



खाद्यFora

ALL ABOUT SCIENCE OF FOOD



DECEMBER 2022, ISSUE 2

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Piyali Sengupta, Vaishnavi Kale, Mrunmayee Kolhatkar, Ananya Lele, Gayatri Kamat, Mrunmayee Salunkhe, Sakshi Mirashi, Aishwarya Mirashi, Baishakhi Mandal, Sakshi Pardeshi, Gayatri Patil, Aditi Vargante



EDITORIAL DESK

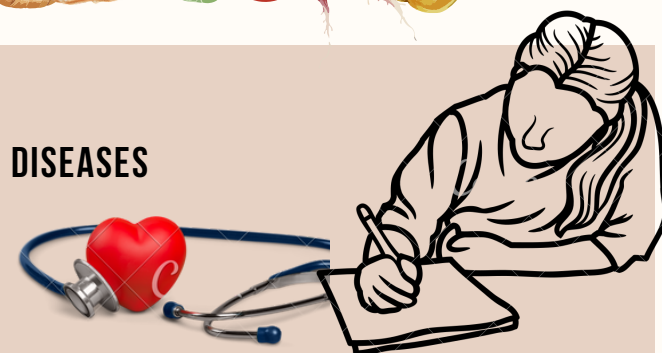
INTRODUCTION TO NON-COMMUNICABLE DISEASES

Non-communicable diseases (NCDs) are a diverse group of chronic diseases that are not communicable and are defined as diseases of long duration, generally slow progression, causing a large burden of adult mortality and morbidity worldwide.

NCDs are as a result of genetic, physiological, environmental and behavioural factors. According to WHO, NCDs kill about 41 million people each year, equivalent to 74% of all deaths globally. Each year, 17 million people die from a NCD before the age of 70; 86% of these premature deaths occur in low- and middle-income countries. The main types of NCDs are cardiovascular diseases such as heart attacks and stroke and it accounts for most deaths followed by cancers, chronic respiratory diseases and diabetes. Other types of NCDs are hypertension, dyslipidemia, obesity, rheumatoid arthritis, osteopenia/osteoporosis, depression, neurodegenerative diseases like Alzheimer's disease, Parkinson's disease and epilepsy.

Rapid unplanned urbanization and globalization of unhealthy lifestyle is a major contributor to NCDs. Unhealthy diets and a lack of physical activity may show up in people as raised blood pressure, increased blood glucose, elevated blood lipids and obesity. These are called metabolic risk factors and can lead to cardiovascular disease, the leading NCD in terms of premature deaths. Nutrition plays an important role across geographies and societal groups in contributing to better health, strengthening the immune system, better recovery and extending the period of being free from NCDs and improving the quality of life.

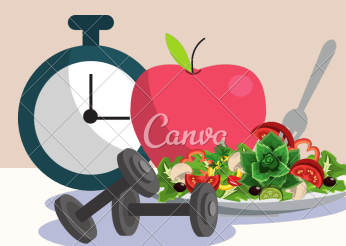
According to ICMR, the deaths related to NCDs in India have increased from 37.9% in 1990 to 61.8% in 2016. The behavioural risk factors associated are unhealthy diets, use of tobacco, alcohol and lack of physical activity. A population-based initiative for prevention, control and screening for common NCDs i.e. diabetes, hypertension and common cancers has been introduced in the country under NHM and also as a part of Comprehensive Primary Health Care.



Under the initiative, people more than 30 years of age are targeted for the screening of the common NCDs, in which there is focus on screening of breast cancer and cervical cancer among women. Screening of these common NCDs is an integral part of service delivery under Ayushman Bharat - Health and Wellness Centres.

Other initiatives for increasing public awareness about NCDs and for promotion of healthy lifestyle include observation of National & International Health Days and use of print, electronic and social media for continued community awareness. Furthermore, healthy eating is also promoted through FSSAI. Fit India movement is implemented by Ministry of Youth Affairs and Sports, and various Yoga related activities are carried out by Ministry of AYUSH.

"AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE"



SUPERFOOD CORNER GAR-LICKY

Garlic, for many years has been used as a food and also for its medicinal purpose. Regular consumption of garlic helps to reduce triglyceride levels and LDL cholesterol, making it a superfood to prevent cardiovascular diseases. Allicin present in garlic is a hypolipidemic agent. Garlic also has anti-microbial, anti-viral and anti-inflammatory effects.

“

**PREVENT
CHRONIC
ILLNESS**

”





CEREBRAL PALSY

Cerebral palsy (CP) is one of the non-communicable diseases and it is a broad term used to describe a group of chronic disorders that impair movement due to damage of the developing brain. CP is a non-progressive brain disorder. People with CP may also have visual, learning, hearing, speech, epilepsy (seizures) and intellectual impairments.

CP is one of the most common causes of childhood disability. It usually develops by the age of 2-3 years. Congenital cerebral palsy caused by a brain injury during a baby's development in the womb is responsible in about 70% of the children who have the condition. It is present at birth, although it may not be detected for months. An additional 20% have congenital CP due to a brain injury during the birthing process.

In most cases, the cause of congenital CP is unknown, however, some possible causes are: an infection during pregnancy may damage a fetus's developing nervous system, about 45% of children diagnosed with CP are born prematurely, severe jaundice in the infant and the physical or metabolic trauma of birth can be a cause.



TEACHER'S CORNER

PREMENSTRUAL SYNDROME: IT'S NOT ALL IN YOUR HEAD!

Premenstrual syndrome (PMS) is a condition in which certain symptoms arise during the late luteal phase of menstruation and disappear on commencement of menstruation. Premenstrual syndrome is classified under 10th revision of International Classification of Diseases (ICD-10) by the World Health Organization.

It can be experienced by girls/women at any age between child bearing age groups. Most commonly found symptoms include irritability, anxiety, breast pain, body aches etc. Symptoms are studied widely and are well defined; however, causes are multifactorial. Treatment of PMS is varied and comprises hormonal therapy, nutritional supplements, dietary and lifestyle modifications.

In earlier days when women first started reporting the symptoms, PMS was seen as a hypothetical or imaginary disease. Often PMS was considered as "all in a woman's head". PMS term was first coined in 1931 in Britain and for the first-time researchers recommended that PMS symptoms were due to imbalance of hormones. The hormonal imbalances were interrelated to the menstrual cycle. It has been estimated from numerous retrospective community surveys that 90% of women experience minimum one episode of PMS.

There is a strong theoretical foundation for the important role of nutrition in the reproductive health of women. Dietary factors play a vital role in the occurrence of PMS. Various studies have shown the association between certain nutrients with menstrual issues including PMS.

Food cravings and changes in appetite which leads to sometimes overeating during the late luteal phase may reflect deviations in energy intake. 'Carbohydrate craving' has been widely reported by women with PMS. Foods containing maltose such as alcoholic beverages, candies, tomato sauce, and some cereals were found to be associated with the development of premenstrual symptoms. Consumption of sugar increases the tendency particularly to premenstrual hypoglycemia which is interrelated with sugar cravings, irritability and headaches. High intake of refined carbohydrates along with higher sodium intake may have an impact on water retention. High caffeine consumption aggravates emotional or psychosomatic symptoms namely anxiety and irritability.

Premenstrual changes may include inflammation and alterations in hormones. Essential fatty acids especially Gamma Linolenic acid (GLA) is an important precursor of prostaglandins. Prostaglandin acts as an anti-inflammatory agent and some studies have shown their role in reduction of PMS symptoms. Vitamin B1, vitamin B6, vitamin E, biotin, magnesium, manganese, zinc, and copper are important in the metabolism of neurotransmitters. Hence, ensuring a good intake of these micronutrients could be beneficial in reducing the incidence and intensity of PMS.

Lifestyle factors are modifiable habits and ways of life that can highly impact overall health and wellbeing. Physical activity is one of the most vital lifestyle factors. Many studies done in India supported the benefits of yoga, meditation, relaxation techniques, and stretching exercises for lowering PMS symptoms.

Women experiencing symptoms of PMS may benefit from adopting a healthy lifestyle which includes:

- Intake of a well-balanced diet consisting of whole grains, legumes, vegetables, fruits, nuts, oilseeds, sprouted legumes, soybean, and dairy products.
- Restricting the intake of salt, refined sugar, and caffeine containing foods.
- Regular exercise, reducing screen time and supplementary inclusion of yoga, stretching and breathing exercises.
- Refraining from substance abuse and sufficient sleep and rest.
- Health education and nutrition education for women.

-Dr. Harshada Thakur



AMLA CHUTNEY

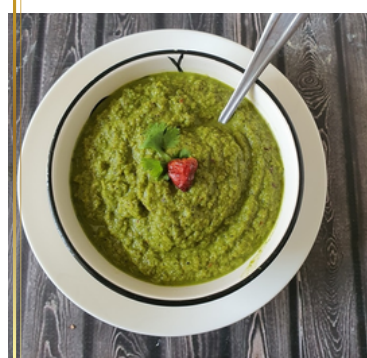
-Dr. Preeti Patankar

Ingredients:

Amla- 100g
Coriander seeds- 2g
Fennel Seeds- 2g
Fenugreek Seeds- 1g
Ajwain- 2g
Cumin seeds- 1g
Green chilli- 1/2No.
Garlic - 3-4 Flakes
Ginger- 1/2 inch
Curry leaves- 10-15no.
Oil- 5ml
Salt- 2g
Jaggery- 25g

Procedure:

1. Steam amla and let it cool. Remove seeds and cut them in flakes.
2. Prepare spices mix- heat oil, add mustard seeds, cumin seeds, curry leaves. Allow it to splutter. Add turmeric and asafoetida.
3. Let it cool. Add ginger, garlic, chilli paste and grind everything in a fine powder.
4. Add the above spice mix with jaggery and salt in the amla flakes.
5. Cook for 5 minutes with continuous stirring. Store in the refrigerator



TEACHER'S CORNER AMLA: THE REJUVENATOR



Amla (*Emblica officinalis*), commonly called Indian gooseberry, belongs to family Euphorbiaceae. Amla is called Amritphal or Dhatriphal in Ayurveda. It has been used as a medicine since the Vedic period.

Amla fruit has gained popularity as a “superfruit” throughout the world. The fruit is a bright green and has a sour, sweet, bitter and astringent taste with a cooling energy. It is an enriched source of Vitamin C. 100g fresh amla berries contain as much vitamin C as 20 oranges. Due to its excellent vitamin C content, amla is a powerful antioxidant. It's no wonder that the fruit is such a great Rejuvenator.

AMLA

A Absolute

M Medicament for

L longevity

A Anti-Aging

Several studies have shown that amla is an effective fruit against various non-communicable diseases (NCDs), such as heart disease, stroke, cancer, diabetes and chronic lung disease, which are collectively responsible for 74% of all deaths worldwide. A study published in international journal of Food Sciences and Nutrition (2011) showed that having 3g of amla powder regularly for 21 days could be more efficient to decrease the blood sugar level than prescribed drugs. The fruit is rich in Ellagic acid and is known to reduce the significant level of serum glucose and improves the serum insulin.

Hyperlipidemia is one of the major causes of cardiovascular disorders but bioactive compounds from amla helps to manage this condition. The fruit juice contains myricetin, gallic acid, and kaempferol as major polyphenols which protects low density lipoproteins from oxidation. Amla fruit also regulates the endogenous antioxidant system, eNOS, activation of serum nitric oxide (NO), and serum electrolytes level. Erythropoiesis is also a pivotal characteristic of amla which makes it so special due to the presence of iron. Thus patients suffering from anemia must take amla juice regularly to increase haemoglobin and red blood cells.

An excellent example is Chyawanprash, which is a herbal tonic prepared by adding different ingredients out of which amla is the core constituent. It proves to be the best friend of the respiratory system and hence used in multiple ailments like chest infections, chronic cough, tuberculosis, bronchitis, allergic rhinitis, asthma, flu, throat infections and blocked chest problems. Polyphenols inhibit oxidative stress, produce pro-inflammatory chemicals, prevent DNA damage, and increase apoptosis. To deal with this disease and its treatment like chemotherapy, amla is the best berry as it prevents the growth of cancerous cells and also protects natural cells from being harmed.

Amla is the cheapest source of natural vitamin C but due to its inestimable outcome; in Ayurveda, it is designated as Rasayana as it enhances longevity, abolishes ailments, slows the process of aging, promotes immunity, and rejuvenates soma. The rejuvenation process is not superficial at the systemic or organ level however it is carried out at the cellular level for the prolongation of human life.

-Ms. Surbhi Antarkar



IMPORTANCE OF SEEDS TO CONTROL PCOS

With the upgradation of science and society our lifestyle also changed a lot, there is upgradation of stress, pollution, unhealthy food habit and so on. All these factors together increased the prevalence of several lifestyle disorders, among which PCOS (Polycystic Ovary Syndrome) is the most commonly occurring hormonal condition among women of reproductive age group. According to a study of National Institutes of Health Office of Disease Prevention in USA, PCOS affects approximately 5 million women of child bearing age. It is proven that increased level of androgen, that is a male hormone, affects the development and production of eggs during ovulation in case of PCOS. This in turn causes accumulation of premature eggs in the ovaries which later may develop into cysts. The endocrine glands tend to secrete excessive amount of insulin and androgen, that too causes development of cysts in the ovaries in the same manner.

Some common symptoms of PCOS are irregular menstrual cycle, excessive growth in body and facial hair, acne problems and weight gain or loss. The main two reasons are unhealthy lifestyle and genetics. Diet plays a major role in reversing PCOS.

Specially if we talk about seeds, there are several seeds which have beneficial effect against PCOS. Few studies have shown that fenugreek seeds improve the level of estrogen and testosterone, as well as improve the menstrual cycle and sonographic results in PCOS due to its anti-inflammatory, antioxidant, carminative, hypolipidemic and hypoglycemic properties. Traditionally it has been used as pain relieving agent during menstruation. Flax seed can decrease Body Mass Index (BMI), insulin, total serum testosterone, levels and in fact studies found that it can decrease androgen levels with reduction in hirsutism (excess hair growth mainly around the mouth and chin) in women with PCOS. Healthy fats of chia seeds can help to reduce inflammation, improve insulin response, and balance blood sugar. Sesame seeds contain omega-6-fatty acids, calcium, magnesium, and zinc and help to regulate blood glucose levels. Pumpkin seeds are rich in omega-3-fatty acids which may help to reduce high cholesterol and high insulin levels seen in PCOS. The phytosterol content of pumpkin seeds can remove excess androgens and treat the hirsutism, acne and weight gain seen in PCOS. Fennel seeds also contain anti-hirsutism properties and can decrease androgen hormone level.

Lastly we need to remember a healthy lifestyle and healthy food habits together can protect us against such lifestyle disorders because “prevention is better than cure”.

DID YOU KNOW?

India is called the 'Diabetes capital of the World'. In a survey conducted by ICMR and NCDIR, by 2025, the number of diabetics in India is estimated to be 69.9 million.



ALUMNI CORNER

MRINALINI SANT

DIETITIAN, ENTREPRENEUR

Dear Friends, it gives me immense pleasure to introduce myself as an alumni of this college...where I could find myself, I could realize my own potentials, skills & I could start a fresh journey as a Clinical Dietician & as an entrepreneur.

Friends, I was the luckiest candidate to get admission on the basis of my post graduate degree in Biochemistry. Before taking admission to PGDD, I had worked with Cytogenetics labs in Pune. I had also worked in stem cells banks where cord blood is processed and preserved. Considering this vast experience in health sector, Dr. Mannuru Maa'm considered my late application for the course of P.G. Diploma in Dietetics. I just can't forget that day in my life when I got a call from Aakanksha Salvi Maa'm saying my admission is confirmed.

The course was full of knowledge, submissions, seminars, guest lectures & practicals; a big challenge for a person like me who was a mother of just 1.5 years old daughter. My day used to start with a hug and cry saying "Mumma, please don't go today". I tried my best to balance the course & motherhood.

After passing out from SNTD, I worked with some gyms & then I started my own practice as a clinical dietician. The journey started initially from home, then in a polyclinic & then in Krishna Hospital, Kothrud. Today, I prescribe diet charts for IPD, ICU & OPD patients. I'm also associated with few specialist Doctors to provide diet support for their prescribed medicines in various critical illnesses.

Many times I observed that patients or patient's family members are not able to prepare prescribed food combinations due to their work commitments, age or various unavoidable reasons and that was the first reason I started thinking & writing my formulas of different premixes in my diary. A day came when one of my family friend during his diet consultation suggested me to start the commercial production of my formulas. My kitchen became my biggest lab. With lots of trials & errors, calculations, corrections, standardization & lab testing my very own authentic, nutritious & tasty premixes came in real.



Today I have 8 products which are appreciated by many of my patients, namely

1. Calcium Ahaar
2. Combograins Ahaar
3. Protein waali kheer
4. Add Protein - an additive for wheat flour
5. Nitya Digest - Digestion booster herbs
6. Whole grain dosa premix
7. Omega 3 Rich chatpata - Enriched with sunflower seeds
8. Nitya Protein - kitchen made tasty protein powder

Three of them are available on Amazon too. It was and it is a huge learning process and the same continues.

The journey was not easy but I continued to stick to certain principles. I never give printed charts, it is customised hand handwritten for every individual patient with lot of options/recipes in the chart. It takes time but we need to understand every patient is different, his/her challenges are different. And patient counselling is the core part in every consultation.

Friends, I want to be an active part of the "Ahaar Kranti", where all the myths, incomplete knowledge about nutrition and mainly the misunderstanding that diet food is not tasty will be corrected. We dieticians along with doctors can change the mentality of our society and make everyone understand that Medical Nutrition Therapy is an essential part of treatment of each and every disease and a base of healthy long life!!!

Wish you all good health!!!



I can & I will

DID YOU KNOW?

It is estimated that 1 in 7 adolescents experience mental health condition globally

MENTAL
health
MATTERS

CANKIDS KIDSCAN

Cancer survivor and patient advocate Ms. Poonam Bagai established CanKids in 2004 under the auspices of the Delhi Branch of the Indian Cancer Society, which later split off and registered as a separate National Society in June 2012. Now, having over 300 members, CanKids has a valid 12A and 80G certificate as well as an FCRA Clearance Certificate, making it eligible for international funding, and is registered as an NGO under the Indian Societies Act of 1951.

By collaborating with cancer centers, continuously identifying needs and filling in gaps, providing financial support, social support staff, building capacities, and promoting high-quality care, research and impact evaluation, CanKids makes it possible for cancer patients to receive better standards of treatment and care. CanKids uses the principle of YANA (You Are Not Alone) to drive Access2Care, in a country like India.

They have:

1. CanKids Hospital Support Units (CHSU)- enabling children with cancer and their families to access the best care, support, and treatment once they arrive at a CHSU out of 124 being operated in India.
2. Change for Childhood Cancer- treating for earliest possible detection, diagnosis, and treatment through shared care. Operating in 15 states and UTs.

To provide holistic support, they also have 9 Home away from Homes, 2 Canshalas, and 1 Pediatric Palliative Care Unit situated in New Delhi.

Through the partnership, CanKids provides a support unit (CHSU) covering 10 program areas and 25 core services in each hospital. So far they have helped about 72,000 children with cancer and about 125 partnering hospitals.



PLAY



Insulin
Tumor
Allergen
Chronic
Stroke
Cancer
Allergy
Disease
Heart attack
Hives
Degenerative
Non communicable

H G W U E X F O B K I N S U L I N
O G V S K O E A Q L Z Y S G Z K W
X S N E R I Q E Z K T J E M K G J
V Y O S E B Q K M R U V S V Q S Z
B Z N P G C H O J K S H M B E O X
J V C Y M I X R X E J Q Q M G W C
C L O Q F N B T D K U W K N S V C
B H M D G O B S Z U K P C Q P H A
T Z M I C R R O M U T X A U R I N
T E U S T H R L S P S V T D K V C
J N N E K C C Y C A G N T I H E E
V X I A R U H G D D A V A I S S R
R D C S Q L U B Q J U N T K E M B
C Y A E A L L E R G E N R F Q A C
L O B V Q D E G E N E R A T I V E
A L L E R G Y K M M V O E T F Q E
B J E T Z P U N Y F O G H P O N W



fun



TYPES OF PASTA

4 letters

Orzo
Pici
Ziti

5 letters

Fiori
Penne

6 letters

Anelli
Ditali
Trofie

7 letters

Fregula
Fusilli
Gemelli
Gnocchi
Lumache
Ravioli
Rotelle

8 letters

Cencioni
Corzetti
Linguine
Paccheri
Pansotti
Rigatoni
Tortelli

9 letters

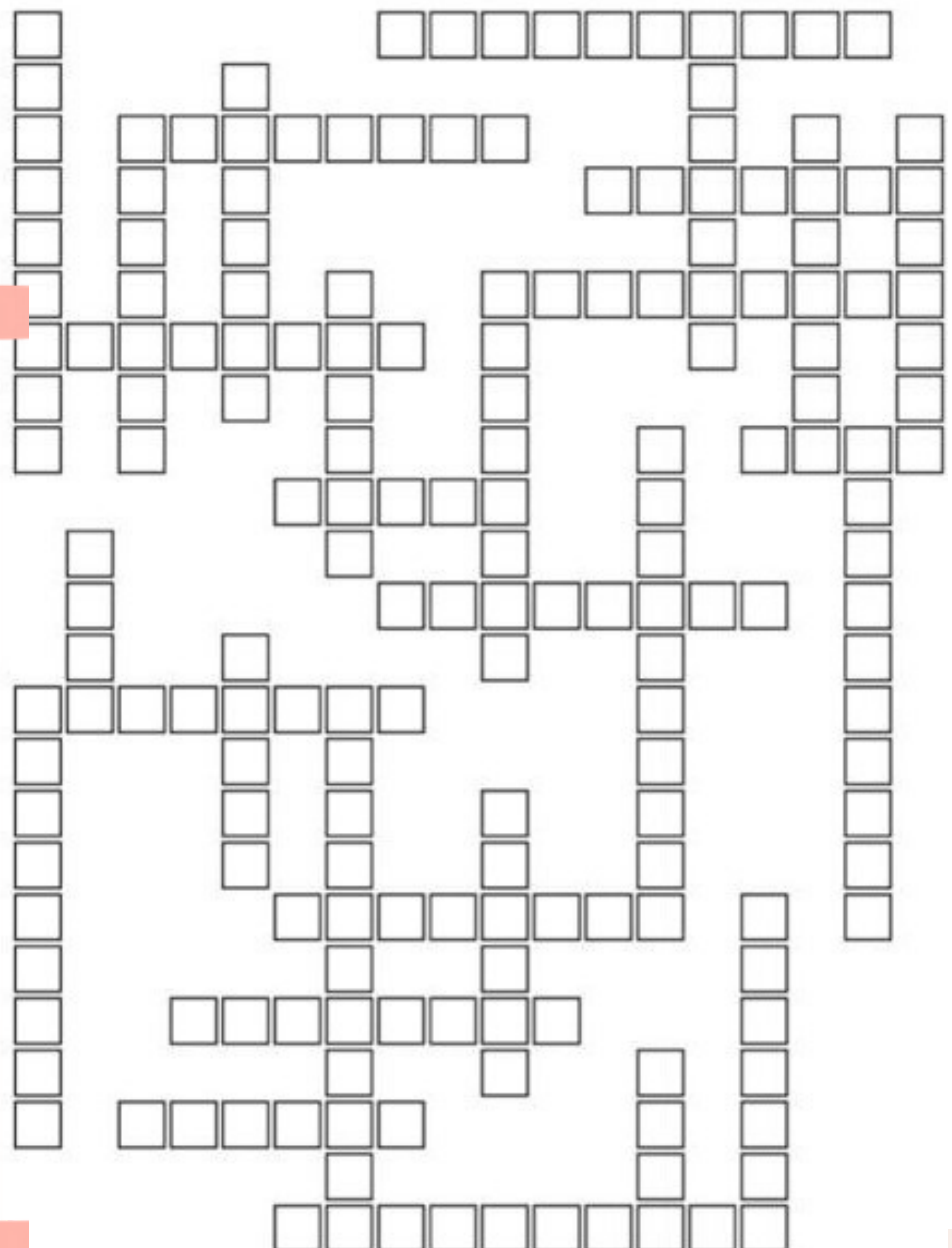
Capellini
Casunziei
Cavatappi

10 letters

Cannelloni
Conchiglie
Fettuccine
Tortelloni

11 letters

Tagliatelle





AN INTERVIEW WITH SMITA MURTHY

Smita Murthy is an entrepreneur, microbiologist, quality manager, quality assistant and research assistant and has worked at National Institute of Virology as research assistant on a project based on Hepatitis A virus. She has been a Director managing analytical services at coca-cola for about 33 countries, moved up to Delhi in corporate office and also to Atlantica for global audits. She started her entrepreneurial journey from 2018.

Q. So you being an entrepreneur, how will you describe your journey?

Ans. I have started my entrepreneurial journey from 2018 by setting up a cafe named 'The Fat Labrador Cafe'. There were no or less cafes in Pune where people can take their pets along with them and also my love for coffee gave me idea to start the cafe. In 2019 the pandemic hit hard but we survived through it as we had regular customers.

Q. You have experienced both, life as an employee as well as an entrepreneur. So what changes have you observed?

Ans. As an employee, life was quite balanced as I was aware that salary is going to be credited every month end. So I think Entrepreneurial journey is quite challenging as we have to think about people working for us and not just for ourselves. It was not just me but 10 families dependent on me.

Q. Being an entrepreneur, you have many ups and downs in your business, so how do you tackle the situation and give your 100% every time and everywhere?

Ans- As a woman when you have a small child and some tragedy happens to you, I personally think self pitying and doing nothing really wont work and i did not want to do that.

At that moment you just need to tell yourself to "get up and move on". Everyone faces some problems in their journey and problems are part of our life. Luck plays a very important role in our life too. One thing I strongly believe is that you all get your challenges knowing that you have some strength to face them. When you lose faith in yourself then you have to keep one thing in mind that is, "certain things happened to me so that I can learn from them and I will get over it". Once you know your strength you will be able to face any challenges in life.

Q. Since there is an increase in non-communicable diseases due to processed foods, how do you rate the future of food processing industry and what changes you want to see?

Ans- I think all processed foods are not bad. As a working mother, taking care of children and feeding them properly is very important. Processed foods play a very important role as they are convenient and they save a lot of time. Processing of food helps to increase shelf life of the product. Food industry has to become smart in the future. Not everything which is processed is bad or unhealthy and one cannot compare fresh food with processed food. High heat treated food products containing high salt and sugar if consumed frequently may lead to obesity and other lifestyle disorders but that doesn't mean we should not consume these foods. Education plays a key role in order to spread awareness regarding these issues. A good sleep, exercise and nutrition are equally important for good health. As a food industry professional its our responsibility to give correct information and encourage to make good food choices.

Q. Is there any book or any idol who has inspired you?

Ans- I would say one should develop a reading habit. Everyday you should read something, atleast 2 pages a day and you can make this your 2023 resolution. You can read anything, may it be a article, blog etc and this helps you to stay connected with the world. There are some interesting podcasts such as seen and unseen by Amit Verma.

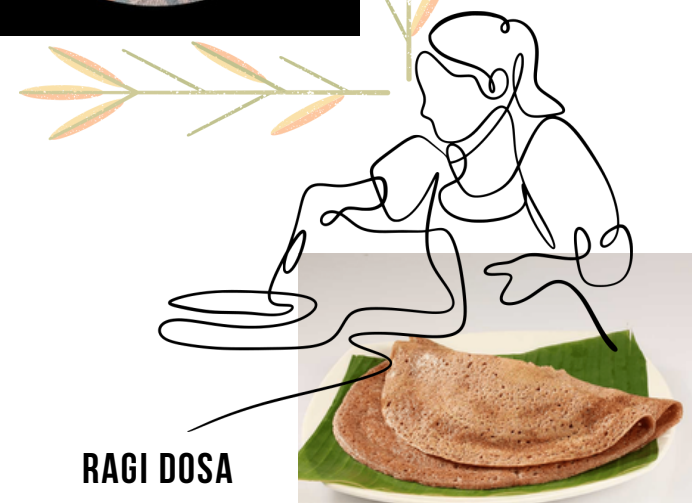
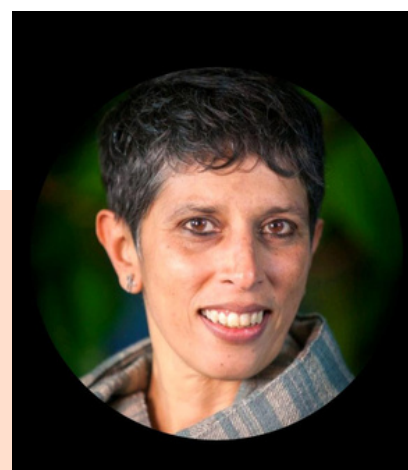
Q. What motivational message will you give to the young generation, especially women?

Ans- Like Nike says, "Just do it". Dont think too much.. If you want to work just save money and dont spend too much time thinking, that I want to do this. If you want to, just start now. When you are passionate and good at something, give it a try and check how exactly that idea works on a small scale, see peoples response. If they are giving nice feedback then it is definitely worth for money and you can just plan your next step.

Q. What is one thing that helps to keep the sparkle alive ?

Ans- "What the caterpillar calls the end of the world, the master calls a butterfly".

For now it may look like too much pressure to handle but after few years when you look back its not a loss. You gain experience, knowledge, patience, strength and ability to tackle further problems. I just follow this philosophy.



RAGI DOSA

Ingredients:

Ragi Flour (Finger Millet) - 1 cup
Rice Flour - 1/4 cup
Sour Curd / Yogurt - 1/4 cup
Ginger finely chopped
Coriander Leaves - 2 tbsp finely chopped
Water - 1½ cups
Salt (to taste)

Method:

1) In a large mixing bowl, add 1 cup ragi flour, 1/4 cup rice flour, finely chopped ginger, 1/4 cup curd, coriander chopped, 1½ cups water and a pinch of salt.
2) Mix well with a whisk. Set the batter aside for 30 minutes to rest.
Serve with any chutney as per choice.



SUPERFOOD CORNER THE JAMUN TREAT

Jamun is a low calorie delicious seasonal fruit which is also called as Black plum or Indian BlackBerry. In Sanskrit, it is known as Jammu and in Marathi we call it as jambhul. It is loaded with zinc, calcium, magnesium, folic acid, iron and Vitamin C.

Jamun bark leaves and fruits are used for therapeutic purpose. It can reduce blood sugar levels as it improves insulin sensitivity and activity. It contains Jumbolana which is a bioactive compound found in jamun. Though it is a seasonal fruit we can use jamun powder, jamun extracts and jamun tablets to treat high sugar levels.





FOOD PACKAGING AND ITS ILL EFFECTS

Food packaging is defined as enclosing food to protect it from tampering or contamination from physical, chemical and biological sources. Most material used for packaging food belongs to: Metal, glasses, paper, polymers and synthetic chemicals.

Food packaging lies at the very heart of modern day food industry and very few foods nowadays are sold unpacked. Over the past years, households have become busy and convenience has become an important part in our lives. While food packaging brings this convenience to us it also comes with its own disadvantages. Packaging can be bulky, expensive and can cause or produce a lot of wastage. The synthetic chemicals used in the packaging and processing of these foodstuffs might be harmful to human health over a period of time.

Studies show that these chemical substances are very active and leach on the food we eat. A chronic exposure to these substances throughout lives causes adverse effect on our health, like increasing waist circumference and high risk of obesity in both men and women, it can also increase the risk of endometriosis and other pregnancy related complications in women, alter hormone levels and it has also shown endocrine disrupting activities, increase in cholesterol level, various liver and kidney damage and cancer in some cases. These materials also show to lower immunity and can cause low infant birth rate.

Food packaging not only harms health but is also responsible for a significant portion of waste stream, eventually ending up in a landfill. These packaging require a lot of resources which uses a lot of energy generated by burning fossil fuels which in the long run causes a lot of water pollution and air pollution. All these can add up to the cost of the production increasing the retail price of the food.

With increasing effects of increasing awareness among people, manufacturers have started adopting or developing innovative and eco-friendly, plant-friendly and safer ways for packing of food. Removing chemicals in food contact material is vital for our health as well as for our environment. This can easily be approached by using fresh fruits rather than packaged foods, using reusable packets or containers to store food, using glass, ceramic or stainless steel over plastic and avoiding buying anything in tiny amounts. All these ways can help reduce the impact food packaging can have on our lives and help us lead a healthier, more productive and a safer future.

All this said, food packaging is the need of the hour. We just need to choose wisely.



ACHIEVEMENTS

Ms Ritu Watturkar (Faculty) received Gold Sovereign for standing first in Route 2 in the cooked category.

Tour de Fruit- National Fruits Appreciation Contest organised by TagTaste and IFCA in collaboration with Hortgro South Africa. It was India's first ever fruits appreciation tour with Apple and Pears as the star ingredients.

Akshita Garge (Student) secured the first prize in State Level Essay Writing Competition on the Theme: Food Safety in Monsoon.

The competition was organised by Maniben Nanavati Women's College in collaboration with NSI, Mumbai Chapter to celebrate National Nutrition Month 2022



DEPARTMENT ACTIVITIES



Dr. Komal Chauhan
(HOD Food Science and Technology, NIFTEM, Sonipat) delivered a lecture on "Emerging trends in Food Technology and Nutrition"



An interactive session was conducted by the department with **Dr. Sridevi Singh** (Director- CSIR-CFTRI, Mysuru)

The department in association with Farm To Fork Solutions conducted a FosTac Training (Advance Manufacturing Level 2)



Dr. Harshada Thakur (Faculty) represented the college at the NSI conference 2022 for poster presentation.

IMPORTANT DATES

DECEMBER

- 01- World AIDS Day
- 05- World Soil Day
- 06- National Microwave Oven Day
- 23- National Farmer's Day

JANUARY

- International Millet Year- 2023
- 10- Dietetics Day
- 30- World Leprosy Day

FEBRUARY

- 04- World Cancer Day





Merry Christmas

Happy New Year

