

DEPARTMENT OF NUTRITION

1 SEPTEMBER 2024





Importance of Nutrition to Avoid Metabolic Changes

Metabolic changes can have a significant impact on our overall health and wellbeing. These changes can lead to weight gain, fatigue, and increased risk of chronic diseases like diabetes and heart disease. One crucial factor in avoiding metabolic changes is nutrition.

A balanced diet provides the body with the necessary nutrients to function properly, including vitamins, minerals, proteins, and healthy fats. When we consume a diet high in processed foods, sugar, and saturated fats, our bodies undergo metabolic changes that can lead to negative health consequences.

-Here are some key reasons why nutrition is important to avoid metabolic changes:

Regulates Blood Sugar Levels: A diet rich in whole foods like fruits, vegetables, and whole grains helps regulate blood sugar levels, reducing the risk of developing insulin resistance and type 2 diabetes.

Supports Healthy Weight: Eating nutrient-dense foods like lean proteins, healthy fats, and fiber-rich foods helps maintain a healthy weight, reducing the risk of metabolic changes associated with obesity.

Boosts Energy: A balanced diet provides the body with the necessary nutrients to produce energy, reducing fatigue and increasing physical performance.

Supports Gut Health: A diet rich in fiber and probiotics supports gut health, promoting a healthy gut microbiome and reducing inflammation.

Reduces Inflammation: Eating foods high in antioxidants and omega-3 fatty acids reduces inflammation, which can contribute to metabolic changes.

• In conclusion, nutrition plays a critical role in avoiding metabolic changes. By consuming a balanced diet rich in whole foods, we can regulate blood sugar levels, support healthy weight, boost energy, support gut health, and reduce inflammation. Make nutrition a priority to maintain optimal health and wellbeing.

In this newsletter you can expect:

Department at a Glance

Fascinating Articles

Fun Corner: Play ground for your mind

"Nutrition: Crafting a Career with Impact"

Faculty Profile



By - Dr. Deepa Agarwal, MSc, PhD, Founder and Consultant Nutritionist, NutriClinic -Hyderabad (Our illustrious alumna)

From the Principal's desk

The Department of Nutrition at St Ann's College for Women is a distinguished pillar of the institution, renowned for its outstanding contribution to both academics and professional development. Since its inception in 1988, the department has grown exponentially, offering a wide array of courses that blend rigorous academics with hands-on experience. The faculty, deeply experienced and highly qualified, have been instrumental in shaping the department's legacy, with many serving since its early days.

The department's alumni, now successful dieticians, nutritionists, and researchers globally, are a testament to the quality of education provided. Recognized as an IGNOU study center, the department continues to expand its educational reach. With state-of-the-art infrastructure and a strong emphasis on research and community outreach, the Department of Nutrition not only imparts knowledge but also drives innovation, embodying the college's mission of empowering women through excellence in education.



Dr.Sr.A.Vijaya Rani Principal St Ann's College for Women

"Your commitment to promoting health and wellness is truly inspiring. Keep enriching minds and students Skills with your outstanding work."

The Better Option: Real Food or Nutrition Supplements? BY - Ms.Nasreen Begum

HOD . Department of Nutrition



Nutrition supplements are often marketed as convenient substitutes for real food, but the question remains: are they better or real foods? This article examines the evidence and weighs the advantages and disadvantages of each using research-backed findings. Real food is essential for incorporating nutrient complexity and synergy, as it contains various vitamins, minerals, proteins, antioxidants, fiber, and phytochemicals that work together to promote overall health. The concept of food synergy suggests that the health benefits of food extend beyond the individual contributions of its nutrients.

Whole foods also have the additional benefit of limiting the risk of overconsumption of certain nutrients, which can lead to toxicity if consumed in excess. Excessive intake of fat-soluble vitamins, such as A, D, E, and K, can result in harmful side effects; however, obtaining these nutrients from food sources reduces this risk because they are present in balanced proportions.

Real foods, particularly those high in fiber, promote satiety, control appetite, and prevent overeating. Fiber delays digestion, resulting in a more gradual release of energy and prolonged sensations of fullness. According to Slavin (2005), dietary fiber from whole meals is essential for weight management and metabolic health, and cannot be replaced by isolated fiber supplements.

Supplements can fill nutritional gaps by treating certain vitamin and mineral deficits that are difficult to address through diet alone. They can provide tailored support for people with certain health issues, dietary limitations, or high nutritional needs (for example, pregnant women, the elderly, and athletes).

In some situations, supplements offer convenience and accessibility, especially when whole foods are not readily available. Protein supplements may be beneficial for athletes who need to quickly meet their protein requirements after intense training or people affected with severe malnutrition.

The supplement market is less regulated than the food industry, which raises worries about contamination, mislabelling, and the existence of hazardous compounds. Geller et al. (2015) discovered that certain nutritional supplements contain substances that may not be specified on the label, posing substantial health hazards. This absence of regulation emphasizes the necessity of getting your nutrients from whole meals whenever feasible.

Supplements do not substitute a well-balanced diet rich in real foods. They should be used sparingly and under the supervision of a healthcare expert to ensure they supplement, rather than replace, the benefits of a healthy diet. In conclusion, a food-first approach is often the best technique for obtaining optimal health.

About The Department

Founded in 1988, the Department of Nutrition has evolved into a dynamic hub for aspiring nutritionists. It offers three core programs: B.Sc. (Nutrition & Public Health), PG Diploma in Nutrition & Dietetics, and M.Sc. (Clinical Nutrition & Dietetics), catering to 450 students. Led by Ms. Nasreen Begum and supported by seven dedicated faculty members, the department features advanced labs and a Diet Counseling Center. As an IGNOU study center, it also offers a variety of nutrition courses. Graduates excel globally as dietitians, consultants, and educators. The department is deeply engaged in research, publications, and community outreach initiatives.

Activities 2024-25

The Apollo Medical College



Students of B.sc Final years Attended a conference CME organized jointly by Apollo hospitals and IAPEN at Apollo Medical College on 28th June 2024.



Ms. Phani Kumari and Mrs. Hannah Jessie judging the microbiome cooking contest (recipe contest using probiotics) organized by the microbiology department, July 2024.



Healthy Recipe Counter by our B.Sc. final year students





Online workshop on Precision Nutrition organized by the Institute of Nutrigenetics on 24th August 23, 2024



Department of Nutrition has been awarded a certificate for celebrating and commemorating World Breastfeeding Awareness Week. World Alliance for Breastfeeding Awareness (WABA) has issued a certificate of appreciation.



Ms. Hannah jessie francis and Ms. Zoha (faculty, Dept on Nutrition) along with MSc final years conducted an breast feeding awareness program at Course) for first-year students on 9th August GMR on 8th August 2024



Mrs. Phani Kumari served as the resource person for the Baking Techniques SOC (Skill Oriented

2024.



Department Orientation session conducted for 1st years on 30th august 2024





Shimaila and Ms. Bhavani (faculty, Dept of Nutrition) along with NCB final years conducted a breastfeeding awareness program at GMR on 9th August 2024.

September

The Department of Nutrition is organizing exciting events this September. We have curated enriching activities to promote health and well-being.

Mark your calendars for:

O1 NUTRI QUOTES- 1ST - 30TH SEPTEMBER 2024

O2

GUEST LECTURE ON ROLE OF NUTRITION IN DIABETES
CARE AND ADVANCED CAREER GUIDELINES IN LIFE
SCIENCES- 3RD SEPTEMBER 2024

O3 INTRA-COLLEGIATE SLOGAN WRITING CONTEST 9TH SEPTEMBER 2024

RELEASE OF NEWSLETTER
ON 11TH SEPTEMBER 2024

05 INTERCOLLEGIATE - INFO GRAPHIC COMPETITION 12TH SEPTEMBER 2024

06 NUTRIGAMES 17TH -21ST SEPTEMBER 2024

O7 INTERCOLLEGIATE REEL MAKING
CONTEST - 22ND SEPTEMBER 2024

WORKSHOP ON CPR IN COLLABORATION WITH DHANWANTRI TRUST -25TH SEPTEMBER 2024

On occasion of National Nutritional Month, the dept has lined up a series of exciting events.



MSc Nutrition students won all top 3 positions: 1st, 2nd, and 3rd in a quiz organized by Yashoda Multispecialty Hospital, Secunderabad, at an event NUTRIQUEST on the occasion of National Nutrition Month on 5th Sep 2024.



Mrs. Phani Kumari published her paper entitled 'Isolation and Identification of Probiotic Bacteria from Natural Neera to Extend the Shelf Life of Fresh Fruits and Vegetables' in the "International Journal of Biosciences (IJB)" journal.





Guest lecture by Dr. Raju Padai Chairman BOS on Role of Nutrition in Diabetes care and advanced career guidelines in life sciences on 3rd September 2024



Mrs. Phani Kumari was awarded for her two research publications in Web of Science Research journals on 5th Sep 2024.

Careers In Nutrition At Glance

Clinical Dietician

Food Scientists

BY - Zoha Samreen Khan Assistant Professor Dept. of Nutrition

Dietitians, often holding a degree in nutrition or dietetics, play a crucial role in healthcare by working in hospitals, private clinics, or running their own consultation services. In hospitals, they collaborate with medical teams to ensure nutrition supports patient healing and recovery, serving both inpatients and outpatients. Their work involves patient assessments, reviewing medical and diet histories to create personalized nutrition plans for conditions like diabetes and heart disease. Dietitians must adapt these plans as patients' health evolves, working closely with kitchen staff and caregivers to ensure nutritional needs are met. Regular follow-ups help track progress and keep patients motivated toward better health. This career offers the opportunity to make a meaningful impact by promoting health and wellness through nutrition.

Food scientists play a key role in developing, improving, and ensuring the safety of food products across various settings, including manufacturing, research labs, and regulatory agencies. They innovate new food products, enhancing taste, texture, and nutrition, while implementing strict quality control to ensure safety and consistency. By identifying potential hazards like contamination, food scientists develop strategies to mitigate risks and comply with safety regulations. They analyze nutritional content, fortify foods with essential vitamins and minerals, and focus on sustainable production methods to reduce waste and environmental impact. Additionally, they ensure regulatory compliance and educate consumers on food safety and nutrition. Their work has a significant impact on public health by ensuring a safer, higher-quality, and more sustainable food supply.

We Proudly Present Our Illustrious Alumni



Name: Dr.M S Radhika

Batch: 1998

Group: BSc Applied Nutrition & Public Health

Current Designation: Scientist "D", National Institute of Nutrition, (NIN), Hyderabad.



Name: Dr.Radha R Chada

Batch: 1999

Group: BSc Applied Nutrition & Samp; Public Health

Current Designation: Registered Dietitian, Chief consulting clinical dietician AIG Hospitals,

Somajiguda Hyderabad





Name: Apeksha Ekbote

Batch: 2008

Group: BSc, Applied Nutrition & Public Health

Current Designation: Registered Dietitian, Chief Dietician, NephroPlus, Heading dietetics

team PAN India





Name: Nafisa Iqra

Batch: 2012

Group: BSc, Applied Nutrition & Public Health

Current Designation: Registered Dietitian, Senior Clinical Dietician- Registered

Dietician(RD), Gleneagles Global Hospital.



Nutrition Research Insights

Mother's gut microbiome during pregnancy shapes baby's brain development

- Key Findings:
- Bifidobacterium breve in pregnant mice boosts fetal brain development by improving nutrient transport and growth.
- Suggests probiotics could help prevent fetal growth issues, reducing risks of certain conditions.
- Implications:
- Focus on enhancing maternal gut health rather than using drugs during pregnancy.

https://www.sciencedaily.com/releases/2024/08/240820221803.htm

Boosting fruit intake during midlife can ward off late-life blues

- Overview:
- Ageing populations face increased late-life depression, possibly linked to neurodegeneration.
- Key Findings:
- Bifidobacterium breve : Probiotic may enhance fetal brain development, potentially reducing future depression risks.
- Diet's Role: Early dietary choices might protect against depression in later life.
- Implications: Focus on probiotics and maternal gut health over pharmaceuticals for mental well-being.

https://www.sciencedaily.com/releases/2024/07/240722155127.htm

Faculty Profile



Ms. Nasreen Begum
(HOD-Department of
Nutrition) Qualification
- M.Sc. Nutrition and
Dietetics, UGC-NET,
ADND. Teaching
Experience: 11 years



Ms. Urooja Birjis Fatima
(Asst. Prof.)
Qualification: M.Sc.
Nutrition and Dietetics,
UGC-NET Qualified, B. Ed.
Teaching Experience: 11
years



Ms. Y.V Phani Kumari
(Asst. Prof.)
Qualification - M.Sc.
Nutrition and
Dietetics, ADND.
Teaching Experience 17 years



Mrs. Hannah Jessie
Francis. T (Asst. Prof.)
Qualification: M.Sc.
Nutrition and Dietetics,
PGDHM.
Teaching Experience: 16
years



Dr. Khushboo Vyas
(Asst. Prof.)
Qualification - Ph.D.,
M.Sc. Foods and
Nutrition.
Teaching Experience - 3
years



Ms. Amtul Shimaila
(Asst. Prof.)
Qualification - M.Sc.
Nutrition and Dietetics,
PGDND.
Teaching Experience - 5
year

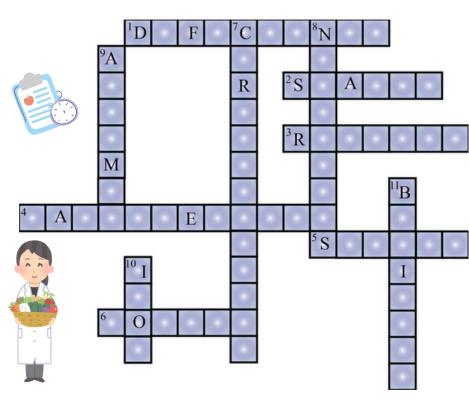


Ms. Zoha Samreen Khan
(Asst. Prof.)
Qualification - M.Sc.
Clinical Nutrition &
Dietetics; Gold Medalist
(U.G., P.G.)
Teaching Experience - 2
years



Ms Bhavani Avula
(Asst prof)
Qualification:MSc
Nutrition and Dietetics
Experience: Clinical
Dietitian - 2 years





<u>Across</u>

- 1. Lack of nutrient in our diet over a long period causes these diseases. (10)
- 2. Rice and potato are rich in this type of carbohydrate. (6)
- 3. Deficiency disease in bones making it becomes soft and bent. (7)
- 4. The diet that provides all the nutrients that our body needs in right quantities along width adequate amount of roughage and water. (8,4)
- 5. Deficiency disease with bleeding gums. (6)
- 6. Disease caused due to the deficiency of iodine. (6) <u>Down</u>
- 7. Starch and sugar in our food are rich in this type of energy giving nutrient.
- 8. The term given to the useful components of food. (9)
- 9. The disease caused by deficiency of iron in diet. (7)
- 10. Green leafy vegetables and apples are rich in this mineral (4)
- 11. Deficiency disease caused due to the lack of vitamin B1



Look Forward To The Answers In Our Next Issue



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



unsaturated fats food allergy unhealthy reaction calcium sugars

water

nutrient-dense osteoperosis nutrition minerals weight grains meal

GYTHGI

RENIMKO

saturated fats cholesterol quantity vitamins growth fruits body

S

G E W D N

T L

POURCTDOSJBETITE

carbohydrates overweight appetite proteins hunger dairy

diet

TCEC

RTOQMT

concentrated vegetables calories obesity health fiber oils

P A L L O







Innovative Recipe Corner



Hania Mukarram, MSc CLINICAL NUTRITION AND DIETETICS Hall Ticket no 120422688047

QUINOA PEARL CRUNCH DELIGHTS

Ingredients:
25g Quinoa
25g Pearl millet
10g Pistachios
10g Pumpkin seeds



Directions:

30g Jaggery

- I. Chop the nuts and seeds.
- 2. Dry roast the chopped nuts and seeds in a pan until they become fragrant.
- 3. In a separate pan, heat on medium flame and melt the jaggery until it thickens.
- 4. Add the roasted nuts and seeds to the melted jaggery, mixing thoroughly to combine.
- 5. Grease a pan with ghee or vegetable oil.
- 6. Pour the mixture into the greased pan and spread it evenly. Once slightly cooled, roll the mixture out and cut it into bars.





A Tribute to Our Pioneers



Dr MEENA KUMARI PATANGAY, MSc, DLitt
Former Dean Admin & Head of Nutrition
Department
Established the Dept in 1988 & served as HoD for
36 years



Dr. RANI GEORGE M.Sc, M.Phil, Ph.D Former P.G, Incharge,, Dept of Nutrition, Coordinator, Human value Education Served the Department for 26 years

As we look back on the rich history of our department, we are filled with immense gratitude for the teachers who have dedicated their lives to shaping its legacy. Dr Meena Kumari Patangay and Dr Rani George are the very foundation of our success, having imparted not just knowledge, but also values that have molded generations of students.

Your passion, commitment, and wisdom have left an indelible mark on all of us. You have been more than educators; you have been mentors, role models, and guiding lights for students and colleagues alike. Through your tireless efforts, you've not only shaped minds but have also nurtured dreams and futures.

Even in retirement, your influence continues to inspire, and your contributions remain woven into the fabric of our department. As we move forward, we carry with us the lessons you've imparted and the warmth of your presence.

Thank you for your service, your heart, and your unwavering dedication. You will always be a cherished part of our family.

With deep respect and admiration,

Faculty, Department of Nutrition

"Exciting things are on the horizon-Nutriverse is just getting started, and the best is yet to come!"Dont miss the Next Issue

Support given by our Patron

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1. Nutriclinic (10am to 2pm - Monday to Saturday) Opposite to Karvy Office, Above Bank of Baroda, Banjara Hills Road No. 10 Hyderabad, Telangana

2. Nutriclinic (3pm to 6pm Monday to Saturday) 1-2-9 Sardar Patel Road, Opposite to Parade Grounds Secunderabad, Telangana Feel free to reach out to us @
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Ms. Nasreen begum (Dept HOD) Ms. Amtul Shimaila (Asst. Prof.) Ms. Zoha Samreen Khan (Asst. Prof.)

"Special thanks to our dedicated editing team for

helping bring Nutriverse to life!"

Ms. Zoha Samreen Khan (Asst. Prof.) Sadia fatima (120423588017) Shaista suroor (120423588022)