerate.

Note: If desired, poach bauernwurst in 160°F–170°F water for 1 hour or until the internal temperature is 155°F–160°F. Cool under running water and refrigerate.

Otto's Hungarian Salami (Empire Version)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
58.5%	Pork shoulder	18.5 oz
25	Beef chuck	8 oz
16.5	Fresh fatback	5.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

7 g	kosher salt
5 g	prague powder or instacure #2
1 g	dextrose/sugar
9 g	ice cold Tokai wine
8 g	smoked Paprika (Schreiber)
4 g	powdered garlic
2 g	ground black pepper
1 g	Bactoferm F-RM-52

Preparation

1. Cube pork and beef chuck and semifreeze.
2. Grind through a $\frac{3}{16}$ -in./5-mm grinding plate.
3. Cube fatback and semifreeze.
4. Grind through a $\frac{3}{16}$ -in./5-mm grinding plate.
5. Combine meat and fat and mix with salt.
6. Cure in refrigerator for 1 hour.
7. Dissolve Bactoferm in 1 or 2 Tbsp of bottled water.
8. Place meat mixture into a bowl. Add Bactoferm, spices, and wine and mix with a paddle at slow speed for 2 to 3 minutes.
9. Pipe into $3\frac{1}{2}$ -in. natural beef middle or $3\frac{1}{2}$ -in. protein lined synthetic casings. Tie with a bubble knot.
10. Hang in a room at 70°F–80°F with a humidity of 90% and incubate for for 24 hours.
11. Hang in a smoker and cold-smoke for 4 hours.
12. Hang in a dark, cool, and airy place at 55°F–60°F with 70% humidity for 28 days or longer if needed. Sometimes a fine bloom of white edible mold will develop which makes the product more desirable.

Summary

After reading this chapter you will know how to make sliceable raw cured sausages. You will also understand the curing process, the incubation stage, and the drying/ripening period. The chapter explains the importance of using TCM to prevent botulism and stresses good sanitation and personal hygiene procedures to follow. The chapter also gives suggestions for serving cured sausages.

IN REVIEW

1. What is a salami?
2. What is the temperature for keeping meats and fats of forcemeats safe from contamination?
3. Explain why older animals are better for sausage making.
4. What are starter cultures?
5. Where should powdered paprika be stored?
6. How long is the curing process of salamis?
7. What is the translation of land jaeger?
8. Explain the reason why salts are essential to the curing process.



KEY TERMS

Beef Round

Bologna Forcemeat
Base

Brat

Gelbwurst (White
Bologna) Forcemeat
Base

Hog Stomach

Leberkäse

Prague Powder

9

Poached Sausages

Poached sausages, usually called cold cuts, are prepared by the same method as raw sausages and contain the very same ingredients. The difference is that after filling the casings, these sausages are poached in warm water. In some cases, they are smoked before poaching to give better color and aroma (see Chapter 5).

In the preparation of this sausage forcemeat (often called brat), many types of meat cuts (as described in Chapter 2) are used. They are all readily available in butcher shops and supermarkets.

The most frequently used cuts of meat are pork butt or pork shoulder, beef clod or chuck, lean or fat pork belly, pork fatback, pork jowls, and, of course, dark and white turkey meat and trimmings. For different flavors and textures you can use the meat of rabbits, chickens, lamb, sheep, or game, for example, wild boar, deer, or pheasant.

Top, left to right: Gelbwurst, bologna, pistachio sausage, Neapolitan sausage, ham bologna, mortadella, knockwurst
Bottom, German franks, (wiener wuerst!), kielbasa



General Preparation of Poached Sausages

All meats need to be trimmed of any sinews, gristle, and connective tissue. It is cubed to fit the meat grinder opening and semifrozen before grinding.

If you use pork fatback or belly, remove the rind or skin. Save the removed skin for other uses (see pork brei or headcheese on page 245). If pork jowls are used, trim and then cube as described above. All types of fat need to be semifrozen before using.

It is important that you follow the recipe for each different sausage as directed. Weigh out the proper amounts of meat and fat. Just before grinding, mix with kosher salt, TCM (also called Prague powder), and seasonings. Then grind according to directions.

Weigh the proper amount of crushed ice. After placing the ground meat and fat into a high-speed chopper or food processor, add the crushed ice and start to process the mixture. Check temperature frequently to be sure that the mixture is within the desired temperature range.

The crushed ice is needed to offset the heat created by the fast cutting action of the knife blades. The fast cutting action liquefies the fat, enabling it to

blend more evenly with the lean meats and therefore giving a smoother and juicier texture. The crushed ice controls the temperature to allow the proteins to bind for the perfect emulsion. The ideal temperature to achieve the perfect emulsion is between 48°F–58°F. The end result is a light, almost spongy texture.

Forcemeats for pâtés, raw sausages (breakfast sausages,) salamis, or mettwurst are ground only. Therefore, there is less friction and less heat and they need only some iced liquid to keep the proper temperature.

Garnishing Sausages

Some sausages, such as ham bologna, krakauer, or jaegerwurst, need a coarse garnish that is prepared from cured or smoked meats like tongue or ham, nuts, dried fruits, cheeses, or vegetables. The garnishes are usually cubed, diced, or ground coarse and then folded into the forcemeat (brat).

Casings used for poached sausages are hog casings, beef and pork middles, beef bungs, or when directed, synthetic fibrous or collagen casings. For specialty sausages, the hog stomach may be used.

To refresh your memory on the basics of sausage making, reread Chapters 2 through 5.

Bologna Sausage (Bologna forcemeat Base)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
20%	Beef chuck	6.5 oz
22	Pork shoulder	7.5 oz
18	Fresh fatback	6 oz
20	Pork jowls	6 oz
20	Crushed ice	6 oz
100%		32 oz
Seasoning for 2-lb Mixture		
7 g	kosher salt	
5 g	TCM	
1 g	sugar	
1.5 g	ground white pepper	
0.5 g	ground mace	
0.5 g	ground coriander	
0.5 g	smoked paprika	
0.25 g	ginger powder	
0.25 g	ground cardamom	
5 g	onion powder	
5 g	soy protein concentrate or dry milk powder or plum powder	

Note: For pistachio sausage, add 20–25 g peeled green pistachio nuts per 2-lb mixture.

Preparation

1. Cube beef and pork and semifreeze.
2. Cube fatback and pork jowls and semifreeze.
3. Toss beef and pork with salt and seasonings. Grind through large grinding plate ($\frac{3}{8}$ in./10-mm).
4. Grind fat and jowls.
5. Place in a food processor, add crushed ice, process to 50°F, maximum 58°F. Stop the machine 2 to 3 times to check temperature. (This forcemeat needs to have a smooth texture.)
6. Pipe into pretied and premeasured beef middles ($2\frac{1}{4}$ in.– $2\frac{1}{2}$ in.). Finish with a bubble knot.
7. Hang to dry in a smokehouse for 1 to 2 hours or in the refrigerator or cool room overnight.
8. Smoke at 140°F–160°F for 1 to 2 hours or until golden brown.
9. Poach in water at 160°F–170°F for 1 hour or to an internal temperature of 160°F.
10. Cool in cold water. Hang to dry. Refrigerate.



French-style frankfurter: baguette split and brushed with mustard, topped with a frankfurter and topped with slices of emmentaler cheese and browned under a broiler or salamander

German Frankfurter (Wiener Wuerstl)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
20%	Beef chuck	6.5 oz
22	Pork shoulder	7.5 oz
18	Fresh fatback	6 oz
20	Pork jowls	6 oz
20	Crushed ice	6 oz
100%		32 oz
Seasoning for 2-lb Mixture		
7 g	kosher salt	
5 g	TCM	
1 g	dextrose/sugar	

2 g	smoked paprika
1.5 g	ground white pepper
0.5 g	ground mace
0.5 g	ground coriander
0.25 g	powdered ginger
0.25 g	ground cardamom
5 g	onion powder
5 g	soy protein concentrate or powdered milk or plum powder

Preparation

1. Cube beef and pork and semifreeze.
2. Cube fatback and jowls and semifreeze.
3. Toss beef and pork with salt and seasonings.
4. Grind through a large grinding plate ($\frac{3}{8}$ in./10 mm).
5. Grind fatback and pork jowls through same grinding plate and place all the ingredients in a large (2-lb) food processor. Add crushed ice and process to 50°F, maximum of 58°F. Stop the machine 2 to 3 times to check temperature and texture. (The forcemeat should have a smooth texture.)
6. Pipe into sheep casings (1– $\frac{1}{16}$ in./24–26 mm) or hog casings ($\frac{1}{8}$ in.– $\frac{1}{4}$ in./29–32 mm). Twist or tie into 6-in. links. Hang on wooden sticks.
7. Dry in smokehouse for 1 to 2 hours or overnight in the refrigerator or a cool room. Smoke at 140°F–160°F until sausage is a reddish color (approximately 1 to 2 hours).
8. Poach for 15 to 20 minutes, or to an internal temperature of 160°F–170°F. Remove and cool in cold water.
9. Cut into pairs and hang to dry.
10. Store covered in the refrigerator.

Note: When heating water for poaching, always start with cold water and bring to a boil. Remove from fire and let stand for 5 minutes.

Ham Bologna or Ring Bologna

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
20%	Beef chuck	6.5 oz
25	Pork shoulder	8 oz
15	Fresh fatback	5 oz
10	Crushed ice	3 oz
Garnish Meat		
20%	Pork shoulder, cubed	6.5 oz
10	Lean pork butt, cubed	3 oz
100%		32 oz
Seasoning for 2-lb Mixture		
7 g	kosher salt	
5 g	TCM	
1 g	dextrose/sugar	
2 g	ground white pepper	
0.25 g	ground nutmeg	
0.5 g	ground mace	
1 g	smoked paprika	
0.25 g	ground coriander	
5 g	onion powder	
0.5 g	garlic powder (optional)	
4 g	soy protein concentrate or dry milk powder or plum powder	

Preparation

1. Cube beef, pork, and fatback and semifreeze,
2. Fold in half of the salt and the seasoning into the meat mixture.
3. Fold the other half of the salt and seasonings into the garnish meat. Cure in the refrigerator for 1 hour.
4. Grind the beef, pork, and fatback through a $\frac{3}{8}$ in./10-mm grinding plate.
5. Place in a food processor add crushed ice, and process to 45°F, maximum 55°F.
6. Cut cured pork meat into $\frac{1}{2}$ -in. cubes or larger.
7. Place garnish with forcemeat (brat) in a bowl and mix with a dough hook at low speed for 2 minutes or until thoroughly mixed.
8. For ring bologna, pipe into pretied hog casings ($1\frac{1}{2}$ in.– $1\frac{3}{4}$ in./38–43 mm). Measure to the desired length and tie with a bubble knot. Then tie into rings.

9. For ham bologna, pipe into pretied 18-in. synthetic fibrous casings ($3\frac{3}{8}$ in./88 mm). Seal with a bubble knot.
10. Hang to dry in smokehouse for 1 to 2 hours or overnight in refrigerator or a cool room.
11. Smoke at 160°F–170°F for 1 to 2 hours or until golden in color.
12. Poach in water at 160°F–170°F for 30 minutes or to an internal temperature of 155°F–160°F. Cool in cold water.
13. Hang to dry. Store in refrigerator.

Krakauer or Beerwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
45%	Bologna base forcemeat	14.5 oz
55	Lean pork shoulder	17.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
7 g	Kosher salt	
6 g	TCM	
1 g	sugar	
2 g	ground white pepper	
1.5 g	mace	
0.5 g	coriander	
0.5 g	smoked paprika	
0.25 g	ginger powder	
0.25 g	ground cardamom	
8 g	onion powder	
4 g	soy protein concentrate or dry milk powder or plum powder	

Preparation

1. Cube pork shoulder and semifreeze.
2. Toss with half of the salt and seasoning mix and grind through a large (pea-size) grinding plate.
3. Place in a bowl and press down to remove any air. Cover with plastic wrap and cure in the refrigerator overnight.
4. Place in a bowl and add bologna base. Mix with paddle or dough hook on low speed for 3 to 5 minutes (mixture should feel sticky).
5. Pipe into premeasured and pretied beef middle casings (2¹/₄ in.–2¹/₂ in.). Finish with a bubble knot.
6. Hang in smokehouse to dry for 1 to 2 hours or in the refrigerator or cool room overnight.
7. Smoke at 160°F–170°F to a golden color (1 to 2 hours).
8. Poach in water at 160°F–170°F for 1 hour or to an internal temperature of 155°F–160°F. Cool in water.
9. Hang to dry for 1 hour and refrigerate overnight.

**did you
know?**

TCM stands for tinted curing mixture.

Coarse Leberkäse

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Bologna base forcemeat	16 oz
50	Pork shoulder	16 oz
100%		32 oz
Seasoning for 2-lb Mixture (Garnish)		
7 g	kosher salt	
6 g	TCM	
1 g	dextrose/sugar	
1.5 g	ground white pepper	
0.5 g	ground mace	
0.5 g	ground coriander	
0.5 g	smoked paprika	
0.25 g	powdered ginger	
0.25 g	ground cardamom	
15 g	powdered onion	
4 g	soy protein concentrate, or milk powder, or plum powder	

Preparation

1. Cube pork shoulder and semifreeze.
2. Toss with half of the seasoning mix. (Save unused mixture for later use in an airtight container.) Grind through a large (pea-size) grinding plate.
3. Place in a stainless steel bowl and press down to remove any air pockets. Cover with plastic wrap and cure in the refrigerator overnight.
4. Place together with the bologna forcemeat base in a mixer and blend with a paddle or dough hook on low speed for 2 to 3 minutes, or until well mixed.
5. Spray 1- or 2-lb loaf pans with olive oil and fill pans with prepared forcemeat. Press down with a spatula to remove all possible air pockets.
6. Smooth the surface and slightly cut diagonally with the tip of a knife (see photo on page 140). This will ensure that the leberkäse will bake evenly. Rest overnight in the refrigerator.
7. Bake in a preheated oven at 300°F–350°F for 1 hour or to an internal temperature of 150°F–160°F. Let stand for 20 minutes.

Serve hot or cold.



Leberkaese filled in mold, pressed and smooth, cut diagonally cutting board: Cooked sliced leberkaese with pickled red onions

Bavarian Leberkäse (Munich Style)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
20%	Beef chuck	6.5 oz
22	Pork shoulder	7.5 oz
18	Fresh fatback	6 oz
20	Pork jowls	6 oz
20 to 25	Crushed ice	6–8 oz
100%		32 oz

Seasoning for 2-lb Mixture

7 g	kosher salt
5 g	TCM
1 g	dextrose/sugar

1.5 g	ground white pepper
0.5 g	ground mace
0.5 g	ground coriander
1 g	smoked paprika
0.25 g	powdered ginger
0.25 g	ground cardamom
15 g	onion powder
4 g	soy protein concentrate or powdered milk or plum powder

Preparation

1. Cube beef and pork and semifreeze.
2. Cube fatback and jowls and semifreeze.
3. Toss beef and pork with salt and seasonings.
4. Grind through a large grinding plate ($\frac{3}{8}$ in./10 mm).
5. Grind fatback and pork jowls through the same grinding plate and place together with beef and pork in a large food processor. Add crushed ice. Process to 50°F (maximum 58°F). Stop machine 2 to 3 times to check temperature and texture. This forcemeat should have a very fine, spongelike texture.
6. Place forcemeat in an oil-sprayed 2-lb loaf pan. Press down with a spatula to remove trapped air. Cut diagonally into a diamond pattern with the knife tip (see photo on page 140). Let stand overnight in the refrigerator.
7. Bake in a 350°F preheated oven for 1 hour or to an internal temperature of 155°F–160°F. Let stand for 20 minutes. Serve hot or cold.

Hunter Sausage (Jaegerwurst)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
55%	Bologna forcemeat	17.5 oz
35	Pork shoulder	11.5 oz
10	Lean pork belly	3 oz
100%		32 oz
Seasoning for garnish for 2-lb Mixture		
7 g	kosher salt	
5 g	TCM	
1 g	sugar	
2 g	ground white pepper	
0.5 g	ground mace	
0.5 g	ground coriander	
0.5 g	smoked paprika	
0.25 g	powdered ginger	
0.25 g	ground cardamom	
5 g	onion powder	
4 g	soy protein concentrate or milk powder or plum powder	
15 g	pistachio nuts, peeled	

Preparation

1. Cube pork shoulder and pork belly and semifreeze.
2. Mix with half of the salt and seasonings. (Save unused mixture for later use in an airtight container.)
3. Grind using a 1/4 in./6-mm grinding plate.
4. Press into a bowl to remove any possible air pockets. Cover with plastic wrap and refrigerate overnight.
5. Combine bologna forcemeat base and garnish mixture in a bowl and mix with a paddle or dough hook for 3 to 5 minutes at low speed.
6. Fold in the peeled pistachio nuts.
7. Pipe into premeasured (14 in.–15 in. length) pretied hog middle casings (2 1/4 in./55–60 mm) or beef middles (2 1/4 in.–2 1/2 in./57–63 mm). Tie with a bubble knot.
8. Hang in smokehouse for 3 hours to dry or in refrigerator or cool room overnight.
9. Smoke at 160°F–170°F for 1 to 2 hours or until golden.
10. Poach in 160°F–170°F water for 1 hour or to an internal temperature of 155°F–160°F.
11. Cool in cold water.
12. Hang to dry and refrigerate.

Ukrainian Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
45%	Bologna forcemeat base	14.5 oz
Garnish		
70%	Lean pork butt	22.5 oz
30	Fresh fatback	9.5 oz
100%		32 oz
Seasoning for 2-lb Mixture for Garnish		
7 g	kosher salt	
5 g	TCM	
1 g	sugar	
2.5 g	ground black pepper	
0.5 g	nutmeg	
10 g	smoked paprika	
0.5 g	ground coriander	
0.5 g	whole caraway seeds	
0.5 g	garlic powder	
4 g	soy protein concentrate or plum powder	

Preparation

1. Cube garnish meats and semifreeze.
2. Toss with salt and seasoning, mixing well.
3. Grind through a 3/8-in./10-mm grinding plate.
4. Place in a bowl and press down to remove any possible air pockets. Cover with plastic wrap and cure overnight in a refrigerator.
5. Combine garnish with bologna forcemeat base in a bowl. Mix with a paddle or dough hook on slow speed for 3 minutes.
6. Pipe into precut 14-in.–15-in. measured and pretied beef middle casings (2¹/₄ in.–2¹/₂ in./57–63 mm).
7. Hang in a cool room for 4 to 6 hours to dry.
8. Smoke 1 to 2 hours or until golden in color at 140°F–160°F.
9. Poach in water at 160°F–180°F for 1 hour or to an internal temperature of 150°F–160°F. Cool in water.
10. Hang to dry and refrigerate.



Sausage salad with pretzels

Knockwurst (Regensburger)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
30%	Beef chuck	9.5 oz
25	Pork shoulder	8 oz
25	Fresh fatback	8 oz
20	Crushed ice	6.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
7 g	kosher salt	
6 g	TCM	
1 g	sugar/dextrose	
2 g	ground white pepper	
0.25 g	nutmeg	

0.5 g	mace
1.5 g	smoked paprika
0.25 g	ground coriander
6 g	soy protein concentrate or milk powder or plum powder
0.5 g	garlic powder (optional)

Preparation

1. Cube beef and pork and semifreeze.
2. Cube fatback and semifreeze.
3. Toss beef and pork with salt and seasonings.
4. Grind through a large grinding plate ($\frac{3}{8}$ in./10 mm).
5. Grind fatback through the same grinding plate.
6. Place both mixtures in a food processor. Add crushed ice and process to 48°F (maximum 58°F). Stop machine 2 to 3 times to check temperature. (This type of forcemeat needs to be very smooth.)
7. Pipe into pork casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Twist or tie into 4–5-oz sausages (approximately 5 in. long).
8. Hang to dry in a cool room for 3 hours or refrigerate overnight.
9. Hot-smoke at 155°F–160°F until golden (1 to 2 hours).
10. Poach in water at 160°F–170°F for 20 minutes to an internal temperature of 155°F–160°F.
11. Cool in cold water. Hang to dry. Refrigerate.



Cooked kielbasa, riesling sauerkraut, and pierogies

Ring Kielbasa

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
42 %	Pork butt shoulder	13.5 oz
24	Beef chuck	7.5 oz
19.5	Pork jowls or fatback	6 oz
14.5	Crushed ice	5 oz
100 %		32 oz
Cure for 2-lb Mixture		
7 g	kosher salt	
5 g	TCM	
2 g	sugar	

Seasonings for 2-lb Mixture

2 g	white pepper
1 g	dry mustard
1 g	garlic powder
1.5 g	smoked paprika
6 g	soy protein concentrate or dry milk powder or plum powder

Preparation

1. Cube pork and semifreeze.
2. Toss with half of the cure, and grind through a $\frac{3}{8}$ -in./10-mm grinding plate.
3. Place in a bowl and press down to remove any possible air pockets. Cover with plastic wrap and cure in the refrigerator overnight.
4. Cube beef and pork jowls or fatback and semifreeze.
5. Toss with rest of cure and seasonings and grind through $\frac{3}{8}$ -in./10-mm grinding plate.
6. Place beef, pork jowls, fatback, and ice into a food processor and process to 46°F, 55°F maximum.
7. Remove and place into a bowl. Add garnish and mix at low speed with a dough hook for 3 to 5 minutes.
8. Pipe into pretied pork casings ($1\frac{3}{8}$ in.– $1\frac{1}{2}$ in./35–38 mm). Finish with a bubble knot and tie into a ring.
9. Hang in smokehouse to dry for 2 to 4 hours or in refrigerator or cool room overnight.
10. Smoke at 150°F–160°F 1 to 2 hours or until golden in color.
11. Remove and poach in water at 160°F–170°F for 30 minutes or to an internal temperature of 160°F.
12. Remove and cool in cold water.
13. Hang to dry and refrigerate.

French Garlic Sausages Jacques Dechantaloup

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Pork butt or pork shoulder	16 oz
19	Beef chuck	6 oz
16	Pork fat	5.5 oz
15	Crushed ice	4.5 oz
100%		32 oz
Cure for 2-lb Mixture		
8 g	kosher salt	
4 g	TCM	
1 g	dextrose/sugar	
Seasoning for 2-lb Mixture		
2 g	garlic powder	
1.5 g	ground white pepper	
1 g	dry mustard	
6 g	soy protein concentrate or milk powder or plum powder	

Preparation

1. Cube pork and semifreeze.
2. Remove from freezer. Toss with half of the cure and mix well.
3. Grind through $\frac{3}{16}$ -in./5-mm grinding plate.
4. Press into a bowl to remove all air pockets. Cover with plastic wrap and cure in the refrigerator overnight.
5. Cube beef and pork fat and semifreeze.
6. Remove and toss with rest of cure and seasonings.
7. Grind through $\frac{3}{8}$ -in./10-mm grinding plate.
8. Place in food processor. Add ice and process to 48°F–54°F.
9. Place into a mixing bowl. Add garnish and mix with a paddle or dough hook at low speed for 3 to 5 minutes.
10. Pipe into pretied, measured 14-in.-long beef middle casings ($2\frac{1}{4}$ in.– $2\frac{1}{2}$ in.). Finish with a bubble knot.
11. Hang to dry in a cool room for 3 hours or in refrigerator overnight.
12. Smoke at 160°F–170°F for 1 to 2 hours or until golden.
13. Poach in water at 160°F–170°F for 1 hour or to an internal temperature of 155°F–160°F.
14. Cool in cold water.
15. Hang to dry for 1 to 2 hours and refrigerate overnight.

Note: For additional flavor and eye appeal, add 1 bulb of roasted garlic.

Cooked Salami

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Bologna forcemeat base	16 oz
Garnish		
75%	Pork butt	24 oz
25	Beef chuck	8 oz
100%		32 oz
Cure for 2-lb Garnish Mixture		
8 g	kosher salt	
6 g	TCM	
1 g	sugar	
Seasoning for 2-lb Garnish Mixture		
1.5 g	ground white pepper	
0.5 g	ground coriander	
0.5 g	garlic powder	
1 g	smoked paprika	
6 g	plum powder or soy protein concentrate	
1.5 g	whole black peppercorns, coarsely crushed	

Preparation

Garnish

1. Cube pork butt and beef chuck. Semifreeze.
2. Toss with cure mixture and press into a stainless steel bowl to remove any possible air pockets. Cover with plastic wrap and cure overnight in the refrigerator.
3. Toss with seasonings mixture (except crushed black peppercorns) and grind through a 1/4-in./6-mm grinding plate.
4. Add bologna forcemeat and crushed black peppercorns. Mix with a paddle or dough hook at low speed for 3 to 5 minutes.
5. Pipe into precut (14-in. long) pretied beef middles (2¹/₄ in.–2¹/₂ in./57–63 mm).
6. Hang in smokehouse for 1 to 2 hours to dry or in refrigerator or cool room overnight.
7. Smoke at 140°F–150°F for 1 to 2 hours or until golden.
8. Poach in water at 160°F–170°F for 1 hour or to an internal temperature of 155°F–160°F.
9. Cool in cold water.
10. Hang to dry and refrigerate overnight.

Andouilles Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
83.5%	Pork butt or shoulder, cubed	26.5 oz
16.5	Raw onions, diced	5.5 oz
100 %		32 oz
Cure for 2-lb Mixture		
6 g	kosher salt	
7 g	TCM	
1 g	sugar	
Seasoning for 2-lb Mixture		
1.5 g	ground thyme	
0.5 g	mace	
1.5 g	cayenne pepper	
1.5 g	ground cloves	
0.5 g	powdered garlic	
1.5 g	powdered marjoram	
1.5 g	smoked paprika	
6 g	soy protein concentrate or milk powder or plum powder	

Preparation

1. Blanch onion in salted water. Remove and chill.
2. Cube pork and semifreeze.
3. Mix meat with cure and seasonings.
4. Grind through $\frac{3}{8}$ -in./5-mm grinding plate with the chilled onions.
5. Place in a mixing bowl and mix with a paddle or dough hook at low speed for 3 to 5 minutes.
6. Pipe into sheep casings (1 in.– $1\frac{1}{16}$ in./24–26 mm). Tie or twist every 6 to 8 inches.
7. Dry overnight in refrigerator.
8. Smoke at 150°F for 2 to 3 hours.
9. Poach in water at 160°F to an internal temperature of 155°F.
10. Cool in cold water. Hang to dry
11. Refrigerate or freeze.

Note: If smoker is not available, add $\frac{1}{3}$ tsp liquid smoke to each 2-lb mixture.

Southern Italian Sausage (Also called Neapolitan Sausage)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
64%	Bologna forcemeat base	20.5 oz
Garnish		
12%	Fatback, cubed small and blanched	3 oz
5	Pistachio nuts, blanched and peeled	1.5 oz
19	Cooked smoked beef tongue or pork tongue, cubed small	7 oz
100%		32 oz
Seasonings for Garnish		
0.5 g	coriander ground	
1 g	ground white pepper	
0.5 g	garlic powder	
2–3 g	madeira wine, ice cold	

Preparation

1. Place chilled garnish into a mixing bowl. Mix with seasoning cure for 2 hours or overnight.
2. Place in a bowl and add bologna forcemeat base and mix well with a paddle or dough hook at low speed for 3 to 5 minutes.
3. Place in a greased loaf pan. Press with spatula to remove all possible air pockets and refrigerate overnight.
4. Cover with aluminum foil and bake in a 350°F oven for 1 hour or until the internal temperature is 160°F. Or pipe into precut measured 30-in. beef middles (2¼ in.–2½ in.) or hog middle casings (2¼ in./55–60 mm). Tie with a bubble knot.
5. If natural or synthetic casings are used, hang to dry in smokehouse for 1 to 2 hours or in the refrigerator or cool room overnight.
6. Smoke at 140°F for 1 to 2 hours or to a golden color.
7. Poach in water at 160°F–175°F for 1 hour to an internal temperature of 160°F.

Note: Smoked whole beef tongue needs to be simmered submerged in water for 1 to 2 hours or until soft and easy to peel. Shock it in ice water before using. Before cubing for garnish, trim to remove fat and gristle.

Mortadella

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
47 %	Lean beef chuck	15 oz
15.5	Lean pork butt or shoulder	5 oz
15.5	Fresh fatback	5 oz
22	Ice	7 oz
100 %		32 oz
Garnish		
6.5%	Small cubed fatback	2 oz
4.5%	Peeled pistachio nuts, coarsely chopped	1.5 oz
Seasoning for 2-lb Mixture		
8 g	kosher salt	
5 g	TCM	
1 g	sugar/dextrose	
1.5 g	ground white pepper	
0.5 g	ground cardamom	
0.5 g	ground mace	
0.5 g	ground ginger	
6 g	soy protein concentrate or plum powder	

Preparation

1. Cube beef, pork, and fatback and semifreeze.
2. Toss with salt and seasonings and grind through a $\frac{3}{8}$ in./10-mm grinding plate.
3. Place in a food processor. Add ice and process to a temperature of 45°F–55°F. Stop food processor 2 to 3 times to check temperature.
4. Remove and place into a bowl and fold in garnish with a dough hook and mix well.
5. Pipe into soaked pretied fibrous synthetic casings (3 in.–4 in.). Tie with a metal clip or butcher's twine (bubble knot).
6. Poach in water at 160°F–170°F for 1 to 2 hours or to an internal temperature of 155°F–160°F.
7. Cool in water and refrigerate.

***Bavarian Gelbwurst—White Bologna
(Gelbwurst Forcemeat Base)***

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
20%	Turkey thighs or pork butt	6.5 oz
30	Turkey breast or veal	9.5 oz
35	Fatback without skin or pork jowls	11 oz
15	Crushed ice	6 oz
100%		32 oz
Seasoning for 2-lb Mixture		
13 g	salt	
1.5 g	white pepper	
0.5 g	mace	
0.5 g	ginger	
0.25 g	cardamom	
7 g	onion powder	
6 g	soy protein concentrate or milk powder	

Preparation

1. Cube meat and fat. Semifreeze.
2. Toss with all salt and seasonings.
3. Grind through a $\frac{3}{8}$ -in./10-mm grinding plate.
4. Place in food processor. Add all the ice and process to a temperature of 48°F–55°F. Stop food processor 2 to 3 times to check temperature.
5. Pipe into pretied and measured (14–15 in.) beef middles (2 $\frac{1}{4}$ in.–2 $\frac{1}{2}$ in./57–63 mm). Tie with a bubble knot.
6. Poach in saffron broth at 160°F–170°F for 30 to 40 minutes or to an internal temperature of 155°F–160°F.
7. Cool in cold water. Hang to dry for 2 hours and then refrigerate.
8. Store in closed container or wrap in plastic wrap.

Note: Saffron broth: For $\frac{1}{2}$ -gallon water, use 1–2 g saffron. Bring to a boil, let stand for 5–10 minutes, then strain.



Clockwise starting at noon: Leberkäse, gelbwurst, Neapolitan sausage, krakauer, gelbwurst, cooked salami, mortadella, pistachio sausage, bologna Center: Black pudding

Romanian Beef Sausage (a Jewish speciality)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
66.5%	Beef chuck	21 oz
27.5	Meat from short rib	9 oz
6	Beef suet (fat)	2 oz
100 %		32 oz

Seasoning for 2-lb Mixture

8 g	kosher salt
4 g	TCM
2 g	ground black pepper
3 g	ground coriander seeds
0.25 g	ground allspice
0.25 g	ground cloves
2 g	mustard powder
3 g	garlic powder or 5 g fresh garlic bulbs
3 g	yellow mustard seeds
40 g	plum powder
124 g	(4 oz) ice cold water

Preparation

1. Cube meat and fat and semifreeze.
2. Grind through a 3/8-in./10-mm grinding plate.
3. Grind through a 1/4-in./6-mm grinding plate into a bowl. Add salt and seasonings and water and mix with a paddle for 3 to 4 minutes on low speed.
4. Pipe into preprepared beef middles (2¹/₄–2¹/₂ in./57–63 mm) precut to 12-in. lengths. Tie with a bubble knot. Check for air pockets and remove them with a pricker.
5. Hang to dry for 2 hours or overnight in a dark, cool room.
6. Place in a smokehouse and hot-smoke to an internal temperature of 155°F (2 to 3 hours).
7. Rinse in cold water and chill.
8. Serve warm.

Note: Pork butt can be substituted for short rib and fatback for beef suet. Sheep's casings (1–1¹/₁₆ in./24–26 mm) can be substituted for beef middle. Tie or twist them into 6-inch links.

did you know?

The best beef fat (suet) for this type of sausage is the beef fat that surrounds the kidney.

White Leberkäse

Put gelbwurst forcemeat base in a greased rectangular metal or aluminum pan. Press down with a spatula to remove all possible air pockets. Let stand covered overnight in a refrigerator. Make small indentation in the shape of diamonds on the top. Bake in a water bath covered in a 350°F oven for 1 hour or to an internal temperature of 160°F.

Pistachio Sausage

Blanch 20–24 g whole pistachio nuts in salted boiling water. Cool and rub pistachio nuts between your hands to remove the peel. Chill. Then fold into 2-lb gelbwurst forcemeat base (white Bologna). Follow gelbwurst instructions to finish.

White Frankfurters

Pipe gelbwurst forcemeat base (white Bologna) into sheep casings (1–1¹/₁₆ in./24–26 mm) or hog casings (1¹/₈–1¹/₄ in./29–32 mm) and tie or twist every 6 inches. Poach in water at 160°F–170°F or to an internal temperature of 155°F–160°F. Cool in water and refrigerate. Good with pineapple sauerkraut, or sautéed with German potato salad.

Summary

After reading this chapter you will possess the knowhow to make poached sausages. Many easy recipes are provided so even beginners can successfully prepare cold cuts for any occasion. Each recipe is based on a 2-pound mixture (the capacity of a 3-quart food processor). Larger amounts can easily be calculated by multiplying the formulas provided in Chapter 2.

IN REVIEW

1. Define Prague powder #2.
2. What temperature (°F) is recommended for poaching sausages?
3. Explain the term “brat.”
4. Where on the pig are jowls located?
5. State the temperature for the perfect emulsion.
6. What does the term “TCM” stand for?
7. What state is known for using andouille sausage?
8. State the difference between a synthetic fibrous casing and a natural casing.



Brot Zeit: Cold cut sandwich boards, Neapolitan sausage, gelbwurst, hard cervelat, red pepper jelly



KEY TERMS

Coarse Brat

Chorizo

Emulsion

Merguez

Schubling

10

Bratwurst

Bratwurst, commonly known as brat, is the most popular sausage in Europe, as well as in America. The reason: It is easy to prepare and has great flavor. I have selected various types of bratwurst and easy recipes to follow.

In 1949, during my apprenticeship in Bavaria, my master, who also was a top charcutier, gave me this basic formula for bratwurst.

1/3 beef, lamb, veal, or turkey

1/3 pork shoulder or butt

1/3 fresh fatback without skin

Seasoning of choice

Grind all ingredients through a medium plate. Mix well. The bratwurst I made with this recipe was a huge success and launched me into the world of sausage making. Maybe it will also inspire you and you will have as much fun preparing these flavorful morsels as I have.

There are two types of bratwurst:

1) Coarsely ground and raw

2) Finely ground and emulsified and poached

*Top row hanging: Turkey franks, Nuremberger brat, Debbie kielbas brat, breakfast sausage
Cutting board, top row: British bangers, merguez Below: Farmer's brat, buffalo brat
Front row: Schweins wurstel, hot Italian sausage, sweet Italian sausage*



Coarse Bratwurst

The ingredients for coarse bratwurst are cubed and semifrozen for approximately 30 minutes.

They are mixed by hand with salt, seasonings, and binders (optional) and ground as directed. Then they are mixed to a sticky consistency either by hand or machine, piped into an appropriate casing, and refrigerated.

Note: Coarse bratwurst can also be smoked for a different flavor.

Fine Bratwurst

Fine bratwurst actually belongs in the category of poached sausages, but because of its size and preparation, I placed it in this chapter.

Fine bratwurst is prepared like coarse bratwurst but it is then emulsified with ice in a food processor and poached and cooled under running water before being refrigerated.

Bratwurst is good sautéed or grilled.

Note: Fine bratwurst sausages cannot be smoked.



Grinding of meat for coarse bratwurst



Semi-emulsified forcemeat for coarse bratwurst



Tying sausages into links



Removing any possible air pockets

Preparation of fine Bratwurst



1. Basic ingredients: meat, fat and ice



2. Folding in salt and seasoning mix



3. Tossing in seasoning mix



4. Grinding seasoned meat mixture



5. Emulsified fine bratwurst



6. Checking temperature 45°F–55°F



7. Piping emulsified fine bratwurst into casings



8. Twisting links



9. Poaching bratwurst in 160°F–170°F water



10. Checking internal temperature (160°F–170°F)



11. Cooling bratwurst to 140°F under running water



English breakfast with British bangers

British Bangers Piccadilly
(From My London Days)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
80%	Pork shoulder (70% meat/ 30% fat)	25.5 oz
12	Pork broth	4 oz
8	White bread crumbs	2.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground white pepper	
0.25 g	ground ginger	
0.25 g	mace	
0.25 g	rubbed sage	
5 g	soy protein concentrate	

Preparation

1. Cut pork shoulder into cubes and semifreeze.
 2. Mix with salt and seasonings and grind through a fine plate into a mixing bowl.
 3. Add broth and bread crumbs and mix well in a bowl with a paddle.
 4. Let stand overnight in a refrigerator.
 5. Pipe into hog casings (1³/₈-in.–1¹/₂-in./35–38-mm) and tie into 5-in. links.
 6. Hang to dry for 2 hours or overnight in a refrigerator; then refrigerate or freeze.
- These are great with grilled portabella mushrooms and scrambled eggs on a roll (English breakfast).

Irish Breakfast Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
61%	Pork butt (70/30)	19.5 oz
15	White bread crumbs	5.5 oz
12	Eggs, lightly beaten	3.5 oz
12	White wine, ice cold	3.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1.5 g	dried basil
1.5 g	dried rosemary
2 g	powdered marjoram
2 g	powdered garlic
1.5 g	ground black pepper
1 g	dried thyme
4 g	plum powder or soy protein concentrate

Preparation

1. Cube pork and semifreeze.
2. Mix with seasonings and grind through a ¼-in./6-mm grinding plate into a bowl.
3. Add bread crumbs and mix well with a paddle on slow speed for 3 minutes.
4. Add ice cold white wine and mix for 3 minutes on slow speed and then 1 minute on high speed.
5. Pipe into 1-in.–1¹/₁₈-in./24–26-mm lamb casings. Tie or twist into 6-in. links.
6. Let stand in refrigerator overnight.
7. Sauté to a golden brown.

Debbie's Kielbasa Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
84%	Fat pork belly without skin (50/50 fat/meat)	27 oz
14	Beef chuck	4 oz
2	Ice water or vodka	1 oz
100%		32 oz

Seasoning for 2-lb Mixture

7 g	kosher salt
5 g	TCM
1.5 g	ground black pepper
1 g	garlic powder
1.5 g	mustard seeds
6 g	soy protein concentrate or plum powder

Preparation

1. Cube meat and fat and semifreeze.
2. Mix with salt and seasonings.
3. Grind through a large (3/8-in./10-mm) grinding plate into a bowl.
4. Add ice water or vodka and mix with a paddle for 3 to 5 minutes at slow speed.
5. Pipe into hog casings. Tie into 6-in. links.
6. Hang overnight in a refrigerator or a cool room to dry.
7. Hot-smoke for 1 to 2 hours.
8. Poach for 20 minutes at 160°F–170°F or to an internal temperature of 155°F–160°F.
9. Cool in cold water. Remove and refrigerate.

*Debbie's kielbasa with sauerkraut*

Ground Coarse Bratwurst (Nuremburg Bratwurst)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
20%	Beef chuck	6.5 oz
77	Pork belly or pork butt	24.5 oz
3	Ice cold water or beer	1 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
2 g	ground white pepper	
0.5 g	mace	
0.5 g	ginger	
1.5 g	powdered marjoram	
3 g	soy protein concentrate or milk powder	
3 g	plum powder	

Preparation

1. Cube pork and beef and semifreeze.
2. Mix with salt and seasoning and grind through a coarse $\frac{3}{8}$ -in./10-mm grinding plate (pea size) into a bowl.
3. Mix with a paddle or dough hook at low speed for 1 to 2 minutes or until sticky to the touch.
4. Pipe into a rinsed hog casing ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Twist or tie into 5–6-in. links.
5. Dry in refrigerator or a cold room overnight.
6. Poach in water at 160°F–170°F for 20 minutes or to an internal temperature of 150°F–155°F.
7. Cool under running water. Dry with paper towels and refrigerate.

Hot Italian Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
71%	Pork butt or turkey thigh meat	22.5 oz
25	Fresh fatback or chicken fat trim	8 oz
4	Ice water or red wine	1.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1 g	sugar
1.5 g	crushed black pepper
1 g	powdered garlic
1.5 g	fennel seeds
0.5 g	ground pepper
0.5 g	red pepper flakes
0.5 g	lemon juice
0.25 g	ground coriander
4 g	soy protein concentrate
2 g	plum powder

Preparation

1. Cube meat and fatback and semifreeze.
2. Mix with salt and seasonings. Grind through a coarse 1¼-in.-1⅜-in./10 mm grinding plate into a bowl.
3. Add ice water or red wine and mix with a paddle for 5 minutes at low speed.
4. Pipe into hog casings (1¼ in.-1⅜ in./32–35 mm). Tie into 5–6-in. links. Refrigerate.

Note: For a different flavor use 7 g kosher salt and 5 g curing salt. After mixture is prepared, pipe into the casings and hang to dry in a cool room for two hours or until pellicle has formed. Cold-smoke (160°F) for two to three hours and poach water at 160°F for 20 minutes or to an internal temperature of 155°F.



Hot Italian sausage and peppers

Greek Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
100%	Pork butt (70/40)	32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
0.5 g	grated orange zest	
1.5 g	ground black pepper	
0.5 g	ground allspice	
1 g	dried parsley	
0.5 g	dried oregano	
0.5 g	dried thyme	
10 g	sautéed onions, blanched	
1	clove of garlic, crushed	
6 g	soy protein concentrate or plum powder	

Preparation

1. Cube meat and semifreeze.
 2. Mix with salt and seasonings, onions, and garlic. Grind through medium grinding plate (1/4 in./6 mm) into a bowl and mix with a paddle for 3 to 5 minutes at low speed.
 3. Pipe into lamb casings (3/4 in.–1 in./24–26 mm) and tie or twist into 6-in. links. Or wrap into pig's caul.
 4. Press between two sheet pans for 12 hours. Refrigerate.
 5. Sauté or bake in an oven at 400°F.
- Serve with pita bread or in a hamburger roll.

Alsatian Sausage Moulouse

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
68%	Lean pork shoulder	21.5 oz
32	Fresh fatback	10.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
6 g	kosher salt	
6 g	TCM	
1 g	sugar/dextrose	
0.25 g	ground ginger	
1.5 g	quatre-épices (1 part each ground pepper, ground nutmeg, clove, and cinnamon)	
0.5 g	crushed juniper berries	
6 g	soy protein concentrate (optional) or plum powder	

Preparation

1. Cube meat and fat and semifreeze.
2. Mix with salt and seasonings. Grind through a fine grinding plate ($\frac{3}{16}$ in./5 mm) into a bowl and mix with a paddle for 3 to 5 minutes.
3. Pipe into hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–25 mm) and tie or twist into 4–5-in. links.
4. Hang for 24 hours to dry in a room at 60°F–70°F.
5. Pack into ziplock bags and refrigerate.

Note: Blanch the sausage in water before sautéing. Great with choucroute (sauerkraut).



Schweins Wurstel with apple sauerkraut

Schweins Würstel (Bavarian Pork Brat)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
42%	Pork butt	13.5 oz
42	Pork belly	13.5 oz
9	Fresh fatback	3 oz
7	Ice water	2 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
0.5 g	dextrose/sugar
2 g	ground marjoram
0.5 g	ground coriander
2 g	ground white pepper
0.5 g	powdered ginger
6 g	soy protein concentrate or plum powder

Preparation

1. Cube pork butt, pork belly, and fatback and semifreeze.
2. Mix with salt and seasonings.
3. Grind through a medium plate ($\frac{1}{4}$ in. / 6 mm) and mix in a bowl with a paddle for 2 to 5 minutes or until sticky.
4. Pipe into lamb casings (size 24–26 mm ($1''-1\frac{1}{16}''$)) and twist or tie into 8–10-in. links. Brown in butter and serve with sauerkraut (see recipe on page 316).

Hungarian Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
42%	Pork butt	13.5 oz
42	Pork belly	13.5 oz
9	Fatback	3 oz
7	Ice water or red wine	2 oz
100%		32 oz

Seasonings for 2-lb Mixture

12 g	kosher salt
1.5 g	black pepper
1.5 g	powdered garlic
1 g	dextrose or sugar
4 g	smoked paprika
6 g	soy protein concentrate or plum powder

Preparation

1. Cube pork butt, pork belly, and fatback and semifreeze.
2. Mix with salt and seasonings. Grind through a $\frac{3}{8}$ -in./10-mm grinding plate into a bowl. Mix with a paddle or dough hook at slow speed for 3 to 5 minutes or until sticky to the touch.
3. Pipe into sheep casings (1 in.– $1\frac{1}{16}$ in./24–26 mm). Tie or twist into 6–8-in. links. Or pipe into hog casings ($1\frac{3}{8}$ in.– $1\frac{1}{2}$ in./32–25 mm). Tie or twist into 4–5-in. links.
4. Refrigerate overnight.
5. To serve, brown in butter and serve with paprika sauerkraut.

Beer Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
42%	Pork butt	13.5 oz
42	Pork belly	13.5 oz
9	Fresh fatback	3 oz
7	Ice cold beer	2 oz
100%		32 oz

Seasonings for 2-lb Mixture

12 g	kosher salt
2 g	white pepper
1 g	crushed caraway seeds
1 g	powdered marjoram
4 g	soy protein concentrate
4 g	plum powder

Preparation

1. Cube pork butt, pork belly, and fatback and semifreeze.
2. Mix with salt and seasonings. Grind through a $\frac{3}{8}$ -in./10-mm grinding plate and mix in a bowl together with the ice cold beer with a paddle or dough hook on low speed for 3 to 4 minutes, or until sticky to the touch.
3. Pipe into prepared hog casings ($1\frac{3}{8}$ in.– $1\frac{1}{2}$ in./35–38 mm). Twist or tie into 4–5-in. links.
4. Refrigerate overnight.
5. Brown in butter or grill.

Farmer's Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Pork butt or shoulder	16 oz
50	Fat pork belly without skin	16 oz
100%		32 oz
Seasoning for 2-lb Mixture		
6 g	kosher salt	
6 g	TCM	
1.5 g	dextrose or sugar	
1.5 g	ground white pepper	
0.25 g	ground nutmeg	
0.5 g	powdered marjoram	
0.25 g	garlic powder (optional)	
6 g	soy protein concentrate or plum powder	

Preparation

1. Trim all meats and cube meat. Semifreeze.
2. Mix well with salt and seasonings. Grind through a 3/8-in./10-mm grinding plate. Place in a bowl and mix with a paddle or dough hook at low speed for 2 to 5 minutes.
3. Pipe into pork casings (1¼ in.–1⅜ in./32–35 mm) and tie into 4–5-oz links.
4. Let stand overnight in a refrigerator.
5. Cold-smoke for 1 to 2 hours or longer (optional). Refrigerate.
6. To serve, place in hot water (not boiling) to warm sausages for 15 to 20 minutes. Then brown in butter or grill.

Note: Brown over low heat. If the temperature is too high, sausages will burst.

Dutchess County Fair Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
15%	Beef chuck	5 oz
45	Pork shoulder or butt	14.5 oz
40	Pork belly	12.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1.5 g	ground white pepper
0.5 g	ground allspice
0.5 g	ground mace
0.5 g	ground ginger
1 g	ground cardamom
6 g	soy protein concentrate
3 g	plum powder

Preparation

1. Cube all meat and semifreeze.
2. Mix with salt and seasonings and grind through a hamburger grinding plate ($\frac{3}{16}$ in./5 mm) into a bowl.
3. Mix with paddle or dough hook at low speed for 2 to 5 minutes or until sticky.
4. Pipe into hog casings ($1\frac{3}{8}$ in.– $1\frac{1}{2}$ in./35–38 mm). Twist or tie into 4–5-in. links.
5. Refrigerate overnight.
6. Sauté in butter or grill.

Southern German Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
30%	Beef chuck	9.5 oz
70	Pork belly (fatty)	22.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground white pepper	
0.5 g	ground mace	
0.5 g	ginger powder	
1.5 g	marjoram	
4 g	soy protein concentrate	
4 g	plum powder	

Preparation

1. Cube all meats and semifreeze.
2. Mix with salt and seasonings.
3. Grind through a $\frac{3}{8}$ -in./10-mm grinding plate. Place in bowl and mix with a paddle or dough hook on low speed for 2 to 5 minutes or until sticky.
4. Pipe into hog casings (1¼ in.–1⅜ in./32–35 mm).
5. Twist or tie into 5–6-in. links.
6. Poach in water at 160°F–170°F for 20 minutes or to an internal temperature of 155°F–160°F.
7. Cool under running water. Refrigerate covered.
8. Dip in milk and sauté until golden brown.

Turkey Frankfurter

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
90%	Turkey breast, leg meat, skin, and turkey fat	29 oz
10	Crushed ice	3 oz
100%		32 oz

Seasoning for 2-lb Mixture

8 g	kosher salt
4 g	TCM
15 g	plum powder or soy protein concentrate
1 g	onion powder
1 g	ground coriander
1 g	ground mace
1 g	ground mustard
2 g	smoked paprika
1 g	garlic powder
1 g	dextrose/sugar
1 g	ground black pepper
1 g	ground white pepper

Preparation

1. Cube turkey skin and fat and semifreeze.
2. Grind through hamburger grinding plate (1/4 in./6 mm) and refreeze for 30 minutes.
3. Place in a food processor and add salt, seasonings, and ice.
4. Purée to an internal temperature of 45°F–55°F.
5. Pipe into lamb casings (1 in.–1 1/8 in./24–26 mm). Twist or tie into 5–6 in. links.
6. Hang to dry in cool place for 4 hours or until pellicle forms.
7. Hang in smokehouse and hot-smoke, starting at 165°F. Smoke to an internal temperature of 155°F.
8. Cool under running water until internal temperature is reduced to 110°F.
9. Hang in a cool room for 2 to 3 hours or until dry. Refrigerate.

Note: This recipe can also be made with chicken meat.

Willmar Turkey Brat

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
70%	Turkey (½ white and ½ dark)	22.5 oz
30	Pork belly without skin, pork fatback, or turkey fat	9.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground white pepper	
0.5 g	smoked paprika	
0.25 g	lemon zest or juice	
4 g	soy protein concentrate	
3 g	plum powder	

Preparation

1. Cube meats and semifreeze.
2. Mix with salt and seasonings. Grind through a fine hamburger plate (¼ in./6 mm) into bowl and mix with paddle at low speed for 2 to 5 minutes or until sticky.
3. Pipe into hog casings (1⅜ in.–1½ in./35-38 mm). Tie or twist into 6-inch links. Refrigerate overnight.

Note: For dietary purposes this sausage can be made from fresh turkey by combining white and dark meat (16 oz/16 oz). No fat is needed. Salt can be reduced to 9 g for each 2-lb mixture. You can add from 1 oz to 5 oz of ice cold chicken or turkey broth.

Venison Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
40%	Venison	12.5 oz
60	Fat pork belly	19.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
7 g	kosher salt	
5 g	TCM	
1.5 g	dextrose/sugar	
2.5 g	ground white pepper	
0.5 g	ground coriander	
1	small clove of garlic	
5 g	white wine, ice cold	
4 g	soy protein concentrate	
2 g	plum powder	

Preparation

1. Cube meat and semifreeze.
2. Mix with minced garlic and salt and seasonings.
3. Grind through $\frac{3}{8}$ -in./10-mm grinding plate into a bowl. Add white wine and mix at low speed with paddle or dough hook for 3 to 5 minute or until sticky.
4. Pipe into hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Tie in links as desired.
5. Dry overnight in refrigerator or cool room.
6. Smoke at 150°F–170°F for 1 to 2 hours or as needed.
7. Poach in water at 160°F–170°F for 20 minutes or to an internal temperature of 155°F.
8. Cool in water and refrigerate.

Good for grilling.

Linguica Portuguese Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
95%	Pork butt(70% meat/30% fat)	30.5 oz
5	Red wine, ice cold	1.5 oz
100%		32 oz

Seasonings for 2-lb Mixture

8 g	kosher salt
4 g	TCM
5 g	powdered garlic
1 g	ground white pepper
1 g	sugar/dextrose
1 g	oregano
0.5 g	cayenne pepper
4 g	plum powder
4 g	soy protein concentrate

Preparation

1. Cube pork and semifreeze.
2. Grind through a $\frac{3}{8}$ -in./10-mm grinding plate into a bowl and mix for 3 minutes with a paddle on low speed.
3. Pipe into hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm) and twist or tie into 5-in.–6-in. links.
4. Hang overnight in a cool room or refrigerator to dry.
5. Hot smoke at 170°F to an internal temperature of 155°F–160°F.
6. Cool in water and refrigerate.

Serve hot or cold.

Merguez (A North African Sausage)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
100%	Lamb shoulder	32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1 g	smoked paprika
8 g	onion powder
3 g	powdered garlic
1 g	ground black pepper
1 g	ground coriander
0.5 g	ground cumin
0.5 g	powdered oregano
6 g	soy protein concentrate

Preparation

1. Cube lamb meat and semifreeze.
2. Mix with salt and spices. Grind through a fine grinder plate ($\frac{3}{16}$ in./5 mm) into a large bowl and mix with a paddle or dough hook for 3 to 5 minutes or until sticky to the touch.
3. Pipe into 1-in.- $\frac{1}{16}$ -in./24-mm lamb casings and tie into 5-in.-6-in. links.
4. Refrigerate overnight.

Good for grilling, sautéing, or braising. Serve with tomato salsa and couscous.



Merguez with couscous

Chorizo

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
91%	Pork butt (70/30)	29 oz
9	Ice cold white wine	3 oz
100%		32 oz
Seasonings for 2-lb Mixture		
8 g	kosher salt	
4 g	curing salt	
3 g	garlic powder	
5 g	smoked paprika	
0.5 g	cumin	
0.5 g	oregano	
1.5 g	powdered black pepper	
0.5 g	cayenne pepper	
6 g	plum powder or soy protein concentrate	

Preparation

1. Cube pork and semifreeze.
2. Mix with all seasonings and grind through $\frac{3}{8}$ -in./10-mm grinding plate into a bowl.
3. Add white wine and mix with a paddle on slow speed for 3 minutes.
4. Pipe into hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Tie or twist into 6- or 12-in. links.
5. Smoke with hot smoke (170°F) to an internal temperature of 155°F.
6. Cool under running water. Refrigerate overnight.

Serve hot or cold.

Emulsified Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
40%	Pork butt or shoulder	13 oz
25	Lean pork belly	8 oz
20	Pork fatback	6 oz
15	Crushed ice	5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1.5 g	white pepper
1 g	ground coriander
0.25 g	zest of lemon or juice
6 g	soy protein concentrate or milk powder

Preparation

1. Cube pork butt and pork belly and semifreeze.
2. Cube fatback and semifreeze.
3. Mix meat with salt and seasonings.
4. Grind through large grinding plate ($\frac{3}{8}$ in./10 mm).
5. Grind fat through same grinding plate.
6. Place meat and fat together with ice into a 3-quart food processor and process to 45°F (maximum 56°F).
7. Pipe into hog casings (1¼ in.–1⅜ in./32–35 mm). Twist or tie into 4-in.–5-in. links.
8. Hang to dry in a cool room for 2 hours.
9. Poach at 160°F–170°F for 20 minutes or to an internal temperature of 155°F–160°F. Cool in cold water.

Skinless Bratwurst

Preparation

1. Use the recipe for emulsified bratwurst (page 138).
2. Place sausage forcemeat into a piping bag or sausage stuffer.
 - a. For piping bag, use plain 1-in.–1½-in. tube and pipe onto moist parchment paper. Semifreeze.
 - b. For sausage stuffer, use medium tube. Pipe 3 to 4 rows next to each other. Semifreeze.
3. Dip knife into hot water. Cut sausage to desired length (link) and drop into 160°F–170°F water for 25 minutes or to an internal temperature of 155°F–160°F.
4. Cool in cold water. Chill in refrigerator.

Note: Make sure parchment paper is wet so sausages can slide easily into water.

Note: To serve, dip in cold milk and sauté to golden brown.

Turkey Bratwurst Swiss Style (Schuebling)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
60%	Turkey white meat	19 oz
25	Fatback or chicken fat	8 oz
15	Crushed ice	5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1.5 g	ground white pepper
0.5 g	mace
0.5 g	ginger
6 g	soy protein concentrate or milk powder

Preparation

1. Cube meat and fat. Semifreeze.
2. Mix with salt and seasonings. Grind through a $\frac{3}{8}$ -in./10-mm grinding plate.
3. Place with ice in a 3-quart food processor and process to an internal temperature of 45°F–56°F.
4. Pipe into hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Twist or tie into 4-in.–5-in. links.
5. Hang for 2 to 3 hours in a cool room to form a pellicle (dry casing). Poach in 160°F–170°F water for 20 minutes or to an internal temperature of 155°F–160°F.
6. Cool in water and refrigerate.
7. Brown in butter and serve with roesti potatoes.



Turkey bratwurst with Swiss roesti potatoes



Weisswurst with potato salad and a pretzel

Weisswurst, a Bavarian Specialty

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
25%	Turkey breast	8 oz
25	Pork butt	8 oz
10	Soft cooked pork skin (possibly from pig's feet or pork belly)	3 oz
25	Fresh fatback	8 oz
15	Crushed ice	5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground white pepper	
0.5 g	ground mace	
0.5 g	powdered ginger	
6 g	soy protein concentrate or milk powder	
	grated zest of 1/3 of a lemon	
Garnish		
4 g	fresh parsley, chopped coarse	
1 g	dried parsley	

Preparation

1. Cube meat and fat. Semifreeze.
2. Mix with salt and seasonings and grind through a large plate.
3. Grind cooked pork skin through medium plate.
4. Place ground meat and fat in a food processor with the ice and run to an internal temperature of 48°F–56°F.
5. Add ground pork skin and run blade 4 to 5 times. Pulsate in chopped parsley.
6. Fill hog casings (1¼ in.–1⅜ in./32–35 mm) and twist or tie into 3–4-oz links.
7. Poach in 160°F–170°F water for 20 minutes or to an internal temperature of 155°F–160°F.

Note: This sausage can also be made with 50% white turkey meat or 50% pork butt.

Munich Schweins Wurstel #2

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
10%	gelbwurst (white bologna) forcemeat base	3.5 oz
90	Pork butt	28.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1.5 g	ground black or white pepper
1.5 g	powdered marjoram

Preparation

1. Cube pork belly. Semifreeze.
2. Mix well with salt and spices.
3. Grind through a medium plate ($\frac{3}{16}$ in./5 mm) into a mixing bowl and add the gelbwurst (white bologna) forcemeat base. Mix well.
4. Pipe into lamb casings (size 24–26 mm (1"– $\frac{1}{16}$ ")). Tie into 5-in.–6-in. long links. Refrigerate.

Sweet Italian Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
91%	Pork butt (70% lean/30% fat)	29 oz
9	Ice cold water or white or red wine	3 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1 g	sugar	
1.5 g	coarse black pepper	
1 g	whole fennel seed	
4 g	soy protein concentrate	
2 g	plum powder	

Preparation

1. Cube pork and semifreeze.
2. Mix with salt and seasonings.
3. Grind through large plate ($\frac{3}{8}$ in./10 mm) into a bowl. Add ice water and mix with a paddle at low speed for 2 to 5 minutes or until sticky to the touch.
4. Pipe into rinsed hog casings ($1\frac{1}{8}$ in.– $1\frac{1}{4}$ in./29–32 mm). Tie or twist into 5-in. links.
5. Let stand overnight in a refrigerator. Separate links.

Breakfast Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
91%	Pork butt (70/30)	29 oz
9	Ice water	3 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground white pepper	
1.5 g	poultry seasoning	
6 g	soy protein concentrate or plum powder	

Preparation

1. Cube pork butt and semifreeze.
2. Mix with salt and seasonings.
3. Grind through medium ($\frac{3}{8}$ in./10 mm) grinding plate.
4. Place in a bowl. Add ice water and mix with a paddle for 2 to 5 minutes or until sticky.
5. Either make patties or pipe into sheep casings ($\frac{3}{4}$ in.–1 in./22–24 mm). Tie or twist into 5-in. links.
6. Refrigerate overnight. Separate links.

Turkey Parsley Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
70%	Turkey thigh meat	22.5 oz
30	Chicken or turkey fat trim	9.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground white pepper	
0.5 g	lemon zest or juice	
6 g	soy protein concentrate or plum powder	
Garnish		
8 g	fresh chopped parsley or cilantro	

Preparation

1. Cube meat and chicken fat. Semifreeze.
2. Mix with salt, seasonings, and parsley. Grind through a hamburger grinding plate into a mixing bowl.
3. Mix with a paddle for 5 minutes on medium speed.
4. Pipe into prewashed and soaked hog casings (1¼ in.–1⅜ in./32–35 mm).
5. Twist or tie into 5–6 inch links. Separate and refrigerate or freeze.
6. Before grilling or sautéing, blanch in 170°F water for 10 to 20 minutes.



Buffalo bratwurst with baked beans and biscuits

Buffalo Bratwurst Bill Cody

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
42%	Buffalo meat	13.5 oz
42	Fat pork belly	13.5 oz
9	Fatback	3 oz
7	Ice water or red wine	2 oz
100%		32 oz

Seasoning for 2-lb Mixture

8 g	kosher salt
4 g	TCM
1 g	dextrose or sugar
2 g	ground black pepper
3 g	chili powder (optional)
1 g	powdered garlic
6 g	soy protein concentrate or plum powder cheddar cheese (optional)

Preparation

1. Cube meat and fat and semifreeze.
2. Mix with salt and seasonings. Grind through a large grinding plate ($\frac{3}{8}$ in./10 mm) into a bowl and mix with a paddle for 5 to 6 minutes. Fold in cheese (optional).
3. Pipe into hog casings ($1\frac{3}{8}$ in.– $1\frac{1}{2}$ in./25–38 mm). Twist or tie into 5-in.–6-in. links.
4. Separate and refrigerate or freeze.
5. Before grilling or sautéing, blanch for 10 to 20 minutes in 170°F water.

Serve with baked beans and biscuits.

Note: Make sure cheese is cut to fit the stuffing tube.

Venison Bratwurst with Fruits

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
40%	Venison shoulder, connective tissue removed	13 oz
30	Pork butt	9.5 oz
15	Pork fatback or trimmings	4.5 oz
10	Fresh blueberries	3.5 oz
5	Balsamic vinegar (ice cold)	1.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	sea salt
1 g	rosemary
1 g	sage
1 g	crushed juniper berries
1.5 g	ground black pepper
4 g	soy protein concentrate or plum powder
2–4 g	ice cold gin

Preparation

1. Cube venison and pork shoulder and semifreeze.
2. Toss with salt and seasonings and grind through a $\frac{3}{8}$ -in./10-mm grinding plate.
3. Cube fatback and semifreeze. Grind pork fat through a $\frac{1}{4}$ -in./6-mm grinding plate.
4. Place meat and fat into a bowl. Add balsamic vinegar and gin and mix with a paddle or dough hook for 5 minutes on slow speed. Fold in blueberries.
5. Pipe into rinsed and soaked hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Twist or tie into 4-in. links.
6. Refrigerate overnight.

Rabbit or Chicken Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
60%	Boneless rabbit or chicken, connective tissue removed	20 oz
20	Pork shoulder	6 oz
20	Fatback	6 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	Mediterranean sea salt	
1.5 g	ground white pepper	
1.5 g	powdered mustard	
1 g	dried rosemary	
1 g	dried thyme	
1 g	dried parsley	
6 g	soy protein concentrate or milk	

Preparation

1. Cube rabbit and pork shoulder and semifreeze.
2. Mix with salt and seasonings and grind through a $\frac{3}{8}$ -in./10-mm grinding plate into a bowl.
3. Cube and semifreeze fatback and grind through a $\frac{3}{8}$ -in./10-mm grinding plate into the bowl and combine meat and fat mixtures.
4. Mix with a paddle or dough hook for 5 minutes on low speed or until sticky.
5. Refrigerate for 2 hours.
6. Pipe into prerinsed and soaked hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Twist or tie into 4-in. links.
7. Refrigerate overnight.

Note: For different texture and flavor, add 5–10 g dried cranberries (crasins) or 5–10 g dried mushrooms.

Chicken Broccoli and Cheese Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
30%	Chicken thigh meat	9.5 oz
30	Chicken breast meat	9.5 oz
30	Chicken fat trim or fatback	9.5 oz
10	Frozen broccoli	3.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1.5 g	white pepper
0.5 g	marjoram
6 g	soy protein or plum powder or milk powder
2–3 oz	cheddar cheese, cubed small

Note: Use 2–3 oz of cubed cheddar cheese for 2-lb mixture.

Preparation

- 1 Cube meat and fat and semifreeze.
- 2 Mix with salt and seasonings and grind with frozen broccoli through a fine hamburger grinding plate.
- 3 Fold in cheese and mix with dough hook in a bowl for 5 to 6 minutes on medium speed.
- 4 Pipe into hog casings (1³/₈ in.–1¹/₂ in./32–35 mm). Twist or tie into 5-in.–6-in. links.
- 5 Separate and refrigerate or freeze.
- 6 Before sautéing or grilling, blanch in 170°F water for 10 to 20 minutes.

Chicken and Artichoke and Cheese Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
40%	Boneless chicken breast	13 oz
30	Boneless chicken thighs	9.5 oz
30	Chicken fat trim or fatback	9.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1.5 g	ground white pepper	
1.5 g	poultry seasoning	
6 g	plum powder or soy protein concentrate	
Garnish		
2.5 oz	frozen artichokes hearts, cubed	
1.5 oz	white mild cheddar cheese, medium cubed	

Preparation

1. Cube chicken breast, chicken thigh, and chicken fat and semifreeze.
2. Mix well with all spices and salt and grind through a large grinding plate ($\frac{3}{8}$ in./10 mm) into a bowl. Mix with a paddle for 5 minutes on medium speed.
3. Fold in cheese and artichokes.
4. Pipe into hog casings ($1\frac{3}{8}$ in.– $1\frac{1}{2}$ in./35–38 mm). Twist or tie into 5-in.–6-in. links. Separate and refrigerate or freeze.
5. Before sautéing or grilling, blanch in 170°F water for 10 to 20 minutes. Serve immediately.

Note: Make sure that artichokes and cheese are cut to fit the stuffing tube.

Amish Pennsylvaniaian Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
25%	Beef chuck	8 oz
35	Pork butt	11 oz
40	Pork belly	13 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
2 g	ground white pepper
0.5 g	ground allspice
2 g	powdered marjoram
4 g	soy protein concentrate
3 g	plum powder

Preparation

1. Cube beef, pork butt, and belly and semifreeze.
2. Mix with salt and spices.
3. Grind through a coarse ($\frac{3}{8}$ -in./10-mm) grinder plate into a bowl and mix with a paddle at slow speed for 2 to 5 minutes.
4. Pipe into hog casings ($1\frac{1}{4}$ in.– $1\frac{3}{8}$ in./32–35 mm). Twist or tie into 5-in. links. Refrigerate.
5. Poach in 160°F water for 10 minutes. Sauté or grill.

County Fair Brat

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Pork butt (70/30)	16 oz
30	Beef chuck	9.5 oz
6.5	Fat back, no skin	6.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1.5 g	ground white pepper
0.5 g	mace
2 g	marjoram
1 g	grated lemon zest
4 g	plum powder or soy protein concentrate
12 g	ice cold milk

Preparation

1. Cube pork beef, and fat and semifreeze and grind through a large ($\frac{3}{8}$ in./10 mm) grinding plate.
2. Place into a mixing bowl, add salt and seasoning and milk, mix with a paddle for 3–5 (in.) minutes.
3. Pipe into prepared hog casing size $1\frac{1}{4}$ in. to $1\frac{3}{8}$ in., 32–35 mm.
4. Tie or twist into 5–6 in. links and refrigerate overnight, separate and sauté or grill.

Note: For a different flavor use 1.5 g ground white pepper, 0.5 g all spice, 1 g marjoram, 1 g thyme 1 knife tip cinnamon, or 1.2 g white pepper ground. 1 g caraway seeds, 0.5 g mace; instead of milk, use beer.

Paprikash

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
100%	Pork but (70/30)	32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
1 g	ground black pepper
2 g	smoked paprika
1 g	sweet hungarian paprika
2 g	marjoram
6 g	plum powder or milk powder
10 g	ice water
	orange juice to soak hog casing

Preparation

Soak hog casing over night in orange juice in the refrigerator

1. Cube pork and semifreeze.
2. Grind through a large ½ in. grinding plate into a mixing bowl.
3. Add salt, seasoning and ice water and mix with a paddle for 3–5 minutes on slow speed.
4. Pipe into preprepared hog casing size 1¹/₈ in.–1¹/₄ in. (29–32 mm).
5. And tie or twist into 6 inch links, rest overnight and separate.
6. Sauté and serve with sauerkraut and spatzle.

Specialty Sausages Recipes

Andouille

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
95%	Pork butt (70/30)	30.5 oz
5	Ice water	1.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
8 g	kosher salt	
4 g	TCM	
0.5 g	cayenne pepper	
2 g	smoked paprika	
1 g	ground black pepper	
0.5 g	dried thyme	
0.5 g	red pepper	
4 g	soy protein concentrate (keep separate)	
2 g	powdered garlic	

Preparation

1. Cube meat and semifreeze.
2. Add salt and spices. Toss well.
3. Cover with plastic wrap and refrigerate for 1 to 2 days.
4. Grind half of the mixture through a $\frac{3}{8}$ -in./10-mm grinding plate.
5. Grind the rest of the meat through a $\frac{1}{4}$ -in./6-mm grinding plate. Fold in soy protein concentrate.
6. Mix both mixtures in a bowl with a paddle or dough hook for 3 to 5 minutes on slow speed or until sticky.
7. Pipe into prepared hog casings ($1\frac{1}{2}$ in.– $1\frac{3}{4}$ in./38–42 mm) and tie with a bubble knot into rings.
8. Hang uncovered in a refrigerator to cool, or in a dark room for 12 hours.
9. Smoke at 130°F for 2 hours. Then increase temperature to 165°F to 170°F and smoke 2 hours more or to an internal temperature of 155°F.
10. Rinse with cold water and hang to dry overnight in the refrigerator or in a cool dark room. Refrigerate.

Seafood Sausage

Ingredients

21 oz	Fresh scallops
21 oz	Fillet of flounder or striped bass without skin
½ tsp	White pepper
Up to 1 pint	Heavy cream, ice cold
2	Egg whites
½ tsp	Sea salt or to taste

Garnish

3 oz	coarsely cut shrimp
1.5 oz	peeled pistachio nuts
2 oz	blanched mussels or oysters
1 tsp	chopped chives

Preparation

1. Cube scallops and fish fillet. Semifreeze.
2. Toss with salt and seasonings. Place in a food processor and process by adding cold heavy cream slowly to desired consistency.
3. Remove and make a test dumpling. Poach in 160°F water for 4 minutes. Adjust seasoning.
4. Fold in garnish. Mix well.
5. Pipe into hog casings (1¹/₈ in.– 1¹/₄ in./29–32 mm or 1¹/₄ in.–1³/₈ in./32–35 mm). Twist or tie into 4-in. links.
6. Poach in 160°F water for 20 minutes or to an internal temperature of 155°F.
7. Cool in running water and refrigerate.

Note: Sauté over low heat or warm in 160°F water and serve with blanched spinach or over honey sauerkraut.

Tuna Fish Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
100%	Fatty tuna fish belly without skin	32 oz
Seasoning for 2-lb Mixture		
9 g	sea salt	
3 g	TCM	
0.5 g	ground ginger	
2 g	ground marjoram	
0.5 g	ground cardamom	
2 g	black pepper	
6 g	soy protein concentrate	
3 g	plum powder	
4 g	poultry seasoning	

Preparation

1. Semifreeze cubed fatty tuna belly.
2. Mix with salt and seasonings and grind through a large (1/2-in./12-mm) grinding plate.
3. Mix carefully by hand to achieve a light emulsion.
4. Pipe into hog casings or fresh round collagen casings. Tie or twist into 5-in. links.
5. Refrigerate overnight.
6. Sauté or grill.

Great for breakfast or luncheon salads.

Note: If tuna belly is not available, use 70% tuna fish and 30% chicken fat.

Salmon Bratwurst

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
95%	Fatty salmon belly, trimmed without skin	30.5 oz
5	Ice cold water or white wine	1.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	sea salt	
1 g	dextrose/sugar	
1.5 g	ground white pepper	
1 g	smoked paprika	
6 g	soy protein concentrate or milk powder	
2 g	plum powder	
2 g	chopped chives or parsley	

Preparation

1. Cube trimmed salmon belly and semifreeze.
2. Fold in salt and seasonings without herbs and grind through a ½-in. or ¾-in. grinding plate.
3. Carefully mix in ice cold water or wine and chives to form a light emulsion.
4. Pipe into hog or lamb casings. Tie or twist into 6-in. links.
5. Let stand for 2 hours or overnight in a refrigerator.
6. Sauté or poach

Note: If salmon belly is not available, use 70% salmon trimmings and 30% chicken fat.

Curry Sausage (An Indian Speciality)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
100%	Lamb shoulder or chuck	32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
6 g	Madras curry	
2 g	ground black pepper	
2 g	ground cinnamon	
1 g	dried thyme	
30 g	currants	
100 g	pomegranate juice, ice cold	
3 g	garlic powder	
30 g	plum powder	

Preparation

1. Cube lamb and semifreeze.
2. Grind through a ¼-in./6-mm grinding plate into a bowl. Add all seasonings and mix with a paddle on slow speed for 5 minutes.
3. Pipe into rinsed sheep casings, 1 in.–1¹/₁₆ in./24–26 mm. Twist or tie into 6-in. links.
4. Refrigerate.
5. Sauté or grill.

Note: This sausage can also be made with pork butt.

Spicy Tunisian Lamb Sausage

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
100%	Lamb chuck or shoulder	32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
2 g	ground cumin
2 g	black pepper
6 g	hot paprika
2 g	cinnamon powder
5 g	fresh garlic, chopped
2 g	dried thyme
40 g	plum powder
100 g	pomegranate juice

Preparation

1. Cube lamb and semifreeze.
 2. Grind through a 1/8-in. grinder plate into a bowl.
 3. Add seasonings to ground meat and mix with a paddle for 2 minutes.
 4. Add pomegranate juice and mix 3 minutes on slow speed.
 5. Pipe into sheep casings (1 in.–1 1/6 in./24–26 mm). Check for air pockets and remove them with a pricker.
 6. Tie or twist into 6-in. long links.
 7. Refrigerate overnight.
 8. Sauté or grill over low heat.
- Serve with couscous or fruit compote with dates.

Summary

After reading this chapter, you will know the difference between fine and coarse bratwurst. By following the recipes, you can create an array of different sausages. Each formula is for 2 pounds and can easily be converted to a larger amount if desired.

IN REVIEW

1. Name two types of bratwurst.
2. How many millimeters is a $\frac{3}{16}$ -in. grinding plate?
3. State the internal temperature of a bratwurst after poaching.
4. Hog casings are sold by the _____?
5. State the temperature for hot smoking.
6. What size of casing is needed for Hungarian bratwurst?
7. A North African sausage is called _____?



KEY TERMS

Aspic

Forcemeat

Gelatin

Pâté En Croûte

Terrine

11

Pâtés and Terrines

Pâtés and terrines have a long illustrious history. They were mentioned in documents dating to 75 B.C. when a Greek chef, Epinatos, was working in Egypt. Epinatos prepared various mixtures from meat, fat, blood, and honey and baked them in bread. His creations took the world by storm. It was the beginning of “fast food” and writings from that time mention that vendors at sports arenas became upset when the games were interesting because they sold fewer “pâtés,” but when the games were not interesting, they sold more “pâtés.” Well, nothing has changed over all the centuries, as vendors’ complaints are the same today, only the food has changed to franks and pizzas.

When Catherine de’Medici married King Henry II of France in 1533, her chefs brought to the French royal court the Italian specialty polpeta made with ground meats from rabbits. With the added expertise of the French king’s chefs, the pâté as we know it today was born.

Bottom left: Pheasant pie, pâté en croûte
Center, left: Pâté campagne, duck terrine, Top: French liver pâté



In spite of their reputation of elegance and sophistication, pâtés started life more as a preservation method as back then no refrigeration was available and food was preserved by baking it in bread. In the early nineteenth century, the celebrated chef Antonin Careme baked forcemeats in long rectangular vessels instead of using dough to enclose the pâtés. Thus the terrine was born and “terrine” became the new buzzword in the courts of Europe. After baking, these terrines were covered with pure lard and later with *chaud froid* in order to preserve them the same way the dough did. Today, especially with our busy schedules, the preparation and look of pâtés are changing again. They are being made in the shape of pies or just baked in terrines and served unmolded.

With all their history, pâtés and terrines are interesting to study because, on the one hand they are prepared like sausages, and on the other hand they are simple meat loafs enclosed in dough.

Types of Forcemeats

In this chapter, I present recipes and the methods for preparing three basic forcemeats that are used in pâtés and terrines:

1. Straight forcemeat
2. Country-style forcemeat
3. Mousseline

Straight Forcemeats

Straight forcemeat is made from pork, pork fat, and a dominant meat (for example, pheasant) in equal parts. The ingredients are ground or emulsified in a food processor. The meat is cubed, semifrozen, seasoned, cured, and prepared the same way it is in sausage making.

Country-Style Forcemeat

Country-style of forcemeat is coarse in texture. It is made from pork, pork fat, and liver. It is ground through various sizes of grinding plates, seasoned, mixed, and then baked or poached in water in an enclosed vessel.

Mousseline

Mousseline is a light fine-textured forcemeat made from turkey, veal, chicken, game, or fish. It is ground, seasoned, and emulsified in a food processor with cream and eggs. It is then molded into *quenelles* (dumplings), piped into natural casings, placed in a terrine, and then poached, or baked in a water bath.

did you know?

The term forcemeat is derived from the action of forcing meat through a mesh or grinding plate. It is forced meat.



Pâté en croûte molds



Various types and shapes of terrines

Preparation of Forcemeats

Forcemeats, also called brat or farces, are the base of sausages. They are made from raw meats, mostly pork, but can also be made from beef, poultry, fish, or mollusks such as shrimp or lobster. For better taste and texture, I suggest using only well-exercised cuts, as they are more muscular and have more flavor than tender cuts.

For mousseline forcemeats, white meats, fish, or shellfish are used. Heavy cream is substituted for the animal fat. Having everything ready and observing good sanitary practices will help in the preparation of pâtés, terrines, or mousselines. All ingredients and equipment must be kept at approximately 36°F to 40°F.

Seasonings

As in any full emulsion or semi-emulsion (grinding and mixing) process, salt plays a vital role. The salt draws out moisture and proteins from the meat and ensures a good “bind.” Using carefully measured herbs and ground spices creates the flavor.

Seasonings should complement the main flavor of the meat used and not be overpowering. In some cases, wine, brandy, or grain-based spirits can be used to enhance the flavor and the aroma. Colorful garnishes allow the cook to add eye appeal and develop additional textures and flavor.

Production of Forcemeats

Keep ingredients cold. Keep equipment cold. This is important to the success of pâtés and terrines. Keep ingredients, and machinery between 36°F and 40°F. The low temperature reduces the risk of foodborne illnesses.

Prepare all ingredients according to the recipe you are using: grind and mix them or emulsify them as you would for sausages.

It is important that grinding knives, grinding plates, and food processor blades be kept sharp at all times.

Terrines (vessels or molds are lined with thinly sliced fatback or pig’s caul/crepinette (see photo) or sprayed or greased with oil or butter before filling them with forcemeat. Do not overfill the terrine. Allow about ½ inch of space below the top of the

terrine. Cover the terrine with plastic wrap and aluminum foil and place it in a roasting pan. Fill the pan halfway up the terrine with hot water and place in a 350°F oven.

Note: The water temperature should be 175°F–185°F. Bake for 2 hours or to an internal temperature of 150°F to 155°F. Remove and cool. Then chill.

Pig’s Caul

The caul (English) or crépinette (French) or Schweine Netz (German) is a fine, fatty tissue enclosing the intestines of the pig.

Before using, the caul should be soaked in cold water for 2 to 3 hours in order to remove all blood clots and impurities, then squeezed dry and refrigerated. You can use it when needed.



Soaked pig’s caul

Pâtés and terrines can interact with sausage forcemeats, especially with the bologna and gelbwurst (white bologna) forcemeat bases. Using these two forcemeat bases in pâtés and terrines is a new way of creating attractive and tasty pâtés or terrines.

did you know?

The term pâté in French is “pie”. It is traditionally served in a crust (en croûte) or molded as a terrine. The crust was not originally intended to be eaten, only to hold the pâté together. Julia Child called it a luxurious meat loaf.

Duck Terrine

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
40%	Boned meat from a young duck	13 oz
5	Onions	1.5 oz
10	Mushrooms (possibly chanterelles)	3 oz
30	Duck liver or chicken liver	9.5 oz
15	Gelbwurst forcemeat base (white bologna)	5 oz
100%		32 oz

Seasoning for 2-lb Mixture

5 g	kosher salt
1 g	ground white pepper
0.5 g	powdered or chopped thyme

Preparation

1. Bone and skin duck. Remove all fat and sinews.
2. Cube or dice skin and fat and sauté for 3 to 5 minutes over high heat. Remove crisp skin and sear duck meat in the duck fat (approximately 3 to 5 minutes). Remove and cool.
3. Sauté diced onions golden. Add cubed mushrooms and sauté for 5 minutes. Remove from fat.
4. Cool and grind cooked duck skin, mushrooms, liver, and seared duck meat through a hamburger grinding plate ($\frac{3}{16}$ in./5 mm) grinding plate into a bowl. Add the salt and seasonings and fold in gelbwurst forcemeat base. Mix well.
5. Line a terrine with thinly sliced fatback or pig's caul. Fill with forcemeat and cover with a lid.
6. Bake in a water bath in a 250°F oven for 1½ hours or to an internal temperature of 155°F–160°F.
7. Cool and remove from the mold. Roll into plastic wrap and refrigerate.

Goose or Turkey Liver Pâté

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
25%	Goose liver or turkey liver	8 oz
50	Pork butt	16 oz
25	Fatback or pork belly	8 oz
100%		32 oz

Seasoning for 2-lb Mixture

12 g	kosher salt
2 g	ground white pepper
0.5 g	smoked paprika
1 g	marjoram powder
1 g	ground basil
45 g fresh or 20 g dehydrated	onions

Preparation

1. Cube liver and sear (1 to 2 minutes) on high heat. Remove.
 2. Slice onions thinly and sauté or blanch until transparent (1 to 2 minutes) or use dehydrated onions.
 3. Grind cubed pork, fatback, onions, and liver through a fine hamburger ($\frac{3}{16}$ -in./5-mm) grinding plate into a bowl. Add salt and seasonings, and mix well with a paddle.
 4. Line the terrine or mold with thinly sliced fatback or pig's caul.
 5. Fill terrine three-quarters full.
 6. Cover with a lid or plastic wrap and aluminum foil and bake in a water bath in a 250°F–300°F oven to an internal temperature of 155°F.
 7. Remove and cool.
 8. Remove from the mold. Wrap in plastic wrap and refrigerate.
- Serve with gherkins, rustic bread, and a glass of merlot.

**did you
know?**

The terms terrine and pâté are used interchangeably.



Pâté en croûte with orange wedges and lingonberries



Pâté en croûte mold with template



Rolling out dough



Template on rolled dough



Pâté mold outlined with dough, dough lid and eggwash

Pâté en Croûte with Chicken Livers

20 oz	White bologna forcemeat base
7–8 oz	Firm chicken livers
4 oz	Pistachio nuts

Seasoning for Garnish

2 g	kosher salt
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Preparation

1. Clean and trim chicken livers and soak in buttermilk overnight. Remove and rinse under running water and dry with paper towels. Season with salt.
2. Place white bologna forcemeat and pistachio nuts in a bowl and mix on low speed with a paddle. Fold in chicken livers.
3. Roll out pâté dough and line a pâté mold with dough (see photo on page 212). Fill the mold with forcemeat (make sure you press it carefully down into the dough-lined mold to remove any possible air pockets).
4. Fold dough ends over forcemeat and brush with egg whites. Close with a dough lid. Press ends with a fork to seal and cut a chimney hole. Brush with egg whites.
5. Refrigerate overnight.
6. Preheat oven to 500°F. Place pâté in the oven and turn oven down to 350°F. Bake for 1½ hours or to an internal temperature of 155°F.
7. Remove and cool. Fill with aspic if desired. Refrigerate.

Pâté en Croûte with Morels

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
65%	Venison, pork butt, pork loin, or pheasant meat	21 oz
5	Mushrooms	1.5 oz
1	Diced morels or truffles	0.5 oz
29	Bologna forcemeat base	9 oz
100%		32 oz
Seasoning for 2-lb Mixture		
7 g	salt	
1.5 g	ground black pepper	
1 g	dried basil	
0.5 g	dried rosemary	
1 g	dried thyme	
	pâté dough (see recipe on page 215)	

Preparation

1. Soak morels for 1 to 2 hours in warm water; prepare pâté dough.
2. Trim meat; remove fat and sinews. Cube into ½-inch cubes.
3. Mix with salt and seasonings and sear in hot oil. Remove and cool.
4. Dice truffle, squeeze morels dry, and finely dice. Cool.
5. Mix all ingredients with bologna forcemeat base.
6. Let stand in refrigerator for 1 hour.
7. Roll pâté dough 1/3-inch thick. Refrigerate to stiffen. Line pâté mold with dough. Reserve some dough for the lid and to decorate.
8. Fill mold with forcemeat (do not overfill). Brush ends of dough with egg white and cover. Crimp sides.
9. Cut 2 chimney holes, brush pâté with egg white. Let it stand in refrigerator for 1 to 2 hours.
10. Place into 400°F oven for 20 minutes. Reduce heat to 350°F and bake for 40 minutes or to an internal temperature of 155°F–160°F.
11. Cool for 1 hour and fill with aspic if desired. Chill overnight, remove from mold.

Note: I prefer to bake this pâté in an aluminum pie pan. After chilling I cut the pâté into wedges and serve it with onion marmalade (see Chapter 14).

did you know?

Pâté en croûte is an elegant ground meat dish/baked in a dough crust that can be served hot or cold.

Pâté Dough (Basic Recipe)

(Yield 2-lbs)

20 oz	flour
1½ oz	powdered milk
¼ oz	baking powder
½ oz	salt
3½ oz	lard or shortening
2½ oz	butter
2	eggs
½ oz	vinegar
4–5 oz	milk or water

Preparation

1. Place flour, powdered milk, baking powder, salt, lard, and butter into a food processor and pulse until dough is a fine meal.
2. Add eggs and vinegar and pulse for 4 to 6 seconds.
3. Place the dough into a mixer. Add 4–5 oz milk and knead for 5 minutes on medium speed, until the dough forms a ball. Check consistency and, if needed, add more milk. Remove from mixer and knead by hand until smooth. Square off.
4. Wrap in plastic wrap.
5. Let stand for 30 minutes to 1 hour in the refrigerator before rolling and cutting to line pâté mold.

Note: To change the flavor and appearance of the pâté dough, add spices, herbs, grated cheese, or saffron. Or use different flour, such as rye, whole wheat, or corn.

Saffron Pâté Dough

Ingredients

1 recipe	basic pâté dough
1 large	pinch of saffron
	Use half of the warm water or milk
2 tsp	chopped dill
2 tsp	chopped chives

Preparation

Infuse saffron into the water/milk. Add herbs to the basic dough recipe.

Tomato Parsley Pâté Dough

Ingredients

1 recipe	basic pâté dough
2 tsp	ground coriander
2 tsp	ground cumin
1½ oz	tomato ketchup
2 tsp	chopped parsley

Preparation

1. Prepare pâté dough as called for in the basic recipe.
 2. In the mixing process, add coriander, cumin, tomato ketchup, and parsley.
-

Pâté Brisée

For 2 pies

2½ cups	flour
1 tsp	kosher salt
1 cup	cold unsalted butter, cut into ½-in. pieces
¼–½ cup	ice water or milk

Preparation

1. Pulse flour and salt in a food processor.
 2. Add butter and pulse until mixture forms coarse crumbs.
 3. With the mixer running, add ice water slowly until dough holds together (not wet).
 4. Divide dough into balls.
 5. Shape into discs.
 6. Wrap in plastic wrap. Refrigerate for 1 hour or overnight.
- Use for pâtés and pies.

Simple Pâté Dough

21 oz	flour
10.5 oz	soft butter
¼ tsp	kosher salt
4–6 oz	milk or water
1	egg

Preparation

1. Place flour in a food processor.
2. Add salt and cubes of butter and pulse for 30 to 40 seconds.
3. Mix water/milk and egg and add to dough mixture. Work it into dough.
4. On a floured surface, knead into smooth elastic dough.
5. Cover with plastic wrap and refrigerate for 1 hour.
6. Roll thin and line Pâté mold.



Pheasant pie with corn salad

Pheasant Pie

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
65%	Pheasant meat, breast and legs	20.5 oz
5	Button mushrooms or chanterelles	1.5 oz
2	morels	0.5 oz
29	gelbwurst forcemeat base (white bologna)	9.5 oz
100%		32 oz
Seasoning for 2-lb Mixture		
6 g	salt	
1.5 g	ground black pepper	
0.5 g	chopped basil	
0.5 g	chopped rosemary	
0.5 g	chopped thyme	

Preparation

1. Soak mushrooms for 1 to 2 hours in lukewarm water.
2. Prepare pâté dough (see basic pâté dough recipe on page 215). Let stand for 2 hours in refrigerator.
3. Trim pheasant meat and cut into 1-in. cubes. Mix with salt and seasoning.
4. Heat oil and sear pheasant meat (3 minutes). Remove and cool.
5. Slice mushrooms, squeeze dry, and cut in small cubes.
6. Sauté for 1 minute in hot oil. Cool.
7. Roll pâté dough ¼-in. thick and line a greased 10-in. pie plate.
8. Place gelbwurst (white bologna) forcemeat base in a bowl. Add garnish and mix with a paddle on low speed.
9. Fill pie plate with mixture. Press down well to remove possible air pockets. Top with pâté dough. Cut chimney and brush with egg white. Decorate with leftover dough.
10. Bake in a preheated 500°F oven for 20 minutes.
11. Reduce temperature to 350°F and bake for 40 minutes or to an internal temperature of 155°F–160°F.
12. Turn off oven and let pâté stand for 20 minutes in the oven.
13. Remove and cool. Prepare some aspic and fill through chimney holes, if desired. Refrigerate overnight.



Duck terrine with pickled cherry tomatoes



Outlining terrine with thinly sliced fatback



Slicing fatback thin

Terrine of Lamb

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
48%	Lean shoulder of lamb	15.5 oz
32	Fatback, without skin	10 oz
10	Calf, chicken, or turkey liver	3.5 oz
5	Dried rye bread crumbs	1.5 oz
5	Heavy cream	1.5 oz
100%		32 oz
Garnish		
32%	Gelbwurst (white bologna) forcemeat (base)	10.5 oz
32%	Thinly sliced fatback for lining terrine	10.5 oz

Seasoning for 2-lb Mixture

10–11 g	kosher salt
10 g	onion, sliced
1 g	ground thyme
1 g	ground basil
0.5 g	garlic powder
1 g	ground black pepper
0.5 g	ground cardamon

Preparation

1. Cube lamb shoulder and semifreeze.
2. Sauté sliced onions in oil until golden. Cool.
3. Mix lamb with salt and spices. Add chicken liver and onions, and sprinkle with rye crumbs. Pour in heavy cream.
4. Marinate overnight in the refrigerator.
5. Grind through a $\frac{3}{16}$ -in./5-mm hamburger grinding plate.
6. Grind 10 oz fatback through a $\frac{3}{16}$ -in./5-mm hamburger grinding plate.
7. Add meat mixture and fat to gelbwurst forcemeat base and mix at low speed for 1 to 3 minutes.
8. Line terrine with thinly sliced fatback.
9. Fill terrine with forcemeat and top with a lid.
10. Bake in a water bath for 60 minutes in a 350°F oven or to an internal temperature of 155°F–160°F.
11. Cool. Remove from mold. Wrap in plastic wrap and refrigerate

Homestead Liver Terrine

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
70%	Bologna forcemeat base	22.5 oz
30	Turkey or chicken liver, trimmed and cleaned	9.5 oz
100%		32 oz

Seasoning for 2-lb Mixture

3 g	kosher salt
2 g	TCM
1 g	ground white pepper
0.5 g	ground mace
2 g	onion rings, sliced thin
	Pâté dough (see recipe on page 215)

Preparation

1. Sauté onion rings in oil until golden brown. Cool.
2. Place liver and onion into a food processor and purée until it is blistery. Add salt and seasoning.
3. Place liver mixture with bologna forcemeat base in a bowl and mix with a paddle at low speed. Finish with high speed for 10 seconds.
4. Line a terrine with plastic wrap and thinly sliced fatback.
5. Carefully fill terrine with liver mixture to avoid air pockets.
6. Cover with fatback sheets.
7. Close with lid and bake in a water bath at 250°F for 1½ hours or to an internal temperature of 155°F–160°F. Cool. Unmold and refrigerate.

did you know?

A terrine is a glazed earthen ware (terracotta) cooking dish with vertical sides and a tightly fitting lid. It is generally oblong or oval. Terrine also refers to food prepared in a terrine.

Pâté de Campagne

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
34%	Pork belly	11 oz
34	pork shoulder or pork butt	11 oz
32	pork or calf's liver	10 oz
100%		32 oz

Seasoning for 2-lb Mixture

10 g	kosher salt
2 g	TCM
1	clove of garlic, finely chopped
1 g	juniper berries, crushed
1 g	ground black pepper
1 g	finely chopped thyme
30 g	roasted onions
4 g	brandy

Garnish

50 g	pitted prunes, soaked in 3 Tbsp warm brandy
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For the Terrine

10 oz	pig's caul
4 slices	lemon or orange
2	bay leaves

Preparation

1. Cube pork belly, shoulder, and calf's liver.
 2. Add salt, seasonings and roasted onions.
 3. Grind through a $\frac{3}{16}$ -in./5-mm grinder plate.
 4. Add prune garnish and mix well.
 5. Line a terrine with the pig's caul.
 6. Fill terrine with mixture. Cover with plastic wrap and press down to remove any possible air pockets.
 7. Cool in refrigerator for 4 hours.
 8. Top with orange slices and bay leaves.
 9. Cover terrine with a lid or aluminum foil.
 10. Place in a roasting pan, filling it halfway with warm water.
 11. Poach/bake in a 325°F oven for 1½ to 2 hours, or to an internal temperature of 155°F.
 12. Remove from oven and cool.
 13. Refrigerate overnight.
- Serve with corn bread, and gherkins.

did you know?

The classic French basic country pâté (pâté campagne) was the blueprint for many other pâtés?

As it is easy to prepare, it allows beginners to practice and gain experience in pâté making. Adding different garnishes, besides prunes, hazelnuts, dried pears, dried apricots, dried apples, or any combination thereof, will change a pâté's flavor and texture.

Pâté de Campagne # 2

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
25%	Pork, turkey or chicken liver	8 oz
50	Pork butt	16 oz
25	Fresh fatback	8 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
2 g	ground white pepper	
0.5 g	smoked paprika	
0.75 g	powdered marjoram	
45 g	thin onion rings	
Garnish		
up to 3.5 oz	pistachio nuts	

Preparation

1. Cube pork and fatback and semifreeze.
2. Clean livers and trim. Toss meat and fat with salt and seasoning.
3. Cut liver in thick slices and sear in hot oil. Cool.
4. Sauté onion rings in oil until transparent. Cool.
5. Grind meat, fat, liver, and onions through fine grinding plate ($\frac{3}{16}$ -in./5 mm) into a bowl and mix with paddle 3 minutes at low speed.
6. Finish for 30 seconds on high speed and fold in pistachio nuts.
7. Line a pâté mold with pâté dough. Brush inside with egg white. Fill with mixture. Brush with egg white and enclose with a dough lid. (See pâté basic dough directions on page 215).
8. Let stand for 30 minutes. Preheat oven to 450°F.
9. When pâté is in the oven, lower temperature to 350°F and bake for 1 hour or to an internal temperature of 155°F–160°F. Cool.
10. Fill with aspic if desired. Place in a refrigerator and chill.
11. Remove pâté from mold carefully.

Moullard Pâté Hudson Valley

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
60%	Moullard duck meat (breast or legs)	19.5 oz
5	Shallots	1.5 oz
10	Mushrooms (chanterelles or any others)	3 oz
25	Duck, goose, or chicken liver (soaked in buttermilk)	8 oz
100%		32 oz
25%	Bologna forcemeat base	8 oz

Seasoning for 2-lb Mixture

10 g	kosher salt
1.5 g	ground white pepper
1 g	thyme

Preparation

1. Bone duck and remove skin. (Save for headcheese.)
2. Cube duck meat into medium cubes.
3. Heat oil until smoky and sear duck meat for 30 seconds on all sides. Remove and chill.
4. Dice shallots and sauté. Add mushrooms and sauté for 1 minute and chill.
5. Rinse livers, and dry with a paper towel. Cut in thirds.
6. Heat olive oil until smoky and sear livers for 2 minutes. Chill.
7. Combine all meat, shallots, mushrooms and livers. Mix with seasoning and fold in bologna forcemeat base.
8. Line a terrine with thin bacon slices or fatback. Fill with pâté mixture.
9. Cover with lid and bake in a water bath (at 350°F) for 1 to 1½ hours or to an internal temperature of 155°F to 160°F.
10. Let stand for 1 hour.
11. Remove from mold. Wrap in plastic wrap and refrigerate overnight.

French Liver Pâté

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
75%	Bologna forcemeat base	24 oz
25	Pork, calf's, chicken, or turkey liver	8 oz
	Thinly sliced fatback or pig's caul	
100%		32 oz
Seasoning for 2-lb Mixture		
2 g	kosher salt	
2 g	TCM	
0.5 g	ground white pepper	
35 g	onions	

Preparation

1. Slice onion thin and sauté in lard or oil until golden.
2. Cool and grind with the liver through a fine hamburger ($\frac{3}{16}$ -in./5-mm) grinding plate into a bowl. Mix with a paddle at high speed until it thoroughly blisters (bubbles).
3. Fold in salt and seasoning and bologna forcemeat base. Mix well on slow speed.
4. Line a terrine with fatback or pig's caul. Fill $\frac{3}{4}$ of the mold.
5. Cover with fatback or pig's caul.
6. Let stand in refrigerator for 2 hours. Cover with a lid and poach/bake in a water bath in a 350°F oven for 1 to 1½ hours or to an internal temperature of 155°F.
7. Cool. Remove from mold and wrap in plastic wrap. Refrigerate overnight.

Turkey Terrine/Pâté Jenni'O Turkey Store

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
50%	Turkey leg meat	16 oz
25	Turkey breast	8 oz
25	Fatback or chicken or turkey fat	8 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
1 g	ground green peppercorns	
0.5 g	allspice	
0.25 g	mace	
0.25 g	rosemary	
0.25 g	marjoram	
0.25 g	cinnamon	
One clove of garlic	crushed	
8 g	brandy	
Garnish for 2-lb Mixture		
16.5%	Turkey liver	5 oz
24	Fresh fat back	7.5 oz

Preparation

1. Cube turkey and pork fatback and semifreeze.
 2. Mix with salt and spices and grind with crushed garlic through a fine ($\frac{3}{16}$ -in./5-mm) hamburger grinding plate into a bowl and mix for 3 to 4 minutes with a paddle on low speed.
 3. For garnish, cube turkey liver, and fatback into small cubes or dice small and fold into ground meat.
 4. Adjust seasoning.
 5. Line a terrine with thinly sliced fatback. Fill it $\frac{3}{4}$ full with forcemeat and cover with fatback.
 6. Cover with a lid or aluminum foil and poach/bake in a water bath for 50 to 60 minutes in a preheated 250°F oven or to an internal temperature of 155°F.
 7. Cool for 2 hours.
 8. Unmold and roll into plastic wrap. Refrigerate overnight.
- Serve with onion marmalade.

Rillettes (A French Specialty)

Percentage of Meat and Fat	Meat and Fat Ingredients	For 2-lb Mixture
40%	Goose meat or chicken meat	13 oz
40	Pork shoulder	13 oz
8.5	Pig jowls	2.5 oz
8.5	Goose fat or chicken fat	2.5 oz
3	Brandy	1 oz
100%		32 oz
Seasoning for 2-lb Mixture		
12 g	kosher salt	
2 g	quatre-épices	

Preparation

1. Simmer goose meat, pork shoulder, and pig jowls in water until tender.
 2. Render goose or chicken fat.
 3. Cool meat and grind through a large grinding plate ($\frac{3}{8}$ -in./10 mm) into a bowl.
 4. Add cold goose or chicken fat, salt, and quatre-épices.
 5. Mix well with paddle at low speed.
 6. Place in a stone crock or porcelain dish.
 7. Cover and chill overnight in refrigerator.
- Serve with toast.

Quatre-Épices (A Classic Spice Mixture)

Yield 1 cup

8 Tbsp	black peppercorns
3 tsp	ground nutmeg
2 tsp	ground ginger
2 tsp	crushed cloves
2 tsp	ground ginger

Preparation

1. Grind fine in a spice mill.
2. Store in a cold place in airtight containers.



Spice grinder

Classic Recipes

Duck Terrine/Pâté with Pistachios and Kumquats

1 6 lb	duck, deboned with skin removed, and duck liver
10 oz	pork butt
1 lb	pork belly
2	eggs
3 oz	pistachio nuts (soaked in hot water and peeled)
1 Tbsp	kosher salt
1 tsp	ground black pepper
1 Tbsp	finely chopped tarragon
2 pieces	pork caul, soaked in water
16	kumquats (washed)

Marinade

½ cup	brandy
2	cloves garlic, crushed
	zest of 1 orange
Few sprigs	thyme

Preparation

1. Place duck meat and liver into a bowl. Add marinade and cure in the refrigerator for 12 hours.
2. Remove duck breast and liver from marinade and cut into ½-in. cubes.
3. Grind duck legs, pork butt, and pork belly through a ¾-in./10-mm grinding plate. Into a mixing bowl. Add cubed duck breast and liver together with marinade.
4. Add eggs, nuts, salt, pepper, and tarragon.
5. Mix well with a paddle at low speed.
6. Line terrine with pig's caul.
7. Fill with forcemeat halfway up the terrine. Press down to remove any possible air pockets.
8. Top with rest of forcemeat. Press down again to remove all air pockets. Smooth the top.
9. Cover with pig's caul. Cover terrine with a lid or aluminum foil.
10. Place in a roasting pan filled halfway up with warm water. Poach/bake in a 250°F oven for 2 hours or to an internal temperature of 155°F.
11. Remove terrine from water. Cool. Weight down and refrigerate overnight.
12. Unmold. Remove jelly or liquid with a paper towel and place back into terrine upside down. Cover with tomato aspic.

Present terrine to your guests and cut at the table. Serve with salad or onion marmalade.

did you know?

To remove skin from pistachio nuts, blanch them in boiling water. Let them stand until cool and rub off the skins.

To make cracklings, cut duck skin into large pieces and place in a pan with 1 cup of water. Bring to a boil and then simmer until the water evaporates. Increase the heat and crisp the skins. Serve as garnish with the pâté.

Pâté of Rabbit

1	large rabbit boned, saddle loins removed
14 oz (400 g)	pork butt
4	shallots, coarsely chopped
1 Tbsp	olive oil
2	medium carrots, peeled and finely diced
3	eggs
1 Tbsp	canned green peppercorns, drained
1 Tbsp	salt or to taste
½ tsp	ground black pepper
2 Tbsp	finely chopped parsley
1 tsp	finely chopped thyme
1 tsp	finely chopped sage
1 pig's caul	(½ lb or 250 g) or thinly sliced fatback to line mold

Marinade

⅓ cup (75 ml)	slivovitz, kirsch, or brandy
3 sprigs	thyme, crushed
3 leaves	sage, bruised
1 tsp	coarse ground black pepper
1 bay leaf	toasted and crumbled

Preparation

1. Place rabbit loins, cubed rabbit meat, and pork in a bowl. Add marinade and toss with meat. Cover with plastic wrap and refrigerate for 12 hours.
2. Sweat diced shallots in olive oil for 1 minute. Remove and cool.
3. Blanch carrots in salted boiling water for 1 minute. Drain and shock in ice water and drain again.
4. Remove loin of rabbit from marinade, pat dry with a paper towel, and sear in oil. Cool.
5. Remove rest of meat, add salt and seasonings (except herbs), and mix well.
6. Add cold shallots and grind through a ¾-in./5-mm grinding plate.

(continued)

(continued)

7. Strain marinade, add to ground meat.
 8. Add carrots, eggs, peppercorns, salt, and pepper. Mix well in bowl using paddle at slow speed. Adjust seasonings and refrigerate for 2 hours.
 9. Toss chopped herbs well. Sprinkle over a sheet pan and roll rabbit loins until well covered with herbs.
 10. Line a terrine with fatback or pig's caul. Spoon half of meat mixture into the terrine mold. Smooth surface with a narrow spatula.
 11. Place herb covered rabbit loins into the center. Press down. Spoon in rest of forcemeat making sure there are no air pockets.
 12. Smooth top and cover with pig's caul. Cover with a lid or aluminum foil.
 13. Place into a roasting pan. Fill pan with hot water halfway up the terrine.
 14. Bake/poach in 325°F oven for 1½ to 2 hours or to an internal temperature of 155°F.
 15. Remove from water bath. Place a weight on top of the terrine.
 16. Cool and remove from terrine. Roll in plastic wrap and refrigerate for 12 hours.
- Serve with chutney or pickled pears.

Gehockte Leber—Chopped Liver (A Jewish Speciality)

Ingredients

1 lb	chicken or turkey liver
½ cup	chicken fat
1 cup	diced Vidalia onions (aprox. 2 onions)
1 Tbsp	sherry wine
2	hard-boiled eggs
1 Tbsp	chopped parsley
½ tsp	kosher salt, or to taste
¼ tsp	ground black pepper or to taste

Preparation

1. Rinse livers with cold water and pat dry with a paper towel.
2. Melt 2 Tbsp chicken fat and sauté livers over medium heat until livers are a pink color (5 minutes).
3. Remove livers from pan.
4. Add 3 Tbsp chicken fat and sweat onions for 5 minutes (no color). Add sherry and simmer onions for 5 minutes. Add to livers.
5. Add eggs and grind through a $\frac{3}{16}$ -in. grinding plate into a bowl. Add rest of chicken fat and seasonings and mix on low speed for 5 minutes. Adjust seasonings.
6. Refrigerate before serving.

Summary

This chapter explains the inner world of pâtés, terrines, *pâté en croûte*, and meat pies. You are given detailed instructions for starting and finishing classic as well as modern creations. You will learn the glorious history of pâtés and their role in the past. Recipes for classic pâtés as well as modern time-saving pâtés are presented. The recipes all address the real meaning of *pâté*—pies filled with delectable combinations of emulsified forcemeats: simple straight forcemeats, and country-style forcemeats.

IN REVIEW

1. What is a terrine?
2. What is forcemeat?
3. How is a terrine cooked?
4. What is the finishing internal heat of a *pâté* or terrine?
5. What are the steps in the preparation of a *pâté campagne*?
6. What is a *pâté en croûte*?
7. What dough is used for pâtés?
8. Name the three basic forcemeats.

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KEY TERMS

Bloom

Dariole

Egg Wash

Headcheese

Kassler Rippchen

Leaf Gelatin

Powdered Gelatin

Oblique

Timbale



12

Aspics, Headcheese, and Savory Jellies

Classic aspic is made from bones, pork skin, water, and aromatics that are simmered to extract flavor and gelatin and then clarified. This process is difficult and cumbersome and takes time. As time in today's frantic culinary world is limited, I, therefore, suggest preparing mock aspic by using a strong, flavorful clear meat broth enforced with sheet or powdered gelatin.

To be good, aspic must have good clarity and a pleasing consistency and an exciting taste.

Clockwise, left to right: Smoked pork loin in aspic, parsley headcheese, sauce vinaigrette, classic savory jelly, asparagus and gelbwurst aspic



Classic Aspic Gelée

Ingredients

7 lb	pig's feet and pig skin
2 lb	chicken bones or beef bones
4 qts	Enough water to cover feet, skin, and bones
	sachet filled with 10 crushed peppercorns and 3 bay leaves
1	bouquet garni (1 carrot, 1 celery stalk, 4 parsley stems)
1	onion cut in half and burned black (to give some color)
1 oz	kosher salt

Preparation

1. Rinse pig's feet, skin, and bones well under cold water.
2. Place in a large pot. Add sachet, bouquet garni, and water and bring to a boil. Simmer for 3 to 4 hours.
3. Strain carefully through a moist cheesecloth or fine-mesh china cap.
4. Refrigerate overnight.
5. Wash off the accumulated fat. If it's too gelatinous, add some more water. If it is too soft, reduce some more. If it is too cloudy, clarify by whipping 3 to 5 egg whites into the warm aspic. Bring to a boil and simmer for 15 minutes.
6. Let stand for 15 minutes and carefully strain through a moist double cheesecloth or linen napkin. Adjust seasoning and add a little vinegar (optional).

Shortcut Mock Aspic

1. Use 2 quarts of flavorful meat broth. Heat to a temperature of 170°F and sprinkle 1 oz–1½ oz powdered gelatin over broth.
2. Let it bloom (soak) for 2 minutes and mix into broth. Make sure there are no lumps.
3. Adjust seasoning and add a touch of vinegar or sherry wine (optional).

Note: Pour 1 Tbsp of the aspic on a tasting plate and refrigerate. Let it set for 20 minutes. Check for strength and taste.

To decorate savory aspics and add garnish to give color, use kosher dill pickles, sliced blanched mushrooms (domestic and wild), cherry tomatoes, heirloom tomatoes, eggs, truffles, stuffed green or black olives and other vegetables, and fresh green herbs, like chives, scallions, dill, parsley, chervil, and basil. Aspics (savory jelly), jellied sausages, headcheeses, and pâtés are refreshing foods served during the hot summer months, either for lunch, snacks, or dinners. Serve with different salsas or vinaigrettes and home-fried potatoes. Enjoy!

Classic Aspic (Savory Jelly)

Ingredients

2½ lb	pickled calf's or pig's feet/knuckles
1	white leek
2–3	celery stalks, peeled
1	carrot, peeled
1	onion, peeled, cut in half, and blackened
1	tomato, cut into quarters
3½ qt	water

Sachet

5	crushed peppercorns
2	crushed juniper berries
1	bay leaf
1	garlic clove
	salt and sugar to taste

Preparation

1. Place calf's or pig's feet/knuckles into a large pot and add 3½ qt of water. Bring to a boil, skim, and simmer lightly for 4 hours or until tender. Halfway through the cooking time, add blackened onion halves, sachet, and tomato.
2. Julienne leek, white and some green.
3. Peel celery and julienne.
4. Peel carrot and julienne.
5. Remove calf's or pig's feet/knuckles from broth and cool.
6. Strain broth and clarify, if needed.
7. Use some of the broth to cook the vegetables tender and shock them.
8. Season broth/aspic.
9. Place a teaspoon on a plate and refrigerate for 30 minutes. Check strength of aspic. If too soft, add more powdered gelatin.
10. Remove skin and meat from feet/knuckles and julienne. Rinse with warm water.
11. Add cooked vegetables.
12. Line a terrine or metal mold with plastic wrap. Fill with meat and vegetable mixture. Press down and fill with aspic. Cover with a lid or plastic wrap and weight down.
13. Chill in refrigerator overnight.
14. Unmold. Cut into ½-in. thick slices and serve with thinly sliced red onions and herbal vinaigrette or any salsa you choose.

Note: For eye appeal and taste, pour a layer of tomato aspic on the bottom of a pan and refrigerate for 30 minutes. Then fill as described in the text and after chilling the classic aspic, finish with a layer of tomato aspic.



Classic aspic dariole, jellied pig's feet and garnish in aspic

did you know?

Cooks of the Middle Ages (1400 to 1500) discovered that meat broth cooked with gelatinous bones will seal meats from the air and therefore keep it from spoiling. Over the years chefs developed this gelatinous broth into light, refreshing dishes and called them savory aspics.

Beet Aspic**Ingredients**

28 oz	red beet juice
8.5 oz	meat broth
3 oz	Madeira wine
1 oz	powdered gelatin
	some salt and pepper to taste

Preparation

1. Warm beet juice and meat broth to 170°F. Season with salt and pepper.
2. Add Madeira and sprinkle gelatin powder over surface. Bloom (soak) for 5 minutes.
3. Stir well, avoiding lumps.
4. Pour into a mold and refrigerate overnight.
5. Unmold and cut into small cubes. Use to garnish or cover (nape) terrines.

Tomato Aspic

Ingredients

2 lb	ripe tomatoes
1	unpeeled carrot, cubed
2 oz	celery stalks, rinsed and cubed
3 oz	shallots
6–8	basil leave
	juice of ½ lime
10	peppercorns (sachet)
½ Tbsp	coarse sea salt
20	leaves of gelatin, soaked in cold water or 2.5 oz of powdered gelatin
3	cloves of garlic, peeled
½ cup	tomato ketchup

Preparation

1. Wash tomatoes, carrots, celery, shallot, basil, and garlic. Put through a vegetable juicer.
2. Pour into a casserole. Add sachet, salt, and tomato ketchup and bring to a boil.
3. Strain through cheesecloth, china cap, or linen napkin (approx. 1 qt).
4. Soak leaves of gelatin in cold water for 10 to 15 minutes. Squeeze dry, and dissolve.
5. Adjust seasoning and cool.
6. Test to check strength of aspic. Place a teaspoon of the aspic in the refrigerator for 20 minutes. If soft and watery, add more gelatin to the warm broth.

Note: For fast action use 1 cup V8 juice, ½ cup warm pork broth, and add 1 Tbsp powdered gelatin. Bloom (soak) and dissolve. Season with salt and white pepper.

7. Chill for 12 hours.

did you know?

The term “bloom,” when used professionally, means “soaking.” It is also a device that measures the rigidity of gelatin invented by Mr. Bloom, a scientist. The higher the bloom, the higher the grade and the price.

Plated Aspic (Savory Jelly)

Ingredients

2 lb	pork skin (no fat) or turkey skin
4	fresh pig's knuckles or feet
2–3	kosher dill pickles
1 qt	cold water
30 g (1–1¼ oz)	powdered gelatin if pig's knuckles are used
40 g (1–1¾ oz)	powdered gelatin if turkey skin is used
	salt (start with 1 tsp) or to taste
1	sachet of 4 crushed black peppercorns and 1 small bay leaf
¼ tsp	sugar
½ oz	plain white vinegar or to taste
2 Tbsp	chopped chives

Preparation

1. Soak turkey skin or pork skin for 2 to 3 hours in cold water.
2. Place in a large pot. Add pig's knuckles and cover with water (3 qts). Add sachet and salt and simmer for 2 to 3 hours or until tender.
3. Remove all items from the broth and cool. Clarify if needed.
4. Strain broth and sprinkle powdered gelatin over surface. Let it bloom (soak) and dissolve. Stir carefully to avoid lumps. Season with salt, sugar, and vinegar.
5. Place a teaspoon of aspic on a plate in the refrigerator to test the strength and taste.
6. Remove skin and meat from pig's knuckles.
7. Julienne pork or turkey skin. Julienne pickles. Combine and mix well.
8. Place into four to five soup bowls.
9. Cover lightly with aspic jelly and chill overnight in refrigerator.
10. Sprinkle with chopped chives. Serve with boiled potatoes.

Note: To enhance eye appeal and taste, decorate with sliced hard-boiled eggs or dill pickle.

Luncheon Aspic

Ingredients

32 oz	pork loin center cut or Kassler Rippchen (four, 6-oz portions)
1	large carrot, peeled and cut oblique
2	hard-boiled eggs
6–7	gherkins
4–6 lbs	pig's or calf's feet for the aspic jelly

Seasoning for 1 quart of broth

1/3 Tbsp	kosher salt or to taste
1 tsp	plain vinegar or to taste
1	sachet of 2–3 crushed peppercorns, 1 small crushed bay leaf, 5 parsley stems

Preparation

1. Place pork loin or Kassler Rippchen into a large pot. Add pig's feet and cover with water. Bring to a boil and simmer for 2 hours or until pork is tender.
2. After 1 hour add sachet, carrot, and salt and simmer for 30 minutes.
3. Remove pork and carrots and cool.
4. Simmer pig's feet for 1 more hour.
5. Cut loin or Kassler Rippchen, into four 6-oz portions. Trim and place in a soup bowl. Add carrots.
6. Fan the gherkins, slice eggs, and decorate each pork cutlet and refrigerate.
7. Strain aspic. Season with salt and some vinegar.
8. Place a tablespoon of aspic on a plate in the refrigerator for 20 minutes and check strength of aspic. If too weak, either reduce or add some gelatin powder.
9. Pour room-temperature aspic carefully over cutlets until lightly covered. Refrigerate 2 to 3 hours. Serve with home fried potatoes or salsa of your choice.



Smoked and cooked pork cutlets in aspic, Italian vinaigrette



Terrine lined with plastic wrap



Pouring aspic into terrine



Covering headcheese with plastic wrap before refrigeration

Homemade Headcheese

Ingredients

24.5 oz	cooked ham or pork skin
24.5 oz	pork butt or pork neck
4	medium carrots, peeled and cubed
6–8	medium-sized kosher dill pickles, cubed
½	peeled celery root, cubed
¾ oz	kosher salt to season pork butt
⅓ tsp	ground white pepper or to taste

Preparation

1. Place pork butt or pork neck, peeled celery root, and carrots in a pot and cover with water. Simmer for 1 hour or until tender.
2. Remove meat and vegetables. Cool and cube.
3. Cube cooked ham or pork skin.
4. Combine cooked pork and ham/pork skin. Season with salt and pepper and refrigerate for a few hours.
5. Measure 1 quart warm pork broth and add 1–1½-oz powdered gelatin and bloom (soak). Mix in carefully to avoid lumps or use 12 to 15 leaves of gelatin (softened).
6. Place ham, pork, carrots, kosher pickle, and celery in a terrine lined with plastic wrap.
7. Fill with aspic until garnish is slightly covered. Cover with plastic wrap and weight down.
8. Refrigerate for 24 hours, unmold, and slice.

did you know?

Making an oblique or roll cut is easy.

1. *Place a carrot on a cutting board and make a diagonal cut to remove the stem.*
 2. *Holding the knife in the same position, roll the carrot one half turn or 180 degrees and make a rough cut with two angled edges.*
 3. *Continue to roll and cut.*
-



Country headcheese with olives and pickles

Country Headcheese

Ingredients

24½ oz	cooked pig's feet and fresh (green) ham and skin
24½ oz	cooked ham or pig's head
3–4	carrots
6	medium-sized kosher dill pickles
2	stalks of peeled celery

Seasonings

½ oz	kosher salt
⅓ tsp	ground white pepper or to taste

Aspic

1 qt	broth
3 Tbsp	vinegar
1½–2 oz	powdered gelatin

Preparation

1. Simmer pig's feet and green ham, carrot, and celery for 2½ hours in seasoned water or until tender. Remove and cool. (Check carrots and celery as they cook faster and remove).
2. Cut pig's feet and ham approximately ½-in. in diameter.
3. Cut carrots, celery, and pickle oblique. Mix with seasonings.
4. Let stand for 2 hours in a refrigerator.
5. Prepare aspic by adding powdered gelatin to hot broth. Dissolve. Add vinegar.
6. Press cubed meat and vegetables into rectangular mold or terrine lined with plastic wrap.
7. Pour as much aspic as needed to cover lightly. Cover with plastic wrap and weight down. Refrigerate overnight.
8. Unmold to serve.

Goose or Duck Breast in Aspic

Ingredients

3 lb	goose or duck breast with bone
3 qt	water or clear chicken broth
½ tsp	kosher salt
6 oz	carrots, peeled, and cubed small
1 oz	parsley root, cubed small
3 oz	white leek cut into squares
3 oz	celery root, cubed small
8	leaves of gelatin soaked in cold water
4 oz	plain vinegar
3 tsp	salt
½ oz	sugar
14 oz	duck or goose broth
1 Tbsp	chopped parsley

Note: Each leaf of gelatin is 3.5 grams. As an exchange for 8 leaves, use 1 oz of powdered gelatin.

Preparation

1. Rinse goose or duck breast. Place in a large pot and cover with cold water. Add ½ tsp salt and bring to a boil. Simmer for 90 minutes or until tender.
2. After 1 hour, add vegetables (carrot, parsley root, leek, and celery).
3. When meat is tender, remove and cool. Remove vegetables and strain broth carefully. Chill overnight.
4. Remove all fat. Add squeezed dry gelatin to 14-oz warm broth. Add vinegar, sugar, and salt if needed and stir until gelatin is dissolved.
5. Bone goose or duck breast. Remove skin and fat. Cube into ½-in. cubes.
6. Combine with cooked vegetables and parsley.
7. Place in a 10" x 5" x 3" rectangular mold (terrine).

Cover with aspic, pouring gently. Refrigerate overnight.

To unmold, dip mold into hot water and place back in refrigerator to chill. Cut into ½-in. slices.

Serve with herbal salsa (page 286) and home-fried potatoes.

did you know?

Gelatin is traditionally used in three major areas:

1. *Food*
 2. *Pharmaceuticals*
 3. *Confectionary applications*
-

Turkey and Ham Aspic Pie (10 Portions)

Ingredients

1	8–10-in. aluminum pie plate
1	recipe pâté dough (see page 215)
	some oil spray
14 oz	sliced cooked ham
14 oz	sliced cooked turkey breast
	salt and pepper to taste
1–2 oz	olive oil
5 oz	finely diced shallots
8 oz	sliced mushrooms
2–3 Tbsp	chopped parsley
	approximately 8 oz aspic (see page 239)
1	egg for egg wash, some milk

Preparation

1. Spray pie plate with oil and line with pâté dough. Brush with egg wash.
2. Slice ham and turkey and place in a bowl.
3. Heat olive oil and sauté finely diced shallots, mushrooms, and parsley.
4. Fill pie plate, alternating ham, onion, and mushroom mixture and turkey.
5. Brush pie dough with egg wash and cover pie with a dough lid.
6. Crimp sides to seal and cut a chimney in the center of the pie.
7. Brush with egg wash and bake in a 350°F oven for 1 hour or to an internal temperature of 155°F.
8. Cool and pour aspic into chimney if needed and chill overnight.
9. Cut into wedges. Serve with cranberry sauce.



Turkey and ham aspic pie with cranberry sauce



Green asparagus and gelbwurst aspic, vinaigrette sauce

Green Asparagus and Turkey Aspic

Ingredients

40	spears of asparagus
2 lb	smoked turkey breast or sliced gelbwurst (white bologna) sliced thin
	some salt
½	recipe of beet aspic (page 240)
1	full recipe of tomato aspic (see page 241)

Preparation

1. Rinse asparagus, peel, and trim. Cook until al dente in salt water. Shock in ice water. Split asparagus lengthwise in half.
2. Arrange cold sliced turkey or gelbwurst (white bologna) in cocottes or on plates. Top with asparagus spears. Brush heavily with tomato aspic and refrigerate for 1 to 2 hours.
3. Decorate with beet aspic cubes.
4. Garnish with a basil leaf. Serve with vinaigrette.

Fennel and Chicken Aspic

Ingredients

2	chicken breasts skin and bones removed and shredded
	salt and pepper to taste
3 Tbsp	olive oil
2 bulbs	fennel, rinsed, trimmed; save green tops
7 oz	peeled carrots, cut into julienne strips
4 oz	celery stalk, peeled and cut into thin slices
7 oz	red onion sliced into thin rings
10	cherry tomatoes
1	tomato aspic recipe (made with 12 leaves of gelatin)

Preparation

1. Shred chicken and season with salt and pepper. Sear in oil (stir-fry) for 3 to 5 minutes and cool.
2. Cut fennel bulbs into 8 sections and simmer in salt water for 5 to 8 minutes or until al dente. Shock in ice water and dry with a paper towel.
3. Blanch julienned carrots, sliced celery, and onions for 2 minutes and shock in ice water. Place on a paper towel to dry.
4. Arrange 2 fennel quarters, 1 oz julionned carrots, 2 oz shredded or shaved chicken, 1 oz onion rings, ½ oz celery and 2 cherry tomatoes into 6 to 8 soup bowls.
5. Pour well-seasoned tomato aspic evenly over each bowl.
6. Refrigerate for 3 hours.
7. Decorate with fennel greens. Serve with tomato croutons.

Herbal Headcheese (Jambon Persillée)

Ingredients

6	cooked pickled pig's feet, boned
1½ lb	cooked pickled pork tongue
¾ lb	cooked ham or pickled pig's head

Ingredients

1 cup	finely chopped parsley
2 Tbsp	chopped dill
3 cups	strong basic aspic (see page 239)

Preparation

1. Cut all pig's feet skin and meat, tongue, ham or pig's head into 1-in. by 4-in. strips.
2. Combine parsley and dill.
3. Line terrine with plastic wrap. Brush with aspic and dust evenly with herbs. Refrigerate for 1 hour.
4. Layer all meat, ham, pig's feet, and tongue in the terrine and fill with aspic. Dust top with chopped herbs.
5. Cover terrine with plastic wrap. Press or weight down and chill overnight.
6. Unmold.

Slice and serve with mustard or horseradish sauce and home-fried potatoes.

Savory Sausage Torte

Dough for Torte (Yield 80 oz)

8 oz	warm water
8 oz	warm milk
8	eggs
2 oz	oil
½ oz	sugar
1 oz	salt
2½ lb	bread flour
1 oz	baking powder
¾ oz	rapid rise yeast

Preparation

1. Blend all the liquids. Add sugar and salt mixture.
2. Sift flour and baking powder. Add the yeast to the flour.
3. Mix flour mixture into the liquids. Place into a mixing machine and process the dough for 10 minutes at slow speed.
4. Place in a bowl and let stand for 2 hours covered with a cloth.
5. Punch dough down and refrigerate overnight.
6. Grease a 12-in. springform pan. Add 12 oz of the dough and bake in a 400°F oven for 30 minutes.
7. Remove and chill. Slice into two halves.

Note: The rule for measuring the amount of dough needed: for every inch of pie pan, use one oz of dough.

8. Spread top and center of the torte evenly with mettwurst or liverwurst.
9. Place a mound of Italian sausage salad, (see recipe on page 324) in the center and refrigerate.
10. Slice 4 oz of gelbwurst (white bologna) thinly.
11. Slice 4 oz of black pudding thinly.
12. Slice 4 oz cooked salami thinly.
13. Slice 3 large kosher pickles thinly.
14. Surround Italian salad with one layer of gelbwurst, one layer of black pudding, and one layer cooked salami. Finish with a layer of kosher pickles.
15. Place in refrigerator for 1 hour and coat (nappe) evenly with aspic.
16. To decorate side of torte, brush with aspic and coat with chopped pistachio nuts.
17. Refrigerate overnight.

Serve with zucchini-melon-cucumber salsa (page 295).



Savory sausage torte with pistachios

Summary

This chapter presents intensive and extensive coverage of classic as well as mock aspic and their uses across the culinary food spectrum. A variety of recipes for these light, refreshing summer dishes are included.

IN REVIEW

1. How do you check gelatin strength in a liquid?
2. How do you add unflavored powdered gelatin to a liquid?
3. How do you add leaves of gelatin to a liquid?
4. What is bloom?
5. What is the difference between a jellied meat and a pressed meat?
6. What is the difference between classic aspic and mock aspic?
7. What is a savory jelly?
8. What is a jambon persillée?
9. What is a clarification?

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KEY TERMS

Aitch Bone

Brine

Dehydration

Denaturing Proteins

Dry Cure

Lachs Schinken

Magret

Osmosis

Pork Shoulder

Prague Powder #1

Prague Powder #2

Sachet

Wet Cure

13

Curing and Brining

This chapter describes the ingredients and processes for curing and brining. Curing meat is an ancient practice. There are formulas or recipes for salting ham written around 200 B.C. as well as in fourteenth-century Finland. Back then, not having cured bacon in the kitchen was indeed a sign of poverty. We have come a long way as bacon is a common staple in every kitchen today.

Mechanical refrigeration was introduced in 1877; it was the beginning of modern curing and brining techniques and gave way to a new dimension of flavor, textures, and aromas. The requisites for the curing process are a temperature of 30°F–50°F and a dark place, as light has a negative effect on the fat. The drying process requires a temperature of 60°F, preferably in a room with a light flow of air.

*Bottom, left: Pastrami, corned beef, Canadian bacon,
Center, left: Duck prosciutto, pancetta, lachs schinken
Top, left: Smoked ham, smoked loin of pork (Kassler)*



Methods for Curing

Salt

Salt changes meat by removing air, blood, and other impurities. This process preserves the meat and makes it less susceptible to spoilage. The salt's role in the brining and curing process is by

- Osmosis
- Dehydration
- Fermentation
- Denaturing proteins

Osmosis

Osmosis is a natural process and happens without human intervention. But we should understand how osmosis works in preserving meats. According to my research, it is a movement of a solvent (mostly water) through a semipermeable membrane (the cell wall) in order to equalize the concentration of a solute (typically salt) on both sides of the membrane.

To explain this in simple terms, when you apply salt to a piece of meat, the fluids inside the cell travel across the cell membrane in an effort to dilute the salt on the other side of the membrane. Once there is less fluid inside the cell than outside the cell, the fluid is sucked back into the cell's interior, taking with it the dissolved salt and bringing the salt inside the cell, where it can destroy harmful pathogens. This is the essence of curing meats with salt.

Dehydration

The presence of "free" water (liquid) is one of the indicators of a food's relative susceptibility to spoilage through microbacterial action. To keep food safe and appealing to the eye and tasty for long periods of time, it is important to remove as much excess water (liquid) as possible by using salt. Meats will become dry, since the salt tends to free water (liquid), making it unavailable for microbacteria. Exposure to air or heat for controlled periods of time allows the water (liquid) to evaporate, thereby reducing the overall volume and weight of the meat as well.

Fermentation

Enzymes tend to feed on the compounds found in energy-rich foods, such as meat. They ferment food into gases and organic compounds. The gas may be transposed to produce, for example, the holes in Swiss cheese or the light texture in yeast-raised breads or cakes. Sometimes they simply disappear, leaving behind the organic acid, as occurs in pickling sauerkraut.

By increasing the acid levels in food, enzymes also help to preserve. Since most harmful pathogens can thrive only when the levels of acid are within a specific range; for example, if the acid levels change, the flavor of the food will become sharper and tastier. Left unchecked, the process of fermentation will completely break down the meat. Salt acts as a control factor in this process, as it affects the amount of water available to the enzymes. Like bacteria and other microbacteria, enzymes cannot live without water/liquid.

Denaturing Proteins

In the preparation of meat, proteins are structurally changed. This change is known as "denaturing." It involves the application of heat, acid, alkalies, or ultraviolet radiation. In other words, the strands that make up the protein are encouraged to lengthen or coil, open or close, recombine, or dissolve in such a way that meats that were soft may become firm, smooth foods may become less smooth, translucent foods may turn less translucent, and firm food may soften or become liquid.

Curing Salts

When man discovered, most likely by accident, how to pickle, cure, or brine meats and fish to preserve them for long voyages, using salt from the marshes or sea, meat took on a deep reddish color and had eye appeal and a better taste.

The reason for that change of color was discovered in the early twentieth century by a German scientist who unlocked the mystery of how nitrate and nitrate compounds, already present in salt, redden the meat.

In the early days of curing and brining, peasants used salt peter or potassium nitrate, but the results

were inconsistent. These chemicals were banned in 1975 for usage in commercially prepared meats. Today we use mostly nitrites and not nitrates as they take longer to break down in cured meats.

Tinted Curing Mixture, Prague Powder, and Instacure

Prague powder and instacure are grouped under the umbrella term “tinted curing mixture” also known as TCM. The curing salt labeled number 1 contains only sodium chloride (kosher salt) and sodium nitrite. The curing salt labeled number 2 is made of sodium nitrate, sodium nitrite, and sodium chloride (kosher salt). It is colored pink to make it identifiable and therefore prevent its accidental use in other foods. Its recommended use is a ratio of 4 ounces of TCM for every 10 pounds of meat.

Prague Powder #1 and Instacure #1

Prague powder #1 and instacure #1 are used mostly in nonfermented types of sausages such as bologna, franks, and kielbasas.

Prague Powder #2 and Instacure #2

Prague powder #2 and instacure #2 are used to make dry fermented sausages, for example, cervelat and salami, which need longer curing and drying periods. The presence of nitrate is needed in order to cure the meat evenly.

Seasoning and Flavoring

Salt-cured or brined meats have a harsh flavor unless some flavor enhancers are added. Sugar, spices, aromatics, and wines or liqueurs add pleasing flavors to ham, bacon, poultry, game, or fish.

Sugar or Sweeteners

Sugar/dextrose, corn syrup, honey, and maple syrup can be used in most recipes.

Sweeteners are used to:

- overcome the harshness of the salt in the cure.
- balance the overall flavor conception.
- help stabilize color in cured meats.
- counteract bitterness, especially in liver, spleen, or kidney cuts.

- increase moisture retention in finished products.
- provide a good nutrient source for fermentation.

Spices and Herbs

Many spices and herbs are used in the curing and brining process to enhance flavor, for example, junipers with smoked cured ham. Nutmeg, cinnamon, mace, cardamons, and many others are used to create the classic traditional flavors and aromas expected in sausages.



Top, left to right: Netting for hams, bacon holder, butcher twin.
Second from top, left to right: Salami netting, needles for brine pump, large brine pump, hand thermometer.
Middle row: simple brine pump.
Second from bottom: salt meter.
Bottom: butcher knife

Cures and Brines

Cure or brine is a term used to indicate brine with water—wet cure—and without water—dry cure. When salt, the base of a dry cure or wet cure is applied, the meat submerged in it is referred to as cured, brined, or pickled. My masters called all cured or brined meats “pickled” and in some cases added some vinegar. Although our forefathers used unrefined sea salt or seawater for brining and curing, in today’s modern world with all the knowledge acquired over centuries, we use refined and purified salts, sugars, and other ingredients like nitrates and nitrites which guarantee a more perfect and stable product, with better texture and better taste.

Dry Cures

Dry cures are mostly achieved by using salt only. But, for better flavor, sweeteners are added to the salt, and to create the accustomed color of meat products, tinted curing mix (TCM) or Prague powder #1 and #2 are added. This mixture is patted or rubbed over the surface of the meat.

It is important to evenly distribute the cure all over the meat, and then steep the meat in a tightly closed plastic tub. When curing the meat, turn or rotate it often. This process is called “overhauling”.

Brines

When the dry cure mixture is dissolved in water, it is called a wet cure (brine). The salt content for wet cures (brine) is calculated as follows:

#1 Grade—Wet brine: 6 grams for each quart of water = 0.75 ounces salt per gallon

#6 Grade—Wet brine: $6 \times 6 = 36$ grams or 1.2 ounces per quart = 4.8 ounces salt per gallon

#8 Grade—Wet brine: $8 \times 6 = 48$ grams or 1.6 ounces per quart = 6.4 ounces salt per gallon

#10 Grade—Wet brine: $10 \times 6 = 60$ grams or 2.1 ounces per quart = 8.4 ounces salt per gallon

There are variations in preparing brine. Sometimes only hot water and salt are used. Other brines are simmered to infuse flavor from spices or aromatics. All brines must be cooled and chilled before the meat can be submerged or injected.

Brines can be applied in two different ways:

1. Dry cure and wet cure combined
2. Wet cure injected into the veins of the meat (fast method)

Brine Methods

Soaking

In brine soaking, the meat is submerged in the brine and held under refrigeration until the brine has fully penetrated the interior of the meat. Brining time depends on the thickness or density of the meat and the amount of fat cover (long-term brining).

Pumping

Brine pumping is used more often today because it takes less time. The brine is injected into the meat, which results in a more rapid and uniform distribution of the brine solution in the meat tissue. The injected meat needs to be submerged in more brine and held under refrigeration for three to four days or as directed.

For small pieces of meat, like chicken breasts or ham hocks, only submerging them in brine is called “soaking.” Place meats in a bucket and cover with brine. Place a wooden or plastic lid on top and weight it down with a plastic-covered brick or weight. Larger meats such as turkey, ham, or pork belly can be dry cured and then wet cured, or only injected with brine (fast method).



Pumping with brine for Kassler Rippchen

There are three methods for pumping meats:

1. Artery pumping: Injecting through the arterial system an amount equal to 8 to 10% of the weight of the meat.
2. Multiple-needle pumping: Using commercial machinery, rapidly injecting brine into the meat, often with a large number of evenly spaced needles which inject the brine effectively and fast.
3. Spray pumping: Using a spray needle to inject salt brine into the meat.

The amount of the brine injected should not be more than 10% of the item’s weight. A ham or pork belly weighing 12 lbs requires approximately 19 oz of brine. Once the brine is injected, I suggest submerging it in brine as described in the recipes.



Brine pumping chicken

Wet Cure Herbal Seasoning Mixtures

Sometimes a wet cure with seasoning mixtures is used for curing. For each quart of wet cure (brine), use 4 g of herbal seasoning mixture \times 4 qts brine = 16 g (approximately $\frac{1}{2}$ oz). Place it into a sachet and submerge into the brine.

A large variety of seasoning combinations can be used in sachets:

1. Juniper berries, garlic, fresh ginger root
2. Thyme, sage, cloves, bay leaf, juniper berries, tarragon, coriander, peppercorns
3. Peppercorns, bay leaf, allspice, dried red chilies, coriander seeds, mustard seeds
4. Cinnamon stick, white peppercorns, allspice, fennel seeds
5. Crushed garlic, cinnamon stick, black peppercorns, mustard seeds



Rubbing dry cure into hams

All-Purpose Dry Cure
(Yield 1 $\frac{3}{4}$ lb)

Ingredients

1 $\frac{1}{4}$ lb	kosher salt
7 oz	sugar/dextrose (white or brown)
2 oz	TCM

Preparation

1. Mix all ingredients well. Rub firmly on all sides of the meat (pheasant, pork shoulder, duck, chicken, etc.).
2. Pack meat into a plastic container and cure in a refrigerator for up to 7 days, turning meat daily.
3. Remove and rinse with cold water. Pat dry and hang to dry for 12 hours. Hot-smoke at 190°F or roast to an internal temperature of 155°F.

Smoked Bacon

Ingredients

1 fresh pork belly, skin on (approximately 10 lb)

Dry Cure

9 oz kosher salt

7 oz brown or white sugar

1 oz TCM

Preparation

1. Weigh pork belly. Adjust basic cure as necessary.
2. Mix cure ingredients well.
3. Rub the cure mix over belly, making sure all surfaces are covered.
4. Place in a plastic tub, skin side down.
5. Cure in refrigerator for 20 to 25 days covered, turning every day during the curing period.
6. Rinse belly under running water. Soak in fresh water for 1 to 2 hours and pat dry.
7. Hang on a hook and air-dry in a smoker, refrigerator, or a cool room overnight.
8. Hot-smoke at 120°F–180°F to an internal temperature of 150°F (approximately 3 to 4 hours).
9. Cool. Remove pork rind (save for later use). Wrap in plastic wrap for storage in the refrigerator. Slice as needed.

Note: For maple-syrup-cured bacon, substitute 1 cup of maple syrup for the sugar. For honey-cured bacon, substitute 1 cup of honey for sugar.

Note: Pork belly can be cut in half to fit the curing container or smoke chamber.



Top: Curing pork belly, bottom: smoked slab of bacon

did you know?

The cured or “brined only” pork belly, thinly sliced and cooked crisp, is very popular in Chinese and Korean cooking. It is called “Samgyeopsal.”

Parisian Lachs Schinken (Jambon de Saumon)

Ingredients

1	boneless pork loin with all fat trimmed (approximately 7 lb)
2–3 lb ½-in.	sliced fatback
# 6 grade wet cure	same grade wet cure as in Kassler Rippchen

Preparation

1. Surround pork loin with ½-in. sliced fatback and tie tightly with butcher twine or cover with cheesecloth/netting ensuring pork loin is fully covered. Tie as you would tie a roast leaving 6-in. of twine to form a loop.
2. Weight each loin individually and inject with brine equal to 10% of its weight.
3. Place in a plastic container and pour enough brine over the loin to submerge. Place a weight on top to keep the meat below the surface.
4. Brine for 7 to 10 days in the refrigerator or in a cool dark room at 40°F–50°F.
5. Rinse under running water and soak in fresh water for 1 to 2 hours. Dry in refrigerator overnight.
6. Cold-smoke for 4 hours.
7. Hang in a cool dark room for 5 to 6 weeks.
8. Refrigerate for 24 hours. Remove fat lining and slice thinly to serve.

Note: For Canadian Bacon, pump untrimmed and tied loin of pork using the procedure described in the recipe for Lachs Schinken.

Soft Brine

Ingredients

2 gal	water
12 oz	coarse sea salt
4 oz	sugar
Herb sachet	Crushed bay leaf, thyme, crushed peppercorns, crushed juniper berries, basil, ginger, marjoram, and sage

Preparation

1. Combine all ingredients.
2. Dissolve salt and ginger and add herb sachet. Bring to a boil.
3. Chill before using. Can be used for steeping or pumping.

Smoked Ham Hocks

Ingredients

12 lb	ham hocks
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#10 grade brine	
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3 gal	water
-------	-------

30 oz	salt
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8 oz	sugar/dextrose
------	----------------

3 oz	TCM
------	-----

Preparation

1. Bring wet cure to a boil and chill.
2. Place ham hocks in a deep plastic container.
3. Pour chilled brine over hocks to submerge them. Top with a plate or weight to keep them submerged.
4. Cure for up to 10 days in refrigerator.
5. Rinse the ham hocks and soak in fresh water for 1 to 2 hours. Dry overnight in refrigerator or cool room.
6. Hot-smoke at 185°F to an internal temperature of 150°F–155°F for approximately 4 hours.
7. Cool and refrigerate.

Smoked Turkey Breast or Turkey Thigh

Ingredients

2	turkey breasts with skin (4–8 lbs each)
---	---

Dry cure

1 oz	kosher salt
------	-------------

1 oz	curing salt
------	-------------

¼ oz	sugar/dextrose
------	----------------

1 Tbsp	crushed juniper berries
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Brine

#5 grade brine

Per 1 qt water/1 oz coarse sea salt;

Per 1 gal water/4 oz coarse sea salt

sachet

8 crushed juniper berries

1 Tbsp caraway seeds (optional)

Preparation

1. Rub dry cure all over turkey breast. Place some of the cure on the bottom of a plastic tub. Top with breast. Cover with plastic wrap and weight down with a plastic-covered brick or heavy stone.
2. Cure refrigerated for 20 hours.
3. Remove turkey from cure. Drain cure and reserve liquid.
4. Dissolve curing salt in 1 gallon of water, add sachet, and add saved dry cure liquid. Bring to a boil and chill.
5. Pour over dry-cured meat and cover with 1-in. brine and brine for 6 to 10 days, depending on size.
6. After day 3, turn meat and continue to brine.
7. Remove and soak in cold water for 2 hours. Change water a few times.
8. Pat meat dry and tie with butcher twine or net.
9. Hang to dry for 6 hours in a cool room.
10. Hot-smoke for 4 to 6 hours to an internal temperature of 155°F. Refrigerate.

Note: Can also be cold-smoked for 4 to 5 hours and air-dried in a cool, dark room for up to 8 days or longer (Westphalia style). Refrigerate.

Note: Should be sliced very thin like prosciutto.

Kassler Rippchen

Ingredients

- 2 center cut pork loins, chine bone removed (with 10–11 rib bones),
approximately 8 lb each
-

Preparation

1. Prepare a #5 grade wet cure using 1.5 oz curing salt (TCM) per 1 quart of water; 9 oz curing salt, 2 oz sugar/dextrose for 1½ gal water. Bring to a boil and chill.
2. Weight each pork loin individually and inject with brine equal to 10% of its weight.
3. Place in a plastic container; completely cover with brine. Place weight on top to keep meat below the surface.
4. Cure covered in the refrigerator for up to 10 to 12 days.
5. Rinse the ribs (center cut) under running water and soak in fresh water for 1 to 2 hours. Pat dry and air dry in refrigerator or cool room uncovered overnight.
6. Hot-smoke at 170°F–180°F to an internal temperature of 155°F–160°F (approximately 4 to 5 hours); or simmer in water for 4 hours to an internal temperature of 155°F–160°F.

Serve hot or cold.

Whole Smoked or Cooked Ham

Ingredients

1 fresh leg of pork, skin on (approximately 10–15 lb)

Brine

#7 grade wet cure

5 qt water

1 lb kosher salt or sea salt

7 oz sugar/dextrose

5 oz TCM

Preparation

1. Dissolve all brine ingredients. Bring to a boil and chill.
2. Trim fresh leg of pork, leaving 5 to 6 inches of skin around the shank. Remove the aitch bone (or have the butcher do it).
3. Weigh the leg and inject with brine equal to 10% of its weight.

Note: First inject brine along the bone structure, then into the muscular veins for even distribution.

4. Place in a plastic bucket and pour enough brine over the leg to submerge it. Top with a weight to keep it completely below the surface.
5. Brine in refrigerator covered for up to 10 days. Rinse ham with cold water and soak in fresh water for 1 to 2 hours.
6. Pat dry and air-dry uncovered in refrigerator or cool room for 16 hours.
7. Hot-smoke at 185°F to an internal temperature of 155°F–160°F (approximately 4 hours) or simmer in water for 3 hours to an internal temperature of 155°F–160°F.
8. Remove and cool. Refrigerate.

did you know?

The farmers of yesteryear prepared cured ham this way and hung it in the chimney to smoke for up to 4 weeks or longer. In today's curing and smoking process faster methods are used at the risk of less flavor development.

Cured Ham (The Old Fashioned Way)

Ingredients

1 leg (11–12 lb)	pork (aitch bone removed, skin on)
2 cups	kosher salt

Brine

6 qts	water
2 qts	dark beer
5 cups (40 oz)	salt
2 Tbsp	curing salt #2 (Prague powder or instacure)
2½ cups (24 oz)	brown sugar

Sachet

1 small	bunch of thyme
2 sprigs	rosemary
2	bay leaves
2 Tbsp	juniper berries
½ tsp	cloves

Salt Dough

1¼ cup (10 oz)	flour
1 cup (8 oz)	kosher salt
8–10 tsp	cold water

Preparation

1. Rub leg of pork heavily with kosher salt, making sure that all crevices are exposed to the salt.
2. Place a layer of salt approximately ½ in. deep in a tall plastic bucket. Place pork leg on top of it. Sprinkle the rest of salt over the leg. Cover and put in refrigerator or in a cool place (40°F) for 24 to 48 hours.
3. To make the brine, combine water, beer, salts, sugar, sachet, and bring to a boil. Simmer for 5 to 10 minutes. Remove from stove and cool. When cold, remove sachet.
4. Remove dry-cured pork leg and brush off salt. Place into brining bucket or tub. Submerge in cold brine. Cover with at least 1–2 in. of brine. Put in the refrigerator (38°F–40°F) for 2 to 2½ weeks. If brine is stored out of the refrigerator, check every day. Discard the brine if any odor develops and cover pork with new brine.
5. Remove meat from brine. Rinse well under running water and soak in cold water for 2 hours. Hang to dry in a cool airy place for 1 day.
6. Mix salt dough and cover the area where the aitch bone was removed and dry for 3 more days.
7. In the old days the farmer would have placed the ham in the chimney to smoke. Today you can hot-smoke the ham in a smokehouse for 4 to 8 hours to an internal temperature of 155°F–160°F (see smoked cooked ham, page 268).
8. Remove and hang in a cool dark room for 2 to 3 days or longer.
9. Refrigerate.
10. Before using remove salt crust.

Pancetta (Italian Bacon)

Ingredients

1 fresh (approx. 10 lb)	pork belly (skin on)
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Dry Cure

9 oz	kosher salt
2 oz	brown sugar
2 oz	cracked black peppercorns
½ oz	crushed juniper berries
3 small	bay leaves, crushed
½ tsp	grated nutmeg
½ tsp	fresh thyme leaves
4 cloves	garlic, crushed
1 oz	TCM

Preparation

1. Weigh pork belly and adjust amount of cure, if necessary, following a ratio of 8 oz of cure mix for every 10 lb of pork belly.
2. Combine cure mix ingredients and mix well.
3. Cure the pork belly as directed for basic bacon recipe (page 263).
4. Rinse the belly under running water. Remove skin.
5. Roll into a cylinder and tie tightly or press into a net.
6. Hang to air-dry for 2 to 3 weeks (see Chapter 8) in a dry cool area. Refrigerate.
7. Slice thin.

Serve sautéed at breakfast.

Corned Beef

Ingredients

1	fresh brisket of beef (10–12 lbs)
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Dry Cure

6 oz	kosher salt
------	-------------

3 oz	curing salt
------	-------------

1.5 oz	sugar/dextrose
--------	----------------

#8 Grade Brine

1½ gal	cold water
--------	------------

7 oz	kosher salt
------	-------------

4 oz	sugar/dextrose
------	----------------

2.5 oz	TCM
--------	-----

3 cloves	garlic, mashed
----------	----------------

2 Tbsp	pickling spice
--------	----------------

Preparation

1. Trim fat on brisket to ¼ in. thick.
2. Rub dry cure all over brisket.
3. Place rest of cure in a plastic tub and top with brisket. Cover with plastic wrap and weight down the cure for 20 hours in a cool room or refrigerator.
4. Remove. Strain liquid and save.
5. Combine cold water with all ingredients of wet cure.
6. Add saved liquid from dry cure and bring to a boil and chill.
7. Submerge beef brisket in brine and refrigerate for up to 20 days. Rinse with cold water.

Note: For fast curing, weigh fresh brisket and pump with wet cure (brine) equal to 10% of the weight of the green brisket. Place in a plastic tub and pour rest of wet cure over brisket. Cover with 1 in. of brine.

8. Top with a weight (a brick covered with plastic wrap) to keep meat submerged and cover with plastic wrap.
9. Wet cure in the refrigerator for 3 to 4 days at 38°F–40°F. Rinse under cold water.
10. Place into a large deep pot. Cover with cold water and bring to a boil. Simmer to fork tender for approximately 3 hours. Remove beef brisket from the cooking liquid. Trim fat. It's ready to serve.

Old-Fashioned Prosciutto Ham

Ingredients

1	Smithfield green ham, 8–10 pounds (aitch bone removed)
28 oz	kosher salt
4 oz	curing salt # 2 (Prague powder or instacure)

Preparation

1. Mix kosher salt and curing salt well and rub all over the ham.
 2. Place excess curing mixture on the bottom of the curing container. Top with salted ham. Weight down and cover.
 3. Cure in a refrigerator or in a 40°F room for 28 days, turning once a week.
 4. Remove and rinse with plain white vinegar and pat dry.
 5. Tie like a pork roast or use netting, leaving some extra twine to make a loop.
 6. Hang in a cool, dry, dark room (50°F) for up to 1 year.
 7. Refrigerate and slice paper thin to serve.
-

Garlic Prosciutto Ham

Ingredients

1	1 leg of green pork, 10–12 pounds
6	6 bulbs of garlic, peeled
8 oz	coarse ground black pepper
2½ lb	kosher salt
8 oz	TCM #2

Preparation

1. Place peeled garlic into a food processor and purée. Spread evenly all over the pork leg. Sprinkle with black pepper and press into ham. Salt ham heavily with mixture of kosher salt and curing salt.
2. Place excess salt on the bottom of a plastic pan. Top with ham and place covered in a refrigerator or a cool, dark room for 4 weeks. Turn it once a week.
3. Remove the ham and rinse well with cold water.
4. Pat dry and rub with 4 Tbsp puréed garlic. Sprinkle lightly with coarse ground black pepper and cover with cheesecloth or a net. Tie like a pork roast. Leave some extra twine to tie into a loop.
5. Hang in dry, dark, cool airy room for up to 1 year.

Duck Breast Prosciutto

Traditionally, prosciutto is a form of charcuterie in Italian/French cooking. It is simply a cured type of meat that is cured either dry or wet and is then further cured and matured by drying in a dry, cool, airy room or basement. Most prosciutto hams are made from pork, but they can also be made from lamb, duck, certified deer, bear, or wild boar.

The best duck to use for duck prosciutto is the moulard duck, a duck raised for the purpose of producing foie gras. The moulard is more flavorful than domestic pekin duck, and not as gamey in flavor as the wild mallard duck. The lobe, or half of the moulard breast, is called “magret.” Each duck has two magrets or one full breast.

Salt and Spice Cure

The salt ratio is very important. The spices and garlic ratio are used more for flavor than the curing process. Weigh each magret to calculate your cure mix.

For each pound of magret use	15 g (0.5 oz) kosher salt
	4 g (0.14 oz) dextrose/sugar
	2 g curing salt (0.07 oz)
	5 juniper berries, crushed
	½ tsp coriander seeds, crushed
	5 black peppercorns, crushed
	½ clove of garlic, crushed
	⅓ bay leaf broken (optional)

Mix ingredients thoroughly.

Preparation

1. For each magret, place a large square piece plastic wrap on a table. Place magret skin side down on the wrap and place half of the salt and spice mix on the magret. Spread it all over the surface. Turn and repeat.
2. Enclose tightly within wrap. Place into a plastic or porcelain dish and weight down. Cure in the refrigerator for 24 to 32 hours depending on the size.

Air cure

1. Wipe off cure. Do not rinse. Place magret on a large cheesecloth and wrap cloth around the magret, making sure the cheesecloth fully covers the meat. Tie like a roast with 6 inches of twine free on one end to tie a loop.
2. Hang in a cool, dry, dark room (40°F–50°F) for one to three weeks.
3. Remove cheesecloth and wrap in plastic wrap. Weight down.
4. Refrigerate for 12 hours. Slice paper thin to serve.

Note: For extra flavor, the duck can be cold-smoked for 2 hours and then hung to dry. To slice thin, I suggest that you slightly freeze the magret.



Thin sliced Dutch prosciutto with mustard cucumbers

Deer Ham (Prosciutto Style)

Ingredients

6.5 lb	boned leg of deer
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Dry cure

2 oz	Prague powder #2 or instacure #2
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3 oz	kosher salt
------	-------------

2 Tbsp	crushed juniper berries
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Wet Brine

2 gal	water
-------	-------

6 oz	sea salt
------	----------

4 oz	curing salt #2 (Prague powder or instacure)
------	---

Sachet

2	cloves garlic, crushed
---	------------------------

½ tsp	black peppercorns, crushed
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6	parsley stems
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1	crushed bay leaf
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Preparation

1. If possible, bone leg of venison hollow. Rub heavily with dry cure.
2. Place some of the dry cure into a large plastic tub or bucket. Top with leg of venison. Cover with a lid or plastic wrap and cure for 24 hours.
3. Remove venison from the cure and tie or place in netting or cheesecloth.
4. Strain liquid from dry cure into wet brine and bring to a boil.
5. Keep cured leg refrigerated.
6. Chill wet brine and submerge leg of venison. Brine for 24 days in a refrigerator.
7. Remove venison from the brine and rinse with fresh cold water.
8. Hang to dry in cool, airy dark room for 12 hours.
9. Cold smoke for 4 hours and hang in a cool, dry dark room for up to 12 weeks or until firm to the touch.
10. Refrigerate.
11. Remove netting and slice paper thin to serve.

Note: To speed up the brining process, pump leg with up to 10% of brine solution and submerge in brine for three to four days. Follow direction as above.

Lamb Prosciutto

Ingredients

1	leg of lamb, aitch bone removed
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Dry cure

2 oz	Prague powder #2
------	------------------

3 oz	kosher salt
------	-------------

2 Tbsp	juniper berries
--------	-----------------

Mix well

Wet Brine

2 gal	water
-------	-------

6 oz	kosher salt
------	-------------

4 oz	curing salt #2 (Prague powder or instacure)
------	---

1 Sachet	Or use pickling spice mixture
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2 cloves garlic	
½ tsp black peppercorns	
6 parsley stems	
1 bay leaf	

Preparation

1. Remove aitch bone. Rub leg of lamb heavily with dry cure.
 2. Place some of cure in a large plastic tub. Top with leg of lamb. Cover with a lid or plastic wrap.
 3. Cure refrigerated for 24 hours.
 4. Remove leg from tub.
 5. Strain dry-cure liquid into wet brine and bring to a boil together with sachet bag. Chill.
 6. Place leg of lamb back into the tub and cover it with approximately 1 in. cold wet brine. Brine for up to 24 days.
 7. Remove lamb from brine, rinse with cold water, and soak for 2 to 3 hours in cold water.
 8. Remove and pat dry with paper towels and enclose with netting or cheesecloth.
 9. Hang in a cool, airy, dark place for 12 hours to dry.
 10. Cold-smoke for 10 hours at 90°F or cold-smoke for 2 hours.
 11. Hang overnight in a cool, airy, dark place. Repeat 2 hour cold smoke process four times.
 12. Hang to dry/ripen until firm to the touch (30 weeks or longer).
 13. Refrigerate.
- To serve, slice paper thin.



Smoked lamb prosciutto



Easter bread or pita bread with ricotta cheese, thinly sliced lamb prosciutto and arugula

Pastrami

Ingredients

6 lb (3 kg)	lean beef brisket
12 oz (340 g)	sea salt
1 tsp	Prague powder #2
6 cloves	garlic, crushed
4 Tbsp	light brown sugar
4 Tbsp	coarsely crushed black pepper
2 Tbsp	coarsely crushed coriander seeds
1 Tbsp	ground ginger

Preparation

1. Place brisket into a plastic tub.
2. Mix salt and Prague powder and rub half of it onto the meat. Cure for 12 hours.
3. Rinse meat and dry well with paper towels.
4. Mix the remaining salt and rest of ingredients together and rub well into meat on all sides.
5. Place meat into a clean tub, place a weight (a brick covered with plastic wrap) on it. Cover and cure for 1½ to 2 weeks, turning every second day.
6. Remove meat from tub. Pat dry with paper towels.
7. Hang in a cool, dark, airy room (42°F–46°F) for 1 day.
8. Cold-smoke at 100°F for 4 to 6 hours.
9. Simmer the pastrami in unsalted water for 2½ to 3 hours or until tender.
10. Remove, drain well, and serve immediately. Or drain well and refrigerate for later use.

Westphalian Ham

Ingredients

1	leg of pork, boned, skin on
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Dry Cure

3 oz	curing salt #2
------	----------------

4 oz	kosher salt
------	-------------

2 Tbsp	crushed juniper berries
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#6 Grade wet cure

For 2 gal, 5 oz kosher salt

5 oz curing salt #2

Preparation

1. Rub dry cure all over pork, skin and meat.
2. Place some of the dry cure in the bottom of a plastic tub. Place pieces of pork meat skin side down into the tub. Weight down with a plastic-covered clean brick or stones. Cover.
3. Cure for 24 hours in the refrigerator. Turn meat after 10 hours.
4. Remove pork pieces from dry cure. Refrigerate.
5. Strain liquid from dry cure into 2-gallons of prepared brine. Bring to a boil and chill.
6. Place pieces of meat back into tub and refrigerate overnight.
7. Submerge meat in cold brine. Weight down. Cool and brine 14 to 16 days in the refrigerator.
8. Remove. Tie and hang to dry in a cool, dark room for 2 to 4 hours or overnight.
9. Cold-smoke for 12 hours at 80°F–100°F. Or smoke 2 to 4 hours.
10. Remove from smoker and hang in a dry, cool, dark place overnight.
11. Repeat smoking and hang again overnight. Repeat smoking process three times more.
12. Hang in a cool, dry, airy, dark place for up to 12 weeks or as needed to have a firm consistency. Refrigerate.

Good for sandwiches, appetizers, or salads.



Westphalian ham



Thinly sliced Westphalian ham with melon wedges



Sliced black forest ham with mustard pickles

Black Forest Ham

Ingredients

1	leg of pork, boned, skin on
---	-----------------------------

Dry Cure

3 oz	curing salt #2
------	----------------

4 oz	kosher salt
------	-------------

2 Tbsp	crushed juniper berries
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#6 Grade wet cure

For 2 gal, 5 oz kosher salt

5 oz curing salt #2 (Prague powder or instacure)

Preparation

1. Rub dry cure all over pork pieces, heavy on skin.
2. Place some of the dry cure on the bottom of the plastic tub. Place pork meat side down into the tub. Top with a weight, cover, and cure for 24 hours in the refrigerator. Turn after 10 hours.
3. Remove pork from dry cure.
4. Strain liquid and add to 2 gal of prepared brine. Bring to a boil, cool, and chill.
5. Place pieces of meat back into the cleaned tub. Cover all meat by approximately 1 in. of brine and brine for 10 to 14 days in the refrigerator.
6. Remove. Tie or net.
7. Hang to dry in a cool, dark place for 2 to 4 hours or overnight.
8. Cold-smoke for 12 hours (can be done in 2-hour intervals of smoking). Smoking temperature should be 80°F–100°F.
9. Place into a pot of boiling water and simmer for 2 to 3 hours or to an internal temperature of 185°F.
10. Remove and chill. Serve.



Black forest ham

Bundner Fleisch (A Swiss Specialty)

4 pound lean top round of beef

4 oz kosher salt

19 juniper berries crushed

2 teaspoon ground black pepper

4 oz Aquavit or kirschwasser

Preparation

1. Cut Top round in to 2 each 2 pound pieces.
2. Rinse under running water for 2–3 minutes, pat dry with paper towels.
3. Rub with salt and pepper (massage with your palm heavily).
4. Place into a plastic container, sprinkle with Juniper berries and add Kirschwasser.
5. Weigh down with a heavy plastic wrapped stone or brick, cover.
6. Cure in the refrigerator for 8 days, turning it 3–4 times.
7. Remove and dry with a paper towel.
8. With large needle, push a butcher twine through the meat and tie into a loop.
9. Cover with cheese cloth and hang in a dark, airy, cool room or cellar for up to 3 months.
10. Remove cheesecloth and rinse with cold water, hang to dry for 1–2 hours, refrigerate.
11. Slice paper thin, serve with melon or pears.

Mock Bundner Fleisch (A Short Cut)

4 pound of Beef or Venison top round
 1 teaspoon TCM #2
 3 Tablespoon kosher salt
 2 T Garlic granulars
 2 T Dextrose/sugar
 1 tsp white pepper ground
 2 quarts water

Preparation

1. Combine all ingredients except beef and water and mix well.
2. Cut beef into two LB pieces and pump with brine (10% of its weight).
3. Submerge in the brine and for 6 days refrigerated, turning every 2 days.
4. Remove from brine and pat dry with paper towels (do not rinse).
5. Placed on a rack, place into a 150°F oven (keep door open) for 1–2 hours, or until dry.
6. Close the oven door turn the dial to 175°F and roast to a 152°F internal temperature.
7. Remove and cool, refrigerate.
8. Slice paper thin. Serve with melon or pears.

Note: This can also be prepared in a smoker.

Place meat on a rack and place into the smoker pre-heated to 130–140°F, keep damper wide open for 2 hours, close damper and smoke hot at 175°F to a 152°F internal temperature, rinse with cold water, pat dry and refrigerate.

Summary

In this chapter science meets the practical world. Different curing methods are outlined to enhance your understanding of the chemical processes of curing that change the meat's flavor and color. The ins and outs of curing are supplemented by techniques for hanging and drying meat (prosciutto) and hot-smoking meat (ham or pastrami).

IN REVIEW

1. What is the definition of curing?
2. What determines if you use a dry cure or brine?
3. How does brine cure a meat product?
4. What are the two basic methods of brining meat or poultry?
List three variations of one of them.
5. What is the percentage of brine that is injected into meat?
6. Name three factors that affect the length of time meat must be brined.
7. What two steps are performed between curing or brining and smoking?
8. What are the basic ingredients in a brine and dry cure?
9. What are the two names that refer to brined meats?



KEY TERMS

Blanch

Braise

Marination

Salsa

Sauce

Sweat

Tomato Concassée

Simmer

14

Introduction to Salsas

Traditionally, salsas are made from raw fruits or vegetables, but recently they have moved to center stage and include other ingredients. The “new” ingredients include acids, such as citrus juices; flavored vinegars or wine; various spices, chilies, and herbs, combined with fruits or vegetables, creating sharp aromatic contrasts, like sweet or sour or spicy hot. These combo sauces are becoming increasingly popular. They include sauces prepared with raw as well as cooked ingredients and are called relishes, chutneys, or compotes.

Originally, salsa (Spanish for “sauce”) came to us from South America and because of that background some aficionados argue the term. “Salsa” includes only raw materials and precludes relishes, compotes (French), or chutneys (Indian). I believe the difference is based more on their country of origin or style of cuisine than the difference in their preparation. Salsa in Spanish or sauce in French or sosse in German are, in my opinion, all the same.



With this in mind I have put together an array of raw and cooked salsas/sauces to be served hot or cold with sausages, pâtés, aspics, hams, and other meats to enhance their flavor and tingle the taste buds.

Hearty Appetite!

Bon Appetit!

Mahlzeit!

Guten Appetit!

Black Bean Salsa with Papaya (Yield 1 Qt)

Ingredients

1 cup	black beans, cooked tender
1 small	ripe papaya, peeled, seeds removed, and diced small
1 cup	red pepper, seeds and membrane removed and diced small
1 small	red onion, peeled and diced small
2	jalapenos peppers, seeds removed and minced
4 cup	cilantro leaves, chopped coarse
1 tsp	dried oregano
1 tsp	gingerroot, peeled and grated
2 oz	virgin olive oil
1–2	fresh limes, juiced
1 tsp	ground black pepper
1 tsp	sea salt, or to taste

Preparation

1. Combine all ingredients and mix well.
2. Marinate for 1 hour.
3. Adjust seasonings and refrigerate.
4. Serve ice cold.

Red Onion Salsa

Ingredients

3 tsp	olive oil
2	red onions, peeled and sliced
¼ cup	raisins (golden)
½ cup	red wine vinegar
¼ cup	brown sugar
½	cinnamon stick
1 small sprig	thyme leaves, chopped fine
Salt, pepper	

Preparation

1. Sweat onion in oil for 1 minute (no color).
2. Add raisins and stir for 2 minutes.
3. Add vinegar, sugar, cinnamon, and thyme.
4. Simmer and reduce to syrup consistency.
5. Remove cinnamon stick and serve warm or cold.

did you know?

The term aurora is used to describe sauces that have a pinkish-reddish color like the morning sunrise or the evening sunset. The name is attributed to the Greek goddess Aurora.

Sauce Aurora

Ingredients

1 pt	mayonnaise
4 Tbsp	tomato ketchup (see recipe on page 303)
4 tsp	sweet pickle relish
2 Tbsp	chopped onions, blanched
1 tsp	sherry (optional)

Preparation

1. Combine all ingredients, mix well, and refrigerate. Serve with smoked sausages, meats, poultry, pâtés or terrines.

Herbal Salsa

Ingredients

8 oz	mayonnaise
8 oz	sour cream
1	kosher dill pickle, finely chopped
1	hard boiled egg, finely chopped
2 Tbsp	chopped chives, parsley, and basil
1 tsp	A1 sauce

Preparation

1. Combine all ingredients and mix well.
2. Refrigerate until served.

Serve with headcheese, or smoked items such as savory aspics and pâtés.

Adam Mikenberg's Tropical Fruit Salsa (Yield 4 Cups)

Ingredients

1	papaya, seeded, peeled, and cubed
1	mango, peeled, pit removed and cubed
1	kiwi, peeled and cubed
1 cup	fresh pineapple, cubed
1–2 cups	red wine vinegar
1/8 cup	honey
1/2 tsp	salt or to taste
1/2 tsp	ground white pepper or to taste
1 1/4 cup	olive oil

Preparation

1. Place papaya, mango, kiwi, pineapple, and vinegar in a stainless steel pan and simmer for 10 minutes.
2. Cool mixture for 30 minutes.
3. Place in a food processor. Add honey and seasonings.
4. Blend 20 to 30 seconds and slowly drizzle in olive oil while motor is running. Process 10 to 20 seconds or more as needed to emulsify.

Serve with ham, corned beef, or headcheese and pâtés.

Shepherd Salsa

Ingredients

21 oz	sheep yogurt
9 oz	tomato concasee (diced tomatoes)
2½ oz	scallions, sliced into thin rings
½ tsp	ground caraway seeds
2 Tbsp	chopped parsley

Salt, pepper

Preparation

1. Combine yogurt with diced or cubed tomatoes.
2. Fold in scallions, salt, pepper, and parsley.
3. Chill for 2 hours.

Great with pâtés, bratwurst, and lamb terrines.

Note: Plain yogurt can be substituted.

Simple Cucumber Salsa

Ingredients

16 oz	cucumber
	some salt
16 oz	sheep's yogurt or plain yogurt
4 cloves	garlic, minced
1 oz	extra virgin olive oil
½–1 oz	vinegar
⅓ tsp	black pepper
2 Tbsp	finely chopped dill

Preparation

1. Peel cucumber, cut in half, and remove seeds. Shred cucumber. Add salt and rest for 20 minutes. Squeeze out water.
2. Mix with yogurt and garlic. Season with vinegar, salt, and pepper.
3. Whisk in olive oil until smooth. Mix well.
4. Fold in dill and refrigerate.

Refreshing with jellied sausages and savory jellies.

Salsa Santa Maria

Ingredients

16 oz	tomato
3	green chilies cut in half, seeds removed
3	peeled garlic cloves, coarsely chopped
2 Tbsp	chopped parsley
Salt and pepper	to taste
1 dash	vinegar

Preparation

1. Blanch tomatoes and chilies for 3 minutes.
2. Peel tomatoes and cut in half. Remove seeds.
3. Purée tomatoes, chilies, and garlic in a food processor or blender.
4. Fold in chopped parsley and finish with a dash of vinegar.

Serve with pâtés, terrines, or savory aspics.

The Super Cucumber Salsa

Ingredients

11 oz	cucumber, peeled and cut in half
6 oz	tomato concassee
2	red chilies, finely chopped (seeds removed)
2 cloves	garlic, minced
2 Tbsp	chopped coriander greens or chervil
	grated zest of one lime
1 oz	lime juice
2.5 oz	chicken broth
½ oz	sugar
1 tsp	cornstarch
1 oz	olive oil
	salt and pepper to taste

Preparation

1. Remove seeds from cucumber and small cube.
2. Prepare tomato concasee. Combine cucumbers, tomatoes, chilies, garlic, and coriander greens or chervil.
3. Bring chicken broth, lime juice, and sugar to a boil. Thicken with cornstarch.
4. Cool and whip in olive oil until absorbed. Add cucumber mixture.
5. Toss well and marinate for 2 hours or overnight in refrigerator.

Good with all sausages, brined meats, or headcheeses and savory aspics.

tip

In order to remove the wax coating on lemons, limes, and oranges, blanch them for 30 seconds in salted boiling water. Remove and shock in ice water. Dry.

Cumberland Sauce, a Classic Sauce

Ingredients

1	orange
1	lemon
1 pt	red wine
5 oz	red currant jelly
7 oz	lingonberries
4 oz	red port wine
1 tsp	powdered Coleman's mustard
1/3 tsp	cayenne pepper

Preparation

1. Dip orange and lemon into boiling salt water for 30 seconds. Shock in ice water.
2. Zest lemon and orange with a zester.
3. Juice lemon and orange. Blanch julienne of orange and lemon in water. Shock.
4. Combine wine, orange and lemon juice and reduce to maple syrup consistency. Add red currant jelly and lingonberries, port wine, and orange and lemon julienne. Bring to a boil.
5. Cool and refrigerate.

Serve with pâtés and terrines.

Pumpkin Sweet and Sour

Ingredients

2 small	ginger roots, peeled and diced small
4½ lb	pumpkin, peeled
1 qt	vinegar
8 oz	water
26 oz	sugar
1 Tbsp	fennel seeds
½ tsp	kosher salt or to taste
½ tsp	white pepper or to taste

Preparation

1. Peel ginger and dice fine or shred with a grater.
 2. Cut pumpkin into small cubes.
 3. Bring vinegar, water, sugar, spices, and salt and pepper to a boil. Add pumpkin and ginger. Simmer for 8 to 10 minutes.
 4. Remove and place in plastic containers. Cover with a lid or plastic wrap. Cool. Refrigerate overnight.
- Good with cold cuts, cervelat, or salami.

Salsa from Green Tomatoes

Ingredients

16 oz	green tomatoes
16 oz	Vidalia onion
1	green pepper, seeds and ribs removed
2 cloves	garlic
3 small	chilies
3.5 oz	vinegar
2½ oz	brown sugar
1 pinch	salt and pepper
	Some olives and ginger

Preparation

1. Blanch tomatoes. Peel and dice.
 2. Cut green pepper in half. Remove seeds and ribs. Cube small.
 3. Peel onions and finely dice.
 4. Peel garlic and crush.
 5. Dice chilies finely.
 6. Place all ingredients into a pan. Add vinegar, sugar, and spices. Simmer for 50 minutes. Stir occasionally. Adjust seasoning.
 7. Pour into a plastic container, cover, and cool. Place in a refrigerator overnight.
- Good with pâtés, headcheese, aspics, and game dishes.

Tomatoes and Pears Chutney

Ingredients

1½ lb	tomatoes
16 oz	red onion
8 oz	pears
16 oz	sugar
½ oz	salt
2 Tbsp	olive oil
pinch	cayenne pepper or 2 drops of Tabasco
pinch	ground clove
pinch	ground allspice
1½ cup	red wine vinegar
1 dash	port wine

Preparation

1. Blanch tomatoes in boiling water. Shock and peel. Remove stem core and cut into wedges.
2. Peel onion and chop coarsely.
3. Peel pears and shred.
4. Heat olive oil in a pan. Add onions and sweat for 1 minute. Add cayenne pepper, clove, allspice, salt, tomatoes, pears, sugar, and vinegar. Bring to a boil and simmer for 30 minutes.
5. Finish with a splash of port wine.

Serve hot or cold.

Mango-Pumpkin Chutney

Ingredients

4½ lb	ripe mangos (after trim 2½ lb)
3½ oz	currants
7 oz	dates
5 oz	red bell pepper
2 small	chilies
3½ oz	fresh ginger, peeled
1½ lb	peeled pumpkin, seeds removed
1 pt	vinegar
1 oz	kosher salt
10 oz	brown sugar
3½ oz	Vidalia onion
1 clove	garlic, crushed
½ tsp	ground allspice
1 Tbsp	mustard seeds

Preparation

1. Cube mango fruit meat.
 2. Rinse currants with hot water.
 3. Remove pit from dates and chop coarse.
 4. Cut red bell pepper in half, remove seeds and white ribs. Dice fine.
 5. Slice ginger root.
 6. Combine fruits in a bowl. Add vinegar, salt, and sugar. Mix well and marinate covered in a refrigerator overnight.
 7. Peel onion and chop coarse. Add garlic, lime juice, turmeric, allspice, mustard seeds, and marinated mango.
 8. Peel pumpkin, remove seeds and pulp, and cut into small cubes, place in a large pan.
 9. Add mango mixture and simmer for 30 to 45 minutes. Adjust seasonings.
 10. Cool and place in plastic containers. Cover and set in a refrigerator overnight.
- Good for pickled brined meats and good with smoked sausages and bratwurst.

Zucchini-Melon-Cucumber Salsa

Ingredients

8 oz	cucumbers, cut in half, seeds removed
14 oz	cantaloupe
7 oz	zucchini, diced small
2 oz	extra virgin olive oil
6 oz	white wine (chablis)
8 oz	sugar
	juice of 2 limes
1½ oz	Madras curry
½ tsp	pink peppercorns
1½ tsp	powdered ginger
	Salt and pepper to taste
1–2 tsp	freshly minced mint leaves

Preparation

1. Remove seeds from cucumber and dice fine.
 2. Remove melon fruit meat with a melon scoop.
 3. Finely dice zucchini.
 4. Heat oil in a pan and sweat cucumbers and melon for 5 minutes. Deglaze with white wine.
 5. Add sugar, lime juice, curry, pink peppercorns, ginger, salt, and pepper and braise covered for 30 minutes in a 400°F oven.
 6. Fold in chopped mint and cool.
 7. Pour into a plastic container and place covered in a refrigerator overnight.
- Serve in the melon shell with cold cuts.

Salsa Italiano

Ingredients

14 oz	fennel
3 oz	red onion
2 Tbsp	extra virgin olive oil
3 Tbsp	honey
½ Tbsp	fennel seeds
½ cup	orange juice
1	orange, cut into wedges
	Salt and pepper to taste
4	kumquats
½ tsp	Fresh or dried green peppercorns
1 Tbsp	finely chopped fennel greens or chervil

Preparation

1. Rinse fennel bulbs well and remove root core and the fennel greens. Quarter bulb and cut into small cubes.
 2. Peel onion and finely dice.
 3. Heat olive oil in a pan.
 4. Add fennel and onions and sweat (no color) for 3 to 5 minutes.
 5. Add honey, fennel seeds, and orange juice, some salt and pepper. Braise fennel mixture covered for 30 to 40 minutes in a 400°F oven.
 6. Cube orange wedges. Cut kumquats in quarters, and add to mixture with green peppercorns.
 7. Braise covered for 5 more minutes. Add chopped fennel greens or chervil.
 8. Adjust seasoning and pour into plastic jar. Refrigerate overnight.
- Good with Italian sausages, salami, or other cured meats.

Apple Salsa Hudson Valley

Ingredients

2 lbs	apples
4 oz	finely chopped Vidalia onion
1 small clove	garlic, crushed
½ pt	malt vinegar
12 oz	brown sugar
2 oz	crystallized ginger root
4 oz	raisins
¼ tsp	ground pickling spice
¼ tsp	cayenne pepper
¼ tsp	salt

Preparation

1. Peel and core apples and chop fine.
 2. Peel onions and garlic and chop fine.
 3. Place prepared apples, onions, and garlic in a pan together with vinegar. Simmer covered until tender.
 4. Add all remaining ingredients and simmer for 15 to 20 minutes or to maple syrup thickness.
 5. Adjust seasoning. Pour into plastic containers, cover, and refrigerate overnight.
- Good with bratwurst, kielbasa, or ham.
-

Mustard, the Sausage's Best Friend

1. Always mix dry mustard powder with water or meat broth at room temperature to a thick paste. Then marinate for 15 minutes to develop the full heat and flavor. This step is critical to the success of the mustard.
2. Add kosher salt and vinegar to the paste and mix well. This will further develop the heat and flavor. If salt and vinegar are incorporated too soon, they will destabilize the mixture, causing possible bitter flavors or loss of heat.
3. Add all remaining ingredients and mix well with a wooden spoon to minimize incorporation of air.
4. To get maximum heat and flavor, I recommend marinating (aging) prepared mustard for a minimum of 1 week to 4 weeks in an airtight container in the refrigerator.

did you know?

Mustard was mentioned as early as A.D. 42. In the thirteenth century French monks prepared mustard and successfully sold the mustard through vendors in the streets of Paris.

Beer Mustard, Bavarian Style (Yield 1 Pt)

Ingredients

6 oz	dark beer
3	eggs
6 oz	dry powdered mustard
½–1 tsp	kosher salt
½ tsp	Worcestershire sauce
1 oz	white vinegar
1 tsp	toasted caraway seeds
1 tsp	brown sugar or honey

Preparation

1. Mix beer and powdered mustard to a thick paste. Let stand at room temperature for 15 minutes.
 2. Fold in eggs, salt, vinegar, Worcestershire sauce, and sugar. Place in a pan and cook over medium heat, constantly stirring until thick and smooth.
 3. Add caraway seeds.
 4. Cool. Cover airtight and cure for 1 to 2 weeks in the refrigerator.
- Serve with hot and cold sausages, headcheese and hams.

Herbal Mustard

Ingredients

3½ oz	mustard flour or yellow mustard seeds
4–5 Tbsp	water or chicken broth
4½ oz	vinegar
1 tsp	fresh tarragon, chopped
½ tsp	fresh chervil, chopped
1 tsp	parsley, finely chopped
½ tsp	salt or to taste
½ tsp	chopped basil
1 Tbsp	sugar
3–4 Tbsp	olive oil

Preparation

1. Mix cold chicken broth with mustard flour or finely ground mustard seed to a paste. Let stand for 10 minutes.
2. Bring vinegar, salt, and sugar to a boil.
3. Cool. Fold in mustard paste. Add chopped herbs and then slowly whip in oil.
4. Place in jars and refrigerate. Let stand up to 1 week.

English Grill Mustard (From My London Days)

Ingredients

2 oz	mustard flour and mustard seeds, finely ground
2 Tbsp	water or chicken broth
¼ tsp	salt or to taste
1	small onion
3½ oz	vinegar or to taste
½–1 Tbsp	brown sugar
2 Tbsp	sweet Hungarian paprika
1 Tbsp	sherry wine
½–1 Tbsp	olive oil
	few drops of Tabasco sauce

Preparation

- Mix mustard flour and water or chicken stock to a paste. Let stand at room temperature for 10 minutes.
 - Chop onion fine. Pour boiling vinegar over onions and steep for 20 minutes.
 - Combine mustard paste with paprika, sherry wine, sugar and Tabasco.
 - Strain vinegar and fold warm into mixture.
 - Place in a blender. Add oil and emulsify.
 - Fill plastic containers and refrigerate. Cover airtight and marinate for 2 weeks.
-

Cranberry Mustard (Yield 1 Pt)

Ingredients

½ cup	Coleman dry powder mustard
3	eggs
4 oz	cranberry juice
½ oz	white distilled vinegar
¼ tsp	kosher salt
½ tsp	Worcestershire sauce
½ cup	brown sugar
¼ cup	dried cranberries, chopped coarse

Preparation

- Place ingredients, except cranberries, into a stainless steel bowl. Mix well and cook in a double boiler, stirring until thick and smooth.
- Add cranberries. Mix well.
- Cool and pour into a ceramic crock and refrigerate for 6 days. Serve.

Swedish Mustard Salsa

Ingredients

4 oz	prepared mustard
1 oz	minced horseradish
8 oz	mayonnaise
½ tsp	kosher salt
½ tsp	sugar
1 tsp	Worcestershire sauce
4 oz	heavy cream, whipped
2 Tbsp	chopped dill

Preparation

1. Combine all ingredients except heavy cream.
 2. Mix well and fold in whipped cream.
 3. Adjust seasoning. Refrigerate. Use immediately.
- Good with headcheese, bratwurst, or any sausage or cured meats or fish.

Paprika Ketchup

Ingredients

2 lb	red bell peppers
2 oz	water/chicken broth
½ tsp	allspice berries
2	whole cloves
1 small	bay leaf
1	clove of garlic, crushed
⅓ tsp	salt or to taste
2	tomatoes , blanched, peeled, and seeds removed
⅓ tsp	sugar or to taste
⅓–½ tsp	smoked paprika
4 oz	vinegar or to taste

Preparation

1. Cut red peppers in half. Remove all seeds and white ribs. Cut into small squares.
2. Add water/chicken broth and vinegar. Bring to a boil and simmer for 10 minutes. Add salt, sugar, and garlic.
3. Add paprika and sachet with allspice and bay leaf. Add chopped tomatoes.
4. Place into a 350°F oven. Cover and braise for ¾–1 hour.
5. Remove and press through a sieve or food mill.
6. Bring to a boil again. Adjust seasoning.
7. Place into plastic bowl and chill.

Good for a lamb terrine or with bratwurst or other cured meats.

Fritz's Tomato Ketchup

Ingredients

4 lb	ripe tomatoes
2 tsp	tomato paste
½ tsp	kosher salt or to taste
2	Vidalia onions
1	clove garlic, crushed
½ tsp	mace
½ tsp	white peppercorns
½ tsp	allspice
¼ oz	ginger root, grated
1 small	bay leaf
1 pt	white vinegar
2 tsp	sugar or to taste

Preparation

1. Rinse tomatoes and cut into thick slices. Layer in a stainless steel pan.
2. Sprinkle some salt over each layer. Cover. Let stand overnight.
3. Add peeled and chopped onions, garlic, spices, and bay leaf and bring to a boil.
4. Braise covered in a 400°F oven for 1 hour or until thick and pulpy.
5. Press through a sieve or purée in a food mill.
6. Return to cleaned pan. Add vinegar and sugar to taste and simmer for 20 minutes or until thickened (maple syrup consistency). Stir frequently. Taste, adjust seasoning.
7. Cool and fill squeeze bottles. Refrigerate.

Horseradish Sauce (English Style)

Ingredients

1 cup	heavy cream whipped to soft peaks
4 Tbsp	white bread crumbs
2–4 Tbsp	grated fresh horseradish or drained preprepared horseradish
1 Tbsp	yellow mustard (Dijon)
1 Tbsp	chopped chives
1	dash of nutmeg
1/3 tsp	Salt and pepper or to taste

Preparation

1. Fold all ingredients into whipped cream.
 2. Cover and chill for one hour. Use as soon as possible.
- Good with English bangers, bratwurst, or other cured meats.

Fast Mustard Horseradish Sauce

Ingredients

1 cup	mayonnaise
1/4 oz	yellow mustard (French)
2 Tbsp	fresh grated horseradish
	black pepper and sugar to taste

Preparation

1. Combine all ingredients, mix well. Serve ice cold.

Orange Cranberry Sauce

Ingredients

1 large	orange
1 lb	fresh or frozen cranberries
½ cup	sugar
3 oz	orange concentrate (frozen)
3 oz	water

Preparation

1. Zest orange and save. Trim and peel orange and dice the flesh.
2. In a pan, combine zest and diced orange with all the remaining ingredients.
3. Simmer for 30 minutes, stirring occasionally or until cranberries burst.
4. Chill.

Good with smoked turkey, turkey sausage, or cured meats.

Cranberry Relish

Ingredients

1 lb	fresh cranberries or frozen
1 lb	oranges (blanched for 30 seconds and shocked)
3	lemons (blanched and shocked)
½ to 1 cup	sugar
½ tsp	cinnamon (optional)
½ tsp	kosher salt

Preparation

1. Grind cranberries, oranges, and lemon through a medium grinding plate.
2. Fold in sugar, cinnamon, and salt. Mix well.
3. Marinate in the refrigerator for 14 hours.

Radish Remoulade

Ingredients

1 lb	red radishes, finely julienned or shredded
½ cup	white vinegar
1½ Tbsp	yellow mustard (Gulden)
½ tsp	caraway seeds
½ cup	remoulade sauce (see recipe on page 309)
Some salt	

Preparation

1. Marinate radishes in vinegar. Add mustard, salt, and caraway seeds.
2. Refrigerate for 2 hours. Drain well and discard liquid.
3. Toss radishes in remoulade sauce. Serve ice cold.

Good with cold cuts, leberkaese, and bratwurst.

Spiced Cherry Tomatoes

Ingredients

2 lb	firm, red or yellow cherry tomatoes.
12	basil leaves
	sugar-free vinegar to cover (see recipe on page 307)

Preparation

1. Lightly prick tomatoes with sausage pricker or a needle.
2. Place tomatoes into a sterilized jar. Cover with sugar-free vinegar and weight down for a few hours. Seal and marinate 4 to 6 weeks in a refrigerator. This improves with age.

Sugar-free Vinegar

Ingredients

2½ quart	cider vinegar
6 oz	concentrated apple juice
1 Tbsp	black peppercorns
½ Tbsp	allspice berries
1 tsp	cloves
1	cinnamon stick
	A few dried chilies (optional)

Preparation

1. Place vinegar and apple juice in a stainless steel pan.
2. Add a sachet of peppercorns, cloves, cinnamon stick, and chilies. Simmer for 20 minutes.
3. Remove sachet and pour vinegar into sterilized bottles. Cool and store in a dark place. The vinegar improves with age.

Mustard Pickles

Ingredients

5 lb	cucumber, peeled, cut in half, seeds removed
1 quart	plain white vinegar
2 lb	granulated sugar
1 tsp	turmeric powder
3 Tbsp	mustard seeds
16 oz	sliced onions
1 oz	kosher salt

Note: Turmeric and mustard seed can be exchanged with 16 oz prepared yellow mustard (Guldens).

Preparation

1. Bring vinegar, sugar, turmeric, mustard seeds (or exchange) to a boil.
2. Cut cucumbers into 2-in. pieces. Slightly salt and let stand for 2 hours in a colander.
3. Add well drained cucumbers and sliced onions to boiling vinegar. Simmer for 5 minutes.
4. Fill sterilized jars. Cover and cool. Refrigerate for 1 week.

did you know?

This recipe belongs to the large family of salsas and chutneys that are served to enhance and tempt appetites. Grated apples, carrots, and turnips can be substituted for onions.

Onion Chutney

Ingredients

2 lb	large sweet red onions, sliced into rings
1 tsp	salt to taste
up to 3	green or red chilies, seeded and finely chopped
6 Tbsp	white distilled vinegar
3 Tbsp	parsley
1 Tbsp	kalonje, also known as nigella seeds (optional)

Preparation

1. Place sliced onions in a colander. Sprinkle with kosher salt. Toss well and let stand to drain for 4 hours.
2. Squeeze onions dry. Combine in a bowl with all other ingredients.
3. Let stand for 1 hour to develop its flavor.

Excellent with corned beef.

did you know?

Kalonje (nigella seeds) are a popular spice used in India for breads and in various curry dishes.

Sweet Tarragon Mustard

Ingredients

	Finely grated zest and juice of 4 oranges
1 cup (8 oz)	yellow mustard seeds
1/3 cup (2.5 oz)	white distilled vinegar
1 tsp	kosher salt
1 Tbsp	chopped fresh tarragon leaves
1 tsp	Sam Adams lager beer

Preparation

1. Place orange zest and juice in a small pan. Bring to a boil. Reduce the heat and reduce by half. Remove from heat and cool.
2. Coarsely grind 7 oz mustard seeds in a spice mill. Place into a glass jar or bowl with remaining mustard seeds.
3. Add cold orange mixture and beer and mix well.
4. Let stand for 10 or 20 minutes.
5. Fold in vinegar, salt, and tarragon. Seal or cover jar or bowl and let stand for 6 to 12 days.

tip

This coarse grained mustard is very good for coating meat before roasting, for example, corned beef, pastrami, or hams.

Classical Remoulade Sauce (1¼ Cups)

Ingredients

1 cup	mayonnaise
1 tsp	Dijon mustard
1½ tsp	gherkins, chopped fine or drained pickle relish
1 tsp	chopped capers
1 tsp	chopped herbs (parsley and chervil)
1 tsp	chopped dill

Preparation

1. Combine all ingredients and chill.

Summary

This chapter presents an array of salsa, chutney, and compote recipes to experiment with. It also gives detailed instructions for preparing mustard, the ultimate garnish for sausages. Hopefully this introduction to the big, wide world of salsas will whet your taste buds and inspire you to prepare these magical treats to tickle your palate.

IN REVIEW

1. What is tomato concasee?
2. What is a sachet?
3. Explain the term “sweat.”
4. Explain the term “blanching.”
5. What color does the term “aurora” imply?
6. State the difference between cranberry and lingonberries.
7. Explain the term “shock.”
8. What is a cold egg and oil emulsion called?
9. What is the purpose of marinating?

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KEY TERMS

Julienne

Chiffonade

Juniper Berries

Mâche

Vidalia Onion

Lingonberries



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Specialty Recipes

Every sausage, savory aspic or cured meat needs an accompaniment; it assists in bringing out the flavor and helps the eye appeal of each serving. The suggestions in this chapter are designed, like a marriage, to bring together opposites and create harmony, love, and passion. I am like a “food yenta”, a matchmaker bringing different foods together—a weisswurst with German potato salad and a smidgen of sweet mustard, or a kielbasa bratwurst and honey sauerkraut on toasted pumpernickel, or a buffalo brat with Boston baked beans and pickled Brussels sprouts.

This chapter is also designed to give a practical use for “leftovers” and bring them back into the limelight of gastronomy, for example an Italian meat salad, or a combination of leftover leberkäse and pickled melons, or a Greek sausage burger with walnut sauce. My masters always taught me, “Chefs never waste food”. This chapter will assist you in creating new combinations of food to increase the flavor variety of your dishes as well as the value of your food budget.



Basic Potato Salad (Yield 2½ Lbs)

Ingredients

32 oz	Yukon potatoes
8 oz	chicken broth
4 oz	onions, finely diced
4 oz	white vinegar
½ tsp	prepared mustard (optional)
	salt and sugar to taste
1 oz	oil
2 Tbsp	chives, finely chopped

Preparation

1. Cook potatoes in their jackets until done.
2. Drain. Set potatoes on a sheet pan, and dry in a 250°F oven for 5 minutes.
3. Peel while warm and slice thin.
4. Bring chicken broth, onions, vinegar, mustard (optional), salt, and sugar to a boil. Simmer for 10 minutes. Add oil and pour over potatoes.
5. Toss gently and marinate for 1 hour. Adjust seasoning and vinegar.
6. Just before serving, sprinkle with chives.

Variations

With bacon: Add 4 oz bacon, diced and crispy.

With mayonnaise: Use no oil. When cold fold 2 to 3 oz of mayonnaise into salad, with chopped hard-boiled eggs and chopped parsley.

With apple: Add 1 peeled apple, cored and cubed small.

With celery: For a different taste, add blanched julienne of celery root and apple in equal amounts. Marinate in lemon juice and add to potato salad.

If chicken broth is not available use a ratio of 1 part vinegar and 2 parts water reinforced with chicken base.

Honey Sauerkraut

Ingredients

1 can	sauerkraut
1 small	onion, diced
1	apple, peeled, cored, and sliced
1–2 tsp	honey
½ tsp	caraway seeds
6	juniper berries
	lard or oil
2 cups	chicken broth or as needed
1	peeled grated potato

Preparation

1. If sauerkraut is too salty, rinse under cold water.
2. Heat lard; add onions and apples and sauté for 2 minutes.
3. Add sauerkraut, honey, caraway seeds, and juniper berries. Add chicken broth.
4. Bring to a boil, reduce heat, and simmer covered for 1–1½ hours.
5. Fold in grated potato and simmer for 5 minutes.
6. Season with salt, if needed.



Bavarian brat (schweinswürstel) with honey sauerkraut

Riesling Choucroute (Sauerkraut)

Ingredients

1 lb	well-rinsed sauerkraut
1	sachet (cheesecloth bag with 2 bay leaves, 12 peppercorns and 6 juniper berries)
1 Tbsp	pork lard or oil
1	medium Spanish onion, peeled and finely chopped
4-in.	square piece of smoked slab bacon
1 cup	of pork broth or as needed
1	medium potato
2 cups	Riesling wine
2 oz	vermouth

Preparation

1. Place bay leaves, peppercorns and juniper berries into a cheesecloth bag and tie. Set aside.
 2. Heat lard in a pan. Add chopped onions and sauté to a golden color.
 3. Add the well-rinsed sauerkraut, slab bacon, sachet, pork broth, and wine.
 4. Bring to a boil. Cover and simmer over low heat for 45 minutes.
 5. Add vermouth and simmer for 45 minutes.
 6. Peel potato and grate fine. Fold into sauerkraut and simmer uncovered for 10 more minutes.
-

Homemade Sauerkraut

Ingredients

5 pounds	white cabbage shredded
2–3 oz	kosher salt

Preparation

1. Wash cabbage well. Cut into quarters and remove the core. Shred by machine or by hand, approximately $\frac{1}{4}$ in. thick.
2. Toss with salt and place in an earthen crock or a plastic bucket lined with a plastic bag. Weight it down with a dinner plate or wooden disk and a brick covered with plastic wrap.
3. Cure in a cool, dark room or in the refrigerator for 1 month or as desired.
4. Rinse with water before cooking.

Bavarian Cabbage Salad

Ingredients

1–1½ lb	white cabbage, shredded
1	onion
1 Tbsp	diced bacon, sautéed crisp (save the fat)
⅓ tsp	caraway seeds
4 Tbsp	white vinegar
3 Tbsp	oil
	Salt and pepper to taste

Preparation

1. Shred the cabbage. Slice the onions.
2. Blanch cabbage and onions in boiling salted water and drain.
3. Place in a bowl. Add crisp bacon, caraway seeds, salt, pepper, and oil and vinegar.
4. Mix well and adjust seasoning. Serve at room temperature.

Pumpkin or Squash Salad

Ingredients

16 oz	pumpkin
2 tsp	butter
1 tsp	pumpkin seeds

Marinade

2 tsp	balsamic vinegar
1 tsp	white wine
4 tsp	virgin olive oil or ½ pumpkin oil, ½ olive oil
1 tsp	chopped chives
	salt, pepper, sugar to taste

Some Boston lettuce leaves for garnish

Preparation

1. Deseed and peel pumpkin. Slice thin.
 2. Heat butter in a sauté pan. Add pumpkin and sauté for 5 minutes. Keep warm.
 3. Combine oil, vinegar, white wine, chives, salt, pepper, and sugar. Mix well.
 4. Pour over warm pumpkin slices and marinate for 5 minutes.
- Place Boston lettuce on a plate. Arrange pumpkin slices on top. Sprinkle with pumpkin seeds. Serve at room temperature. Good with smoked turkey or sautéed kielbasa.

Vinegar and Oil Dressing for Headcheese

Ingredients

1	shallot
1	small bunch chives
4–6 Tbsp	chicken broth
2–3 Tbsp	red or white vinegar
	salt, sugar, pepper to taste
2 Tbsp	pork skin broth
2 Tbsp	extra virgin olive oil

Preparation

1. Chop shallots fine.
2. Cut chives fine.
3. Mix broth and vinegar with shallots. Season with salt, sugar, and black pepper.
4. Whip oil and warm pork skin broth.
5. Let stand for 10 minutes.
6. Add chives and serve.

Use for headcheese, sausage salad, or red and white Pressack.

Knockwurst Salad

Ingredients

1½ lb	sliced knockwurst (Chapter 9)
7 oz	red onion, thinly sliced
8 oz	Swiss cheese julienne (optional)
8 oz	celery, peeled and sliced thin
2 Tbsp	chopped chives and parsley

Dressing

3 oz	vinegar
2 oz	pork broth
	salt and pepper and sugar to taste
4 oz	olive oil

Preparation

1. For dressing, combine all ingredients and emulsify in a blender.
 2. Toss with all other ingredients.
 3. Arrange on Romaine lettuce leaves.
- Serve with garlic bread or pretzels.



Knockwurst salad with red onions and vinaigrette, basket of pretzels

Salami Salad

Ingredients

8 oz	cooked carrots, julienned
8 oz	blanched snow peas, julienned
8 oz	blanched celery peeled, trimmed, and thinly sliced
1½ lb	salami or cervelat, large cubes (Chapter 8)
8 oz	Vidalia onion, peeled, sliced thin, and blanched
8 oz	sour cream
1–2 oz	heavy cream
1 oz	vinegar
1 oz	olive oil
	salt and pepper to taste
2 Tbsp	finely chopped parsley
8 oz	crumbled blue cheese

Preparation

1. Combine carrots, celery, and snow peas. Add cubed salami and onion rings.
2. Prepare dressing: Mix sour cream and heavy cream. Add vinegar, oil, salt, pepper and parsley.
3. Mix well. Add blue cheese and toss carefully with all ingredients.

Serve ice cold.

Fritz's Cheese Spread

Ingredients

8 oz	cream cheese (room temperature)
2 oz	soft butter
4 oz	ripe brie cheese or camembert
1 heaped Tbsp	onions, finely chopped
	salt and pepper to taste
1 tsp	sweet paprika
2 Tbsp	light beer
1 Tbsp	chopped chives
½ tsp	caraway seeds

Preparation

1. Mash all ingredients with dinner fork into a paste.
- Use for salami canapés or as a center for any sausage platter.

Marinated Red Cabbage

Ingredients

1 lb	red cabbage, shredded
1 small	red onion, sliced thin
	salt and pepper to taste
2 oz	vinegar
1½ oz	extra virgin olive oil
2 oz	red currant jelly or lingonberries

Preparation

1. Bring water seasoned with salt and 1 oz vinegar to a boil.
2. Blanch red cabbage and drain well.
3. Add rest of vinegar, salt, pepper, red currant jelly or lingonberries, and olive oil.
4. Toss well.
5. Marinate for 1 hour.
6. Adjust seasoning.

Serve with headcheese or cold cuts.



Stir-fried rice with soft cervelat fried egg, and caviar

Stir-Fried Rice

Ingredients

2 Tbsp	peanut oil or olive oil
1	egg
½ cup	sautéed chopped onions
1 oz	diced cooked carrot
1 oz	diced cooked celery
⅓ tsp	chopped fresh ginger
⅓ tsp	chopped garlic
1 oz	chopped scallions
2 cups	cooked jasmine rice
1 oz	pineapple, diced
	kosher salt and black pepper to taste

Preparation

1. Heat oil in a wok to the smoking point. Add egg and scramble until very dry and golden in color.
2. Add onions, carrot, celery, garlic, and ginger. Stir-fry for 2 minutes.
3. Add rice and toss for 5 minutes or until heated.
4. Add pineapple and scallions. Season with salt and pepper.
5. Serve warm or room temperature.



Italian meat salad with rye bread

Italian Meat Salad

Ingredients

8 oz	salami, gelbwurst (white bologna), knockwurst, or bologna, julienned
2 oz	kosher pickles, julienned
1 oz	apples, peeled and cored, julienned
½ cup	mayonnaise
½ tsp	Worcestershire sauce
½ tsp	chopped anchovies (optional)
2	hard boiled eggs
1 Tbsp	chopped chives

Preparation

1. Combine julienne of sausage, pickles, and apples.
2. Fold in mayonnaise, chopped eggs, anchovies, pickle relish. Season with Worcestershire sauce and sprinkle with chives.
3. Marinate for 2 hours or overnight in refrigerator.

Leftover Leberkäse or Bologna Salad with Melon

Ingredients

2 small	cantaloupes, cut into balls
10 oz	leberkäse or bologna, cut into julienne (Chapter 9)
10 oz	gelbwurst (white bologna) cut into julienne (Chapter 9)
8 oz	red pepper julienne
8 oz	Swiss cheese
8 oz	kosher pickle julienne

Dressing

2 oz	vinegar
	juice of half a lime
3 tsp	honey
3 oz	olive oil
2 Tbsp	chopped chives

Preparation

1. Combine all ingredients and marinate for 2 hours.
2. Refrigerate.

Serve on a bed of Boston lettuce with rye or pumpernickel bread.

Bavarian Pretzel

Ingredients

10.5 oz	water
2.5 oz	buttermilk
26.5 oz	high-gluten flour
1 oz	yeast
1/3 tsp	sugar
1/3 tsp	malt
3/4 oz	oil
1/2 oz	salt

Preparation

1. Combine all ingredients. Mix until dough is developed (about 8 minutes). Let stand for 1 hour.
2. Divide into 12–14 pieces. Roll each piece into thin 12-in. rolls. Taper the ends.
3. Fold each strip into a pretzel. Place pretzels on heavily greased parchment paper.
4. Proof for 30 minutes.
5. Use a razor-sharp knife to cut a thin line on top of each pretzel.
6. Spray with a sodium hydroxide solution. Sprinkle with coarse salt.
7. Bake in a 450°F oven for 15 to 20 minutes.

Note: For larger amounts, dip pretzels into the solution before baking.

Banh Mi (Vietnamese Liverwurst Sandwich)

Ingredients

½ tsp	soy sauce
½ lb	liverwurst (Papa Metz's (page 61)
2	jalapenos, thinly sliced
½ pound	daikon, peeled
1	carrot, peeled
½ cup	rice vinegar (not seasoned)
1	baguette (24-in), soft
2 Tbsp	olive oil
1 Tbsp	Asian fish sauce
½	Vidalia onion, cut into ¼-in. rings
¼ cup	cilantro sprigs
8 oz	smoked turkey, thinly sliced
2 Tbsp	mayonnaise

Preparation

1. Shred daikon and carrot either by hand or food processor.
2. In a bowl mix vinegar, sugar, and ½ tsp salt.
3. Toss with shredded vegetables and marinate for ½ hour.
4. Preheat oven to 350°F. Heat baguette until crusty (5 minutes).
5. Cut ends off and save for possible use for metzel soup (page 74). Split lengthwise.
6. In a bowl mix together oil, fish sauce, and soy sauce. Brush on cut sides of the bread.
7. Spread Papa Metz's Liverwurst on the bottom half and sprinkle with chilies.

Spiced Pears

Ingredients

	Juice of 1 lemon
2 lb (11g)	pears
5 cups	red wine vinegar
2 cups	sugar
¼ cup	honey

Sachet

1 Tbsp	black peppercorns
2 tsp	cloves
2 tsp	allspice
2	bay leaves
1 large	cinnamon stick
	some lemon zest

Preparation

1. Combine lemon juice and water enough to cover pears.
2. Peel pears, cut into quarters, remove core, and place into the lemon water.
3. Bring spice sachet ingredients to a boil. Skim and simmer for 5 minutes.
4. Add pears and simmer for 10 to 15 minutes.
5. Remove pears with a slotted spoon and place in jars.
6. Boil and reduce liquid by half and pour over pears. Make sure they are totally covered.
7. Seal in container and chill.

Easter Bread with Ricotta, Lamb, Prosciutto, and Arugula

Ingredients

3½ cups	all-purpose flour
½ tsp	baking soda
	some kosher salt
4 oz	lard or butter (½ cup) at room temperature
¾ cup	water
1 Tbsp	extra virgin olive oil
1½ cups	fresh ricotta cheese
	some ground black pepper
4 oz	arugula, baby leaves (4 cups)
1 tsp	fresh lemon juice and vinegar
¼ lb	thinly sliced lamb prosciutto (Chapter 13)

Preparation

1. In an electric mixer bowl, combine flour, baking soda, and salt and mix with a dough hook.
2. Add lard or butter and mix at medium speed. Continue until dough forms a mass around the hook.
3. Increase speed to medium and knead until smooth (approximately 5 minutes).
4. Divide dough into 6 pieces and roll each piece into a ball.
5. Cover with plastic wrap and let stand at room temperature for 30 minutes.
6. Preheat oven to 225°F.
7. Heat a cast-iron griddle until very hot.
8. Roll each ball into a 10-in. round, approximately ⅛-in. thick.
9. Brush both sides with olive oil.
10. Grill over moderate heat turning over until golden and cooked through (2 to 4 minutes).
11. Wrap in aluminum foil to keep warm.
12. In a bowl, season ricotta cheese with salt and pepper.
13. Toss arugula with lemon juice and 1 Tbsp oil. Season with salt and pepper.
14. Arrange bread on plate, spread with ricotta cheese, and garnish with prosciutto ham. Top with arugula. Serve warm.

Note: The bread can be bought in any supermarket.

Salami, Bread, and Tomato Salad

Ingredients

1 cup	meat broth
3–4 Tbsp	red wine vinegar
6 oz	rustic whole-grain bread, cut into 1-in. cubes
1/3 cup	extra virgin olive oil
1 cup	(pint) cherry tomatoes, cut in half
1 cup	peeled celery, sliced
6 oz	salami, land jaeger or cervelat
1 cup	coarsely chopped green olives
1	small Vidalia or red onion, thinly sliced
1/2 cup	coarsely chopped yellow peppers
1 cup	coarsely chopped basil
1 tsp	dried oregano
	salt, pepper, and sugar to taste

Preparation

1. In a large bowl, combine meat broth with 2 Tbsp of the vinegar.
2. Toss the bread in the vinegar solution and drain in a colander, carefully squeezing out liquid.
3. In a small bowl combine 2 Tbsp broth, olive oil, 1 Tbsp vinegar, salt and pepper, and some sugar.
4. Add tomatoes, salami, and celery, onions, basil, and oregano.
5. Toss with prepared bread cubes. Adjust seasoning.
6. Arrange on Boston lettuce leaves.

Sweet Mustard Cucumbers

Ingredients

5 lb	garden cucumbers, peeled and deseeded
1 qt	plain white distilled vinegar.
2 lb	sugar
1 lb	yellow mustard
2 lb	Spanish onion, peeled, cut in half, and sliced 1/8-in. thick
1 Tbsp	salt

Preparation

1. Cut peeled and deseeded cucumber into 2-in. squares. Toss with salt and let stand for 2 hours.
 2. Bring vinegar, sugar, and mustard to a boil.
 3. Drain cucumbers well and add with sliced onions to the marinade and boil for 5 minutes.
 4. Fill sterilized jar and seal.
 5. Cool and store in a refrigerator. Marinate for 1 week.
-

Sweet Pickled Cherry Tomatoes

Ingredients

3 lb	firm cherry tomatoes
3½ lb	sugar
1 qt	water
1	fresh ginger root, peeled and grated
	juice and grated zest of 2 lemons
1 tsp	pickling salt

Preparation

1. Rinse tomatoes under running water. Pierce each one in several places with a sausage pricker.
2. In a large pot, dissolve sugar in water and bring to a boil. Rapidly boil for 8 minutes.
3. Add prepared tomatoes and simmer for 10 minutes. Remove the tomatoes with a spider and set aside.
4. Add the grated ginger, lemon juice, and grated zest to the liquid and simmer for 20 minutes.
5. Return tomatoes to the syrup and simmer for 30 minutes more or until the syrup is thick and the tomatoes transparent.
6. Place in glass jars.
7. Fill to within 1/2-in. of the top. Cover with a lid or plastic wrap. Cool and refrigerate.

Pickled Green Cherry Tomatoes

Ingredients (1 qt jar)

32 oz	hard green cherry tomatoes, rinsed
2	bay leaves
2 tsp	pickling spice
3	cloves of garlic
1	heaping tsp of dill seeds
1	onion, sliced
1	heaping tsp of celery seeds

Brine

7 cups	water
3 cups	plain white vinegar
½ cup	kosher salt

Preparation

1. Place bay leaves, pickling spice, garlic, dill seeds, onion, and celery seeds into preheated jar.
2. Firmly pack cherry tomatoes into jar to just below the top of the jar.
3. Bring water, vinegar, and salt to a boil and pour boiling hot liquid over the tomatoes to lightly cover tomatoes. Wait for a few minutes to let the brine settle. If needed add more of the brine to cover tomatoes.
4. Cover with a lid or plastic wrap. Cool and refrigerate for 2 weeks before serving.

Bucatini or Elbow Macaroni with Italian Sausage and Peas

Ingredients

2 Tbsp	olive oil
1 lb	Italian sausage, casing removed
2	cloves of garlic, finely chopped or mashed
2	shallots, finely chopped
2½ cups	tomato sauce (use canned tomato sauce)
¼ cup	heavy cream
½ cup	frozen or canned baby peas
⅓ Tbsp	kosher salt
⅓ Tbsp	sugar or to taste
1 lb	bucatini or macaroni
½ cup	grated parmesan cheese
2 Tbsp	chiffonade of basil leaves

Preparation

1. In a large pasta pot, heat oil. Add crumbled Italian sausage and cook over medium heat, for approximately 8 minutes.
2. Add garlic and shallots and cook for 3 minutes.
3. Add tomato sauce and simmer covered for 30 minutes.
4. Temper the heavy cream and fold into the sauce.
5. Add peas and simmer for 10 more minutes. Season with salt and sugar.
6. Cook pasta in lots of water until al dente. Drain well and return to the pot.
7. Pour sauce over pasta and mix well. Fold in ¼ cup grated parmesan cheese. Let stand for 3 minutes to allow sauce to be absorbed into the pasta.
8. Place in a serving dish. Sprinkle with rest of the cheese and the basil chiffonade.

Greek Sausage Burger with Walnut Sauce

Ingredients

4–5 4-oz Greek sausage patties

Sauce

1 small clove of garlic

½ cup (1½ oz) walnuts

¼ cup chicken broth

1 tsp lemon juice

A touch of cayenne pepper, salt to taste

Bread

4–5 (4 in.) pita loaves

1 Tbsp extra virgin olive oil

Smoked paprika for dusting

Some ground pepper medley

Preparation

1. Prepare sauce. Finely chop garlic and transfer with all other ingredients to a minifood processor or blender and process until smooth and creamy. Taste and adjust seasoning. Set aside.
 2. Place pitas on a baking tray. Brush lightly with extra virgin olive oil. Dust with smoked paprika and season with crushed pepper mélange.
 3. Broil for 1 to 2 minutes under the broiler or salamander (do not burn).
 4. Sauté or broil Greek sausage patties for 4 to 5 minutes or until cooked.
- Serve on pita bread topped with walnut sauce.

Westphalian Ham with Mache and Pomegranate Seeds

Ingredients

8 oz	thinly sliced Westphalian ham (Chapter 13)
4 oz	Swiss cheese
1 pt	mache (field lettuce) or frisee
2 Tbsp	pomegranate seeds

Dressing

2 Tbsp	balsamic vinegar
4 Tbsp	extra virgin olive oil
	salt and pepper to taste

Preparation

1. Remove the rind of the Westphalian ham and slice paper thin.
2. Slice Swiss cheese thinly.
3. Combine the balsamic vinegar, salt, and pepper. Add olive oil and emulsify in a blender.
4. Brush some of the dressing on a plate.
5. Toss greens lightly with some of the dressing. Place in the center of the plate and arrange Westphalian ham in a circle, alternating cheese and ham.
6. Sprinkle with pomegranate seeds and drizzle some dressing over greens.

Asparagus with Westphalian Ham and Herbal Salad

Ingredients

12	spears of asparagus
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Seasonings

1 tsp	butter
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2 Tbsp	white wine
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½ tsp	sugar
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½ tsp	salt
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Salad

6 oz	mache or frisee
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½ tsp	chopped chives
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½ tsp	chopped parsley
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12	slices of Westphalian ham (Chapter 13)
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Dressing

3 oz	sunflower oil
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1 oz	white distilled vinegar
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1½ oz	asparagus broth
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7 oz	carrots, finely chopped, or celery or leeks
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1 tsp	shallots, finely chopped
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1 tsp	chopped chives
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	Salt and pepper to taste
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Preparation

1. Peel the asparagus. Trim off woody ends and tie into a bundle.
2. Season water with butter, white wine sugar, and salt. Simmer asparagus until al dente and shock. Save cooking water.

Herbal Salad

1. Clean, rinse, and dry greens. Cut or rip into bite size pieces.

Dressing

1. Blanch carrots and shallots in the asparagus water. Remove and drain well.
2. Combine vinegar and warm asparagus broth. Add sunflower oil and emulsify in a blender.
3. Add carrots and shallots. Season with salt and pepper. Fold in herbs.
4. Roll asparagus into Westphalian ham.
5. Arrange on a plate or platter. Toss greens lightly with some dressing and arrange on the ends of the asparagus.
6. Drizzle some dressing over asparagus and greens.

Bratwurst Kielbasa with Braised Cannellini Beans and Olives

Ingredients

5 Tbsp	olive oil
4	red onions, sliced thin
1 lb	shiitake mushroom caps (if large, cut in half)
20 oz (4 cups)	red Swiss chard leaves
4 cups	cannellini beans, cooked
½ cup	white wine
1 cup	pork broth (Chapter 6)
1 tsp	chopped rosemary
1	lemon grated zest
½ cup	black olives
1 pt	cherry tomatoes, seared in olive oil
	salt and pepper to taste
¾ cup	shaved pecorino cheese
6	each Debbie's Kielbasa Bratwurst (Chapter 10)

Preparation

1. Heat olive oil in a casserole. Add red onions and sauté for 3 minutes.
2. Add mushroom caps and sauté for 5 minutes.
3. Add Swiss chard and cook until wilted.
4. Fold in beans. Add white wine and reduce to a glaze.
5. Add pork broth (Chapter 6), rosemary, lemon zest, and olives. Bring to a boil and simmer for 5 minutes.
6. Add seared cherry tomatoes and season with salt and pepper.
7. Swirl in butter, sauté or grill kielbasa bratwurst. Cut kielbasa into 5 bias slices.
8. Spoon bean ragout into warm plates and top with kielbasa bratwurst. Sprinkle with shaved pecorino cheese.

Variety of Sausages with Beans and Kale

Ingredients

20 oz	dry cannellini beans
½ oz	olive oil
1	clove of garlic, minced
1	small red onion, finely diced
1	sprig of sage
1	sprig of thyme
1 oz	tomato paste or 5 Tbsp tomato ketchup
1 qt	pork broth (Chapter 6)
½ tsp	sea salt and black pepper or to taste
10	buffalo bratwurst (Chapter 10)
10	venison bratwurst (Chapter 10)
10	Swiss bratwurst (Chapter 10)
26 oz	kale

Preparation

1. Soak beans for 12 hours in four times amount of water.
 2. Heat olive oil. Add diced red onion and minced garlic and sauté until golden.
 3. Add herbs, beans, and tomato paste. Cook for 3 to 4 minutes.
 4. Add pork broth, sea salt and pepper. Bring to a boil and simmer covered until beans are soft (40 minutes). Add some broth if needed.
 5. Heat 2 Tbsp oil and 2 Tbsp butter and sauté the kale until wilted. Season with salt and pepper and a little sugar.
 6. Combine 2 oz beans with 1 sautéed venison, buffalo, and Swiss bratwurst sausage and 2 oz sautéed kale.
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Scottish Eggs

Ingredients

12	hard boiled eggs, peeled
2 lb	Bavarian bratwurst (page 169) or breakfast sausage (page 188) bulk forcemeat
	Oil to fry

Preparation

1. Surround eggs evenly with a thin layer of sausage meat. Let stand in the refrigerator for 2 hours.
2. Deep fry for 5 minutes to a golden brown color and serve with Russian dressing.

Pickled Brussels Sprouts

Ingredients

1 pound	small fresh Brussels sprouts
2 Tbsp	honey
1	small Vidalia onion, coarsely diced
1 cup (8 oz)	chicken broth
¼ cup (2.5 oz)	white distilled vinegar
¼ tsp	salt or to taste

Preparation

1. Trim sprouts and cut crosswise on the root section.
 2. Combine chicken broth, vinegar, honey, and salt and bring to a boil.
 3. Place sprouts and onion in a glass jar and pour boiling hot marinade over mixture.
 4. Cover with a lid and cool.
 5. Refrigerate and marinate for 24 hours.
- Serve with sliced ham, duck prosciutto, or venison pâté.

Pickled Cauliflower

Ingredients

1	large head of cauliflower (2 lb), cut into florets
1	peeled red onion, thinly sliced
1	pint chicken broth
5 oz	plain white distilled vinegar
½ tsp	sea salt
1 tsp	sugar or to taste

Preparation

1. Combine chicken broth, vinegar, mustard, salt, and sugar. Bring to a boil.
2. Add onions and cauliflower florets and simmer for 3 minutes.
3. Place in a glass jar. Close with a lid and cool.
4. Marinate for 24 hours in a refrigerator.

Serve with pâtés, headcheese, or savory aspics.

Appendix A

General Formulas for Metric Conversion

Ounces to grams	Multiply ounces by 28.35
Grams to ounces	Multiply grams by 0.035
Pounds to grams	Multiply pounds by 453.5
Pounds to kilograms	Multiply pounds by 0.45
Cups to liters	Multiply cups by 0.24
Fahrenheit to Celsius	Subtract 32 from Fahrenheit temperature, multiply by 5, then divide by 9
Celsius to Fahrenheit	Multiply Celsius temperature by 9, divide by 5, then add 32

Approximate Metric Equivalents by Volume

U.S. System	Metric
1 teaspoon	5 milliliters
1 tablespoon	15 milliliters
$\frac{1}{4}$ cup	60 milliliters
$\frac{1}{2}$ cup	120 milliliters
1 cup	230 milliliters
$1\frac{1}{4}$ cups	300 milliliters
$1\frac{1}{2}$ cups	360 milliliters
2 cups	460 milliliters
$2\frac{1}{2}$ cups	600 milliliters
3 cups	700 milliliters
4 cups	0.95 liter
1.06 quarts	1 liter
4 quarts	3.8 liters

Approximate Metric Equivalents by Weight

U.S. System	Metric
¼ ounce	7 grams
½ ounce	14 grams
1 ounce	28 grams
1¼ ounces	35 grams
1½ ounces	40 grams
2½ ounces	70 grams
4 ounces	112 grams
5 ounces	140 grams
8 ounces	228 grams
10 ounces	280 grams
15 ounces	425 grams
16 ounces (1 pound)	454 grams
0.035 ounce	1 gram
1.75 ounces	50 grams
3.5 ounces	100 grams
8.75 ounces	250 grams
1.1 pounds	500 grams
2.2 pounds	1 kilogram

Appendix B

How to Calculate Sausage Formulas

Example: Emulsified Bratwurst

For 2 pounds of sausage: 40% pork shoulder $\times .32$ oz = 12.8 oz adjusted to 13 oz

25% lean pork belly $\times .32$ oz = 8 oz 8 oz

20% pork fatback $\times .32$ oz = 6.4 oz adjusted to 6 oz

15% ice $\times .32$ oz = 4.8 oz adjusted to 5 oz

Total 32 oz 32 oz

For 6 pounds of sausage: 40% pork shoulder $\times .96$ oz = 38.4 oz adjusted to 38 oz

25% lean pork belly $\times .96$ oz = 24 oz 24 oz

20% pork fatback $\times .96$ oz = 19.2 oz adjusted to 19 oz

15% ice $\times .96$ oz = 14.4 oz adjusted to 15 oz

Total 96 oz 96 oz

Seasoning: Multiply 2-lb seasoning mixture by 3

For 10 pounds of sausage: 40% pork shoulder $\times 160$ oz = 64 oz

25% lean pork belly $\times 160$ oz = 40 oz

20% pork fatback $\times 160$ oz = 32 oz

15% ice $\times 160$ oz = 24 oz

Total 160 oz

Seasoning: Multiply 2-lb seasoning mixture by 5

Appendix C

Resources

Plum Powder

Ever Changing Times, Inc.
17855 U.S. Highway 441
Suite 6
Mount Dora, FL 32757
Phone: 352-383-5191
<http://www.CaliforniaDriedPlums.org>

The Sausage Maker

1500 Clinton Street, Bldg. 123
Buffalo, NY 14208
Phone: 1 800-824-5814
<http://www.sausagemaker.com>

Butcher & Packer Supply Company

1468 Gratiot Avenue
Detroit, MI 48207
Phone 800-521-3188
<http://www.butcher-packer.com>

Judy Prince Company

36 East 31 street
New. NY. 10012
<http://www.jpprince.com>
800-473-0577

R.L. Schreiber Inc.

Spices/smoked paprika
<http://www.RLSchreiber.com>
800-624-8777

Mc Cormick Spices

<http://www.spiceplace.com>

Cutco Cutlery

1116 East Street
Olean
New York, NY 14760
<http://www.cutco.com>
800-828-0448

Jennie-O Turkey store sales LLC

P.O. Box 778
Willmar, MN 56201
320-231-7123

Glossary

- air dry** A technique of slowly drying or ripening sausage in a cool, dark room by air.
- aitch bone** The split portion of the pelvic bone.
- aspic** Aspic by itself is actually a vessel into which clarified meat broth enforced with gelatin is poured to set into a gelée. Today professionals use the term aspic loosely for gelatinized clear meat or fish broth.
- beef chuck** Beef chuck comes from the shoulder and neck of the animal. It yields some of the most flavorful and economical cuts of meat.
- beef round** A type of casing that derives its name from the characteristic “ring” shape beef rounds have.
- blanch** A basic culinary cooking process to enhance the color, flavor, and texture of vegetables and fruits. Vegetables or fruits are quickly submerged in boiling salted water and shocked in ice water to stop the cooking process.
- blood** Pasteurized pork or beef blood is available either fresh or frozen. It is the main ingredient in boudin noir, black pudding, and some specialty sausages.
- bloom** To bloom gelatin, granulated gelatin is sprinkled into a cold liquid to “bloom” (3 to 4 minutes). The mixture is then heated to guarantee a lump-free texture. The term “bloom” is also used as a measure of the jelling strength of the gelatin.
- boning knife** Knife for trimming and boning meat.
- Boston butt** Cut of the pork that comes from the upper part of the pork shoulder. It may contain the blade bone.
- botulism** An acute paralytic disease caused by the anaerobic bacterium *botulinum* that does not require air to grow. It can be found in produce, sausages, cured meat, or improperly pasteurized, vacuum-packed, or canned foods.
- boudin noir** A dark-hued French or Cajun blood sausage containing pork fat, rice, and pig’s blood. It is widely consumed in southern Louisiana.
- braise** A combination cooking process using both moist and dry heat. The food is first seared at a high temperature and then finished in a covered pot with variable amounts of liquid at a low temperature.
- brat** A term used by sausage makers for forcemeat.
- brine** Water saturated or nearly saturated with either sea salt or kosher salt.
- bubble knot** A special knot to hold the filling in large sausage casings securely.
- bundle** A measurement for beef middle or beef round casings. A bundle has approximately 6 to 8 middles or rounds, each approximately 8 feet long. A bundle has a total length of 57 feet.
- certified pork** Cubed pork (or venison) that has been frozen up to 30 days.
- cervelat** A cured fermented type of German salami. It is cold smoked and air dried.
- Chiffonade** Leafy herbs or vegetables cut into fine strips (ribbons).
- chorizo** The name for several types of pork sausages. It is called *chorizo* in Spanish and *chowico* in Portuguese and originated in the Iberian Peninsula. This sausage is known for its spiciness, smokiness, and deep red color derived from smoked red peppers. It is used often in Basque and Spanish cuisines.
- coarse brat** A raw ground coarse mixture of meat, fat, and seasonings enclosed in a casing.
- cold smoking** To cold-smoke, the sausage is either dry cured or wet cured, air dried for 6 to 12 hours (to form pellicle), and cold smoked at a temperature of 70°F–90°F (or as directed) for 1 to 24 hours depending on the size of the sausage. These sausages are considered semiraw.
- collagen casings** Casings made from collagen, the fiber of edible protein that is extruded from animals by modern technologies to produce a high-quality uniform thin wallet casing.
- cooked sausages** Sausages whose meat and fat ingredients are simmered in broth before making sausage forcemeat.

- corn syrup solids** Used in processing semidry cured and dry-cured sausages, corn syrup solids help bind the meat and fat together, add flavor, and help in the fermentation process. They also help cured sausages keep their color longer.
- cracklings** Cubed pork fat that has been rendered until golden brown and crisp and crunchy. Cracklings can be eaten for snacks or in cooking and sausage making. They can also be made from cubed pork or duck or goose skin.
- cultured starters** Freeze-dried cultures that add lactic acid to the sausage to prevent spoilage and add a European flavor.
- cure** Cure, dry cure, and salting are preservation and flavoring processes for meat and fish using salt, sugar, and nitrates or nitrites. The curing process prevents the growth of harmful microorganisms by drawing water out of microbial cells by osmosis.
- cured sausages** Sausages made with a curing agent that enables long-term storage of the sausages. Implicit with the word “cure” is the use of tinted curing mixture (TCM #2).
- dariole** A French term meaning a small cylindrical mold. It is also used for savory dishes, like aspics or vegetable custards.
- dehydration** A process to remove water. Salt is a solute; when concentrated inside or outside a cell, it will draw water (moisture) in its direction. As an experiment, eat something salty and you will experience dry mouth.
- dextrose/sugar** Sometimes known as “glucose,” dextrose is a simple grape sugar. It is also referred to as “dextrose monohydrate” or in the food industry as “dextrose.” This type of sugar is absorbed more easily by meats than cane or root sugar.
- dry cure** See *cure*.
- E-coli** A bacterium that in combination with other bacteria can produce a potent toxin causing intestinal illness that can be fatal.
- egg wash** A beaten mixture of whole eggs, yolks, or egg white. It is used to brush the surface of pie crusts or *pâté en croûte*. It is often used to brush a pie shell before prebaking to protect the dough from moisture. It is also used to give *pâtés* or pies a glossy sheen. To prepare egg wash, use 1 teaspoon to 1 tablespoon of liquid (milk or water) per one egg.
- emulsion** A term used to describe a mixture of protein, fat, and water (ice). The emulsion is formed when the proteins (meat) are solubilized and the fat particles are suspended and entrapped within the protein matrix. The emulsion process is complete when all the water (ice) is taken up by the disintegrated and homogenized meats.
- fatback** Often confused with salt pork (which comes from the sides and belly of the pig), fatback is the fresh layer of fat that runs along the animal’s back.
- fine brat (also called fine bratwurst)** A ground and emulsified mixture of meat, fat, water (ice), and seasonings enclosed in a casing and poached and chilled.
- fermento** A product used in fermenting/curing semidry sausages. It accelerates the curing/fermentation process and produces a more consistent sausage.
- forcemeat** A mixture of ground meat and fat emulsified by grinding or by puréeing the ingredients into a coarse or fine, smooth consistency. There are four basic types: (1) straight forcemeat—equal parts of pork, fat, and a dominating meat; (2) country-style forcemeat—a combination of pork, fat, and liver; (3) gratin forcemeat—a portion of the main protein is seared or browned (the term gratin means “brown”); (4) mousseline forcemeat—a very light texture of lean meats or fish, heavy cream, and eggs.
- game birds** Undomesticated wild fowl including pheasants, quail, turkeys, and mallard ducks.
- gelatin/gelatine (from the French word “gelatine”)** A translucent, colorless, nearly tasteless substance extracted from the collagen inside an animal’s connective tissue. Gelatin (aspic) can also be prepared by boiling cartilaginous cuts of meat, pork skin, or bones and dissolving gelatin into the water. When cooled, the resulting broth will naturally form a jelly or gel.
- hank** A measurement for sheep or hog casings. A hank contains 16 to 18 strings of sausage casings; each approximately 42 to 54 feet. A hank contains a total of up to 672 feet.
- headcheese** Not a cheese, but a terrine of meat and gelatin made from the heads of pigs or calves.
- hot smoking** To hot-smoke, dry-cured or wet-brined sausages are smoked at a temperature of 170°F–180°F (or as directed) for 6 to 12 hours. These sausages are considered cooked.
- hog stomach** Also called hog maw, hog stomach is actually the lining of the hog stomach which is very muscular and contains no fat. It is used

for specialty sausages like mortadella and tongue sausage and is served hot or cold. In Pennsylvania's Amish region, it is called "selmaaga" and stuffed with sausage meat and potatoes.

incubate A process for maintaining a bacterial culture at a particular temperature for a set length of time to allow the development of bacterial growth.

instacure #1 A curing medium that is a mixture of salt containing 6.25% sodium nitrite and 93.75% kosher salt.

instacure #2 A curing medium that is a mixture of salt containing 1 oz. of sodium nitrite (6.25%) along with 0.64 oz of sodium nitrate to 1 lb. of salt.

jowls The cheeks of a pig, jowls are a solid blob of muscles and fat. They give an excellent texture to emulsified sausages. They are also good cured and smoked.

Julienne To cut into thin strips, usually root vegetables.

Juniper berries The female seed cone produced by various species of juniper bushes. They are not true berries, but a cone with unusually fleshy, merged scales and a berrylike appearance. The cones from a handful of species, especially *juniperus communis*, are used as a spice.

Kassler Rippchen A brined and smoked pork rib roast often served with sauerkraut. It is named after the Hessian city of Kassel and was brought to the United States during the Revolutionary War by Hessian mercenaries.

kosher salt A granular salt that is pressed together. Under a microscope each grain resembles a pyramid of stacked cubes that have weathered. This structure dissolves easily and imparts good flavor without oversalting. This type of salt is mined in the Appalachian basin of western New York through parts of Ontario, in the Michigan basin, and in Utah.

lachs schinken Though its name comes from lox (salmon) as it has a similar flavor and color, lachs schinken is certified boneless loin of pork, carefully wrapped in a thin layer of fatback and then cured and smoked. It is famous in Germany and France.

land jaeger A sausage whose name is derived from the German word *jaeger* (hunter). It is cured and fermented, then smoked and air dried. Its flavor is similar to American jerky.

leaf or sheet gelatin Gelatin that works the same as granulated or powdered gelatin; it is just in a different form. There are three grades of sheet gelatin: (1) chrome for commercial use; (2) gold for pharmaceutical use; (3) silver. The silver has become the most popular with professional chefs and is most readily available. Many chefs use gelatin sheets or leaves because it allows them to count sheets rather than weigh the powdered form. Its only drawback is that it must be soaked in water before use.

leberkäse A specialty sausage invented by the chef of the Bavarian Duke Karl Theodor of Wittelsbach in 1776. It has become a specialty in Bavaria, Austria, Switzerland, and now in America.

Lingonberries Also called a cow berry, fox berry, mountain berry or low bush cranberry, they come from a small, flowery shrub of the Ericaceae family.

liver The major ingredient of cooked sausages, including pâtés, and cold savory mousses. Pork liver is usually used, but liver from chickens, geese, and young sheep and lambs can be substituted.

Mâche A salad green that has small dark green velvety leaves with a rich sweet flavor similar to hazelnut. It is also known as corn salad, field salad, lamb lettuce or lambs tongue.

magret The lobe, or half breast, of the moulard duck. Each duck has two magrets, or one full breast.

marination A process of soaking foods in a seasoned, often acidic, liquid before serving cold or cooked. It is also commonly used to add flavor and tenderize tough cuts of meat.

merguez A spicy sausage from North Africa. Popular in France, Morocco, Israel, and Belgium, it is made from lamb or beef and is traditionally made fresh to order. It is mostly grilled and served with couscous or used as a flavor agent for tagines.

metzel soup A rustic bread and onion soup made from cooked sausage broth, boudin noir, and warm liverwurst.

metzger The German word for "butcher" or "sausage maker."

milk powder Invented by a Russian doctor named Osip Kricheski in 1802, milk powder is made from dehydrated milk solids. It is used to bind and keep moisture in sausage forcemeat.

- moulard** A duck raised for foie gras (fat duck liver).
- nitrites/nitrates** Chemicals found naturally in our environment. Two of earth's most common elements, nitrogen and oxygen combine to form these nitrogen-containing compounds.
- osmosis** A process of absorption. Water is usually removed by evaporation (air drying or wind drying). The removal of water (moisture) from meat slows down the growth of microorganisms and decay.
- nozzle** A metal or plastic pipe or tube attached to the sausage stuffer to control the rate of flow, speed, direction, mass, shape, and pressure of the stream of sausage meat that emerges from it.
- oblique (or roll) cut** A cut used mostly with long cylinder-shaped vegetables like carrots, celery, and parsnips.
- oxidation** A major problem in improperly packed or stored fatty foods. Oxidation will affect aroma, color, and taste. It can also destroy nutritional values as well as generate toxic compounds.
- paring knife** Knife for slicing, trimming, and shaping vegetables, such as for garnishes.
- pâté** A French word meaning minced or ground meat and fat. In French and Belgian cuisine, pâté may be baked in a round or rectangular shaped crust, in which case it is called pâté en croûte. If baked in a terrine, lined with pork fat or pig's caul, it is known as a "terrine," but if it is unmolded, it is called a pâté.
- pellicle** A protective film which forms on the outer membrane or skin surface of a cured fish fillet or meat after air drying for 4 to 12 hours.
- pig's feet (and hearts)** Eaten cold as a luncheon dish or as a snack. It is sometimes called "souise meat" in Pennsylvania, especially when flavored with vinegar.
- plum powder** An all-natural product made from ripe plums. The plums are spray dried into a light brown powder. It has high (50%) moisture retention in ground meats and inhibits pathogens. It also increases yields.
- poached sausages** Sausages that are submerged in water and poached at 160°F–170°F to an internal temperature of 155°F–160°F.
- pork belly** The underside of the pig from which bacon is made. Bacon made from bellies is referred to as "streaky" or "American Style."
- pork brei** The soft boiled skin of the pig, ground and emulsified with pork broth. It is used to bind cooked sausages and give texture and flavor.
- pork butt** See *Boston butt*.
- pork kidney** A flat, bean-shaped, smooth, firm, and reddish-brown organ. It has a strong odor and needs to be soaked in buttermilk or marinated before use.
- pork liver** A smooth, irregularly shaped organ consisting of four lobes of various sizes that is covered with a thin membrane. It is reddish brown and is used in cooked sausages.
- pork shoulder** The primal shoulder, known as picnic ham, is the lower portion of the hog's foreleg. It accounts for approximately 20 percent of the carcass weight.
- pork tongue** A tough muscle weighing approximately 1 pound covered by a pinkish membrane. Cured or brined, it is used as garnish with pâtés and sausages.
- powdered or granulated gelatin** This form of gelatin is sold by the packet (approximately $\frac{3}{4}$ oz/7 g) or in bulk. One packet (7 grams) is equal to 2 sheets or leaves (each sheet of gelatin weighs 3.5 grams).
- Prague powder #1 or instacure #1** Interchangeable curing salts containing 6.25% sodium nitrite and 93.75% sodium chloride (kosher salt).
- Prague powder #2 or instacure #2** Interchangeable curing salts containing 1 part sodium nitrite, 0.64 part sodium nitrate, and 16 parts sodium chloride (kosher salt).
- sachet** A small bag made of cheesecloth or linen containing fresh herbs and spices used to infuse flavor into brines or stocks.
- salmonella** Bacteria found in poultry products, beef, raw eggs, and sometimes in melons, spinach, and other vegetables. It can cause diarrhea, cramps, fever, or vomiting.
- salsa** A term from Spanish, Arabic, and Italian regions referring to any type of sauce. American and English versions are usually on the spicy side.
- santoku knife** An all-utility knife used for chopping, slicing, and dicing.
- sauce** A liquid served or used to prepare other foods. Sauces have been part of classic French cuisine since medieval times and have become a defining characteristic of French cuisine.
- schübling** A traditional Swiss bratwurst mostly made from beef, but also made with pork,

turkey, or veal. It is usually served with roasted potatoes (hash browns) or sauerkraut.

sea salt A salt that comes from many countries along the Mediterranean, the coast of Brittany, and the English Maldonian coast (east coast). It gets its flavor from the old tradition of boiling it in water which evaporates and leaves hollow pyramid-shaped crystals. It dissolves easily, especially in dry and wet cures. The harvested salt crystals retain most of the seawater and trace elements prized by chefs around the world.

set A measurement for large-intestine casings, like beef bung. They are sold by the piece. The casings are nonedible and each is approximately 4 to 5 feet long.

simmer A cooking technique by which foods are cooked in a hot liquid kept just below the boiling point (82°F to 94°F).

sopressata An Italian cured salami, it is a southern Italian specialty. The spelling of its name depends on which region of Italy it is from—"sopressata" or "soppresate" or "supersate." In the southern coal region of Pennsylvania, it is called "supie."

soy protein concentrate About 70% soy protein, this concentrate is made of soy beans without the water-soluble carbohydrates/sugars. It helps retain moisture and fat in forcemeats and increases nutritional values.

sweat To sweat food is to cook it over low heat in small amounts, usually in a covered pot or pan. The objective is to soften the vegetable without removing the color, but removing some of the moisture (sweat). This process is also known as butter steaming.

synthetic casing A tubular casing made of cellulose hydrate with paper fiber added for strength,

therefore, the term fibrous-synthetic. Used for medium and large sausages, these casings are nonedible.

TCM (tinted curing mixture) Also known as Prague powder or instacure, TCM is a curing salt used to prevent botulism and to produce the necessary color in cured meat and sausages. All tinted curing salts have about the same sodium nitrite concentration of 6.25% per 100 pounds of salt.

teawurst A spreadable fermented raw sausage with a very fine texture. It is usually used in preparing small tea sandwiches.

terrine A glazed earthenware (terracotta) cooking vessel with vertical sides and a tight-fitting lid. It is usually oblong or oval, but it can also be an enameled cast iron mold.

timbale A large thimble or cone-shaped mold used for various sorts of food.

tomato concassee A dish made from fresh tomatoes with the cores removed. The tomatoes are blanched for 30 seconds in boiling salted water, removed, and shocked in ice water. The tomatoes are peeled and diced and the seeds removed.

Trichinosis Illness caused by microscopic live worms called trichinae found in pigs, bear meat, and venison. It can cause painful inflammation in joints as well as death.

Vidalia Onion A sweet onion of certain varieties, grown in a production area defined by law in Georgia and by the United States Code of Federal Regulations (CFR). The onions were first grown near Vidalia, Georgia, in the early 1930s. They are unusually sweet due to the amount of sulfur in the soil.

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