

Post-Harvest Management Protocols

READY TO EAT (RTE) FOODS

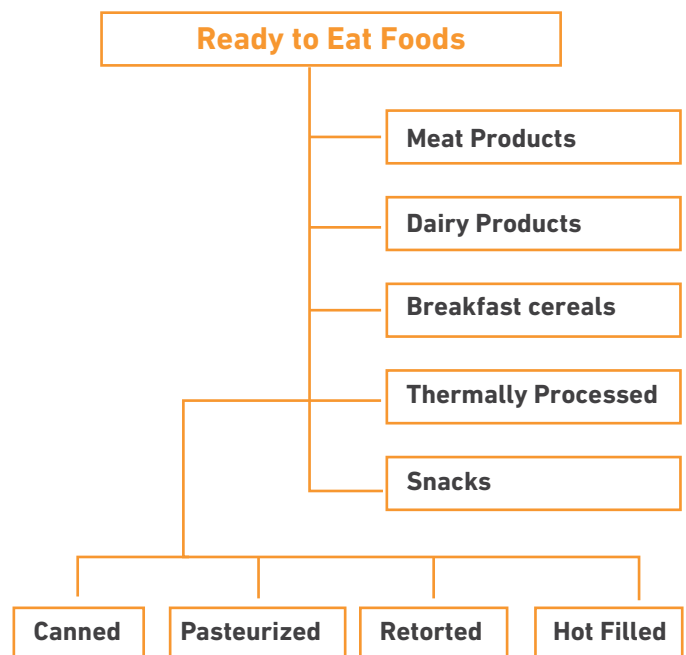
India has made significant progress in Agriculture and Food sector in terms of output as well as processing of food. The ready to eat (RTE) segment has emerged as one of the fastest growing sectors in the food industry. Ready-to-eat (RTE) foods are a group of food products that are pre-cleaned, precooked, mostly packaged and ready for consumption without prior preparation or cooking. According to the 2009 US Food code (FDA, 2009), RTE foods should be in an edible form without an additional preparation step to achieve food safety.



Foods in this category usually contain raw materials of plant or animal origin, such as eggs, fish, meat, poultry etc, and must be cooked to allow the lowest internal temperature to reach a minimum temperature, for a minimum holding time, during manufacturing to destroy microorganisms of public health concern. In an industrial setting, the cooking step is achieved by thermal processing using steam, hot water, microwave, or infrared. A properly processed and packaged RTE food should be free of the target foodborne pathogen and ready for consumption.

The total size of the country’s processed foods market is Rs1500 crore, of which the Ready to Eat markets is Rs.225 crore this year with an expected growth rate of 25 – 30% over the next 5 years. This shows the enormous potential for increasing the customer base and increasing the size of ready to eat foods. The major players in the RTE foods include MTR, Kohinoor foods, ITC, Haldiram’s, Tasty Bites and Priya.

CATEGORIES OF RTE



PRESERVING READY TO EAT FOODS

Long shelf life of ready to eat packed foods is made possible by several food preservation technologies. But each of these have certain merits & demerits. Below are the two techniques:

- In this technique, food is cooked and stored in multiple layers of pouches which are then 'Sterilized' resulting in removing bacteria that cause food decaying or poisoning. These pouches have a shelf life upto a year and the consumer just need to heat the contents before serving. Bacteria need moisture and oxygen to grow. In the thermal process, after cooking a food, it is sealed and is put in a retort chamber that heats up the sealed container at 120 degrees centigrade. This process helps to ensure that the nutrients are locked in, and you can keep the food at ambient room temperature for a long time. The thermal process gives food longer shelf life. A few companies fill in nitrogen in order to be absolutely safe as nitrogen acts as a safe preservative which hinders bacterial growth in food.
- Another technique involves adding oodles of 'Oil' and 'Spices' and keeping the water content as minimum as possible.

STORAGE GUIDELINES

The ready to eat frozen foods such as usually stored as French fries, kebabs, potato wedges, aloo tikki, chicken kebab, burger temperature of -18 to -20 °C. They have a storage shelf – life of 9 to 12 months.

The ready to eat foods such, Rice, Poha and vegetables including gravy items can be stored at ambient temperature with a shelf life of up to 12 months.

