

22nd Edition

NOVEMBER


Abhyudaya

Reliving the Legacy

BLOCKCHAIN AND THE FUTURE OF FOOD

DRIVING EFFICIENCY TRANSPARENCY AND
TRUST IN FOOD SUPPLY CHAINS

2019

Words from the Editor's desk...

This Issue

Did you hear about the rose that grew
from a crack in the concrete?
Proving nature's law is wrong it
learned to walk without having feet.

Funny it seems, but by keeping it's dreams,
it learned to breathe fresh air.

Long live the rose that grew from concrete
when no one else ever cared.

-Tupac Shakur

To all the distinguished readers

On behalf of team Abhyuday, I humbly present to you the dussehra edition from the 54th batch of CFTRI; Soup-a-stars .

Industry buzz is here to keep you abreast of all the new policies and to make you crave for some new products in the market...

Learning new things never goes out of style; our alumni Ms. Subhaprada Nishtala is here to share her knowledge with us in cover story about block chain. And don't miss her talk reminiscing over her memories of CFTRI days, especially happy ones; let's stroll down through the memory lane in Alumn column.

CFTRI energy is something else, so come be a part of it as we take you through the happenings in and around the CFTRI recently in Kampus Khabar section.

Food incorporated: it's all about Aashirvad atta!! Scroll down to see many alluring facts about it.

Have you had the pleasure of dining on a century egg? Discover the origins of this Chinese delicacy also known as the thousand-year-old egg in What The Food section.

Extracurricular activities are crucial if you want to boost your career prospects. Discover the best hobbies to put on your CV in Career column.

Life after CFTRI will be full of new experiences and challenges, here's our alumni Mr. M D Deepak to share his interesting journey and inspire us in experience talk.

Photography; a small effort to capture the bewitching beauty of our campus.

Congratulating our seniors and wishing them all the success in placement section and the collection of brain-teasingly tricky riddles in games section will have you scratching your head in puzzlement.

I hope you, our dear readers, keep the magazine dynamic by giving your valuable comments and inputs, thus keeping the spirit high as always.

Without revealing any further details, we invite you to turn the pages and witness glimpses of the student life at CFTRI. Look closely, you might find details of the year that was, and probably a hint of the promises the next year holds!



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About Abhyuday.....

Emerging as a pioneer in food research in 1950 and continuing to provide an impetus to the food and allied sectors, CFTRI is the backbone of food-based scientific as well as industrial developments in India. The genesis of Abhyuday owes itself to the heritage that was created by the great minds that have been a part of this institution ever since the beginning and emerged from here as successful individuals spreading the glory of this place far and wide.

Abhyuday is a Sanskrit word which means beginning or awakening...

Awakening for re-inventing the vigour and strength by breaking away from the shackles of mediocrity and sombreness...Awakening for being the change and leading the way...

The e-newsletter, it is expected, would try and achieve its goal of promoting dissemination of the right and benign knowledge and act like an umbilical cord that would keep us connected to our mother institution.

Industry Buzz will include the past months developments in food industry viz. M&A, new product launches, new market entrants, market reviews, inventions and innovations etc. The Cover-Story will talk about a mind boggling relationship between food and our mind. What The Food! will shed light on the interesting and lesser known facts about food. Kampus Khabar will attempt to track the campus news, developments, conference and seminars, tech-talks by our alumni. Career Corner would be the space where articles related to interpersonal and communication skill development, interview etiquette, CV writing skills etc. would be stressed.

The most exclusive of all the sections would be the Experience Talk which will feature technical articles, literary and artistic works, tweets and blogposts, creative and memorable contributions by our distinguished alumni. Also, we shall run a feature on one prominent CFTRIian in any field in each edition in Alumn Column.

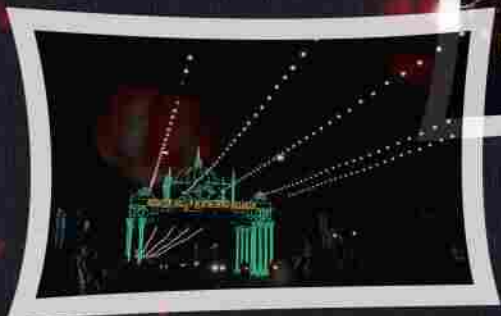
Besides, updates regarding upcoming seminars and events, congratulatory messages on birthdays and anniversaries, placements and promotions of alumni will also be featured. Advertisements from industries and entrepreneurs will also be featured for free. With a view to ensure the involvement of the readers and make the experience worthwhile, some games like crosswords, food quiz, jigsaw puzzles, riddles etc. would also be incorporated.

Its Dussehra time again!!!

The time when Mysuru will get dressed up like a newlywed bride and every street looks like something straight out of a Disney movie. The auspicious festival of Dussehra, celebrated in myriad ways in our city is a spectacle to behold.

Through this edition, we are presenting you all, a glimpse of Dussehra celebrations of Mysuru along with our other spectacular columns.

We hereby, wish our dearest readers, May the good triumph over the evil and may you achieve the strength and courage to follow the path of righteousness.



Happy Dussehra

BLOCKCHAIN AND THE FUTURE OF FOOD

Driving Efficiency, Transparency & Trust In Food Supply Chains



The blockchain is, in essence, a technology to store and access data. As such, each “block” stores a finite set of data and transactions, while the “chain” connects all the blocks in a fixed order. The present dataset is determined by following the chain from the first to the (current) last block and resolving the transactions in each block. As a result, the blockchain not only holds the present dataset, but also the complete transaction history. The way the blockchain is built and operated offers several advantages when compared to a classical electronic database or, unsurprisingly, a paper ledger. Most of blockchain’s immediate advantages stem from one of the most basic principles around which blockchain technology is developed: *Decentralization*

Decentralization of data leads to increased transparency regarding the transaction history. Each participant in the blockchain network shares the same dataset, meaning everyone holds the actual documentation of the data. When data are changed, everyone receives the new status quo almost immediately. This does not hold true for local copies of centralized data, especially when it comes to transactions that are performed on paper. However, the increase in transparency does not ignore the demand for privacy. Data can be made available only to the holders of permissioned access, e.g., by means of cryptography. As a result, a properly set up blockchain is at the same time more transparent than, and at least as private as, a conventional database.

The shared transaction history can only be updated through consensus. The way this consensus is reached depends on the validation method of a given blockchain. In the case of the Bitcoin blockchain, the most prominent use of blockchain technology, a “proof of work” algorithm is used. Consensus on the present dataset is reached by the majority of calculating power in the network. The size of the network does have an immediate effect on the robustness of the proof of work consensus: To attack the Bitcoin blockchain is nearly impossible because the attacker would have to amass a very large amount of calculating power to outscale the existing network. Private networks that solely rely on proof of work do not, however, have the size required and are more vulnerable to attackers.

An overview of how blockchain is being used to improve food and agriculture supply chains around the world. The blockchain community has come a long way over the past couple of years. We have moved from a focus on cryptocurrencies to a wider understanding of different ways we can leverage blockchain technology across industries. There are more than fifty different initiatives focused on food and agriculture around the world that are doing more than just raising funds through an ICO (Initial Coin Offering) to build a platform. I have listed the six main ways I am seeing blockchain applied to food and agriculture supply chains

1. TRACEABILITY

The most common use of blockchain in food and agriculture supply chains is to improve traceability. It enables companies to quickly track unsafe products back to their source and see where else they have been distributed. This can prevent illness and save lives, as well as reducing the cost of product recalls. Information being collected and the stakeholder groups involved varies based on the needs of the groups behind each initiative.

The IBM Food Trust initiative started with their collaboration with Walmart China and Tsinghua University, and has grown into a global consortium that includes big names companies such as Dole, Driscoll's, Kroger, Nestle, Tyson, and Unilever.

Frank Yiannas of Walmart has said that the improved data traceability provided by the IBM platform reduced the time it took to trace a mango from the store back to its source from seven days to 2.2 seconds. That reduction in time enables companies to identify contaminated supply chains and recall affected products before they are consumed and cause illness.

Blockchain is not the only technology changing the way things are done when it comes to agricultural supply chain data.

What makes many initiatives noteworthy is how they combine blockchain with other technologies, such as IoT (Internet of Things), and AI (Artificial Intelligence). This can be especially useful because it removes the likelihood of human error — whether deliberate or accidental.

Several companies are demonstrating different ways IoT can be used with traceability initiatives.

- Automatic Identification (AIS) sensors used by Viant's partners in Fiji - AIS transmitters were installed on their vessels and operate continually to track and monitor fishing activities. Fish are tagged with a sensor when caught; that sensor interacts with the AIS transmitter to record both the time and exact location. The location data confirms that the fish were caught in a place where fish stocks are not over-exploited.
- ZhongAn Technology, based in Shanghai, has a platform called Bubuji that puts sensors on chickens when they reach a certain size. The sensors not only track the location of the chicks, it also allows customers to see how much they moved on a daily basis (think of it as an exercise and location tracker for chickens).
- Walimai has a sensor it places on baby formula canisters that registers when the canister has been opened. If a customer scans the QR code on a canister to learn about the supply chain they can confirm that the can has not been tampered with.

2. COMMODITY MANAGEMENT

Agricultural commodities are big business, and commodity managers have been plagued by data management challenges and payment time lags. Blockchain is enabling innovation that addresses these issues by providing cloud-based agricultural commodity management services recorded onto a blockchain, thereby creating cost-effective, efficient and world-leading agri-commodity management and supply chain solutions.

Eg: the Australian company AgriDigital completed the world's first farmer to buyer wheat sale recorded on a blockchain; since then they have run pilots for food traceability and supply chain provenance, real-time payments, digital escrows and supply chain finance.

3. MARKETPLACE CREATION

A major challenge for commercial food companies is sourcing quality ingredients in sufficient quantity. Farmers may not know who the big customers are or what end customers are looking for. Historically, intermediaries have controlled a significant percentage of profits. Digital marketplaces allow buyers and growers to connect directly, increasing the amount of profits that go to the farmers, and investors to invest directly into farms producing commodities and then trade on that investment.

Avenews-GT is an Israeli-based company that has created a trading platform which allows commercial buyers to find the growers who have what they need. Their first projects allowed coffee-buyers to find coffee growers in Rwanda, and cattle farmers in South Africa to find alfalfa to feed their animals, request a digital quote and manage payments all within the Avenews-GT platform.

4. DATA SHARING

Companies that buy or invest in agricultural products have an inherent interest in having information about the product before they commit to a purchase. This can include everything from salt and sugar levels in tomatoes, which would affect flavor, to crop health information, which can help banks and others predict whether a farm will be able to repay a loan.

California-based Ripe.io collects data from sensors, spreadsheets, manual surveys and other sources along the supply chain to give commercial buyers detailed information about product attributes. Their first project tracked tomatoes from Ward's Berry Farm in Massachusetts that were destined for the salad chain Sweetgreen. Data points such as light, humidity, air temperature, tomato color, salt and sugar content, and pH levels were entered into the blockchain. Tracking this information helped Sweetgreen get the tomatoes into customers' salads when they were at their best and reduced waste from spoilage.

5. ACCESS TO CAPITAL

Tech savvy agricultural entrepreneurs are now using blockchain to create investment tokens and raise funds for their agricultural businesses.

This helps small farmers who lack significant credit histories, do not have land ownership documentation, which makes it difficult to access bank loans.

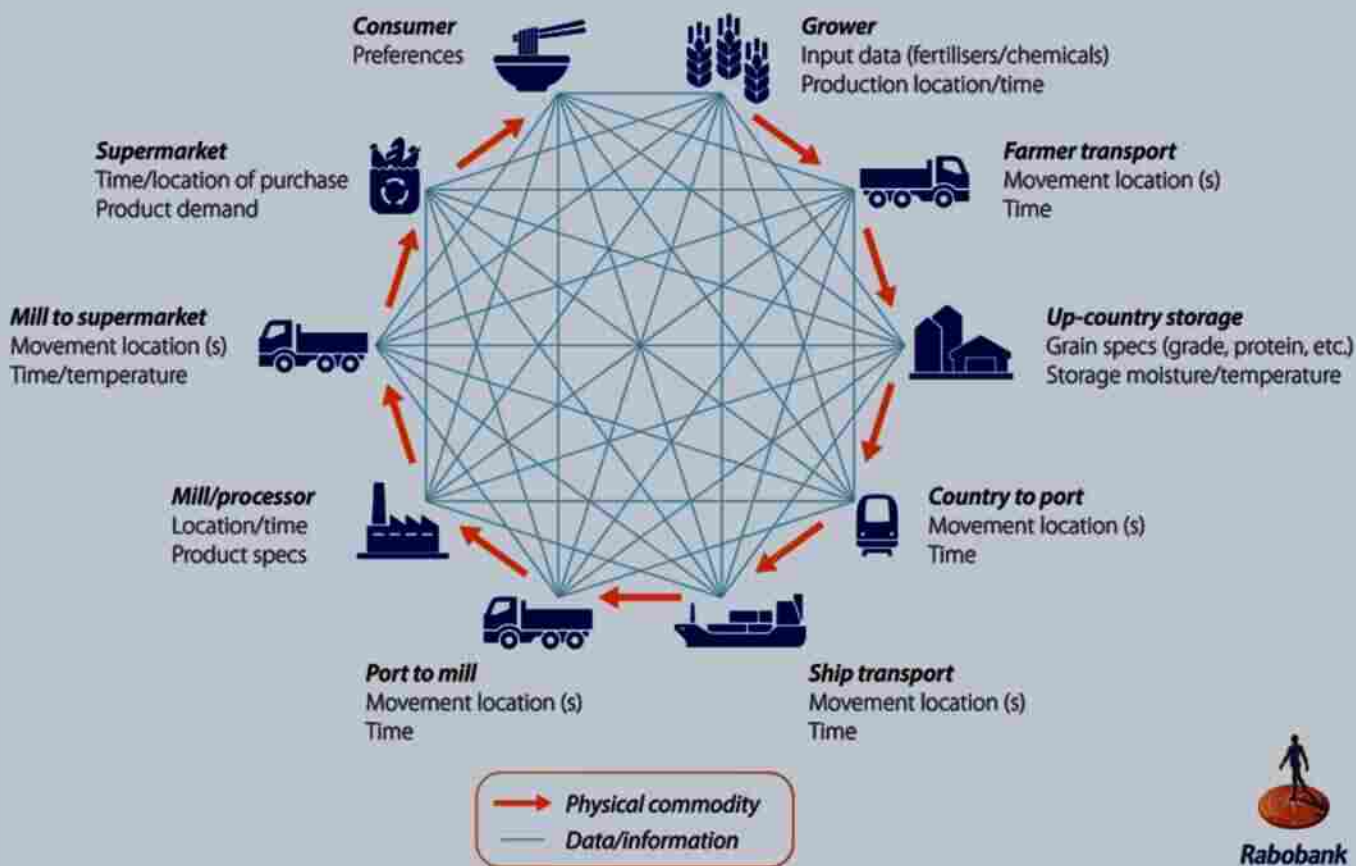
In Mexico, Agrocoin has created an investment token to enable investors at all levels to support agribusinesses across the Americas. Their first offering funded was a token backed by a square meter of habaneros being grown by Amar Hidroponia in Quintana Roo, south of Cancun.

6. PAYMENTS

While there is much more to blockchain than just cryptocurrency, payments are still a critical issue for small farms and other businesses in agriculture.

San Francisco based Veem is used by Las Vegas-based online tea distributor Tealet to pay more than 30 different farmers and suppliers in different countries across Africa and Asia. Tealet founder Elyse Peterson has spoken extensively about how her frustration with fees as high as 12% and long clearing times, sometimes five days or longer, for international payments led her to work with Veem. The Veem automated platform uses blockchain to convert payments from the source currency and then into the local currency in more than 80 receiving countries, including China. International payments are processed and available to vendors in one to three days, with a 1.9% fee.

In conclusion, whilst there are still many hurdles to overcome before this technology is a widely accepted supply chain tool. Resistance to change and the need to integrate blockchain solutions into complex IT systems are two of the primary obstacles that impede the technology's adoption. However the food industry is under increasing pressure from customers and government agencies to change the way its products are made and delivered, and it seems inevitable that blockchain will be a key part of its response





Subhaprada Nishtala
(Batch 1996-98)
Director-in-Charge
ITC-FSAN, FSSAI

Alumn Column

1. What was your batch name and story behind it?

Our time was before the practice of naming batches started. Ours was the first batch which wrote an entrance exam to qualify.

2. The first thing you did in CFTRI but never done before?

Oh – there were many! Not maybe all suitable for sharing here though. Some of the memorable firsts were dancing late into, or rather early into the morning, playing TT, cooking full course meals on our small heaters, eating a breakfast of only Bengali sweets (thanks to K C Das at ICFOST)

3. How were your intro-sessions and can you share some experiences or memories of the same?

Our intro sessions with our seniors started with serious gyaan but ended with a bit of reverse ragging – as we went out of our way to way lay them in groups and wish them. They delightfully took us to see the Brindavan Garden.

Our ragging session for our juniors included some fun stuff like them reading a newspaper to the tune of songs from Silsila.

4. Can you share your best memories with your juniors and seniors?



Our seniors encouraging us to see an Ajay Devgn movie called Gangaajal which was really bad-they however praised it so much that we went to see it – uff.. can still hear them laugh at us when we returned that night from the most boring movie we had ever seen.

5. Who was the best Maggie maker in your batch for birthdays?

Rohini Tiwari! Cook par excellence...we still talk about her maggi!

6. What do you miss the most in CFTRI?

My friends, the endless hours of talking and walking and railway station ki midnight chai

7. Best take-away from CFTRI?

Pride in the institute and great friends

8. Any embarrassing moment in CFTRI?

Being caught out after mass bunking a viva exam

9. As an alumni, kindly share us a piece of advice...

Cherish these 2 years, build strong friendships and connect with your seniors. We need to build on the strength of our alumni

INDUSTRY BUZZ

Mrida unveils Earthspired millet-based quick cook & serve upma, khichdi

06 September 2019



Mrida, through its FMCG (fast-moving consumer goods) brand Earthspired, has launched healthy millet-based quick cook n' serve upma and khichdi. Earthspired millet upma is a special multi-grain, gluten-free mix of foxtail millets, Bengal gram and spices. High in complex carbohydrates, dietary fibres and proteins, this ready-to-cook (RTC) upma makes a wholesome, nutritious and tasty breakfast/snack option. Available in 200g packs, these products are available on Amazon, BigBasket and Mrida's site, earthspired.com.

For more information log on to:

<http://www.fnbnews.com/Food-Processing/mrida-unveils-earthspired-milletbased-quick-cook--serve>

Dr Oetker FunFoods Professional launches Veg Mayonnaise Smoky Peri-Peri

18 September 2019

Dr Oetker FunFoods Professional (DOFFP), a leading player in food service for western sauces and spreads, has launched a trendy new flavour, Veg Mayonnaise Smoky Peri Peri. The variant is thick and creamy. It is infused with Peri Peri Chilli and a smoky note, which adds spicy zing to sandwiches, burgers, wraps, French fries and much more. The product will be exclusively supplied to hotels, restaurants, cafés, bakeries and caterers.

DOFFP's range consists of over 150 products that enable leading QSRs (quick service restaurants), restaurants, cafés, and local eateries across the country to delight their customers.



For more information log on to:

<http://www.fnbnews.com/Top-News/dr-oetker-funfoods-professional-launches-veg-mayonnaise-smoky-periperi-51787>

Cornitos launches flavoured nuts and seeds

20 September 2019



Cornitos, the flagship brand of Greendot Health Foods Pvt Ltd, India's leading nacho crisps brand, has launched flavoured nuts and seeds under its Pop N Crunch range. The range includes Premium Cashews, California Almonds, Roasted Salted Pumpkin Seeds, Sunflower seeds, Party Nut Mix, Premium Salted Peanuts and Coated Green Peas.

Cornitos nuts and seeds are cholesterol-free and have zero trans-fats. Additional health benefits of high protein, fibre and Vitamin E make it suitable for most age-groups. It is available in all retail outlets across India.

For more information log on to:

<http://www.fnbnews.com/Top-News/cornitos-launches-flavoured-nuts-and-seeds-under-pop-n-crunch-range-51812>

Dairy Day launches premium tubs of ice cream in 3 new flavours

30 September 2019



Dairy Day, a leading ice cream brand, has unveiled mini premium tubs in three flavours, viz. Gajar Halwa, Gulab Jamun and Rose Kulfi, "Dairy Day's Gajar Halwa, Gulab Jamun and Rose Kulfi are a unique blend of ice cream and sweets that are prepared using traditional recipes that preserve the authentic flavours of the product. The company was founded in 2002 to manufacture and supply approximately 150 products in over 30 flavours. The range of products include a variety of cups, cones, sticks, tubs and other novelties.

For more information log on to:

<http://www.fnbnews.com/Dairy-Products/dairy-day-launches-premium-tubs-of-ice-cream-in-3-flavours-for-dussehra-51895>

Mondelez India introduces Cadbury dark Milk

04 October 2019

Mondelez India has introduced a new taste experience to its thriving bouquet of premium chocolates with the launch of Cadbury Dark Milk, which is expected to offer a superior product experience for those with sophisticated and mature sensibilities. Cadbury Dark Milk is a new, premium taste that will surely appeal to chocolate lovers. It is available in Original – Rich and Creamy variant, priced at Rs. 99 for a 72g pack, and in Original – Rich and Creamy and Salted Caramel – Rich and Creamy variant, priced at Rs. 199 for a 156g pack.



For more information log on to:

<http://www.fnbnews.com/Top-News/cadbury-dark-milk-introduced-for-consumers-with-sophisticated-tastes-51921>

FSSAI POLICIES AND REGULATIONS

FSSAI directs food businesses to stop incorporating toys in food

03 August 2019

FSSAI has issued an advisory to food businesses to stop incorporating gifts and toys inside food packages, as there are chances of contamination and risk of ingestion by kids. The advisory stated that there was a need to discourage such practices, and the FBOs should refrain from adding toys, resembling the texture, colour and nature of the food. The promotional free toys or gift items may be provided separately or packed separately. The commissioners of food safety of all the states were requested to make efforts for generating awareness amongst the stakeholders to discourage such practices of packing toys with food products. According to the Food Safety and Standards Act, 2006, unsafe food means an article of food whose nature, substance or quality is so affected as to render it injurious to health by virtue of being misbranded or sub-standard or food containing extraneous matter.

For more information log on to:

<http://www.fnbnews.com/Top-News/fssai-directs-food-businesses-to-stop-incorporating-toys-in-food-packs-51394>

FSSAI to put forth regulation limiting trans-fats through FSSR amendment

09 September 2019

The Food Safety and Standards Authority of India, to strengthen its fight against trans-fats and limiting its percentage in food products, has decided to put forth a regulation through an amendment in the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations, 2019. The country's apex food regulator had issued a draft notification saying that from January 1, 2022, the limit of trans-fats in the food products shall not be more than two per cent. Earlier, it was a voluntary provision, but through this regulation, FSSAI is making it mandatory for the food businesses. Recently, the regulator also launched the trans-fat-free logo. It will help the FBOs (Food Business Operators) make claims about the same while helping consumers make informed choices. Nuts, fish and other foods containing unsaturated omega-3 fatty acids are some of the good choices of foods with healthy fats. Food companies will have to incorporate these unsaturated fats to create space for a healthier market.

For more information log on to:

<http://www.fnbnews.com/Top-News/fssai-to-put-forth-regulation-limiting-transfats-through-fssr-amendment-51701>

FSSAI permits hotels to serve water in paper-sealed glass bottles

18 September 2019

The Food Safety and Standards Authority of India (FSSAI) has permitted hotels to serve drinking water in paper-sealed glass bottles to their in-house guests. In this regard, it had taken cognizance of the matter and decided to allow serving drinking water in paper-sealed reusable glass bottles within the hotel premises. The order mandated that hotels will be required to follow the sanitation and hygienic conditions as per the regulations for drinking water and set up in-house drinking water bottling systems on their premises. The hotels also need to ensure that water served in such bottles follow the BIS (Bureau of Indian Standards) specification IS 10500:2012 (for drinking water). And the paper-sealed glass water bottles will not be for sale and served free of cost to in house guests, while their labels will prominently specify Not for Sale, along with the name and address of the hotel.

For more information log on to:

<http://www.fnbnews.com/Top-News/fssai-permits-hotels-to-serve-water-in-papersealed-glass-bottles-51788>

EGGSACTLY A CENTURY

Would you dare to taste an egg that has a dark green to grey yolk, and a translucent brown jelly as the egg white? If you are up to the challenge then century eggs will be the bullseye!! Hundredyear eggs, millennium eggs or whatever, these outlandish ova are a Chinese delicacy dating back centuries to the Ming Dynasty in Hunan, when a homeowner discovered duck eggs in a shallow pool of slaked lime that was used for mortar during construction of his house two months before. Upon tasting the eggs, he set out to produce more – this time with the addition of salt to improve their flavor – resulting in the present recipe of the century egg.

The boastful name suggests these eggs take forever to make, but this misnomer.

This preserved food delicacy is made by preserving duck, chicken or quail eggs in a mixture of clay, ash, salt, quicklime, and rice hulls for several weeks to several months, depending on the method of processing. Through the process, the yolk becomes a dark green to grey color, with a creamy consistency and strong flavor due to the hydrogen sulfide and ammonia present, while the white becomes a dark brown, translucent jelly with a salty flavor. The transforming agent in the century egg is an alkaline salt, which gradually raises the pH of the egg to around 9–12, during the curing process. This chemical process breaks down some of the complex, flavorless proteins and fats, which produces a variety of smaller flavorful

Compounds. Some eggs have patterns near the surface of the egg white which are likened to pine branches, giving rise to one of its Chinese names, the pine-patterned egg.

The necessity to continue creating century eggs, likely came about through the need to preserve eggs in times of plenty by coating them in alkaline clay, which is similar to methods of egg preservation in some Western cultures. The clay hardens around the egg and results in the curing and creation of century eggs instead of spoiled eggs.



The traditional method for producing century eggs developed through improvement of the aforementioned primitive process. Instead of using just clay, a mixture of wood ash, calcium oxide, and salt is included in the plastering mixture, thereby increasing its pH and sodium content. The addition of calcium oxide and wood ash to the mixture lowers the risk of spoilage and also increases the speed of the process. A recipe for creating century eggs starts with the infusion of three pounds of tea in boiling water. To the tea, three pounds of calcium oxide (or seven pounds, if done in winter), nine pounds of sea salt, and seven pounds of ash from burned oak is mixed into a smooth paste. Each egg is individually covered by hand, with gloves worn to protect the skin from chemical burns. It is then rolled in a mass of rice chaff, to keep the eggs from adhering to one another, before the eggs are placed in cloth-covered jars or tightly woven baskets. The mud slowly dries and hardens into a crust over several months.

The eggs are then ready for consumption. Century eggs are sometimes avoided due to the belief that they are prepared by soaking eggs in horse urine, but there is no good evidence to support this, and furthermore urine is generally not alkaline. In Thai and Lao, the common word for century egg translates to "horse urine egg", due to the distinctive urine-like odor of the delicacy.

Heavy metals were used to speed up the process to turn more profit for less time and artificially increase the quality of the preserved egg. It was an unscrupulous practice in some small factories but it became rampant in China and forced many honest manufacturers to label their boxes "Lead Free" after the scandal went mainstream in



2013. Many production factories in China were using industrial quality copper sulphate which was contaminated with arsenic, lead, cadmium, and other heavy metals and toxic chemicals, to make eggs more translucent, lessen odor, provide smoother texture and encourage faster curing.

The Chinese government has recently been trying to regulate food additives and license law abiding establishments to combat the food safety incidents posed by bad manufacturing practice.

Century eggs take about 4-5 weeks to make, a few minutes to work up the courage to open, and a few seconds to eat. Century eggs are truly eggciting and deserve a try!

PLACEMENTS



ASWIN R



MUTTURAJ HOTKAR

KAMPUS KHABAR

1. GANAPATI BAPPA MORIYA

As always this year too, students celebrated the festival with gaiety and grandeur. The celebration started with the decoration of the IFT room which created a divine atmosphere. The festival started by placing Ganesha idol in IFT room on 2nd September. The festival continued for two days, the whole CFTRI campus indulged into the vibes of Ganesha with morning and evening pooja. The colourful evening of Ganesha visarjan was started with the DJ, followed by the Ganesha procession which made the campus vibrant. The idol was immersed with immense festive spirit among the student community.



2. SEEKING THE BLESSING OF CHAMUNDESWERI

We the soup-A-stars with the pie-thons started our new journey by taking the blessing of Lord Chamundeswari on 7th September. We started the cheerful day early morning with a fresh mind. The MSc family together prayed there to have a successful year ahead. It was a day full of enjoyment and happiness and a new beginning towards good memories.



3. TEACHER'S DAY

On September 5, 2019, we celebrated the Teachers day at Human Resource Department. On behalf of all M.Sc. Food Technology Students, the IFT club president honoured our beloved Dr.R.P Singh Sir (The Coordinator, MSc Food Technology) and Jyotsana madam. During the session, Dr R.P. Singh sir addressed all students and he highlighted the importance of teachers in a student's life. It was an excellent occasion to show our gratitude to our teachers.



4. ONAM CELEBRATION

Onam was celebrated on 21st September 2019. It started with rangoli competition, teams were allotted to all the blocks of IFTTC Hostel for rangoli. Different teams made various themes for rangoli and the colours were filled with creativity and messages. In addition to rangoli in all the blocks, flower carpet was also designed in front of the hostel mess. After rangoli competition, photo session added beauty to the celebration. Everyone showed up with traditional dress and it made the day more colourful. Afternoon session was for

games. All students were grouped into four groups and the games were conducted, It was a fun-filled day overall. All the groups competed for games with full energy and true sportsman spirit. And the team Crazy stars won the overall winners title.



5. CSIR FOUNDATION DAY

The 77th CSIR foundation day was celebrated in IFFTC Auditorium on 26th September. Programme started with lighting the lamp by dignitaries. Dr. N R Parasuraman, The Director, SDMIMD, Mysuru was guest of honour. Formal function was followed by distribution of prize to winners of different competitions, meritorious students and winners of Hindi fortnight celebrations. Dr. KSMS Raghavarao, Director CSID-CFTRI and Padma Shri Dr. Kota Harinarayana also addressed the audience.



6. SWATCH BHARATH

On October 2nd, 2019 we observed Gandhi Jayanthi, by organizing Swatch Bharath Mission at IFFTC Hostel complex. The programme was effective in spreading the message of social service and created awareness for maintaining a healthy and clean environment. All students actively participated in cleaning activities. The plastic waste and other non-biodegradable wastes were collected and disposed of for recycling. The programme helped in creating awareness among students about cleanliness and hygiene.



8. FRESHERS' DAY

2019-2021 batch (PIE-THONS) of M.Sc. Food Technology was given a warm welcome by the Soup-a-stars, on Saturday, 14th of September, 2019. The programme began at 5 pm and was filled with all sorts of fun and colour. Scientists Mr. Anbalagan, Mrs. Vijayalakshmi and Dr. Chanchala were present for the freshers' night. After various funny rounds of games, Mr. Pulkit Tyagi and Ms. Mythri Hegde V got selected as the Mister Fresher and Miss Fresher of 2019-2021 batch.



9. RETIREMENT PARTY TO MR. HANUMANTHAPPA

M.Sc. Food Technology students, along with Dr. R.P. Singh, gave a retirement party for Hanumanthappa sir on 29th August 2019, Thursday, 2 pm at HRD. He was thanked for his selfless service as the attendant in Human Resource Development department. The M.Sc. Coordinator Dr.R.P. Singh, Mrs.Jyotsana Rajive and Mrs.Silpa were present for the function.



10. AWARD DAY FUNCTION

On July 10th 2019, CSIR - CFTRI organized an award function for both M.Sc food technology and ISMT passout batch. The programme was held at Chaluvamba Assembly Hall in the presence of Dr. KSMS Raghava Rao (Director, CSIR-CFTRI), Dr. RP Singh (Coordinator - M.Sc Food Technology), Dr. Suresh Sakhare (Coordinator - ISMT) and Dr. Rajender Singh Sangwan (Director, AcSIR) as chief guest. Dr. RP Singh addressed the gathering.



On this occasion, course completion certificates were distributed to M.Sc food Technology and ISMT 2019 passout batch. Ms. Neha Rawat (M.Sc Food Technology, 2016-2018) was awarded with gold medal. Mr. Varun Arora (M.Sc Food Technology, 2016-2018) was conferred with the silver medal.

Mr. Abhimanyu Singh received Best dissertation award for the topic "Fractination of medium chain triglyceride from virgin cocunut oil by Crystallization" and Ms. Harleen Kaur got best investigation award for the topic "Preparation of High Protein Cornflakes".

11. IFT CLUB ELECTION

IFT club elections were conducted for new office bearers of M. Sc. Fod Technology 2018-20 batch by outgoing office bearers of IFT Club. Ms. Anju Elizabeth was elected as the President of the Club. Mr. Vikash Patel was elected as the treasurer, Mr. Chethan T.R as the sports secretary, Ms. Rushda H and Maneesha D.M as cultural secretaries and Ms. Priya L as DJ of the batch for the second term. Ms. A.R Aarthi was appointed as Quest CEO.

FOOD IN'CORPORATED

AASHIRVAAD ATTA

Though the wheat flour market is largely dominated by local chakki mills in India, the branded packaged wheat flour segment is emerging rapidly in the country by offering better quality, nutrition and convenience.

The Indian packaged wheat flour market comprises few national players and a large number of regional and private label brands operating at pan-India or restricted geographic market based on their size and capacity. Packaged atta market is dominated by ITC with its brand Aashirvaad followed by other players such as Shakti Bhog, Annapurna and Pillsbury.

In May 2002, ITC made its entry into the branded Atta segment and within a short period of time became the number one branded packaged atta across the country. ITC use network of 6500 Choupals to buy wheat straight from farmers across the most fertile fields. This is followed by vigorous process of cleaning, mechanized packing and nutrition lockage. Aashirvaad atta has become a popular brand in the wheat flour market, with around 28 per cent share in the branded segment (2018). Besides, ITC also exports Aashirwad atta to 32 countries, including the US, Canada and the Middle East, targeting the Indian diaspora. The export is about 7 per cent of total sales (2018).

The various underlying factors driving the consumers for purchase of packaged wheat flour are fulfillment of basic nutrition needs, convenience and saving of time, deficiency in storage of wheat in bulk and quality of packaged wheat flour. Particularly health and quality-conscious consumers, there are many variants of Aashirvad in the market as follows:

1. AASHIRVAAD SELECT ATTA

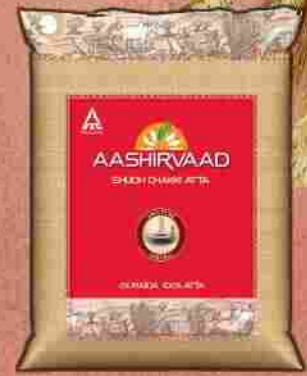
AASHIRVAAD Select is a premium quality atta made from 100% MP Sharbati wheat which is harvested in the Sehore region of Madhya Pradesh. Sharbati wheat which are consistent in size are golden hard wheat grains. Rotis made from Aashirvaad Select Atta have a delightful aroma and stay soft for a longer time.



2. AASHIRVAAD WHOLE WHEAT ATTA

AASHIRVAAD Whole Wheat Atta was launched on 27th May 2002 and now has become the number one in branded packaged atta across the country.

AASHIRVAAD Whole Wheat Atta is made from the hard wheat grains which are ground using modern 'chakki - grinding' process by ensuring that all the nutrients of the grain stay intact and protected. The dough made from AASHIRVAAD Atta absorbs more water; hence rotis remain soft for a longer time.



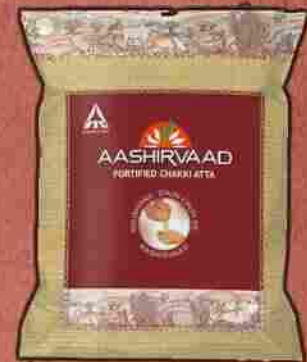
3. AASHIRVAAD SUGAR RELEASE CONTROL ATTA

AASHIRVAAD Sugar Release Control Atta is a blend of whole wheat flour and pulse and legume flours forming a unique "Natural Grain Mix". Ingredients like oats and methi ensure that this Atta is high in protein and fibre with a Low Glycemic Index. It releases its sugar slowly in the body, thus helps in preventing sugar level spikes.

4. AASHIRVAAD FORTIFIED ATTA

AASHIRVAAD Fortified Chakki Atta is a source of nutrients like Iron, Folic Acid, and Vitamin B12, which helps in meeting the daily micronutrient requirement and helps tackle the issue of micronutrient deficiency.

Micronutrients are important for the human body. Micronutrients like Iron, Folic Acid and Vitamin B12 are recognized to take part in various metabolic activities of the body, and thereby, supporting the growth and development processes of an individual with an active lifestyle.



5. AASHIRVAAD ATTA WITH MULTIGRAINS

AASHIRVAAD Atta with Multigrains gives the wholesome goodness of six different grains – wheat, soya, channa, oat, maize and psyllium husk. These ingredients infuse proteins, vitamins, minerals and fibre to diet.

6. AASHIRVAAD NATURE'S SUPER FOODS

Constant lifestyle changes among urban consumers is increasingly driving interest in back-to-roots, simple food. Easy-to-incorporate in daily meals, Nature's Super Foods' wholesome and healthy blends will help cater to consumers' diverse nutri-wellness dietary requirements, along with taste, while providing convenience of preparation.

Super foods are nutritionally dense foods known for their numerous health benefits. With consumers moving towards health foods, superfoods have emerged as one of the fastest growing nutri-cereals in the staples market. This new range will be available across leading metros, including New Delhi, Mumbai, Bangalore, Kolkata, Hyderabad and Chennai.

These are enriched with the goodness of nature, being abundant source of vitamins, fibre, protein and minerals, thereby known to provide more satiety and nutrition. The current range comprises innovative offerings including, Gluten-free Flour, Ragi flour and Multi Millet Mix flour, which are naturally gluten free, rich in dietary fibre and a source of protein.

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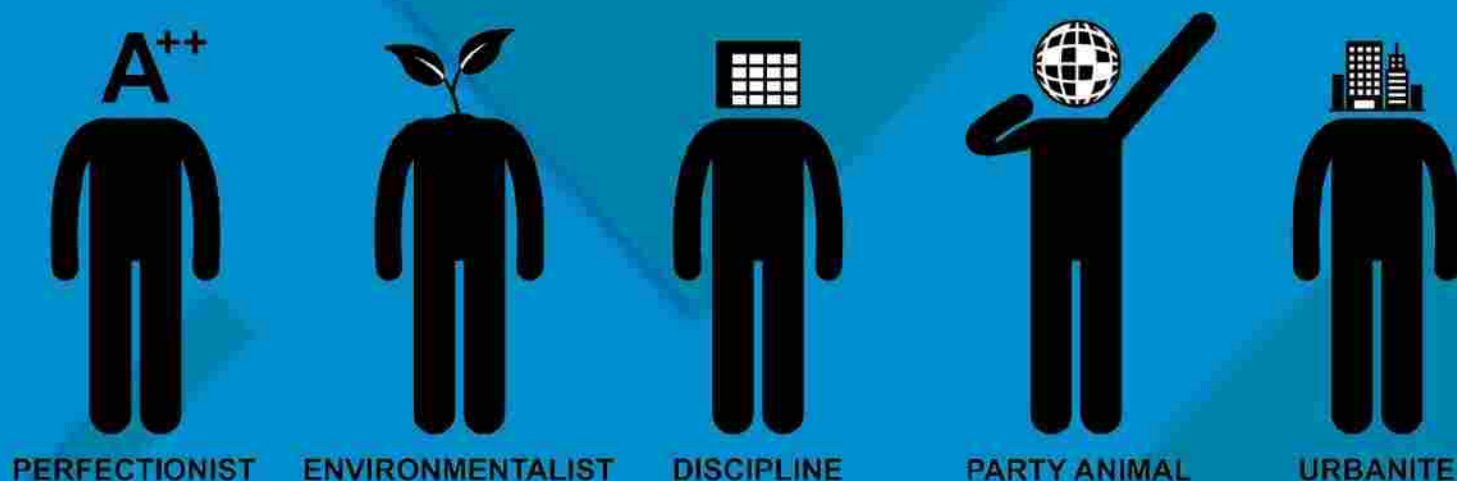


CAREER CORNER

When the preference of Job Recruiters Changes...

There was a time you study diehard and your grades and marks speak loud about you. The academic marks help you to gain knowledge but the acclaimed Wisdom and Emotional Quotient come all the way through the stuffs other than your academics, so-called Extracurricular activities.

Extracurricular activities are crucial to mold yourselves and acquire your soft skills enabling you to boost your career prospects. Employers keep seeking for a difference and demarcation among the candidates who faced challenges, learning experiences and take up the skills out of it. Extracurricular activities keep you engaged with people, get developed with communication skills, decision-making skills, teamwork and time management. Recruiters look for an evidence of your abilities and your potential to succeed and it doesn't matter whether it come from your social life or your work experience.



It's all about leaving a mark!

Just for the sake of being into extra-curricular works doesn't add to your merit. It is all about your involvement and active participation which matters. There should be a valid and sound contribution from your side which makes a great difference in the community or its events. It's not always holding a position in the club or community; it's all about getting recognized over a period of time.

It's not always mandatory that your participation is in accordance with academic relevance. Other than subject clubs, those volunteering activities and giving hands for a social cause do matters to broaden your experience and skills. Ultimately recruiters will be impressed by your ability to work with people from different backgrounds and age groups.

How extra-curricular activities matter in your profile?

Involving in works other than your curriculum will teach you key points on time management and recruiters will get a better understanding of your ability to prioritize your works and responsibilities. Hereby we give a gist of extra-curricular activities which help you reap benefits out it.



Subject societies and professional societies:

These clubs offer a good platform for getting yourselves updated with recent trends and developments in the field and they are good opportunities for professional development and networking. It will open yourselves to a group of subject experts and will help you to foster your scientific domain and may serve as a gateway to new openings and opportunities.

Sports clubs:

Whether you are committed to a particular sport or decide to try something new, organizing matches and training sessions will help you to develop your leadership, communication and administrative abilities. Playing matches as part of a team will also provide you with plenty of examples of your teamwork skills.

Student TV, radio and newspapers:

Report writing, documentation and presentation skills are a must for every job sector. Being a part of the TV, radio and newspaper will help you foster those skills and improve your communication skills. It will help you to get aligned with the trends and walks in the communication sector.



MUSIC LOVER



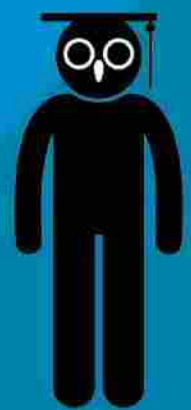
ORGANIZED



PRODUCTIVE



PROCRASTINATOR



WISE

Volunteering, charitable and fundraising groups:

Getting successful and amassing knowledge in your academics and subject field doesn't make you an ideal man. Your kindness and compassion to the fellow beings also matters. This is an essential goodness you should possess to grow and empower your team and community you are engaged with. It will also develop your problem-solving ability, emotional intelligence and creativity by finding fresh ways to support good causes. As many employers place a high value on corporate social responsibility and encourage staff to get involved in volunteering, so they will welcome evidence of your interest in helping others.

Be wise in locating your interest and to be in the apt extra-curricular activities. Rather than proclaiming that you are in, be strong to put forward and speak about your contributions, active participation and skills acquired. Make sure that such activities are something that makes you different and unique from others.



Mr. M.D. Deepak

(Batch 1986-88)

Quality Assurance Head

ITC-Agri Business Division

EXPERIENCE TALK

He has over three decades of experience in food industry. We would like to thank him for giving his valuable time, guidance and sharing his experience with us.

1) How was your experience as a fresher in WIMCO food division at Hyderabad/Madanapalli - Chittoor?

I joined WIMCO - Food Division as Management Trainee. I have been given Induction for 3 weeks and was asked to start reporting in Nightshift (10 pm - 6.00 am). I found it difficult initially and also my shift in-charge was not happy, which led to the consequence of me working in the night shift for a whole year as punishment, which dejected me for a while.

I motivated myself to work hard meeting the quality and production target.

There was a competition among the shifts as to achieve the target. The way you handle your subordinate is very important. Finally, Factory Manager was happy with my performance. He made me shift-in-charge and later Asst. Production Manager.

2) What is your current role in ITC?

My job role is to Establish Central Quality Assurance and Food Safety Cell for ABD - (Agri Business Division) in 12 months.

This ABD is basically trading division. We have several Business

- a. Coffee b. Rice c. Wheat and Wheat Products. d. Aqua Business.
- e. Spice f. Frozen Snacks g. Fresh fruits and veg. h. Frozen fruits and veg.
- i. Fruit pulps / Tomato paste. j. Bulk Staples

I am establishing CQA & FS Cell to monitor quality, Vendor development, Audits, Third-party QA Operations, Customer complaint and Quality analysis for all the above business.

3) Please share some experience about your first International Project. How did you manage that?

I got an opportunity in Lagos - Nigeria as G.M (Operations), but my employer told me that he had taken over a bankrupt company. I went to Lagos in 2000 Nov. Next day owner took me to the site/plant, When I visited the plant I got a big shock. The whole premises looked like one junk factory/"Booth bungalow". It was my responsibility to turn it into a working plant - It was a MAJOR CHALLENGING TASK. I started from scratch, hiring cleaners, plumbers, Electrician, Mechanical fitters, Workers etc.

The machinery was in very bad condition, totally vandalised, Factory Civil structure was very bad. It took 6 months to transform it into a working condition. Africa will teach you everything about how to run a business. You need to have tons of patience and courage to overcome the challenge.

4) You have been to different countries for work and training. Is there any difference between working atmosphere in India and in abroad?

In Africa you are one-man army, need to do multitasking (Budgeting, Production Planning, Supply chain, Quality, Engineering, HR etc...) In India, you have a much defined role to play.

5) What was the most challenging task that you have had to take up as a Food Technologist? How did you overcome it?

My first job and my Africa Experience as I have mentioned above.

Three D's played a role: Determination, Devotion, Destiny.

6) What do you believe is your greatest achievement till date?

My achievement was learning new things through experience by working in different fields, roles and responsibilities, which gave me a wider exposure to different fields in Food Processing Industry, Fruit Processing, Chocolates and Confectionery, Frozen Snacks, Beverages, Frozen Veg, Fruit Concentrates, Biscuits, Ready to Eat, Ready to Cook, Heat and eat etc...

7) Its been 31 years in the Food Industry. How do you think the Indian Food Industry has changed over the years?

Indian Industry has changed a lot. In our time we could count Industries in fingers, now it has grown enormously (Food Processing Industry). Now there are more opportunities and better salary than our time.

8) The Knowledge that you have fostered here in CFTRI. How far does its application go in the industry?

What we learn in CFTRI is like a strong base for our future. We can fit in any role in Food Industry. Whatever exposer you get in CFTRI, please master yourself thoroughly for your future endeavour.

10) Would you like to give any message for the new generations of CFTRIians?

Have healthy competition, gain good experience, don't run behind money, don't compare yourself with anyone in knowledge, experience, status, money, etc. Share your Knowledge and Experience. "Take time to live, the world has so much to give." Have faith in yourself.

Just sit back, rewind your experience and think where you went wrong. Overcome those mistakes. Respect everyone, be humble, God is always there with you.

Have a great day.

GAMES

RIDDLES

1. Hundreds of blacksmiths, in a dungeon with no doors or windows, when we leave, each of us builds his own dungeon?
2. What vegetable do people look forward to getting every month?
3. What has eyes but can't see?
4. What stinks when living, smells good when dead?
5. Kind of room which has no windows or doors?
6. It can poison water in a way no detect poison can tell you. Damned it is in water, highly-priced when dry?
7. They are twin sisters, same height; they work in the kitchen, arm in arm. Whatever is cooked, they always try it first?
8. When does an Indian potatoes nationality changes?
9. What goes in dry and hard but comes out wet and soft?
10. A container without hinges, lock or a key, a golden treasure lies inside. What is it?



ANSWERS:
1. Watermelon
2. Celery
3. Potato
4. Bacon
5. Mushroom

6. Salt
7. Chopsticks
8. French fries
9. Chewing gum
10. Egg



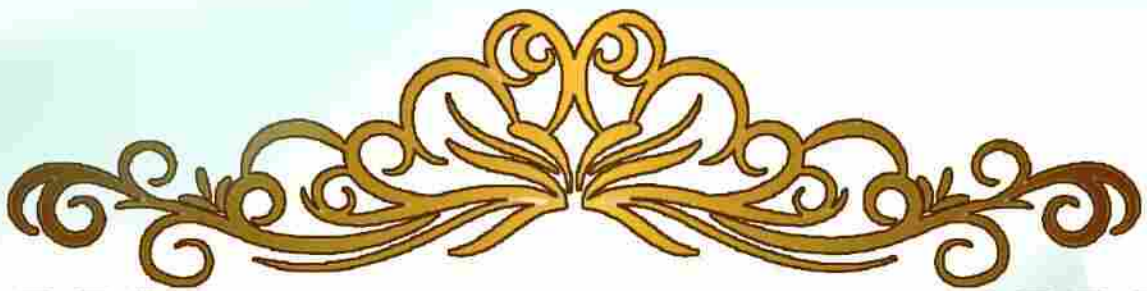
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Introducing **PIETHONS**

M.Sc. FOOD TECHNOLOGY
(2019-21 BATCH)



In loving memory of...



Dr.D.Indrani



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