

NutriTech Digest

A quarterly Newsletter from PG Food Science



ESTD : 1880



Welcome to our dynamic PG Food Science Department, where we blend theory with hands-on experience to nourish knowledge. Through practical applications and a dedication to social service, we strive to make a tangible impact on health and well-being. Join us in our mission to create a healthier, more sustainable world through the power of food.

Stay updated with our team newsletter for the latest insights, research findings, and initiatives driving positive change in the field of food science and beyond.

In this newsletter you can expect:

Student Highlights

Staff Highlights

Department Highlights

Expertise Hub

Upcoming News and Events

Newsletter Team#

Student Highlights

Triumphs



**Staphny Snowy Dsouza,
Food Science (FST) student
from the batch of 2022-
2024, has successfully passed
the NET for Assistant
Professor.**



**R Rashmitha
Batch of Food science (Fsnd)
(2022-2024)
has
Acheived Success in
NET for Assistant Professor**

September 16 2023

Hands-on Training Workshop on "Nurturing Beginnings"



The Department of PGSR in Food Science at St. Aloysius College, in collaboration with Integrated Child Development Services (ICDS), Government of India, Mangaluru, organized a two-day hands-on training workshop on "Nurturing Beginnings." This event was held in honor of National Nutritional Week on the 16th and 17th of September, aiming to shed light on crucial aspects of early nutrition and child feeding practices.

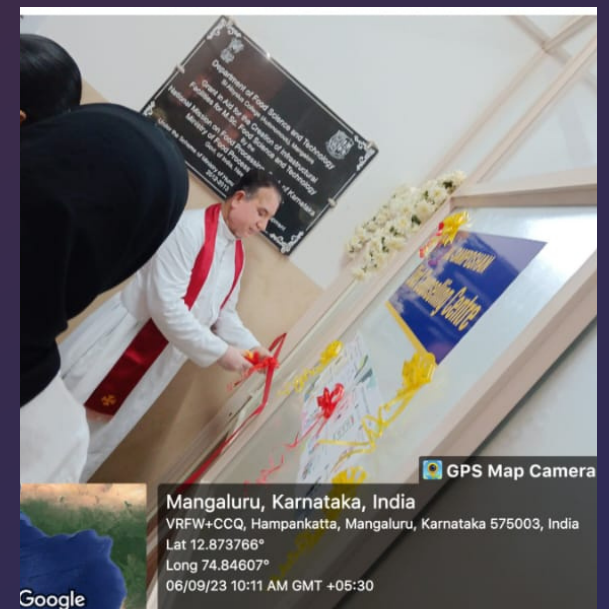
Shweta Jain, Child Development Officer, Mangalore, graced the occasion with her presence. Rathan Shekar B, a distinguished professional holding certifications as a Registered Dietitian, Certified Diabetes Educator, Certified Medical Keto Dietician, and Certified Lactation & IYCF Counselor, served as the resource person for the workshop. The attendees learnt about Importance of Early Nutrition, Lactation Techniques and Challenges, Complementary Feeding: Best Practices, Infant Formula: Selection and Preparation and how to Address Common Feeding Problems. This workshop was conducted through Interactive Lectures, Live Demonstrations, Group Discussions and Q&A Sessions. Participants engaged in dynamic discussions, gaining practical skills and strategies to promote healthy feeding practices.



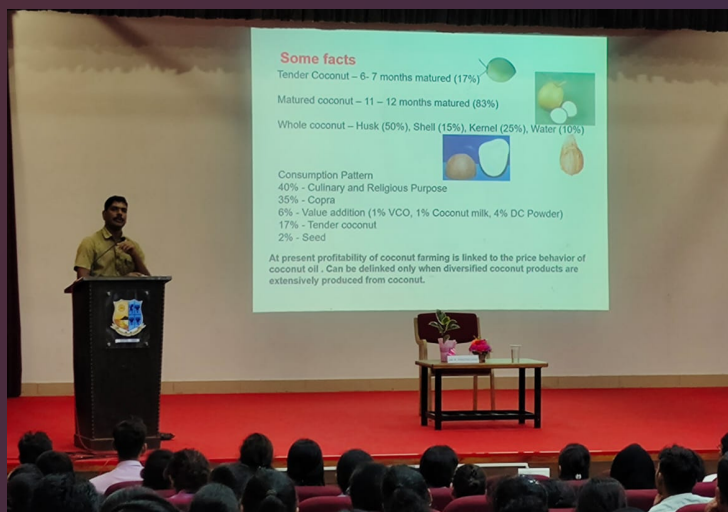
AL-SAMPOSHAN Diet Counselling Inaugural Ceremony



We are thrilled to announce the successful inauguration of our new Diet Counseling Center AL SAMPOSHAN, which took place on 06 September 2023. The event was graced with the presence and blessings of Rev Fr Dr. Praveen Martis S J and Rev Fr Melvin adding a sense of auspiciousness to the occasion. The inauguration ceremony not only marked the formal opening of the center but also provided an invaluable learning experience for our students. Witnessing the dedication and commitment of professionals in the field of dietetics has undoubtedly enriched their understanding and passion for promoting health and well-being through nutrition.



Seeding Tech: Food security at the Forefront



A National seminar was held on October 30th by the Department of PG and UG Food Science in conjunction with the Entrepreneurship and Consultancy cell. Titled "Feeding the Future: Exploring Innovations in Food Security," the event commemorated World Food Day, drawing about 200 attendees to the Rasquinha Hall LCRI Block. The opening featured Sri Nidhi and Dr. Basaiah Hiremath, Founder-Director, NOFH Pvt Ltd, as the Chief Guest, alongside Dr. R. Pandiselvam and Dr. Anil Kumar HS as notable guests. The seminar began with a prayer led by the Food Science Choir, followed by the lamp-lighting ceremony and addresses by Dr. Daniella and the Principal. Dr. Hiremath discussed the benefits of Moringa powder and emphasized organic farming practices. After a refreshment break, Dr. Pandiselvam discussed Value Added Products and By Product Utilization of Coconut, while the next speaker highlighted innovative crop-growing methods like Hydroponics and Vertical farming. The seminar showcased modern agricultural techniques and emphasized sustainability. The event concluded with expressions of gratitude from Ms. Anju Kurian.



December 6 2023

Embraced Rustic Living MUNDGOD & HANGAL



The Rural immersion camp for first year postgraduate students of St. Aloysius Deemed To Be University was held from December 6 to 11. The rural immersion programme lasted for 5 days. The students of food science (FSND and FST) were split into two groups. FSND students were allotted to HANGAL village is the historical place of Kadamba Dynasty now currently a taluk of Karnataka which is approximately 48 km from the district headquarters of Haveri. They were divided into 7 sub village such as Hosa samsagi, Hale samsagi, laxmipur, shirgod, savikeri, Gajjihalli. FST students were allotted to MUNDGOD is about 50 kilometres far from Hubli-Dharwad. The village is located on level ground in an agricultural zone. Tibet camp is one of the most highlighted places in mundgod. They were split into chawdalli and chitger village. The Hangal and mundgod group were further broken into village-based teams. Each team comprised 8-12 students who were further divided into 2 people in each house based on the status of the family.





Rural immersion programs for students provide a unique opportunity to gain firsthand experience and understanding of rural life, its challenges, and the potential for the development. These programs are designed to sensitize students towards rural realities, foster cultural sensitivity, and develop leadership skills. The experiences gained during rural immersion can be used to develop innovative solutions to rural problems and analyse creative mechanisms for rural development. The program not only sought to bridge the gap between urban and rural lifestyles but also to explore the various facets of rural existence, from agriculture to socio-economic dynamics.



Our visit to the village provided a unique experience, offering insights into the distinct village life and economy compared to our daily routines. We gained a comprehensive understanding of the pros and cons of rural socio-economic settings. The locals were instrumental in providing valuable information for our research, revealing challenges such as limited access to essential services, inadequate infrastructure, and reliance on agriculture for livelihoods.

February 19 2024

Molecules Chronicles: Unveiling challenges, igniting opportunities for future.



A Single day tends to drive young minds, paradigm shift unfolded— transcending mere ingredients to unveil a world where food scientists craft diverse, valuable products. Innovative formulations ignited novel applications, pioneering breakthroughs in food science, fostering creativity in a transformative discourse.

Chemistry Department and Entrepreneurship Cell host a transformative seminar led by Mr. Pramod Hegde, sparking new horizons in food science and entrepreneurship.

Dr. Ravishankar Bhat's "From Lab to Market" session charts an entrepreneurial journey in organic chemistry, inspiring sustainable solutions. His brands Ecoswachh 3R and Eco Sattva 3RTM, recognized for innovation, promote eco-friendly hygiene. In the green innovation realm, chemistry tackles environmental challenges, urging interdisciplinary collaboration for transformative progress. Discovered innovative range crafted from soap nuts, shikhakai, and moringa leaves – from handwash to toilet cleaners. With a commitment to chemical-free formulas, we advocate for safe grey water practices, promoting green living to safeguard our precious resources and combat water pollution.

He clinched the KSTA award for his innovative contributions, marking a milestone in his journey towards pioneering sustainability.

In the second session, Ms. Swathika Devadiga illuminated the chemistry behind air care products, transitioning from lab to fab. Her expertise enlivened discussions on fragrance creation and wax-making techniques. BricsBio's innovative solutions redefine food science with safe, food-grade preservatives. Extracting *Cocum Carcinia indica* seed oil for pharmaceuticals and beyond, chemistry transitions 'from lab to fab'. Amidst COVID-19 demand, 5 units, including 2 in Mangalore, sustainably meet air care and sanitizer needs. Emphasizing sustainability, cotton wick in candles reflects our commitment to eco-friendly practices.

Dr. Vijayendra S. Shetti of NITK Surathkal led a session on porphyrin-themed molecular architecture, exploring their diverse applications. The session highlighted porphyrins' roles in nature and their applications in photo dynamic therapy, PSSC, OLED, and click chemistry. Dr. Shetti's expertise inspired scholarly inquiry into porphyrin-based molecular design.

Dr. Joel Cornelio illuminated the photophysics of metal-organic frameworks via Zoom platform, revealing their intricate dynamics and potential applications. The session united us in our pursuit of a greener future, leveraging chemistry to heal our planet and foster sustainable legacies for generations to come.

Let's embark on a journey driven by innovation, shaping ingredients into diverse, beneficial offerings, fostering broader thinking in food science.

March 2, 2024

Shop with confidence: Food safety standards exceed Expectations

In the world of E-commerce, transparency is the currency of trust, especially when it comes for food safety. An enlightening session led by Dr. Dishant James, Senior compliance associate at Amazon, Poland. We Dived into an intriguing exploration of food safety, packed with insights and awareness for the current era. Unveiled the secrets of a safer culinary landscape in just one captivating hour on the most relevant topic “Food safety in E-commerce platforms.” Embarked on a transformation journey into Eu Food Safety regulations. Delved into the intricacies of 26th and 16th rules. Explored critical role of food labels, especially with alcopops. In this dynamic session learned why every consumer must vigilantly scrutinize food labels, ensuring safer and more informed online culinary experience. Explored the intricate process of product identification, suppression, and approval in e-platforms, ensuring every click leads to informed. We reflected on a wonderful session embraced the wisdom to read the food labels before purchase. Informed minds shape safer consumption habits, fostering a healthier more conscientious culinary landscape for all.



GPS Map Camera
Mangaluru, KA, India
Hampankatta, Mangaluru, 575001, KA, India
Lat 12.873836, Long 74.846093
03/02/2024 11:32 AM GMT+05:30
Note : Captured by GPS Map Camera

January 19 2024

Transforming Lives: St Aloysius Deemed to be University



This year marks a significant milestone as our beloved institution, with a distinguished history spanning 144 years, has officially been granted deemed to be university status. Inaugural program was held on 28th of February for the same. This transformation into St. Aloysius deemed to be University represents a monumental achievement for our college community and underscores our unwavering commitment to academic excellence, innovation, and service to society. As St. Aloysius College transitions into a deemed university, the college remains committed to the mission of fostering intellectual curiosity, nurturing talent, and shaping future leaders.

February 10 2024

Unravelling Cancer Cell Cycle Disruption



Our department recently hosted a guest lecture on "Cell Cycle Disruption in Cancer" by Dr. Sahana Hebsur from TATA Memorial Cancer Research Center which was Held on 10th February 2024 at Fr. Robert Sequeira Hall, the session provided invaluable insights into cancer biology. Dr. Hebsur's expertise inspired us to delve deeper into this critical area of research, fostering a renewed commitment to advancing our understanding of cancer mechanisms. The event, held at Fr. Robert Sequeira Hall, witnessed enthusiastic participation from faculty, staff, and students alike. It served as a platform for intellectual exploration and collaborative learning, highlighting the Department of PGSR in Food Science's commitment to fostering academic excellence and research advancement



SCHOOL VISIT FOR ANTHROPOMETRY IN CHILDREN



The first-year PG students in Food Science, Nutrition, and Dietetics (2022-2024 batch) conducted a comprehensive assessment at St. Aloysius Primary School. The assessment focused on measuring various anthropometric indicators of children aged 4-6 years. These included height for age, weight for age, weight for height, Body Mass Index (BMI) for age, head circumference for age, and mid-upper arm circumference for age. These measurements were compared to the WHO growth charts to identify deviations such as wasting, underweight, stunting, and malnutrition. Anthropometry, a scientific discipline studying human body measurements and proportions, enabled the evaluation of physical characteristics and growth patterns. The primary objective of this initiative was to gather data for research purposes and discern patterns and trends in students' physical development.

A HOUSE VISIT FOR STANDARDIZATION OF RECIPES

A tour was conducted with the aim of gathering traditional Mangalorean recipes from various households, with the ultimate goal of standardizing these recipes. The main objective of this endeavor was to safeguard the region's rich culinary legacy by compiling an extensive repository of authentic recipes that could be shared with a broader audience. Standardizing the recipes per serving was crucial to ensure consistency and accuracy.

The standardization process encompassed several steps, including harmonizing ingredients, adjusting quantities, clarifying methods, providing special instructions, and thorough testing and refinement. These steps were essential in maintaining the authenticity of the recipes while making them accessible and reproducible for all.

During the house visits, a diverse array of local Mangalorean recipes was gathered, reflecting the region's culinary diversity. The data collected can now undergo analysis to uncover common ingredients, cooking techniques, and flavor profiles prevalent in Mangalorean cuisine. Furthermore, this analysis may unveil variations and unique characteristics of specific recipes associated with different communities or locales within Mangalore. Overall, this initiative not only preserves the cultural heritage of Mangalorean cuisine but also promotes its appreciation and understanding among a wider audience.



Pulav, Potato Bhaji, Ridge Guard Palya, Semolina Upma, Wheat Dosa, Dosa, White Rice, Raitha, Thokku, Majjige Huli, Vermicelli Upma, Boiled Rice, Chicken Sukka, Roti, Kadala Manoli Curry, Rasam, Chicken Ghee Roast, Ladies Finger Pallya, Methi Ganji

RURAL EXPOSURE DAY-1

The rural exposure visit was organized from the Department of PG studies and Research in Food Science as a part of our educational curriculum to provide students with firsthand experience and insight into the challenges, opportunities, and lifestyle in rural areas. The visit was organized under the lecturer in-charge Mr. Roysten Dias and Ms. Bharathi VH. The visit was conducted on October 5th 2023 to St. Anthony's Ashram, Jeppu , Mangalore. All the students gathered in college by 8:45 AM and reached the location at 9:00 AM. A small interaction with the people in the Ashram was done up to 11:30 where we visited the different places in the Ashram. Later on, 4 groups were made and were divided to do different work in Arecanut plantation, Arecanut dehusking and tailor section. Lunch was served at 1:00 PM. After lunch the work was interchanged between the groups till 4. Then snacks was provided by the Ashram before vacating the location. Total of 59 students and 2 lecturers were present. The rural exposure visit was a transformative experience. This firsthand exposure will undoubtedly shape our perspectives and actions.



RURAL EXPOSURE DAY-2



On 6th October, we the students of PG Food Science (2022-2024 batch) along with our assistant professors Mr. Roysten Dias and Ms. Bharathi Venkatesh Hebsur, visited Snehalaya Psychosocial Rehabilitation Center as part of our rural exposure. Snehalaya is an abode of love and compassion that caters to the needs of the Last, Least & Lost in the society without discrimination of caste, creed, status, religion, or any political organization. It is located in Manjeshwar, under the Catholic Diocese of Mangalore, Karnataka State, India. We visited Snehalaya Psycho Social Rehabilitation Centre for Men and Women both and got the opportunity to speak to the inmates. It was a great experience speaking with them. They spoke their heart out with us and we were really overwhelmed by them. After that we organized a cultural program dedicated for the people living there. It brought smiles on their face and they enjoyed it to their heart's content. After the lunch break, we were allotted the work of cleaning the grass from the field as part of field work.



INDUSTRIAL VISIT



As part of an industrial visit, a group of 30 students from the M.Sc. Food Science, Nutrition, and Dietetics (FSND) '22-'24 batch had the opportunity to explore the Modern Rice Mill situated at Hoige Bail, Ashoknagar, Mangalore. This establishment boasts a remarkable history, having been founded in 1956, making it 67 years old. The mill's origins trace back to Ullal Vaman Subray Mallya, the founder of Mallya Soap Works, who ventured into rice manufacturing in a small capacity in 1956 alongside four of his six sons, under the banner of Mallya Brothers and Company. However, it wasn't until 1958 when Ullal Venkatraya Mallya assumed control of the company and renamed it Modern Industrial Corporation, operating as a proprietary concern.

Upon our arrival promptly at 9:00 AM, we were greeted and guided by two knowledgeable lecturers, Ms. Bharathi Venkatesh Hebsur and Mr. Ashok Kumar C. Our tour commenced with an external exploration led by Mr. Ganesh Prasad, where we were introduced to the machinery employed for dust removal from the paddy and the heat treatment process. Additionally, we learned about the animal husbandry aspect of the business, witnessing goats and cattle reared on-site, which initially began as a family endeavor before integrating into the business operations, located at the rear of the mill.

Venturing inside, we were enlightened about the diverse range of rice brands manufactured by the mill. Comprising three units, the facility specializes in the separation of bran and husk from the paddy, followed by two subsequent polishing stages. The husk, meticulously collected in jute bags, is transported to Tumkur for the extraction and production of rice bran oil. It was fascinating to learn that the rice bran oil obtained from this process contains approximately 25% fat content, highlighting the multifaceted operations and sustainable practices employed by the Modern Rice Mill.

THE ACHING DIABETES

-BAISHALI GHOSH
II MSc. FSND

Diabetes Mellitus, a chronic metabolic disorder;
The World is finding difficult to completely recover.

Characterized by raised glucose concentration,
It is due to failure in insulin action.

Polyuria, Polydipsia and Polyphagia are some of the symptoms;
Diabetes throws many tantrums.

Sugar, fat and simple carbohydrates in the diet are restricted;
Cakes, sweets and fried foods are required to be avoided.

Always need to maintain the sugar level;
To live a life that is healthy and normal.

Though diabetes is not curable;
We can control it before it becomes horrible.

So everyone should follow a proper lifestyle;
To live a life that is worthwhile.



THE CHIT

-BAISHALI GHOSH
II MSc. FSND

Everything was usually same in school for twelve year old Ananth, loneliness, not a single friend to share his thoughts and tiffin with, boring lectures, his broken spectacles somehow holding itself with the fevikwik that his mother used to put it back together the other day, when Ananth came to her crying and telling “They broke it again, Mumma” and cherry on top was of course added by his classmates by bullying him on a regular basis for his shabby looks and for the fact that he didn’t had a father. Every single night cursing himself and his luck was the only thing that Ananth did. His mother Aarti could only pray for the best for her son, as for being a single mother, from the very first day itself she knew she would have to face hardships and that would definitely affect her son as well.

Today was a little different for Ananth because of the ‘chit’ that he found in his school bag while packing it for the next day. It also told him that it was written by someone named BUDDY, of course it was not his/her real name. It was not something that happened with him before. The chit said

“You are not alone; I am with you in this. Remember, you are loved’ - Buddy

For a regular person this might not be a very big deal. Also, something like this would not have happened with a regular normal kid but for Ananth, it was. He was happy to know that there is someone who secretly admired him.

This chit thing now started to continue every single day. Everyday there was something different and beautiful on the chits. Unknowingly, this BUDDY was creating a deep impact on Ananth’s life.

“You are the most beautiful soul I have ever seen” - Buddy

“You are the smartest kid, lots of love to you” - Buddy

“You don’t need to hear what the muggles say, you are my HARRY POTTER” - Buddy

“You are the cutest human being; I have ever seen” - Buddy

Every single day, the smile on her son’s face was making Aarti happy, after all her idea of making her son feel special in a little way was working out. Though not in any other way, but at least somehow she was able to make her son happy and lively again by making those little chits every single day and keeping it in his bag while he was leaving for school. Every single night he would check his bag excitedly for the new chit which made Aarti’s heart melt.

One day suddenly, Aarti felt very sick and forgot to keep the chit in her son’s bag, she totally forgot about it until she saw Ananth checking his bag for the chit. She felt nervous and was about to do something, that’s when she saw Ananth taking a chit out of his bag, reading it quietly and smiling. She got confused, if she didn’t keep a chit in his bag then who did, she assumed it to be one of his classmates. She felt really very happy about it as there was at least someone other than her who cared about her son. She slept peacefully, only if she knew it was her own son, who kept the chit in his bag himself as he got to know beforehand that it was his own mother who was keeping the chits in his bag every single day. For a second, he felt sad, but the very next moment he understood his mother’s unconditional love for him which was enough for him. When he saw his mother is sick and could not keep the chit, he himself kept it and acted as if he didn’t know anything. Both mother and son slept peacefully that night and every other night.

Oh Myself, Where are you



Aleema K S
1st Msc. FSND

Where did my old self went
To hell or to heaven?

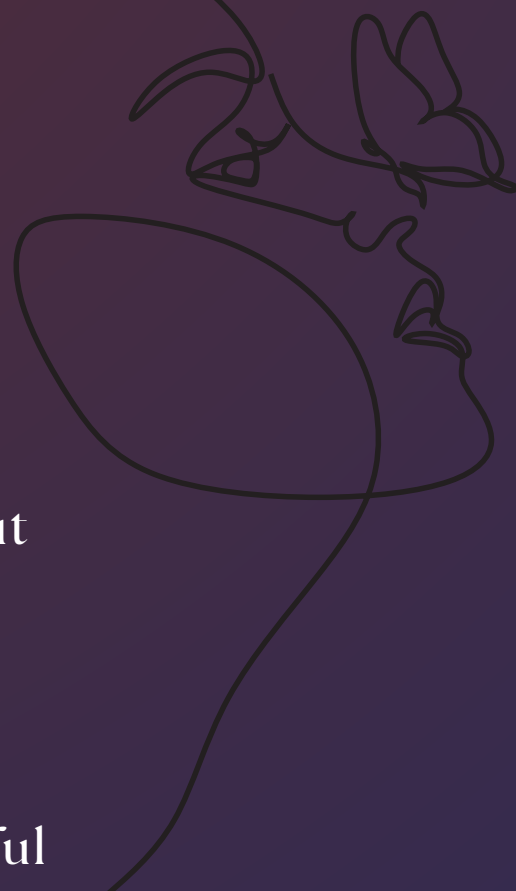
Leaving the bare body
Soul eloped with my charming face
Glittery eyes
Now Rolling glossy pearls.

Never did wrong-in my
presence.
Something gone wrong in
My mind's Absence.

Afterall Rainbows arose, But
Cloudy skies wrapped me
their arms.
making me hassle.

Everything seemed delightful
until I discerned; No one cares!
No one really cares!!

Oh myself, where are you?
My girl.
Where is your prettiness?
Your sparkling smile?



Rising of Phoenix from Ashes



Riyola Monteiro
1st Msc Fst

Fire symbolizes beauty, fury, and rebirth. Too bad in my case, it symbolized nothing but demise.

When I woke up in the morning and looked at my face in the mirror. I didn't recognize the face looking back at me. 'This is not me', I cried aloud. I simply stared back at the person in front of me- a stranger I didn't know and would probably never befriend- watching as fate laughed in my face. I felt swollen and feverish. I saw a big scar on the left side of my face, burnt and purplish staring right back at me. The infected area was still raw. Just like that, my thoughts drifted to that night.

I was asleep when it happened. I started coughing when I realized what was happening. I sat on my bed and looked around smoke rolled from the door crack. I jumped out of bed and called for my grams, her room was at the end of the hall. I got out of my room and saw that the fire reached the second floor. I ran to grams room and dragged her out. I shielded her with my body and wrapped her around like a blanket. By the time we made it out of her room, the floor began to collapse, and part of the wall warped on top of me. It pressed against my left side. We were crushed against the wooden plank which was on fire. I felt my face and shoulder melting away.

What woke me up this morning was grams after I treaded out of the induced coma. Nothing could chase away the nightmares that haunted my sleepless nights.

A few weeks later my grams forced me to socialize with the outer world after that tragic night. She told me to go to a rehabilitation center and that there are kids in the center and I could use a little encouragement. It was a huge estate with a white façade and gardens. I started admiring the place and collided with something. I found myself staring at a pair of sunglasses. And it took me a moment to realize it was a blind girl. She was probably of my age. I lifted her walking stick and helped her out. We started talking and she guided me to a beautiful garden. That garden had a shimmering lake with Swans and a bench. We exchanged our names and I told her about my life and scars. I asked about her past and got to know that her mom lost control behind the wheel due to which she lost her mom and her sight in the accident. That's when we realized that we were both broken souls sealed with pain. Conversations reduced the burden on our shoulders. Before she felt that she had nothing remaining in this world for her to see but now she wanted to see me and went through a corneal transplant.

We both were wingless angels on earth to fill the void in each other's lives. We are all just phoenixes, rising from our ashes, taking flight to an unknown destination, our wingtips forged by flames. It was our tragedy, our rebirth, and our life.