

THE ART OF SMOKING FOOD

The art of smoke cookery and smoke curing seemed, a few years ago, to be nearly extinct. But the situation is changing. With more and more people owning a barbecue they have realized that a whole new world has opened up to them. Smoke cooking can be described as a process whereby a large cut of meat is cooked by the smoke of a hardwood fire at low temperatures (210 degrees or less) for a long period of time, with doneness determined by the meats tenderness. Smoke curing does not simply preserve food, but heightens and improves its flavour. It yields a finished product that actually tastes better than fresh-cooked meat, fish or game! Also smoked foods can be made at home much more cheaply than they can be bought in shops.

Controlled smoking processes can favourably influence the taste, smell, odour, texture and appearance of food, and so produce a wide variety of flavours that cannot be attained by ordinary cooking methods Good flavour heightens the diner's enjoyment of food, and aids digestion. This benefit is obtained, to a much greater degree, with home-smoked rather than with commercially smoked foods. The commercial food processor must necessarily cater to an assumed average customer, but honey-smoked food can be prepared exactly to the cook's own taste There is a great pleasure on offering to family and friends better smoked food than they can buy in any store. Even more satisfying is it to produce smoked delicacies that cannot be bought in a shop, at any price.

The two essentials of real barbecue are a low cooking temperature and a cloud of wood smoke. You need sufficient heat to cook the food - the main difference from smoke curing - but you want to keep the temperature just above the level that meat will register inside when done. The rich smokiness you want in all barbecue should come from smouldering wood, not from fat or oil dripping on coals or hot metal. The difference is enormous, both in taste and in health risks. The smoke produced by burning fat contains benzopyrene, a carcinogen that sticks to food. The effect is almost unavoidable in grilling, but it isn't a problem in barbecuing if you have a water reservoir or pan beneath the meat, an option with much of the equipment.

The use of water and other liquids is a bit controversial in barbecue circles. People in the past didn't add any water to their pits in any fashion, and many pitmasters disdain the idea today, contending that barbecuing must be a dry cooking process. In truth, though, most methods of barbecuing have always involved the circulation of moisture-laden air over food, making the process much "wetter" than cooking in a conventional oven. We think water has a proper place in barbecuing, depending on how it's used and what you're cooking. Traditional barbecue meats benefit from losing moisture as they cook, shrinking their size, but many non-traditional foods benefit from bumping up the humidity instead of smoke - potentially a problem when the water boils - the extra moisture helps to prevent lean meat and fish from getting too dry

COOKING TIMES AND TEMPERATURES

Though critical in barbecuing, a low cooking temperature isn't always easy to measure or maintain. Equipment manufacturers are still oriented to grilling, where you need only minimal control over the cooking temperature. Even major companies often fail to put useful thermometers on their smokers, telling complainers that barbecuing is an "inexact art"

Lovat's ART OF SMOKING & COOKING FOOD

There's a lot of truth in their statement, but the art isn't as inexact as their thinking. As with any other cooking process, if you can gauge the cooking temperature and control fluctuations, you can make a reasonably reliable estimate of the time required for barbecuing anything. That's exactly what we do in our recipes. We provide an approximate cooking time based on optimum barbecuing temperatures around 200F, allowing for some variations in factors such as weather and altitude. Cooking times are important information in recipes, but they won't be fully useful unless you've got a good thermometer and a way to control the heat level of your smoker.

TOOLS AND EQUIPMENT

The world of outdoor cooking has come a long way since the days of cooking sausages and burgers over an open grill. Significant advances in the design of backyard cookers now enable you to produce exquisite meals that you never thought possible. Listed here are basic grill shapes and types and other equipment you may find useful for grilling as well as for smoking, barbecuing, and in some cases for cooking over a campfire. Recipes in this chapter were tested on a kettle-shaped grill. Though you can adapt them for use on the piece of equipment you own.

Some of the other equipment such as a drip pan and an instant-read thermometer, neither of which is very expensive, are essential for more sophisticated recipes. For simpler fare, little equipment is needed. In most cases standard kitchenware can be used, although use on and around the grill is hard on tools not designed for that use. Although you do not have to purchase a great deal of equipment to enjoy grilling, you may find it beneficial to have some of these items for your outdoor cooking.

KETTLE-SHAPED GRILLS

The kettle-shaped grill revolutionised outdoor cooking. The sophisticated design eliminated the need to control heat by lowering and raising the grill, and saved the cook from constant battles with flare-ups and uneven heat. The kettle-shaped grill is designed for cooking with the lid closed. Carefully placed vents in the top and bottom provide adequate airflow to keep the fire going and completely eliminate flare-ups. Thus, searing over a very hot fire can easily be accomplished without burning the food. If the coals are moved to each side of the kettle and a drip pan positioned in the centre, food can also be cooked more slowly; this is the indirect-heat method of cooking. Although not quite as easy to use as water smokers, kettles can also be used for slow smoke cooking.

There are two main drawbacks to the kettle-shaped grill, however. First, the lid is not hinged, which causes some inconvenience every time you open and close it. Second, the grill position is not adjustable, if the food is not quite ready but the fire is dying out, it's not possible to move the food closer to the coals to finish the job. You are left with two options: finish under your kitchen grill or remove the food and rebuild the fire.

GAS GRILLS

The most recent step forward in the high-tech world of outdoor cooking is the introduction of a new generation of gas grills with sophisticated heat circulation and control. You'll find versions with either lava rock or porcelain-coated metal bars. Both serve the same function. They evenly emanate heat from the gas burners below them and vaporise drippings from the food above, giving the food that distinct grilled flavour. In time a difference between the two

versions becomes evident, however. The lava rocks are nearly impossible to clean effectively; the layers of burned grease give food an unpleasant flavour. The porcelain-coated bars are easily removable for cleaning and are dishwasher safe

Probably the greatest asset gas grills offer is the ability to control cooking temperatures. Most units have three horizontal gas burners, which allow you to regulate the heat to the desired temperature. By experimenting a bit, you will find the gas grill to be just as accurate as your kitchen oven.

The primary drawback of cooking on gas grills is the difficulty of imparting a distinctive smoked flavour. Hardwood chunks are too big to burn effectively, and hardwood chips tend to burn too quickly. The best way to achieve acceptable smoked flavour is to carefully replenish the chips as they burn.

The second drawback is one of personal attitude. To some, cooking on a gas grill just doesn't seem like traditional outdoor cooking. How can food cooked over a gas grill even begin to taste as good as food cooked over a mesquite grill laden with apple wood chips? This is a legitimate objection, but it is primarily emotional and romantic. The truth of the matter is that a gas grill is as good as the person cooking on it. Memorable and exceptional food can be produced on a gas grill . food that is just as good or better than fare from a charcoal grill. You just have to learn how to use a gas grill to produce the desired effects.

RECTANGULAR HINGED GRILLS

A number of people insist that rectangular grills are better than kettle-shaped grills. Rectangular grills do have the advantage of heat control. To attain this the grill height can be raised or lowered. You can also add briquettes, hardwood chips or moistened fresh herbs to the fire more easily than when using a kettle-shaped grill. Also, a hinged lid makes opening and closing much easier. But when it comes to real heat control and even cooking, kettle-shaped grills are better. The rectangular grill simply cannot match the heat circulation of the kettle, and flare-ups on the grill are harder to control.

OPEN GRILLS

Recipes in this chapter were developed for use with a covered grill, but you can use them with your open grill if you improvise a lid. Try using a large cooking pot or the lid to an electric frying pan to cover the food, or make a foil tent.

Open grills are not as easy to use as kettle-shaped grills, but they are often less expensive. Since they don't have a lid, you are very likely to experience flare-ups during cooking. The best way to handle this is to use an open grill to cook only foods that don't have an oil-based marinade or foods that are low in fat, such as fish and poultry. You can't effectively use the indirect-heat method of cooking when using an open grill because most of the heat simply wafts into the air. Keep a spray bottle handy to control flare-ups.

INDOOR GRILLS

Although this book was developed for cooking outdoors, most of the grilling can be adapted for use on an indoor grill. The most current indoor grill can be incorporated into the cooker top or set up on kitchen islands, providing a year-round grilling appliance. Both electric and gas models are available. Whatever style of indoor grill you choose, be sure it is correctly installed and that proper ventilation is maintained. Check the manufacturer's instructions for

Lovat's ART OF SMOKING & COOKING FOOD

recipe adaptation methods, especially regarding cooking with marinades and the use of oil to prepare the grill.

BASTING BRUSH

There is no need to splurge on fancy wood-handled brushes. The version with a twisted-wire handle works just fine for outdoor use. Basting brushes should have long handles so that you don't burn yourself while basting.

CHARCOAL RAILS

Designed to hold charcoal in even piles on each side of the drip pan, charcoal rails are really a bit of an extravagance. The sides of the drip pan can do just as good a job holding the charcoal in place.

DRIP PAN

A drip pan is an essential for the indirect-heat method of cooking. Your best bet is to purchase a disposable aluminium pan .a 2-3 inch deep rectangle .and throw it out after each use.

GRILL BRUSH

This inexpensive tool is a must for proper grill care. Brush grill before oiling, and after cooking, while the grill is still hot, to remove any food particles or burned-on grease. If you follow this procedure consistently, you won't have to wash the grill with cleanser, which ruins the seasoning.

HINGED WIRE BASKET

These baskets hold fish fillets, hamburger patties, or bread between two grills secured by a latch. Simply place the food inside the basket and place the basket over the heat. When one side is done, flip it over. It is a good idea to lightly oil the basket before placing food inside.

INSTANT-READ THERMOMETER

Old-style thermometers take too long to work to provide accurate cooking temperatures for grilled foods. The instant-read versions provide an accurate picture of the progress within five seconds of insertion.

ROAST RACKS

Made of aluminium or stainless steel V-shaped roast racks do an excellent job holding large pieces of meat or poultry together as they cook. If you use one while cooking with indirect heat, you don't need to turn the meat at all; it cooks evenly on all sides.

SKEWERS

Lovat's ART OF SMOKING & COOKING FOOD

Metal and bamboo are common skewer materials. Metal skewers, of course, never burn up, but you do have to wash them. You need to soak bamboo skewers in water for 15 to 30 minutes before use to prevent their burning. If you are fortunate enough to have rosemary growing nearby, try using these branches for skewers. Remove the needles and soak the branches in water for 30 minutes. They imbue the skewered food with a pungent rosemary flavour.

SPATULA

Take time to find an offset stainless-steel spatula with a blade 5 to 6 inches long .the kind professional chefs use. The advantage of the long blade is that it will slide under most chops and fish fillets completely so that they won't tear or stick when being flipped over. Stainless steel will never rust and is easy to care for.

SPRAY BOTTLE

With the advent of kettles and gas grills, there aren't many flare-ups anymore But always keep a spray bottle filled with water next to your grill, just in case of an emergency.

TONGS

Are probably the most useful and versatile grill tool that you can buy. Use a pair that is at least 12 inches long and spring loaded. It's not a bad idea to have two pairs, one to move hot charcoal around and one to use with food. (Of course you can get by with one pair .you will just have to keep washing it off every time you use it to move charcoal.)

FUELS

Shopping for fuels in a well-stocked market can be quite a confusing experience. Many different competing fuels now surround traditional charcoal briquettes. Mesquite charcoal; hardwood charcoals; hardwood-flavour charcoals; "self-lighting" briquettes; and a number of different types of smoke-creating hardwood chips, chunks and sawdust all crowd the shelf They all work well in the right situation. You must judge what will work best for you.

CHARCOAL BRIQUETTES

Charcoal briquettes are made from wood chips smouldered into carbon, then bound together with fillers and starch and pressed into a uniform shape. Self-lighting briquettes are formed by the addition of petroleum products. Before beginning to cook over any briquettes, wait until they are completely coated with a thin layer of grey ash. This means that all the additives have burned off. Long, slow cooking required that you replenish your fire with more briquettes, so you will be faced with the dilemma of how to add fresh briquettes without adding chemical fumes from the additives to your food. One solution is to start your second set of coals in a charcoal chimney .a large, vented metal can .and add them to your grill after they are covered with grey ash. A distinct advantage of charcoal briquettes is that they burn evenly and consistently. For an average fire that lasts about an hour, count out 30 to 40 briquettes. Plan on adding 16 to 20 for each additional hour.

MESQUITE CHARCOAL

Mesquite is a scrub hardwood tree that covers the arid plains of Southwest USA and Mexico. It has long been used in those areas as a fuel for outdoor cooking and is rapidly becoming the most popular outdoor cooking fuel source. Mesquite charcoal is simply mesquite that has been carbonised by slow smouldering in controlled conditions. There are no additives or fillers of any kind. The advantage of mesquite is that it burns much hotter than charcoal briquettes and most other hardwood charcoals. As a result, you don't have to use as much, and the high cooking temperature produces a much tastier product. Mesquite also provides a subtly smoky flavour that is not nearly as pronounced as that of fruitwoods, oak or hickory. Left over pieces of mesquite charcoal can be reused, something that can't be said for charcoal briquettes. Light mesquite as you would any other charcoal, but be particularly careful about high winds or nearby trees. Mesquite charcoal pops and crackles a lot when first lit, and can eject burning embers into the air. Extra supervision is required.

HARDWOOD CHARCOALS

Although not nearly as prevalent as mesquite charcoal, other hardwoods are carbonised in the same manner as mesquite to form excellent fuel sources. The advantage of hardwood charcoals is that they provide a flavourful smoky complement to your food; the disadvantages are scarcity, price, and, most significant, the inability to burn as hot as mesquite. Try using mesquite charcoal as your fuel source and pre-soaked hardwood chunks as your smoke source.

For the average fire, use between 3 and 4 pounds of either mesquite or hardwood charcoal in your grill. You may need more or less, depending on the size of the charcoal. Add an additional 2 to 3 pounds of charcoal hourly to maintain the fire.

WOODS

Use oak, hickory, cherry, apple, mesquite or alder as a wood for outdoor cooking. Be aware, however, that although a wood-burning barbecue is romantic, it doesn't make much sense. Wood takes a considerable time to burn down as usable coals, and wood coals don't last as long as either charcoal briquettes or hardwood charcoal. With wood you end up waiting twice as long to cook, and then your fire goes out sooner. Instead of using these woods as your major fuel source, use the smaller pieces as kindling, and cut the remainder into 1-inch chunks to add a smoky complement to your fire. Never use a softwood for either smoking or as a fuel, the thick resins produce a distinctly unpleasant aftertaste.

Be careful about burning scrap wood. Pressure-treated lumber (the type used in outdoor construction), for instance, contains chemicals that can be toxic.

HARDWOOD CHUNKS AND SAWDUST

Food cooked over hardwood has a distinctive smoky flavour. Hickory, alder, mesquite, and apple wood are the most popular and available woods.

If you use a gas grill, hardwood chips work better than chunks. Select pieces 1/2 to 1 inch thick and soak them in water for at least 30 minutes before you use them. Place an old aluminium pan over the gas heating elements towards the back corner of your grill before you turn it on, and place the water-soaked chips in the pan. As the grill heats up, the chips will begin to smoulder. You may experience flare-ups from the chips if you cook with high heat, so have your spray bottle handy. The only limitation of this method is that the chips tend to

Lovat's ART OF SMOKING & COOKING FOOD

burn quickly. You'll have to monitor the progress and replenish the chips as necessary, but don't put too many on at once lest you extinguish the fire.

For the gas grill, hardwood sawdust works as well or better than hardwood chips. Easy to ignite, sawdust provides a consistent, flavourful smoke. To use, place sawdust in an old pie pan and place directly on top of lava rocks or flavouriser bars. Turn gas burners to high until sawdust just blackens and begins to smoulder. Immediately turn burner underneath pan off. Replenish sawdust as needed. Hardwood sawdust is available at wood mills and speciality cook shops.

FRESH HERBS AND CITRUS RINDS

Thyme, bay, rosemary, oregano, and marjoram are particularly well suited to flavouring your fire. Choose one type of herb and simply moisten it with water (use wine or liquor to moisten it for an added taste treat), and toss it onto the coals right before you put the food on the grill. Try lemon, orange, or lime rinds as well. Add them one at a time, with or without a complimentary fresh herb. Be careful not to directly inhale the fumes of burning herbs or fruit rinds, however they can be rather powerful.

TIPS FOR SAFE GRILLING

Grills are designed for outdoor use only. Toxic fumes may accumulate and cause serious injury or death if used indoors.

Do not use grills in high winds.

Do not use petrol, alcohol, or other highly volatile fluids to ignite charcoal. Use only a commercially prepared fire starter and make sure that any fluid that may have spilled is cleaned up before igniting the charcoal.

Infants, children, and pets should never be left unattended near a hot grill. Since leaving the grill for a few minutes while it is hot is inevitable, consider purchasing a portable screen to place around the grill when in use to prevent people and pets from bumping into the hot grill.

If the area around your grill is a shared space, come up with some kind of sign to place on the grill to indicate that the grill is in use and should not be touched.

Grills should never be used within 5 feet of any combustible material. Do not wear clothing with loose, flowing sleeves while barbecuing.

Lighter fluid should never be added to hot or even warm coals. After use, lighter fluid should be capped and placed a safe distance from fire.

Do not add self-starting briquettes, the kind impregnated with lighter fluid, while food is cooking.

Never touch the heat source or the grill to see if they're hot.

In case of flare-up or sparks, keep a spray bottle filled with water next to your grill at all times.

Lovat's ART OF SMOKING & COOKING FOOD

If you use a kettle-shaped grill, the lid should be removed while starting the fire. Most styles have a hook on the back of the lid so you can place the lid right onto the kettle.

To prevent damage to your plants and patio area, do not place a hot lid on carpet, grass, or wood floor.

Always use proper barbecue tools with long handles. Do not leave lying on the grill.

Wear fireproof mitts to protect hands while cooking.

Do not use fringed dish towels in place of mitts or potholders, the fringe can easily catch fire as you reach across the grill.

Liquid petroleum (LP), as tanks for gas grills should always be turned off when not in use.

Remove ashes only after all coals have completely burned out. During cooking, the ashes may contain hot coals. Remove excess ashes and used briquettes before lighting the fire for each use.

Never attempt to move a hot barbecue grill.

FIRE STARTING

Whatever method you use, allow about 30 to 45 minutes for your fire to start. Be sure to follow all the Tips for Safe Grilling. The idea is to start a fire in your grill, not in your house.

KINDLING

Starting a fire with kindling is probably the most individual and ritual-laden method. Although each fire starter has a unique style, the basic method is to start with a few sheets of your favourite newspaper and crumple them loosely or twist them into "logs". Place these logs in the bottom of your grill, and then place a handful of dry kindling on top. Place 5 or 6 briquettes on top of the kindling. Light the newspaper and hope for the best. If the briquettes do not light, add more newspaper and kindling until they do. Once the briquettes light, add more briquettes on top until you have a fire of the desired size. Everyone seems to have their own ratio of newspaper to kindling to briquettes. Just do what works for you.

ELECTRIC STARTER

Electricity is certainly the easiest and most foolproof means of starting a fire. Check the manufacturer's recommendations for starting a fire with an electric starter in your grill. In most cases, the instructions tell you to arrange the briquettes in a pile on top of the starter, plug it in, and let it go to work. In about 10 minutes, your briquettes should be started. Don't leave your starter in any longer, or the heating element will be damaged by lengthy exposure to high heat. The only disadvantage to this fire-starting method is that you need to be near the electrical outlet.

CHARCOAL CHIMNEY

The simplicity and ease of charcoal chimneys make them a wonder to watch. A charcoal chimney is nothing more than an open-ended sheet-metal cylinder vented at the lower end, with a grate about 4 inches from the bottom to set the charcoal briquettes on. To use, simply crumple several sheets of newspaper and place them under the grate. Fill the chimney with charcoal briquettes, and place in the bottom of the grill. Open the bottom vents of the grill and light the paper. In about 10 minutes the briquettes will begin to smoulder. Once all the briquettes are well ignited, pour them out of the chimney into the bottom of your grill.

A charcoal chimney is also the answer when you will be using your grill for several hours and don't want to replenish your fire with "raw" briquettes because of the fumes they emit when they just start to burn. Simply set the chimney on an old pie pan on a concrete surface and light more charcoal. When the briquettes are ready, pour them onto your existing fire.

You can make your own charcoal chimney by cutting the top and bottom off a can and making a vent in the bottom with a can opener. If you buy a ready-made chimney you will find that it is inexpensive and has the added benefits of a wooden handle and a grate to set the charcoal on.

LIGHTER FLUID

Follow all safety procedures listed on the can when using lighter fluid. Never squirt the fluid directly onto a burning fire. The flame can easily travel back up the stream and ignite your hands and arms, not to mention the can itself? Never use petrol, naphtha, paint thinner, or kerosene - they are too flammable for this purpose. Use only a product specifically labelled as lighter fluid

HOW MUCH FIRE?

When determining the size of your fire, first imagine the cooking surface that the food requires. Spread the briquettes out in a single layer to cover an area about 1 inch past the edges that you have imagined. Now add about half again as much charcoal, and you should have enough for an hour's worth of fire. Usually 30 to 40 briquettes are sufficient to cook food for four people. If you are making a fire for slow cooking using the indirect-heat method use about 25 briquettes on each side of the grill. Plan on adding 8 to 10 briquettes to each side for every hour of additional cooking time.

WHEN IS THE FIRE READY?

It usually takes between 30 and 45 minutes for a fire to be ready for cooking. Never cook over a fire until the briquettes are covered with a light ash and are no longer flaming. Cooking over a direct flame only burns the outside of the food, leaving the inside raw. Your hand is probably the best judge of when a fire is ready. Hold your hand flat over the fire at grill height. You will be able to hold your hand over a very hot fire for about 2 seconds. If the fire is hot, you can hold your hand above it for 3 to 4 seconds. If you can hold it any longer than that, you have let the fire die down too much. Add more briquettes and let it build up again. A very hot fire is ideal for the direct-heat method of cooking, a medium to hot fire is desirable for the indirect-method. Once your fire is ready, carefully add hardwood chips or fresh herbs. Put the grill in place and let it heat up for 4 to 5 minutes before putting on food.

PREPARING THE GRILL

Always arrange the fire so that there are areas of the grill with no fire under them. If some of your food is done sooner than others, move it to these cooler spots to keep finished food warm while the remainder of the meal cooks.

Brush the grill lightly with oil right after you put it in place over the fire. To do this, moisten a paper towel with oil. Using tongs held in a fireproof mitt-clad hand, rub the oil from the towel on to the grill. This will help prevent food from sticking to the grill and will also keep the grill seasoned.

Always keep the grill clean. The best method is to quickly brush the excess food off with a grill brush immediately after you remove the food. This way the remaining fire will burn off any lingering bits, and you won't have to resort to soap and water, which would ruin the seasoning of the grill surface. If you do not have a grill brush use a crumpled wad of aluminium foil held by tongs.

Have all your grill tools ready and available before you light your fire. Tongs, mitts and spray bottle are particularly important to have at your fingertips.

Have extra charcoal available. There is nothing more frustrating than discovering that your fire is dying before dinner is ready and there is no more charcoal.

OUTDOOR COOKING METHODS

With the advent of covered grills, a whole new world of barbecuing opened up. Foods can now be slowly roasted over indirect heat so that they become tender and stay moist during cooking. Whether to use indirect-heat cooking or traditional grilling over direct heat depends on the type of food to be cooked and the result desired.

DIRECT-HEAT METHOD

Use the direct-heat cooking method to sear foods to seal in their natural juices and to give the characteristic grilled look. Foods that are low in fat, such as poultry, and fish, and foods that don't take very long to cook are ideal choices for this method. Hamburgers, chops, vegetables, skewered items, and fish fillets all fall within this category.

If using charcoal, start your fire as described above. After 30 to 45 minutes when the coals have a light grey ash covering, spread them out one briquette deep so that you have an even cooking source. Place your grill over the coals and let it heat up for 4 to 5 minutes. If you are using pre-soaked hardwood chips or chunks or moistened fresh herbs, spread them out over the coals right before placing food on the grill. The wood will immediately begin to smoulder. Now you are ready to cook. When using a kettle-shaped grill, keep the lid closed for the duration of cooking; regulate the heat by adjusting the upper and lower vents. The beauty of this system is the total lack of flare-ups, even though the food is cooking at a very high temperature and fat is dripping onto the coals. The fat vaporises as it hits the coals, imparting a desirable smoky flavour to the food, but the fat doesn't have enough oxygen to ignite into an undesirable flame. Also, the heat circulation in a kettle-shaped grill is excellent, cooking the food on top as well as on the bottom. You still need to turn the food over due to

Lovat's ART OF SMOKING & COOKING FOOD

the short cooking time, but it does cook faster and more evenly inside a kettle. So it is very important that the lid stay closed except when you need to baste, add coals, check the food, or turn it over. Otherwise, leave the grill alone and let it cook. If you are using a gas grill, turn all three burners to high and close the lid. Your grill should be sufficiently hot enough to cook on in about 10 minutes. Depending on the food being cooked and the desired effect, you can leave the temperature on high while cooking or turn down one or more burners. There is a nearly immediate response to the burner temperature controls, so experiment to find the exact temperature you want.

INDIRECT-HEAT METHOD

The indirect-heat method is where recent advances in grill designs yield the most spectacular results. You can now cook things on the grill that were unimaginable ten years ago. Whole prime ribs, turkeys and chickens will cook beautifully without ever needing to be turned over. Foods traditionally braised slowly in the oven with plenty of cooking liquid, such as veal breasts and pheasant, can now be done outdoors. The reason is that the food is placed over a drip pan with no direct heat under it. All the heat circulated around the food, in much the same way as in a convection oven. Thus, you won't need to turn over a large roast, for example, because it cooks just as fast on top as it does underneath. (You probably will want to turn smaller cuts to obtain equal coloration and grill marks, however.)

Another advantage of this method is the absence of the sometimes difficult-to-handle rotisserie. It simply isn't needed any more

If you are using a charcoal grill, prepare your coals as described before. When they are covered with a light grey ash, separate them into two piles on each side of the kettle. Place a disposable aluminium drip pan between the piles. If you are using pre-soaked hardwood chips or chunks or moistened fresh herbs, add them to the piles now. Put the grill in place and allow it to heat up for 4 to 5 minutes before positioning the food on the grill directly over the drip pan. If you want to sear the food first, simply place the food directly over one side of the coals until it is browned, and then move it over the drip pan. Close the lid and regulate the temperature by adjusting the upper and lower vents. Since the indirect-heat cooking method often takes several hours, you will occasionally need to add more briquettes.

If you are using a gas grill, pre-heat the grill with all three burners on high. The grill should be hot in about 10 minutes. Turn off the centre burner and carefully position the disposable aluminium drip pan over it. Place the oiled grill in position and turn up the heat for 4 to 5 minutes. Place the food directly over the drip pan. Close the lid and let it cook. Regulate the temperature by adjusting the two outer burners; leave the centre burner off. For recipes calling for a temperature of 350F to 325F, turn both burners to low. If you want a smoky flavour see previous information on using hardwood chips in a gas grill. If you are using fresh herbs, throw them directly onto the outside porcelain bars. Remember, these grills are designed to operate most effectively when the lid is closed. Open the lid only to check on or to baste the food or to add more chips or herbs.

BASICS OF DRY SPICE RUBS.

One of the easiest and quickest ways to prepare food for grilling is to use dry spice rubs. Although there are many spice combinations available commercially, try making batches to your own taste and use them to create quick and easy grilled dinners. You can store them for up to 4 months in a jar in your spice rack. The concept of a dried spice rub is to improve the

Lovat's ART OF SMOKING & COOKING FOOD

meat with your own particular balance of herbs and spices that will grow stronger the longer you leave the coating on the meat. The spices explode with flavour as they cook and for a delicious crusty exterior.

In Cajun cooking spice rubs are used to blacken meats cooked in an extremely hot cast-iron skillet. You can create the same effect on your grill by using the direct-heat cooking method. Whichever method you choose, follow these basic techniques.

1. Make spice rub by combining all ingredients and mixing well.
2. Wash and pat dry all food before cooking. Lightly oil all external surfaces of beef lamb, pork, and poultry. Lightly coat fish with clarified butter
3. Massage spice rub all over external surfaces of food Depending on the type of spice mixture, use from 1 to 2 tablespoons of rub for a pound of meat, poultry or fish. Let stand for at least 1 hour at room temperature before cooking to allow spices to permeate flesh
4. Grill food over fire. The spices emit rather powerful vapours when cooked at high heat, so provide plenty of ventilation, and don't stand directly downwind from grill.

The first step in smoking, most of the time, is the application of a dry rub, paste or marinade to the food you're fixing. Then, after you start cooking, you often baste the food with a liquid containing some of the same ingredients. Flavour is the main function of the various potions, and this is how they work:

DRY RUBS

Dry rubs are a combination of dried spices massaged into food before cooking. Originally developed long ago for preservation, rubs in barbecuing help seal in the flavour, add another dimension to the taste, and form a savoury crust. The ingredients vary with the kind of food you're cooking, with salt and sugar appearing more often than anything else, but garlic powder, onion powder, and lemon-pepper are a close second in popularity. They all work better in a dry spice mix than they do in most kitchen preparations, but by themselves their potential is pretty limited. We usually supplement them with pepper and dried chillies, plus some combination of secondary seasonings, such as dry mustard, cumin, sage, thyme, allspice, cinnamon, nutmeg and ginger.

When applying a rub, add it thoroughly and evenly. Generally you don't skimp on the amount, though some dishes benefit from a light touch. If you're cooking chicken or other poultry, spread the seasoning both over and under the skin, being careful to avoid tearing the skin. If you're covering vegetables, cover them first with a layer of oil.

After coating the food, let it absorb the spices in the refrigerator, wrapped in plastic. Fish fillets and shrimp need to sit for 30-45 minutes before cooking, big cuts of meat like to sit overnight, and other kinds of food require some amount of time in between

PASTES

A paste is a wet version of a dry rub, a combination of seasoning bound together by liquid or fat. Pastes add both flavour and moisture to food. Typical core ingredients range from stock

Lovat's ART OF SMOKING & COOKING FOOD

to lemon juice, from oil to fresh herbs. Pureed garlic, onions, anchovies, horseradish or mustard might bind the mixture.

Pastes work better on some lean meats, and usually impart a milder taste than rubs, making them suitable for delicate fish or seafood preparations. Pastes are also a good way to add herb flavours, allowing you to coat a chicken with basil or a lamb chop with mint.

A paste needs to be thick enough to adhere to the food but thin enough to smear easily. As with dry rubs you massage it into every surface and then put the food into the refrigerator in a plastic bag to soak for an appropriate period. Pastes with fresh herbs lose their potency after a few days, but others keep for several weeks when refrigerated.

MARINADES

Normally a combination of acid, oil and spices, marinades are liquid flavour agents used to bathe food before cooking, and are intended to complement and enrich the food's natural flavour.

The acid might be vinegar, lemon or other fruit juice, milk, yoghurt or wine. The fat in a marinade is normally a vegetable oil, since butter and bacon drippings coagulate when chilled. The proportions depend a lot on the type of food you're cooking, with the amount of oil increasing substantially with fish and lean cuts of meat. Spices and herbs are used in assertive quantities because the soaking process diminishes their pungency.

Some people think marinades tenderise meat, but that's not quite accurate. Actually the liquid softens tissue, a subtle but important distinction. Food marinated too long becomes mushy and flabby. Extra time doesn't help the flavouring process either, because marinades don't penetrate much beyond the surface of the food and don't need to go any deeper.

Prepare marinades right before they are needed and don't reuse them with other raw foods. If you plan to use a marinade for basting, or as part of a sauce, first boil the mixture vigorously to kill off any harmful bacteria.

SMOKE COOKING

Recipes in this book for smoke cooking (also called hot smoking) were designed for use with a kettle-shaped, covered home style water smoker. All smoke cooking must be done outside, out of reach of children and pets. Be careful of wind, which may blow the smoke into your house or, worse, your neighbour's.

Set up water smoker outside. Remove the top and centre ring and open all vents. Start charcoal briquettes in a charcoal chimney, or place them directly on bottom grill inside ring and start with an electric starter. Coals are ready when coated with a light grey ash. Spread coals evenly across the inside of the charcoal ring. Place water pan in position and fill with desired hot liquid. Set lower grill over water pan. Carefully set middle ring in place on top of the bottom section.

Soak 2 by 3 inch wood chunks of choice in water for at least 1 hour. Shake off excess water. Open side door, and using tongs, place wood on top of coals.