

## INCREASING USE OF FOOD PRESERVATIVES IN MODERN TIMES

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### Summary –

Safe food has been the mantra of safe life since ancient times. Food, clothing, shelter are the basic needs of human beings. Food is an essential element for the functioning of the human body. Since food is available to us from the elements of nature, humans do not feel the need to make a separate effort for it. In today's era of increasing pollution, food is essential for the body in order to keep our standard of living safer. As humans will always need food and the current food wastage, there is concern about the future of food preservation. For that it is important to understand how to preserve food. Because while preserving food, it is necessary to pay attention to how the quality of food will be increased without reducing it in any way in terms of health. For food preservation, food preservatives in various forms such as domestic, chemical, antibiotic are used to preserve meat, mutton, fish, sea food and other foods. Therefore, in today's time, it is necessary to recognize the need for food protection and think about it.

### Introduction -

Just as living things need food, clothing and shelter to survive. Similarly, all kinds of food grains and cereals are needed for a healthy human body. In the human diet, along with plant and animal foods, the body also needs milk. According to the season, the human body's need for food also changes. In order to meet the need of food grains according to the season, it is very important to preserve the food and keep it safe and its quality intact. For this, food security is an important aspect. Food preservation is not only about storing food but also about maintaining the quality of food.

The changed standard of living and the changed methods of food preservation as per the modern times are to be admired. The traditional methods by which food was preserved in the past have changed in modern times. Modern methods of food preservation have come into existence in the twenty-first century. By which food is preserved for a long time. The use of food preservatives is very important in this. Refrigerators are mainly used in food preservation. Cold storages are being set up in places where there are big projects. Use of refrigerator for household work is a matter of daily necessity. Food is being preserved for a long time through cold storage. Food Preservation, Objectives, Importance of Food Preservation and Is the Increased Use of Food Preservatives Harmful to Human Health? It is important to know this. It is also very important to know the effect of food on the human body. It is necessary to make efforts to strengthen human health through human food preservation, so it is necessary to discuss it in view of the increasing use of food preservation.

### Keywords -

Food Preservation - Preserving food in its original state along with its nutrients by various appropriate proces

### OBJECTIVE OF THE RESEARCH –

1. To study what is food security.
2. To know the purpose of food preservation.
3. To understand various methods of food preservation.
4. To assert the necessity of food preservatives in human life.
5. To study the human health effects of food consumed by food conservators.

### Importance of Research -

Due to the fast pace of life in today's technological age, people cannot pay enough attention to their health, so consuming healthy food can improve human health. It is necessary to process and preserve the food to make it available in all seasons, which is essential for health. But while preserving food, it is necessary to have scientific knowledge of it, otherwise consuming food that has been used with food preservatives can have harmful effects on human health. . This topic is important for that.

### Food Protection -

Food preservation is a method of preserving food for a long time. During the First World War, technological progress gained a lot of importance. As it was not possible to supply food like fruits, vegetables, fish, eggs, milk, milk products etc. to the soldiers during the war, it was necessary to reflect on

this issue. As all these were perishable items, it was not possible for the soldiers to deliver them. That is why the French King Napoleon Bonaparte announced a prize of twelve thousand francs for the scientist who discovers a superior method of food preservation. This spurred research into food preservation and long-distance supply. In the 1860s, Louis Pasteur, a scientist who studied food preservation in depth, discovered that food spoilage is mainly caused by susceptible bacteria. Foods that have been heated to a specific temperature for a specific period of time and immediately cooled to prevent the growth of this bacterium have been shown to last for a long time. Louis Pasteur invented this method and named it 'pasteurization' after himself and this method of food preservation became popular. It is especially used in making food such as milk and milk products, fruit juice, liquor etc.

Since traditional times in India, preparation and preservation of marmalade, pickle syrup and sun drying of vegetables, fruits, curds, papads and grains were followed. This traditional method in India has given rise to the concept of food preservation in modern times.

#### **Importance of Food Protection-**

Since ancient times in our country, food preservation processes have been carried out as proof. Food preservation is done by raising, salting, preserving animal meat, making marmalade, pickles and using it for a year, storing fruits and juices, and picking and cleaning vegetables (eggplant, gram leaves, fenugreek leaves, kardi water, cauliflower etc.). Cut and dried method has been used for many years till date. These are all examples of food preservation. Food security ensures that vegetables, fruits and grains are available in abundance in certain seasons. They can be used in other seasons without spoiling. Crop destruction is stopped. Marmalade, pickles, jam, jelly, gar can be made from the specific fruits that are available in a certain season and they can be eaten at the time of need throughout the year. Similarly, it is possible to prepare food with different flavors from the same food by processing it in different ways. Preserved foods are pre-processed and processed, so it saves the labor of the housewife as there is no need to process it separately every time. The process of food preservation creates employment opportunities in that sector. In countries where these grains and gins are not available, these foods can be easily available through food preservation. This food is used to have a balanced diet in the daily diet. Similarly, due to abundant availability of the material, price fall in the market can also be avoided. And the price is controllable. So food protection is important.

#### **Methods of food preservation -**

There are mainly two methods of food preservation. The traditional method prevalent among these is home food preservation method and another is chemical food preservation method. Food is preserved by killing bacteria and stopping the growth of bacteria. Food preservation by killing bacteria involves heating food, disinfecting it, and using radiation. While preserving food by stopping the growth of bacteria, food preservation is done by stopping the growth of fungi, yeast, bacteria. Both of these methods involve growing, freezing, salting, using small amounts of disinfectants, etc.

#### **Household methods of food preservation -**

Household methods of food preservation date back to ancient times. In which methods such as cooking and sterilizing food, using oil and spices and keeping the water content of food to a minimum are prevalent. The food we eat in our daily life is sterilized by cooking to make it sterile and easy to digest and safe for health by reducing the exposure to germs. Similarly, if kaira is to be preserved, spices are used in it and it is used as pickle throughout the year. In which there are enough substances like salt, jaggery, chili, cinnamon, kalmi, coriander etc. or any fat, they prevent bacteria, germs do not enter and the food remains preserved for many days, years. Similarly, by reducing the amount of water in a substance, it is stored for years. It is used to dry food. There are two methods of drying natural and artificial. Sun drying is a natural method in which the water content of grains, fruits and vegetables etc. is reduced. Thus, rotting of food, growth of bacteria, spoilage of food can be avoided and its usefulness can be maintained for a long time. Different types of electric drivers are used in artificial drying method. Which includes soup powder, milk powder, egg powder, many different syrup powders.

#### **Chemical methods of food preservation -**

Chemical preservatives are used to protect any product made from fruit. This substance keeps food safe for long by chemically reacting with food to stop the entry of bacteria and the growth of bacteria. In this mainly tamarind, curry, fish are preserved by adding salt and sugar syrup etc. is also used. Sugar, salt absorb the water in fruits and vegetables for themselves, so water does not remain in the food. Bacteria do not grow because they do not have access to water. No heat is required while using salt but sugar requires heat. Curry, Amla, Ginger, Garlic, Halkund etc. In this, sour pickle is prepared using salt, while in Amla, Kairi, marmalade is made by heating sugar in the same way, jam, fruit juice is also chemically stored and used as food in different seasons throughout the year.

### Side Effects of Food Preservatives and Remedies -

Any food that we eat hot is always better, it does not cause any harm, rather, the food enters the stomach fresh and the digestion process becomes more smooth. All the nutrients required by the body are not available in all seasons so food is conserved. But even in daily life the quality of food is reduced by storing it. The frequent use of food preservatives in daily life also has some side effects. The use of domestic refrigerators as food preservation is well known.

Keeping food cold in the refrigerator reduces the growth of bacteria in food. Bacteria are most likely to grow in food between 5°C and 63°C. So never keep the fridge at 5 degrees Celsius or below. Place a mercury-free fridge thermometer on the shelf above the salad drawer and check the temperature once a week. Always keep the fridge door properly closed, as the temperature will rise if the door is left open. Also, do not keep hot food in the fridge, as it may increase the temperature of the fridge. Do not store items in the refrigerator for more than five days after you purchase them. Do not keep any food in the fridge for a long time. Then, when you get home, remove the spoiled food and store the perishables in the fridge. But never overfill the fridge. Leave some space in the fridge to allow air to circulate, as this lowers the fridge's ideal temperature and increases the risk of bacterial growth. It is equally important to check the food you keep in the fridge every now and then, because after some time the food in the fridge starts going bad. There is a risk of dangerous viruses being produced in these foods. So whenever in doubt, remove the food. Remove as much air as possible from the bags used for storage to keep food fresher for longer. Keep hot food in a separate container to cool food quickly. Never refrigerate onions. Because by doing this the onion loses its moisture and becomes susceptible to fungus. So onions should not be kept in plastic bags and should never be kept with potatoes. If garlic is kept in the fridge, it becomes rubbery inside. Garlic and onions should always be kept in a dry and cool place. Storing tomatoes in the fridge destroys their taste, flavor and juice. Nutrients are also lost. The best way to store tomatoes is to keep them at room temperature. Tomatoes should be kept in the open for longer shelf life. Tomatoes kept in the open are the same and last longer. Refrigerating capsicum at low temperatures softens the skin of the capsicum and loses its crispiness. Which completely destroys the taste of capsicum. Capsicum is known as a very nutritious vegetable. But using the fridge to keep it fresh makes it worse than staying fresh and its quality goes down a lot.

If the above type of care is taken while preserving the food, it can be energizing for the body without harming the health.

### Conclusion –

Pure and sattvic diet is the key to human health. Psychiatrist of Nanavati Hospital Dr.VaniKhullali says, "Diet and mental health are interdependent. Adequate nutritional intake and mental illness are closely related." It has been proven. The brain needs energy to function. This energy comes from food. A balanced diet provides the nutrients the brain needs to stay positive. It improves brain function. The use of food preservatives is like a double-edged sword, it is necessary to know the scientific methods of food preservation and use it accordingly. Otherwise, the use of food preservatives can be harmful to human health.

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