

Everything You Need to Know About Charcoal, from Briquettes to Binchotan

JUNE 4, 2013 | BY [SAM DEAN](#)

In some respects, grilling is the simplest form of cooking: you put food on top of a fire and wait until it's done. And if you're a once-a-summer kind of cooker-outer, or just pinch hit on your friends' grills to let the host take a break, that's all you really need to know.



Once you get serious about (or obsessed with) grilling, though, things get more complicated. If you're using gas, then most of your decisions are made for you--once you've got the grill and a tank of propane, it's all about the food you put on there. But if you're going the charcoal route, you have more options. Which means more decisions. Not only do you have to pick the type of grill, but you also have to choose the type of charcoal. Do you go for briquettes? Hardwood lump? Binchotan? Extruded coconut? And after you pick what charcoal family you want to burn, what difference do the brands make?!

Let's start with the basics.

No matter what shape it's pressed into or how it's been processed, all charcoal starts out with some kind of wood, heated up in an oxygen-poor environment. Without oxygen, the wood can't actually catch on fire--instead, everything in the wood besides the carbon melts away into liquid or gas. You're left with a high-carbon chunk of stuff: charcoal. From there, though, the charcoal landscape splits into two main segments: hardwood lump charcoal and charcoal briquettes.

Charcoal Briquettes

Technically, charcoal briquettes aren't actual charcoal, but a combination of charcoal and other ingredients molded into easy-to-light lumps. Kingsford Charcoal, for example, by far the most popular brand in the US, is made up of bits of charcoal, coal, starch (as a binder), sawdust, and sodium nitrate (to make it burn better). For the same reason that SPAM is cheaper than a whole ham, briquettes are cheaper to make than all-wood charcoal.

And charcoal briquettes are nothing to sneer at--competition grillers have won national contests with them. There are, however, three things that separate them from hardwood lump charcoal. First, briquettes are more consistent in their burn, since they're all of uniform size. Second, briquettes have no distinct flavor of their own. Third, and maybe most importantly, all the binders and additives in the briquettes make for a much ashier burn. What this means for cooking is that the briquettes tend to top out at a lower heat than hardwood lump, as the ash acts to slightly suffocate and insulate the coals. The volume of ash that briquettes produces also means that you can't use them effectively in ceramic grills. If you're using a Weber kettle, or a similar brand with a ton of extra room for ash, briquettes work just fine.

That said, avoid the briquettes that come pre-coated with lighter fluid. It's not rocket science to get a load of coals lit, and you don't need those kinds of fumes messing with your food.

Hardwood Lump

Hardwood lump charcoal is just charcoal made from chunks of hardwood, and there's a ton of variation within the category. With no fillers to burn down, hardwood lump produces a lot less ash than charcoal briquettes, and by weight, it burns for about 20 minutes longer. Measured by the chimney-full, though, which is a more convenient measure (unless you're busting out your scale each time you grill), hardwood lump burns faster than briquettes, since the irregular shape of the lump charcoal makes for less efficient packing in the chimney.

The nitty gritty of burn time and ash aside, though, hardwood lump's big difference is the real wood smoke. Pure charcoal, made almost entirely of carbon, won't smoke at all when lit--what makes smoke, and that smoky flavor, are the bits of real wood that remain in the mix. So, while it might mean that your charcoal

burns a little less efficiently, having a few pieces of not-totally-charcoalized wood in a bag of hardwood lump means that your meat is more likely to pick up a little smoke action, even without adding wood chips to the grill.

We spoke with Doug Hanthorn, the man behind [The Naked Whiz's Lump Charcoal Database](#), a collection of a decade's worth of lump charcoal reviews, to find out what sets a great hardwood lump apart from the rest. He began reviewing charcoal soon after getting his first Big Green Egg (which, as mentioned before, has to burn lump charcoal, since briquettes are too ashy) in 2001, and has since reviewed over 90 different brands. In other words, he is a man who knows about hardwood lump charcoal.

He rates the charcoal on ash production, burn time, maximum temperature, ease of lighting, ratio per bag of actual charcoal to junk pieces and dust, and the smell and smokiness of the burn. After doing as much precision testing as he has, he was a little loath to generalize (you can [check out the database here](#)), but did come up with a few broad strokes: "I will say that American hardwood charcoal, not mesquite, but the oak, hickory, maple-blend type, all tends to be fairly good, overall." (Mesquite, he says, is a little more hit-or-miss.)

As you can see on his site, the smokiness of the lump charcoal varies pretty widely, but if you err on the side of unsmokiness, you can always add in more wood chips to the mix. Hanthorn likes to add applewood for lamb and apple or hickory for ribs (and [we have more suggestions for adding wood based on the recipe](#)), but tends to go no-wood for chicken, since it picks up plenty of smoke from the charcoal itself.

Coconut Charcoal

Wood (and wood combined with fillers and pressed into briquettes) isn't the only option out there. Charred coconut shells, pressed into cubes or rods, can also work for grilling. "If it's good coconut charcoal," Hanthorn says, "it has a wonderful, almost sweet smell to the smoke, and it's very low in ash and burns very evenly." This has made it a favorite for overnight low-and-slow cooks, since it's more dependable and forgiving (like briquettes) than lump. But, Hanthorn warns, the lower-quality stuff can produce huge amounts of ash, and still cost more than your typical briquettes, so ask around. (Hanthorn likes Charcos brand).

To summarize: If you've got a Weber-style grill, and don't feel like you want a lot of smoke going on, charcoal briquettes are totally fine. If you want to have a little more fun with it, and get a little more smoke going on your food, go for the hardwood lump, and stick to the American hardwoods if you want consistency. If you've got a ceramic grill, you already know you've got to stick to the lump charcoal, but feel free to check out Doug Hanthorn's site, the Naked Whiz, to see what some of your more specialized options are. And happy grilling.

How to: heat control

Tame the flames. How to manage temperatures and flare-ups for successful cooking with charcoal.

Charcoal grilling is much easier when you understand how to control the heat of the live coals. Here are a few techniques for managing heat and flare-ups so your food cooks perfectly every time.

Oxygen: your friend and enemy

Oxygen is what makes fire possible and what makes the coals burn. Abundant oxygen makes the coals burn hot and fast. Limited oxygen decreases cooking temperatures and lets the coals burn more slowly.

Need more heat? Add more coals.

Just place unlit coals on top of the bed of already lit coals. There's no need to add lighter fluid—the lit coals will start the new coals. This requires you to plan ahead a bit, as the unlit coals will take 15 minutes to light fully. Another strategy is to light a chimney with new coals and then pour in the hot coals when ready. Note that if using Match Light® Charcoal, do not add more Match Light® charcoal once your fire has been lit. Add Kingsford® Original Charcoal if extra charcoal is needed.

Which charcoal should you use? Depends on what you are cooking.



Kingsford® Original Charcoal

Our 100% Natural Kingsford® Original Charcoal is the taste of summer, and it's been the gold standard of grilling for nearly 100 years. Each briquet is made with natural ingredients and real wood to ensure the smoky flavor barbecue lovers crave. These newest briquets still feature our signature Sure Fire Grooves® to help coals light faster than ever. In fact, they're ready for cooking within about 15 minutes—that's 25% faster*—and they still burn as hot and long as before. Available in a variety of sizes, from 3.9-pound bags to 20-pound bags. Look for Kingsford® Original Charcoal in the red, white and blue bag.

- Tree: 100% natural
- Clock: Ready to cook on in 15 minutes
- Clock: Long burn time*



Kingsford® Match Light® Charcoal

Kingsford® Match Light® Charcoal lights instantly every time. Each briquet is infused with just the right amount of lighter fluid, so they light fast and stay lit, perfect for tailgating. Just fire up the briquets with a match, and be ready to cook in 10 minutes, no extra fluid necessary. And our Match Light® Charcoal features the same quality ingredients as Kingsford® Original, so you know you're getting real wood flavor when you grill. Because taste is everything. Available in a variety of sizes — from 3.1-pound bags to 11.6-pound bags.

For best results, always close the bag tightly after use. Kingsford® Match Light® Charcoal should last one to two years in unopened bags stored in a cool, dry place. For best lighting results, partially used bags should be rolled tightly down to the level of the briquets in the bag, and securely closed. Additionally, storing open or unopened bags in a cool, dry place will help maintain performance.

- Clock: Ready to cook on in 10 minutes
- Match: More edges for faster lighting*



Kingsford® Professional Briquets

Our Kingsford® Professional Briquets are made with premium wood char to ensure pro-quality results. These 100% natural briquets deliver higher heat for better searing, and a consistent burn for slow cooking, or smoking large cuts of meat. They're ready to go in about 10 minutes, and deliver consistent, competition-ready performance you can count on every time. They also feature a low ash formula that's great for ceramic grills and smokers.

Available in an 11.1-pound bag and an 18-pound bag.

- Tree: 100% natural
- Thermometer: High heat
- Low Ash



Kingsford® Long-Burning Charcoal Briquets

Keep the BBQ going with Kingsford® Long-Burning Charcoal Briquets. The innovative charcoal is made with a blend of premium chars and long-lasting ingredients to deliver an extended burn, with less ash. So now you can maintain the heat, and refill less frequently. And with a 25% longer cooking time, these briquets are just what you need for serious grilling, smoking and slow cooking. Available in a 6.0 pound bag and an 11.1 pound bag.

- Tree: 100% natural
- Clock: Long burn time*
- Low ash

* Compared to other charcoal brands.

How to: light the coals

Get fired up! Your guide to lighting up charcoal with a chimney, lighter or just a match.

Lighting the coals is easy when you know the basics. Fire is contagious. Keeping the briquets close together will help the fire spread from coal to coal easily so they're ready to use faster.



Method 1: Lighting the coals with a chimney starter

This simple device uses paper — most commonly newspaper — to light the coals, which are held within the confines of a metal cylinder. The coals sit above the flames, so the edges light quickly and help ignite neighboring coals.



Step 1. Fill the chimney with charcoal.

Fill the chimney with the appropriate amount of charcoal. A standard chimney holds about 100 briquets. But you may not need that many.

Step 2. Add newspaper and light it.

Add one or two sheets of newspaper, following the instructions on the chimney. Light the newspaper in several spots. As the newspaper burns in the chamber below, the flames light the edges of the charcoal above. Peek through the vents of the chimney to check if the coals have started and the edges of the coals have turned gray. If the coals have not started, burn another piece of newspaper. You can also drizzle the newspaper with cooking oil before lighting so it burns longer.



Step 3. When you see flames up top, pour out the coals.

After about 10 minutes, you will see the coals starting to glow through the vents and flames starting to flicker over the top layer of coals. Pour them out into a pile and wait until the coals are mostly covered in ash and gray in color. Then spread the coals out. The entire process takes approximately 15 minutes.



Method 2: Lighting charcoal with lighter fluid

The tried-and-true method that works well to get your charcoal started. Here are some tips to use lighter fluid safely.



Step 1. Arrange the coals into a neat mound.

Piling the coals into a mound or pyramid will help increase coal-to-coal contact and help the fire spread.

Step 2. Add lighter fluid to the pile of unlit coals and light immediately.

Carefully squirt lighter fluid on the top and sides of the charcoal mound, following lighter fluid directions. Light immediately after applying the fluid. **Never squirt lighter fluid onto flaming or hot coals.**



Step 3. Coals are ready when covered with gray ash.

After the fluid burns off, the edges of the coals will turn gray. As the coals continue to burn, the ash spreads to cover each briquette. Once mostly covered in ash, the coals are ready to spread out and use. The entire process takes approximately 15 minutes. The entire process takes 10 minutes.

