

## SPICE RUBS

A couple of weeks ago I announced on air that spice rubs shouldn't be used with meat that was to be grilled directly over the hot coals. My reasoning was that the spices would burn and become bitter. Therefore spice rubs were more suited to meat or chicken that was to be cooked over indirect heat, while marinades were better for items that were to be cooked over the coals directly.

Well, it turns out that I was partially right. An interesting article in the summer issue of *Cook's* magazine, Garth Clingingsmith, shows that while there are many spices that do burn and become bitter on the grill, there are others that work very well indeed. *Cook's*, by the way, is an excellent publication that is brought to you by the folks that have the *America's Test Kitchen* show on PBS on Saturdays. While I don't always agree with some of their recipes, (sometimes their preferred techniques require more effort than I'm willing to give), it's great to have the benefit of their research on various foods and cooking methods.

In the spices test, the author tested 24 different spices and herbs. He discovered that many of the most common spices used in spice rubs become acrid and bitter when cooked on the grill. With the exception of cinnamon, which becomes more complex, the sweeter spices such as nutmeg, clove and cardamom lose their pleasant attributes when cooked on the grill. And garlic, whether powdered or granulated, becomes bitter and burned-tasting. Peppers and chiles work well on the grill, with the glaring exception of paprika, which is one of the most frequently-used ingredients of a spice rub, yet turns very bitter when exposed to direct heat.

Some spice rub recipes call for toasting whole spices first, and then grinding the mixture together in a spice grinder. The author found that to be pointless—which makes sense when you ask yourself “why am I toasting these spices first, when they're just going to be toasted on the grill?” And he found that pre-ground spices worked just as well as grinding them fresh yourself—with the exception of black pepper, which tasted better freshly ground.

The following is a list of the spices that don't work with direct heat on the grill, either turning bitter or losing their flavor: cardamom, celery seed, cloves, garlic powder, nutmeg, oregano, paprika, and rosemary. You'll note that garlic powder and paprika are the two most commonly called-for ingredients in spice rubs, while oregano and rosemary aren't too far behind.

This next list is those spices that are pretty good when cooked over direct heat, although not the best. These include cocoa, coffee, coriander, dill seed, fennel, star anise, tarragon and thyme. Finally, here's a list of those spices that are delicious when used in a rub to be cooked over direct heat. These are allspice, ground ancho chile, ground chipotle chile, (and both these ground chiles are available now at your local supermarket in the spice section), black pepper, cinnamon, cumin, mustard seed and red pepper flakes.

Many spice rubs also have an ingredient list as long as your arm, requiring you to empty out your spice cabinet. But the author discovered that in the case of spice rubs for grilled meat, less was often more. He found that combinations of only four or five ingredients worked better than elaborate mixtures. And don't put the spice rub on too long before you cook the meat, otherwise the meat will develop an unpleasant texture. He suggests lighting the coals, then patting on enough of the spice rub to cover your meat while your fire gets going. The length of time it takes to get your fire ready to cook is long enough for the spices to sit on the meat.

There are some delicious spice rub mixes listed in the article, so check out this summer's issue of *Cook's*. You'll also find other excellent recipes as well as tips on barbecuing and grilling.