

Meat Smoking Mastery - Part II

Your Complete Time & Temperature Guide

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MEAT SMOKING MASTERY PART II

Everything you need to know about using wood for smoking

Using wood for smoking is one of the pillars of barbecue. Smoke coming from wood will give your food a rich, characteristic flavor, and using the right type of wood can take your meat to an entirely new level. While in Part I we talked about techniques and cooking times for different cuts of meat, in this guide we will be going over the basics (the differences between wood types, size of wood pieces, soaking) but will also cover some more advanced techniques (combining wood types). At the end of this e-book you will find a chart complete with all the information you will need about each wood type and when you should use them.

What wood should you use?

When picking a wood to cook with, you always want hardwoods—softwoods like pine and cedar create a nasty, sooty smoke that even has the potential to be dangerous to your health. Although each wood has its own unique flavor, without tasting them side-by-side, it's usually too subtle to really distinguish. According to The Forest Encyclopedia, smoke flavor is influenced as much by the climate and soil in which the tree was grown than the species of wood. This means that the differences between hickory grown in Arkansas and hickory grown in New York may be greater than the differences between hickory and pecan grown side by side. That's why it's best to pick wood based on the level of smokiness it will impart, rather than obsessing over the minuteness of flavor.

“Think of smoking woods as existing on a spectrum from mild to strong.”

On the mild side are fruit woods. This includes apple, peach, cherry, and pear, which might impart that sweetness your friends swear by, but are subtle enough to use with lighter foods like poultry or fish, and sometimes pork. Birch is a smidge heavier, and an appropriate choice for more strongly flavored fish—salmon smoked in birch is a classic combination.



In the middle part of the spectrum are woods like hickory, maple, pecan, and oak. They're great with pork, and strong enough to stand up to beef and game meats.

Finally, there's the strongest wood of all, and it's in a category all its own: mesquite. It can be an invaluable wood to smoke with—if you do it in moderation.

With any wood, but especially ones falling into the medium and heavy categories, take caution not to use too much. Smoke can quickly overpower all other flavors, so if you're just getting started, it is recommended that you use one chunk at first and increasing the amount as you find the right balance of smokiness—something that may also be achieved using a combination of woods.

And for the truly advanced, there's nothing wrong with a little mix-and-match. If you're willing to experiment, try simultaneously using different woods of various strengths. The most serious smokers or competition pit masters get into the act of blending woods the same way you would blend spices. Popular combinations include hickory with apple or hickory with cherry, which ups the game of the mild fruit woods while imparting that deep, golden-brown finish to the meat.

Wood piece types

For the most part, you'll be using chunk-sized pieces of wood in your smoker, which won't become cinders before your pork shoulder gets above room temperature. But wood chips have their role too: If you're grilling up something that cooks up in a flash on a regular charcoal grill—say, chicken thighs or fish fillets—wood chips are ideal for adding that five or 10 minutes of smoke that are all you really need. Here are the most common wood pieces that you will come across:



Chips

are scraps and shavings of wood that ignite quickly, but also burn out pretty fast. The biggest advantage to these are they're more readily available in a wide variety in stores. Other than that, the short burn time is a reason to skip them unless totally necessary.



Chunks

are usually about fist-size pieces of wood and my choice for getting things smoking. They take longer to fully ignite than chips, but burn for a good hour in a grill, and hours in a smoker. For people who may not have a natural supply of wood to forage from, chunks are sold pretty inexpensively all over the internet.



Logs

are full pieces of wood, like you would use in a fireplace or to build a campfire. These are best reserved for barbecuing in a pit or with an offset smoker, but for grilling logs serve much of a use — they take a long time to get to the point where you cook over them and produce more smoke than you'll probably ever need when grilling.

Soaking the wood

Many grilling books and guides will recommended soaking of wood chips, chunks, and logs prior to usage. This is, however, up to debate, and there are many pitmasters both for and against this practice. Generally speaking it is a good idea to soak smaller pieces of wood—without some added moisture they will ignite and extinguish before any real flavor can be delivered to the food.

To soak the wood, place it in water for at least one hour, to make sure it is moisturized evenly all the way through. Chips (including wine barrel chips) and aromatic twigs (grape vines or fruit wood twigs) need only 30 minutes of soaking. After soaking the wood, make sure to shake all excess water off before adding it to your box.

Different methods for smoking

There are two main methods for setting up your fire: the Standard method and the Minion method. The differences between them range from the initial set up of the charcoal to temperature control.

1. Standard method

The Standard method refers to the practice of firing-up enough charcoal at the beginning to last the entire cooking session. All briquettes are hot and covered with a light coat of gray ash before the meat is introduced.

It is the method preferred for cooking at hotter temperatures (over 300°F) and for sessions ranging from 4 to 6 hours. You do not need to add any fuel to the fire throughout the entire cooking process, but it might be a little difficult to control temperature if it is running too hot.



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2. Minion method

The Minion method (named after its creator, pitmaster Jim Minion) refers to only lighting some of the charcoal in a full chamber, and with the help of air vents letting the unlit fuel fire-up gradually throughout the cooking session.

This method was designed for cooking over longer periods of time (6-18 hours) at a lower temperature (will never reach the 320°F mark) making it perfect for cooking low'n'slow and/or overnight. It is also much easier to control the temperature, as it's easier to start with just a few hot coals and bring the cooker up to 225-250°F than it is to start with a red-hot cooker and fight to bring it down to 225-250°F.

If there's any controversy about the Minion method, it's that it contradicts the conventional wisdom that says all charcoal briquettes must be fully lit and covered with gray ash before cooking begins. Everyone knows how bad charcoal briquettes smell while lighting, so some people assume that this smell permeates the meat during cooking, since fuel is lighting continuously over many hours. Interestingly, the Minion Method does not



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Over smoking meat

One of the most common beginner mistakes is over smoking your meat. Contrary to what you might think, more smoke does not mean that your meat is getting more “smoky” or tasty. If what you see coming out of your chimney looks like a thick, white cloud, you might even be damaging your meal!

In reality you only want a certain kind of smoke to come in contact with your meat, otherwise your food will have a bitter creosote flavor. There may be different causes behind this: a dirty smoker, using green wood, wood burning at a low temperature, not enough oxygen to feed the fire can all lead to a thick smoke that will ruin the taste of your meat.

Blue Smoke

You might have heard of the legendary “thin blue smoke”. This elusive phenomenon is considered the Holy Grail of smoking among pitmasters, and the reason is not just the visual appeal. Thin Blue Smoke is the byproduct of clean-burning wood – at just the right temperature – and it’s packed with pure “smoky” flavors. Too much wood will produce a thick, white smoke. If you’ve got this smoke, your bed of coals isn’t hot enough for the amount of wood and it chokes out your coals. There is too much carbon in a thick, white smoke and it produces a harsh, bitter taste on your meat.

When you are going for this smoke, there are many variables to consider: Humidity, type of smoker, type of wood, quality of wood, size of wood, how the wood is placed in the chip pan, the heat being applied to the wood, amount of oxygen the wood is receiving, just to name a few. But below are a few tips you can follow. Get the fire going with a good bed of hot coals first, with vents open as much as possible. Bring the smoker up to temperature, then begin closing vents little by little to get the smoker to level out to the temps that you desire. Only then should you add wood, a piece or a chunk or two at a time, dry seasoned wood, and don’t smother the fire. Those pieces of wood will immediately start producing a lot of white smoke, but should reach sweet blue heaven in about 6 minutes.

Be careful though: Too much air flow will result in too hot of a fire and the fire will spread too fast to unburned wood and larger particulates and more of them will be released into the air allowing moisture to adhere to them as well as creosote. This will give off a white appearance and will coat your meat with a strong bitter flavor. Too little air will choke the fire out also causing larger particulates into the air but less of them. I believe it’s the larger particulates that are the problem.

Color and quantity are key. Watch your exhaust from your smoker. Lets say you are cooking on a stick burner.

In most cases you want your top vent fully open. Use your fire box vent to control the burn and achieve a thin blue smoke coming out of your exhaust vent or stack. For smoking meat your chamber temperature should be between 180 and 250 degrees ideally around 225 degrees.

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With any smoker, as your smoke wood burns down they become part of your heat source. This is when you replenish with fresh wood to keep the light smoke rolling.





All things considered, the best advice you will probably ever get comes from pitmaster Mike Mills. He preaches that you need to learn how to control your cooking temperature first before you ever worry about producing smoke –regardless of the pit you are using– because that and a little smoke goes a long way. And some equally important advice: feel free to experiment. Learning from your mistakes might not be pleasant, but it is one of the best ways to learn.



	Wood	Characteristics	Smoke with this meat
	Acacia	Shares family with Mesquite but less heavy.	Great with beef, good with all meats.
	Alder	Common in the Northwest United States, use for a lighter, sweet musky smoke.	Great with lighter meats, such as fish, pork, poultry. Traditionally used in the Pacific Northwest for smoking salmon.
	Almond	Nutty and sweet.	Good with all meats.
	Apple	Light sweetness with a robust fruity smoke flavor.	Great with pork, especially popular with ham, as well as beef, poultry.
	Apricot	Mild and sweet flavor similar to Hickory but lighter.	Good with most meats.
	Beech	Mild and similar to Oak.	Good with most meats, as well as seafood.
	Birch	Mildly smoky with a slight sweetness similar to Maple.	Great with pork and poultry.
	Cherry	Light sweetness with slightly fruity smoke.	Great with pork and poultry, often transforming the color of the skin dark brown and giving meat a reddish hue. Good with other meats as well.
	Corn Cob	Powerful sweet flavor. Best used in small quantities in combination with fruit woods.	Good with poultry and fish.

	Cottonwood	Similar to Alder with a very subtle flavor best used for fuel in combination with other woods. Do not use green Cottonwood.	Great with pork and ribs. Good with all other meats.
	Crabapple	Similar to apple. Light sweetness with robust fruity smoke flavor.	Great with pork, ham. Good with red meats, game lamb.
	Fig	Light smoky fruit flavor.	Good with all meats.
	Grapefruit	Mild smoky flavor.	Great with pork, beef, fish and poultry.
	Guava	Wood from Hawaii, Guava produces a flowery and fruity smoke taste similar to apple.	Great with all meats.
	Hickory	The most commonly used meat for smoking, Hickory gives you sweet with strong bacon flavor.	Great on pork and ribs. Good with all other meats. Recommended to soak wood chips in water for a few hours to prevent bitterness.
	Kiawe	Great wood native to Hawaii with a strong earthy flavor that is sweeter than Hickory. It is said to be similar to Mesquite although milder.	Great with rich flavored meats such as beef, steaks, especially duck and lamb. Good with all other meats.
	Lemon	Tangy citrus medium smoke flavor with slight notes of fruitiness.	Great with beef, pork and poultry.
	Lime	Mild smoke flavor with slight notes of fruitiness.	Excellent with beef, pork and poultry.

	Maple	Mild smoke and slightly sweet subtle flavor.	Great with pork (especially picnic roast), turkey, and other poultry.
	Mesquite	One of the most popular woods to smoke with, Mesquite provides a strong earthy flavor that is sweeter and milder than Hickory.	Great with rich flavored meats (steaks and beef especially), duck and lamb.
	Mulberry	Mild with a sweet tangy flavor, similar to Blackberry.	Good with beef, poultry, pork (especially ham).
	Nectarine	Mild and sweet fruity flavor, lighter than Hickory.	Great on poultry, pork fish. Good on most other meats.
	Oak (White & Black Jack)	Mild smoke with no aftertaste- gives meat a nice smoke color.	Great with brisket. Good with beef, pork, fish and big game.
	Olive	Smoke flavor similar to Mesquite however much milder	Good with poultry.
	Orange	Tangy citrus, medium smoke flavor with mild fruitiness. Gives meat a golden color.	Great with beef, pork and poultry.
	Peach	Lightly sweet woody flavor.	Great with pork, poultry fish. Good with most other meats.
	Pear	Subtle smoke with slight sweet and woody flavor.	Good on poultry and pork.

	Pecan	Sweet and mild. Some call it similar to Hickory but not as strong. Very popular smoking wood (and rightfully so).	Great for turkey. Good for most other meats.
	Pimento (Allspice)	Natural peppery flavor that may include hints of cinnamon, cloves, and nutmeg. Also referred to as Jamaican Pepper, Myrtle Pepper and Newspice . Commonly used in Jamaican food to flavor when grilling.	
	Sassafras	Mild, musky and sweet with a root beer aftertaste flavor finish.	Great on beef, pork and poultry.
	Walnut (Black & English)	Mild, musky and sweet with a root beer aftertaste flavor finish.	Good on beef, pork, venison and big game meats.



Woods NOT to use when smoking:

Never use Conifer trees, Pine, Fir, Spruce, Redwood, Cedar, Cypress, Sweet Gum, Elm, Eucalyptus, Sycamore, Liquid Amber. Never use wood that has been painted, stained, is from furniture, lumber scraps, chemically treated, pallet wood or wood covered in mold or fungus.

Sources

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