





"You are what you eat," the saying goes. And 'what you eat' is a matter of endless discussion, debate and concerns too, from diets and yummy recipes to the worries and perplexities surrounding food safety.

Let's zero in on food safety! After all, it is World Food Safety Day today. And it is also a major issue to be dealt with in Bangladesh, as it is all across the world; during the pandemic, it is even more crucial.

On this special occasion, Star Lifestyle brings you various info and insights on food safety, which we hope shall help you in making more informed choices as an aware and health-conscious consumer.

If you think about it, with so many myths, theories, offerings in the market, unanswered questions and misconceptions, it can be a whirlwind of confusion for people.

One big concern is of course food adulteration; and stories such as usage of harmful — or overdoses of — preservatives are not unheard of. And then there is the issue of food processing and technology. Does processed food automatically mean 'unhealthy food'? Not really!

We also need to keep in mind that we can't farm and produce food mindlessly. There must be science behind it, and the science used for it should come with the promise of both availability and safety of food — plus, the promise of putting less stress on the

If you think about it, with so many myths, theories, offerings in the market, unanswered questions and misconceptions, it can be a whirlwind of confusion for people.

In the centre of it all are, well, you and me — the consumers! In any given day, we take numerous decisions on food, striving to choose what's best for our children, trying to secure a healthy tomorrow.

In fact, the theme of this year's World Food Safety Day has aptly been set as: 'Safe food today for a healthy tomorrow'.

Therefore, we look at many aspects involving food safety; particularly focusing on milk, as it is something which is on everybody's grocery list, an item which has immense nutritional value, and also a food on which people seem to have many questions and queries about when it comes to its safety.

UHT milk has created a buzz among consumers, and much has been talked about its sound packaging, long shelf life, etc. So, we've spoken to experts, industry leaders and trendsetters in the national and international arena and as well as consumers, to scoop out essential insights we all should know.

On the other hand, what are some of the latest technological advancements — such as aseptic technology by Tetra Pak — that have stretched the horizon of food safety without reducing its nutritional value? Also, what are your rights — and with equal importance what are your responsibilities, as a consumer?

Dive into our special issue of Star Lifestyle to find all these out and much more. Here's to a healthy tomorrow!

Bv M H Haider Photo: Sazzad Ibne Saved









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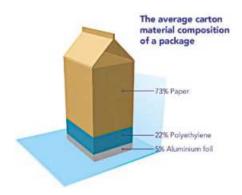
Food safety innovations you just cannot miss

The month of June celebrates something we all love — food! There have been many technologies innovated and introduced globally that serve to ensure that absolutely the safest and best food is delivered to consumers. While there are quite a large number of them worth mentioning, some have just topped the list and are unconditionally worth knowing.

Aseptic Technology by Tetra Pak

The aseptic technology introduced by Tetra Pak makes sure that food, along with the packaging materials, relevant processing equipment as well as the packaging environment itself, has been made completely sterile. This technology keeps food safe, fresh and retains its nutrients for as long as six months, that too without refrigeration or preservative addition.

According to the Tetra Pak website, "UHT treatment requires both a sterilizer and an



aseptic unit (for packaging the product). The goal is to maximise the destruction of microorganisms while minimising the chemical changes in the product. That means finding the optimal combination of temperature and processing time for different types of food.

"Tetra Pak offers two alternative methods of UHT treatment: direct or indirect. In direct UHT heating, steam is briefly injected into the product, and this is rapidly followed by flash cooling. The brevity of the treatment makes it possible to achieve very high product quality. With indirect heating, the product does not come into direct contact with the heat source, but is instead heated using heat exchangers."

The packaging material is the next step



to keeping the food safe, and Tetra Pak has that covered just as well. Made essentially from paper, Tetra Pak cartons comprise of 75 percent paperboard, 20 percent polymer, and 5 percent aluminium.

Heat and pressure are used to fix the above-mentioned materials together, forming a six-layered 'shield' which protects the food from environmental factors. As the microbes in the food are already deactivated through aseptic processing, the aseptic packaging allows the product inside to stay fresh, without the need of any preservatives. The pack need not be refrigerated until opened.

Retortable carton technology

The Tetra Pak website states, "Retorting is an in-container sterilisation process where both the package and its food contents are exposed to high pressure, high temperature in a humid environment for a longer period of time. The time and temperature exposure are dependent on which food product is being sterilized and will vary also between different producers with the same type of food product.

"Retorting is a tough process for any package type and has traditionally mainly been used with metal cans and glass jars. With Tetra Recart, it is now possible to have a carton-based package managing the tough retort process. The major challenge

when developing Tetra Recart was to find a packaging material structure that would be able to withstand the conditions inside a retort and manage a shelf-life up to two years. Each layer in the package has its own specific purpose and together, they keep the food inside the package safe."

Safety aside, what makes Tetra Recart so unique is that it is environmentally sound. Tetra Recart has been hailed as 'canned food, but two centuries smarter.'

It has smaller carbon footprint in comparison to its conventional glass jar and can counterparts. After comparing Tetra Recart packages with glass jars and steel cans, it has been deduced that Tetra Recart has a significantly lower environmental impact. Tetra Recart packages are mainly made of renewable materials — wood fibres. Tetra Recart also takes up 30 percent less space than cans and glass jars and are lightweight (they weigh about 60 percent less than cans).

Use of automation in the food industry

This has been one of the most revolutionary changes in the food industry. Automation and analytics combined, can improve the traceability of raw materials and foods from the field all the way to order fulfilment.

Special mention goes to use of 'dynamic' QR codes for traceability. These codes are used to track and trace products to ensure that it is of the highest quality and fit for human consumption. Dynamic QR codes also enable consumers to trace the origin of their food, and get detailed information about the product.

Automation makes quality control more efficient because it gets easier to notice issues earlier in the supply or production processes. Machines are precise, which helps keep everything standard in a way that is difficult to achieve with humans.

Automation systems and equipment can perform, monitor, or control dangerous tasks, thus limiting the dangers that workers have to face. Automation can help businesses move better and faster than it would if relied solely on human workers.

Human workers often have to be retrained to adapt to new systems. Digital automation does not carry the same disadvantage as systems are easier to repurpose. If laws or industry standards change, then software or hardware adjustments are all you need to get back into compliance quickly.

Role of adulteration kits and laboratory

Adulteration kits have been developed that detect the presence of contaminants, pesticides, food-borne pathogens and other toxins.

Most detection kits comprise of reagents that will undergo certain colour change when added to the food being tested. The most striking advantage of these kits is that they give instantaneous results.

In addition, there are many laboratory sensors that are able to detect adulterants or contaminants in food. The most recently developed are the nanoparticle-based ones, termed as nanosensors. These are adept in identifying a wide range of food contaminants — pathogens, pesticides, fertilisers, carcinogens, heavy metals, to name a few. Nanosensors provide very specific and accurate results.

No matter the number of innovations, food safety cannot be fully ensured without backup of the law. One such example is the highly appreciated Food Safety Act 2013, which has encouraged food safety in Bangladesh and reinforced its importance in the country.

By Faiza Khondokar Photo: Collected **#CHECK IT OUT**

Food safety is everyone's responsibility

Time and again we have been reminded of the dire condition of food safety in Bangladesh. Although positive steps are being taken and some praiseworthy initiatives are in place, we still have a long way to go in ensuring safe food for all.

The important thing to understand is that it is a collective responsibility. From farmers to consumers, and from corporations to the government, there is a staggering number of stakeholders or entities involved, and any chain is only as strong as its weakest link.

We are in this together. As the dictum goes, food safety is a shared responsibility.

Consumers have a huge role to play in this.

"It is not possible for one single institution or stakeholder to fully control food safety," Monzur Morshed Ahmed, member, Bangladesh Food Safety Authority (BFSA) said, explaining, "There may be an eatery or shop in a neighbourhood where adulterated food is being sold, and it sometimes happens that the locals will know of this prior to any formal regulatory body. And if the locals take action (inform the authority, or refuse to buy from there),





the seller will be bound to rectify."

One can think of it simply as a demandand-supply thing. "The more aware and conscious demand side (consumers) will be, the more responsible supply side (businesses) will become," said Khalilur Rahman Sajal, Executive Director of Voluntary Consumers Training & Awareness Society (VOCTA).

He added that it is then in turn the responsibility of governmental and non-governmental bodies to educate consumers and create awareness on food safety. Consumers must be made aware of their rights.

Among various laws, the Food Safety Act of 2013 has been a monumental step in providing a proper legal framework, appreciated by many, including the consumer rights activist Khalilur Rahman Sajal, who commented, "This law is very



much adequate, but what's lacking is proper implementation."

In this regard, Monzur Morshed Ahmed of BFSA pointed out, "There is a humongous difference between making a law and implementing it. We have to keep in mind our capacities, circumstances, consumer awareness level, budget, etc. Change does not happen overnight. What's important is whether we are moving forward or not, in the right direction. If that's happening, we will get the results gradually, in course of time."

He further said BFSA in addition to regulation and monitoring undertakes several campaigns to raise consumer awareness on food safety, through various media and formats, such as advertisements and cultural events and programmes.

On the other hand, a bulk of responsibilities surely lies on the supply side.

Let's look at just one sector: milk, something we can all relate to.

Professor Raihan Habib, head of the Department of Dairy Science in Bangladesh Agricultural University, expressed his concern on the farmers' end, an early stage of the supply chain. "Generally speaking, training, awareness, and governance are so poor that many farmers cannot deliver high quality milk," he said, adding that many do not even have refrigerators or proper storage facilities for milk.

BFSA's member, Ahmed, also showed a similar concern. "A lot can happen in the time period between milking the cow and handing over the milk to a processing plant." he commented.

There is also the responsibility of enforcing good agricultural practices, not only to ensure nutrition and safety, but also for agricultural sustainability in the long run. "We have to research or look into

not just food safety, but food security as well.

Explaining with UHT milk, he continued, "Milk is given an ultra-high temperature treatment for just a limited few seconds, which kills off harmful bacteria and other injurious components, thus making it safe to dripk

At the same time, we have to take into consideration food security -- the continuous availability of milk. Milk has seasonal fluctuations in our country. And UHT milk, in smartly packaged aseptic cartons, can last for several months in room temperature. Hence, surplus processed milk can be used to compensate for fluctuations in supply."

The professor also stated that honesty is crucial among the middlemen, observing that the formal market of milk is significantly small when compared to the informal one. And of course, we all know informal market is more difficult to monitor or regulate.

Dr Habib opined that a lack of transparency prevails in the overall dairy sector in general.

In addition to that, it also ought to be noted that unsafe food is not always due to unscrupulous activities. Sajal said, "We have to keep in mind that food sometimes becomes unsafe unintentionally. It is not always for an ulterior motive. We must identify and curb unintentional adulteration of food as well, by ensuring proper infrastructure, system, and awareness."

Indeed, a lot needs to be improved in terms of food safety. But to put it simply, if all of us do our bit -- as a consumer, as a cook, seller, intermediary, regulator, or a farmer -- we can surely one day ensure safe food for all. Food safety is truly a shared responsibility!

Well, the casually termed 'supply side' is of course an immensely complex value chain spanning numerous stakeholders; farmers, middlemen, food processors, food handlers, retailers, etc.

available data and find out what systems work best for our country, be it in terms of cow breeds or cow feeds," Dr Habib said.

When it comes to milk, the processing industry plays a huge role in maintaining

By M H Haider Photo: Collected





SECRET TO FOOD SAFETY

The right processing and packaging

Concerns related to safe food processing, packaging and transport, while a constant area of monitoring and innovation, have come to the fore anew due to the Coronavirus pandemic that has gripped the world for over a year now.

Food packaging is generally a sterile process anyway, as it requires the utmost care to stave off contamination and hence avoid compromising on quality or safety, the viral element of the pandemic ensured that people all around the world became more aware and concerned about the what and how of food packaging.

Some fresh produce can be packaged simply and does not spoil easily within the purview of a few days, but an essential component of human diet, dairy, is not only perishable, but is vulnerable to spoiling within a few hours of production. Obviously, this increases concerns about access to safe milk and milk products, and the choices become apparent between chilled and straight-from-farm options, or the frozen option, to the more long lasting UHT processed milk available on the shelves.

Although for all-natural produce, the freshest is preferred. But the complications in transportation and preservation of quality of milk makes it necessary to let technology take precedence, especially one which can increase the shelf-life of the product without affecting the nutritional value or safety of the food. This is where the UHT process comes in.

The ultra-high temperature treatment used in the production of UHT milk kills all microorganisms, increasing the shelf life of fresh milk by months. The milk is packed in an aseptic package that protects it from light, oxygen, moisture and air, and the entrance of microorganisms, rendering it safe for months without the need of refrigeration or preservatives. There is simply no need to add preservatives into a UHT treated product, as there are no active microorganisms present in the milk. This is where UHT milk becomes a more viable

option than straight from farm.

The fact that UHT milk is packaged in Tetra Pak cartons brings all the benefits of the safe packaging to the dairy market. "The biggest benefits of packaged food have always been the promise of hygiene, safety, long shelf-life, lesser likelihood of adulteration, convenience, and easy access. This has only become more pronounced during the pandemic," said Ashutosh Manohar, managing director of Tetra Pak

UHT milk in Tetra Pak cartons stays fresh for six months unopened, and the easiest way to see the dates for safe consumption are to check the dates on the package. But once opened and exposed to the natural elements, it must be refrigerated, and consumed within a couple of days. The fact that UHT milk does not require refrigeration until it has been opened is an added attraction for a consumer base like the one in Bangladesh, wherein a large number of people are not living in fully urbanised areas with access to electricity and personal refrigerators. In this case, UHT milk in small singular packages can be the perfect answer.

"For example, workers in the garment industry and manufacturing in general in Savar, Gazipur and Narayanganj find it very difficult to access milk daily due to scarcity of raw milk. They have no gas connections or refrigeration either. UHT milk with its long shelf-life and no need for boiling is one of the most important ways for them to meet their daily nutritional needs. In fact, we have been running a 'UHT Bondhu' programme under which, a mobile (milk) retailer goes door to door where retail distribution is challenging," stated Manohar.

"Also, the convenience of not having to boil the milk periodically and ensuring on time refrigeration can be a critical decisionmaking factor. For consumer groups like young professionals living independently across the country, working mothers trying to juggle between home and work who rely of ready-to-eat, ready-to-drink options for their convenience, UHT milk in Tetra Pak cartons is a suitable answer," Manohar added

It is not just milk that is a concern, as the production cycles in agriculture create skewed supply curves that show abundance in one season and scarcity in the next. Apart from enhancing storage capacity, adopting sustainable but long-lasting processing and packaging is a viable option.

The power of aseptic processing and packaging in not just limited to milk.
Consumers are warming up to many new

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health-focussed categories that promise good health and safety.

"There are categories like juices, especially some health and immunity focused ones like 100 percent juice which are becoming increasingly popular among the health-conscious consumers. We are also very positive about the ORS (Oral Rehydration Solutions) which has traditionally been seen only as a solution for the problem of dehydration or diarrhoea. The ready-to-drink ORS is being looked at as a safe, ready to consume alternative to

the traditional way of mixing powder in water manually because this eliminates any risk of poor quality of water or incorrect dosage. It is also being adopted as a rehydration drink for consumers with active lifestyles, like gym-goers, those into active sports and those with field jobs.

"We also see immense potential for solutions like Tetra Recart which can help extend the shelf life of foods like peas, corn, mangoes, purees, sauces and more. Anything that would traditionally be packed in an aluminium can, can be offered in a Tetra Recart package, at a fraction of the environmental impact, and potentially result in reducing food waste in the country. We are very excited about bringing this solution to South Asia," Manohar added.

One big question that is often asked when talking about packaged food is – what about the packaging waste after the food in it has been consumed?

"Waste as such is not the challenge, efficient disposal of it is. It really boils down to making informed choices – what is the source of the packaging material? Can it be recycled? Tetra Pak cartons are for instance already over 70 percent paper, and recyclable.

"Most importantly, it's not just a question for us, or brand-owners, it is a question for all consumers – because change starts at home by making the right choices and then doing the right thing. Something as simple as choosing a paper-based package and putting waste in the right bin after consumption," Manohar explained.

"Packaging has its inherent benefits that cannot be denied. Think about absolute essentials like water or milk – how do you access them safely on the go, without packaging? If it comes in an environmentally sound package like a Tetra Pak carton, that's more than half the battle won," he concluded.

By Sania Aiman Photo: Collected



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

six months at room temperature, without the need for refrigeration or use of preservatives to prevent spoilage This mechanism 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-toend 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



The altering consumer trends in milk consumption

Most people, if not all, "Currently, there are so many alternative forms to consume milk which were not available previously, may agree that our former such as cheese, yoghurt, milk powder and flavoured milk. So, although milk is not directly consumed as it generations consumed a was done before, people are consuming it via other means, which also reduces the dependency on plair higher amount of liquid He also shares that there is an increasing milk than we do. Given popularity of UHT milk among the urban populace. Consistency in quality and better the rich nutritional convenience are two key inherent benefits of appropriately packaged milk. The UHT value contained in treatment combined with sterile packaging milk, this may seem makes it possible to store milk for longer and

> 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

consume it anywhere on the go, even while

possible to meet high seasonal demand too," said

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.

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

"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

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

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



Balancing Food Safety and Sustainability

Today's consumers are extremely wellinformed; they not only want safe food from manufacturing companies and brands. but also do not want this access at the cost of the planet. For some organisations, sustainability is not a new phenomenon but something that is embedded in their DNA, even as they step up efforts to ensure that they run a responsible business, that not only cares for people but also the planet. One such organisation is Tetra Pak, the world leading processing and packaging company that has long been known for their commitment to sustainability. We spoke to Jaideep Gokhale, Vice President, Sustainability for the Asia Pacific at Tetra Pak to learn more of their efforts.

Can you please describe for us how Tetra Pak's technology is an ideal example of balancing food safety and sustainability?

The primary role of a Tetra Pak carton is to deliver safe food to everyone, everywhere. The magic is in the aseptic processing and packaging technology which first helps make the food safe through a unique UHT (Ultra High Temperature) treatment and then keeps the food safe till the package is opened thanks to a special 6-layer aseptic packaging. This combination ensures that food inside our cartons can remain safe, retain its nutrients and can be stored up to six months without the need for any preservatives or refrigeration.

While on one hand the carton keeps the food safe, on the other hand, it does this with the lowest carbon footprint compared to any alternative packaging used for similar products. More than 70 percent of the carton is made of paperboard, a

Today's consumers are extremely well-informed; they not only want safe food from manufacturing companies and brands, but also do not want this access at the cost of the planet.

renewable material, sourced only from responsibly managed forests. The carton is recyclable and can be recycled into various materials like paper and panel-boards (to replace wood). So, when you choose a Tetra Pak carton, you are not only choosing a package that is good for you, but one that is also good for the planet.

We can see that India has advanced significantly in recycling of Tetra Pak cartons. What have been the success factors that Bangladesh can adopt?

In India, we have been fairly successful but we still have a long way to go. The biggest contributing factor in our progress has been our 'value-chain approach.' Every stakeholder is involved in the successful and efficient waste management system. It's not the sole duty of the manufacturers only, the consumers to the government and municipal bodies are proactively involved to make the system successful.

Here, we have also invested more than 17 years in building an ecosystem with the support of all these stakeholders, working tirelessly to keep strengthening it year after year.

We believe a similar initiative in Bangladesh, a slow but effective method, can definitely help bring similar results in keeping the country clean and help recover wastes in a way that can be recycled into valuable materials that is useful for the society.

Other than the end of life of a carton, what is Tetra Pak's focus when talking about environmental sustainability?

At Tetra Pak, we are working to support the sustainable future of our planet and the long-term success of our customers, as well as the success of our own business. These ambitions are embedded in two of our Strategy 2030 goals: to lead with low-carbon solutions for a circular economy, and to enhance sustainability across the value chain, from sourcing to production to the end of life of our products. This includes minimising emissions and waste, protecting biodiversity and ecosystems, maintaining fresh water availability, and promoting recycling and circularity.

How has COVID-19 impacted your view of the need for balance between food safety and sustainability?

The COVID-19 pandemic has disrupted the status quo, accelerated trends, and created a new landscape of consumer needs and opportunities for companies to build on. In particular, the industry needs to address the growing dilemma around food safety and the environment, stepping up towards the twin goals of meeting the human need for food while protecting our planet's ecosystem. This is where food packaging can play a strong role in bringing about harmony.

Working closely with our customers and stakeholders, we are already on a journey to create the ultimate sustainable food package — a carton package that is made solely from responsibly sourced renewable or recycled materials, is fully recyclable and carbon-neutral, allowing ambient distribution and meeting food safety requirements. We see this as a critical step in building a sustainable future for the next generation, especially in the aftermath of COVID-19

Are you also seeing a shift in consumer consciousness towards this issue?

Yes, absolutely. A study released by Tetra Pak in late 2020 shows a 10 percent increase in global concern about food safety and future food supplies. Additionally, more than 50 percent of consumers not only believe that improving food safety is a major responsibility of the manufacturers; they also see it as their 'number one' priority to keep them satisfied.

When asked what the major point of concerns were amongst the consumers besides ensuring food safety, they expressed concerns regarding environmental impacts, innovations regarding a more 'sustainable packaging approach' for a better today and tomorrow.

Interviewed by MMC



Milk has always been considered an ideal food and therefore, the demand was always there. If you live in a village and you know a farmer, you can get freshly collected milk every morning. But what happens if you don't know a farmer (it happens) or what if you live in a city like Dhaka?

You can always pick up a pack of UHT milk, but you are probably worried about its nutrition value and wondering if it's even safe to consume milk that comes in these packs. Well, we are about to bust the common myths revolving around them so you can make your decision based on facts.

Myth: UHT milk lasts long because of preservatives

Reality: UHT Milk does not need preservatives for a longer shelf life. These products have long shelf life because of the way they are processed by using UHT (Ultra-high temperature) milk processing technology.

"This process removes all harmful bacteria such as salmonella, Brucella abortus, toxoplasmosis and a whole host of other critters that can cause intestinal distress or worse such as tuberculosis, brucellosis, salmonellosis and other lifethreatening diseases," said Chowdhury Tasneem Hasin, Principal Dietician at United Hospital Ltd.

Myth: Pasteurised milk is safer than UHT milk Reality:

Many believe that because pasteurised milk has a shelf life of only about a week, it

is somehow more 'natural' and 'healthier' and 'safer' than UHT milk. The truth is, Pasteurized milk has a maximum shelf life of seven days

and requires refrigeration because there are some bacteria still alive in the pack which reduces the shelf life. UHT process eliminates all bacteria, thus prolonging the shelf life.

Myth: The pack can spoil the milk Reality: It's a fair question — a pack of n

Reality: It's a fair question — a pack of milk that has a shelf life of about six months, won't the packet affect the milk? Won't the pack get compromised and spoil the milk itself? The answer is — no!

Tetra Pack uses an innovating 6-layer package that forms a barrier against light, moisture and oxygen, making the packet air tight and sterile, protecting it from unwanted changes or spoilage in the product.

Myth: Processed milk is less nutritious
Reality: The most common myth about not

any processed food is that they lose their nutrition value.

"The calcium, as well as other minerals such as magnesium and potassium in milk, are not altered by either process (Pasteurisation and UHT). Both milk are still excellent sources in and magnesium needed for

just milk, but

types of milk are still excellent sources of calcium and magnesium needed for growing bones and teeth and healthy hearts," added Chowdhury Tasneem Hasin pointing out that the slight difference in nutrition values (which are negligible) can happen to any food and anywhere because of the cooking methods.

Myth: Loose milk is better

Reality: If you are adamant about using freshly collected milk for your cooking then sure, go for it. But remember, loose milk is collected by hand and you have to boil them before you can use them in any dish or drink them. If you fail to do it properly, there's a risk of food poisoning.

UHT Milk on the other hand, ensures food safety and hygiene. The product itself as well as the pack is sterile, making it a safer option. it is also creamier and thicker than regular milk which makes it ideal for cooking purposes.

Myth: It's milk so it must be refrigerated and boiled

Reality: Because the UHT process kills all bacteria and the milk is then packed in a sterile container which prevents any exposure to external elements and the product lasts up to six months without refrigeration or preservatives. Once opened, it must be refrigerated and will last for another few days. As for boiling, the packaged milk already goes through the UHT process in which it is exposed to ultrahigh temperature and then cooled. So, one could drink it without even boiling.

Myth: You can't drink milk because you are lactose intolerant

Reality: Lactose intolerance is caused by the inability to digest lactose, the main carbohydrate in dairy products. Digesting milk can be a real challenge for lactose intolerant people but one can actually get lactose free milk these days.

As an ideal food, milk never lost its appeal and it never will. But it's time for you to make a decision. Safety comes first while consuming the elementary part of your diet and UHT milk is a very safe option compared to others.

By Ashif Ahmed Rudro Photo: Sazzad Ibne Sayed

Rising consumer awareness

— a propeller of the dairy industry

The dairy industry is diverse with several milk-based products, and with so many available options to choose from, consumers now demand a higher degree of safety and nutrition from their food. Not only that, consumers in all sectors depict an increasing level of awareness and seek more information regarding the food they purchase.

Alongside, people are now opting for healthier options and cautiously monitoring what they consume. Such can be seen by the rising trend of purchasing properly packaged meat, swapping rice for quinoa, choosing fresh over frozen and avoiding junk food.

It comes as no surprise that the country's economic development and higher affordability coupled with the prevalence of various diseases and fear of food adulteration brought forth this phenomenon. In order to gain further insights on this topic, we discussed the altering and current trends in consumer demand for higher safety and nutrition from food with three industry leaders.

Md Muniruzzaman Executive Director, PRAN Dairy Limited

"Without a speck of doubt, the demand for healthier food categories is on the rise. Addressing this trend, we introduced a line of 100 percent pure fruit juices under the brand name 'Latina," said Muniruzzaman. "Furthermore, in order to ensure superior quality and packaging that retains the flavour and nutrition of food, we opt for aseptic packaging," he added.

Aseptic packaging is a form of packaging that stores food in a sterile and tamper-evident carton, preventing any chances of

adulteration and protecting food from any external influences like air, water, sunlight, bacteria, etc. Tetra Pak's six-layer aseptic packaging ticks all the boxes and is the first choice for industry leaders.

"It eliminates the usage of preservatives, there exists no scope of food contamination and it is a viable option to guarantee longer shelf life, making it the first choice for great packaging," he said.

He also noted that maintaining transparency with customers has to be a synergistic process, where it is the manufacturer's responsibility to communicate appropriate information and the consumer's responsibility to understand the importance of proper packaging.

Mohammad Anisur Rahman Senior Director, BRAC Enterprises

Being the pioneer when it comes to rewarding customers with new ranges of dairy products, Aarong Dairy opts for nothing but the best for its consumers.

"The rise in consumer awareness and demand is always a positive factor, as this compels processors to meet their growing needs and enrich the market by introducing new products," remarked Rahman.

A relatively newer form of milk is categorised by UHT milk, where the main differing factors from pasteurised milk lies in the treatment and packaging methods. UHT milk is heat treated at a very high temperature and packed into sterile containers to eliminate all harmful materials and elongate its shelf life.

With this notion, the company ensures safe and secure food by using Tetra Pak's six-layer aseptic packaging.

"The aseptic packaging that is currently

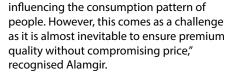
used for UHT milk not only warrants safe consumption of food, but considerably reduces the detrimental impact on the environment as well, as it is paper-based and recyclable provided we have the required technology and facility," he informed.

However, he also agrees that it is equally the responsibility of consumers as it is of producers to safeguard food safety and prevent health hazards. By checking the ingredients, nutritional value, dates of manufacture and expiry, along with seals from authorised food regulatory bodies such as BSTI and BFSA, consumers can ensure this.

Syed Alamgir

MD and CEO, Akij Venture Group
"Given the economic condition of our

"Given the economic condition of our country, pricing plays a vital role in



UHT milk combined with aseptic packaging, although pricier, is unmatched in terms of superior quality. Thus, it is the duty of consumers in this case to understand the benefits that come along with the slight increase in price, and make their purchase decisions accordingly.

"The packaging material used must preserve the taste and quality of food, ensure maximum shelf life, prevent leakage and decay of food over time, and mitigate the risk of contamination by air-borne bacteria," he said.

He also agrees that it is the consumers' right to know what they are paying for, which is why in Akij Food and Beverage Limited, the information printed on food packaging is very comprehensive, not only covering data that is legally mandated but extending to include additional information as well.

Over time, the rise in consumer demand for higher safety and nutrition content from food is foreseeable, whether it is the growing demand for healthy food categories, packaged food, or greater awareness about ingredients and labels. Thus, consumers must make informed decisions regarding their purchases, keeping in mind that the quality of packaging and treatment of food plays an essential role in the safety attributes as well.







Encouraging healthy eating habits amongst children

There is perhaps not a single mum in the world who would agree that meal times aren't a battle zone and that they never had any difficulty feeding their offspring with healthy meals.

Peer pressure, commercials or even siblings at home, encourage children to take up junk food at the beginning, and then the battle from there to get them rolled back into a healthy lifestyle becomes an uphill struggle.

However, switching to a healthy diet can have an immense effect on a child's physical and psychological growth, helping them to maintain a healthy weight, stabilise their moods and even sharpen their minds.

Here we have spoken to few mothers to find out what they do on a regular basis to maintain a healthy lifestyle of their children.

Masuma Akhter, 32, an Executive Director at a local garments factory, and mother of two girls

I make sure that my girls drink milk every day. And since it is difficult to get farm to table milk on a daily basis in an urban city like Dhaka, I give my girls UHT milk, procured from the market. This milk is completely safe and full of nutrition, which is extremely necessary for bone build-up and growth. Sometimes, the girls don't want to have direct milk so on those days I feed them special concoctions like shakes, puddings, or even cakes.

And veggies are also a must; if they don't want to have boiled greens then I make a veggie recipe, which they would





appreciate, like a ginger-veggie soup or even a homemade veggie pizza with gluten free flour, homemade cheese toppings, and fresh greens.

Parvin Begum, 57, a homemaker, and mother of two teenagers

My secret is very straightforward; I make sure to involve my children in whatever I am making for the day. From shopping for groceries to lending a hand at setting the table, they are always involved. This has definitely helped my kids understand the value of a home-cooked meal and the time that is invested behind each meal. And perhaps, this is why both my children enjoy a meal at home rather than going to the restaurant.

My kids love fruit juice, but I'm always concerned about how safe the juice is when I buy it from the market. I now buy 100 percent juice as beverage for my children because of the nutrition and safety.





I do make sure to check the label to ensure that there are no preservatives. To me, sustainable packaging of food is as important as home-cooked meal. Because of this, I prefer buying carton packs instead of any other plastic packaging. Because, the carton that the juice comes in is paper-based and contributes relatively little to the carbon footprint; I personally believe every mother should be conscious on this aspect and teach their children about home-cooked meals and the importance of recyclability of waste products from every source, especially food.

So mums, what is your secret to ensuring good nutrition for your child?

Daily dose of milk is required for healthy bone construction and growth, while at least two servings of fruits and veggies keep your child's immune system strong and ensure gut-health. Whether it's hiding veggies in your child's favourite snack or converting UHT milk into a yummy strawberry smoothie for the teenager who dislikes the taste of milk, every mother has her own tips and tricks to keep their children healthy and safe.

The most important thing to remember is to make sure that whatever your child consumes is clean, safe, full of nutrients, and free from chemicals. When buying fresh food from a farm or the open market, always make sure that you know of the origin of the product and clean it thoroughly before cooking to kill any bacteria etc. Better yet, choose packaged food as much as possible, but only one that assures you of good quality and safety, without relying on chemicals like preservatives.

Final words

All in all, what can be said is that there is no right or wrong method to raising a child or feeding the little ones with good, nutritious food. What may work for someone may not strike a chord on another. Since there's no final proven technique, every method that comes to mind must be tried and tested before making it permanent.

Healthy meal options instead of junk food

By speaking to few more mothers, we have discovered some alternatives for a healthy and happy lifestyle.

Rather than making...

French fries, ice cream, fried chicken, doughnuts or pastries

Try to make...

Grilled carrots, baked tomatoes, sautéed mushrooms, yoghurt with fruits, flavoured milk, baked or grilled chicken, homemade milkshakes with flavoured milk and fruits

By Momma & Mumsy Photo: Sazzad Ibne Sayed





