



## Bring on the Heat!

We all know that cooking happens when you heat food, transforming raw ingredients into the delicious foods that we enjoy.

Knowing how different methods of cooking ultimately affect flavor and texture can help you achieve the results you want – whether it’s a perfectly-seared steak, or cooked-but-still-crispy green beans.

Cooking methods fall into two main groups: wet heat and dry heat, each with several variations, as explained below:

### Wet heat methods:

#### Boiling

Boiling calls for heating a liquid to a high temperature (212°F) until air bubbles rise rapidly to the surface. There are degrees of boiling – from barely perceptible bubbling to a fast “rolling boil.”

Boiling keeps the food (in the liquid) in motion, preventing it from sticking, as when cooking pasta. Vegetables tossed into boiling water and cooked quickly keep their flavor and bright color. Sauces can be made by boiling a liquid, such as a chicken stock, to reduce and thicken it, concentrating its flavor.

#### Simmering

Simmering cooks food slowly at a low consistent temperature (about 180° to 205°F) that’s just short of a boil. Small bubbles periodically rise to the surface - the gentler and slower the bubbles, the lower the temperature. Simmering can be used for tougher cuts of meat or thicker cuts of food that need to cook longer, as well as starchy foods such as potatoes. Because some of the liquid evaporates, simmering melds and concentrates the flavors in the liquids, so it’s a good method for soups and stews.

#### Poaching

One form of simmering is called poaching. It’s useful for more tender foods such as fruits, fish and eggs. This gentle method helps keep foods from breaking apart. The poaching liquid won’t show any signs of bubbling, so it’s best to use a thermometer to ensure a consistent temperature (around 140° to 180°F).

For best results, start whole or large cuts fish and larger pieces of meat in cold liquid. Smaller, quicker-cooking foods, such as chicken breasts, can start in a liquid that is already simmering. The more flavorful your liquid is, the most flavorful your poached food will be.



### How to Boil Water

- Pick a pot that’s large enough to hold the food, enough water to cover the food by 1-2 inches, with at least another 2 inches or so to allow room for bubbling without boiling over.
- Start with cold water and bring to a boil over medium heat. (You’ll know your water is boiling when you see large air bubbles covering the surface of the water.)
- If you need to speed up the boiling process, cover the pot with a tight-fitting lid. Remove the lid slowly to avoid being splashed by boiling water or steam that has built up in the pot; the lid itself will be hot, too, so be sure to grasp it with a towel or pot holder.



## Steaming

Steaming is one of the more gentle ways to cook because food doesn't come in contact with the simmering liquid. This helps food retain its color, shape and texture, and because no fat or oil is used, it's a healthful way to prepare food, too. To steam, gently simmer water and place a steamer basket in the pot, add your food, then cover with a tight-fitting lid. Use this method for foods that need to retain moisture (for example most veggies, chicken breasts, and dumplings).

## Dry heat methods:

### Sautéing

Sautéing involves cooking foods, such as vegetables and tender meats, in a small amount of oil or butter over a medium-high heat. This method gives food a browned or caramelized exterior that adds richness and depth of flavor. Stir-frying is similar in nature but is done over very high heat while the food is constantly stirred to keep it from burning or sticking to the pot, whereas sautéed items are stirred occasionally.

When sautéing, always warm the oil in the pan before adding food, to keep the food from absorbing the fat or oil (which makes it soggy) or from sticking to the pan. To make sure the temperature is just right, add a small piece of food to the pan; if it sizzles, add the rest of your food. No sizzle? Wait a few seconds and try again.

If you see and smell smoke, the butter or oil has burned and it's best to start over. Be sure to wipe the pan with a paper towel or cloth to remove any burned bits.

### Roasting

Roasting takes place in the oven or under an open flame, such as a rotisserie.

Food is usually uncovered and exposed to heat from 300° to 450°F that surrounds the food. Roasting creates a browned outer surface and often adds a caramelized flavor to meats and vegetables.

### Baking

Baking usually takes place in an oven with temperatures between 325° and 425°F. Most baking involves wet batters and doughs that solidify when baked.

### Broiling and grilling

Broiling and grilling are similar because they use direct, high heat to sear, brown and cook food. What distinguishes these two methods is the direction of the heat. Broiling usually takes place in an oven with the heat elements at the top. With grilling, food is placed on a rack and placed over the heat source, such as an open fire, charcoal briquettes or gas flames.

***Most foods can be cooked in more than one way, so have fun experimenting with these different techniques. You'll open yourself up to a whole new world of flavors and textures while expanding your cooking repertoire. Happy cooking!***

