



Outdoor Cooking



Welcome to the Allen County Outdoor Cooking project! We hope you will enjoy this project and learn some new techniques for cooking outside whether that is cooking on a barbeque or open fire. The outdoor cooking project can be done on a gas grill or burner, closed grill or open fire pit using charcoal fire or wood fire. There are a variety of cooking methods that take advantage of all kinds of meats, fruits and vegetables. Look on line and in cooking books for recipes that are yummy for you to try! Have Fun and Happy Cooking!

Building an Open Fire

Campfire cooking is lots of fun and can be done in many ways. Those using a campfire often try to cook by placing their pots and pans directly into the fire. This typically achieves less than satisfactory results, burning both pans and food. You can make an effective campfire cooking range out of all natural materials.

Start off by building a tepee fire. Start with thin, quick burning tinder, stack some wood in a way that allows for plenty of oxygen, and light it up. Remember, this fire won't actually be used for cooking. Once it's lit, its job is to supply you with the fuel for a good cooking fire: hot coals. A good coal-supplying fire should consist of small sticks as opposed to large logs. They take considerably less time to break down into usable coals.

When you get a good fire going, lay two green logs side-by-side about 7 inches apart at one end, and 4 inches at the other. The two logs serve as a stove range where you can place pots and pans. You can put your smaller vessels like a coffee pot on the narrower end, and your larger pots on the wider end. This enables you to cook several dishes at the same time. Spread or pile the coals to create hotter or cooler cooking areas. If you want to make it a bit more elaborate, you can rig up a pole over the fire. Then you can then hang your pots a couple of inches above the fire for care-free simmering.

Whether you're moving coals from the fire pit to a separate coal pit to cook in or just rearranging them, a long metal grilling utensil is required. The coals are much hotter than any other part of the fire, and will immediately ignite any stick or branch you try to arrange them with. When the coals are placed so that there's an even and concentrated layer, put a small grate over them. With that, you're ready to start making the meal.

For great tasting food in the outdoors, nothing beats a good cooking fire. While it won't do much to keep you warm on chilly nights – it will definitely make cooking high quality camping grub a lot easier. Once you get that cooking fire burning, all that's left is to put on the food, gather your camping buddies, and get to munching!

Stick Cooking

Stick cooking is intended to be done over hot coals, not flames. Make sure that your coals are about the right temperature. To test for medium coals, place your hand above the coals about 6". If you can leave your hand there for 4 seconds, they are medium (3 seconds for medium-high).

Skewers come in many sizes and styles. You may want to design your own. Wooden skewers are best used with quick cooking foods. Avoid the ones that are sold in craft stores rather than grocery stores as sometimes they have wood or oil that is toxic. Soaking wooden skewers in water for 30 minutes prior to use can help prevent them from burning. Avoid metal skewers that are round as the food often rolls on the skewer when you try to turn them. I prefer the skewer baskets but the ones that don't have non-stick coating need to be sprayed with cooking spray each time prior to using them. They do require more clean up than traditional skewers, however.



A kabob is a meal on a stick! Select meat and vegetables that cook in the same amount of time. Do not overcrowd, heat should reach all sides of the chunks of meat. Use long metal skewers or hardwood sticks. Soak kabobs in barbecue sauce or brush with zesty sauce during cooking. Serving Kabobs: Push cooked foods from skewers into toasted buns or chunks of split French or Vienna Bread, or serve over cooked rice.

Some Kabob combinations –

- Beef steak cut in 1-2 inch cubes, mushrooms, onions.

- Chicken livers, sliced bacon, and mushrooms.

- Franks cut into 1" pieces, pineapple chunks, and sliced bacon.

- Ham (fully cooked) cut into 1" cubes, pineapple chunks.

Skillet/Griddle Cooking

Your cook stove is the easiest way to cook using this method as it provides the most even temperatures. You can also cook over coals using a cast iron skillet or Dutch oven. Make sure you have a pot holder for the skillet handy as the handle gets very hot when you cook this way.

To adjust the heat for your grilling needs, if raising the cooking surface is not an option (which is generally true when camping), simply spread the coals or push them together depending on whether you wish to lower or raise the temperature (respectively). If you need to add more coals, add them to the outer edges of the hot coals.

NEVER add charcoal lighter fluid to hot coals.

Foil Packets

Foil packets can be a fun alternative in outdoor cooking. One advantage is that many recipes may be prepared in advance, at home, then placed in the ice chest until time to cook. Also, there is minimal clean-up. Our girls simply eat out of their foil, thus eliminating the need for doing dishes - a welcome relief!!

To be successful with foil packets, use heavy-duty foil. Have long handled tongs available but have the kind with rounded edges so you don't puncture the packets when turning them. Another good accessory is a good pair of heat-resistant oven mitts.

Another key to successful foil packet cooking is how you fold the packets. You need to allow room for heat expansion. Use a piece of foil approximately 18"x12" for each serving. The best way to fold is using a drug store fold: Bring the long edges of the foil together and fold down 2-3 times leaving room above the food for expansion. Fold in each side 2 times and crimp to make a seal.

Generally, you cook with the seam side up but if the folds are secure, this allows you to turn the packets to avoid burning the bottom if you place them directly on the coals. Most recipes are best cooked 4"-6" above medium coals. See Stick Cooking for information about coals and how to judge when they are "medium".

Dutch Oven Cooking

Dutch ovens are very versatile for cooking in the outdoors. You can make one pot meals as well as bake in them. Cast iron is preferable over aluminum to maximize its use. Dutch ovens intended for outdoor cooking have legs on the bottom to raise the Dutch oven off of the coals and a dished lid on which to place the coals to provide the major portion of the heat. See picture.

New Dutch ovens need to be seasoned. Heat in the oven or inverted over coals and then wipe out. Wipe entire oven with a thin layer of oil. Store with lid removed.

Cast iron cookware should never be washed in soap and water. Simply scrape out the leftover food and then wipe out with a paper towel. Oil the Dutch oven before storing it so it is ready for use the next time.

To simulate a 350 degree oven, remember the $\frac{2}{3}$, +3, -3 rule. In other words, add 3 to the size of your Dutch oven for the number of briquettes to use on the top and subtract 3 from the size of the Dutch oven for the number of briquettes to use underneath. So, a 12" pot would require 9 briquettes below and 15 on top for 350 degrees. Then, bake for $\frac{2}{3}$ of the recipe time and remove from bottom heat for the remainder. This helps to prevent burning.

You will need some sort of tool for lifting the lid. You will also find a shovel, some charcoal tongs, a small whisk broom, and a putty knife handy when doing Dutch oven cooking.

Grilling

The kind of grilling and barbecue equipment you use will depend on how much money you want to spend. Actually, there are as many different kinds of barbecue grills as there are people with original ideas. When buying a grill, purchase a well-known brand from a reputable dealer. Select a well-constructed grill made of heavy-duty non-rusting steel or iron to reduce chances of warping, rusting, and burning through. Be sure all the moving parts work smoothly and easily. There should be a convenient, easy way to control the distance between the grill surface and heat.

Grid rods should be heavy and plated with chrome or nickel. They should be closely spaced and flat topped, if possible. This helps prevent small foods from falling through the grill. Spit rods should rotate slowly, clockwise, 6RPMS for proper basting. They should be made of heavy metal, and prongs should be sturdy

How much charcoal do I use? Actually, most people tend to use too much and thus waste the charcoal.

Generally, you need about 30 briquettes to grill one pound of meat. You need enough charcoal in a single layer to extend 1"-2" beyond the sides of the cooking area. To determine your needs, spread the charcoal out. When ready to light, pile coals into a pyramid. Weber makes a good quality fire starter if you don't want to make your own. In general, a 10 pound bag of charcoal has about 150-180 briquettes. This should help you decide what size you need when you go to purchase your charcoal.

Care of Grill

Taking care of your grill is both simple and important. Equipment is the easiest to clean right after using. It is important to read the manufacturer's instructions concerning care and storage of your equipment.

Before putting meat or food on the grill, lightly brush the grill with cooking oil or a piece of fat from your meat to help prevent the food from sticking to the bars. Right after barbecuing, put on fireproof gloves, remove the hot grill, and clean in one of the following manners: 1) If the grill is small, plunge it into hot sudsy water and let it soak until you're ready to clean it. 2) Wearing gloves, wipe off top and bottom of hot grill with a cold wet cloth, and the steam will remove the soil. 3) If the grill is very large soak two thick stacks of newspapers with water. Place the hot grill on one stack and cover with the second. Hose down papers and let stand 30 minutes. Food should then wipe off easily.



If the firebox was foil-lined, simply fold the edges over and discard. The cooled fire bowl can be wiped with a damp cloth and dried. The burning charcoal will itself give a mild smoky taste to barbecue meats. If, however, you prefer a stronger smoky flavor and aroma, you may mix in a little green hickory wood (well soaked in water beforehand to prevent flaming with your charcoal.) Another way is to use a liquid smoke preparation in your barbecue sauce.

What To Cook

Meat of all kinds and almost all cuts can be used in outdoor cooking and cooked in a variety of ways. Less tender cuts require tenderizing before barbecuing. Marinating will tenderize the meat; the length of time depends on the size and thickness of the cut. The marinade should contain a food acid such as lemon juice, vinegar, or tomato juice to break down meat fibers as well as give flavor. The barbecue sauce itself can serve as a marinade. A commercial meat tenderizer can also be used.

Beef

All kinds of steaks, from T-bone and porterhouse to flank steaks are excellent barbecuing cuts. Choose high-grade meat, at least one-inch thick and free of excess fat. Cube or minute steaks and ground beef are other familiar beef items at the barbecue pits. Chuck, cubed chuck, and stew beef are also fine barbecue cuts, which will show better flavor and tenderness if marinated first. A general barbecue sauce rule for beef is to use one that is rich in oil.

Pork

Pork items seen at the barbecue include spare ribs, ham slices, and bacon. Barbecue sauce for pork should go easy on the oil and heavy on the catsup, tomato paste or chili sauce.

Poultry

The fryer has become a byword in barbecue circles. A 2 – 2 ½ pound bird is just right. Allow about a pound for each adult, a half-pound for each child. Not so well known, but a fine choice is the fryer turkey. A 4-8 pound turkey is an attractive, tasty, and budget pleasing barbecue choice. The poultry meats are best with delicately seasoned barbecue sauces; choose one that is mostly oils and herbs.

Lamb

Lamb, too, makes an excellent barbecue meat. Steaks, chops, or whole legs of lamb can be barbecued. Choose a sauce that is rich in oil and garlic.

Sauces for meats

It certainly isn't necessary to use a barbecue sauce on high quality, tender meats, but if you prefer to use one, there are many different types of sauces. However, there are a few general rules to follow. Steaks and beef take a sauce that's rich in oil and has plenty of seasoning. Pork calls for easy on the fat and plenty on chili sauce or catsup. Lamb needs lots of oil and lots of garlic. Veal and thin steaks that are slow in browning require a sauce rich in soy and give a brown glaze. Fish, chicken and turkey are best with a delicately seasoned sauce, mostly oil and herbs. For a smoky flavor, add liquid smoke to the barbecue sauce.

With the Meat

Whole potatoes – pierce with a fork, oil, then wrap in aluminum foil and place on grill for about an hour.

Corn on the Cob – soak whole ear, wrap in foil, and cook on grill or in coals before shucking. Allow 10 to 20 minutes. Keep fresh sweet corn refrigerated until ready to cook on grill. Pack with cold items if preparing for a picnic.

Be creative with your recipes and menus. Recipes are readily available, so try some new ones and enjoy!



Barbecue/Grill Safety Check Sheet

1. Never start a fire with gasoline.
2. Avoid wearing loose clothing that might catch fire.
3. If charcoal lighter fluid is used, pour from open can only and do not spill on grill or top and sides of pit.
4. It is safer to light a piece of twisted paper to ignite the charcoal lighter fluid which has been put on briquettes.
5. Avoid having arm and body directly over blaze when fuel is ignited.
6. Never spray starter fluid on hot briquettes.
7. Maintain water receptacle full of water at all times to control the fire.
8. Have clean gloves and/or tongs for chicken or meats.
9. Use heat resistant gloves to handle grills.
10. When cutting meat, cut with knife away from yourself on cutting board.
11. Be cautious. Do not set up barbecue pit over dry grass, leaves, or other combustible material.
12. Never dump and leave hot coals on ground where they can be stepped on. (Use plenty of water and be sure the coals are completely extinguished.)

Equipment Check Sheet

Use this before each outdoor cooking venture to be sure you have necessary equipment:

1. Grill or open fire pit
2. Charcoal Briquettes, Wood or plenty of gas in grill tank
3. Apron
4. Sauce – pan & dauber
5. Salt/Pepper/Seasonings
6. Menu
7. Gloves for handling grill, cooking grate, Dutch oven, skillet, etc.
8. Water for controlling fire
9. Small Shovel

OUTDOOR COOKING PROJECT

Level 1	Grades 3-4-5
Level 2	Grades 6-7-8
Level 3	Grades 9-10-11-12

Posters must follow county poster requirements.

All Divisions: The barbecue contest is OPTIONAL. At the Barbecue Contest any meat/entree may be barbecued. **Degree of difficulty will be considered in judging.** You must exhibit in the Barbecue Project in order to compete in the Barbecue Contest. No open/wood fires pits/barrels may be used.

BEGINNER

1. Cook four (4) or more times using either a barbeque or open fire.
2. Exhibit a 22 x 28 inch poster showing you cooking. The poster must display a menu. A completed and signed General Record Sheet must accompany each exhibitor at fair check-in. Refer to your Allen County 4-H Rules Book for complete poster and labeling rule.

INTERMEDIATE

1. Cook six (6) or more times using either a barbeque or open fire. At least two (2) of the times you need to cook with different types of meats/entrees. At least two different types of cooking need to be used: Stick Cooking, Grilling, Foil Packets, Dutch Oven, Skillet or Griddle Cooking etc.
2. Exhibit a 22 x 28 inch poster showing you barbecuing only one type of meat or entrée. The poster must display a menu. A completed and signed General Record Sheet must accompany each exhibitor at fair check-in. Refer to your Allen County 4-H Rules Book for complete poster and labeling rule.

ADVANCED

1. Cook eight (8) or more times. You must use at least two different cooking types, as in barbeque grill or open fire. At least two different types of cooking need to be used: Stick Cooking, Grilling, Foil Packets, Dutch Oven, Skillet or Griddle Cooking etc. At least one (1) time prepare a meal for 5 or more people. Also, at least one (1) time cook from two (2) of the following options: a) fruits; b) vegetables; c) breads/pastries; d) desserts; e) meat/entrée.
2. Exhibit a 22 x 28 inch poster showing you cooking at least 2 of the following options: fruits, vegetables, breads/pastries, desserts or meat/entrée. The poster must display a menu including at least 2 of the options. A completed and signed General Record Sheet must accompany each exhibitor at fair check-in. Refer to your Allen County 4-H Rules Book for complete poster and labeling rule.

BARBECUE CONTEST SUGGESTIONS

EQUIPMENT SUGGESTIONS FOR BARBECUE CONTEST:

Grill and charcoal	Plate	Table
Knife	Hot Pads	Silverware
Tongs	Brush for Sauce	Spray Bottle

SAMPLE BARBECUE CONTEST SCORECARD

Points

Equipment	10
-- Practical, efficient	
Doneness	20
-- was food cooked thoroughly	
-- overcooked	
-- undercooked	
Appearance	20
-- nicely browned	
-- uniform appearance	
Food and Fire Safety	20
--station was neat and clean	
--food was handled properly	
--safety precautions taken	
Degree of difficulty	30
-- Entree cooked fit degree of difficulty for division	
TOTAL	100