

16<sup>TH</sup> EDITION

APRIL 2018

Abh yuday *Reliving the Legacy*



**Psychological Hunger**

*Mind over matter!!*



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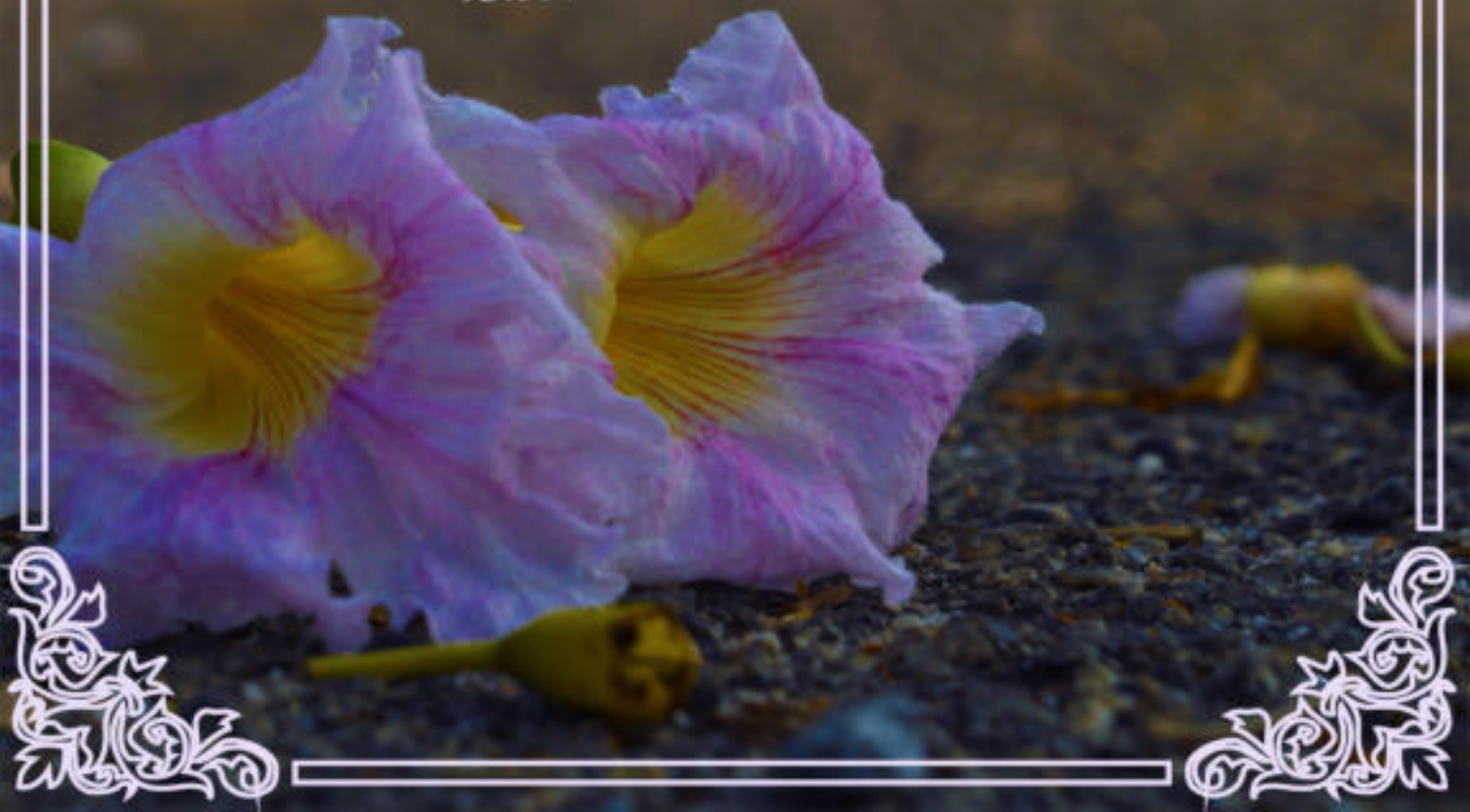


# Abhyuday

*Reliving the Legacy*

Like food nourishes us physiologically, spring is food for the soul. Clear blue sky, golden sun rays, bright colours all around, chirping of the myna and the sweet aroma of flowers which words can't describe. Can anything be more enchanting than this? The force of spring is mysterious, and powerful beyond measure. It makes you come out of your house and breathe in the fresh air. Spring is the Abhyuday of something beautiful, so sing along to the cuckoo's tune. After all, spring is nature's way of saying 'Let's Party!' and you can't stop the feeling.

*Spring*  
*edition*





*Words from the Editor's desk...*

# This Issue



*To all the distinguished readers*

On behalf of team Abhyuday, humbly presenting you the SPRING EDITION from a learner of 53rd batch of CFTRI-  
"French Toast Mafia"

*"Spring is the time of the year, when it is summer in the sun and winter in the shade."  
- Charles Dickens*

When time came to decide the theme for the 16th Edition of Abhyuday, our very competent designing team suggested 'spring', and I knew that this was apt for the occasion. Walking in the campus is a pleasure which I am sure all of us have experienced, but during spring, the specks of yellow, pink, purple, red and white sprinkled across the campus is like a colourful painting on the canvas that is our beautiful CFTRI. The air filled with the sweet scent of flowers, birds chirping and the eastern sunlight shining on the Cheluvamba mansion against the backdrop of crisp green hues and azure sky makes us realise the magnum opus of beauty, which it truly is. So, on behalf of Team Abhyuday, I humbly present to you the 16th edition, that is, the special 'Spring Edition'.

This edition, other than enthralling your senses by capturing the different colours of spring on every page, is going to talk about 'Psychological hunger', a phenomenon which is slowly catching the eye of many researchers. Don't be tempted to reach out for that cookie after reading it!

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

Want to have some 'Myosin' without the sin? Read about Vegetarian meat in this edition of "What the Food".

Forget those days when your mom forbade you from playing with your food. If the idea of creating exploding chocolates, hot maple ice cream or smoking beer excites you then read all about it in Career Corner.

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

Read about one of our Alumni, Ms. Prabhjot Kaur of Zeal Fosters (2009-11) batch in Alumni Column as she reminisces the time spent in CFTRI and relive her student days.

This edition is all about colours. Adhering to the theme of this edition, enjoy the splash of colours in our photography section as it covers the most colourful festival there can ever be, that is Holi.

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 a learner of the 53rd batch of CFTRI-'French Toast Mafia', we, Team Abhyuday, welcome all suggestions and feedback from our dear readers. Looking forward to hear from you!!

Go on...flip the page!

REGARDS  
ARUNIMA BANERJEE

16<sup>th</sup> Edition  
Abhyuday

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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 track one most important development of the month in the food industry with a detailed analysis from all the quarters. 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 Alumn Column 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.

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.





CSIR - CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE

cftri

CFTRI ALUMNI ASSOCIATION

*invites you to*

# mulaqat-e-noor

- a trip down memory lane

*Like branches of a tree,  
our lives may grow in different directions.  
Yet our root remains.*

*Lets take a ride to cherish all the joyful  
moments which went through old memory lane.*

**DATE : 05-05-2018**

**VENUE : IFTTC AUDITORIUM, CFTRI**

**TIME : 2:30 PM**

**WARM REGARDS  
OFFICE BEARERS (CFTRI ALUMNI  
ASSOCIATION),  
INCREDIBLEZ'30 (2016-18) &  
FRENCH TOAST MAFIA (2017-19)**



## New launches

### Nestlé to launch Nescafé Azera Nitro in two variants in UK and Ireland

**Friday, 23 March, 2018**

Nestlé will launch Nescafé Azera Nitro, a new product for coffee fans in the United Kingdom and Ireland. It is a coffee drink infused with nitrogen for a smoother taste. It will be available in two flavours - Americano and latte.

For more information log on: <http://www.fnbnews.com/Beverage/nestle-to-launch-nescafe-azera-nitro-in-two-variants-in-uk-and-ireland-41931>



### IITC introduces Aashirvaad Svasti in Munger, enters pouch milk category

**Friday, 16 March, 2018**

IITC Limited has forayed into the pouch milk category with the rollout of Aashirvaad Svasti, a brand of homogenised milk, at its dairy plant in Munger, Bihar which is the hub of its dairy operations. With this development, the company has expanded its dairy portfolio beyond ghee and dairy whitener.

For more information log on to: <http://www.fnbnews.com/Dairy-Products/iitc-introduces-aashirvaad-svasti-in-munger-enters-pouch-milk-category-41901>

### Bisleri to introduce one-of-a-kind bubbly mango drink Fonzo in summer

**Monday, March 12, 2018**

Bisleri International Pvt Ltd, the most trusted brand of mineral water in India, will launch Bisleri Fonzo, a bubbly mango drink, this summer. It will be available in 250ml PET bottles. Fonzo will be one of its kind in the fizzy fruit drink category having a unique proposition of real mango juice with refreshing fizz.

For more information log on to: <http://www.fnbnews.com/Beverage/bisleri-to-introduce-oneofakind-bubbly-mango-drink-fonzo-in-summer-41881>





## Coca-Cola to make maiden alcoholic drink, version of Chu-Hi, in Japan

**Saturday, March 10, 2018**

For the first time in its history of 131 years, Coca-Cola is set to produce its first alcoholic drink in Japan. The company stated that it would start making a version of Chu-Hi, canned sparkling flavoured drinks that include a local spirit called shochu.

For more information log on to: <http://www.fnbnews.com/Beverage/cocacola-to-make-maiden-alcoholic-drink-version-of-chuhi-in-japan-41874>

## Policies and Regulations

### FSSAI issues guidance document on use of supplements intended for athletes

**Saturday, 24 March, 2018**

FSSAI issued a guidance document on the use of supplements/products intended for sports persons recently. It provides an overview about the regulatory status and available provisions made in the Food Safety and Standards Regulations, 2011, as well as in the National Anti-Doping Agency's (NADA) anti-doping rule.

For more information log on to: <http://www.fnbnews.com/Policy-Regulations/fssai-issues-guidance-docu-on-use-of-supplements-intended-for-athletes-41939>

### FSSAI includes standards for whey protein concentrates & colostrum in FSSR

**Friday, 16 March, 2018**

FSSAI has included standards for milk protein concentrates, whey protein concentrates and colostrum and colostrum products in the Food Safety and Standards Regulations (FSSR), 2011, and those pertaining to food additives.

For more information log on to: <http://www.fnbnews.com/Dairy-Products/fssai-includes-stds-for-whey-protein-concentrates-colostrum-in-fssr-41903>

### Food companies may be forced to change printing norms

**Friday, March 23, 2018**

Packaged food companies in India, including ITC, HUL, PepsiCo and Nestle, may soon have to change their printing and packaging norms due to safety issues with certain chemicals currently being used to print labels and packages. The Bureau of Indian Standards (BIS) is working to update the current standard (IS 15495) for printing ink for food packaging and several harmful chemicals, including toluene, which may be banned with the new standards coming into effect.

For more information log on to: <https://economictimes.indiatimes.com/news/economy/policy/food-companies-may-be-forced-to-change-printing-norms/articleshow/6342581.cms>



# PSYCHOLOGICAL HUNGER

## Mind over Matter?

**Situation 1-** You are sitting comfortably in your living room, watching T.V and suddenly crave for a bag of chips even if you've just had a meal. You go to the kitchen and search for it but return empty handed because you wanted only chips.

**Situation 2-** You are writing an article for a magazine and feel like your brain would stop working if you don't have chocolate chip cookies at that very instant. Does this mean you are hungry? Not really. Then why the sudden urge to eat? Worry not. You, my friend have just fallen victim to a very normal tendency known as **Psychological Hunger**. This kind of hunger is not caused by an actual desire to eat because you have an empty stomach, but caused either because you see good food around, are upset or sometimes simply just for the heck of it. It is different from physiological hunger as physical hunger can be tolerated for some period of time, and unlike psychological hunger which is aimed at a very specific food item, is very general.



**Lambert et al.** in 1991 conducted an experiment in which they gave either hungry or satiated subjects one of three types of sensory cues or no stimulus, and compared their desire to eat chocolate before versus after the stimulus. The different sensory cues included **taste** (trying a piece of chocolate), **sight** (viewing a photograph of chocolate), and **cognition** (reading a description of chocolate). They found that the presentation of sensory cues significantly increased participants' desire to eat chocolate, and that participants consumed more chocolate regardless of their state of hunger or the type of stimulus presented. Simply put, this explains why while watching an episode of the Sanjeev Kapoor cookery show, you crave for the food items being cooked onscreen as a variety of external sensory cues can influence people to consume food, even if they are not hungry. So now you know why the billing area in a supermarket is filled with sugary items like chocolates, liquorice or wafers and the hefty profits made by movie theatres on popcorns and burgers.



But visual cues may also help distract you from the sudden pangs of hunger. In a 2013 study published in the journal *Appetite*, researchers found that women who looked at a smartphone app that showed a rapidly changing visual display whenever they had a craving reported that the craving became less intense.

So why do we crave for certain foods? There can be a lot of external factors at play like parties, while working/studying, under stress conditions or at a certain time of the day like late in the afternoon. But it's not all so simple. We have a biological explanation for this as well. Hunger is a dynamic interplay of three places in the brain namely:

- 1) The hypothalamus, which governs metabolism
- 2) The limbic centre of our emotion brain, which governs dopamine for pleasure; and
- 3) The hind-brain, which wires the behaviour of eating into our unconscious habits so we don't have to think about it.



This creates a powerful neural circuit that overrides the cognitive brain to ensure that we continue to eat again and again. Our bodies are designed to break whole foods down into energy through the process of digestion. As **ghrelin**, **blood sugar levels**, and **sensorimotor signals** tell the brain that our stomach is empty, we begin to feel hungry, and we initiate our habitual search to satisfy our hunger. One mechanism that regulates physical hunger is the balance between hormones, particularly **ghrelin**—“the hunger hormone”—and **leptin**—“the satiation hormone.” Ghrelin tells our brains that we are hungry when we perceive our bellies to be empty, and it helps to regulate the rate at which we use our energy. The more present we are when we are eating, the more accurately we can read our bodies cues and aid our digestion.



The science of appetite includes emotional processes. Dopamine is the neurotransmitter that drives pleasure and is linked with every addictive process. It's no wonder the Hindus identified the second chakra, a nerve plexus located just below the navel, as the centre for all relational issues of food, money, sex, and other people. Our nervous systems are designed to get really happy when we eat food because our ancestors who took advantage of the food available survived long enough for the next meal. This is a good thing. It affirms and ensures our survival. And, pleasure feels good!

Emotions are ingrained in social mammals to alert us to needs. Anger lets us know a boundary has been crossed or abandoned. Sadness tells us we lost something valuable and heightens our hunger for our needs to get met elsewhere (much like ghrelin lets us know we're hungry). Fear lets us know that something could be threatening to our survival, while joy lets us know something is life affirming. Our habits about our emotions—whether we bottle them up, relate to them with ease, or explode with them—can give us information about our emotional appetite.

People when sad or upset also differ on their choice of comfort foods; some might crave for a bag of chips while some opt for softer, foamy foods like cake. Ever wondered why during exams, some students prefer skipping meals while some go out and have junk food? Stress in particular has been shown to drive us to consume more food. In a study of female participants only, **Groesz et al.** in 2011 found that greater reported stress was associated with participants' drive to eat, as measured by feelings of hunger, binge eating, disinhibited eating, and ineffective efforts to regulate eating. **Kandiah et al.** in 2006 found that stress produced a change in appetite in 81% of participants, and that 62% of these participants experienced an increase in appetite. Those with an increased appetite were also more likely to choose sweet or mixed foods such as desserts or burgers. Interestingly, while 80% of participants reported eating healthily normally, this number dropped to 33% when they were stressed. This increased drive to eat and to eat unhealthily may explain why stress may contribute to obesity. Thus, it can be said that our emotional state of mind also has a role in many lifestyle disorders like obesity. Also, we crave for sugary foods when upset or stressed, because our body at that time has a high level of a hormone called **cortisol**, and sugar leads to the production of another hormone called **serotonin**, which is calming and relaxing. In other words, it's just our body's way of taking a chill pill.

So where does this leave us? Would we never be able to resist reaching out for that plate of chocolate brownie after dinner thinking there's always room for dessert or can we trick our mind somehow? One possible way is to satisfy the craving. Unsatisfied cravings lead to binge eating and we don't want that do we? **Moderation** is the key to success. So, next time, instead of finishing an entire pack of cookies, try to eat just three. When in a social gathering, like a party, being mindful of what you are eating is also very important. While studying or working, or simply lazing around, distract yourself with some other action like calling up your best friend, or going for a stroll in the park (and not to the Pav Bhaji shop!). Also, **unmet emotional needs** influence your eating habits. So it might be tempting to grab a tub of ice cream after a major fight with your mom but don't forget, psychological hunger is a **motivated state of mind**. Don't let your mind bully you into making unhealthy choices for your body. After all, it's just a packet of cookies, not love.



#### References:

- <http://psychologyofeating.com/science-appetite/>
- <https://www.conci.com/weight-loss-tips/physical-or-psychological-hunger>
- <http://www.apa.org/monitor/2013/10/hunger.aspx>



## “More than Meats the Eye”

Have you ever been at a dinner table where your non-vegetarian friends are passing around the meat and you can't help but shirk away from the sight of it. Well, not anymore.

A few US based companies such as Beyond Meat and Impossible Foods have come up with a meat which is not exactly meat, not even a bit. They are meat analogs. The usual meat analogs are tofu and beans or soy-based meat substitutes, but for the meat lovers these alternative protein sources might not amount to the experience of eating the regular meat where when taking a bite, the meat feels dense, rebounds as it is chewed and the juices ooze out into the mouth.

Now scientists are using food science, biotechnology and tissue engineering to develop new and improved meat substitutes with the taste, texture, and appearance of meat—to deliver the pleasure, without the environmental consequences because raising animals for food contributes to climate change, water pollution, and habitat destruction.

The meat analog is:

- 100% plant-based
- Uses legumes such as yellow peas or soy plant.
- The basic ingredients are mixed and then extruded.
- The extrudate is akin to the structure of muscle fibre in animals.

But there's something about the combination of muscle, connective tissue, and fat that makes up meat that is unmistakable. The taste of meat cannot be confused with anything else. And meat is loved because of its deliciousness.



To achieve a fake meat that will please meat lovers requires honing in on the flavour, aroma, texture, and appearance that gives meat its essence. The key then to making a convincing plant-based meat is recreating these attributes. Leghemoglobin, a protein similar to myoglobin that is found in nodules on the roots of legumes is incorporated into the 'meat' and imparts the red colour, hence, the meat appears to “bleed” a little. This protein is produced in yeast and added to the products. The analogs currently exist for chicken and beef.

Due to the high resource demand of livestock animals, this sustainable food was envisioned. It offers a few advantages. First of all this will be acceptable to vegan diet as it is made entirely of vegetarian sources. Next, it does not consume as many resources as needed for the same weight of actual meat. And since this is made from plant sources, there's opportunity to enhance nutrition by providing more protein than beef and it's cholesterol free!

But since it requires very high processing, it has five times more sodium and decreased amount of fibre, vitamins and phytochemicals. And again, as it is a plant source protein, the bioavailability of the protein would be low. The cost of this “meat” is also higher than regular meat.





This meat is available as an occasional treat and not as a whole meal. And for the non-vegetarians, this plant-based meat will allow you to eat more without the guilt and enjoy the "meaty" deliciousness that's good for people's health and the planet.

#### References:

- <http://beyondmeat.com/>
- <https://www.impossiblefoods.com/>
- <https://www.foodnavigator-usa.com/Article/2018/01/urgr-fans-are-meat-eaters-not-vegans-vegetarians-says-Beyond-Meat/12/An-estimated-70-of-Beyond-B>
- <https://www.foodnavigator-usa.com/Article/2016/06/30/Plant-based-Beyond-Burger-to-roll-out-across-Whole-Foods>
- <https://www.foodbusinessnews.net/articles/11030-beyond-meat-debuts-beyond-sausage>
- <https://www.foodnavigator-usa.com/Article/2016/06/30/Plant-based-Beyond-Burger-to-roll-out-across-Whole-Foods>



### Ganesh Chaturthi Celebrations

The new Academic year started with the celebration and invocation of Lord Ganesha on 25th August 2017. Ganesh Chaturthi Celebrations commenced the day before with preparing the IFT Club room for receiving Lord Ganesha. It was decorated beautifully by the French Toast Mafia (2017-19). Puja was held on 25th August at 10 am and prayers were conducted morning and evening till Visarjan on 27th August. Pre-Visarjan celebrations had everyone dancing to the DJ and invoking Lord Ganesha with chants. Everyone participated enthusiastically and prayed for Lord Ganesha's return next year!



### Trip to Chamundi Hill

Following the CFTRI legacy, on 2nd September 2017, the batch of (2016-18) Incr'Ediblez' 30 took the (2017-19) batch French Toast Mafia on a trip to the Chamundi Hill, to visit the Chamundi Temple and invoke Goddess Chamundeshwari's blessings for the beginning of another efficacious year. Everyone had a wonderful time with the interblending of prayers with the fun and entertainment that comes with going in a group.

### Onam Celebrations

The glorious harvest festival of Kerala, Onam, was celebrated with great gusto and participation on 3rd September. Colorful rangoli designs at the entrance of the mess were a delight for everyone to see. Rangoli Competition was held, where the juniors participated. The Rangolis were evaluated by Maj. Vishwamitra Angarika and Cultural Secretary Rashmi Chetule. Photo sessions were extensively carried out, as everyone came out with their best traditional attire. Various games like musical chair were played after Lunch.







### CSIR Platinum Jubilee Celebrations

CFTRI was open for outsiders from 18th to 20th September, in commemoration of CSIR Foundation Day. It was inaugurated by Prof. Ram Rajasekharan. It had two exhibitions, one in the Main building-where many innovative products and technology of CFTRI was on display. The second one was a capsule exhibition at IFTTC auditorium, where the numerous works done by the CSIR institutes was displayed.

### Fresher's Night

The Incr'Ediblez' 30 (2016-18 batch) organized a Fresher's party for their juniors the French Toast Mafia (2017-19 batch) on 23rd September. Everyone was dressed in their best attires capturing the moments in photographs. The evening began with various cultural events like ramp walk which was followed by other performances like Fusion dance, Mad ads, Skits and Clap show all performed by the Fresher batch. A 'Mr. and Ms. Fresher' event was organized by the senior batch for their juniors which included many rounds like On the Spot Skit and Extempore. Mr. Macdonald Ropmay and Ms. Jyotsana Budhiraja, after winning all the rounds were crowned as "Mr. and Ms. Fresher". Students from M.Sc. Nutrition Biology and PhD scholars also attended to enjoy the cultural programs.



### Christmas Celebrations

The Celebrations began on Christmas Eve by decorating Christmas Crib which was followed by everyone visiting St. Philomena's church to celebrate Christmas Eve. On the Day of Christmas a game called 'Secret Santa' was played, where each senior student was assigned junior student and Vice Versa as his secret Santa. The tasks given by secret Santas were very entertaining, ranging from dressing as Hanuman or Harley Quinn of suicide squad!!!, face painting, to wearing a name

plate stating "I am Hopeless" and walking like a Zombie. At the end of the day each student was presented a gift from their secret Santa. Everyone enjoyed Christmas... a season to rejoice!





## Molecular Gastronomist

Clouds of vapour hovering over your bubbly drink, pearls of watermelon lifting off the white cheesecake or chocolate spaghetti teamed with vanilla ice-cream — welcome to the curious world of molecular gastronomy that has foodies in the city salivating and asking for more. Over half a dozen restaurants, cafes and bars are experimenting with molecular gastronomy, the latest food craze that fuses science with culinary art, and serving up everything from drinks and food to even desserts in amazingly new combinations and unexpected flavours.

Two Oxford physicists, Nicholas Kurti and Hervé coined the term molecular gastronomy in 1988. It refers to the scientific discipline that studies the physical and chemical processes that occur while cooking. Molecular gastronomy also incorporates the social and artistic components. It is distinct from the traditional food science, which is focused on food production on an industrial scale, nutrition and food safety. Until the establishment of molecular gastronomy, there was also no scientific discipline studying the chemical processes of cooking at home or in the restaurants —as opposed to food preparation for the mass market.

### HOW DO I GET STARTED?

Pursuing a degree in Masters and Doctorate of Philosophy in gastronomy will help you to tackle a variety of issues in the field including, but not limited to, food culture, biology, products and origins, culinary techniques, best practices, and business management.

In the particular context of the Erasmus Mundus Master Programme “Food Innovation and Product Design (FIPDes)”, it focuses on:

1. Physical chemistry phenomena which are important during dish preparation (capillarity, convection, etc.)
2. General chemistry which will help you recognise the molecules in food with the potential of causing chemical reactions during culinary transformations
3. Organic chemistry phenomena which are important during dish preparation (all the main organic reactions which occur during culinary transformations, such as hydrolysis, condensation, esterification, Maillard/Strecker reactions, etc.)
4. Application to food innovation and product design, including “molecular cuisine” and “note by note cuisine”



Notable Institutes abroad include:-

1. University of Valencia, Spain
2. School of African and Oriental Studies (SOAS), University of London
3. University of Gastronomic Sciences, Pollenzo, Italy
4. Queen Margaret University, Edinburgh, Texas

Some Institutes in India offers such similar courses:-

1. Molecular Mixology Course by AHTA (Advanced Hospitality Training Academy), Mumbai



2. Bangalore Culinary Academy, Bangalore
3. International Institute of culinary arts, New Delhi

All in all, a course in Molecular Gastronomy would help you acquire some knowledge and a good understanding of the scientific discipline and increase your skills in devising a methodology for modifying food and coming up with culinary transformations.

## WHAT'S MY JOB?

1. Flavorist - For a multisensory gastronomic experience, discover volatile aromatization. You can have fun combining your favourite dishes with mesmerising aromatics to trick your customers' senses while creating unique flavour profiles! Open your mind, taste and let their nose surprise them!
2. Molecular Mixologist - Create striking molecular cocktails that will dazzle your guests thanks to easy recipes that combine classic mixology and basic molecular gastronomy techniques. Revolutionize your Mojito with fashioned mint pearls, reinvent your gin tonic with a lemony zest, and morph your martini with an olive sphere! Molecular mixology brings about new flavours, textures, and surprising presentations which enhance your overall drinking experience.



Cocktail Ice Sphere



Transparent Ravioli



Aperol Gel & Paper

3. Molecular Stylist - The art of culinary style is simplified with our precision accessories and plating tools. Garnish, adorn, cut and spread delicious molecular preparations using our high quality accessories. Easily create restaurant-quality food worthy of the best molecular gastronomy hot spots around the globe.

Let's check some of the creativity that Molecular Gastronomists have up their sleeve:-

1. Ferran Adria from El Bulli restaurant used alginates to create his system of spherification with gelled spheres that literally burst in your mouth.
2. Heston Blumenthal from The Fat Duck restaurant discovered the ability of fat to hold flavor and created a dish that had three flavors - basil, olive and onion - with each taste being perceived in sequence.

Chefs associated with molecular gastronomy:-

- |                      |                 |
|----------------------|-----------------|
| 1. Heston Blumenthal | 2. Grant Achatz |
| 3. Ferran Adrià      | 4. Sat Bains    |

In India, we have:-

- |                  |                       |
|------------------|-----------------------|
| 1. Sriram Aylur  | 2. Srijith Gopinathan |
| 3. Akshay Nayyar |                       |

The potential of molecular gastronomy is enormous. It is revolutionizing traditional cooking and transforming dining into a surprising emotional and sensory experience. Either way, as a student of cooking or as a lover of fine food, molecular gastronomy is sure to open up new vistas – and awaken your palate to a new definition of delicious.



Alumn Column would like to thank Ms. Prabhjot Kaur of 2009-11 batch currently working as an Assistant Professor in Shaheed Rajguru College of Applied Sciences for Women, Delhi University for giving us her valuable time and sharing some of her nostalgic moments in CFTRI.

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

- Our batch (2009-11) was named Zeal Fosters. We did not have any story behind the name. But, now I wish we had :-)

2. Favorite spot in the campus

- No second thought. It's the "Mughal Garden"

3. How were placements during your time?

- Our placements were good. Decent number of companies visited us and almost everybody settled towards the end of the session.

4. How were your intro sessions? Any funny memory?

- Intro sessions were initially terrifying. But it turned out to be very fruitful for the fresher's as it laid a strong foundation for warm bonding with the seniors. I distinctly remember how we would crib going for the intros late at night when the very next morning we had our first-monthly exams. We were asked to mug up the names of our batch mates, seniors, super seniors and so on. Being nervous, some of us would replace father's name with the university name or super senior's name, mispronounce the long and uncommon names that made everyone break into peals of laughter.

5. What do you miss the most about the campus?

- I miss loitering on the campus roads, chitchat in the Mughal garden at night and the early morning sight of the campus roads coloured red and yellow with flowers.

6. A memorable moment in the campus.

- Going back to the memory lane, it would be difficult to pick one. For example, during exam nights we would peek outside our window to check whose light was switched on, which motivated us to study for some more time. The unforgettable memories of getting dissertation and investigation printed from Shreekant and standing in long queues, for hours at end, without any tinge of exhaustion.

Our batch had 6 girls from Delhi and we were called the D-gang. We were notorious for our careless, loud giggles. The mess in-charge was so irritated that he put up a warning notice banning the laughter of students during food hours. Another incident that still tickles me was when a cobra was spotted in our hostel area. There was a mixed felling of awe, curiosity and anxiety. The personality of Snake Shyam (snake charmer), his style and efforts to catch the snake hooked us to watch the whole event for hours together.





7. **Something you did in CFTRI for the first time.**

- I made modhak for the first time in CFTRI during Ganesh Chaturthi.

8. **How did studying from CFTRI help you in your career?**

- The reputed institute in the whole of Asia proved to be a right platform to gain knowledge, build up confidence, sharpen my mental faculties and it gave me a unique identity. I am a proud CFTRI-an.

9. **Skills you think are needed that will help us in the industry.**

- Hard and soft skills both are important. I would lay stress on soft skills that can provide edge and help company find an ideal candidate in you. One should know when to be a leader and when to be a team player. Soft skills like communication, flexibility, interpersonal attributes, team management, problem solving, leadership and positive attitude can land you in big positions.

10. **Message for your juniors.**

- Live your days in CFTRI. Study smartly, maintain CFTRI network and always be happy and positive. You are envy of lot of non-CFTRI food technologists. Sky is the limit. All the best!



# PLACEMENTS

**Nestlé**



*Sweety Maria  
Coutinho*



*Suryakavi M*

**Kraft Heinz**



*Deshpande  
Rohan Hemant*



*Shetty Ganesh  
Devraj*

**TASTYBITE**



*Katta Nikhitha*



*Neha Rawat  
KM*



*Prasad  
Renake*



*Amal Mani*



**Coca-Cola**



*Priyatam Prity*



*Gullipalli  
Mohith Aravind*

**UNITED BREWERIES LIMITED**



*Nitin Prakash  
Aladakatti*



*Utkal Ranjan  
Sahoo*

**BRITANNIA**

*Eat Healthy. Think Better*



*Prashansa  
Chauhan*



*Varun Arora*

**KERRY**



*Geethanjali P*



*Christina Pauline  
Emmanuel*

**ITC Limited**



*Anand Chetter*



*Chetule Rashmi  
Bhaurao*





**Across**

1. '\_\_\_\_\_' is 1600 times sweeter than sucrose (9)
2. Pink revolution is related with (4)
3. Name of an empire and also a type of chicken (6)
4. Which company's product is poppins (5)
5. *Trichinella spirallis* is found in (4)
6. Canning was invented in France during the rule of (8)
7. Wine was first heated here for preservation purposes (5)
8. Largest Food and Beverage company in 2017 (6)
9. Proteolytic enzyme found in pineapple (9)
10. 'Haleem' is famous in (9)
11. ISO standard 22000 is related to food '\_\_\_\_\_' in food processing industries (6)

**Down**

- a. Food preservative used in huge quantities, but banned for toxicity after World War I (5,4)
- b. Bioactive compound in aloe vera (9)
- c. Country having the largest per capita consumption of tea (6)
- d. Meat from deer is (7)
- e. The most common fermented cabbage dish from South Korea (6)

- 1. THAI/MAINT
- 2. MEAT
- 3. MCGRAW
- 4. PORK
- 5. PORK
- 6. NAUGHTON
- 7. CHINA
- 8. NESTLE
- 9. BROOKLYN
- 10. HYDRAVAD
- 11. SAFETY
- 12. BORGIC ACID
- 13. GEMANNAN
- 14. JERKBEY
- 15. VENISON
- 16. KIMCHI









**PIC OF THE MONTH**



*m graphy*







**FRENCH TOAST MAFIA**





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