

METHODS OF COOKING

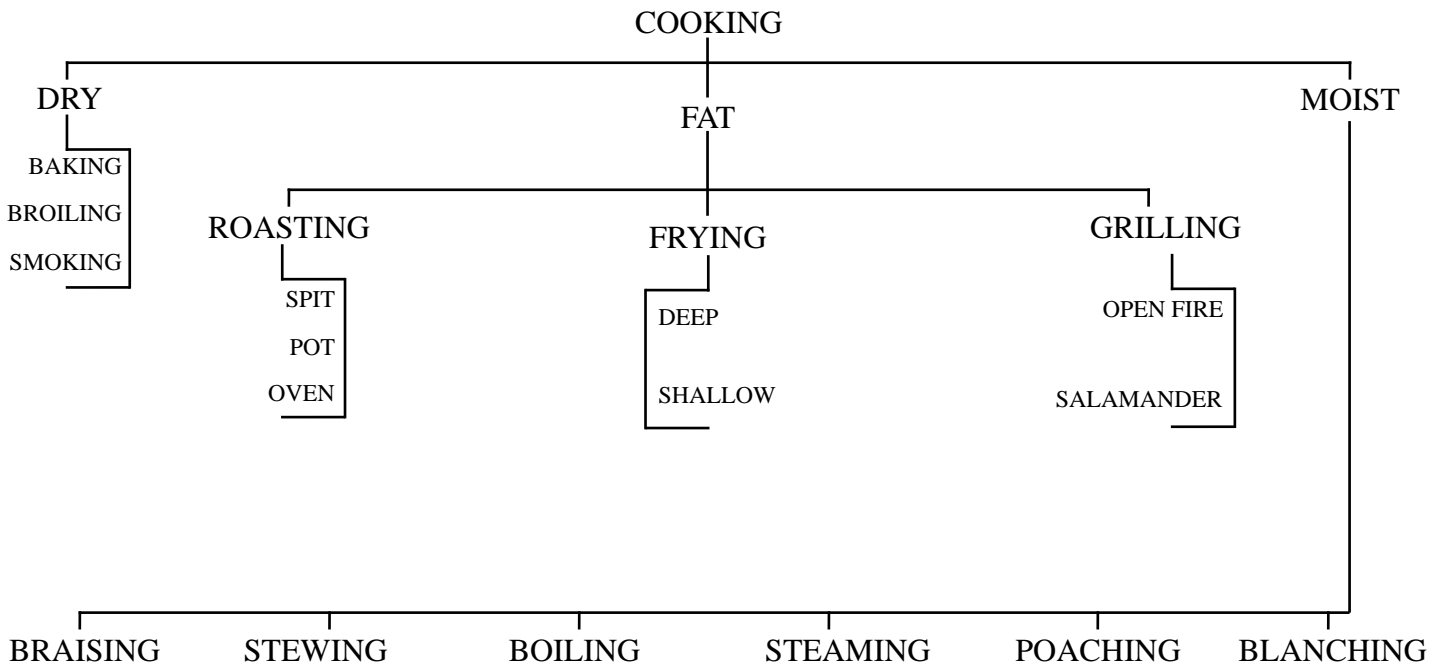
Definition : It is a process to bring about a physical or chemical changes in raw materials either through application or withdrawal of heat.

Changes of Colour Pigments in Presence of Alkali & Acid :-

Colour Pigments	Vegetables	Effect of Alkali	Effect of Acid
FLAVONE	Cauliflower	Yellow	Colourless
ANTHOCYANINS	Red Cabbage & Beet Root	Blue to Green	Bright Red
CAROTINOIDS	Carrot	Orange	Orange
CHLOROPHYL	Green Vegetables	Bright Green	Olive Green

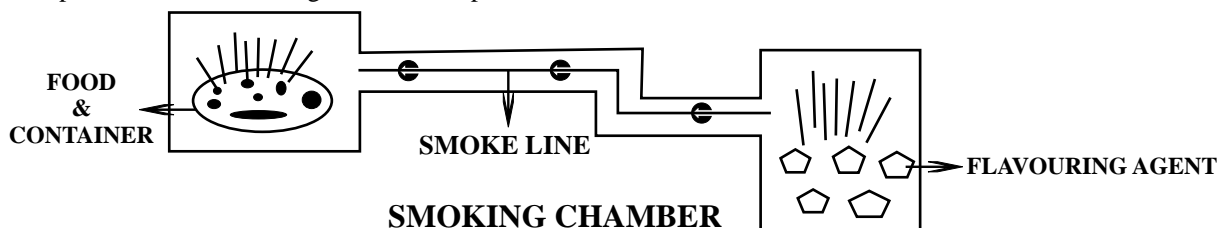
Mainly cooking can be done into 3 ways. 1) Dry Medium, 2) Fat Medium, 3) Moist Medium and all are having different sub-divisions.

Classification of Cooking :-



DRY MEDIUM

1. **BAKING** - In general terms, this is a method of cooking food by dry heat, usually in an oven. Although many types of food can be cooked in this way, the term is most often used to describe the cooking of breads, cakes, biscuits and so on.
2. **BROILING** - A method of cooking food by direct heat under a grill or over a hot fire. Broiling is most often used for making powdered spices from the whole one, for some vegetables for breakfast. This is a fast method of cooking that produces a crisp brown finish.
3. **SMOKING** - The process of preserving of meat and fish by drying them in the smoke of a wood fire. It is essential to use a wood fire and saw-dust is usually thrown over it to create dense smoke. The flavour given to the food depends on the variety of food employed : Juniper, Oak, Beech etc., all give their own special flavour.



FAT MEDIUM

1. ROASTING - A method of cooking foods by dry heat in the oven. Originally the term meant cooking by a fierce heat over an open fire. The heat is still fierce, but confined to the oven space, so the meat retains its juices. This is again having 3 divisions.

- a) **Spit** - In the ancient age, the process, humans used to follow i.e. to cook food against direct flame.
- b) **Pot** - According to the name, food roasted in a heavy pot.
- c) **Oven** - Roasting in a closed chamber.

2. FRYING - A method of cooking food in hot fat or oil. There are various methods of frying, using different quantities of fat or oil. Frying is not popular as it once was because many people are trying to cut down the amount of fat in their diets. However, the newer methods of frying, such as Dry-Frying and Stir-Frying, are healthier methods that, in many cases, can be used instead of more traditional shallow and deep frying.

a) **Shallow** - This is most frequently used type of frying and is a quick method of cooking many different types of food. Shallow frying is frequently used prior to further cooking, for example when browning and sealing in the flavour of meat or poultry before cooking in a casserole, or as the main method of cooking, such as when frying eggs, steaks, bacon etc. Only a small quantity of fat is used, in a shallow frying pan. Most oils are suitable for shallow frying. Butter is not suitable as it burns and smokes at too low a temperature, but clarified butter and ghee can be used, as can a combination of oil and butter. Low fat spreads can not be used as they contain a high proportion of water.

b) **Deep** - This method of frying is suitable for made-up dishes such as Croquettes & Fritters, and also for fish coated with batter and for Whitebait, Chipped Potatoes, Doughnuts etc. It involves immersing the food completely in hot oil or fat, usually in a deep frying pan, which is a saucepan with a wire basket that fits inside it in which the food is placed for frying. Most types of oil are suitable for deep frying. Corn oil is popular as it can be heated to a very high temperature (220°C / 425°F) before it reaches its smoking point. The oil should be pure and free from moisture to avoid any spurting or boiling over. It must be heated to the correct temperature before any food is added, if there is a haze over the oil, it is too hot and the food will burn. If it is not hot enough, it will become sodden with oil.

Temperature for Deep Frying :- The temperature the oil should be heated to depends on the food to be cooked in it. For Doughnuts, Fritters and Fish the temperature should be from 175°C (350°F) - 188°C (370°F). For Croquettes & Potato Chips, the temperature should be about 190°C (375°F). For Scotch Egg and Chicken Kiev, the temperature should be about 160°C (325°F). If you do not have a thermometer, the temperature may be tested as follows: Put one or two 2.5cm (1 inch) cubes of bread into the hot oil. If they take 60 seconds to brown, the temperature of the oil is between 175°C (350°F) & 188°C(370°F), if they take 40 seconds, it is between 188°C(370°F) and 190°C(375°F).

Safety Precautions :- Hot oil ignites whenever heated so care should be taken to avoid this happening when deep frying. Never fill the pan more than 1/3rd full and watch carefully to be sure the fat does not become too hot. Make sure food is dry when it is out into the hot oil and never leave a deep frying pan unattended. If the oil does ignite, never carry the pan to the sink or garden. Immediately cover your hands with a thick cloth and place either the saucepan lid, a metal baking sheet or, best of all, a kitchen fire blanket over the fire. Turn off the heat. Leave until cool enough to handle.

c) **Stir** - Originally Chinese, this is a method of cooking foods quickly in very hot oil. Stir-frying is done in a large frying pan or wok. A little oil is heated to a very high temperature before the food is added in small batches. During the short cooking time, the food is constantly stirred with a spatula so that it cooks evenly. Stir frying is a very healthy method of frying since it uses very little oil, and foods such as vegetables are cooked in a very short time and lose less nutrients than when cooked by longer methods. Stir-frying is ideal for thinly sliced meats, poultry, fish and vegetables. Stir-fried vegetables are cooked until just tender.

3. GRILLING - A method of cooking food by direct heat under a grill or over a hot fire. Grilling is most often used for cooking small cuts of meat (steaks, chops & bacon rashers), poultry (chicken portions), fish (whole or steaks), kebabs, sausages and hamburgers. Most vegetables are unsuitable for grilling, but tomatoes and mushrooms are suitable. Grilling is a fast method of cooking that produces a crisp brown finish. It is also useful for browning the tops of cooked dishes. It is a healthier method of cooking than frying as the food is cooked on a rack in the grill pan, so that excess fat can drip away during cooking. The grill should be thoroughly heated and sometimes greased before use. The distance between the food and the heat source can usually be adjusted, and the heat itself can be reduced or increased. Food is usually brushed with oil or a marinade before cooking, and must be turned at least once during cooking. Grilling can be divided into 2 ways :-

- a) **Open Fire** - In a bed of fuel we generally place a hot plate and on top of that with the help of fat or oil the food is cooked. The other name of this process is Barbeque.
- b) **Salamander** - This is actually an electric or a gas operated machine. A heavy metal instrument that is heated until red-hot to brown or caramelize the surface of the food.

MOIST MEDIUM

This is the process where with the help of heat and moisture a food can be cooked. This is also having 6 various process.

a) Braising - It is a slow method of cooking cuts of meat, poultry and game which are too tough to roast. It is also good for some vegetables. A pan or casserole with a tightly fitting lid should be used so that little liquid is lost through evaporation. The meat is first fried, then cooked on a bed of chopped vegetables with just enough liquid added to cover the vegetables. A braise may be cooked on the hob or in the oven.

b) Stewing - A long, slow cooking method where food is placed in liquid which is kept at simmering point. It is a good method for tenderising coarse meat and vegetables. Stewing may be done in a saucepan on the hob or in the oven.

c) Boiling - Cooking in liquid at 100°C(212°F), which is the boiling temperature of water. The main foods that are boiled are vegetables, rice and pasta. Syrups and glazes that need reducing and thickening are also boiled, as are some sauces. Other foods, such as meat, are often said to be 'boiled' but in fact should be cooked slowly, or simmered, at a temperature just below boiling point. Fast boiling for a longer period causes meat or other foods to shrink, lose flavour and become tough.

d) Steaming - Cooking food in the steam of rapidly boiling water. This is a method of cooking gently, particularly good for fish and vegetables. Special perforated steamers are available, they either fit inside saucepans or stand on top.

e) Poaching - A method of cooking food gently in a liquid at simmering point so that the surface is just trembling. Poaching can be done in an open pan, in the oven or using an egg poacher with a lid. The term is used most commonly for eggs and fish.

f) Blanching - Immersing food briefly in boiling water to whiten it as in sweetbreads, or to remove the skin of such foods as peaches and tomatoes. Vegetables which are to be frozen and kept for a certain length of time are blanched to destroy enzymes and preserve the colour, flavour and texture.