

UNIT 3

AIMS AND OBJECTIVES OF COOKING

AIM

- The aim or intention of cooking is to see that the food cooked undergoes a physical and at times chemical changes and that the end result is edible and acceptable.

OBJECTIVES

- ▣ It helps to digest the food.
- ▣ Easily to masticate the food items.
- ▣ Enhance the flavour.
- ▣ Cooking retains, nutritive and flavouring ingredients.
- ▣ Cooking gives a variety to the menu, as one item could be cooked in various ways.
- ▣ Cooking pleases the eye and is receptive to the palate and helps to stimulate the digestive juices, thereby creating an appetite
- ▣ Cooking kills the germs present in the raw food items.
- ▣ Cooking preserve food for a longer time.

EFFECT OF COOKING

- ▣ The effect of cooking upon the three chief constituents of food : proteins, carbohydrates and fats.
- ▣ 1) **Proteins:** The protein of meat (myosin), of egg (albumin), of wheat (gluten), of pulse (legumin) is coagulated by heat. Avoid high temp. as the protein hardens, denatures and shrinks and the food becomes indigestible. The connective tissue is converted into gelatine which is soluble in water and rendered digestible.

EFFECT OF COOKING

▣ **Carbohydrates:**

- ▣ **1) Starch:** - starch in food is greatly affected by heat. By moist heat, it is converted first into a soluble form and then by extreme heat into a new substance, sweetish in flavour.
- ▣ **2) Cellulose:** - it is softened by the application of moist heat.
- ▣ **3) Sugar:** - when heated in water dissolves, then colors, upon further heating, turns brown and becomes a caramel and emits a lovely flavour, but does not crystallize.
- ▣ Moderate heat does not cause much loss of mineral salts and vitamins, except vitamin c.

EFFECT OF COOKING

- ▮ **Fats:-** if heated to a very high degree for a long time, fats undergo partial decomposition and fatty acids and glycerol are produced.

VARIOUS TEXTURES

- ▣ TEXTURE : texture is the term used to describe the characteristics of a finished food product. The menu includes dishes that have different textures as soft, crisp, hard, smooth etc.
- ▣ The factors those contribute to the concept of texture:
 - ▣ Appearance
 - ▣ Feel to touch
 - ▣ Softness
 - ▣ Mouth feel

VARIOUS TEXTURES

- ▣ The textures are:
- ▣ Firm and close: - biscuits, tartlets
- ▣ Short and crumbly: - short bread, nankhatai, short crust pastry.
- ▣ Light and even:- madeira or queen cake
- ▣ Spongy: - idlis, khaman dhokla, swiss rolls
- ▣ Flaky:- paratha, patties, vol-au-vent
- ▣ Smooth: - sauces, gravies, batters.

VARIOUS CONSISTENCIES

- ▣ Raising or leavening agents:-
 - ▣ Biological (yeast)
 - ▣ Chemical (baking powder)
 - ▣ Mechanical (whisking, beating)
 - ▣ Lamination (folding, rolling)
 - ▣ Combination of the above.
- ▣ Thickening agents and binding agents
- ▣ Flavourings and seasonings.

TECHNIQUES IN PRE-PREPARATION

- ▣ Washing
- ▣ Peeling
- ▣ Paring
- ▣ Cutting
- ▣ Mirepoix
- ▣ Mincing
- ▣ Meringue
- ▣ Mandolin
- ▣ Macedoine

TECHNIQUES IN PRE-PREPARATION

- ▣ Shredding
- ▣ Slicing
- ▣ Slitting
- ▣ Grating
- ▣ Grinding
- ▣ Mashing
- ▣ Pureeing
- ▣ Pressing
- ▣ Sieving
- ▣ Refining

TECHNIQUES IN PRE-PREPARATION

- ▣ Skimming
- ▣ Rendering
- ▣ Filtration
- ▣ Flavouring
- ▣ Folding
- ▣ Flotation
- ▣ Evaporation or reduction
- ▣ Homogenization
- ▣ emulsification

TECHNIQUES USED IN PREPARATION

- ▣ Beating
- ▣ Blending
- ▣ Cutting
- ▣ Creaming
- ▣ Folding
- ▣ Kneading
- ▣ Marinating
- ▣ Sealing
- ▣ Whipping
- ▣ whisking