

Using the power of technology to ensure milk safety

Since time immemorial, safeguarding food safety and hygiene, especially for perishable products such as milk has remained a challenge. Fortunately, the arrival of UHT treatment worked as a breakthrough technology in this case. UHT or Ultra High Temperature sterilises liquid food by heating them at a high temperature for a very short while, but which is long enough to eliminate harmful elements.

This treatment occurs rapidly inside a closed system before milk is transferred into a sterile six-layer carton from Tetra Pak. Following this procedure, the quality, colour, texture, taste, and nutrition of milk is retained successfully. Furthermore, this technology makes it possible for unopened milk to last for up to

retained successfully. Furthermore, this technology makes it possible for unopened milk to last for up to six months at room temperature, without the need for refrigeration or use of preservatives to prevent spoilage.

This machanism is widely

preferred by industry leaders, such as Akij Food and Beverage Limited, as the MD and CEO of Akij Venture Group, Syed Alamgir mentions, "In AFBL, the end-to-end process is facilitated by world class technological inventions to include machineries that are designed to maintain consistency in terms of quality and timeliness. One noteworthy technology that is also known to be the only one in our country is aseptic filling."

"Without any doubt, food packaging and storage play the most vital role in the entire value chain," he adds. "Starting from raw materials to the end product, if any of them are not duly packaged or stored, it will eventually hamper the consumers."

Thus, it is of utmost importance that raw milk is treated and packed appropriately by using advanced technologies, such as UHT treatment and Tetra Pak's sterile packaging to ensure safe consumption for everyone.



The altering consumer trends in milk consumption

Most people, if not all,
may agree that our former
generations consumed a
higher amount of liquid
milk than we do. Given

"Currently, there are so many alternative forms to consume milk which were not available previously, such as cheese, yoghurt, milk powder and flavoured milk. So, although milk is not directly consumed as it was done before, people are consuming it via other means, which also reduces the dependency on plain milk," he said.

He also shares that there is an increasing popularity of UHT milk among the urban

populace. Consistency in quality and better convenience are two key inherent benefits of appropriately packaged milk. The UHT treatment combined with sterile packaging makes it possible to store milk for longer and consume it anywhere on the go, even while travelling.

Apart from that, UHT milk and Tetra Pak's sixlayer packaging come together as a powerful force to combat the problem of milk security. By creating suitable conditions for milk to withstand ambient temperatures for long, the produce can be UHT treated and stored for when production is low, whilst making it available during all seasons.

"The benefits of UHT milk are aplenty, which meets the needs of the consumers, processors and retailers as well. Furthermore, its storage capacity makes it



possible to meet high seasonal demand too," said Rahman

Milk is a versatile and sensitive product that is consumed by everyone for both commercial and individual purposes. Starting from children to adults alike to include ailed patients and pregnant women as well, milk stands as a fundamental component of both the dairy and food industry.

Consequently, it is of immense importance that milk is treated and packed properly, in the best manner possible. Making sure of this will also warrant food safety and security to a great extent, and make it possible for the dairy industry to thrive and proliferate further.

By Fariha Amber





The role of dairy hubs in ensuring milk security

Have you ever wondered about the process your store-bought milk goes through before safely reaching your home? Well, among many other factors that facilitate this process, dairy hubs play a crucial role in ensuring milk security and availability for all.

the rich nutritional

value contained in

milk, this may seem

like a concerning issue

Senior Director at BRAC

positive light.

Mohammad Anisur Rahman.

Enterprises views this under

superficially. However,

In 2002, PRAN Dairy Limited pioneered the efficient and systematic "hub model," where they work at the grassroots level to collect raw milk from farmers, which is then transferred to Village Milk Collection Centres (VMCC). From there, it is delivered to milk hubs and finally towards the factory for processing. At each stage of this process, temperature is carefully regulated and quality parameters are checked.

After that, either milk is pasteurised following cold chain procedures or UHT treated. However, as seamless as this procedure may sound, factors such as the monsoon climate of our country where supply of electricity is also unstable make managing the cold



chain rather difficult

"Taking these factors into account, UHT technology combined with aseptic packaging is preferred," remarked Md Muniruzzaman, Executive Director of PRAN Dairy Limited.

"UHT treatment gets rid of harmful bacteria and the six-layer sterile packaging keeps quality intact at ambient conditions, that too, without the use of any preservatives," he explained.

This helps safeguard food security and availability for people, reduce food wastage, and facilitate food handling and storage.

"Passing milk through the UHT procedure drastically reduces the bacterial count and this system is able to kill some specific germs, which is often not possible via other processes. It is an internationally recognised system that is safe in every way," said Muniruzzaman.

Bangladesh's thriving dairy industry

The dairy industry of Bangladesh, in all its glory, is one of the primary economic drivers of the nation. It has developed considerably in the past few decades with the incorporation of advanced technology along with better methods of processing and packaging. In addition to that, the altering trends in milk consumption has also played a pivotal role in transforming food production systems.

Needless to say, along with these factors, the major players of the dairy industry also deserve their fair share of appreciation as contributors in this significant development. While the industry leaders are progressing in their preferred ways to advance the dairy industry farther, one common notion that is shared by all is the importance placed upon the usage of UHT milk and Tetra Pak's six-layer aseptic packaging.

Aseptic technology ensures the safety and nutrition of food for a longer period without the use of refrigeration or preservatives. This can be the probable solution to some crucial underlying problems within the dairy industry, whether it is the issue of safeguarding food safety and hygiene or ensuring food availability and security. This has affected the purchasing patterns and consumer trends of milk consumption as well.



Photo: Pran Dairy, Brac Enterprise, Akij Venture Group