

Big Green Egg User Guide



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The best barbecue in the world

That's a big statement, but it's quite possibly true! Every now and again someone asks me what is the best Barbeque? I always answer that if I had to have only one, it would be a Big Green Egg.

The reasoning is simple, the Big Green Egg style BBQs are the only one I know that will do absolutely everything perfectly, and that's the kicker, there are a few BBQs around that claim they will do everything, but a Big Green Egg does do everything Perfectly; Low and Slow at a steady 80°C (175°F), High temperature searing at a scary 450°C (845°F) and everything in-between! With a little practice you can set up your Big Green Egg to run clean or to smoke at any temperature.

The versatility a Big Green Egg offers is unrivalled, They are stylish and practical, but most of all, they cook like nothing else! They require some skill, so they are not for everyone! But the rewards are great for those who persevere and become at one with the techniques.

Traditionally made from Terracotta, Kamado style cookers have a long history and are available in many incarnations now days. Most people would understand what a "Big Green Egg" is but they may not see it as a Kamado.

Fantastic food, Good Looks, Versatile, Economic to run, what's not to like?



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201,416

COMBINED BARBECUE GRILL AND SMOKER

Farhad Sazegar, 15413 Cordary Ave., Lawndale, Calif.

Filed Aug. 7, 1964, Ser. No. 81,193

Term of patent 14 years

(Cl. D81-10)

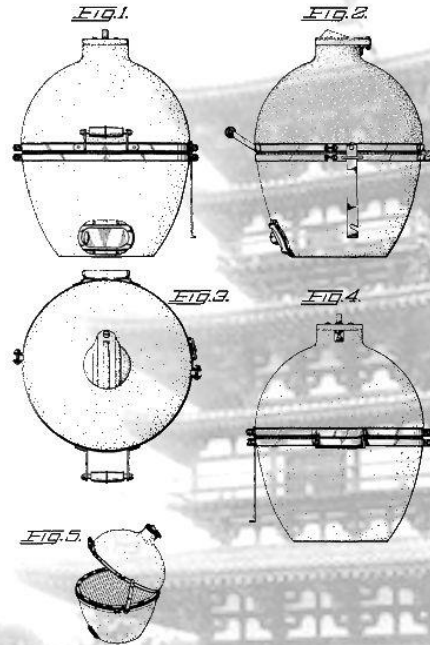


FIGURE 1 is a front elevational view of a combined barbecue grill and smoker, showing my new design;
FIGURE 2 is a side view of the same taken at right angle to FIGURE 1;
FIGURE 3 is a top plan view thereof;
FIGURE 4 is a rear elevational view taken 180° from the position of FIGURE 1; and
FIGURE 5 is a perspective view with the cover shown latched in open position.
The dominant feature of my design resides in the portions shown in full lines.
I claim:
The ornamental design for a combined barbecue grill and smoker, substantially as shown and described.

References Cited by the Examiner

UNITED STATES PATENTS

1,399,704 12/21 Eida.
3,049,071 8/62 Diack.

OTHER REFERENCES

Hardware Age, Mar. 10, 1960, page 172, barbecue at upper left.
Housewares Review, January 1957, page 139, smoker at top center.

WALLACE R. BURKE, Acting Primary Examiner.

HISTORY

The history of Big Green Egg style cookers goes back thousands of years; the Oki-Big Green Egg was a portable cooker that was designed for outdoor cooking during the Nara-Heian era (710-794 A.D.) in Japan. It had removable parts and was the precursor to the Mushi-Big Green Egg (a rice cooker) which subsequently was developed into what we know as the Imperial Big Green Egg. The Mushi-Big Green Egg was a round earthenware cooker with a removable clay lid, with a food container that nested in a hole directly over the fire.

The Mushi-Big Green Egg was re-designed by airline pilot Richard Johnson and patented as a ceramic barbecue in 1960's under the name "Big Green Egg" which is the Japanese word for "stove" or "cooker". Richard Johnson's original promise was that the Big Green Egg, "is the best barbecue in the world." Thousands of the original Big Green Eggs were sold to U.S. military personnel stationed in Japan, who took them back to the US in empty military transport planes. Many of these early purchasers still use their Big Green Eggs and swear by Richard Johnson's claim that it is the best BBQ in the world and the term Big Green Egg, originally a trade mark is now used to describe ceramic cookers world-wide.

Modern Big Green Egg cookers are made from sophisticated "Space Age" ceramics and are capable of tolerating enormous temperatures if treated carefully. New onto the market are Steel Big Green Egg

cookers like the Big Steel Keg, these have been designed carefully to make the most of the Big Green Egg cooking style, they are lighter, portable and great fun to use!

SETTING UP YOUR BIG GREEN EGG

Always be aware a Big Green Egg cooker can get quite hot and needs to be positioned with ample clearance; in particular be careful of overhead flammable materials. Big Green Egg cookers also need airspace underneath them, this helps in the cooling phase and timber decks and flooring. Be aware of the space your Big Green Egg lid needs to open fully.

Your Big Green Egg may have come with a trolley, a cart or feet, but if it did not, you can purchase terracotta pot plant feet from a nursery.

A lot of users opt to make a mobile bench for the Big Green Egg to sit in. Mobile benches provide mobility, stability and raise the working height of the Big Green Egg, they also provide extra bench space to work from and storage for charcoal and tools. There are some ideas for benches in the **Afterthoughts** section at the end of this publication.

Big Green Egg cookers should only be used in a well ventilated outdoor area, burning charcoal will rob the air of oxygen and working with hot coals inside is dangerous.

Make sure the Big Green Egg is not placed in a thoroughfare; the exterior can get quite hot to the touch.

Keep the Big Green Egg dry, the ceramic will absorb moisture and running a high heat in a moisture impregnated Big Green Egg can crack the ceramic.



TIPS FOR SETTING UP YOUR BIG GREEN EGG COOKER

Always make sure your Big Green Egg is stable and level.

Even when using a wooden trolley or stand, you must sit the Big Green Egg cooker on feet of some kind so it can breathe underneath. Most Big Green Eggs come with or have, as an accessory a “Nest”, which is a steel frame on wheels to hold the Big Green Egg at a good working height, the design on these allows for airflow around and underneath the Big Green Egg.

Position the Big Green Egg so that the feet balance the weight, test opening the lid, the open lid can topple the Big Green Egg if not balanced properly. Opening the lid rapidly can cause it to topple, always open a Big Green Egg slowly.

Be aware that excessive atmospheric moisture, torrential rain and the like can cause the bare ceramic walls to soak up moisture. Always make sure you remove the charcoal and ash and leave the cooker with its lid open, until it has dried out. Preferably, don't let it get wet in the first place. **If your Big Green Egg gets wet from rain or snow, there is a risk the ceramic will crack when it is used with a hot fire. Be sure to dry it before use. Leave it open in the sun for a few days or light 4 or 5 small pieces of charcoal it and let them burn with the lid open, the next day use 7 or 8 pieces, on the third day use a dozen or so pieces. Then use the Three Step Cook Seasoning process to ensure all the moisture is driven out.**

If you are using your Big Green Egg on a timber deck, always use something heatproof to protect the timber from the radiant heat from the base of the Big Green Egg, floor tiles or a concrete/stone slab is ideal.

Remove the ashes from inside the Big Green Egg, under the fire bowl periodically when the Big Green Egg is not in use.

Check all the bolts and screws for tightness periodically. Check the seal regularly by closing the lid on a \$10 note and checking the tension it takes to pull it free.

Never use flammable liquids to start or re-kindle the Big Green Egg.

Never use water to extinguish the charcoal, the charcoal will extinguish itself if you starve it of air by closing the top and bottom vents. Water splashed onto the hot ceramic walls can make it crack.

After closing both vents to shut the Big Green Egg down do not open it again for at least 45minutes or you risk a sudden “back draft” of flame as the charcoal flares up in response to the rush of incoming air when the lid is opened.

After cooking in your ceramic Big Green Egg a very high heat (300°C (575°F) plus) be sure to use a “Safe” shut down technique, first lower the Big Green Egg temperature down to at least 200°C (390°F) by reducing the air supply in stages, before shutting the vents completely. Shut the bottom vent for 15 minutes with top vent half open, once at 200°C (390°F) the top vent must be closed for minimum of 45 minutes to ensure the fire is completely extinguished.

A steel Big Green Egg like the Big Steel Keg or Akorn can be shut down from high temperature immediately without risk.

Position the Slide top vent with the hinge facing forward, this means the top vent has a tendency to close when the lid is opened, if you don't notice your vent setting has changed straight away, at least the fire won't have raged out of control, it is easier to rescue a choked fire than one that is raging.

CHARCOAL FUEL

My preference is for Natural Lump Charcoal (Lump is made from natural timber) in larger pieces. Different charcoals burn differently, some burn fast, some require more air. Charcoal that has absorbed moisture from the air burns with less heat.

The production of charcoal eliminates the natural plant volatiles. Water, oils and creosote are burnt off leaving a carbon rich fuel which burns easily, produces little smoke and is largely free of any carcinogenic chemicals. Charcoal is a clean, green and renewable fuel.


Never use firewood in a Big Green Egg cooker, it produces too much smoke and burns at temperatures in excess of what the Big Green Egg is designed for.

To increase the smoke flavour of your food, you can use a small amount of a flavour wood, in chunk, pellet or chip form to increase the level of smoke. Herb bundles are also a good way to smoke flavour food.

A new charcoal product to the market is Compressed or Tubular Charcoal, these are usually made from spent charcoal dust used in filters, they burn hot and can maintain heat longer than Natural Charcoal, the downside is it is often harder to light and it has little flavour. This kind of charcoal is best used in combination with Natural Charcoal.

Charcoal is quite economical to use. Once you have finished cooking in your Big Green Egg, close the lid and the vents and the unused charcoal will be there for next time. If you are using old (used from a previous cook) charcoal, stir the charcoal before starting to make sure the air holes are clear in the firebox and bottom grate.

Coal based Briquettes are generally not used in a Big Green Egg as the entire fuel mass needs to be lit before you can cook on them and this is generally too much heat for most cooking needs and they produce too much ash for the Big Green Egg to work properly.



Use Quality Hardwood Charcoal to ensure you get the best results from your Big Green Egg Cooker

LIGHTING A BIG GREEN EGG FOR THE FIRST TIME

Seasoning your Big Green Egg

Before high temperature cooking on your Big Green Egg for the first time, you must season it, this is particularly important for ceramic and earthenware or terracotta Big Green Eggs. Moisture from manufacture and transport must be driven out before high temperature cooking is attempted. This process will dry the Big Green Egg and ensure the ceramic and earthenware or terracotta is properly cured, some Big Green Eggs are only partially fired to allow some flexibility in the shell for transport. I recommend following this Seasoning process two or three times before taking the Big Green Egg to high heat.

Start a moderate fire and aim for between 150°C (305°F) and 250°C (480°F) and hold the Big Green Egg at that temperature for two hours before shutting down, do not cook during this first heat cycle, let the Big Green Egg settle in. look for leaks around the gasket. At the end of the seasoning burn, just before shutting down, add two small pieces of wood to the charcoal, let them start to smoke, then shut the vents down, look for smoke leaking, this will tell you if you have a leak and how serious it is. This shut down period is an ideal time to season cast iron parts, grills or pots you may have.

Three Step Cook Seasoning

This process continues the seasoning of the Big Green Egg with three initial cooking sessions. It builds on the initial seasoning and is a great time to learn the versatility of your Big Green Egg and how to control temperature in it.

First Cook:

A low temperature 107°C (225°F) cook, suitable for Slow cooking or Low temperature smoking, warming and drying of foods.

Second Cook:

A medium temperature 180°C (355°F) cook, a slower roasting temperature for larger (or tougher) roasts, Turkey and Ham.

Third Cook:

A high temperature 225°C (440°F) cook, "Oven" Hot for BBQ burgers, chicken pieces etc



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Lighting the Fire

You control the heat in a Big Green Egg by how much air you give the fuel.

Fill the firebox with good quality charcoal to just over the level of the upper air holes in the fire box and mound it up towards the centre. Always have a good fuel load of charcoal, in a standard Big Green Egg, this is roughly a 9 litre (2 Gallon) household plastic bucket full. It will seem like too much charcoal, but that is what you want, only part of the charcoal is lit during most cooking; it is only on the most extreme high temperature cook that the whole charcoal load will be lit.

You will be surprised by how little charcoal a Big Green Egg actually uses when cooking. If you use a full sized pile of charcoal, and close the vents after the cook, the fire will go out, leaving a considerable percentage of the charcoal for next time.

For a hot fire, use a FLAT pile of charcoal and light four or five small sections spread through the charcoal, the more lit sections, the hotter and quicker the start up temperature will be.

For lower temperature slow cooking, use a CONICAL pile of charcoal and light only one or two spots at the very top of the charcoal pile. Use this also for "Oven" roasting, just give it more air to increase the temperature.

I prefer to not use firelighters as I do not like the smell they produce. I use a gas "Weed Burner" to light my charcoal, but there are plenty of other options on the market including electric blowers. The gas torch lights the charcoal within two minutes and I can light as much charcoal (or as little) as I need to give the kind of fire I want. You can use firelighters if you like.

It is surprising how little lit charcoal it takes to successfully establish a fire. The charcoal will quickly show evidence of the fire taking hold, the charcoal will glow red and show a little white ash on the outside within a minute or two, at this point you can close the lid and open the top and bottom vents to allow the Big Green Egg to pre heat.

As the temperature inside the Big Green Egg approaches 25°C (50°F) before your target temperature, start to close the top and bottom vents to roughly where they should be for your chosen target temperature, this will allow the Big Green Egg to slowly acquire the target temperature. Watch the thermometer and determine if you need to make minor adjustments to the vents while the temperature settles, if you do not pay attention at this point, your Big Green Egg will quickly overshoot the target temperature; the stored heat makes it difficult to bring the temperature back down to where you want.



CONTROLLING TEMPERATURE IN A BIG GREEN EGG

Controlling the temperature of your Big Green Egg is a skill, an art form if you like, I know this sounds like mumbo jumbo but you will start to understand the subtleties of controlling your Big Green Egg, you will come to be “at one with it”, it’s a Zen kind of thing!

There are a number of ways to control your Big Green Egg and each produces a slightly different result.

Accurate temperature control in a Big Green Egg cooker is not difficult, but it is a skill that requires a little practice. You will quickly learn to maintain stable temperatures for even the longest cooking times and this is one of the real joys of Big Green Egg cooking. A good digital temperature gauge with an external display will help you develop an understanding (a sixth sense, if you like) for how your charcoal is behaving inside the Big Green Egg.

Charcoal is “Alive” and responds quite rapidly to an increase in air, the less often you have to open the lid and the quicker you can be the better and more stable your fire will be.

With practice you will develop methods that suit you and your various styles of cooking, this is part of the art and skill of cooking on a Big Green Egg. You will find your Big Green Egg cooker is capable of maintaining stable temperatures over a long period of time with a little practice.

A Big Green Egg store massive amounts of heat (energy) and will respond slowly to vent adjustments, be patient when making adjustments, allow time for the Big Green Egg to show a result. Wait 15 minutes after making an adjustment before readjusting.

Adjustments to increase temperature will show faster than adjustments to lower temperature.



VENT POSITIONS CONTROL TEMPERATURES

The more the vents are open top and bottom the hotter the temperature. You will be surprised how little air your Big Green Egg cooker needs to maintain temperature. Spend a little time getting to know how your Big Green Egg responds to vent changes, become comfortable with how it behaves and the look and feel of how it is behaving.

Temperature control is the secret, once you master temperature control, your cooking will improve dramatically and you will be able to relax and enjoy yourself.

Remember also that different charcoals behave differently, if you change charcoal brands and/or size, you may need to use different vent settings to achieve the same temperature or smokiness.

The top and bottom vents control the level of heat and smoke in the Big Green Egg. The vents work together to regulate airflow into and out of the Big Green Egg and this determines the temperature and the smoke level.

Imagine that the Big Green Egg breaths “normally” if the Top Vent is open the same amount as the Bottom Vent. The amount the vents are open dictates the amount of air that the charcoal feeds off, and this determines if you have a small low temperature fire or a raging pit of red hot coals. The more air, the more charcoal will light and of course this determines the temperature inside the Big Green Egg cooker. If you restrict the input air you very effectively control the amount of the charcoal fuel load that can light and you will have a low temperature fire capable of working for many hours.

If the Bottom Vent is open more than the Top Vent, the fire is able to breathe but the exhaust through the “chimney” at the top of the cooker is limited so the heat and smoke generated are trapped and the amount of smoke inside the cooker increases.

If the Top Vent is open more than the Bottom Vent, the heat leaving the Big Green Egg through the chimney will force an increase in the velocity of the air entering under the firebox through the Bottom Vent and the fire burns cleanly, subtle temperature increases can be achieved by adjusting the Top Vent.

The temperature can be easily controlled by setting the Bottom Vent roughly where it needs to be for your target temperature and adjusting the Top Vent to achieve temperature control. This method is not the only way, but it is preferred by most Big Green Egg users, primarily as it eliminates the need to bend over and fiddle with the Bottom Vent.

Bottom Vent

The Bottom Vent controls the air intake that feeds the charcoal and keeps the charcoal lit, the more the charcoal can breathe the more charcoal will be lit and the more aggressive and hotter the fire will burn. Roughly speaking, a 5mm (1/4 inch) opening or closing of the Bottom Vent will increase or lower the Big Green Egg temperature by 25°C (50°F).

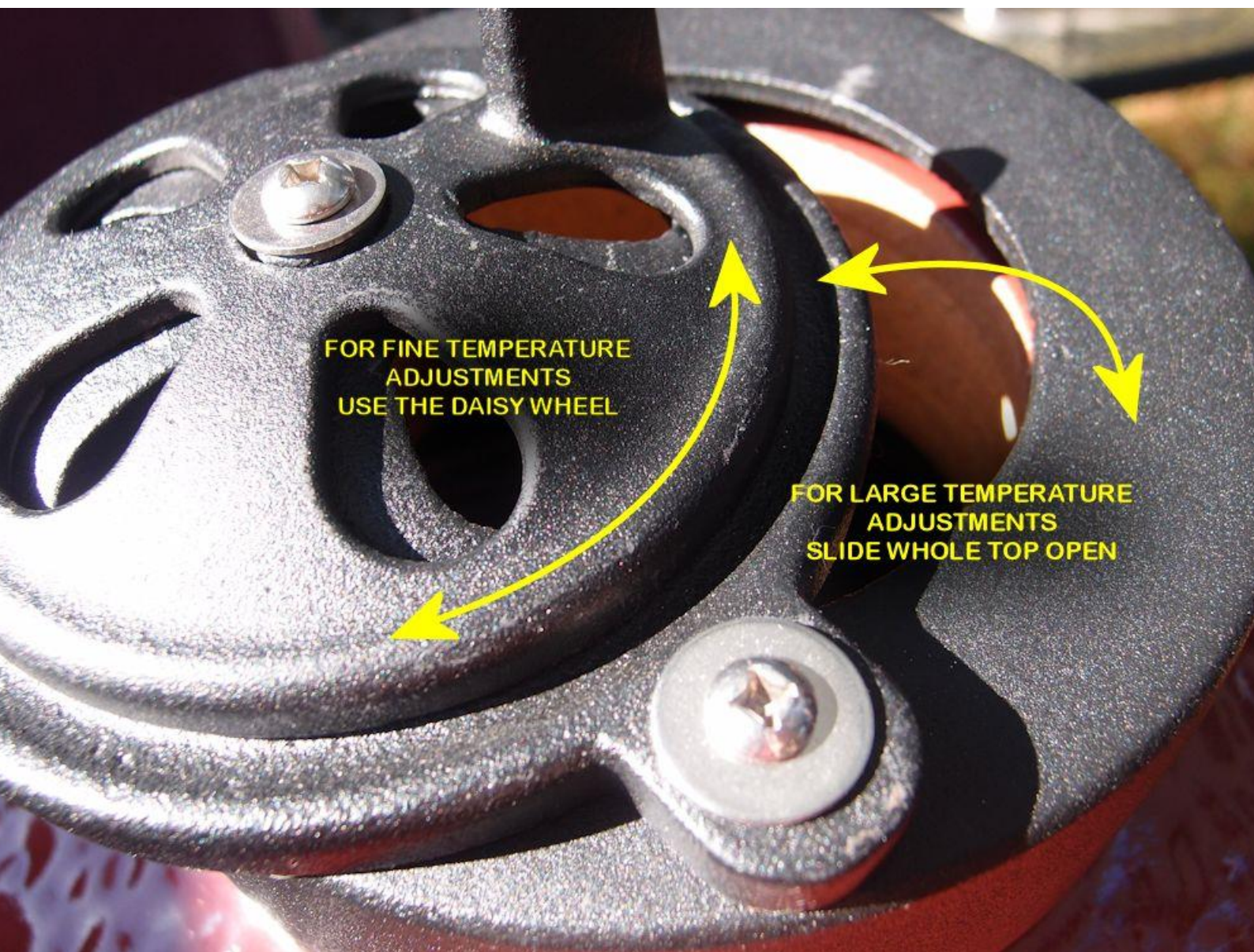


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Top Vent

The Top Vent controls the airflow through the “chimney” and this determines the amount of heat and smoke that can escape from the Big Green Egg. If you open the top damper more, temperature will increase and smoke flavour will decrease.

When both vents are open fully, the fire will quickly accelerate and your Big Green Egg will rapidly reach temperatures in excess of 300°C (575°F). If you are running your Big Green Egg this hot, be careful to employ safe techniques, “Burp” your cooker before opening and use the “Safe” shut down procedure.



FOR FINE TEMPERATURE
ADJUSTMENTS
USE THE DAISY WHEEL

FOR LARGE TEMPERATURE
ADJUSTMENTS
SLIDE WHOLE TOP OPEN

SHUTTING DOWN YOUR BIG GREEN EGG SAFELY

Big Green Eggs store enormous amounts of heat (energy) in the ceramic shell.

It is easier to slowly increase the heat, than it is to try to reduce the heat once it has overheated. Opening the lid will not reduce the heat, the reverse in fact happens, the access to air will feed the fire and increase the heat.

Do not leave the lid open for more than 10 minutes, the charcoal will burn furiously, unrestricted charcoal burns at temperatures in excess of 2500°C (4530°F) and this level of extreme heat can damage the ceramics of the Big Green Egg. This is particularly important with an older style Earthenware Imperial Big Green Egg.

When you shut your Big Green Egg down, the remaining charcoal is saved and can be used next time. For a low to medium temperature, up to 250°C (480°F) close the Bottom Vent completely, but leave the Top Vent open where it is for roughly five minutes, then close it down completely, this will evacuate some of the heat and trapped moisture, the fire is starved of oxygen as a result of the closing of both vents and will die from the lack of oxygen in a half hour or so.

If the temperature inside the Big Green Egg is over 250°C (480°F) it is wise to use the Safe Shut Down technique.

Be careful, at high temperatures it is not uncommon to experience a serious flame back draft and to have flames shooting out of the Top Vent or out of the cooking chamber when you open the lid, become familiar with the Burping technique and use it every time you open the Big Green Egg.

In these photos, I have deliberately forced the Back Draft to happen, to illustrate the rush of heat and scalding steam that can occur with a raging hot Big Green Egg.

If you use the Burping Technique correctly, you will never see this.



Burping:

Burping lets the fire breathe a little air before fully opening the lid and this helps eliminate the “back draft” that can flare as the lid is opened and the fire rages upwards in response to the incoming air, it also lets some of the steam from cooking out so you don’t scald yourself when you open the lid.

A really hot Big Green Egg stores a lot of heat energy and steam, and can give you a decent steam burn when you least expect it!

To “Burp” your cooker, open the Big Green Egg lid 50mm (2 inches) then let it down again one second later, leave it for another one or two seconds before opening the lid fully.

Burping is a skill that should become habit, it reduces the risk of scalding and minimises burn damage to the felt seal! Try to “Burp” no matter what heat you are running inside your Big Green Egg.

A smart operator will always open the Big Green Egg standing to the side, not directly in front and use a full arm BBQ glove for protection from the steam and Back Draft flames.

The Safe Shutdown Technique:

This is a simple technique, become comfortable with its use and it will save you a lot of heartache.

After a high temperature cook, close the Bottom Vent completely while leaving the Top Vent open where it was for roughly fifteen minutes, you are looking for the temperature to drop slowly to 200°C (390°F) at this point you can close the Top Vent roughly half the remaining amount, leave it like this for 5 minutes before closing completely.

This technique vents heat and moisture from the Big Green Egg, if you close the Big Green Egg down completely immediately after a high temperature cook the Big Green Egg will pressurise (Like a Pressure Cooker) and the built up heat and energy stresses the ceramic and can cause hairline cracks, in extreme cases it will “punch” the base of the Big Green Egg and crack it right the way around.

Get familiar with the Safe Shut Down technique, it takes a little time but is great insurance against hairline cracking. I use a timer to remind me to come back every fifteen minutes to crank it down another notch.

Fan Assisted Digital Controllers.

Digital Fan assisted controllers are a great way to control the temperature inside your Big Green Egg.

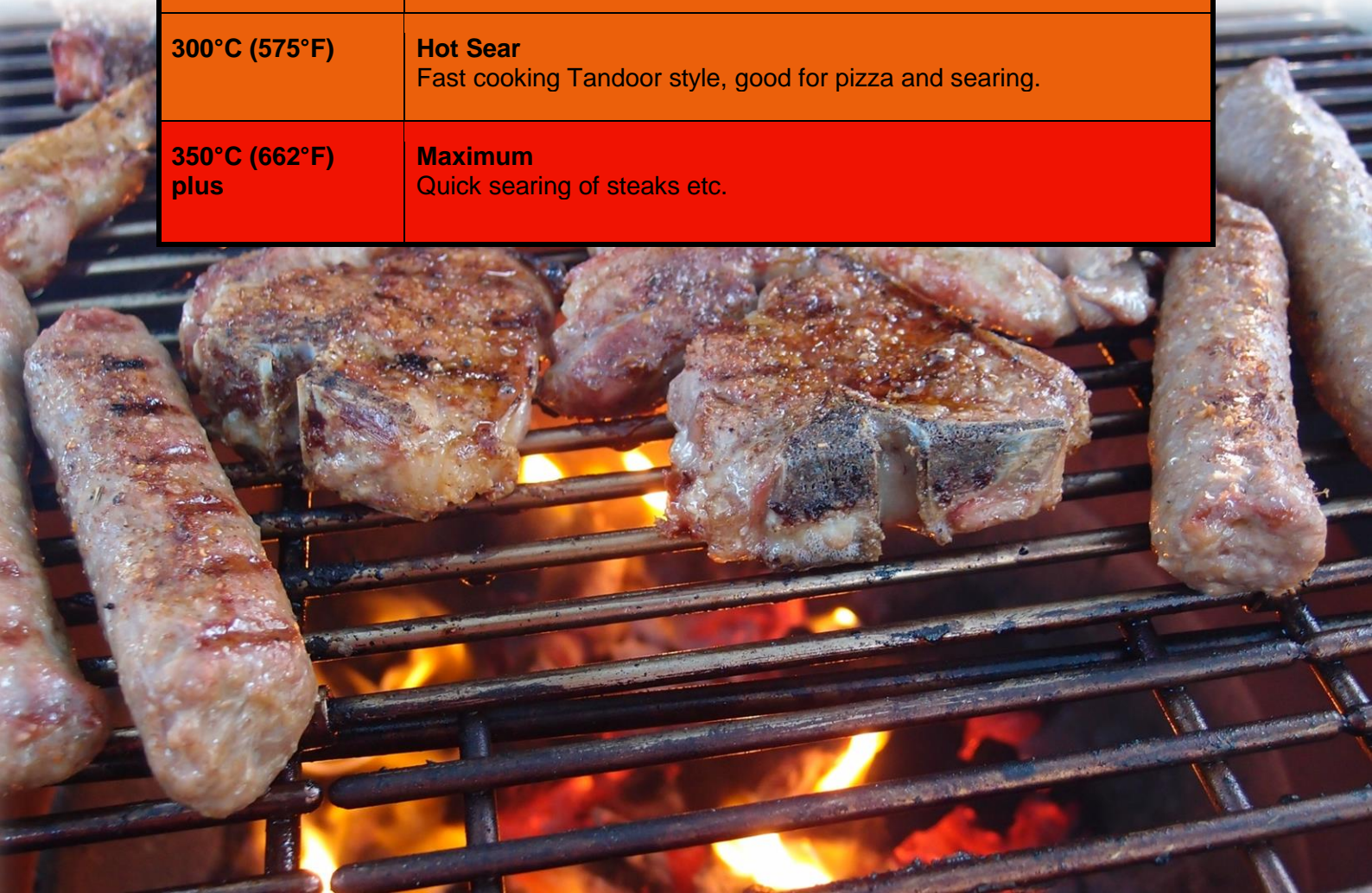
There are a few on the market but they all use the same basic principle to control temperature.

In a nutshell: A digital temperature probe sits inside the Big Green Egg at the level of the food or grill, this feeds temperature information to a controller which drives a fan connected to the air intake. If the Big Green Egg is at the selected temperature the fan is idle, if the temperature drops, the fan feeds air to the charcoal till the temperature rises to the desired level.

This type of controller can take all the stress out of a long low temperature cook and is a worthwhile investment.

BIG GREEN EGG COOKING TEMPERATURES

Temperature	Cooking Style
110°C (230F)	Slow cooking Slow cooking of cuts like Ribs, Brisket," Pulled Pork" etc.
140°C (285°F)	Warm / Slow cooking Faster slow cooking, Shoulder, Baked Fish, Roast Duck.
180°C (355°F)	Medium Heat Roasting temperature for larger roasts, Turkey and Ham.
200°C (390°F)	Medium to "Oven" Hot Bake breads, pastries and cake, roast chickens and premium cuts.
225°C (440°F)	"Oven" Hot Fast bread baking, BBQ burgers, chicken pieces etc
250°C (480°F)	High Temp "Oven" Hot BBQ cooking, fast sealing and quick heat.
275°C (525°F)	Extreme / Hot Pizza cooking and kebab
300°C (575°F)	Hot Sear Fast cooking Tandoor style, good for pizza and searing.
350°C (662°F) plus	Maximum Quick searing of steaks etc.



COOKING TECHNIQUES

Direct and Indirect Cooking:

Direct cooking is when the flame and radiant heat from the charcoal fire has a direct “line of sight” access to the food. A simple example is cooking on a grill placed directly over a fire.

Indirect cooking is when there is a barrier or heat shield between the fire and the food. The food cooks in the heat and fume from the fire but is not seared by the radiation or flame. The simplest example is to have a drip pan or pizza stone on the main cooking grill with the food on a raised grill above that.

Use the main grill to support a drip pan and set the raised cooking grill on top of that. This is a perfect set up for Baking, Large Roasts and ribs.

Smoking

To set the Big Green Egg up for smoking, load the fire bowl with charcoal, with the larger pieces of charcoal at the bottom of a large conical pile. Light the very top of the charcoal pile only. Once a small fire has been established, place a couple of small pieces of smoking wood on top of the fire, close the top vent completely and open the bottom vent halfway to feed air to the fire, because the exhaust vent is completely closed the Big Green Egg will be filled with smoke and the fire will only just be able to breathe. With some care, this technique can provide temperatures as low as 65°C (150°F), this is ideal for smoking fish and jerky.

To lower the temperature even further, place a large bowl full of ice mixed with a handful of salt inside the Big Green Egg, but be aware, the condensation that forms on the outside will drip and can put out your fire.

Hot Smoking

The Hot Smoking technique can be used at any temperature. Drop a handful of woodchips (soaked in water for an hour if you like) or wood pellets (unsoaked), directly onto the coals or lightly wrap them in a foil package (with a few air holes poked in the top) and placed on the coals, this will provide extra smoke inside the Big Green Egg, for best results, close the top vent down a little and open the bottom vent slightly.

Slow Cooking

Slow cooking in a Big Green Egg is the most rewarding techniques of all and can be one of the most relaxing if you are prepared. This technique will slowly transform a tough cut of meat into a luscious meal over an 8 to 18 hour cook and once mastered is as satisfying as BBQ cooking gets.

Slow cooking is best as an Indirect cooking process. Load a large fuel serve into the Big Green Egg and light a fire at the top of the pile the same as you would for Smoking, the small fire will not need a lot of air, but will burn for a long time, the fire will spread slowly to the unlit charcoal and with some care will provide up to 18 hours of constant low temperature heat.

Close the lid and bring the Big Green Egg temperature to 95°C (200°F), then close the bottom and top dampers to 1.25cm (½ inch), With the right care building the charcoal base and lighting the fire, there will be no need to re-fuel the fire, be sure to watch the temperature gauge every hour or so (or let a digital temperature probe do the work), do not be tempted to lift the lid, the extra oxygen will feed the fire and you will lose control of the temperature, when you do lift the lid to apply a glaze or baste, be quick, you don't want the temperature to spike!

This is where a Digital Temperature Controller can really help, once you are used to operating one, you can leave it “In Charge” while you go to sleep.

Roasting

Roasting is performed by either Direct or Indirect cooking methods with a temperature of between 180°C (350°F) and 240°C (460°F); it is the simplest form of cooking in your Big Green Egg. With lean meats you can use a Direct cooking method, the juices and fats will drip onto the coals in the Big Green Egg and provide a wonderful flavour, be careful of flare-ups if using fattier meats.

Grilling

Charcoal Grilling cooks the food on the grill directly above a very hot charcoal fire.

Pizza Baking

Get the pizza up into the hottest circulating air by using the Raised grill to hold the Pizza stone, cook Pizza directly on the Pizza stone at a temperature of 250-300°C (575°F).

For Grilling, Roasting and Pizza Baking, remember to “Burp” your cooker and use the Safe Shut Down technique to avoid damage to your Big Green Egg.

Baking

Baking is a perfect thing to do after cooking a meal, in that time when the Big Green Egg cooker is in the cooling down phase (downward heat cycle), the ceramic of the Big Green Egg retains heat for such a long time, if you are ready it is a great use of the stored heat. Baking is usually done **Indirect**, on the raised grill, using the Pizza Stone as cooking surface on top of the grill and a diffuser underneath, a temperature of 180°C (350°F) is perfect.



Containing the Fire

There are a number of reasons to contain the fire, not the least of which is to conserve fuel. Usually the charcoal is contained in a basket, cylinder or flower pot, but “fences” are also useful.

Baskets like the ones from a Weber Kettle will allow you to burn the fuel on only one side of the Big Green Egg, so you have a Direct Grilling and an Indirect Baking or Roasting zone in the one Big Green Egg, this is a handy technique when cooking for two to four people.

Another great technique is to pile small charcoal pieces up on one side of the Big Green Egg fire box. Small pieces of charcoal can block the air holes, and using one side allows for the air to come from the other side if some vent holes are blocked.

Using just a couple of pieces of charcoal in a flowerpot or metal cylinder gives a controlled extremely low heat. Sprinkle woodchips on top and you have the perfect environment for “Cold” smoking.

Don't be afraid to combine techniques. For Ribs or Brisket you could set a metal cylinder up for cold smoking, and then pack the fire chamber with charcoal outside the cylinder. Start with the Cold smoke by lighting the charcoal inside the cylinder, cover with wood chips and after an hour or so, when the smoke has done its work, remove the cylinder and allow the burning contents to light the main fuel load for the rest of the cook.



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The Cooking Phases

There are three cooking phases available when using a Big Green Egg:

Upward Cycle

This is while the Big Green Egg is heating up.

Sustained Temperature

When you have the Big Green Egg operating at a set temperature

Downward Cycle

When the Big Green Egg is shut down or cooling.

The design of a Big Green Egg provides precise temperature and cycle control to the attentive cook. Using charcoal as the fuel provides a clean heat and allows the Big Green Egg to cook, dry or smoke food at any phase of the heat cycle.

The Upward and Downward cycles are of particular interest here and can be used to heat or smoke foods while waiting for the Big Green Egg to come to temperature or as part of a shut down cycle, making use of the stored heat.

Upward Cycle

When you fire your Big Green Egg, you usually open both vents fully (to speed up the heating) and close the vents to your preferred heat setting when the dome is within 25°C (50°F) of the target temperature. If however, you start your Big Green Egg and immediately set the vents for your target temperature, the fire will slowly build and the temperature in the Big Green Egg will take longer to come to the target. This Upward heat cycle is extremely useful. You can retard the heat up even more by starting the Big Green Egg on an extremely tight vent regime and opening the vents a little gradually over time to control the heat.

You can use the Upward Cycle to do many things, think about heating or smoking soup, cooking seafood, heating pastries and baking bread. You can get a spectacular result by bringing a large beef roast to an internal temperature of 55°C (130°F) over 5 or 6 hours, then opening the vents to get a seared crust before serving.

Downward Cycle

This cycle makes use of the stored heat and moisture left in the Big Green Egg at the end of a cook, it's the perfect time to bake bread or slow cook meats, stews and curries. You can completely shut the Big Green Egg down or use the Safe Shut Down technique.

Try a slow roast, layer a roasting pan with root vegetables and some onion and garlic, lay a butterflied leg of lamb on top of that and pour in 1cm (3/8 inch) of water or stock, put it in the Big Green Egg at 200°C (390°F) and close the vents, come back in 4 hours and the Big Green Egg has cooled to around 55°C (130°F) and everything is cooked to perfection!

Choke

The Choke is also a useful technique and the best illustration of its value is the cooking of roast pork with crackle. The idea is to get the Big Green Egg running hot, say 250°C (480°F), put the food in and a half hour later or so restrict the airflow by significantly closing the vents, forcing the fuel load to “Choke”, this pressurises the Big Green Egg with hot moist air. In the case of the roast pork, the extreme heat starts the crackle, then the “pressurised” Downward Cycle cooks the meat.

Be aware that this technique “pressurises” the Big Green Egg, making conditions ideal for Back Draft, always use the Burping Technique if opening the dome.

Dwelling

Dwelling is an advanced Big Green Egg cooking technique. In this technique you allow an extremely hot fuel load to develop, then close the lid (with the chimney open) for a few minutes to allow a little heat build-up then shut down the airflow and let the meat sit cooking in the “tight” Big Green Egg.

This technique is best described as similar to the practice of searing a steak in a pan and finishing in a hot oven. Sear a steak on both sides then shut down (Dwell) the Big Green Egg and let the steak finish cooking, it’s great for roast pork as well.

With the Dwelling technique you never let the Big Green Egg build up a store of heat, so when it is shut down it easily goes from Searing 400°C (750°F) to a roasting temperature of 205°C (400°F) or lower.

Get a full fuel load burning well.

Close the lid with the top and bottom vents open for a few minutes so the Big Green Egg absorbs some heat but does not fully soak the ceramic.

Put the food on the grill (in this case Pork Shanks) and within a minute or two close the vents to where you need them for the target temperature you want.

Within 5 minutes the temperature in the Big Green Egg will drop.

Within 15 minutes, the Big Green Egg will have settled at the target temperature.

Hours later as the fuel load has burnt down a little you may have to open the vents to keep the temperature.

This is the result after a 4 hour cook.



Be aware that this technique, like the Choke, “pressurises” the Big Green Egg, making conditions ideal for Back Draft, always use the Burping Technique when opening the Big Green Egg.

Old School

The “Old School” technique is a reference to an old Weber Kettle cooking method where the top (Lid) vent is left fully open and the temperature is controlled by the bottom vent and the fuel load. This technique is valid and although it does not offer precise temperature control, it is a good place for a beginner to start learning the finer arts of Big Green Egg temperature control.

Top Vent Bias

This technique has the bottom vent set open and the top vent is used to control the temperature. It does work, but I find it too twitchy to be of much use, it seems I spend all my time fiddling with the vent, waiting to see the change in temperature then adjusting again, not a very relaxing pursuit!

BIG GREEN EGG OPERATIONAL TIPS

Regularly clean the air holes in the firebox and the charcoal grill and remove the ash from under the fire bowl to make sure there is plenty of airflow to feed the charcoal.

Stir the left over charcoal to clear the ash and tiny pieces of charcoal, before topping up with new charcoal, this will improve the air flow to the charcoal. The used charcoal will light easily, but will not burn as strong as the new, nor will it last as long, a mixture of older and newer charcoal is great.

Never leave the Big Green Egg lid open with the charcoal burning or the vents fully open for more than 10 to 15 minutes without checking it, left unattended, the fire will accelerate and be difficult to bring under control afterwards you also risk damaging the Big Green Egg.

Learn the **Safe Shut Down** and **"Burping"** techniques so that you intuitively use them.

Take care when cooking fatty foods, dripping fat can catch fire when the lid is opened and when the lid is closed creates a lot of smoke inside the Big Green Egg, use a drip pan.

If you remove any of the internal ceramic parts for cleaning or when you move the Big Green Egg, be aware the weight of the open lid could over balance the Big Green Egg as the weight of the body has been reduced; have someone hold the front of the Big Green Egg, or stabilise it to reduce the risk of it falling over backwards.

Keep charcoal dry at all times, a bin with a lid will help keep your charcoal in good condition; Charcoal will absorb moisture from the atmosphere and damp charcoal is frustrating, it is hard to light and worse still, can extinguish mid cook.



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Cooking Methods

Low Temperature Smoking

Low temperature smoking is different to “Cold” smoking, Cold smoke is room temperature or less. Low Temperature Smoking will cook the food, albeit slowly, it is perfect for fish and infusing smokey flavour.

Light just the top few pieces of a large fuel load shaped to a conical point, allow it to establish for a few minutes, with the lid open, then close the lid and close the top and bottom vent to roughly a match width. The Big Green Egg should settle to roughly 80°C (175°F).

Low and Slow

Similar to Low Temperature Smoking, except the emphasis is on maintaining a low temperature over a long period of time. The fuel load should be “fresh” and the Big Green Egg clear of ash and debris.

Light just the top few pieces of a large conical fuel load in the Big Green Egg, allow it to establish a good fire for ten minutes or so, then close the lid and adjust the top and bottom vents to just over a match width. The Big Green Egg should settle to roughly 100°C (215°F) to 107°C (225°F).

Make sure the bottom vent is protected from the prevailing wind and the Big Green Egg should run without temperature fluctuation for 20 hours minimum.

Roasting

Roasting requires a temperature between 170°C (340°F) and 200°C (395°F) usually. Temperatures like this are fairly standard for many Big Green Egg cooking tasks. One of the best things to come out of a Big Green Egg is the humble roast chicken.

Place a large fuel load in the Big Green Egg, have the top of the fuel slightly flat and light an area roughly the size of a small saucer. Let the fire establish for ten minutes then shut the lid, leaving both vents open at least 3/4. Preheat the Big Green Egg for 10 minutes with the bottom and top vents open. When the Big Green Egg temperature gets to within 25°C (50°F) begin to close both the top and bottom vents to 25mm (1 inch), wait ten minutes then make a final adjustment to the vents to achieve the desired temperature.

For most Roasting you will want to minimise the direct heat from the fire, so you will usually use the deflector.

Baking

Baking and Roasting are the same thing, the temperatures for Baking are generally a little lower and some baking requires a smoke free fire.

Set the fire up the same as for Roasting, once the fire has established, put the diffuser in and close the lid. Leave both vents open for ten minutes while the Big Green Egg builds heat, then close the vents down to achieve the desired temperature, this time have the top vent open 50% more than the bottom. The bottom vent controls the amount of air the fire can have and therefore the “speed” or temperature of the burn. Having the top vent open more than the bottom increases the airspeed through the bottom vent and ensures a clean almost smokeless burn.

Grill Roasting

With Grill Roasting the fire setup is the same as for Roasting, the difference here is you will be looking to have the food seared or grilled by the fire at the same time as roasting. To achieve this, the deflector plate is not used; the food is usually set on the grill with the grill height extender in place so the cooking grill is at the lid height to give some separation from the fire.

Take care with fatty foods as the drippings can ignite if they are dripping into the fire. This is a great way to get crackle on Pork, but be careful; it can go up in flames all too quickly.

Searing

Set the Big Green Egg up with a flat pile of fuel. Light the fuel in three or four places around the edge of the pile and in the centre. Open the bottom vent fully, wait ten minutes then shut the lid and set the top vent to fully open.

Before you can finish a cold beer, the fuel load will be completely lit and the heat inside the Big Green Egg will be marching towards 300°C (592°F). Unless you want to cook immediately, close the vents a little to temper the heat and save fuel. Sear on the lowest level as close to the molten hot fuel as you can.

Remember to Burp whenever you open the Big Green Egg.

Reverse Sear

This is a cooking technique more than a setup. The Idea is to get heat slowly into the meat till it is almost cooked, then sear the final "Plate" Colour on just before serving.

Hold the Big Green Egg at the lowest temperature you can and put the meat in to warm, when the meat is at the internal temperature for rare or medium, remove it and let it rest. I often put my steaks in a deep dish filled with Ghee, this ensures the meat heats slowly and does not dry out, and you can remove the dish and leave the steaks in the Ghee till you are ready to sear.

While the meat is resting, open the Big Green Egg vents top and bottom, around 15 minutes later the Big Green Egg will be at searing temperature and you can return the meat to the Big Green Egg to sear the colour on (the meat will cook just a little more and by the time you have the colour you want, the internal temperature will be perfect!



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BIG GREEN EGG COOKING EQUIPMENT (Toys)

There are some pieces of basic equipment that can make your Big Green Egg cooking experience more versatile, easier and safer.

Pizza Stone

A Big Green Egg will generate enormous heat, temperatures in the range of 250°C (480°F) to 300°C (575°F) are perfect for pizza, the thicker the pizza stone, the better, some of the cheaper (thinner) ones cannot handle the intense circulating heat of a Big Green Egg and will crack, get the best stone you can. A good substitute is a thick unglazed terracotta tile.

Pizza Peel

A Pizza Peel is like a flat shovel and is used to help get your pizza on and off the pizza stone in the Big Green Egg. You can use a metal, bamboo or timber handled pizza peel, you can also get a pair of half moon Pizza “Handles” that work well.

Cast Iron Cookware

A good range of cast iron cookware is available and most is really useful in Big Green Egg cooking. Cast iron pots, Camp Ovens, Sizzle Plates and Garlic Pots all work well in your Big Green Egg, choose a size that will allow airflow past the pan, so the charcoal can still breathe. I use an old cast iron frying pan that lost its handle years as a cooking pan, diffuser and drip pan.

Cast Iron Grill

Cast Iron Replacement grills are available to fit most Big Green Eggs and will produce great grill marks on your food. Cast Iron holds heat better than Stainless Steel or wire grills.

Blow Torch (weed burner)

I use a gas blow torch to light my charcoal, it is quick, easy and economical not to mention its other uses in cooking and around the home. I prefer it to firelighters as it cleanly lights the charcoal and is quicker.

Electric Charcoal Starters

There are two kinds, one is a coil that you push down into the charcoal, the other is a “heat gun”, like a hair dryer on steroids.

Bellows, Fan or Hair Dryer

Bellows are hard to find, but a cheap hairdryer is not. There is nothing like being able to fan a bit of air at the charcoal to get it roaring!

Poker

You shouldn't need a poker much, that said, they are cheap and handy at times. I usually use a “Fiddle Stick”, a long wire with a right angle bend at one end and a bent handle at the other, this I can get between the grill bars and down into the fire easily when I need to adjust or stir the fire and I can do it without removing the food from the grill.

Drip Pan

A drip pan is essential, it catches the dripping fats and reduces the smoke from fats dripping onto the fire, a good one also acts as a diffuser for indirect cooking.

Raised Grill

Raised grills create a second tier to increase the cooking space, or to raise the food above a drip pan or diffuser. Most well designed raised grills can also be used upside-down to create a lower level for searing, pot cooking or to hold a diffuser.

Diffuser

A diffuser sits between the flame and the food, the purpose is to prevent direct radiation from the fire reaching the food or to calm the heat so the food won't burn in the base of a pot or pan.

Charcoal Gloves

I have a cheap pair of close fitting gardening gloves for working with unlit charcoal, they stop my hands from getting covered in black dust which in turn saves me from the "near death" trouble that wiping black hands on clean white towels can bring on you.

Heat Gloves (full Arm)

Good arms length leather welders or BBQ gloves are essential; you are dealing with hot stuff!

Digital Temperature Controller

These devices are for the advanced user, they are not cheap, but can take all the stress out of a long, low temperature cook. They are a digital control unit that monitors the temperature of the meat and the Big Green Egg and feeds air to the charcoal periodically to maintain a stable temperature.

Temperature Probes

A good digital temperature probe is essential, it will tell you the internal temperature of the food and that tells you how well the food is cooked.

Chicken Roaster

A stand for cooking chickens vertically, this provides an even air flow and gives a better than rotisserie finish to your chicken. Not expensive and a great tool!

Rib Rack

A Rib Rack is just that, a frame for holding ribs or chicken pieces upright so they cook evenly

Roast Holder

A frame for holding roast meats or fish above a roasting pan so it doesn't poach in its own fat.

Powder Fire Extinguisher

Not essential, but if you are smart you'll have one no matter what kind of BBQ you have. Use a powder one because the last thing you want to do if you need to put out a fire is to splash hot fat everywhere. Ceramic Big Green Egg cookers can crack if they are hot and you splash liquids on them.



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Seasoning Cast Iron

Heat the Big Green Egg to 150°C (300°F). Coat the cast iron utensil with lard. Do not use a liquid vegetable oil, it will leave a sticky surface and does not leave the cast iron properly seasoned. Put the cast iron utensil in the Big Green Egg. After 15 minutes, remove the utensil and pour out any excess grease or wipe clean, then return to the Big Green Egg and bake for 2 hours. Repeating this process several times will build a stronger "seasoning" bond and help build the non-stick surface.

Repeat the process if the cast iron starts to lose its protective coating.

Never wash a cast iron utensil with soap, cast iron is porous and will hold the soap making your food taste soapy.

Care of Porcelain Coated Parts

Porcelain coated grills and other parts are able to withstand extreme heat, however porcelain is brittle and will chip easily, it also scratches. Once the surface of the porcelain is compromised by scratches, cracks or chips, moisture can get in and rust will begin forming on the metal sub frame, this will over time bubble and crack the porcelain, which will flake off as a result. To avoid this, only use brass or non-abrasive scourers, be careful with metal tools and protect from sharp shock, like dropping on a hard surface. Clean porcelain parts regularly so there is no heavy build-up to remove, dry them thoroughly and protect with a thin coat of oil.

Care of Stainless Steel Parts

Stainless Steel is not rustproof. Clean stainless steel regularly with a non-abrasive so there heavy build-up is eliminated, this stops moisture trapped in the built up grunge from promoting rust, dry the parts thoroughly and protect with a thin coat of oil.



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