

SHORTENINGS / SHORTENING AGENTS / FATS & OILS

CHAPTER-12.2

Fats are solid at normal temperature & melt when heated . For eg-Lard , Suet ,Drippings, Hydrogenated fat.

Oils are liquid at normal temperature but solidify at lower temperature. For eg:- Coconut oil, Sesame oil, Cottonseed oil , Olive oil, Peanut oil ,Mustard oil ,Corn oil, Sunflower oil.

Fats should be stored in a cold store or refrigerator in warm weather.

(A) BUTTER (LE BEURRE):- Butter must be kept away from strong smelling foods. Butter is produced by churning fresh cream. 1 litre cream yeilds approximately ½ kg butter.

Food value:- butter is an energy food as it has a very high fat content.

Quality:- The taste should be creamy & pleasant. The texture should be soft & smooth. It must smell fresh. The colour of pure butter is almost white or pale yellow. Fresh butter should be used quickly otherwise it goes RANCID (ACQUIRES AN UNPLEASANT SMELL& TASTE) .

Uses:- Butter is used for most kitchen purposes where expenses have not to be considered.

1. making roux for soups & sauces
2. Maitre d' hotel beurre – it means creamed butter, chopped parsley , seasonings , lime juice mixed & put into a butter paper & then refrigerated. .M D H B is the accompaniment for Pomfret Colbert.
3. Used for warm/ hot emulsion sauce Hollandaise.
4. Used for cakes.
5. Used for butter creams.
6. Used in vegetable preparations & pot roasting.

GHEE IS CLARIFIED BUTTER USED IN INDIAN COOKING.

(B) MARGARINE (LA MARGARINE):- Margarine is produced from milk & a blend of vegetable oils emulsified with lecithin , flavourings , salt, colourings & vitamin a &d.

Food value:-Margarine is an energy food & protective food . With the exception of palm oil, the oils used in manufacture of margarine do not contain vitamin a&d , these are added during production . Margarine is not inferior to butter from the nutritional point of view.

USE:- Margarine can be used in place of butter .The difference being that the smell is not so pleasant & nut brown butter (beurre noisette) or black butter (beurre noir) cannot be satisfactorily produced from margarine.

The flavour of margarine when used in the kitchen is inferior to butter , it is therefore not so suitable for finishing sauces & dishes.

It should be remembered that it is equally nutritious & may be cheaper than butter.

ANIMAL FATS

Lard:- it is rendered fat from pig. It has almost 100% fat content.

Suet:- it is from the kidney regions of animals (lamb). Beef suet is the best.

Dripping:- it is obtained from clarified animal fats & is used for deep or shallow frying.

OILS

EXAMPLES OF OILS:-

- 1) CORN OIL
- 2) SUNFLOWER OIL
- 3) SESAME OIL
- 4) ALMOND OIL
- 5) OLIVE OIL
- 6) ARACHIDE OIL (GROUNDNUT OIL)
- 7) COCONUT OIL
- 8) SOYA BEAN OIL ----- LOW SHELF LIFE

HYDROGENATION OF OILS:- Whale oil, cottonseed oil , soya bean oil, peanut oil etc are sold as **SHORTENINGS** of varying consistencies .The conversion of oil into fat is brought about by a process known as **HYDROGENATION**. This consists of treating oil under pressure & at a suitable temperature with hydrogen , in the presence of a catalyst usually **NICKEL**.

Under these conditions the unsaturated fatty acids present in oil combine with the hydrogen. This chemical process brings about a physical change , the liquid oil becoming a solid fat. The varying consistencies are due to the process of hydrogenation being stopped at different stages.

FATS ARE KNON AS SHORTENING AGENTS

THEY ARE USED AS A FRYING MEDIA.

THEY ARE ALSO USED TO ENRICH FOODS.

Collectively they are reffered to as shortening qualities . Their effect is to break down or destroy the toughness of gluten.

So that the resulting product readily melts in the mouth .

THE FACTORS TO LOOK FOR IN SHORTENINGS ARE:-

- 1) Creaming value-it affects the cake volume .
- 2) Shortening value – crispness in wafers.
- 3) Stability-keeping quality.
- 4) Consistency- hardness in puff pastry & softness in cake making.
- 5)Water absorption power- emusification.

RENDERING OF FAT :-

Rendering of fat is the process of melting to extract fat from fatty tissues .A good supply of drippings can be obtained by rendering down suet, (fat obtained from the kidney regions of the sheep or beef).

THIS CAN BE DONE IN TWO WAYS:-

1)Cut the fat into small pieces & place in a baking tray / tin in a slow oven, until the fat has melted & there are only crisp brown pieces of tissues left .Strain through a fine cloth into a clean basin pressing the tissues to squeeze out all the fat.

2)Cut the pieces of fat as above method. Place in a pan without a lid & with very little water .Boil until the water has evaporated & then heat gently , until the fat melts & leaves only crisp brown pieces of tissue. Strain as before.

In both the cases the temperature should not be too high or else the fat will decompose.

CLARIFICATION OF FAT---

This is a method of cleaning used fat . For this process put fat in a pan with enough water to cover . Bring to a boil without covering . Strain & cool .Lift off the cake of fat floating on the top, turn it upside down & scrape off any foreign particles sticking to the bottom . The fat is then heated gently till it stops bubbling, to remove all water particles.
