

## Food Technology and Developments

Lisa Samson\*

Department of Nutrition and Technology, South Institute of Nutrition Sciences, Thailand

\*Corresponding author: Lisa Samson, Department of Nutrition and Technology, South Institute of Nutrition Sciences, Thailand, Tel: 9632587406; E-mail: Samson.L@gmail.com

Received date: December 03, 2021; Accepted date: December 17, 2021; Published date: December 24, 2021

Citation: Samson L (2021) Food Technology and Developments. J Food Sci Toxicol Vol.5 No.4

### Commentary

Food Technology is a science that deals with the every aspect of food from production to packaging. This is not any modern science; it has been followed from our ancestors without knowing the principle and just following the procedure. In 1810 a scientist named Nicolas Appert has discovered the process of canning where the products are packed in an air tight container which totally prevented the growth of micro-organisms and hence prevented the food spoilage. When Nicolas discovered the process he did not get the principle behind it but followed it because it worked exceptionally.

Louis Pasteur is another scientist who worked on the spoilage of wine and ways to prevent it. He has discovered many procedures of producing daily products like cheese, butter. Louis Pasteur has discovered a procedure known as "Pasteurization" which is heating milk to the certain temperature for a specific period of time to kill the microbes present. This procedure got him a great appreciation and was very useful for the preserving purposes.

The Food technology has got development in the recent past in order to process and maintain the sustainability of the food available. Some of the innovations include: milk powder which the spray dried form of milk which is being widely used in the present day; this totally reduces the chance of spoilage. Freeze drying is another procedure which is used preserve the food, this is mostly applied for the pharmaceuticals and instant coffee mix. Another procedure of rapid heating and cooling and packing them into a sterile container is also applicable. In some

cases the food is exposed to radiation where all the micro-organisms are destroyed and the chances of spoilage reduces.

Boiling of the food to remove the moisture in it is another method followed to preserve food it also helps to kill the microbes. Burial is a method where the food is buried in the sand or soil, this ensures that humidity, temperature required for the long storage of the food, it is used particularly for meat. Confitting is another method where meat is salted and heated up to 100°C and then immersed in fat. Smoking and salting are very old yet perfect techniques where both of them work on the principles like deposition of pyrolysis products and osmosis respectively. Fermentation is a process where we use micro-organisms to combat other pathogens; it is very useful in the case of dairy products and even alcoholic beverages.

These days many modern techniques are also utilized like vacuum packing where the food packs are usually filled with vacuum to reduce the oxygen availability. Food preservatives like antioxidants and antimicrobial agents like Sodium nitrite, Butylated hydroxyl anisole and Butylated hydroxyl toluene. Electroporation where food is placed in between the electrodes and then the setup is subjected to electric field; this kills the microbes by enlarging the pores of cell membrane.

The population of the world has become so large that the produces food is not enough to feed all of them, so we must surely protect the produced food and preservation plays a major role in it.