Food Technology practical

Lab1

Food Technology

Food Technology: is the branch of food science which deals with the actual production process to make foods.

• Early scientific research into food Technology food technology concentrated on food preservation.

• Nicolas apperts development in 1918 the Canning process was a decisive event.

• Louis Pasteurs research on the spoilage and how to avoid spoilage was an early attempt to put food technology on a scientific basis.

Developments: Developments in food technology have contributed greatly to the food supply and have changed our world.

Some of these developments are:

1. **Instantized milk powder:** it has become the basis for a variety of new product that is rehydratable. This process increases the surface area of poedered product by partially rehydrating spray- dried milk powder.

2. **Freeze-drying:** The first application of freeze drying was most likely in the pharmaceutical industry; however, a successful large - scale industrial application of the process was the development of continuous freeze drying of coffee.

3. **High-Temperature short time processing:** These processes for the most part are characterized by rapid heating and cooling, holding for a short time at a relatively high temperature and filling aseptically into sterile containers.

4. **Decaffeination of coffee and Tea:** Decaffeinated coffee and Tea was first developed on a commercial basis in Europe around 1900. Green Coffee beans are treated with water, heat and solvents to remove the caffeine from the beans.

5. **Process optimization:** Food Technology now allows production of foods to be more efficient, oil saving technologies is now available on different forms. Productions methods are technology have als become increasingly sophisticated.

Food processing: is the transformation of cooked ingredients, by physical or chemical means into food, or of food into other forms, food processing combines raw food ingredients to produce marketable food products that can easily prepare and served by the consumer. food processing typically involves activities such as mincing and macerating, liquefaction, emulsification and cooking (such as boiling, broiling, frying or grilling); pickling, pasteurization and many other Kinds of preservation and canning or other packaging; (primary processing such as dicing, slicing, freezing or drying) when leading to secondary products are also included.

Benefits of foodprocessing:

1. Toxin removal
2. Preservation
3. Easing marketing and distribution tasks.
4. Increased food consistency.
5. It increases yearly availability of many foods.
6. Enables transportation of delicate perishable foods across long distances.
7. Makes many kinds offood safe to eat by de-activation spoilage and pathogenic M.O.s