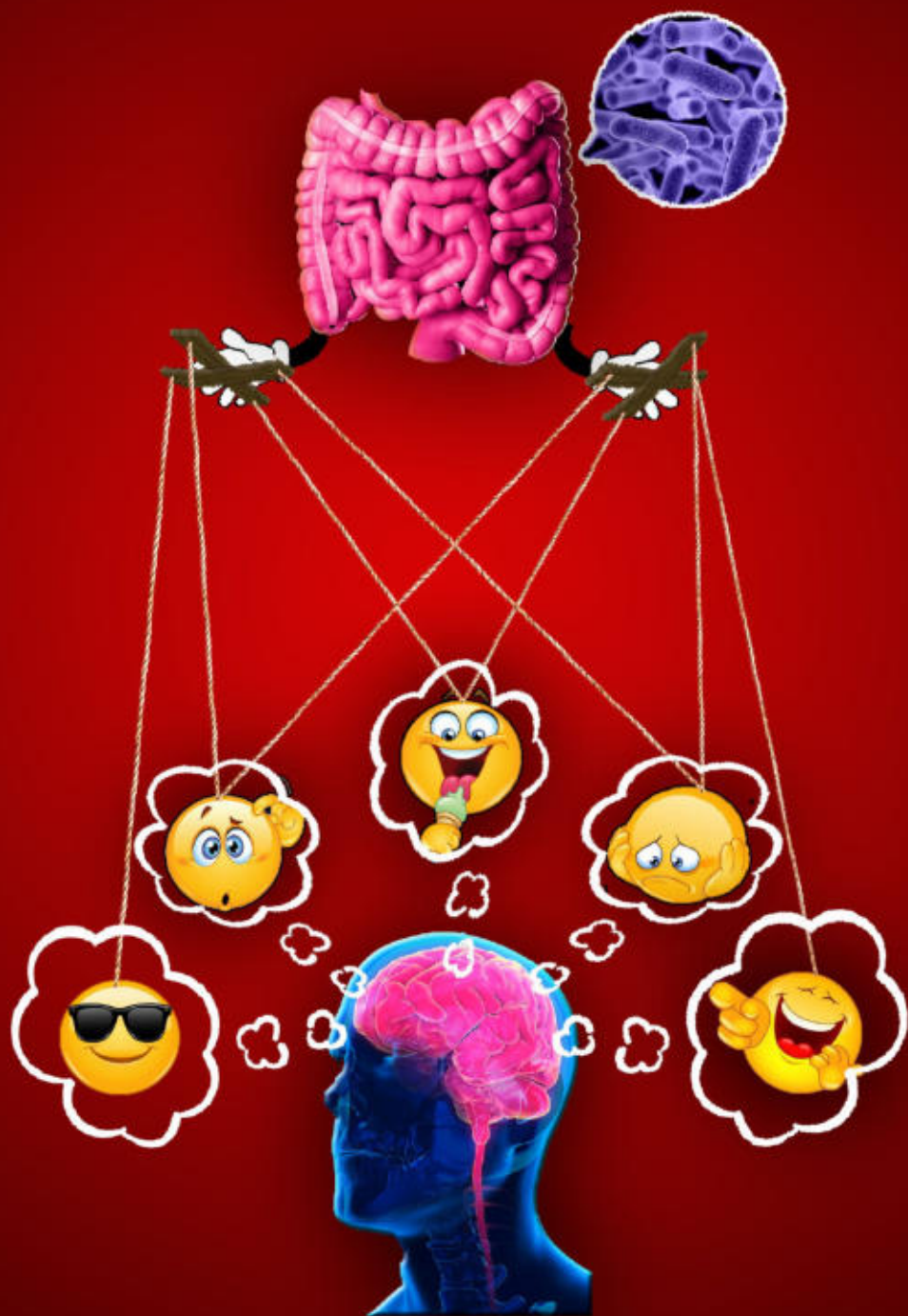


17TH EDITION

JUNE 2018

Abhyudaya

Reliving the Legacy



Microbial Mindfulness

Words from the Editor's desk...

This
Issue

To all the distinguished readers

Back on its golden hinges
the gate of Memory swings,
and my heart goes into the garden
and walks with the olden things

- Ella Wheeler Wilcox



As a tribute to the recently concluded Alumni Meet, where the CFTRI family reunited and relived their college days, this Edition of Abhyuday is going to be a 'Mini-Mysore Darshan'. So brace your heart for a roller coaster ride as we showcase the various spots in Mysore which must have served as a hiding place for the happy memories that our Alumni had shared, through its pages. On behalf of Team Abhyuday, humbly presenting to you the 17th Edition from a learner of 53rd batch of CFTRI - French Toast Mafia

This edition is going to talk about how the tiny little guys in our digestive system can influence our moods and food cravings. 'Hangry' much?

Reunions, meeting old friends, walking on the same roads you once treaded on almost decades ago are what keep you grounded. Capturing these emotions is our special article of this Edition, that is, 'mulaqat-e-noor'.

The Industry is surely abuzz with a lot of new products and policies which will be covered in 'Industry Buzz'.

What has been up these past few months? Catch up on the most happening campus in town that is CFTRI in Kampus Khabar.

Read up on how leftover bread is being made into beer and consequently reducing food wastage on this edition of What the Food! It's a 'Brewtiful' world indeed!

In today's world, food is not only about taste, but ensuring that each and every morsel is packed with a splash of flavour which blows all your senses away! Want to know about the minions at play? Check out this edition of Career Corner as it talks about sensory scientists.

Sharing his experience and giving a bird's eye view as to what is going on in the food industry is Mr. Vishal Joshi of 2006-08 batch in this edition of Experience Talk.

Read about one of our Alumni, Mr. Paramvir Singh Dhindsa of 2013-15 batch in Alumni Column as he reminisces the time spent in CFTRI and relive his student days.

We cannot get enough of our magnificent campus with lush greenery all around. Soothe your eyes as we bring to you some snaps of the sprawling campus in this Edition of the Photography section.

The end of the edition is a page which is an example that not all endings are bad as it exhibits the beginning of the career of students of IncrEDIBLEz'30 (2016-18) as budding Food Technologists in various food companies followed by the Games section.

As always, a lot of hardwork has gone into presenting this edition to you. Thus, we welcome suggestions and feedback and look forward to hearing from you, our dear readers.

Go on...flip the page!

REGARDS
ARUNIMA BANERJEE

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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.

Microbial Mindfulness

Nikhita is waiting anxiously in front of the exam hall. Today, how she does the exam would influence whether or not she gets into CFTRI. She walks into the hall. Although she is well prepared and well rested, she feels her stomach churning and her intestines squirming. She blames the cupful of curd she was given by her mother just hours before. She takes the exam and retires for the day.



A few weeks later, she again has the same sensation of butterflies in her stomach. She is sitting nervously in front of her laptop screen, constantly updating the CFTRI website. She knows the result will be out at 4, but what if it comes out at 3 and she doesn't get to know about it. Hence the futile exercise in entropy of mechanically pressing the refresh button. By the time it is 4, her apprehension reaches a peak. And at 4, there is a sudden reversal of emotions. She sees her name on the merit list and this quells all the uneasiness and trepidations. Her gut feeling that she will get through these few hours was right after all.

All these rushes of emotions and feelings are common, something that we all feel day in and day out. And one might assume that all this flood of emotions was controlled by the brain, processing all the information that comes to it every second. But what if I were to tell you that there is another organ, with the same weight of 1.3 kg as the brain, which had a similar role to play in governing the emotions?

This second brain is your gut and its host of microflora. There are around 100 trillion bacterial cells in your intestines compared to your 10 trillion body cells. A human cell has 20,000 genes while your gastric residents have anywhere around 2-20 million genes. So at any point in life you are more bacteria than you are human.

These microbes enter the body right after birth, covering the skin and intestines. And each individual has a unique colony within them, even amongst identical twins. The type of diversity influences various aspects of an individual like their digestion, resistance to diseases such as obesity and diabetes, hormone release, response to drugs and antibiotics and for our interest, the mental health and personality. Yes, your personality, character and mental fitness are greatly influenced by the stuff in your gut. They are able to control food cravings, behavioural choices and personality changes.

Like all scientists, let's start with the case of mice. Mice, when colonized by the bacterium *Toxoplasma gondii*, lose their innate fear of cats. Now this fear is something all mice have in them, whether they have encountered a cat or not. So after the colonization, the mice instead start to seek them out. They are attracted to the smell of cats, something that they are evolutionarily programmed to flee from. This demonstrates that gut flora can even overtake the natural neural machinery. In the case of humans, the interesting thing is that 90% of serotonin (the happiness hormone) is produced in the intestine and so is about 50% dopamine, which is the feel good hormone. Then certainly the food we eat must play a key role in their regulation and affect our overall health.

Our gut microbes function as a metabolic organ and provide attributes not encoded in our human genome. The production and utilization of short chain fatty acids in the large intestine by the fermentative action of microbes is an excellent example. These SCFAs are key for inflammation control and production on mucin. The diet we take can have a large impact on our colony by affecting

their structure and functional properties. Some species affect your mental acuity. For example, presence of *Prevotella* lead to better connectivity between the attention, sensory and emotional processing brain regions, while *Bacteroides* activated hippocampus, which is responsible for memory making. A study suggested that colonization with *Candida* species may contribute to Autism spectrum disorders. By preventing absorption of carbohydrates and minerals and allowing excessive build-up of toxins, colonization with *Candida albicans* was shown to increase autistic behaviors in children with autistic spectrum disorder. A similar study suggested that it is the interaction between propionic acid and ammonia released by *Candida albicans* that result in increased autistic behaviors. Another study found that the consumption of probiotic drinks improved the recognition of facial expressions in the subjects compared to the control, showing that even our emotional and social quotient can be governed by these tiny guys.

Now you may feel, great! I know these now, so I'll choose the things on my plate more carefully. But hang on just a minute. Microbes are primed for survival and they have been playing this natural selection game for far longer than you or I. They are smart enough to influence our cravings based on what they need for survival. Many gut bacteria can manufacture special peptides that regulate hunger. This raises the distinct possibility that microbes might be able to directly influence human eating behavior by mimicking hunger-regulating hormones or by effecting appetite regulation. It has been described how *Prevotella*, grows easily on carbohydrates and how the bacteria *Bifidobacteria* turns to dietary fiber for its needs. They release hormones and chemicals via the vagus nerve that connects your brain to your gut (called the gut brain axis). And this triggers you to eat those particular foods. So what is already in you controls what you will eat and in turn sustain them. They have even been known to pick those foods that suppress the growth of their competition, and at times making you feel ill if you consume something that is not approved by them. No wonder most people give up on healthy diets very soon. At least you now have someone else to blame.

The gut flora has a profound effect on the health. From their control on our diet, this in turn leads to a negative feedback, and ultimately may influence diabetes and obesity. Other diseases that may add up are inflammatory diseases, irritable bowel syndrome (IBS), anxiety, depression and other toxic side effects of prescription drugs. The mental health being key here, since the way the serotonin, GABA and dopamine receptors function finally determine the way we behave and interact with our society. Biologists now believe that much of what makes us human depends on microbial activity.

Since 2007, when scientists announced plans for a Human Microbiome Project to catalog the micro-organisms living in our body, the profound appreciation for the influence of such organisms has grown rapidly with each passing year. In healthy volunteers, probiotic (now, which may be defined as a psychobiotic) consumption has been shown to improve mood, but only in those who have poorer mood at baseline and reduce depression.

So perhaps there was greater arcane wisdom in the works when Nikhita had her cup of curd before the exam, which might have helped her get a grip on her nerves. So break that habit, overcome the initial hindrance and eat healthy for a healthier mind, gut and the city that is you, and the city needs its gut-izens.

References:

- Gut microbiota's effect on mental health: The gut-brain axis. Clapp et al.(2017)
- A psychology of the human brain-gut-microbiome axis. Allen et al. (2017)
- <https://drjess.com/bacteria-gut-control-mood-cravings-mind>
- <https://www.psychologytoday.com/us/blog/the-athletes-way/201706/gut-microbiota-may-influence-mood-and-behavior-study-finds/>

mulaqat-e-noor

Alumni Meet-2018

"5 May 2018" - a date to remember by every alumni who came forward to celebrate the golden memories of their college days at CFTRI, on the occasion of alumni meet. It was a great pleasure for the alumni association office bearers along with both INCREDIBLEZ 30 and FRENCH TOAST MAFIA'S to make this event a memorable one for them.



People for last 50 batches visited the campus with their families. It was the time when the entire campus became even more lively as the whole CFTRI family came together to share their experiences and reminisce their memories.

SWAACH BHARAT ABHIYAN event was an appropriate start for the day wherein the current batch students along with the association office bearers and a few alumni stepped forward for a cleanliness drive in the campus. It was pledged to keep the beauty of the campus intact by keeping it clean always.

mulaqat

The event started with a welcome speech by the association office bearer Dr. D Indrani at IFTTC auditorium. Shri Raghuramaiah B was the chief guest for the occasion who was also awarded the best alumni award in the golden jubilee batch because of his immense contribution for the institute over past 50 years. Alumni from the silver jubilee batch along with all other staff members were felicitated with the mementos as a token of love. The event was followed by "GO GREEN DRIVE" wherein the silver jubilee batch members planted trees around the hostel premises.





After a lot of chit chat at high tea it was time to burn some calories and all came together to play exciting games that were planned in the mess lawn. They enjoyed a lot by sharing lot of secrets during the game session and nothing could match the kind of happiness they had during that session.

A cultural programme was then organised by the present MSc. Students for them. Alumni along with students put on their dancing shoes and came on to the stage to dance their heart out.



Poolside dinner was a perfect end to such a memorable day. Sitting together as a family for the dinner and sharing beautiful experiences made the day even more special. It was a great experience for them to come back to their roots and we hope to host them soon again.



INDUSTRY BUZZ

Coca-Cola India launches Aquarius Glucocharge and Minute Maid Vitingo

Saturday, 05 May, 2018

Coca-Cola India, one of the country's leading beverage companies, has forayed into two new categories, viz enhanced hydration and nutritious dilutables, with the launch of Aquarius Glucocharge and Minute Maid Vitingo. Aquarius Glucocharge, packed with glucose, essential minerals (potassium, sodium and calcium) and fruit juice has been developed exclusively for Indian consumers who toil in the heat and need instant rehydration to overcome exhaustion.

For more information log on to: <http://www.fnbnews.com/New-Launches/cocacola-india-launches-aquarius-glucocharge-and-minute-maid-vitingo-42123>



Dairy Day Ice Creams launches summer range under Lick, Chew, Bite series

Monday, 23 April, 2018

Dairy Day, a leading ice cream brand in South India, has launched summer range - Crust, Paan Twist and Ice Cream Sandwich under its Lick, Chew, Bite (LCB) series. The range will be available across 30,000 outlets in South India.

The Lick series, a premium extruded product coated with real chocolate, will be available in two new flavours – Crust Coffee Twist and Crust Caramel Twist. Paan Twist under the Chew series, similar to eating a Meetha Paan, will come packed in a paan leaf shaped container. Actual betel leaves and rose petals have been added to the ice cream to enhance the taste and flavour. The Bite series, an ice cream sandwich, will be available in creamy rich vanilla or chocolate ice creams, sandwiched between Choco biscuits.

For more information log on to: <http://www.fnbnews.com/New-Launches/Dairy Day Ice Creams launches summer range under Lick, Chew, Bite series -by-42072>



Amul launches Irish Drink Mocktail, collaborating with Almond Branding

Saturday, 07 April, 2018

Amul, India's largest dairy brand, has launched the first-of-its-kind Irish Drink Mocktail through collaboration with Almond Branding, one of India's leading branding and design agencies, for branding, packaging design and communication. The dairy major has been bringing the best of milk-based beverages to its consumers year after year.

For more information log on to: <http://www.fnbnews.com/New-Launches/amul-launches-irish-drink-mocktail-collaborating-with-almond-branding-42000>



Honey is made from bee nectar and vomit

POLICIES AND REGULATIONS

FSSAI amends law to ensure process hygiene & product safety in veggies

Tuesday, 24 April, 2018

Process hygiene and product safety stand underlined as FSSAI, in a recent move, has revised microbiological standards for nine categories of fruits and vegetables products including carbonated fruit beverages. Notified as the Food Safety and Standards (Food Products Standards and Food Additives) Fourth Amendment Regulations, 2018, the amendment would now address sampling plans and reference test methods, which were not previously mentioned in the principal regulation.

For more information log on to: <http://www.fnbnews.com/Policy-Regulations/fssai-amends-law-to-ensure-process-hygiene-product-safety-in-veggies-42079>

FBOs must declare labelling of foods with GE ingredients, states FSSAI

Tuesday, 17 April, 2018

FSSAI's draft on labelling regulations has made it mandatory for food business operators (FBOs) to declare the labelling of genetically-engineered (GE) or modified (GM) foods, adding that all food products having five per cent or more genetically-engineered ingredients shall be labelled. The total GE ingredients shall be of the top three ingredients in terms of their percentage in the product. The labelling shall read, "Contains genetically-modified organisms (GMO)/Ingredients derived from GMO". FSSAI has also defined high fat, sugar and salt (HFSS) foods as processed food products having high levels of total fat or trans-fat or total sugar or salt under the draft regulations released related to labelling regulations.

For more information log on to: <http://www.fnbnews.com/Policy-Regulations/fbos-must-declare-labelling-of-foods-with-ge-ingredients-states-fssai-42048>

FSSAI orders FBOs to use blue colour in manufacturing of industrial ice

Wednesday, 09 May, 2018

FSSAI has ordered food business operators (FBOs) across India to use blue food colour in the manufacturing of industrial ice to differentiate it from the edible ice, which will remain colourless. The circular by the country's apex food regulator stated, "The use of non-edible ice, which is made from non-potable water, for edible purpose is a health hazard. Similarly, the incorrect use of non-edible ice for preservation, storage and transportation of perishable food commodities may lead to food contamination". The order shall come into effect from June 2018.

For more information log on to: <http://www.fnbnews.com/Policy-Regulations/fssai-orders-fbos-to-use-blue-colour-in-manufacturing-of-industrial-ice-43136>

Chocolate was once used as a currency

KAMPUS KHABAR

Retirement of Murali Madhav V

Shri Murali Madhav V, Principal Technical officer, Dept. of HRD has taken a voluntary retirement in November. Students presented him a gift wishing him a happy and prosperous life after his retirement. He is remembered by the students and Alumni for his outstanding service and his ever soft response to queries of the students.

Sports Meet

IFT club organized a month long sports meet for the current M.Sc. (Food Technology) batch during February and March. It included both indoor and outdoor sports. Outdoor sports included Basketball, Galli Cricket, volleyball, Football, 4 x 100 m relay, and indoor sports like Chess, Carom, Table tennis and Badminton. Both the batches were divided into 4 teams; Sea hawks, Spartans, Avengers and Shakers & Bakers. Every student enthusiastically participated in all the sports with captains and vice captains encouraging their respective teams. A 3km marathon for girls was also conducted by Ms. Vanlal Ramchani Changte and Mr. Sharath Chandra K.C., Sports

Secretaries of IFT club. Majority of girls actively participated and completed the marathon.

Convocation

Convocation ceremony for the M.Sc. (Food Technology) batch 2015-2017 (Kung Food Pandas) was held on 12th March at the University of Mysore, Mysuru. Prior to the convocation, on 11th March the Kung Food Pandas hosted a dinner party for their junior batches at the Hotel Pai Vista, Mysuru where all the three batches, from 2015-2017 to 2017-2019 i.e. Kung Food Pandas, Incr'Ediblez' 30 and French Toast Mafia got to interact and have an enjoyable evening with each other.

New HRD Coordinator

Dr. R.P. Singh, Sr. Principle Scientist, Department of Biochemistry has been appointed as the Coordinator for the M.Sc. (Food Technology) course on 5th March. The outgoing coordinator Dr. Shashirekha M.N., Sr. Principal Scientist, department of Fruit and Vegetable Technology is set to retire this year. A felicitation programme was organized by the students and the new coordinator Dr. R.P. Singh on 6th April, for her service to the students and HRD and wishing her a joyful life after retirement. The New Coordinator was also welcomed by the students on the same day.

Cheese is the most stolen food in the world

Visit of Director General-CSIR

Dr. Girish Sahni, Director General, CSIR and Secretary, DSIR visited the CSIR-CFTRI on 11th June. The new carbonated beverage plant was inaugurated by the DG. Later at 10:30 AM he addressed the Institute staff and students at the IFTTC auditorium followed by high tea. In his address he shared the achievements of CSIR with the gathering. The Director, CSIR-CFTRI Shri Jitendra J Jadhav also graced the occasion with his presence.



SANDIZYA, Farewell Night 2018

The French Toast Mafia (2017-19 batch) organized a farewell for their seniors the Incr'Ediblez'30 (2016-18 batch) on 16th June. The Program was presided by Dr. Varadaraj, retired Head of the Department on Human Resource Development. Alumni of the M.Sc Food Technology were also invited. The farewell began at 5:30 PM with Ganesh Vandana, followed by cultural events by the junior batch. The Co-ordinator of M.Sc. food Technology Dr. R.P. Singh addressed the students and blessed them for their future. DJ night was also organized which began at 9:30 PM. Students of the Incr'Ediblez'30 batch reminisced their two years in CFTRI and how quickly it had passed.

Alumni Visit Timeline

Dr. Navneet Deora (2007-09) Jubilant Food Works Ltd	20-12-2017	02-12-2017	Mr. Tapomay Saha (1992-1994) Mother Dairy Fruits and Vegetable Pvt. Ltd
Mr. Vishal Joshi (2006-2008) MARS, Incorporated	20-01-2018	30-12-2017	Mr. Prabhdiyal Singh (2002-2004) Pepsico India Holdings Pvt. Ltd
Mr. Rajpal (2009-2011) Bureau of Indian Standards	22-02-2018	26-01-2018	Mr. Abhay Nag (2013-2015) & Ms. Manjari Singh (2012-2014) Hindustan Unilever Ltd
Mr. Sanjeev Kumar Sharma (2005-2007) Mondelēz International, Inc.	27-04-2018	24-03-2018	Mr. Surendra Singh (1979-81)

Alumni Meet
05-05-2018

When cranberries are ripe, they bounce like a rubber ball

WHAT THE FOOD

BREWING A BETTER WORLD

Have you ever ordered a sandwich at the local sandwich shop and received an end piece of the loaf? Of course not, so what happens to all of the crusts? Often, they contribute to the millions of kilograms of food waste in this country and worldwide. Bread is top of the list of our most wasted household food items. Almost 900,000 tonnes of bread is wasted every year – around 24 million slices every day. In terms of calories, that's enough to lift over 26 million people out of hunger. Sandwich factories discard the heel and first slice of every loaf – that's 17% of the loaf – because we don't buy sandwiches made with crusts. A single sandwich factory discards 13,000 slices of fresh bread every day. And bakeries and retailers dispose of loaves that are day-old because it's relatively cheap to produce and consumers expect abundant supplies of day-fresh bread.

So, a startup Toast Ale came into the scene to combat this problem. Toast was launched two years ago in the U.K. by Tristram Stuart, an expert on the environmental and social impacts of food waste. His mission was to create beer with salvaged leftover bread. Toast ale is an awesome, award-winning beer brewed using fresh surplus bread that would otherwise be wasted. It is brewed with up to one-third of the malt being replaced with bread that would otherwise be thrown away.



BEER PROFILE ACHIEVED:-

Original gravity:- 1.048

Final gravity:- 1.010

Recipe type:- all-grain

Yield:- 25.00 Litres

Toast Ale was first made in Yorkshire, then it distributed all over the UK. It was launched in USA in July 2017, Rio in October 2017, South Africa and Iceland in November 2017.

Toast Ale is a good example of the philosophy of Feedback, an organisation that works to address food waste issues across all stages of our food system, from farm surplus caused by cosmetic standards to legislation preventing waste being used as feed. Encouraging people to envisage and take steps towards a more circular economy “should start not with complaining, but by showing a better option”. So the team behind Toast have created a brand that is fun and vibrant, and “tells a story with that first gulp”.

So it started a REV-ALE-UTION and is inviting the rest of us to Raise A Toast to reducing food waste.

Three plates of food at a Chinese buffet will net you about 3,000 calories

SLICE, DRY AND CRUSH THE BREAD

- Dry the bread in an oven at 90° Celsius for about 1 hr
- Once the bread is dry, coarsely crush to the size of large croutons

MASH

- Steep grains in water at 67° Celsius and mix. Cover and leave for 60 minutes
- Replace some of the barley malt with bread

SPARGE AND LAUTER

- Drain the liquid from the bottom of mash tun (lautering)
- Rinse the grains with 78° water from the top to extract additional sugars (sparging)

BOIL AND ADD HOPS

- Bring the wort to a boil
- Add hops like German Hallertau Tradition, Cascade, Centennial and Bramling cross

COOL, FERMENT AND CONDITION

- Cool the wort to a 20° Celsius
- Add Safale US-05 rehydrated yeast to the cooled wort
- Keep wort at around 18°C for 7 days
- Siphon the beer into the sterile bottles, primed for the carbonation
- Seal the bottles, leave in cool, dark place (at around 12°C) for two weeks

Cornflakes have more genes than people do

Skills needed to become a Sensory Scientist

Technical Skills: Must be competent in the use of technical sensory measurement techniques such as mass spectrometry, and magnetic resonance imaging.

Communication Skills: Sensory scientists must be able to explain their studies and their results, such as what they were trying to learn. They must also be able to communicate well when working with others, including technicians and student assistants.

Critical-Thinking Skills: Sensory scientists must use their expertise to determine the best way to answer specific research questions.

Data-Analysis Skills: Sensory scientists must be able to utilize standard data analysis techniques to understand the data and get the answers to the questions they are studying.

Observation Skills: Sensory scientists conduct experiments that require precise observation of samples and other data, as any mistake could lead to inconclusive or inaccurate results.

Educational Requirements

- An M.Sc or PhD in Food Science and relatable courses like Chemistry, Biology, Biochemistry, is generally preferred.
- Also, knowledge of Statistics and Mathematics for result analysis is required and subjects like Psychology and Marketing, will also help for understanding consumers.

Some Universities

- There are a few very strong sensory science graduate programs in Food Science departments around the US.
- Postgraduate Certificate and Courses in Sensory Science are also provided in the University of Nottingham (UK, China, Malaysia)
- Many universities have established sensory professorships in their food science departments, with examples from the University of Helsinki (Finland), University of Copenhagen (Denmark), University of Florence (Italy) and University of Nottingham (UK)

Notable Research & Scientists in this Profession

- Currently some sensory and consumer scientists at Auckland's Plant & Food Research are using the results of their research to help industries guide new product development
- Dr. Sara Jaeger and Dr. Richard Newcomb both lead teams at Plant & Food Research and are involved in different areas of Sensory Research
- They use proven methods to research consumer requirements and are considered to be at the forefront of development of new ways of determining consumer and industry requirements for foods and beverages
- Present research includes the breeding of new plant cultivars and expanding the number of new wine styles

So if playing around with flavours to come up with a product which blows our senses away is what interests you, then sensory science is an upcoming field which you can consider as a possible career choice.



Coconut water can be used as blood plasma

EXPERIENCE TALK

In conversation with a CFTRI'an, Mr. Vishal Joshi, of 2006-08 batch who is currently working as a Product Development Manager in Mars Wrigley Confectionary. Read on to find out his valuable insights as to what the current scenario of the food industry is and we would like to thank him for giving us his valuable time.

How was the placement drive when you were at CFTRI?

The placement drive was slow at start but towards end of semester many companies came to campus for recruitment. During our placement drive Dr. R. P. Singh was placement coordinator and he tried to pull all multinationals to campus. In our placement drive almost all got placed in different companies covering areas of Production, Q&FS, R&D & Technical sales. I got an option to choose between Unilever and Cadbury (Now Mondelez), I decided to start my career with Cadbury due to its comprehensive technical trainee program covering stints in all key functions and chocolates!!



How was your experience in Cadbury?

Cadbury was dream job for me! In Cadbury I was exposed to various departments like production, quality, marketing, sales, finance, regulatory and product development. The trainee programme for Cadbury made my foundations for strong. The highlight for Cadbury was critical exposure to various functions and factory stints. The small team environment enabled me to learn faster. My inquisitiveness helped to gain more knowledge from experts in the team.

How was your experience in GSK?

It was good experience overall! It was quite a shift from a fun category to health food category with massive brands like Horlicks & Boosts! Presence of other fellow CFTRI'ans made life easier in the new organization. I worked in GSK in health drink category especially malt based drinks such as Horlicks, Boost. The main objective to develop delicious products with high nutrition profile. In GSK consumer healthcare Nutrition requirements drives product innovation. The key highlight was to see a massive brand like HORLICKS stretched into various age/gender based beverage and allied food categories.

How is R and D in India different than R and D in other countries?

In western world, Health & Wellness is the key prioritization of R & D. In India, it is coming in slowly but will take some time to expand. In countries like USA, UK, and in Europe the global expertise centre invests more in R&D keeping longer term strategy and deploy those learning in allied markets globally. The R & D of any country will depend upon the type of market and consumer base as R & D is bridge between the supply and demand. R&D support demand & supply team to get the best consumer product experience at scale where we can produce safe and quality products with highest efficiency. In India, R& D team mainly focusses on applying the technology of ingredients to meet consumer

Eating lollipops is just swallowing flavoured saliva

requirements rather than doing fundamental scientific research. Moving forward, this may change as India is one of the fastest growing economy and hence people would like to invest more in R&D facility. Same time having a more partnership with research institution like CFTRI and industries will also help in accomplishing common goals.

What challenges did you face as a new product development scientist?

In India as NPD scientist, the main challenge is keeping the product safe and cost competitive with changing regulatory landscape without compromising the key desirable attributes of products for consumers. The changing market trends always gives us new challenges forces us to learn on the fly and deliver.

Can you tell us about current market scenario for new food products in India?

The new product development in India is towards developing more value optimised product for consumers. The Indian seek value in everything they buy and hence even in foods & beverage category we need to delight consumers by providing highest quality product and affordable price. Affordable products will allow brand to reach deeper. Same time, there is equal exciting opportunity for healthier and premium quality products.

Can you tell us about your current role in Mars?

I am working as Scientist, New Product Development at Mars Wrigley Confectionery. Currently I am working on the chocolate development program in Mars. I manage the technical aspects of chocolate portfolio for India which is a combination of locally manufactured and imported products the overall experience is amazing and exciting. MARS is global giant but small player in chocolate industry in India, which means there is enough headroom to grow.

Can you tell us about your experience in CFTRI?

CFTRI provide you immense confidence and self-belief. CFTRI gives you the confidence to work in food industry because of facilities that are offered by CFTRI like well-equipped labs, library, expert scientist and amazing alumni networks. The alumni of CFTRI is very strong that makes big impact in placements, on-going support and mentoring. My guide taught me to always look for simple solution for every problems by dividing them into parts. One of my favourite place in CFTRI was Cheluvamba mansion and nearby CORNER HOUSE.

Lemons contain more sugar than strawberries

ALUMN COLUMN

Alumn Column would like to thank Mr. Paramvir Singh Dhindsa of 2013-15 (Special-26) batch currently working in Nestle India Ltd., for giving us his valuable time and sharing some of his nostalgic moments in CFTRI.

1. What was your batch name & was there any story behind it?

- My batch name was Special-26. The batch got its name from Special-26 movie of Akshay Kumar as we were also 26 in number.

2. How were your intro sessions and share some experience or memory regarding that?

- Intro sessions were unique. I always felt it like roadies show where our senior Mr. Mayank Jain (IFT Club President) used to be like Raghu of Roadies and there was a chair placed in the centre, where everyone used to come and start with their introduction. I think the best part is we not only got to know our seniors also it helped in creating a bond amongst us also as we used to prepare the skits, group dance together.



3. Your memorable moment at CFTRI?

- There are many. I always miss Ganesh Chaturthi, Holi, Christmas, Diwali, Farewell and Convo parties. Also our senior batch (Cereal Killers) and our batch performed together in IFCON 2013 which is the most memorable one.

4. What do you miss the most??

- I miss my friends and the time spent together with them. Be it sitting in the mess for long after evening snacks, going to Big Chicken for lunch after the classes and watching movies in Mall of Mysore on every Saturday.

5. Favourite spot in campus?

- The favourite spot in campus is the staircase near to the swimming pool.

6. Share something about your fresher's & farewell?

- Farewell video is the most awesome gift given to us by our juniors at the time of our Farewell. In our freshers the best part was the fashion show performed by us.

Peanuts aren't nuts, they're legumes

7. *You besties name and your group name if any.*

- Abhay Nag, Sandipa Sarkar, Surabhi Yadav, Shreyas Salunkhe, Ankoti Ghosh and Group Name "Tummy Toli".

8. *Best take away experience/message from CFTRI?*

- Best take away message will be to make use of abundant knowledge gained in CFTRI to foster to the needs of the industry and take your institution to the heights of glory.

9. *Your journey after the CFTRI till now and what's your experience?*

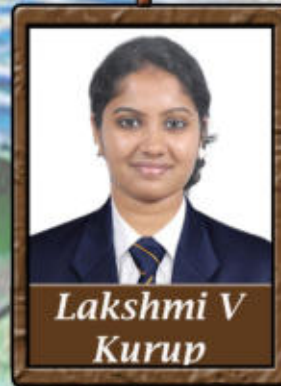
- The journey after CFTRI is a mixture of learnings and experiences. I am currently working in Nestle India Ltd. and the journey of about 2 years and 8 months has taught me many unique things which are not fed into the campus. These you will learn only through experience in industry.

10. *Any message for your juniors?*

- I wish them all the best for future Endeavors. Enjoy every single moment. Work hard and party harder.

Humans share 60% of our DNA with bananas

PLACEMENTS



Altitude can change taste

GAMES

Identify the company names.



E STO



AK



Marico

IITC

Mondelez

PepsiCo

Nestlé

Hindustan Unilever

Parle Agro

Dr. Oetker

Bacardi

ANSWERS



SANDIZYA

-until we meet again



Farewell Night - 2018







incrEDIBLEz'30

M.Sc Food Technology (2016-18)

*Good Friends never say Good Bye.
They simply say "See You Soon"*



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