Home Charcuterie Master

A Beginner's Guide to Home Curing

By Instagram: @home.charcuterie

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By: "Rey"
Instagram: **@home.charcuterie**

Contents

Disclaimer

Since most of the audience for this manual lives in the United States, one of the awesomest and also most litigious countries in the world, with likely the lowest per-capita rate of personal accountability of any nation, I am obliged to add a disclaimer.

You are about to embark on a journey beset by many dangers to your health and that of those around you, which may cause you harm and can leave you permanently injured or kill you and your family in horribly painful ways. You may (or may not) be taking advice here from me, someone with absolutely zero, none, zilch, nada, nil in terms of professional (or even remotely semi-professional) accreditation, training or certifications in any food handling of any kind. By following (or not following) recommendations here, you and your close ones acknowledge that you are totally ok with dying a horrible painful death from making and eating basically raw meat products.

So, is anyone still out there?

About This Booklet

Writing this has been a lot of fun for me which was surprising for someone that can barely write a text message. I get a few requests per week through my instagram account @home.charcuterie from people that would like to get started or that are looking for me to teach them a particular cure. Instagram is not the right medium for long explanations and I thought it would be fun for me to write my own 'how-to'. But please know there are other great resources out there also, after all I learn from those!

This booklet is intended for those NEW to curing meat and sausages that would like to start from zero. It covers two of the most popular charcuterie groups: dry sausages (salamis, chorizos, etc) and whole muscles (loin, bresaola, prosciutto, etc…). I start by covering the foundation concepts and techniques required to make different charcuterie and then walk you through making individual projects that will progressively build up in complexity and apply techniques from the previous ones. Therefore, I suggest you don't skip them, they are in that order for a reason: to ensure you have less frustrations

and fail attempts, like I did when I started. This is not intended as a "recipe" book (although it does have recipes) but rather as a technical foundation for you to create your own recipes or be able to masterfully execute some recipes you find in different sources. There are tons of great (and bad) recipes out there, so no need for me to replicate those here. But with this background and walking through the projects here you would be able to distinguish a good recipe from a 'bad' one and become a "Home Charcuterie Master" as you complete the projects listed in this booklet.

About Me

My name is Rey, you probably found out about this manual through my Instagram account **@home.charcuterie**. I have been creating and experimenting with charcuterie at home for years. I live in Southern California. I was born and grew up in Latin America, my family is from Europe and still lives there (Spain & Germany). I visit often to enjoy charcuterie from the "Old World" and find inspiration for things I would love to create myself. I don't consider myself a "master" of charcuterie, there are plenty of "real" professionals out there that live and breathe that title as an exciting profession. I'm a guy that has been doing this for a long time as a hobby/obsession and I think I'm pretty good when it comes to making charcuterie at home and I enjoy sharing what I know about it. I don't sell charcuterie or have a store, this is my nights and weekend hobby. I still have lots to learn and I keep on learning from all those 'real' professionals and other hobbyist out there that are kind enough to share some of their tips and tricks with me.

Introduction to Meat Curing

Charcuterie is both an art and a science, this would sound like a cliche usually, but here it really is. The art of charcuterie is in the eyes (or mouths) of the beholder (or in this case whoever is eating it!). Some people like more or less salt, some prefer this or the other spice, some like burning hot spices, others cry in agony with even a little, some like it softer or harder, some like more texture, other less, some love molds, some are grossed out by them… that's the "art" of charcuterie. And just like art can't please everyone, you have to find (and make) the ones that please YOU first and foremost.

The science of charcuterie describes some basic rules that need to be followed in order to separate something edible from a horrible food poisoning and hospital visit. And if you follow these rules and you LOVE your results, don't let anyone tell you did your salami or whole muscle cure "wrong", that's the art. I will highly encourage you to take any constructive advice and experiment and change your recipes around. I still do. I rarely make the same recipe twice! There are maybe 2-4 recipies I don't change much, but most are always in constant shift and experimentation based on my curiosity, but also feedback from other charcuterie professional and hobbyist. There is no such thing in my opinion as a 'secret perfect recipe', just like there is no such thing as a recipe for making a 'perfect painting'. If you love your art, that's all that matters, after all, this booklet is about HOME charcuterie, intended to be for YOU, your family and friends, not to create compromises in products that would please the largest number of people. There are plenty of bad as well as great products in the market today that do that. It's time for YOU to make YOURS.

One thing I would suggest is that you begin by embracing molds and bacterias as your friends. If you don't, it would limit your window of experiences in this arena. Love the good bugs and they will love you back!

Curing meats is easy. And if all environmental conditions are right, curing meats is VERY easy. The key in that statement are the environmental

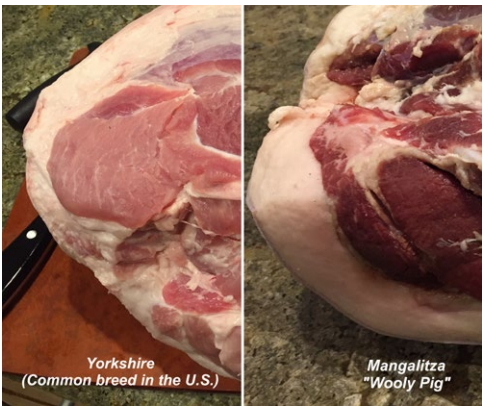
conditions, namely temperature and humidity. Technically, the ONLY ingredient you really need is salt, just salt. All other things are additives to either enhance the flavor, protect it against pathogens or support the curing and preservation of the meat. You can make great charcuterie using only salt and time, and in many places around the world, including Europe, many traditional charcuterie manufacturers still use only salt with amazing results.

Salt works in curing by drawing moisture out of the meat, thereby helping it to dry. Salt also protects the meat, since many "bad" bacterias don't like to grow in the presence of salt. To cure meats you need to protect them from pathogens and get them to a level of dryness where they are "shelf stable". That happens when the available water (aw) is below a threshold that bacterias need to grow. Salt helps in both of these thru the process of osmosis.

The environmental factors are key in successfully curing meats. It is no coincidence that some of the best charcuterie comes from temperate climates in southern Europe, especially Italy and Spain. Is not because those guys were better or more skilled than their northern counterparts. They had a natural environment on their side ideal for curing and preserving meats. Unlike today, preserving meats was a necessity of life, not a fancy delicatessen. Meat had to last thru the winter and early spring months and the weather there during those months rarely got below freezing and humidity, for the most part, stayed relatively high. That Goldilock range is somewhere around 40F - 60F (4C - 15C) and 60% - 75% Relative Humidity (RH). Northern or Eastern Europe will be below freezing point at that time of the year, so meat and sausages will freeze, rather than dry up.

The final key in great charcuterie is the source of this "meat", namely: the pig! It is also no coincidence that most of the best cure meats are made from pork: Prosciutto/Jamon Serrano, Lomo/Lonza, Salamis, Chorizos, etc… You could technically make these with beef, lamb, goat, etc… (and I have done so) but the results will not be nearly as tasty as if you do them with pork. The

key to pork is the pork fat. Different animals have different types of fats and these fats have different melting points. You have probably heard people saying: "That prosciutto just melts in my mouth!" and that's somewhat true. Pork fat has a melting point very similar to the temperature in your mouth. The melting point of beef and lamb fat is higher so when you eat it, it just won't melt. It will likely feel a little chewy. Many people like lamb or venison prosciutto and salamis and there is certainly room in the charcuterie world for those, but I personally don't enjoy them as much as a good pork charcuterie. One close second for me is beef Bresaola. The reason is that this beef cured meat is made from a lean beef cut (eye of round) with little or no fat on it, so you don't get to experience the chewy beef fat.



Pork is the undisputed king in charcuterie, but not all pork is created equal. I used to think it was. In the back of my mind I used to think it was an exaggeration when others would spend so much time talking up heritage breeds like Berkshire, Mangalitsa, Duroc, etc… until I actually tried charcuterie with these. The common "industrialized pig farming" here is the United States looks for fast growing low-maintenance pig breeds, typically Yorkshire. They are also not kept in the best conditions to support healthy growth and they are usually fed some questionable foods. As such their meat is far inferior in taste when compared to their well raise pasture counterparts. I'm not saying you have to make charcuterie only with heritage breeds, I sure don't, but keep in mind it will make a huge difference, especially in whole muscle cures.

When we are talking about meat curing in modern times, we need to discuss the use of curing salts. Not to be confused with regular table salt, and it's not a replacement for the regular table salt you will use to cure. Curing salt

will be added to your sausages or whole muscle cure. They are there to reduce the chances of some bad bugs growing on there (and cause botulism!) and to enhance the color of the final product. There are different names for these things that are all interchangeable: Curing Salts, Prague Powder, Instacure, Pink Salt, etc.. it's all the same. The very important differentiation is which "number". Curing Salt #1 vs Curing Salt #2, or Prague Powder #1 vs Prague Powder #2, etc… lucky there are only two types of curing salt and the only thing you need to know now is if its #1 or #2.

When you buy bacon or other cured meats, you may see labels saying "No Nitrites Added". This is what they are talking about. And here we are walking into a minefield of controversy, misinformation and strong opinions on all sides. Typically there are two groups, those that feel if you don't use curing salts you are an idiot and those that say if you do, you are and idiot. Makes sense?. There is plenty of information and misinformation out there so I will not get into this. I tend to fall somewhere in the middle, not an idiot I guess. There are plenty of people that don't use them and historically people didn't add this either. Studies that are quoted as having connection to cancer are often misquoted and taken out of context. On the other hand preventing botulism sounds like a good thing. I have made charcuterie with and without and noticed little or no difference. For the purpose of this book, I would highly suggest that as you start this process you use nitrates/nitrites, you won't get cancer or die, at least not right away.

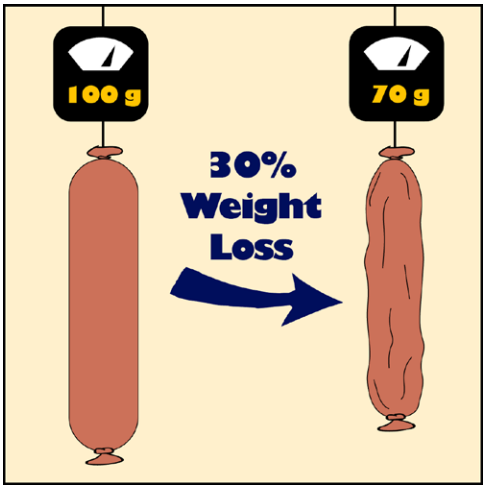
Curing Salt #1

Contains Sodium Nitrite. This will be added typically to meats that will either be cooked or will be eaten relatively quick. Bacon, Deli Meats...

Curing Salt #2

Contains Sodium Nitrite AND Sodium Nitrate. This will be added to meats that will be cured over longer time periods. Salami, Chorizo, Prosciutto, Coppa...

These both look like pink table salt. Don't confuse with "Himalayan" salt which is basically just a pretty-looking table salt. These curing salts are over 90% just regular table salt with a pink colorant added so you won't confuse it with table salt. The actual percentage of Nitrite/Nitrate in curing salts is very small and even then, you will be adding a very small amount of this curing salt to the overall meat weight. So it's a very small amount of an already small amount, which I guess is not a good argument if you are against it: At small amount of crap on your sausages still sounds horrible. But trust me, just use them, at least for now. These are NOT interchangeable, so don't use #2 if you can't find #1, or vice versa.



Moving to our next topic: When do you know your sausages or whole muscle cures are done and ready to eat? Well, it's not a matter of 'time', it's a matter of 'dryness'. As you set you meat to dry cure, each day it will loose some weight due to evaporation. That's why it will be important that you weigh and label your sausages or whole muscles with the total weight once you are ready to hang it up to dry. There is no exact rule when it's 'ready' but there is a generally accepted percentage that once your meat has lost 30% of its initial hanging weight, it's ready. However, most people I know, including myself, would prefer a higher weight loss as the favors will intensify and the texture firm up for a better slice. It is for that reason and also to ensure water activity is further reduce, that I would recommend you aim for a 40% weight loss. So for example, if your fresh salami weighed 1000 g on day 1 you will wait until it has shrunken and weighs around 600 g before 'harvesting' and eating it. Depending on the size of the sausage or whole muscle, the ingredients used and the curing chamber environment; this could vary, but if you are looking for an estimate: A medium diameter salami would take approximately 3-4 weeks, a whole muscle coppa/capocollo 2-3 months.

How do I know if my charcuterie is safe to eat? Well, that's not an easy thing to answer! Unless you send the meat to a lab to test for all sorts of horrible things, there is no way to know if it's 100% safe, that's the truth, but that will apply to practically everything you are handed over to eat each

day. Obviously with curing raw meat there is a much higher risk than with eating home baked bread, for example. There is no home test you can do that will give you the 'green light' that it will be 100% fool proof safe - even if you use Ph meters. There is a 'leap of faith' that is required with home charcuterie. However, as long as you follow the steps described here, there is no reasonable cause to fear. If you or your family are not OK with accepting this 'leap of faith' then home charcuterie is not for you and there will be nothing wrong with that. It's a fact people do get food poisoning from eating 'bad charcuterie'. I found the following statistics online, and we all know, if it's online, it's a true fact.

To put things in perspective for you. In all of the U.S. there are about 20 cases of Botulism (arguably the worst case scenario) reported each year for "foodborne" contamination. These numbers are not for "Home Charcuterie" contaminations but inclusive of ALL the food industry in the U.S. I would assume that most if not all these reported cases are of contaminations in the broader food industry rather than the 'home-made' world. I will also add that in all the years I have been doing charcuterie, even when I started making HORRIBLE mistakes, without the benefit of this book, I have never gotten sick. Likewise, I have never known of any other home charcuterie hobbyist that has gotten sick.

Follow the common sense rules described here and if you see and smell things that you dont like, dont eat it! If the sausage you made stinks and doesn't look like photos of what you see on the internet for other home charcuterie people: don't eat it! If your whole muscle cure just gives off the stench of death and roadkill: don't eat it! Use common sense and you SHOULD be ok, but know there is zero guarantees.

Setting up your Curing Chamber

Required Supplies/Tools/Equipment:

- Refrigerator/Wine Cooler
- Dehumidifier/Dehydrator
- Timers/Controllers (Optional)

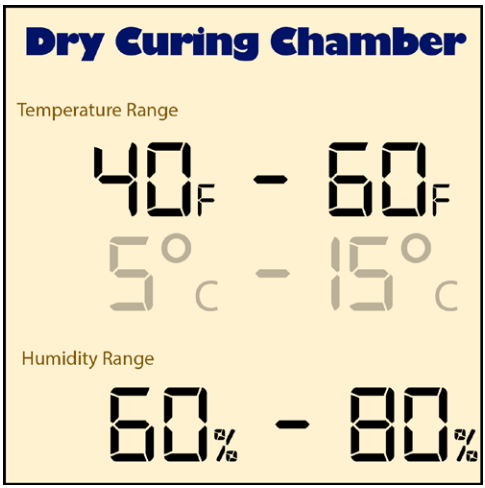
Remember when I said dry curing is easy? And specially VERY easy when you have the right environmental conditions? Well it is. Problem is that we don't all live in Southern Europe, and we don't all live in a Southern Europe that is stuck in a perpetual winter/spring season. And even then, the weather is not always 100% predictable. Thank God for refrigeration! Now we can create the 'right environmental conditions' all the time, every time. And here is the biggest hurdle you need to overcome to be a successful year-around "Home Charcuterie Master": you need to get yourself a curing chamber! Some people can get away without one, but those are either lucky to live in the right weather and likely are able to just make one or two things, and I would argue, not very well or can do them just one time of the year. A curing chamber is key and this is the point that separates the people saying "I would love to make that" from those that actually will.

There are tons of Do It Yourself instructions on the internet, from the very simple one to the very sophisticated ones with automatic controllers etc. I could write hundreds of pages on different options and features, but I won't. I will highly encourage you to check blogs and YouTube to see how others have done their chambers so you can visualize the concept, but I will describe the bare minimum you need to get started. You can always add more bells and whistles, but I want to get your started now.

First Option: If you have the space, perhaps in your garage, like me. Buy an old used refrigerator, one with metal grill shelves where you can hang your charcuterie from. Glass shelf will not work, but you can get rid of them and build yourself some wooden/metal beams to hang things from. You will

remove all the shelves and drawers, except the top shelf which you will use to hang your meats from. A refrigerator will typically be a very dry place to do charcuterie. However depending on where you live in the world or the quality of the fridge, it may actually be too humid. To determine this you need to get yourself a basic humidity/temperature monitor.

Hook your refrigerator up, set the temperature control on the medium setting and place a large bowl with a lot of soken wet paper towels. The wet paper towels will replicate the effect of putting fresh wet meat in the fridge to dry. Monitor the temperature and humidity over the next 24-48 hours. If the humidity is below 60% you will need to get yourself a humidifier to increase the humidity in your chamber. If the humidity is above 80% you need a dehydrator. On the other hand if you are lucky to see humidity in the 60%-80%, cautiously skip the humidifier/dehydrator for now until you can better understand how your chamber behaves. Every chamber behaves differently. I have had 3 different full size refrigerators over the years in the exact same place, they all needed different setting and tweaks. I don't know of anyone that didn't need any kind of humidity/dehydrator. Just know you probably will at some point and monitor your humidity. Once you determine what you needed, the next step is determine how long you need to have your dehydrator/dehumidifier running for. Most likely they won't be running non-stop. Repeat the wet paper towel experiment again, this time set your dehydrator/dehumidifier inside at the bottom of your chamber with the cord running out of the closed door of the fridge.



Your target should be maintaining a relative humidity of around 60%-80% and a temperature between 40F - 60F (5C - 15C). Here you have a few options: 1. You can manually turn the device on and off until you get a reading in that range and MAINTAIN that reading for at least 24 hours to make sure it holds. 2. You can set a timer to turn on/off the device a few key times per day and play with the settings to find the balance point. 3. You can purchase a digital humidity and temperature controller and set it to 75%. This controller will turn on/off your device in a way so as to maintain the correct setting.

Sounds great in theory, but I have had frustrations with using an automatic controller and making things actually worst, but I may have been unlucky.

Controlling the temperature should be easier as all refrigerators have a temperature control. Most likely it would not indicate the temperature setting, but rather 1, 2, 3, 4, … or a scale to "colder". You do have a thermometer inside now, so just notice what settings on your refrigerator produce which specific temperature and make a note of that or write it with a sharpie on the refrigerator controller scale.

Second Option: Another good option is a wine cooler, you can either buy a new one or a used one. I would recommend a larger one, something that holds more than 40 bottles, not the tiny ones. It needs to be large enough to fit your charcuterie and have space for your dehydrator/dehumidifier. Your steps for setting a wine cooler would be the same as those described above for a refrigerator.

Once you have a working chamber that you can control and maintain the desired humidity and temperature you are well on the road to make your own charcuterie at home!

Introduction to Sausages

There are hundreds if not thousands of different sausages which makes it overwhelming for someone starting. If you are one of the lucky ones and you live or have traveled to Southern Europe you may have seen charcuterie stores counters filled with countless different sausages. Its overwhelming to even order, but don't despair, a little secret: most of the locals don't know most of them either. Most will know more than the typical non-european but that's about it. Even in europe, this is something only the few truly understand and follow.

There are tons fresh sausages, the ones you cook in your BBQ; there are also all the different emulsified sausages, those will be your hotdogs, mortadella, etc. In this book I will focus exclusively on dry sausages. That will narrow the scope quite a lot, however even within dry sausages, we are talking about hundreds of different names and types. And so, I will further simplify this to a point where I could be burned alive for sacrilege by the professional charcuterie inquisition. If it looks like a salami it is a salami. Period. I'm choosing the Italian name for it, not out of any bias but just because it's more popular, instead of calling it "Dry Sausage" or "Saucisson Sec", again, for our purpose here it's all the same!

You can take the same ground meat you used to make a "salami" then you add, lets say a lot of fennel and now it's called a "finocchiona". You add tons of smoked paprika and magically it is now called a "chorizo". You stuff it in a larger diameter casing and the name changes again, you use a finer or coarser grind on the meat, the name can change again. You flatten the salami with some weight now it's called "sopressata"... you get my point. You can get technical and throw names out there to impress your friends, but it's all basically the same. I don't mean it all TASTE the same, it sure DOES NOT. Spice flavors differ, textures differ, etc, and that's the art behind all those hundreds of "salamis". You can find different variations you would like to do and experiment. Each of those variations and experiments you do, could

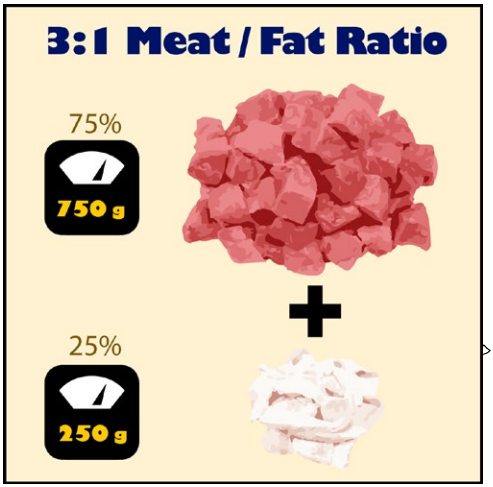
technically have their own name. What i'm trying to get at, is that if you learn how to make a "salami", then you already know how to make all the other ones, since they differ only on the addition of ingredients, the size of the ground meat, the type of casing you use, etc…

After all, the most frequent question I get from people that want to start making dry sausages is "How do I make a salami?" So, we will go with that and introduce variations as we go.

One factor that is considered a standard across all these different types as a general rule of thumb is a lean meat to fat ratio in most sausages, and that is: 3:1. You can make a 100% lean sausage, but it will be really hard and dry and not very enjoyable. The key to most charcuterie is the pork fat. One common misconception I have encountered in the past is that people think sausages are made with substandard meat cuts and 'waste products'. Even Though that is indeed true of many mass-produced 'discount' fresh sausages you find at your local discount store, this is absolutely not the case for even a half-decent mass-produced salami. When you prepare your lean meat and fats for your sausages you will be selecting good dark lean meat pieces from prime pork cuts, the picnic, Boston butt, ham, etc. I would not recommend pork loin, but it's ok if you like to use it.

To do so, buy a large piece of pork meat and deliberately cut out chunks of lean muscle without fat, sinew, silverskin or tendons. I would suggest you do this and keep a large ziplock bag in the freezer with all your lean meat. Next, you need to make sure you deliberately add pork fat into the sausage. The best fat to add is the back fat, and that is exactly what it sounds like, most pigs will have a good layer of thick hard fat on their back, this fat is completely white and clear of any meat. It cures very well and adds great flavor to your sausages. You won't likely find backfat on your supermarket shelfs. This is something you will need to request from your butcher shop. Any half-decent butcher shop will know what backfat is and likely carry some. Backfat will come usually in 'sheets' of different thickness depending on the breed of the pig. If you can't find

backfat, pork belly would be a second option, but I would highly suggest you try as best as possible to find backfat. As a VERY last resort, you can use the soft fat you find when you butchered your lean meat, but that fat will give you unpredictable results. With back fat, you will know every time what you are going to get once it's cured.



Throughout years of experimentations people have come up with that 3:1 ratio. But like with most things in this 'art' it's not a rule written in stone and you can adjust as you prefer. I usually follow this ratio with 75% lean muscle meat and 25% backfat. Although, I do love fat, and some times I will increase the ratio by adding more. This is where you will work your preferences later, but to start, do 75% lean, 25% fat.

Grinding The Meat

Required Supplies/Tools/Equipment:

- Meat Grinder

To make sausages at home you got to grind your own meat. Sure, you can buy ground meat at the butcher's but you won't be able to control the lean meat to fat ratios which are key to making good dry sausages. You can get a manual grinder, but if you are going to be doing this more than just once every few months, get an electric one, your hands would appreciate it. Any basic one will do, usually they will come with a few die options for different size grinds. I would recommend you work with a medium grind, not too coarse, not too small. A medium size grind will give you some texture but won't be too big that the sausage will break apart once sliced.

Grinding meat for sausages should be done with the meat semi-frozen and the fat fully-frozen. The meat should be stiff that you can cut it into cubes big enough to fit your grinder. Some people recommend placing the metal meat grinder parts in the freezer overnight. I found this to be inconvenient and also not necessary. If the meat is semi-frozen, that is more than enough. But why all this talk about freezing things? It's not for food safety issues, although that won't hurt. We are making dry sausages, salamis, chorizos, etc… not hotdogs or mortadella. Dry cured sausages should have a clear differentiation between meat and fat particles. If we grind the meat and fat warm, you run the risk of creating a meat 'smear' or emulsifying the mix which will not cure well as intended. If the meat is frozen, the fat will not melt but rather be cut by the grinder just like the rest of the meat and show up in the

sausage as individual particles, and that's what you want.

Depending on the type and quality of the grinder you have, what type of meat you are grinding and how much, you may have to stop the grind one or more times during the grinding process to disassemble the parts and remove any clogging and entanglements before continuing to grind. Otherwise, you could run the same risk as above of smearing the meat mix. Keep all the meat flowing easily out of your grinder and you will be on your way to a great sausage.

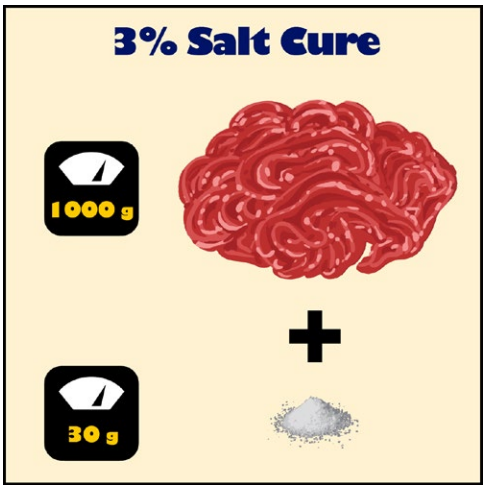
Salting & Flavoring The Meat

Required Supplies/Tools/Equipment:

- Large Pot or Bowl
- Kitchen Scale with a 0.1 gram precision

As described in the previous section about "Introduction to Meat Curing", your most important ingredient will be salt. Everything else are additives and flavoring, and with the exception of nitrites/nitrates (Curing Salts) most of which will be optional and up to your individual liking.

If you are not comfortable with the metric system of grams (g) and kilograms (Kg) this is the time for you to learn something new. The imperial weight system is just not rational for easy math and conversions so from now on I will focus primarily on metric units rather than pounds or ounces but I will introduce some volumetric equivalents (teaspoons/Teaspoons) for the sake of practicality… You will need to make sure the scale you purchase can handle 0.1g increments, not because you need that accuracy to weigh your meat, but because a scale like this can also be used to measure lesser volumes of spices like 0.2 g of cayenne pepper, for example.



There is a simple 'magic rule' you should remember from now on: "3% salt". The 3% salt refers to the weight ratio of salt per unit of meat. For example, if you ground up 1,000 grams of meat or you have a 1,000 gram whole muscle you like to cure, you will need 30 grams of salt to safely cure this. 3% of salt by the weight of the meat. Some people, including myself, would prefer lower ratios and less salt, but to start with,

I would highly recommend you stick with this ratio and only after you are more familiar with curing then venture into lower ones if you prefer less salty charcuterie, if you like it at 3%, all the better for you!

Some people prefer to mix the salt and spices with the meat before grinding, but I think that just makes a whole lot of mess and also if you are working with some smaller amounts of spices, those can get stuck inside your grinder and just mess up your recipe. So I highly recommend you grind your meat first, then add the spices to the ground meat.

Most recipes you will find online and even in some popular charcuterie books will give you amounts in teaspoons or tablespoons. Although these are "OK" for the most part, I would suggest you start getting used to seen units in grams or percentages of the total meat. Grams per unit of meat is a better one, since it's hard to wrap your head around "0.001% Cayenne Pepper" and typical home production volumes will rarely get to a point where percentages of spices will make much sense. You will be ok if you use just the tablespoons volume measure, after all, charcuterie is an 'art' and spices will fall under that flexible art side of the craft. The issue is that a tablespoon of coarse sea salt will weight different than fine ground salt. But honestly it will make little or no difference. However is a good habit to begin forming as you embark on your charcuterie adventures. If you enjoy working with formulas in MS Excel, you can keep your recipes there, otherwise I would suggest a recipies app called "Paprika". It is what I use and I love it because I can adjust the sizes of the recipe easily if I'm grinding 500g or 2,000g of meat.

The first and most important thing you need to measure is your salt content. 3% of your total meat weight. So again, if you have 1000g of the meat/fat mix: measure 30g of salt in a small container, set aside and keep weighing each dry ingredient separately, and once you double check that you have the correct weight for your recipe you can mix with the salt in the same container. Although you can do it in the same container, and reset/tare your scale to ZERO after adding each new ingredient, I would advise you not to do so, as there is no "undo" once you mix it if you later realized you made a mistake.

There are 4 categories of ingredients you may be adding to your sausages or whole muscle cures. Your dry ingredients (salt, curing salt, oregano, paprika, black pepper, etc…); your 'wet' ingredients (fresh crushed garlic, tomato paste, etc…); Your liquid ingredients (red wine, fermented juice, etc..); and finally your bacteria starter culture, if you are fermenting. You should keep all of these types of ingredients separate and add them one at a time to the meat, mix them and add the next one. So, all your dry ingredients at once, mix, all the wet ingredients, mix, all the liquid ingredients, etc... If you for example mix the fresh ground garlic with the other dry spices, all the dry spices will attach to the wet garlic and create some spice lumps that will not mix well with your meat.

Most of this section has focused on salting and flavoring ground meat for sausages, but most will apply to whole muscles too. Salting and flavoring whole muscles is a little different, but not by much. The 3% rule applies here as well for a salting technique I will cover later called "equilibrium curing". In whole muscle cures you will add all your ingredients to your chunk of meat and rub them well all over, then stick the salted and flavored meat in a ziplock back in the fridge. More on whole muscle cure in the "Curing Whole Muscles" section.

Stuffing The Sausage

Required Supplies/Tools/Equipment:

- Sausage Stuffer
- Sausage Casings
- Butcher's Twine (or similar)
- Sausage Pricker
- Masking Tape (for labeling)
- Metal hooks (for hanging)

This part may seem daunting to someone not familiar with the process but there really is not much to it, once you do it, you will quickly get the handle of it.

Most meat grinders will come with "sausage stuffer" adaptors. DO NOT USE THEM! EVER! In my opinion they are all horrible! Most will smear your meat and fat, (and because you worked too hard to avoid smearing your meat while grinding: you don't want to ruin it while stuffing). Just toss those adaptors in the trash so you are not tempted to use them. They may work just fine for making fresh sausages but they are horrible for dry cured ones.

Purchase a dedicated sausage stuffing equipment. There are many different kinds, some very basic small and manual ones, then all the way to some huge electric ones. Buy one that you feel will work best for the volume of sausages you see yourself doing. I personally have something middle of the road, a 5 lbs standup, manual stuffer. I would love an electric one, but I'm fine with mine and I don't think I have ever made 5 lbs of sausage mix at once anyway.

Next, you need to understand about sausage casings, at least the basics. It can be overwhelming when ordering sausage casings depending where you find them. You may get more than 100 versions to choose from. There are 'natural', that is made from intestines, and 'synthetic'. Both of these categories break down into even more categories. Natural will include casings coming

typically from hogs, beef or sheep and they may be from different segments of the intestinal tract, "middles", "bung", "endcaps", etc… for now, we will only focus on the small intestines they will be called just "casings". Synthetic will include different material: Collagen, Cellulose, Plastic, etc. Then all of these will have different diameter options, and different amount options… you can see, it can get overwhelming… To start with making sausages I will boil this down to just a few options. Keep in mind, the larger the diameter the longer they will take to dry and be ready to eat.

Natural Hog Casing: Use for small to medium diameter sausages. Any diameter between 32mm-42mm (1.2in - 1.6in) would be ok. These are edible, and will dry very naturally with the sausage. This would be my first recommendation.

Synthetic Collagen Casing: Use for medium to very large diameter sausages. Diameters between 32mm-60mm (1.2in - 2.3in) are OK for dry sausages. These are NOT edible, so you will need to peel these off once your sausages are dry. They are MUCH easier to work with and your product will be very uniform. They will not shrink down with the drying process, so your sausage will look wrinkled. They are an OK alternative to hog casings.

Hog casings will typically come in huge tangled bundles mixed with heavy amounts of salt for preservation. They will basically last forever if kept in the refrigerator covered up well in salt. They may be a little stinky, that's OK, they are not spoiled, and once you stuff and cure your sausage you will not smell that anymore. One of the first challenges you may encounter may be untangling one single strand of casing out of all that bundled mess!

Once you got one strand out, think about how much meat do you think you are going to stuff and cut the length of the casing appropriately to fit how much you got to stuff. Its MUCH better to err on the side of getting too much casing out. Worst thing that can happen is that you run out of casing in the middle of trying to stuff the meat! Casings are relatively cheap, by the foot, so overshoot it. Any leftover casings, you can return to the salt bag and use later. I would recommend keeping the little leftover pieces in a separate ziplock bag with plenty of salt in it.

Next you will need to remove the salt and re-hydrate the casing before stuffing and let it sit in warm water for a few minutes. It is for this reason that I do this step first when getting ready to make sausages, that way the casings are ready to be stuff by the time i'm done grinding and mixing all ingredients. Rinse of the salt and use a bowl in the sink under water to run water inside the casing. They are "clean" so what you are doing here is just removing any excess salt and helping the casing hydrate.

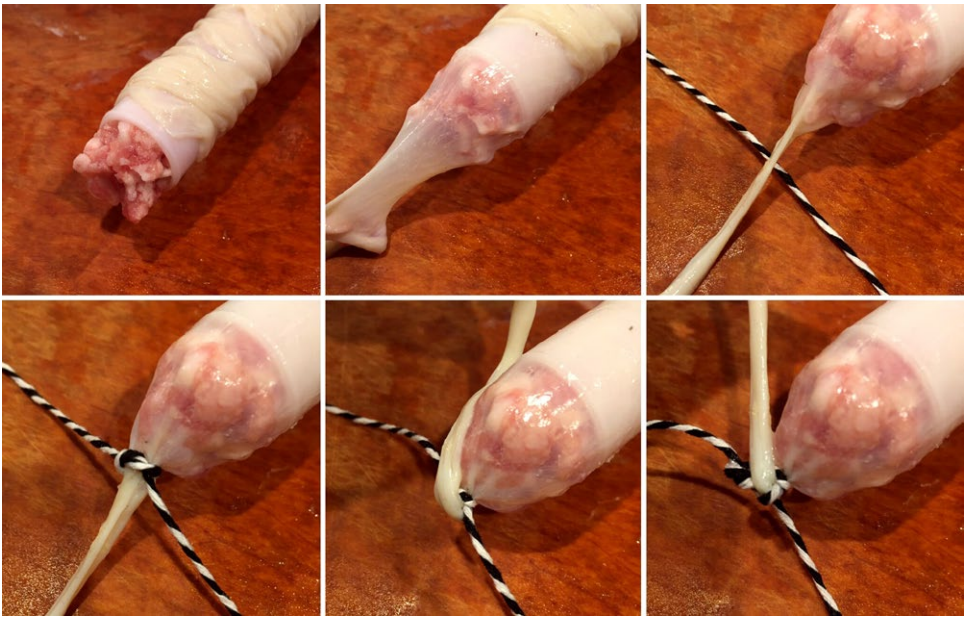
Once you are ready to stuff, find one of the ends of the casing open the hole and place the end of the stuffing tube inside the casing. It will be helpful if you wet the stuffing tube so the casing slides easier. Here is the point in this process when you can start making all sorts of sexual references… I will spare you those… Just keep pushing the casing onto the tube until all the casing is now around the tube and the tube opening is clear.

To fill your meat stuffer with your sausage mix, follow your manufacturer's instructions. What I would recommend is that you do it in layers. One layer

of the mix, then pat down to remove as much air pockets as possible, then another layer and pat down again, and so on. So hopefully when you are done filling your stuffer you will have the least amount of air pockets inside the sausage mix. In industrial settings they will vacuum pack this mix into the stuffers and that will get rid of all the air 'bubbles'. Air (oxygen) is your enemy here, so you are trying to have a solid compact meat mix as much as possible.

With the tube opening clear start pressing the sausage mix until the meat is at the tip of the tube. What you are doing here is trying to get most of the air out from inside your stuffing system. Now with the meat about to come out of the tube, pull the end of the casing out over the opening to about 3-4 inches and make a knot with the casing. I prefer however just to make knot using my butcher's twine since I will be making all these knots with these strings anyways. At this point lots of people recommend pushing all the meat out at once into a very large single sausage coil and them splitting them up into smaller ones. Although that process makes for some awesome looking sausage coils, I found it to be too unruly and hard to separate later. Doing it this way I typically would end up with lots of dangling pieces of casing and having to push the meat around from one side of the casing to the other. It's just preference, but here I will describe my prefered way.

Most cases when I do a sausage batch I would end up with about six to eight 10-inch (25 cm) long sausages, so I separate and tie them up one a time as they come out of the stuffer. To do so, start where we left off above, you are covering up the stuffing tube with the casing now pull out. Take a 6-inch (15 cm) or so piece of twine, and tie up the end of the casing to close it. VERY IMPORTANT: to tie up the sausage make a first simple knot closing the casing. Then, take the leftover dangling piece of casing and fold it over the first knot. Then finally do a regular double knot on top of the folded piece of casing. It's hard to explain in word, but what you are trying to do here is to get the casing stuck and tangled inside of a knot. If you don't, no matter how hard you tie it up. when you hang your sausage to dry, the casing will schink and with the sausage weight, it will very likely slide out and fall to the ground leaving just the string hanging when you come back to check on them.



All of that just to tie the first knot!

Now use your sausage pricker and prick a couple holes right on the tip of the sausage casing. Unlike a balloon, pricking the sausage skin will not rip and open the whole casing. By doing this you are creating an air vent to get more air out of the sausage as you stuff it. With one hand holding the casing over the end of the tube, use your other hand to begin filling your sausage. The hand that holds the tube controls how much casing to release to fill the sausage. Goldilocks rules apply here, not too little, not too much. No way this can be well described here in writing. You will need to 'feel' this and use your judgement.

After you have filled the length of sausage you wanted, stop, with your fingers pinch the casing at the end of the tube and pull about 4 inches (10 cm) extra of empty casing away from the tube and cut the casing right at the tube leaving those extra 4 inches (10 cm) of dangling casing with your sausage.

Before you get too eager to tie this guy up and move on to the next one, I would recommend more air extraction. Prick your sausage all over the surface. No need to be shy, just cover it up with little holes. Massage the sausage meat inside rolling the sausage and pressing it down a little. This will get even more air out. Once you are done, hold the sausage by the open dangling casing and carefully push more of the sausage mix towards the tied up end of the sausage until you have a somewhat shorter sausage than what you started with. Check for air bubbles, if you find any, prick it and let the air out.

Now you are ready to "close" this guy. If you did this right, your 4-inch (10 cm) leftover dangling casing is now longer. Meaning that you compacted the sausage mix inside the casing even more and let more air out. To finish up do the same double-foldover knot you did on the other end. At this point you should have a finish stuffed sausage, with some strings coming out on both ends. Use the strings to create some loops from which to hang the sausage and keep some strings to tape a piece of marking tape to use as label.

"Molding" The Sausage

Required Supplies/Tools/Equipment:

- Mold Spores (Bactoferm Mold-600, or similar)

This step is optional, but a highly desired one for those 'in the know'. I am talking about adding a mold culture to your sausages as they dry. There are a few reasons for doing this. Number one, its really cool! Seriously, however, the functional benefits to adding mold include the protection of your sausage against other 'bad' molds, preventing 'case hardening" and enhance flavor.

Bactoferm Mold-600 is the most popular product name for this. You will find these mold spores under this name if you search online for a retailer that sells it. What you will get is a little bag filled with Penicillium Nalgiovense spores. This mold is in the same family of many other edible molds you find in cheeses like blue cheese or Bries. If applied properly and set under the right conditions, you will get a nice white 'bloom' within a few days if your sausage is sitting at 65F-75F (18C - 24C) with relatively high humidity. Otherwise mold may or may not grow completely at lower temperatures.

There are thousands if not millions of all sorts of mold spores naturally in the air floating around you and your sausages, by introducing billions of beneficial mold spores right on the sausage, you basically give the beneficial mold (Penicillium Nalgiovense) a huge head start compare to all other strange and questionable molds. Once the good mold takes over all the available real estate there is little chance a bad mold can move in.

The second benefit is in preventing something called 'case hardening'. The boogeyman to all home charcuterie beginners! If you setup your chamber correctly as I described here you should not have any issues with case hardening, but this is a very common issue for people starting to make dry sausages. If the sausage is set in a dry environment, the outside of the

sausage (the casing and surrounding meat) will dry hard very quickly and by doing so, it will create a barrier preventing more moisture from escaping the sausage and likely lead to spoilage, it also can harden at the diameter of the fresh sausage so when the meat inside keeps drying the outside will not shrink at the same rate as the inside. If this happens, when you slice your sausage you will see 'caverns' or large holes in them, and sometimes also spoilages or some nasty colors. The key is SLOW drying, to do that, keep humidity high, like I described in "Setting up your Curing Chamber". Mold just adds another layer of protection. If there is an active live mold growing on the surface, it will draw moisture out of the sausage and this layer of moisture will prevent the casing from drying up during those first crucial days/weeks of the sausage's life.

The final benefit I will describe is taste, and that is personal. I, like so many others making and eating charcuterie love the taste of a good mold. I feel it compliments the sausage with a nice 'mushroomy' flavor. Of course this only really matters if you are eating your casing, so this will be irrelevant for collagen, hog middles or beef bung casing, etc.

You would normally apply the mold spores to your sausage as soon as they are done been cased as that will be the ideal time for mold to grow since the sausage is very humid. Once the sausage is much dryer outside, you will have limited success introducing a mold culture. There are different techniques for applying the mold spores. Most of the ones I read about seem very wasteful to me or intended for a large commercial manufacturer. Such as dipping the sausage in a water/spore solution, putting in a spray bottle, 'painting' the solution with brush.... So I will describe the one I use very successfully, but feel free to adjust and do something different.

If you are starting with a commercial mold spore like, Bactoferm Mold-600, you would dilute about ⅛ tsp of the mold powder in about 2 Tablespoons of chlorine-free water (at room temperature) and set aside for about 10 minutes. This amount should be enough to inculcate about 2-4 sausages.

Keep in mind however this is not an exact science, so the amounts described here are not a required recipe, just some 'ballpark' measurements.

I would call the technique I use "hand painting". Mix you spore solution well, then pour about 1 tsp of the solution on one hand, now wet both palms of your hands with the solutions and 'wipe off' the solution all over a sausage and repeat until you have touched all parts of the sausage. Then wash your hands when done. Very little if anything will go to waste like this and I promised you, you have covered the entire surface with billions of spores, even if you can't see it.

Another option is to cross-enaculate your mold from an already moldy sausage you have made before. Just take the moldy sausage and rub it all over a fresh new sausage. This is a technique you can also use (with limited success) if you live in a country with no easy access to mold spores and you want to start. You can purchase a commercial 'white mold' salami (make sure it is mold, not rice flower or other white nasty stuff like talcum powder) and rub that white mold sausage over your fresh sausage. I've recommended this a few times to people overseas and it has worked about half the times. Keep in mind that that sausage you purchased may have 'been around' who knows where, so you may also grow other non-desired things on them, so as when feasible, buy mold spores.

One thing to mention here is that mold does not like smoke, so it will not grow well on smoked sausages (at least not immediately after smoking). That's actually one of the benefits of smoking sausages! Also, never smoke a sausage that has mold on it already, it will be horrible to see some dark stained dead mold.

What do you do if your sausage has been attacked by some ugly, green or black mold? You have a some options. You can throw them away, which will be crazy, but you can do that. Or, you can simply take a wet paper towel with some diluted vinegar and just wipe it off and keep on drying as you normally would. The mold doesn't get inside the sausage and 'spoils' your meat and with some very rare exceptions mold is not poisonous, so you could just eat that nasty mold and be 'OK'. So if you find a tiny speck of green mold, don't freak out. Clean it up and move on.

Fermented Sausages

Required Supplies/Tools/Equipment:

- Starter Culture (T-SPX, B-CL-007 or other "slow fermenting" starter culture blend)

To ferment or not to ferment? That is the question if you want to take your charcuterie to the next level. You don't have to ferment your sausages to make a great salami, but technically it would not be called a 'salami' then. Pretty much every dry sausages you have eaten in the past was fermented, you may not have known that, but it was. If you don't want to ferment your sausages, you can skip this step and move your sausages directly to your cold/humid curing chamber to begin drying it. Chances are you will get a great dry sausage, and many times I choose NOT to ferment my dry sausages as I also enjoy the taste of them like that. I would even recommend you don't ferment your first salami so you have a chance to become more familiar with the process. Keep in mind however you will be missing out on a huge spectrum of charcuterie if you skip this forever.

Fermentation involves the addition of a lactic acid forming bacteria culture to your sausage mix. This bacteria will reproduce and in turn eat the natural sugars in the meat and convert those into lactic acid, thereby raising the acidity of the sausage. By rising the acidity levels in your sausage it will further contribute to protecting your sausage against spoilage as most of the 'bad' bacterias don't like to grow in acid environments.

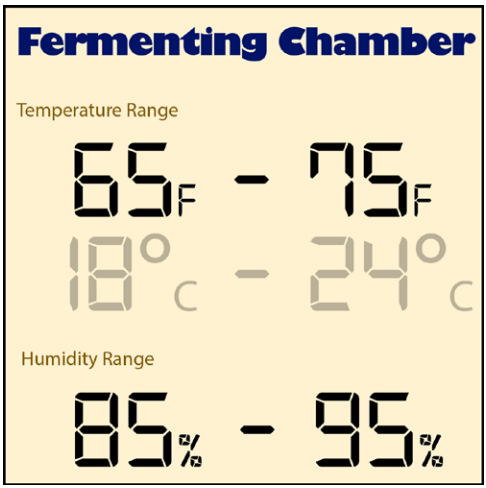
In addition to lactic acid bacteria, the culture you purchase commercially typically will come with other color and flavor-forming bacterias that have been selected to do just that, enhance the color and flavor of your sausage. So by the time you get you eat your sausage, technically billions of other baterias already ate it first.

As you probably guessed it, there are different types of culture mixes that

are designed for different effects. There are "fast fermenting" and "slow fermenting" cultures, and there are different types between those categories. This book will deal only with slow fermenting cultures which are typical of Southern European style sausages and describe only two interchangeable cultures that are more commonly available commercially here in the United States, Bactoferm T-SPX or B-CL-007. If you learn how to work with either one, you can always experiment with different ones in the future on your own.

This culture will come to you as a powder with billions of these bacterias in some 'suspended animation'. You will mix these with chlorine-free room-temperature water and set aside for 10 mins or so. If you know you are going to ferment your sausage, I would recommend you create this water solution early in the process so the bacteria will be well 'hydrated' by the time you are ready to mix it with the meat.

Once you mix the solution with your meat and you have finished casing the sausages they are ready to be fermented. And this is the part that will go against everything you have learned about meat handling. To start the fermentation process you need to leave the meat at room temperature for about 2 days. Yup!



Keep the humidity as high as possible 80%+ and a temperature range of about 65F - 75F (18C - 24C). Lucky for us home charcuterie makers, this is a typical room temperature. If you however live in a colder or warmer climate, find places around your home that will keep this temperature constant for the 2-day fermentation period. The biggest challenge here may be the humidity but that can be easily overcome by just placing your

sausages in a plastic bag (100% humidity). The problem here would be your mold spores (if you added any). Mold will not grow on any surface of the sausage that is not exposed to air as mold needs oxygen to grow. One trick to overcome this is to have a small plastic container, just big enough to hang your sausages inside. Put a wet paper towel at the bottom and hang your sausages inside the closed box to ferment. This should be enough to ensure you have a high humidity environment but always measure to make sure that's the case and your sausages are not drying.

If you are fermenting, I would highly recommend using a mold culture on the outside casing, otherwise you may get some strange mold or yeast growing on it. If that does happen, don't worry, wipe off and keep fermenting it.

The 2-day range is an optimal time frame for that culture to 'finish' fermentation under the temperature and conditions described here, but that depends on many factors so this again here this is not an exact science unless you get yourself some food-grade Ph-Meter and check the Ph of the sausage to decide when the sausage "finished", meaning: reached the recommended Ph level of 5.3. This process however means you need to have a 'sacrificial' sausage that you need to cut open in order to measure, so my recommendation for home charcuterie is to skip the Ph measurement. Nothing bad will happen if you go 3 days, other than maybe a more intense acidity flavor and stronger smell. Definitely do not more than 3 days at 65F-75F (18C - 24C).

You may be tempted to counteract the acidity by adding sugar to the sausage mix. Don't do it. It will have the opposite effect by basically creating an all-you-can-eat buffet for the lactic acid bacteria so it will actually reproduce even more and release even more acidity. If you don't like the acid taste, either don't ferment or ferment for just one day.

Cold Smoking

Required Supplies/Tools/Equipment:

- A-MAZE-N-SMOKER (or any other cold smoke generator)
- Smoke chamber or large box

Cold smoking is an optional step, but a highly desired one for flavor in many recipies. Specially for Eastern and Northern European sausages and meats. If you remember when we talked about the 'pre-refrigeration age' in our "Introduction to Meat Curing", colder climates could not just hang their sausages and meats to dry in the winter months after the slaughter since the meats will just freeze instead of dry cure. So people in these areas needed to create a little slow-burning fire in their curing rooms to maintain the temperature just above freezing. The smoke generated by this fire was the side effect of keeping the curing chamber warm and therefore these regions developed a taste for the 'smoked' charcuterie that is more prevalent than in warmer Southern European areas.

To cold smoke, you have to have the ability to generate smoke in a chamber or box where you will hang your meat that will not heat up. So you can either channel the smoke from an outside fire into a chamber or I would suggest you purchase one of the many options out there for cold smoke generators. I love my A-MAZE-N-SMOKER it so simple and it can produce up to 12 hours of smoke on wood pellets and I'm not getting paid to write this!

Cold smoking is something you do at room temperature, it does not need to be "cold" but if you live in a warmer climate make sure you do it at night or when temperatures outside are lower than 75F (23C). Preferably lower if you can, around 60F (15C). How long you do it is up to you and your preference (I would recomend like 6-10 hours), so is the type of wood you decide to use. For wood, I would recommend a softer flavor wood, like Apple or Cherry,

but that's your preference too. If you over-smoke or use a strong wood flavor it could overpower your charcuterie and just feel like you are eating tree sap, so use moderation first, then adjust to your liking.

Dry Sausages Projects

After you had a chance to learn the curing basics, you setup your curing chamber and bought the required equipment you can begin to get your hands dirty and make your first salami. I would recommend you start slow and begin with a non-fermented dry sausage, get that step right, then move into fermenting once you are comfortable with that first step. This whole process will become second nature to you after doing just a few sausages.

This section is not intended to be an exhausting section on how to make EVERY POSSIBLE dry sausage in the world. The purpose here is to get you to understand the process of creation and set you on the road for you to create your own works of charcuterie 'art' as you move forward. Once you understand the background and have had the hands-on experience in making these, you should be able to find hundreds of free dry sausage recipes online and more importantly in my opinion, begin creating your own to pass down to others.

Sausage Project #1: Sausage Primer - Non-Fermented "Salami"

Salamis are fermented, so technically this is not a salami, however if you remember from a previous section, "Introduction to Sausages": if it looks like a salami, it's a salami! The key steps you want to learn here are familiarising yourself with the grinding, measuring and stuffing of your sausage. And of course drying your salami, but if you setup your chamber right and you are able to maintain the humidity and temperature requirement, then this should be easy.

In this very first recipe, you will learn to make what I would call your "salami base" this would be your ground meat with your prefered meat:fat ratio. This will be the 'mother' of practically most of the different variations of salamis. You will start with this step to do all your later experimentations or following most other recipes.

For this recipe I will start you with a smaller batch of sausage, just 500g (about 1 lb), so you are not too overwhelmed with lots of meat to grind and other things.

If you skipped over the previous sections on how to grind, stuff sausages etc, this will be the time to read and/or re-read those!

Start by getting about 3-4 feet (1-1.5m) long casing string and hydrate it as described in "Stuffing your Sausage". This will help it be ready later when you need to do the stuffing.

Get your scale, ingredients and your meat and fat to grind.

Ingredients:

For a total of 500 grams of meat.

375 g of lean pork muscle
125 g of pork back fat

15 g table salt (~3 tsp)
1 g curing salt #2 (~¼ tsp)

This could be basically it and if you cure and dry your sausage well, you will have good tasting non-fermented salami. However it is typical that you will add some spices to support the flavor, and here is the part that is subjective to each person. There is no 'special secret' recipe that calls from the exact amount of any flavoring spices. Its mostly up to your own taste. Of course with some common sense proportions compare to the volume of your meat. If you absolutely LOVE black pepper, you can probably add one whole Tablespoon of it to this 500 g of ground meat and love the results, someone else may hate it. That's the art! My only suggestion is to not add too many different spices as each one will add their own volume to the mix and you can end up with a very high percentage of spices compare to your meat and all those flavors may likely just get all mixed and hard to distinguish from each other anyway. Keep it simple until you get the hang of flavoring. So for this initial project I would suggest just black pepper, a very traditional ingredient. The proportion of the following ingredients are suggestions, feel

free to tweak 20% up or down depending on your taste.

4 g ground black pepper (~2 tsp)
5-10 whole peppercorns just for fun, if you enjoy biting into them! If not, ignore.

Mix the two types of salts together, then mixing all these ingredients together as described in the section titled "Salting and Flavoring The Meat" and follow the casing instructions, label and weigh your sausages and set them to dry in your curing chamber.

Since these sausages are non-fermented, they will not have the additional protection that comes with fermentation, therefore I would suggest you set your curing chamber in the lower temperature part of the spectrum: 40F - 50F (5C - 10C), at least during the first 10 days or so. Keep humidity high at the usual recommended range (60% - 80%).

Two weeks after take them down and weigh them again and calculate to see how much weight they have lost. Remember, your target is around 30%-40% weight lost. At this point, they will likely need more time to dry, so set them back and continue drying until they are ready. Don't worry, you don't HAVE to eat them all once they reach 30%, the dying speed will slow down and they should be great for a few weeks thereafter and you can always vacuum seal them to store them for many more weeks without fear of them over-drying.

Sausage Project #2: The "Real" Salami

Now that you have hopefully completed and mastered "Sausage Project #1" You should be ready to start playing with some bugs! This project will introduce you to fermentation. Before your start this project, I would suggest you read again the sections "Fermented Sausages" and "Molding The Sausage" as a refresher of some of these concepts.

This project calls for a total meat

weight double of that of project #1. If you feel that that project was the right amount of meat for you to work with, you can just half all the propositions here.

Start by getting about 6-8 feet (2-3m) long casing string and hydrate.
Next, get your starter culture ready (Either T-SPX or B-CL-007) so you can begin hydrating that as well as your mold spores (Bactoferm Mold-600).

Ingredients:

For a total of 1,000 grams (1 Kg, about 2 lbs) of meat.

750 g of lean pork muscle
250 g of pork back fat

30 g table salt (~6 tsp)
2 g curing salt #2 (~½ tsp)

0.2 g of fermenting starter culture, T-SPX or B-CL-007, this amount may be too small to weigh correctly, if so just use about ¼ tsp. Hydrate in about 2 Tablespoons of room-temperature chlorine-free water. Missing this measurement by 20% up or down will not be a tragedy. It's a live bacteria, it will grow, so don't stress if you didn't get the EXACT measurement right. Set aside to hydrate.

0.1 g of mold spores, Mold-600 or similar, an even more ridiculously small amount to measure, about ⅛ tsp. Hydrate just like the fermenting starter culture in about 2 Tablespoons of room-temperature chlorine-free water. And just like with the starter culture: Don't worry to be exact. Its a mold, if conditions are right, it will grow. As long as you are within a reasonable range as shown here, you will be just fine. Set aside to hydrate.

Those are your "required" ingredients. Now come the fun ones that will further develop the flavor and uniqueness of your salami. Here I'm listing ingredients that I use, and are typical of salamis, but feel free to play around with amounts and substitutions as long as they don't vary too much from what's on this list. At least not for this second project, once you are more confident in this fermentation process, you can experiment more and find more unique flavor combinations that you would prefer.

2 g of dry thyme (~1.5 tsp)
4 g of ground black pepper (~2 tsp), plus 10-15 peppercorns for fun!
3 g of ground fennel (~1 tsp), plus some whole fennel seeds for fun!

8 g of fresh crushed garlic (~1.5 tsp), Not the dry kind!

Remember the section "Salting and Flavoring The Meat" to follow the instructions on the order to mix your ingredients with your ground meat. Fresh garlic on its own, all other dry ingredients and salts together then last your fermenting starter culture. MAKE SURE TO NOT MIX IN YOUR MOLD CULTURE! If you do put it in by mistake is not the end of the world, nothing will happen but you will not get any mold outside of your sausage.

Mix all your ingredients well and stuff your sausages as you have done before. Just now as a last step, follow the instructions on "Molding The Sausage" to add the mold spores.

Once that is done you are ready for your first fermentation! Follow the instructions on "Fermented Sausages" to set your salamis to ferment over the next 2-3 days. After that, if you set up your fermenting chamber correctly, you should see some white mold taking over all your salamis. You should now move them over to your cold curing chamber. The cold should slow down the fermentation and eventually stop it once the salamis dry up more as in sausage project #1.

Sausage Project #3: Spanish Chorizo

As you progress on these project, I will skip repeating some of the things I described in the previous ones, assuming you are already familiar with them. And just get down to the uniquenesses about the particular project.

There are two basic dry sausages that most people know: the "salami" and the "chorizo". The only difference between these two are the 'flavoring' spices. Everything else is basically

the same. To boil it down to the basics, if you add a ton of paprika powder to the same recipe in the previous project, it would be called a "Chorizo". That's all.

We will not do that here, that will be pretty boring. I will introduce some new ingredients and some variations that I like, but like always, feel free to add yours.

One technique I would like to introduce is 'hand-dicing'. You can either grind all your meat, grind part of your meat and hand cut the rest or you can hand cut the whole thing! The latter would be very exhausting and also present you with added challenges as the sausage dries so I would recommend a mix of the two. Hand dicing will obviously produce larger pieces of meat and fat that will add some interesting texture to your sausages and it is something I personally like a lot. Recently, I offered someone one of my favorite salamis with big chunks of hand-cut fat, thinking everyone must like this as much as I do, but no, not everyone likes to bite into a big chunk of pure fat like I do! This is as a reminder that this is an 'art' and not everyone will like your creations. What matters for home charcuterie is that you and your family do.

Start by getting about 6-8 feet (2-3m) long casing string and hydrate. Next, get your starter culture ready (Either T-SPX or B-CL-007) so you can begin hydrating it.

Ingredients:

For a total of 1,000 grams (1 Kg, about 2 lbs) of meat.

Grind
600 g of lean pork muscle
200 g of pork back fat

Hand diced to cubes about ½ in (1 cm) in size.
150 g of lean pork muscle
50 g of pork back fat

30 g table salt (~6 tsp)
2 g curing salt #2 (~½ tsp)

0.2 g of fermenting starter culture, T-SPX or B-CL-007, about ¼ tsp. Hydrate in about 2 Tablespoons of room-temperature chlorine-free water.

Now to the ingredients that will make this into a "Chorizo". There is a special kind of paprika called "Pimenton De La Vera" which comes from Spain and is smoked dried, then ground into a powder. You could use some other paprika, like Hungarian, Italian or anything else, just keep in mind it will not taste like a Spanish Chorizo. So "Pimenton De La Vera" is highly recommended here.

17 g of "sweet" (dulce) smoked Spanish paprika/pimenton (~7 tsp)
2 g of hot (picante) smoked Spanish paprika/pimenton (~1 tsp)
1 g of dry oregano (~1.5 tsp)

15 g of fresh crushed garlic (~3 tsp)

Mix the ingredients in the order described before with the meat (dry ones together, garlic by itself, fermentation culture, etc…). Case them as usual and set to ferment. Unlike the salami in the previous project, chorizos are typically not 'molded' so I will skip the step to add mold to the sausage before fermenting. There is no "chorizo standard" police that will hunt you down if you do, so if you liked it, by all means do add it. I personally add mold to most of the chorizos I make. Also one of my prefered 'non-standard' chorizos steps I love is cold smoking them. Which is a step we will do in our next project.

If you choose to not add mold, keep in mind your sausage may grow some unwanted molds or yeast during the

2-3 day fermentation process. If they do, don't worry, just wipe them off with a paper towel and a vinegar/water solution, and keep fermenting. Once you move them to the cold curing chamber it should stabilize.

Sausage Project #4: German Mettwurst

In this project we will move up north to Germany for a classic sausage called Mettwurst. This sausage belongs to a category of sausages call "Spreadable Sausages", because they are just that: spreadable unlike salamis which are sliced. The techniques we will learn in this project will include cold smoking, double grinding and working with larger diameter synthetic collagen casings.

Fermenting of this sausage is typically done with a "fast fermenting" starter culture and if you want more authenticity, you can get one and use that one instead of the "slow fermenting" culture we use here. We will be supporting the fermentation with some additional sugars (dextrose) to make up.

The key to making a sausage spreadable is fat, lots of fat! Fat will not dry, so it will not harden like meat as it dries. In the case of Mettwurst, we increase the fat content to well pass 50%. In addition, this sausage is not set to dry but can be enjoyed just after a few days so the meat content in it does not have time to dry and harden.

A fine grind is key to spreadability. For thos who have a high end-industrial grinder, you can get away with grinding only once on a smaller diameter grinding plate, for the rest of us, we will need to grind twice on the same grinder. To do so make sure you keep your meat and fat frozen. You can grind the meat once, put back in the freezer for 15 minutes and grind it a second time. What we are trying to avoid here is smearing the fat and rendering it.

Start by getting some large diameter collagen casing and hydrate. Unlike natural casing, collagen is much easier to work with, but does not have the

natural flexibility.
Next, get your starter culture ready (Either T-SPX or B-CL-007) so you can begin hydrating it.

Ingredients:

For a total of 1,000 grams (1 Kg, about 2 lbs) of meat.

200 g of beef (yes, beef!) you can use stew beef sold at the supermarkets.
200 g of lean pork muscle
600 g of pork back fat

40 g table salt (~9 tsp), a little more salt than usual (4%) to enhance flavor
2 g curing salt #1 (~½ tsp), CURING SALT "#1", NOT "#2"
2 g of dextrose (~1 tsp), if you don't have dextrose, use about 5 g of sugar (~1 tsp)

0.2 g of fermenting starter culture, T-SPX or B-CL-007, about ¼ tsp. Hydrate in about 2 Tablespoons of room-temperature chlorine-free water.

Unlike the other dry cured sausages, a spreadable sausage will need more spices to bring out the flavors. First, because spreadable sausages are mostly fat and also because unlike "dry" sausages, which lose almost half their weight, spreadable sausages don't get the benefit of concentrating their flavors as they dry.

1 g of cayenne pepper (~ ⅓ tsp)
5 g of white pepper (~2 tsp)
2 g of allspice (~½ tsp)
2 g of dry garlic powder (~¼ tsp)
1 g of mace powder (~½ tsp)

Mix all spices and salts together with the meat and case in a large diameter collagen casing (approximately 60mm - 2.3 inches). Set to ferment for 2-3 days. The last step will involve cold smoking the sausages for at least 12 hours (Refer again to the section called "Cold Smoking"). You can do

this over a period of a few days during the fermentation stage if needed. Once fermented and smoked, set to cool in the fridge overnight and it should be ready to eat the next day over some nice toasted bread.

Sausage Project #5: 'Nduja

Nduja (pronounced en-DOO-ya) is an Italian spreadable sausage well known in the charcuterie world and as we saw in the previous project, made up mostly from fat. Nduja takes the fat level content to an even higher level with recipes calling for 80% to 90% of fat! Unlike the German Mettwurst, 'Nduja is let to cure for about 4-6 months. Not because it needs to loose any weight, because it won't, but to further develop the flavors in the sausage. A new technique we will learn here will working with larger diameter natural casing, such as hog middles. Hog middles are part of the large intestine of the hog. They stink, and look somewhat gross, there is no nice way to put it, but they make for a great natural breathable casing. If you are totally grossed out about the idea of working with larger intestine, you can probably use collagen casings like we used in the previous project, but you will be missing half the fun.

Start by getting your hog middles hydrated and cleaned up as well as your fermenting starter culture. You will need about 3-4 feet (about 1 m) of hog middles, depending on their diameter. Depending how you get your hog middles they may need a little bit of 'cleaning' not from pig poop, but from pieces of dangling tissue inside of them. To clean them, hydrate them well and flip them inside out like a sock, then carefully remove any loose tissue. Anything that doesn't come off easily, leave it there. Surprisingly, hog middles may look thick and strong, but they are more fragile than their thinner counterparts, so removing too much of these tissue will weaken it even more and make it likely to burst from the pressure when you are stuffing your sausage.

Just remember that like in the Mettwurst project, you will need to grind this fat twice.

I will warn you that before you start this recipe, make sure you have enough pepper powder to complete the recipe because it will require A LOT. Unlike the Spanish chorizo that requires smoked paprika. 'Nduja requires Calabrian pepper powder. You can use the Spanish one, probably will taste just as well, but just won't be that close to the authentic ones as these pepper are not smoked liked the Spanish ones.

Ingredients:

For a total of 1,000 grams (1 Kg, about 2 lbs) of meat.

800 g of pure back fat.
200 g of lean pork muscle

(Alternatively, you can use softer pork belly fat, if you do so, just use 100% of this pork belly fat as this fat will likely already contain some little muscle tissue at about 10%-20%

40 g table salt (~9 tsp), a little more salt than usual to enhance flavor.
2 g curing salt #2 (~½ tsp)

0.2 g of fermenting starter culture, T-SPX or B-CL-007, about ¼ tsp.

Now to the part that is going to make you question if this recipe has a typo. You will add A LOT of pepper powder.

190 g of "sweet" Calabrian pepper powder. (that's a lot!)
60 g of "hot" Calabrian pepper powder.

Double grind and mix all the ingredients very well. It will likely take some time for you to mix all this fat paste with that much dry powder, but don't

give up! Once you feel you have mixed this thoroughly you can begin casing into the hog middles. Be careful to not over pressure them as they do have a tendency to burst.

Once you have these cased, you will need to support the weight of this sausage with some fancy tie up job, otherwise the casing will separate at the top of the sausage, introduce some air, and just not look good. It will be very difficult to show here in writing how to do this, but don't despair. Just find any video tutorial on youtube about "meat trussing" or "tying a roast" and hang the sausage from the trussing frame. The idea is to support the weight of the sausage from all around the sausage, not just from the top closing knot.

Once you supported these, set to ferment for 2-3 days and then move over to cold smoking for 12-24 hours. The longer the better.

After 24 hours they will have a strong smoke smell, but don't worry, since these will sit now in your curing chamber for at least 4 months the smell will go down in time and the paste inside will absorb it and it will cure and develop some great texture. If you are in a rush you can harvest them after 2 months.

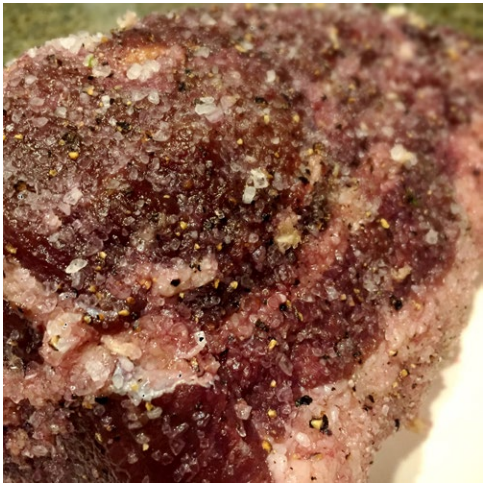
Whole Muscle Curing

In a way, curing a whole muscle is easier than making sausages. There are less steps, but then you will need to babysit your projects for a long time. Some dry curing projects can take longer than a year, such as Prosciutto, others about a month, like Lonzino. Therefore, it is key to have a good curing chamber setup that will stay consistent for the duration of your cure.

Perhaps the most famous of the whole muscle cures here in the U.S. is the Italian Prosciutto, this is what Spaniards would call Jamon Serrano, it's big and photogenic. You see a leg hanging and you can picture what it is: it's an animal's leg, a pig in the case. There is no mystery. On the other hand other whole muscles are a little harder to figure out. In theory, you can chop off any muscle part of a pig and cure it, but traditionally, we cure specific muscles pieces such as the loin muscle, the tenderloin, the neck, the cheeks, the belly and even parts that are not muscles at all, like the backfat.

The good news is that the process for all of these is basically the same. The process involves "salting" the whole muscle, rinsing it, and letting it dry. Of course this is an oversimplification but a realistic one.

There are 2 ways to do the whole muscle "salting". One is an inexact approach to add a lot of salt randomly to cover all the meat, the other is called "equilibrium cure" and it's based on the same 3% rule we talked about for sausages. You weight your muscle piece, let's say you are curing a 1,000 g loin muscle, then you measure 30 g of salt and sprinkle that all over the meat, massaging and making sure you got every nook and



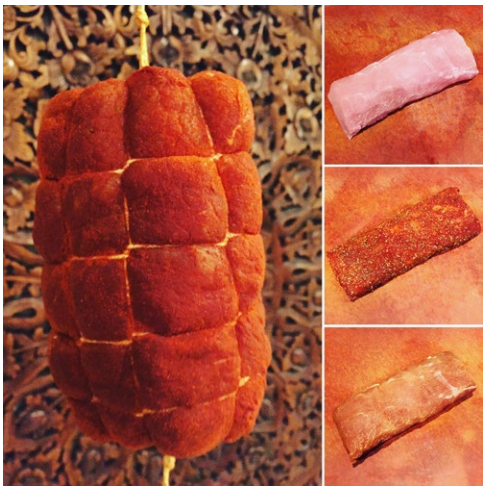
cranny. This is also the time you will add your nitrites (curing salt) and any other flavoring spices you want. Once the muscle is covered in all the salt and spices you can put it in a plastic bag or ziplock bag with as little air as possible inside the bag. Some people vacuum seal the meat in a bag, this is a great option if you have it, but is definitely not required.

This seasoned meat now goes in the fridge for a few days. You can do anywhere from 2-4 days per every 1,000g (1Kg) it won't make much of a difference. The point is that you want the salt to travel into the muscle and a few days will be enough. Some people prefer a much longer salting period like 2 weeks or so. In my experience it makes no difference. The meat will not get "cured more". If anything maybe the other spices you added will transfer more of their flavor, but that's hard to say for sure. Either way is fine. If you used equilibrium cure, the meat will not get saltier. On the other hand, if you added tons of salt, a longer period will mean that more and more salt will penetrate that meat.

Take the meat in the plastic bag and massage it and flip it over everyday from outside the bag. After the salting period is done, it's time to wash it off. The meat will feel firmer, look a little darker and have a somewhat dull color, don't worry. Rinse the meat right under your kitchen faucet and with your hands clean off any decidual spices left on it. Don't use soup! Not sure it was necessary to specify this, but just in case. This is not a wash before surgery so no need for it to be clean, just rinsed off and use a paper towel to pat dry.

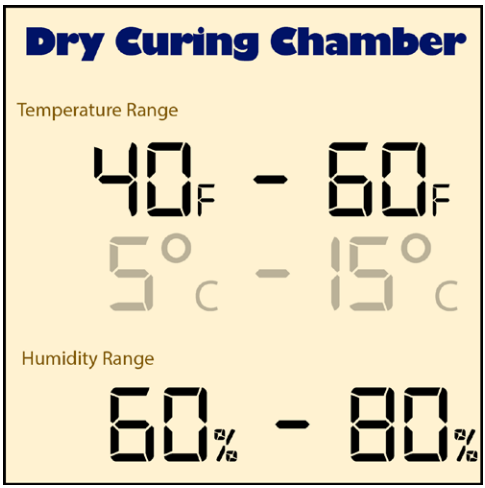
If you like to add more spices, do so at this point so the meat will dry and absorb more of the flavor from the spices during this time. You could also

use a large diameter whole muscle casing such as beef bungs, hog ends, hog bladders, etc. to encase your meat or you can leave it uncased. Similar to sausages, the casings will protect the whole muscle and prevent it from over drying. We will skip casing on your first project, but moving forward it would help that you get used to casing your whole muscles. It will offer you better results. Unlike in sausages, these casings are intended to be peeled off and discarded after curing is done.



Hanging a sausage is obvious, you hang it by the same end where you tied your knot to close the sausage. Whole muscles are not as obvious. Some people use hooks or pass a string through one ends of the meat to hang it to dry. I would suggest you don't do that for a few reasons. First, it will stretch your meat and cure un-even, but also the addition of a hole into the meat will increase the likelihood of spoilage bacteria forming in that cavity and finally, it just doesn't look as cool! I would recommend just watching a few youtube video on how to do some meat trussing, basically tying up meat. There are great tutorials that will show how as it's very difficult to describe in writing. But basically most styles would work. The idea is to weave a little 'basket' around your meat and hang your meat from that 'basket'

Just like with sausages, you would want your whole muscles to cure at similar temperatures and humidity. So you don't need separate chambers for each. Whole muscles can also suffer from case hardening, where the outside layer will dry hard too quickly, trapping the humidity inside. Maintaining the relative humidity at around 60%-80% and a temperature between 40 - 60F (4C - 15C) is ideal for a slow drying process. Again, just like with sausages,



your whole muscle cure should be ready when it has lost about 30%-40% of its initial hanging weight, not how long it has spent in the chamber. Don't be tempted to 'age it' longer, is not like wine, if your meat loses more than 50% weight, it will be closer to a rock than a tasty tender charcuterie. An exception here would be 'large' muscle cures, like Prosciutto, or Culatellos, those been so large will retain moisture longer inside and dry much slower allowing them to hold well for more that 2 years. Even those however, eventually will dry out and likely get ruined if they dry longer than 4 years. Therefore typically the maximum you see in fancy Spanish or Italian delicatessen with some rare exceptions is 3 years, .

When we talked about measuring flavoring spices weights on sausages, I told you to not worry much about exact measurements. Well, for whole muscle cures it feels a little silly for me to add measurements since it's much less important here. Honestly, you can even triple the amounts from one version to another and you will taste little difference if any in the final cure. I know some people add them to their recipes but I have never kept track of them since the difference is barely noticeable. In a whole muscle cure, the spices are applied just to the outside layer of the muscle, litle of any of their flavors will travel more than just a few millimeters into the meat. So the spices are there to just flavor the thin outer ring of the thinly-sliced final charcuterie and if you look at once slice of cure muscle, you can see the thin outer ring makes up an insignificantly small part of the overall volume. Whole muscle cures need to stand up in favor by the actual taste of the cured meat first, the flavoring spices are secondary. A well cured and high quality meat will taste amazing cured with only salt. This is the case of the famous prosciutto or jamon serrano.

They contain nothing but sea salt and are amazing delicatessens.

Whole Muscle Project #1: A Tender Tenderloin

In this first project we will just learn the basic concept to cure a whole muscle. Many whole muscle cures call for the muscle to be encased in a beef bung or similar large diameter natural casing. A natural casing around the whole muscle will protect the meat and support a more even cure. Tenderloins are very small in comparison, and casing them will be an overkill. However, if you want to case them. I would recommend hog middles, they are typically around the same diameter.

Curing a pork tenderloin is my favorite thing to do. I feel it's so rewarding in taste per amount of effort put into it, it's easy to prepare and quick to dry and you can find tenderloins on basically any supermarket shelf. There is just a little trimming and clean up you would need to do with the tenderloin before you begin curing it. This cleanup involves carefully removing as much of the silverskin as possible and cutting a little off both ends until you end up with something resembling more like an even cylinder. Once you have completed this step, you are ready to begin curing.

First, weigh your tenderloin since you will be using this measure to calculate your salt level for your 3% table salt and curing salt equilibrium cure. For example, if your tenderloin weight 632 g, you would multiply this by 3% (0.03) to get 18.96 grams of salt, or rounded up to 19 g. Likewise for your curing salt you would multiply by 0.4% (0.004) to get 2.5 grams of curing

salt. Therefore, in the following ingredient list, replace the words "MEAT WEIGHT" by the actual weight of your tenderloin.

Ingredients:

For a total of [MEAT WEIGHT] in grams.

[MEAT WEIGHT] * 0.03 = ___ g of table salt
[MEAT WEIGHT] * 0.004 = ___ g of curing salt #2

Apply the salts evenly all over the whole tenderloin and add the flavoring spices after that.

Sweet Spanish Pimenton/Paprika, enough to cover the whole muscle.
Hot Spanish Pimenton/Paprika, about 1 tsp volume, just sprinkled evenly around.

Place salted and spiced tenderloin in a ziploc bag with as little air inside as possible (or vacuum seal it if you want) and put in the fridge for about 3-4 days, massaging and flipping once a day.

After 3-4 days, take out and rinse as described in the "Whole Muscle Curing" introduction. Pat dry and tie up the meat using any meat trussing technique you can find online. Once it's ready to hang cover the meat again with more of the spices you used during the salting process. Weigh your meat again, label it with the weight and date and set in your curing chamber to slowly dry until it loses about 30%-40% of its original weight. A tenderloin should take about 4 weeks to be ready.

Whole Muscle Project #2: Getting Larger, Capocollo/Coppa and Others

This project will take you into curing a larger muscle that will be best cased in a natural casing such as a beef bung and will require more meat trussing or netting to ensure a more even dryness and cure. Worst case scenario, you CAN skip casing it but wont come out as tender. Also, in an effort not to be too repetitive with these projects, you can do the EXACT same steps here with a loin muscle and make what will be called a "Lomo" or "Lonza". Alternatively, you can use a lean beef eye of round muscle and make a "Bresaola". So consider this project a 3 in 1 project and follow these instructions here to make a three of these popular muscle cures.

The Coppa muscle is actually not a clean lean single muscle. Unlike the tenderloin, this cut is made up of different muscles with fat layers in between that create a great marbling. The Coppa is a cylindrical cut coming from the neck of the pig. If you live in the U.S. you are not likely to find this cut sitting on your supermarket shelf. You have two choices to get this cut, one you buy a large "Boston Butt" and cut out the Coppa from that. You can find some instructions online how to separate the coppa from a Boston Butt. Or you can talk to your local butcher shop and request the cut from them. Perhaps not with the supermarket meat department guys, but any self-respecting butcher shop will know what the Coppa is and how to get that for you.

The salting process is the same. Clean up the Coppa and cut any loose pieces from it to have a nicer more even surface. You will then need to weigh your Coppa muscle to determine your "MEAT WEIGHT" in grams to use in your equilibrium cure formulas. Who said math was useless?!

Ingredients:

For a total of [MEAT WEIGHT] in grams.

[MEAT WEIGHT] * 0.03 = ___ g of table salt
[MEAT WEIGHT] * 0.004 = ___ g of curing salt #2

Apply the salts evenly all over the whole Coppa and add the flavoring spices after that. For spices you can choose whatever you would like. Here are is a suggestion:

Ground Fennel Seeds, enough to cover the whole muscle.
About 3 tsp of Fresh Crushed Garlic massaged all around the coppa.

Put into ziplock bag (or vacuum seal bag) in the fridge for about 5-7 days, massaging from outside the bag and flipping once a day. Once salting is completed, just like on the previous project, take out, rinse and pat dry with paper towels.

It's time to case your muscle! At this point you can add more of the same spices you used during the salting process. But be careful and make sure you don't add too much, too much spices and they may interfere with the

bond between the meat and the casing as it dries. To case the meat, you will be basically putting on the beef bung like a sock over the Coppa. You have two options to close the casing. You can tie each end like a sausage, or you can use a trussing butcher needle and twine and sew each end tight around the meat. I would suggest the latter as it makes a much cleaner piece to cure.

After you have sucessfully cased your meat, it's time to begin tying it up by

using the meat trussing techniques you practiced in previous projects. At the end, your coppa will rest inside a "woven basket", made up of butcher twine, as it dries for anywhere between 2-3 months losing, 30%-40% weight.

Whole Muscle Project #3: Big Daddy - Prosciutto/Jamon Serrano

The prosciutto is one of the most recognized charcuterie products out there. I have cured many whole leg hams over the years. Contrary to what most people think as a very complicated process wrapped in years of experience and mystery, Prosciutto in reality is one of the easiest things to cure. The challenge is mostly patience and a long term commitment to "taking care" of your ham as if it was your "pet" over a period of more than a year.

To be clear, I have never made a "prosciutto" and I don't think I will any time soon. Confused? There are two main traditions for curing pork ham legs in Europe: the Italian "Prosciutto" and the Spanish "Jamon Serrano". Both are just fine and will give you great results. And given the breed of pork been equal, and curing conditions the same, the result of the cured meat will be indistinguishable. The quality arguments between who is best has little to do with the technique and 90% to do with what "Breed" of pig taste best and what that pig actually ate while it was alive.

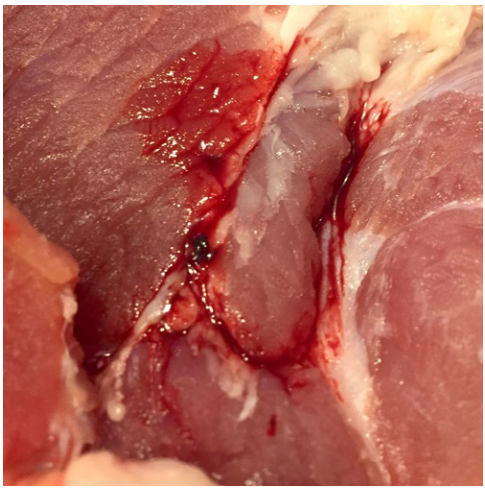
So, what is the difference between the two techniques? Spanish hams are typically cured "whole" including the foot and part of the hip bone (the aitch bone) while Italian hams have both of these removed. Additionally, Spanish hams are cured completely exposed, while Italians add a white paste called Sugna (made from lard and rice flower) to the exposed muscle area thereby keeping the ham from drying too much.

What I will describe here is a hybrid of both of these techniques but heavily leaning more towards the Spanish tradition.

Finding a whole leg that includes the foot is very difficult (at least here in the

U.S.) so you are starting there on the Italian side (without the foot). When you purchase a fresh ham leg it will come with the aitch bone attached. If you continue as an Italian, you would have to cut deep into the leg and remove the bone and cut a lot of the meat around to level out the exposed hole you created and expose the "ball" from the femur bone. I personally feel that if I'm going to go through all the time in curing a whole leg, I want to have as much cured meat as possible and with the prosciutto you will be cutting off and reducing the size of your final ham. Additionally, I feel the cut to expose the ball join could introduce some vulnerability to spoilage on the ham. The Spanish tradition on the other side keeps more meat on the final ham as well as reduce the exposure to spoilage with the ball joint cut and the top foot cut.

Therefore my recommendation is to keep the aitch bone and just clean up the ham edges to remove any overhangs or lose pieces of meat and fat to create a smooth surface all around.



Next step will not be a pleasant one. You need to massage the leg from the foot all the way down to the main muscles to squeeze as much blood as possible from the veins. You may think your leg has no blood inside, but I'm sure you will get a lot more than you imagined was there. Keep massaging and drying the leg with a paper towel. This step is important to lower the risk of spoilage. If you want to get technical: blood has a lower PH level than the rest of the meat. Spoilage bacterias love low PH environments. By removing as much blood as possible, you limit the 'bad' bateria's preferred "habitat".

After trimming edges and bleeding your leg, you are ready to begin the salting stage, which is similar to what it was done in previous whole muscle projects. In this project you will ignore what you learned with equilibrium curing and salt the way it is traditionally done. You will add tons of salt to the leg, so no need to measure the weight to calculate an exact amount. We will limit the salting time to ensure the ham does not get "over salted".

Most of us don't have a walk-in fridge with huge space to keep the ham leg in a box covered in salt. To remedy this, you will salt the ham leg inside a tall

kitchen trash bag. Place the ham inside the bag and begin by taking about ½ tsp curing salt #2 and massaging the curing salt into the top foot cut and the area around the aitch bone and the rest all around the exposed meat. Once you are done with the curing salt you can then rub table salt all around the leg. You don't need to bury the leg in salt. Just make sure it has enough salt around the surface of the leg. Typically, about 2-3 cups of salt all around should be enough.

By now the ham should be inside the bag with salt all around. Close the bag tightly with a knot trying to get as much air out as possible and place in the fridge at around 40F (4C). The way we will ensure your ham won't be too salty would be by limiting the time it stays there. A good formula to use is 1 day per 1 Kg (~2 lbs) if your ham leg is 11 Kg (25 lbs) then you let it salt for 11 days. Flipping the leg each day. If you leave it longer, you run the risk of having a salty ham, which is no problem if you are into that sort of thing.

After your ham spends the days required salting, you will do what you normally do with any other whole muscle cure; take it out to rinse and pat dry with a paper towel. One additional step, to bleed the ham one more time. By massaging the muscle from the foot down to the bottom to get more blood out. The salting process would have 'loosen up' some more blood. Use this opportunity to get it out of the meat. Time to hang out and chill!

You may be tempted to poke a hole at the top of the leg and pass a string through. I would advice against it, for you could be introducing an opening into the ham for spoilage. Practice making some strong knots with a thicker rope to tie the leg at the top. As a last resort, you could probably use a strong zip-tie to attach the foot to a loop of rope, it

just may not look as cool. Either way, find a non-destructive way to hang your ham. Hang it in your chamber at the lowest temp range of your chamber, around 40F - 50F (4C - 10C) for the first month. After it, you can safely change the temperature to anywhere in the normal spectrum 40F - 60F (5C - 15C). Making sure you always maintain a high humidity, preferably around 70%. After the first 6-8 months, your ham should be 'stable' at room temperature, so if you so choose, you can continue to cure outside of your chamber with a much wider temperature range of 40F - 80F (4C - 30C) However, make sure that where you hang your ham it will have a relatively high humidity in the environment of around 60%-80% or your ham will over dry. I would suggest you borrow something from the Italian tradition and cover up the exposed area of your ham. You don't need to do a whole Sugna, a thinner layer of lard should ensure you don't lose too much moisture.

Mold (good ones and 'bad' ones) are likely to form on your ham basically all throughout the lifetime of your cure. No worries, you can set yourself a schedule to remove them once a month with a wet papertower with a water/vinegar solution. Initially I used to be a 'mold police' and remove them as soon as I saw them, these days I leave them there and clean once every one or two months. That makes the hams I have at room temperature to be covered in nasty green mold, which cleans up completely without a trace with a few wipes of the vinager/water solution.

You can cure a ham like this for anywhere between one or two years. I think no one will have the patience for three years. If you do, good for you!

What's Next for Charcuterie?

It is my hope that these projects would have taught you enough about dry curing that you can now venture on your own to learn and research about other dry sausages and whole muscle cures to further experiment, as well as to make and share your own creations.

If at any moment you have any questions, please feel free to contact me via my instagram account **@home.charcuterie**, I'm happy to help!