SRNM
SOCIETY OF RENAL NUTRITION AND METABOLISM

SRNMCON 2026

SOCIETY OF RENAL NUTRITION AND METABOLISM
18TH & 19TH APRIL, HYDERABAD

Annual Conference of the Society of Renal Nutrition & Metabolism

Date: April 18th & 19th 2026 I **Venue:** The Westin Mindspace, Hyderabad

SOUVENIR

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WELCOME MESSAGE

Dear Esteemed Guests, Colleagues, and Members of the Renal Nutrition Community,

It gives us immense pleasure to welcome you all to **SRNMCON 2026,** the Annual Conference of the **Society of Renal Nutrition & Metabolism,** scheduled to be held in **Hyderabad on April 18th & 19th, 2026.**

This prestigious conference is hosted in collaboration with the Hyderabad Kidney Foundation, Indian Society of Nephrology – Telangana Chapter, and IAPEN India Association for Parenteral & Enteral Nutrition. Together, we stand committed to advancing the science and practice of renal nutrition and metabolism across India and beyond.

Hyderabad, fondly known as the **City of Pearls,** is a vibrant confluence of heritage and modernity. From the majestic Charminar and historical structures of the Nizam era to the bustling IT corridors, multicultural lifestyle, and world-famous culinary richness, the city welcomes you with open arms. The delightful weather in April makes it a perfect time to explore Hyderabad's warmth, hospitality, and culture.

The conference venue is well-connected and easily accessible from across the city. Beyond academic interactions, we hope you enjoy Hyderabad's charm—its iconic monuments, thriving shopping streets such as Laad Bazaar and Chudi Bazaar, traditional handicrafts, and of course, the unforgettable Dum Biryani.

On behalf of the Organizing Committee of **SRNMCON 2026,** we are delighted to invite you to be a part of this remarkable event. Come join us in Hyderabad to celebrate learning, networking, collaboration, and professional growth in the field of renal nutrition.

Come, stay, and experience Hyderabad.
Enrich your knowledge. Strengthen your connections.
Wishing you all a pleasant stay and a memorable conference!

PATRONS

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Dr. Girish Narayan

Dr. K. V. Dakshina Murthy

Dr. Pradeep Deshpande

Dr. S. Krishnan

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Dr. KG Rajaram


Dr. V Suresh

MESSAGE FROM CHIEF GUEST HONOURABLE HEALTH MINISTER, TELANGANA

It is a matter of great privilege and honour to extend my warm greetings to the organising committee of Nizam's Institute of Medical Sciences and the Hyderabad Nephrology Forum on the occasion of the Annual National Conference of the Society of Renal Nutrition & Metabolism (SRNMCON 2026).

Telangana has steadily established itself as a distinguished host for national and international scientific forums, providing an enabling environment for meaningful academic exchange and dissemination of knowledge. Such conferences play a vital role in strengthening collaborative efforts aimed at improving healthcare outcomes.

The role of nutrition in the prevention and management of kidney diseases is of paramount importance. Scientific evidence continues to highlight that appropriate nutritional interventions significantly contribute to slowing disease progression, reducing complications, and enhancing the quality of life of patients. The Government of Telangana has been at the forefront of implementing comprehensive initiatives in renal care, encompassing early screening programs, an extensive hub-and-spoke dialysis network, and a robust transplantation program under Jeevandan.

The State remains committed to advancing public health by prioritising nutritional well-being alongside accessible and quality healthcare services.

I am pleased to note that the scientific program of this conference encompasses a wide range of pertinent and contemporary themes, including the burden of chronic kidney disease, optimisation of nutrition in CKD, dietary strategies, dialysis nutrition, and post-transplant care. The participation of distinguished faculty from premier institutions such as AIIMS, SGPGI, PGI, CMC, and other reputed centres across the country will undoubtedly enrich the academic deliberations.

I convey my best wishes to all delegates for a productive and enriching conference. I also hope that your stay in Hyderabad provides an opportunity to experience its rich cultural heritage and renowned cuisine.

I am confident that SRNMCON 2026 will serve as an important milestone in advancing knowledge and strengthening clinical practice in renal nutrition.

C. Damodar Rajanarsimha

Minister for Health, Medical & Family Welfare, Science and Technology
Government of Telangana

MESSAGE FROM DIRECTOR OF MEDICAL EDUCATION, TELANGANA

It is a pleasure to extend my greetings to the organisers and participants of SRNMCON 2026, organised by the Hyderabad Nephrology Forum and the Department of Nephrology, Nizam's Institute of Medical Sciences (NIMS), Hyderabad.

Chronic kidney disease has emerged as a significant public health challenge, necessitating a structured and system-driven response. In Telangana, CKD management has been strengthened through the integration of preventive, promotive, and curative services within the public healthcare system.

The State has implemented several key initiatives, including population-based screening for early detection of kidney disease, expansion of dialysis services across government institutions through a hub-and-spoke model, and well-defined referral pathways to tertiary care centres. The Jeevandan program has further strengthened organ donation and transplantation services, ensuring equitable access to advanced care.

Medical education institutions play a pivotal role in this continuum by building skilled human resources, standardising clinical protocols, and contributing to research and innovation. Ongoing training and capacity building efforts for healthcare professionals remain essential to sustaining quality renal care across all levels of the system.

In this context, the focus of SRNMCON 2026 on renal nutrition is both timely and relevant. Integrating nutritional strategies into routine clinical care is critical to improving long-term outcomes in patients with kidney disease.

I commend the Hyderabad Nephrology Forum and NIMS for their leadership in organising this important academic event. Such platforms are instrumental in aligning clinical practice with evolving evidence and public health priorities.

I extend my best wishes to all delegates for a meaningful and productive conference.

Dr. A. Narendra Kumar

Director of Medical Education (DME), Telangana

MESSAGE FROM DIRECTOR, NIMS

It is a matter of great pride to extend my greetings to the organisers, faculty, and delegates of SRNMCON 2026, organised by the Department of Nephrology, Nizam's Institute of Medical Sciences (NIMS), Hyderabad.

NIMS has been at the forefront of delivering comprehensive and evidence-based healthcare in Telangana. The Department of Nephrology stands as a centre of excellence, contributing significantly through advanced clinical services, renal transplantation, high-volume dialysis programs, and management of complex renal disorders. The department has also played a key role in training healthcare professionals and strengthening renal care capacity across the state, while supporting public health initiatives for early detection and improved access to care.

NIMS continues to complement the Government of Telangana's efforts in addressing the growing burden of chronic kidney disease through innovation and collaboration.

I am pleased that SRNMCON 2026 highlights the critical role of nutrition in kidney disease and provides a valuable platform for academic exchange among experts from across the country.

I warmly welcome all delegates to Hyderabad and wish you a productive and enriching conference. I congratulate the organising team and convey my best wishes for its grand success.

Dr. N. Beerappa

Director
Nizam's Institute of Medical Sciences, Hyderabad

MESSAGE FROM DIRECTOR, NATIONAL INSTITUTE OF NUTRITION

It is my privilege to extend my greetings to the organizing committee of SRNMCON 2026 and to all participants of this prestigious national conference on renal nutrition.

The National Institute of Nutrition (NIN) has, over the decades, remained steadfast in its commitment to advancing nutritional science and translating research into policies and practices that improve public health. Our mission is centred on generating robust evidence, guiding national nutrition programs, and strengthening capacity to address emerging health challenges across the country.

Nutrition plays a critical role in the prevention and management of non-communicable diseases, including chronic kidney disease. The growing burden of kidney disorders in India underscores the need for integrated approaches that combine clinical care with evidence-based nutritional strategies. Institutions like NIN continue to contribute through research, development of dietary guidelines, and support to public health initiatives aimed at improving nutritional status across diverse populations.

I am pleased to note that this conference brings together experts from across the country to deliberate on key aspects of renal nutrition-from disease prevention to advanced therapeutic interventions. Such platforms are essential for bridging the gap between research and clinical practice.

I commend the efforts of the organizing team in curating a comprehensive scientific program and fostering interdisciplinary collaboration. I am confident that the deliberations SRNMCON 2026 willcontribute meaningfully to improving patient care and advancing the science of nutrition in kidney disease.

I extend my best wishes to all delegates for a fruitful and engaging conference.

Dr. Bharati Kulkarni
MBBS, DCH, MPH, PHD, FAMS
NIN Director

MESSAGE FROM PRESIDENT, SRNM

It gives me immense pleasure to extend my warm greetings to all delegates, faculty members, researchers, dietitians, and students participating in the 20th Annual Conference of the Society of Renal Nutrition and Metabolism of India, being held at The Westin, Hyderabad on April 18 & 19, 2026.

Renal nutrition and metabolism has emerged as a cornerstone in the comprehensive care of patients with kidney disease. With the increasing global burden of chronic kidney disease, it has become evident that optimal nutritional management plays a critical role in improving patient outcomes, slowing disease progression, and enhancing quality of life. The integration of nephrology with specialized renal nutrition science represents a powerful approach in modern kidney care.

Over the years, the Society of Renal Nutrition and Metabolism of India has made remarkable strides in promoting research, education, and clinical excellence in this important field. Through academic discussions, collaborative research, and dissemination of updated guidelines, the society continues to contribute significantly to advancing knowledge and improving patient care.

This annual conference provides an excellent platform for exchange of ideas, sharing of scientific advancements, and fostering collaboration among nephrologists, nutritionists, and allied healthcare professionals. I am confident that the scientific deliberations during this meeting will enrich our understanding of renal metabolism, nutritional strategies in dialysis and transplantation, and innovative approaches to managing metabolic complications of kidney disease.

I congratulate the organizing committee led by Dr. Swarnalatha Guditi for their dedicated efforts in putting together an outstanding scientific program and for bringing together experts from across the country. I also appreciate the contributors to this souvenir, which serves as a valuable record of the academic spirit and collective commitment of our community.

I wish the conference great success and hope that the deliberations will inspire new ideas, research initiatives, and collaborative efforts that will ultimately benefit patients with kidney disease.

Dr. A. K. Bhalla

President, Society of Renal Nutrition and Metabolism of India

MESSAGE FROM SECRETARY, SRNM

It gives me immense pleasure to extend a warm welcome to all delegates, faculty members, and participants to the Annual Conference of the Society of Renal Nutrition & Metabolism (SRNMCON 2026) Conference scheduled to be held on 18th–19th April 2026 in Hyderabad, Telangana.

The field of renal nutrition and metabolism continues to evolve rapidly, playing a pivotal role in improving outcomes in patients with kidney disease. As the burden of chronic kidney disease rises globally, the importance of integrating nutritional science into nephrology practice has never been more critical. This conference serves as a unique platform to bring together nephrologists, dietitians, researchers, and allied healthcare professionals to exchange knowledge, share experiences, and discuss the latest advances in this vital domain.

Optimal dietary support remains a cornerstone in the management of kidney disease. From slowing disease progression to improving quality of life and treatment outcomes, individualized nutrition therapy plays a transformative role. Strengthening collaboration between nephrologists and renal dietitians is essential to ensure patient-centered care, address protein-energy wasting, electrolyte imbalances, and tailor interventions across different stages of kidney disease, including dialysis and transplantation.

The scientific program has been thoughtfully curated to address contemporary challenges, emerging research, and practical aspects of renal nutrition across the spectrum of kidney diseases. I am confident that the deliberations and interactions over these two days will enrich our understanding and inspire collaborative efforts toward better patient care.

I sincerely thank the organizing committee for their dedication and hard work in putting together this academic event. I also express my gratitude to all faculty members and participants for their enthusiastic involvement.

I wish the conference great success and hope that all attendees have a rewarding academic and professional experience.

Prof. Narayana Prasad

Secretary, Society of Renal Nutrition and Metabolism of India

MESSAGE FROM PATRON, SRNMCON 2026

I am happy to note that Society of Renal Nutrition & Metabolism is organising a conferenceto discuss various aspects of nutrition in patients with renal diseases. All of us realise that diet plays an important role in the management of various renal diseases .With better understanding and data obtained from various clinical trials and experience of various dietary regimes , dietary modifications have become an integral part of life including management of various medical illnesses. It's role in daily life , different medical conditions and even in sports medicine is now well known.

I am sure this conference will further enhance our knowledge and understanding of role of diet and nutrition in health and disease .I congratulate the organizers and faculty of this conference to discuss such an important topic for benefit of all the attending delegates.

I wish the conference a great success.

Dr. Girish Narayan

Senior Consultant Nephrologist
Yashoda / Udai omni Hospitals

MESSAGE FROM PATRON, SRNMCON 2026

I am delighted to extend my warm greetings to all participants of the Annual Conference of the Society of Renal Nutrition and Metabolism , SRNMCON2026 . This uniquegathering of nephrologists and nutritionists represents a vital platform for professionals, researchers, and practitioners dedicated to advancing the science and practice of renal nutrition.

Nizam's Institute of Medical Sciences, Hyderarabad, represented by Prof. Guditi Swarnalta , the Organising Secretary, Prof. Taduri Gangadhar and Prof. Sribhushanraju, the Chair Persons, have planned an excellent job in presenting a feast of scientific extravaganza, and Hyderabadi cultural as well culinary expertise to the doyens in the fields of Nephrology and Renal Nutrition. Congratulations to all the members of the Organising Committee, by name. The Governing body members of the Society of Renal Nutrition and Metabolism are commendable for the support, in every aspect, rendered to the local organising team.

The conference not only highlights the latest research and clinical practices but also fosters collaboration and knowledge-sharing among experts in the field. Your commitment to improving patient outcomes through nutritional interventions, which form an integral part of the patient care, is commendable and continues to inspire progress in renal care.

I wish the conference great success and look forward to the impactful discussions and innovations that will emerge from this event.

Prof. Dr. Kaligotla Venkata Dakshinamurty

Senior Consultant Nephrologist at Mahatma Sri Ramchandra Centenary Memorial Hospital

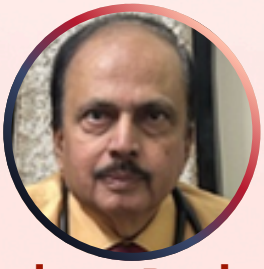
MESSAGE FROM PATRON, SRNMCON 2026

I Extend My Sincere Wishes For The Success Of This Conference And Express My Gratitude To All The Office Bearers For Their Dedicated Efforts.

Nutrition Remains A Critical But Often Underemphasized Component In The Management Of Chronic Kidney Disease.It Plays A Significant Role Not Only In Slowing Disease Progression But Also In Improving Outcomes For Patients Undergoing Hemodialysis And Post-Transplant Care.

However, There Is Considerable Lack Of Awareness Regarding Appropriate Nutritional Practices. Patients Are Sometimes Provided With Inconsistent Or Inadequate Advise, Which Is Further Compounded By Ineffective Communication, Particularly When Guidance Is Not Delivered In Their Native Language .

Strengthening The Focus On Nutrition And Ensuring Clear, Culturally And Linguistically Appropriate Communication Can Greatly Enhance Patient Care And Overall Well-Being



Dr. Pradeep Deshpande

Professor Emeritus of Nephrology and Senior Consultant Nephrologist at Virinchi and Global Hospitals

MESSAGE FROM SENIOR FACULTY, (HNF)

Nutrition is a cornerstone of both health and disease management, yet it's a topic often underrepresented in graduate medical programs. Tailored dietary advice is essential, helping individuals align their nutrition choices with their lifestyles, medical conditions, and test results.

In the context of chronic kidney disease (CKD), nutritional guidelines are vital for managing symptoms and slowing progression. This, however, is no small feat. With patients presenting a myriad of co-morbidities—such as diabetes, obesity, MASLD, CRM syndrome, frailty, and polypharmacy—along with diverse dietary preferences and common misconceptions, individualized strategies become essential. This makes the expertise of a renal dietitian absolutely indispensable.

I'd like to extend my sincere congratulations to the SRNMCON 2026 team, and especially to Dr. Swarnalata, for hosting such an insightful conference on the science of nutrition in renal disease. This gathering is truly an eye-opener for clinicians and postgraduate trainees alike.

Wishing the conference every success.

Dr. S. Krishnan

Senior Consultant Nephrologist
at Apollo Hospitals, Hyderabad

MESSAGE FROM CHAIRMAN, SRNMCON 2026

It is an honour and a pleasure to share my message for "Society of Renal Nutrition & Metabolism Conference." The global burden of chronic kidney disease is escalating, and hence the importance of nutrition in kidney health has increased immensely. Nutritional management is not merely supportive therapy; it is a powerful clinical intervention that influences disease trajectory, treatment outcomes, and patient survival.

Across the continuum of kidney disease—from early CKD to dialysis and transplantation—nutritional care plays a decisive role in preventing complications such as malnutrition, inflammation, metabolic imbalance, and cardiovascular disease. Empowering patients with appropriate dietary guidance also improves adherence to therapy and enhances their quality of life.

This conference is a timely initiative that highlights the need for stronger collaboration between nephrologists, dietitians, and allied healthcare professionals. By sharing knowledge, research insights, and practical experience, we can develop sustainable nutritional strategies tailored to the needs of kidney patients in diverse healthcare settings. This conference provides an excellent platform to share current evidence, clinical experience, and innovative approaches in renal nutrition. Such academic exchanges are essential to bridge the gap between research and clinical practice.

I congratulate the organizers for their vision and commitment in bringing together experts to address this vital aspect of kidney care. I am confident that the deliberations during this meeting will inspire new ideas, strengthen clinical practice, and ultimately improve the lives of patients living with kidney disease.

I extend my best wishes for the success of this conference and for continued progress in the field of renal nutrition.

Dr. (Prof.) Manisha Sahay

Prof and Head, Nephrology
Osmania Medical college and hospital, hyderabad
Chair, Organising Committee, SRNMCON 2026

MESSAGE FROM CHAIRMAN, SRNMCON 2026

Dear all "आहारसम्भवं वस्तु रोगाश्चाहारसम्भवाः" — Health and disease both arise from diet.

Nutrition remains a cornerstone in the management of kidney diseases, significantly influencing disease progression, patient survival, and quality of life. In individuals with renal disorders, precise dietary modulation of protein, electrolytes, and micronutrients is essential to maintain metabolic balance and prevent complications. With evolving evidence, renal nutrition is moving towards more individualized and patient-centric approaches, integrating scientific advances with practical care. This conference serves as a vital platform to explore recent developments, share expertise, and foster multidisciplinary collaboration in renal nutrition. As we deliberate and learn, let us reaffirm the central role of diet as a therapeutic tool in nephrology. May this meeting inspire us to translate knowledge into meaningful clinical practice for improved patient outcomes.

Dr. Sree Bhushan Raju

Professor & Head, Dept. of Nephrology,
Nizam's Institute of Medical Sciences.

MESSAGE FROM CHAIRMAN, SRNMCON 2026

Nutrition is a cornerstone of kidney health, both in preventing chronic kidney disease (CKD) and in slowing its progression once it develops. In healthy individuals, a balanced diet low in sodium and rich in whole grains, fruits, and vegetables supports stable blood pressure and glucose control—two key factors that protect the kidneys over time. For people already living with CKD, dietary modification becomes a targeted therapeutic tool: adjusting protein, sodium, potassium, phosphorus, and fluid intake helps reduce the accumulation of waste and electrolyte imbalances that would otherwise strain failing kidneys.

Nutrition in kidney health and disease is not merely about "avoiding harmful foods," but about applying physiology-based principles: reducing filtered load, maintaining metabolic balance, and preserving nutritional status. By aligning dietary choices with clinical evidence, patients and clinicians turn the everyday meal into a scientific act of prevention, protection, and prolongation of kidney function.

In this regard the upcoming conference will deliver useful key insights in to the nutrition & kidney health in general and nutrition in kidney diseases in particular. Wish the conference a great success.

Dr. Gangadhar Taduri

Professor & HOU Department of Nephrology, NIMS, Hyd

MESSAGE FROM CO - CHAIRMAN, SRNMCON 2026

Hyderabad nephrology forum is a consortium of Telangana nephrologists predominantly academic oriented& inclined to conduct regular scientific activities for knowledge sharing.

As the president of this forum it is my proud privilege & honour to announce that in coordination withWIN we are organising the National conference of Renal nutrition & metabolism 2026.

The organising & scientific committees are striving very hard to serve an academic feast, the conference also includes preconference work shops & also symposiums by Dieticians who are very enthusiastic to share the platform with us.

We welcome every one to this scientific extravaganza happening at this vibrant city of pearls Hyderabad and request to relish the academic feast.

Dr. Kiranmai Ismal

Professor of Nephrology, OGH, Hyd

MESSAGE FROM CO - CHAIRMAN, SRNMCON 2026

A warm welcome to Hyderabad !

We are delighted to host the esteemed SRNMCON 2026 in Hyderabad. This global event presents a significant opportunity to concentrate on important aspects of nutrition related to kidney diseases. Our conference allows kidney researchers, trainees, and dietitians to gather and collaborate on various nutritional facets of kidney disease. It offers a platform for specialists to unite and engage in-depth discussions on a wide array of nutritional topics. The scientific agenda expertly designed by the organizing committee promises to be impressive.

I feel honored to say that this conference will certainly provide chances for networking, presenting your research, and learning from experts.

Hyderabad welcomes everyone with warm hospitality, a variety of cuisines, and numerous tourist attractions, making it a wonderful destination.

I truly appreciate the efforts of Organising Chairs, Secretaries and the Hyderabad Nephrology forum in organising this conference . I wish all the delegates all the very best.

Dr. Manjusha Yadla

Professor & Head of Department,
Gandhi Hospital

MESSAGE FROM ORGANISING SECRETARY, SRNMCON 2026

It is a great honour and privilege to host this conference under the aegis of the SRNM. I sincerely thank the SRNM organisation for giving us the opportunity to conduct this prestigious conference in the southern region for the first time. This milestone reflects the growing academic engagement and collaborative spirit within our community, and we are grateful for the trust placed in our team to organise this important event.

This conference brings together an exceptional scientific program featuring distinguished national faculty, insightful keynote lectures, interactive panel discussions, and evidence-based sessions focusing on contemporary developments in renal nutrition and patient care. The program has been thoughtfully designed to encourage knowledge exchange, practical learning, and meaningful dialogue among clinicians, nutritionists, and researchers dedicated to improving outcomes in kidney disease.

We believe this meeting will greatly benefit nutritionists and healthcare professionals across the country by providing updated knowledge and practical perspectives in renal nutrition. Being in Hyderabad gives us the unique advantage of proximity to the renowned National Institute of Nutrition (NIN), creating valuable opportunities for learning, research exposure, and future collaborations that can further strengthen nutrition science and patient care in our region.

Hyderabad, a city that beautifully blends rich heritage with rapid scientific and technological development, serves as an ideal venue for this gathering. With its growing prominence in healthcare, research, and innovation, the city provides an inspiring environment for academic exchange and professional networking. We hope that alongside the academic sessions, you will also experience the warmth and vibrancy of this dynamic city.

I warmly welcome all delegates and wish you a productive and enriching conference.

Dr. Swarnalatha Guditi

Professor & HOU Department of Nephrology, NIMS, Hyd

MESSAGE FROM ORGANISING SECRETARY, SRNMCON 2026

It is a distinct honor to welcome you to the Annual Conference of the Society of Renal Nutrition & Metabolism (SRNMCON 2026). As we gather in the vibrant city of Hyderabad on April 18 and 19, this souvenir serves as a milestone in our journey toward better patient outcomes through specialized care.

In the management of Chronic Kidney Disease, the synergy between medical intervention and nutritional optimization is paramount. We are currently witnessing a paradigm shift where "food as medicine" is no longer a concept but a clinical necessity. This conference has been curated to explore these frontiers—from the intricacies of the gut-kidney axis to the practical challenges of protein energy wasting and metabolic health.

As Co-Organizing Secretary, my goal has been to ensure that SRNMCON 2026 provides a platform where dietitians, clinicians, and researchers can engage in high-level academic discourse. We hope the evidence-based insights shared here will empower you to bring innovative nutritional strategies back to your clinical practice.

I extend my heartfelt gratitude to the organizing team and the delegates for their unwavering support. May this conference be intellectually stimulating and professionally rewarding for us all.

Dr. P.S.Vali

Senior Nephrologist,
Yashoda Hospital, Hyd

MESSAGE FROM TREASURER, SRNMCON 2026

Warm welcome to all the speakers delegates attending Renal Nutrition Conference being held in Hyderabad.

Renal nutrition plays a crucial role in improving the quality of life for patients with kidney disease. Proper dietary management not only helps in slowing disease progression but also supports overall health and well-being.

This conference provides us with a valuable platform to share knowledge, discuss the latest research, and collaborate on better nutritional strategies for renal care. I am eager to learn from the experts here and contribute to meaningful discussions.

Hope you all enjoy the vibrant city of Hyderabad along with your friends and family.

Thank you for this opportunity, and I wish everyone a productive and insightful conference.

Thank you.

Dr. Kalidindi Karthik

Additional Professor of Nephrology,
NIMS, Hyd

MESSAGE FROM JOINT ORGANISING SECRETARY, SRNMCON 2026

It gives me great pleasure to extend warm greetings to everyone attending the upcoming SRNMCON Nutrition Conference.

Academic meetings like these are not just platforms for sharing knowledge; they are also opportunities for collaboration, mentorship, and strengthening the bonds within our medical community. Nutrition continues to play an increasingly important role in clinical medicine, particularly in the management of chronic diseases, kidney disorders, and metabolic health. Conferences such as SRNMCON provide an excellent forum for exchanging ideas, learning from experts, and inspiring the next generation of clinicians and researchers.

On a personal note, I would like to express my deep gratitude to the teachers, seniors, and colleagues in Hyderabad who welcomed me with warmth and generosity when I first arrived here as an outsider. Their encouragement, guidance, and camaraderie made my professional journey in this city both meaningful and rewarding. The supportive academic culture here truly reflects the spirit of medical fraternity. I remain especially thankful to Dr. Anuradha, Dr. Girish Narayan, Dr. Manisha Sahay, Dr. Manjusha, Dr. Sreebhushan Raju, Dr. Gangadhar, and Dr. M. V. Rao, whose guidance, mentorship, and support in my work have been invaluable.

A special mention must be made of Dr. Swarnalatha, whose remarkable versatility and dedication continue to inspire many. Her multiple talents, tireless energy, and commitment to academic excellence have played an important role in shaping initiatives like this conference and motivating colleagues and students alike.

My best wishes to the entire organizing committee for putting together what promises to be a stimulating and enriching conference. May the deliberations, discussions, and shared experiences during SRNMCON lead to new insights and collaborations in the field of nutrition and healthcare.

Wishing all participants a highly successful conference and a wonderful academic experience ahead.

Dr. Srikanth Gundlapalli

Senior Consultant Nephrologist,
AINU, Hyd

MESSAGE FROM EDITOR, SRNMCON 2026 SOUVENIR

Dear Esteemed Colleagues and Distinguished Guests,

It is with immense pleasure that we extend a warm welcome to all delegates attending the Annual Conference of the Society of Renal Nutrition & Metabolism (SRNMCON) 2026. As the Editor of the conference souvenir, I am truly honored to be part of this prestigious event, to be held in the vibrant city of Hyderabad from April 18–19, 2026.

Nutrition has emerged as a cornerstone in modern clinical practice, particularly in the management of metabolic disorders and chronic illnesses such as chronic kidney disease. SRNMCON serves as an exceptional platform for the exchange of knowledge, dissemination of recent advances, and meaningful interactions among clinicians, researchers, and nutrition experts.

This conference brings together some of the most accomplished minds and dedicated professionals in the fields of nephrology and renal nutrition. It offers a valuable opportunity to share insights, deliberate on emerging evidence, and foster collaborations that will contribute significantly to the advancement of renal nutrition science and patient care.

As we engage in enriching academic discussions and explore innovative approaches to dietary management in kidney disease, we also invite you to experience the rich cultural heritage of Hyderabad—a city renowned for its history, hospitality, and culinary excellence—providing the perfect setting for both intellectual and social enrichment.

I encourage all participants to actively engage, share perspectives, and build lasting professional connections. The souvenir, curated under our editorial guidance, aims to encapsulate the spirit of SRNMCON 2026 and showcase the collective academic excellence of our community.
Once again, we warmly welcome you to Hyderabad. We wish you a rewarding experience and a highly successful conference.

Dr. Praveen Kumar Etta

Senior Consultant Nephrologist,
Aster Prime Hospital, Hyd

SCIENTIFIC PROGRAMME

17-04-2026 Friday, Hall A, 6:30 PM – 8:30 PM

Integrating Physical Fitness and Financial Planning in Medical Practice A Pre-Conference Workshop for Holistic Professional Sustainability			
TIME	**TOPIC**	**SPEAKER**	**MODERATORS/ CHAIR PERSONS**
6:30 PM – 7:30 PM	Session 1: Healthy Finances – Peace of Mind		
6:30 PM – 7:00 PM	Navigating Financial Planning in Times of Global Economic Uncertainty	Dr Vikranth	Dr Dhananjay
7:00 PM – 7:30 PM	Strategic Selection of Stocks and Mutual Funds	Dr Nitin Jagtap	
7:30 PM – 8:30 PM	Session 2: Fit Body – Fit Mind		
7:30 PM – 8:00 PM	Optimising Exercise: The Science of Maximising Exercise Benefits	Dr Srikanth Gundlapalli	Dr Sudhakar
8:00 PM – 8:30 PM	Prioritising Exercise: The Art of Motivation and Time Management	Dr Ravi Andrews	
8:30 PM Onwards	**Followed by Dinner**		

SCIENTIFIC PROGRAMME

Day 1, 18-04-2026 Saturday, Hall A

TIME	TOPIC	SPEAKER	MODERATORS/ CHAIR PERSONS
8:30 AM – 9:00 AM	**REGISTRATION & WELCOME**		
9:00 AM – 9:20 AM	Burden of CKD and Role of Nutrition	Dr Shruti Tapiawala	Dr Anuradha Raman Dr Raja Karthik Dr Bhavya Dr Ravi Tej
9:20 AM – 10:20 AM	Symposium – Optimizing Nutrition in CKD		
9:20 AM – 9:35 AM	Energy and Protein Requirements in CKD	Dr Abhilash Chandra	Dr Umesh Khanna
9:35 AM – 9:50 AM	Managing Sodium and Fluid in CKD	Dr Prodip Kumar Doley	
9:50 AM – 10:05 AM	Potassium and Phosphorus Restriction – Practical Tips	Ms Archana Sinha	
10:05 AM – 10:20 AM	Role of Trace Minerals in CKD	Dr Bhanuprakash Reddy	
10:20 AM – 10:40 AM	Role of Keto Analogues in Low-Protein Diet	Dr K S Nayak	Dr Tarun Saha Dr Satti Reddy Dr G Srikanth Dr Anuradha Shalini
10:40 AM – 11:00 AM	Nutrition Assessment Tools in CKD (SGA, BCM, Bioimpedance)	Dr Balaji kirushnan	Dr Nisith Kumar Mohanty Dr Sanjay Maitra Dr Sahista Hussaini Dr Anitha
11:00 AM – 11:30 AM	**TEA BREAK**		
11:30 AM – 12:00 PM	Debate: Plant-Based vs Mixed Diet in CKD – Which is Better?	Dr Anurag Gupta - Plant-Based vs Dr Satish Balan - Mixed Diet	Dr Pradeep Deshpande Dr Uttara Das Dr Ramachander Dr. Payal Gaggar

SCIENTIFIC PROGRAMME

Day 1, 18-04-2026 Saturday, Hall A

TIME	TOPIC	SPEAKER	MODERATORS/ CHAIR PERSONS
12:00 PM – 12:30 PM	**Dr Anita Saxena Memorial Oration** Metabolic associated CKD (MACKD): A way forward to prevent and treat?	Dr Narayan Prasad	Dr Anil Bhalla Dr R K Sharma Dr Tiwari SC Dr Swarnalatha
12:30 PM – 12:50 PM	KDIGO Nutritional updates - translating evidence into everyday practice	Dr Deodutta Chafekar	Dr Manisha Sahay Dr Raja Ram Dr Vamsidher Dr Bande Sujith Reddy
12:50 PM – 1:50 PM		**LUNCH**	
1:50 PM – 2:10 PM	Diet in Acute Kidney Injury – ICU and Ward Settings	Dr Sandeep Mahajan	Prof. Amit Gupta Dr Ratan Jha Dr Rajesh Khanduja Dr Suryanarayan Mandal
2:10 PM – 2:50 PM	Panel Discussion Improving Diet Adherence in CKD – Patient, Dietitian, Nephrologist Perspective	Dr Piyali Sarkar Dr Sudeep Prakash Dr Urmila Anandh Dr Rajesh Nair	Dr Sreejith Parameswaran
2:50 PM – 3:10 PM	Nutrition in Hemodialysis Patients – Common Pitfalls	Ms. Sunitha Premalatha, (Dietitian)	Dr Dhanajay Dr Sridher(Nizamabad) Dr Sandeep Peddi Dr Ramapriya
3:10 PM – 3:30 PM	Intradialytic Nutrition – Tools and techniques	Dr Nisha Jose	Dr Y Manjusha Dr Shankar Dr Priyadarshini john Dr Susmita
3:30 PM – 3:50 PM		**TEA BREAK**	

SCIENTIFIC PROGRAMME

Day 1, 18-04-2026 Saturday, Hall A

TIME	TOPIC	SPEAKER	MODERATORS/ CHAIR PERSONS
3:50 PM – 4:30 PM	**Panel Discussion :** Sarcopenia and muscle wasting in Kidney Diseases : Nutritional Perspectives	Dr Arun S, Dr Edwin Fernando, Dr Gopambuj Singh Rathod, Dr Santhosh Pai	Dr Shyam Bansal
4:30 PM – 4:50 PM	Case-Based Discussion: Designing CKD Diets for Vegetarian and Non-Vegetarian Patients	Dr Nancy Sahni (Dietitian)	Dr Sashi Kiran Dr Vikranth Dr Venkata Raman Dr Srinivas Rao
4:50 PM – 5:10 PM	CRM Syndrome - Role of diet and Nutrition	Dr Manish Rathi,	Dr Sree Bhushan Raju Dr Krishnan Dr Sridher(Star Hospital) Dr Hari krishna
5:10 PM – 5:30 PM	MNT in Diabetic Kidney Disease – Real-World Case Scenarios	Ms. Zamurrud Patel, (Dietitian)	Dr Kiranmai Ismal Dr Sudhakar Dr Shabana Dr Rama E
5:30 PM – 6:00 PM	**Panel Discussion :** Same Diagnosis, Different Phenotypes: A Comparative Approach in Renal Care	Dr Subba Reddy Dr Sanjay Maitra Ms Harita Shyam Ms Sujatha Stephan	Ms Sana Sahigara
6:30 PM – 7:30 PM	**INAUGURATION**		

SCIENTIFIC PROGRAMME

Day 1, 18-04-2026 Saturday, Hall B
Paper Presentations - 1
09:50 AM - 11:00 AM

Judges - Dr. Pallavi, Dr. Ankit Tiwari

Abstract ID	Title	Presenter name
ABS001	A clinical study of malnutrition and inflammatory parameters in non-dialyzed chronic kidney disease patients	Dr Manzoor Ahmad Parry
ABS003	Prevalence of Malnutrition in Elderly Chronic Kidney Disease Patients on Hemodialysis and Association with Frailty, Co-morbidities, Dialysis Adequacy, Nutritional Practices	Dr Elamandala Sreecharan
ABS007	Hidden muscle loss despite Normal BMI: Detecting Sarcopenia in Pediatric CAPD	Dr Harika Padamata
ABS008	Evaluating Nutritional Scores Against Muscle Mass and Albumin in Hemodialysis: A Cross-Sectional Study	Dr Chaitra C
ABS013	Analysis of the association between Healthy Eating Index (HEI)-2020 and diabetic kidney disease in type 2 diabetes patients	Dr Kakaraparthy Sree Harsha Vardhan
ABS014	Protein Energy Wasting in Maintenance Hemodialysis Patients at a Tertiary Care Center: Anthropometric Assessment Using ISRNM Criteria	Dr Vamshi Krishna
ABS015	Correlation of Visceral Adiposity Index, Visceral and Subcutaneous Adipose Tissue Thickness, Mid-Arm Circumference, Triceps Skinfold Thickness and Carotid Intima-Media Thickness with Cardio-Kidney-Metabolic Risk in Patients on Maintenance Hemodialysis	Dr Anoop Mehta
ABS016	Assesment of my food plate consumption in CKD patients on maintenance hemodialysis using 24hr dietary recall.	Dr Afsha farooqui

SCIENTIFIC PROGRAMME

Day 1, 18-04-2026 Saturday, Hall B

Workshops

TIME	TOPIC	SPEAKER	MODERATORS/ CHAIR PERSONS
11:00 AM – 12:00 PM	**Strength, Structure & Status in CKD - Workshop 1**		
11:00 AM - 11:15 AM	Practical Nutritional Assessment in CKD – Clinical Tools & Implementation	Ms Swetha (Chief Dietitian) Ms Ashwini (Deputy Dietitian)	Dr. Ramapriya Dr. Vishnu Keerthana
11:15 AM - 11 :30 AM	From Fluid Overload to Muscle Loss: Body Composition Analysis – Nephrologist Perspective	Dr Rajiv Medanki (Senior Consultant Nephrologist)	
11:30 AM - 11:45 AM	The Silent Decline: Sarcopenia and Frailty Assessment in Renal Care	Dr Radha R. Chada (Chief Dietitian) Ms A N Malleswari (Chief Dietitian)	
11:45 AM - 12:00 PM	Q/A		
2:00 PM – 4:00 PM	**From Lab to Plate: A Biochemistry-Driven Approach to CKD Nutrition - Workshop 2** In association with IAPEN - Renal Nutrition India		
02:00 PM – 02:20 PM	Understanding CKD Biochemistry Beyond Creatinine	Dr Anil Bhalla (Nephrologist)	**Chairpersons** Dr Deodutta Chafekar Dr Narayan Prasad
02:20 PM – 02:40 PM	Protein & Albumin: Restriction vs Preservation	Ms N.Vijayashree (Dietitian) Dr Manish Lalwani (Nephrologist)	
02:40 PM – 03:00 PM	Sodium & Fluid Balance: The Hidden Drivers of Progression	Ms Sunita Sahoo (Dietitian) Dr. Sasidhar G (Nephrologist)	**Mentors** Dr Deodutta Chafekar Dr Kiranmai Ismal Ms Prashanti Ms A N Malleswari
03:00 PM – 03:20 PM	Potassium & Bicarbonate: Managing Electrolytes and Acid Load	Ms Aishwarya Raj (Dietitian) Dr Anuradha Shalini (Nephrologist)	
03:20 PM – 03:40 PM	Phosphorus & CKD-MBD: Beyond Dairy Restriction	Ms Tanvi (Dietitian) Dr Deepti A (Nephrologist)	
03:40 PM – 04:00 PM	Uric Acid & Metabolic Risk in CKD	Ms K. Sowmya (Dietitian) Dr Ravi Tej (Nephrologist)	
04:00 PM – 04:15 PM	Role of NAC and Taurine in reducing Microalbuminuria - An Evidence based approach	Dr Ankit Tiwari	Dr A K Bhalla Dr Gangadher

SCIENTIFIC PROGRAMME

Day 2, 19-04-2026 Sunday, Hall A

TIME	TOPIC	SPEAKER	MODERATORS/ CHAIR PERSONS
8:00 AM – 8:30 AM	**Breakfast Symposium**		
8:00 AM – 8:15 AM	Impact of Dialysis Membrane Type on Protein-Energy Wasting in Hemodialysis Patients	Dr Vijay chander	Dr Prasad Gullipalli Dr Ranganath Dr Satyanarayana Dr Koushik
8:15 AM – 8:30 AM	Role of heavy metals in Chronic Kidney Diseases	Dr J Srrenivasa Rao	
8:30 AM – 8:50 AM	Reading food labels(Na, K,P)	Dr. Ashwin Dabhi	Dr Krishan Patil Dr Vikram kumar Dr Shyam Sundar Dr Rekha
8:50 AM – 9:10 AM	Diet in CAPD vs APD – Practical Differences	Dr Sampath Kumar	Dr J Sreenivasa Rao Dr Nageshwar Reddy Dr Ravi Manhankali Dr Kavitha Gona
9:10 AM – 10:10 AM	**Symposium – Nutrition in Special Renal Populations**		
9:10 AM – 9:25 AM	Pediatric CKD – Growth, Calories and Protein	Dr Mehul A.Shah	Dr D S Rana
9:25 AM – 9:40 AM	Nutrition in Elderly Patients with CKD and Frailty	Dr Garima Agarwal	
9:40 AM – 9:55 AM	Nutrition in Obesity with CKD – Balancing Weight Loss and Renal Safety	Dr Arpita Roy Chaudhary	
9:55 AM – 10:10 AM	Diet in Post-Transplant Patient – Short and Long Term	Dr Ranjanee Muthu	
10:10 AM – 10:30 AM	Diet in Patients on Tube Feeding / Jejunostomy with Renal Failure	Dr Biju Potakkat	Dr Gangadher Dr Suresh Babu Dr Mukku Kiran Dr Ashwin Dutt
10:30 AM – 11:00 AM	**TEA BREAK**		

SCIENTIFIC PROGRAMME

Day 2, 19-04-2026 Sunday, Hall A

TIME	TOPIC	SPEAKER	MODERATORS/ CHAIR PERSONS
11:00 AM – 11:30 AM	**Debate:** Intermittent Fasting in CKD and Diabetes – Friend or Foe?	Dr Sanjeev Nair (Friend) vs Dr Nagraj Naik (Foe)	Dr Dhanalakshmi Dr Anupama Kaul Dr Santhosh A Dr Arvind Reddy
11:30 AM – 11:50 AM	Nutrition in Patients with Recurrent Renal Calculi	Dr Ravi Kushwaha	Dr Deepti A Dr Sridher (KIMS) Dr Jyothsna Dr Srikanth Bathineni
11:50 AM – 12:30 PM	**Panel Discussion:** AI Tools & Apps for Diet Planning and Nutritional Monitoring in CKD	Dr Srinivas Prasad Dr Jithu Kurian Dr Seerapani Gopaluni Ms. Radha Reddy (Dietitian) Dr Suguna Sapre	Dr P S Vali
12:30 PM – 12:50 PM	Multicentre Study of Lipid Abnormalities in Indian MHD Patients.	Dr Georgi Abraham	Dr Dakshinamurty Dr Praveen Etta Dr Prasanna Dr Ravi Andrews
12:50 PM - 1:05 PM	Kidney Disease & Hyperkalemia: Integrated Diet-Drug Strategies	Dr Rajasekhara Chakravarthi	Dr Snigdha Dr Pranith Ram Dr Rana Fatima Dr Himadeepti
1:05 PM – 1:30 PM	**Quiz** Dr Sai Vani and Dr Sivaparathi		
1:30 PM – 2:00 PM	**VALEDICTORY FUNCTION**		
2:00 PM – 3:00 PM	**LUNCH**		

SCIENTIFIC PROGRAMME

Day 2, 19-04-2026 Sunday, Hall A
Paper Presentations - 2
10:00 AM - 11:00 AM

Judges - Dr Niranjan Ganesh K, Dr Payal Gaggar

Abstract ID	Title	Presenter name
ABS002	Quantitative Multidimensional Assessment of Vitality in Hemodialysis Patients: Early Indicators of Nutritional, Functional Status, and Frailty	Preethi K N
ABS004	Prevalence of Malnutrition and evaluation of Functional, Dietary and Biochemical Parameters in Maintenance Haemodialysis Patients	Hafsa Anjum
ABS005	Dietary Diversity and Nutritional Status Among Patients Undergoing Maintenance Haemodialysis: A Cross-Sectional Study	Kalluri Sowmya
ABS020	Protein energy wasting	Gayatri
ABS021	Menstrual Distress Questionnaire (MEDI-Q)	Renu Raj
ABS022	Efficacy of Combined Breathing Training with Resistance Exercises on Pulse Pressure, Biochemical Markers, and Quality of Life in Haemodialysis Patients: A Randomized Controlled Trial.	Sunith Waghray

SCIENTIFIC PROGRAMME

Day 2, 19-04-2026 Sunday, Hall A
Paper Presentations - 3
11:00 AM - 12:10 PM

Judges - Dr Prasad, Dr Karthik Urala

Abstract ID	Title	Presenter name
ABS006	Pancreatic Exocrine Insufficiency Induced Enteric Hyperoxalosis is a Modifiable Risk Factor of Rapid Progression of Chronic Kidney Disease.	Dr Ilangovan veerappan
ABS009	The Effect of Dietary Habit of Phosphorus Intake in Chronic Kidney Disease Patients on Hemodialysis	Dr Vajed mogal
ABS010	Muscle Matters: Bioelectrical Impedance- Based Evaluation of Protein Energy Wasting in Maintenance Hemodialysis Patients.	Dr Ilakyaa Rajakumar
ABS011	Prevalence and Determinants of Sarcopenia in Dialysis-Dependent Chronic Kidney Disease Patients: A Cross-Sectional Study at Gandhi Hospital	Dr Saraswathi Yashaswini
ABS012	Assessment of Inspiratory and Expiratory Muscle Strength in End Stage Renal Disease Patients on Maintenance Hemodialysis	Dr Srija Muvva
ABS017	The Impact of Intradialytic Aerobic Training on Functional Capacity and Biochemical Markers in Patients Undergoing Hemodialysis	Dr Rishabh Jhala
ABS019	Prevalence of Sarcopenia in Patients with Chronic Kidney Disease: A Cross-Sectional Study from a Tertiary Care Center in Telangana	Dr Rohit Sharma
ABS023	To Evaluate the Nutritional Status of the chronic kidney disease patients on an OPD Basis and also to Analyse the impact of Diet Counselling on the Overall Health of the Patients.	Taru Payal

ABS001

Titile: A clinical study of malnutrition and inflammatory parameters in non-dialyzed chronic kidney disease patients

Presenter Name: Dr Manzoor Ahmad Parry
Coauthor Name: Dr Erteeka Nissar

Background: In India, the prevalence of chronic kidney disease (CKD) is nearly eight thousand for every million.[1] Malnutrition is commonly established in patients with CKD; however, the frequency varies between studies.[2-3] Malnutrition was found in 39% of chronic renal failure patients in a multicenter investigation.[4] In other studies, the prevalence of malnutrition ranged from 16% to 54%. [2-5]

Objectives: This study aimed to evaluate the nutritional status of patients with chronic kidney disease (CKD) before the initiation of renal replacement therapy. It also sought to determine the prevalence of malnutrition and assess associated inflammatory markers in this patient population to better understand their clinical and prognostic significance.

Methods: A prospective cross-sectional observational study was conducted including 528 patients with chronic kidney disease (CKD) who were not yet on dialysis at the time of enrollment. Detailed clinical profiles, biochemical investigations, and anthropometric measurements were systematically analyzed to evaluate the presence and severity of malnutrition and associated inflammatory status. Appropriate statistical methods were applied to ensure accurate interpretation and validity of the study findings.

Results: The mean age was 58.4 (12.2) years, and male patients outnumbered females by more than twice the number (M: F= 359:169). The mean BMI, triceps index, midarm muscle mass index, hemoglobin, serum albumin, and eGFR were significantly lowered and inflammatory markers were significantly higher among malnourished patients ($P<0.001$). A similar trend was observed even when malnourished and non-malnourished patients were compared on the basis of serum albumin level and body mass index. Biochemical and inflammatory parameters were significantly higher among the malnourished group on the basis of the CRP level. On the basis of the severity of renal failure; BMI, triceps index, mid-arm muscle mass circumference, serum creatinine, ferritin and serum TG were comparable between patients with advanced and moderate to severe renal failure.

Conclusion: Inflammation and Malnutrition often coexist in patients with CKD, causing considerable mortality and morbidity. To treat inflammation and malnutrition in patients with chronic renal disease, early identification of malnutrition and suitable management are essential.

ABS002

Titile: Quantitative Multidimensional Assessment of Vitality in Hemodialysis Patients: Early Indicators of Nutritional, Functional Status, and Frailty

Presenter Name: Dr Preethi K.N.
Coauthor Name: Ms Merina Elizabeth Alex, Dr Georgi Abraham, Dr Milly Mathew

Background:
Protein–energy wasting, Sarcopenia, and functional decline are common in hemodialysis patients and contribute to adverse clinical outcomes. Early identification is essential for timely nutritional intervention. Simple, noninvasive bedside measures such as handgrip strength, calf circumference, and impedance–derived phase angle reflect muscle mass, integrity, and functional capacity, enabling detection of malnutrition.

Objective:
To evaluate HGS, CC and PhA as predictors of nutritional status and functional status in hemodialysis patients, and to assess their correlation with SGA.

Methods:
A retrospective cross-sectional study was conducted among 175 hemodialysis patients. Nutritional status was assessed using the Subjective Global Assessment. Functional status was evaluated using handgrip strength and calf circumference. Phase angle was obtained using multifrequency bioelectrical impedance analysis at 50 kHz. Pearson correlation analysis was performed to examine associations between HGS, CC, PhA, and SGA scores.

Results:
A high prevalence of SGA-defined malnutrition was observed. Mean ± SD values of HGS 14.39 ± 7.29 kg, CC 30.97 ± 3.60 cm, PhA 4.43 ± 1.43°, and 12.43 ± 4.78 for SGA score. Pearson correlation analysis showed significant negative correlations between SGA and all three objective markers ($p < 0.001$). The Lower SGA scores (indicating better nutritional status) were associated with higher values of HGS ($p = 0.0145$), CC ($p = 0.0152$), and PhA ($p = 0.0021$), with Phase angle showed the strongest correlation with SGA. HGS and PhA were moderately correlated ($p < 0.001$), while CC showed weaker correlations with HGS ($p = 0.0659$) and PhA ($p = 0.1107$).

Conclusion:
HGS, CC, and PhA are simple, non-invasive indicators of nutritional and functional status in hemodialysis patients. . Phase angle appears to be the most sensitive independent predictor of malnutrition and shows the strongest correlation with SGA. Incorporating these measures into routine practice may enhance early detection and guide individualized nutritional interventions.

ABS003

Titile: Prevalence of Malnutrition in Elderly Chronic Kidney Disease Patients: Association with Frailty, Comorbidities, Dialysis Adequacy, and Nutritional Practices

Presenter Name: Dr Elamandala Sreecharan
Coauthor Name: Dr Krishnan Srinivasan, Dr Ashwini Kumar Aiyangar, Dr Sashidhar, Dr Kameswar Rao

Background:
Malnutrition is a common yet under-recognized problem in elderly patients with chronic kidney disease (CKD). Aging, comorbidities, inflammation, polypharmacy, dialysis-related factors, and dietary misconceptions contribute to protein–energy wasting in this population. Early identification of nutritional risk factors is essential to improve outcomes.

Methods:
This cross-sectional observational study included CKD patients aged ≥60 years attending a tertiary care nephrology center. Nutritional status was assessed using clinical evaluation, anthropometry (BMI and mid-arm circumference), dietary assessment (calorie, salt, potassium, and phosphorus intake), and laboratory parameters including serum protein, iron profile, and C-reactive protein (CRP). Frailty status, comorbidities, medication burden, dialysis adequacy (in maintenance dialysis patients), nutritional supplement use, and dietary misconceptions were recorded using a structured proforma.

Results:
Malnutrition was identified in a significant proportion of elderly CKD patients. It was more prevalent in patients with advanced age, multiple comorbidities, and frailty. Low serum protein levels, abnormal iron profile, elevated CRP, and reduced caloric intake were commonly observed among malnourished patients. Excessive dietary restrictions related to potassium, phosphorus, and salt intake were frequent. Dialysis inadequacy and polypharmacy were additional contributing factors. Nutritional supplement use was inconsistent and often not guided by clinical assessment.

Conclusion:
Malnutrition remains highly prevalent among elderly CKD patients and is closely associated with frailty, inflammation, comorbidity burden, and inappropriate dietary practices. Routine nutritional screening combined with dietary counseling, optimization of dialysis adequacy, and individualized nutritional supplementation may help reduce protein–energy wasting in elderly CKD patients.

ABS004

Titile: Prevalence of Malnutrition and evaluation of Functional, Dietary and Biochemical Parameters in Maintenance Haemodialysis Patients

Presenter Name: Dr Hafsa Anjum
Coauthor Name: Dr Rubina Begum, Dr Haritha Bathina

Background:
Malnutrition is highly prevalent among maintenance haemodialysis (MHD) patients and is strongly associated with inflammation, muscle dysfunction, and adverse clinical outcomes. Conventional anthropometric indicators often underestimate nutritional risk in this population. Comprehensive assessment using validated tools is essential to identify early nutritional compromise and guide intervention strategies aimed at improving survival and functional status.

Objectives:
To determine the prevalence of malnutrition in MHD patients using Subjective Global Assessment (SGA) and Malnutrition–Inflammation Score (MIS), and to evaluate functional strength, body composition parameters, dietary intake, and biochemical markers.

Methods:
A cross-sectional study was conducted among 20 MHD patients. Nutritional status was assessed using SGA and MIS. Handgrip strength (HGS) was evaluated using Asian Working Group for Sarcopenia (AWGS 2019) criteria. Body composition, including Skeletal Muscle Mass (SMM) and Phase Angle (PhA), was measured using bioelectrical impedance analysis. Dietary intake was assessed using 24-hour recall. Biochemical parameters included serum albumin, hemoglobin, and C-reactive protein (CRP). Spearman's rank correlation was used to assess the association between SGA and MIS.

Results:
Malnutrition prevalence was 75% by SGA (55% moderate; 20% severe) and 90% by MIS (70% moderate; 20% severe). A strong positive correlation was observed between SGA and MIS ($\rho = 0.88$, $p < 0.001$). Low HGS was present in 95% of patients, while only 15% had reduced SMM. Phase Angle <5° was observed in 65%. Inadequate protein intake (<70 g/day) was noted in 90%, and 85% had hypoalbuminemia. Elevated CRP (>3 mg/L) was present in all patients.

Conclusions:
Malnutrition is highly prevalent among MHD patients, with significant concordance between SGA and MIS. Functional impairment was disproportionately higher than structural muscle loss, highlighting early muscle quality decline. Inadequate protein intake, hypoalbuminemia, and systemic inflammation were common and may contribute to increased morbidity and mortality risk. Early comprehensive nutritional assessment incorporating functional and inflammatory markers is essential in haemodialysis care.

ABS005

Titile: Dietary Diversity and Nutritional Status Among Patients Undergoing Maintenance Haemodialysis: A Cross-Sectional Study

Presenter Name: Dr Kalluri Sowmya
Coauthor Name: Dr Akhila Reddy, Dr Charan, Dr Krishnan Srinivasan, Mrs Harita Shyam

Chronic kidney disease (CKD) patients undergoing maintenance haemodialysis are at increased risk of malnutrition due to dietary restrictions, metabolic alterations, chronic inflammation, and associated comorbidities. This cross-sectional study aimed to assess dietary diversityscore, clinical profile,and nutritional status among100 patients receiving maintenance haemodialysis. Data were collected using a structured questionnaire, anthropometric measurements, biochemical parameters, and body composition analysis, including Body Mass Index (BMI) and skeletal muscle assessment.

The majority of participants (50%) were above 60 years of age, and62% were male and 38% of them were female. Based on BMI classification, 62% of patients had normal BMI, 13% were underweight, 21% overweight, and 4% obese. Diabetes was present in56% of patients, while 26% had hypertension. Anaemia was highlyprevalent, with 41% having mild anaemia, 40% moderate anaemia, and only 12% maintaining normal haemoglobin levels. Moderate dietary diversity was observed in 55% of patients. A statistically significant association was found between dialysis duration and DDS ($\chi^2 = 32.78$, $df = 4$, $p < 0.001$).

However, 21% exhibited low skeletal muscle mass, including individuals within the normal BMI category, indicating possibleprotein-energy wasting (PEW).The average proteinintake was approximately 44–45 g/day (0.7–0.75 g/kg/day), which is substantially lower than the recommended 1.2 g/kg/day, suggesting a significant protein deficit. Inadequate intakemay be attributed to nausea, poor appetite, taste alterations, religious dietary restrictions, and limited consumption of high-biological-value protein sources. The mean Dietary Diversity Score (DDS) was 4.67 ± 1.18.

In conclusion, prolonged duration of dialysis significantly reduces dietary diversity, and reliance on BMI alone may underestimate underlying malnutrition in patients. The present study highlights the critical importance of comprehensive nutritional evaluation, including dietarydiversity assessment, protein intake monitoring, and body composition analysis, to prevent malnutrition and muscle depletion and to improve overallclinical outcomes in this population.

ABS006

Titile: Pancreatic Exocrine Insufficiency Induced Enteric Hyperoxalosis is a Modifiable Risk Factor of Rapid Progression of Chronic Kidney Disease.

Presenter Name: Dr Ilangovan Veerappan
Coauthor Name: Dr Bhanu Rekha Dasari, Dr Balan Louis Gaspar

Background: Pancreatic Exocrine Insufficiency (PEI) is prevalent in CKD especially those with Diabetes Mellitus and Obesity. The prevalence of PEI increases with age and duration of diabetes and contributes to oxalate mediated rapid CKD progression.

Objectives: To assess correlation between stool elastase and urine oxalate in patients with oxalate induced AKI and those with rapid progression of CKD (> 20 ml/min decline in GFR/year). Methods: The study duration was 3 months from Nov 25 – Jan 26. All patients with unexplained rapid decline in GFR in diabetic CKD, AKI with oxalate nephropathy, clinical steatorrhea were checked for stool elastase and urine oxalate.

Results: Over 3 months, 11 had confirmed PEI with stool elastase < 200 µg/g (mean 51.5 ± 48.6 µg/g). The PEI cohort was predominantly male (91%), diabetic (81.8%, mean DM duration 18.6 ± 9.3 years), with mean age 50.9 ± 14.2 years. All PEI patients had detectable urine oxalate (median 33.5 ± 58.7 mg/day), with 100% meeting clinical relevance threshold of > 16-20 mg/day, 54.5% meeting hyperoxaluria criteria (> 40 mg/day). Serum creatinine rose 4.33-fold from baseline (1.35 ± 0.41) to diagnosis (5.21 ± 2.01 mg/dL) in median time 24.5 ± 12.7 months. Fifty percent required dialysis, 77.8% had hypocalcemia (7.9 ±1 mg/dl. CKD presentations included rapid progression to ESRD (72.7%) and AKI on CKD (27.3%). Renal biopsy (performed in 40%) confirmed oxalate crystal deposition. No significant linear correlation was found between stool elastase and urine oxalate (Spearman ρ = −0.127, p = 0.709), likely reflecting the non-linear, threshold-based mechanism of enteric hyperoxaluria and small sample size. Notably, 3/4 patient showed creatinine improvement following pancreatic enzyme replacement along with oral calcium, magnesium, phosphorus supplementation.

Conclusion: PEI is prevalent in diabetic CKD patients with rapid progression and represents a modifiable risk factor for oxalate-mediated kidney injury. Stool elastase testing should be incorporated into the evaluation of unexplained rapid CKD decline in diabetic patients. Pancreatic enzyme replacement therapy (PERT) offers a targeted therapeutic intervention to reduce enteric hyperoxaluria and potentially slow CKD progression. Larger prospective studies with paired pre/post-PERT urine oxalate and GFR measurements are needed to confirm these findings.

ABS007

Titile: Hidden Muscle Loss Despite Normal BMI: Detecting Sarcopenia in Pediatric CAPD

Presenter Name: Dr Harika Padamata
Coauthor Name: Dr Manisha Sahay, Kiranmai Ismal

Background: Children on continuous ambulatory peritoneal dialysis (CAPD) are vulnerable to growth impairment and altered body composition. Body mass index (BMI), though routinely used to assess nutritional status, may underestimate muscle depletion due to fluid shifts and increased adiposity from dialysate glucose exposure. Lean tissue loss has important implications for growth, inflammation, and long-term outcomes. Simple bedside tools to detect muscle depletion in pediatric CAPD remain underutilized.

Objectives: To determine the prevalence of hidden sarcopenia in children (≤18 years) on CAPD and evaluate the MUAC-to-BMI ratio as a practical bedside screening tool. We also examined its association with serum albumin, growth indices, and residual urine output.
Methods: In this single-center cross-sectional pilot study, 20 children aged ≤18 years on CAPD for ≥3 months were assessed. Anthropometry included weight, height, BMI, and mid-upper arm circumference (MUAC). BMI-for-age Z scores were calculated using standard reference charts. The MUAC-to-BMI ratio (MUAC [cm]/BMI [kg/m^2]) was derived. Hidden sarcopenia was defined as normal BMI (BAZ ≥ −1) with MUAC below the cohort median. Serum albumin and residual urine output (mL/kg/day) were recorded. Associations were analyzed using Spearman correlation and appropriate group comparisons.

Results: The mean age was 10.1 ± 4.2 years; 6 (30%) were males. Although 75% had BMI within the normal range, 40% demonstrated reduced MUAC consistent with hidden sarcopenia. Children with low MUAC-to-BMI ratio had significantly lower serum albumin (3.2 ± 0.4 vs 3.8 ± 0.3 g/dL, p=0.01) and lower residual urine output (4.1 ± 1.8 vs 8.6 ± 2.5 mL/kg/day, p=0.02). The MUAC-to-BMI ratio positively correlated with albumin (r=0.52, p=0.01) and height-for-age Z score (r=0.46, p=0.03), whereas BMI alone showed no significant association with nutritional or growth parameters.

Conclusions: A substantial proportion of pediatric CAPD patients exhibit muscle depletion despite normal BMI. The MUAC-to-BMI ratio is a simple, low-cost bedside screening tool that better reflects nutritional risk than BMI alone. Incorporating arm-based anthropometry into routine assessment may enable earlier detection of muscle loss and targeted nutritional intervention. Larger prospective studies are warranted to validate its prognostic value.

ABS008

Titile: Evaluating Nutritional Scores Against Muscle Mass And Albumin In Hemodialysis: A Cross-sectional Study

Presenter Name: Dr Chaitra C
Coauthor Name: Dr Balaji Krushnan, Dr Rashmi Shivram, Dr Balasubramaniyam R

Background: Patients with chronic kidney disease (CKD) on maintenance haemodialysis are at high risk of malnutrition and muscle mass loss, which adversely affect morbidity and quality of life[1]. Conventional markers such as BMI and serum albumin may not adequately reflect nutritional status[2]. Nutritional screening tools—Malnutrition Universal Screening Tool (MUST), Mini Nutritional Assessment (MNA), and Nutritional Risk Index (NRI)—along with bioimpedance-based body composition analysis may provide more accurate insights[3].

Objectives: To evaluate correlations between muscle mass and serum albumin with nutritional screening tools (MUST, MNA, NRI) in haemodialysis patients, and to identify the most reliable score for integrated nutritional assessment.

Methods: A prospective cross-sectional study was conducted in 56 CKD patients on haemodialysis for >6 months. Muscle mass was measured using a bioimpedance device (InBioz). Nutritional assessment was performed using MUST, MNA, and NRI. Serum albumin was measured as a biochemical correlate. Associations between muscle mass, albumin, and nutritional scores were analysed using chi-square and Pearson correlation statistics, with significance set at .

Results: Of 56 patients (mean age 58 ± 16 years; 64% male), 45% had serum albumin <3.5 g/dL. Albumin correlated strongly with NRI () and moderately with MNA (), but not with MUST. Muscle mass correlated positively with MNA () and negatively with MUST (), while NRI showed no significant association. Other body composition parameters demonstrated weak, non-significant correlations.

Conclusions: MNA demonstrated consistent correlations with both albumin and muscle mass, underscoring its utility as a comprehensive nutritional assessment tool in haemodialysis patients. NRI was strongly albumin-driven but insensitive to muscle mass, while MUST reflected muscle risk but not albumin. Overall, MNA appears superior for integrated evaluation of nutritional status in CKD.

ABS009

Titile: The Effect of Dietary Habit of Phosphorus Intake in Chronic Kidney Disease Patients on Hemodialysis

Presenter Name: Dr Vajed Mogal
Coauthor Name: Mrs Samrin Khan

Background: Phosphorus is an essential nutrient required for multiple physiological functions, recent researches found that high phosphorus intake could have detrimental effects on health. Hyperphosphatemia is one of the most important risk factors for morbidity and mortality for chronic kidney disease (CKD) patients. High phosphorus intake can cause vascular and renal calcification, renal tubular injury, and premature death in multiple animal models. Limited data exist linking high phosphorus intake directly to adverse clinical outcomes. Small studies in human suggest that high phosphorus intake may result in positive phosphorus balance and correlate with renal calcification and albuminuria.Further prospective studies are needed to determine whether phosphorus intake is a modifiable risk factor for kidney disease.

Aims & Objectives:
To study the effect of dietary habits on dietary phosphorous intake in chronic kidney disease patients on hemodialysis.
To study the prevalence of hyperphosphatemia in patients of CKD on maintenance hemodialysis. To see the impact of dietary control of phosphorus in CKD patients.

Methods:
- This was a cross sectional comparative study. It was carryingin tertiary care centre in western region Maharashtra state.
- A total of 80 patient's diagnosed case of CKD on maintenance of hemodialysis were selected for the study, patients on maintenance hemodialysis program twice in a week with 4 hour duration.
- Patients were divided into two groupsas 1st group is on given diet to control phosphorus level in body and 2nd group is on phosphate binder to control phosphorus level.
- Baseline serum phosphorus was measured 1 month before hemodialysis and after 1 month prior hemodialysis in both group patients.

Conclusion:
Renal diet education can reduce phosphorus level and guided diet education provides an additional benefit on controlling hyperphosphatemia in haemodiaylsis patient. The purpose of the study is to see the effect of dietary habits on dietary phosphorus intake in CKD Patients on haemodialysis. Dietary counseling encourage the consumption of foods with least amount of inorganic or absorbable serum phosphorus, low phosphorus- to –protein ratio an adequate protein content .Our phosphorus additives list helps to reduce indirectly intake of phosphorus. Younger group of patient have followed renal diet for hyperphosphatemia effectively.

ABS010

Titile: Muscle Matters: Bioelectrical Impedance- Based Evaluation of Protein – Energy Wasting in Maintenance Hemodialysis Patients.

Presenter Name: Dr Ilakyaa Rajakumar
Coauthor Name: Dr Jayaprakash

Background :
Protein–Energy Wasting (PEW) is a frequent complication in patients with end-stage kidney disease undergoing maintenance hemodialysis and is associated with increased morbidity, hospitalization and mortality (1,2). Conventional indicators such as body weight and body mass index may fail to detect early nutritional depletion in dialysis patients (3). Bioelectrical impedance–derived body composition analysis enables objective assessment of skeletal muscle mass, cellular integrity and fluid distribution. Diagnostic criteria for PEW proposed by the International Society of Renal Nutrition and Metabolism are widely used in clinical research (1,2).

Objectives :
To determine the prevalence of Protein–Energy Wasting in patients undergoing twice or thrice weekly maintenance hemodialysis using bioelectrical impedance–derived body composition analysis. Additionally, the study aimed to evaluate the relationship between PEW and biochemical parameters such as serum albumin and hemoglobin, along with body composition indicators including skeletal muscle mass, skeletal muscle index, phase angle and extracellular water–total body water ratio.

Methods :
A cross-sectional observational study was conducted among 50 patients with end-stage kidney disease receiving maintenance hemodialysis (2–3 sessions per week) at a tertiary care center. Demographic characteristics, dialysis vintage, comorbidities and interdialytic weight gain were recorded. Laboratory parameters including hemoglobin and serum albumin were obtained. Body composition parameters including skeletal muscle mass (SMM), skeletal muscle index (SMI), body cell mass, phase angle, extracellular water/total body water ratio (ECW/TBW) and fat mass were measured using bioelectrical impedance analysis (5). PEW was defined using modified ISRNM criteria including hypoalbuminemia (<3.8 g/dL), reduced skeletal muscle index and low phase angle (1,2)

Results :
The study population had a mean age of 51 ± 14 years with male predominance (≈60%). Hypertension and diabetes mellitus were the most common comorbidities. Mean dialysis vintage was 4.2 ± 3.5 years. Mean serum albumin was 3.8 ± 0.5 g/dL and mean hemoglobin was 9.7 ± 1.7 g/dL. Mean skeletal muscle mass was 23.7 ± 5.3 kg and skeletal muscle index was 6.5 ± 1.2 kg/m^2. Mean phase angle was 3.9 ± 0.9°, and ECW/TBW ratio was 0.40 ± 0.02. Overall, Protein–Energy Wasting was identified in 46% of patients, who demonstrated lower skeletal muscle index and phase angle with relatively higher ECW/TBW ratios.

Conclusion :
Protein–Energy Wasting was highly prevalent among patients undergoing maintenance hemodialysis in our cohort. Body composition analysis provided objective insights into muscle depletion and altered fluid distribution beyond traditional nutritional markers such as body weight and serum albumin. Routine incorporation of body composition assessment may facilitate early detection of nutritional compromise and enable timely nutritional and metabolic interventions to improve clinical outcomes in the hemodialysis population.

ABS012

Titile: Assessment Of Inspiratory And Expiratory Muscle Strength In End Stage Renal Disease Patients On Maintenance Hemodialysis

Presenter Name: Dr Srija Muvva

Background: End-stage renal disease (ESRD) is associated with multiple systemic complications that contribute to skeletal muscle dysfunction, including uremic myopathy, chronic inflammation, metabolic abnormalities, and malnutrition. These factors may impair respiratory muscles such as the diaphragm and intercostal muscles, leading to reduced ventilatory capacity and dyspnea in patients receiving long-term hemodialysis. Respiratory muscle strength can be assessed noninvasively using maximum inspiratory pressure (MIP) and maximum expiratory pressure (MEP), which serve as indicators of inspiratory and expiratory muscle performance. However, respiratory muscle dysfunction remains underrecognized in patients with ESRD undergoing hemodialysis, and its relationship with breathing dysfunction and dyspnea requires further evaluation.

Objectives: To assess inspiratory and expiratory respiratory muscle strength in patients with ESRD undergoing maintenance hemodialysis and to evaluate the association between respiratory muscle strength, dyspnea severity, and breathing dysfunction.

Methods: This prospective observational study was conducted at the dialysis unit of Nizam's Institute of Medical Sciences, Hyderabad. A total of 92 patients aged 18–60 years with stage 5 chronic kidney disease undergoing maintenance hemodialysis for more than six months (three sessions per week) were recruited following ethical approval and informed consent. Respiratory muscle strength was measured using an analogue manometer to determine maximum inspiratory pressure (MIP) and maximum expiratory pressure (MEP) in accordance with American Thoracic Society guidelines. Dyspnea severity was evaluated using the Modified Medical Research Council (mMRC) scale, and breathing dysfunction was assessed using the Self-Evaluation of Breathing Questionnaire (SEBQ). Measurements were obtained after dialysis sessions. Pearson correlation and linear regression were used to assess relationships between respiratory muscle pressures, dyspnea scores, and breathing dysfunction. The Kruskal–Wallis test was used for categorical comparisons.

Results: Patients with ESRD receiving long-term hemodialysis demonstrated reduced inspiratory and expiratory muscle strength, reflected by decreased MIP and MEP values. Reduced respiratory muscle pressures were associated with higher dyspnea scores and increased breathing dysfunction as measured by SEBQ, indicating a relationship between respiratory muscle weakness and respiratory symptoms in this population.

Conclusion: Respiratory muscle weakness is common in patients with ESRD undergoing hemodialysis and is associated with increased dyspnea and breathing dysfunction. Routine evaluation of respiratory muscle strength using MIP and MEP may help identify patients at risk for respiratory impairment and guide targeted rehabilitation interventions aimed at improving respiratory function and quality of life.

ABS013

Titile: Analysis of the association between Healthy Eating Index (HEI)-2020 and diabetic kidney disease in type 2 diabetes patients

Presenter Name: Dr Kakaraparthy Sree Harsha Vardhan
Coauthor Name: Dr Manjusha Yadla, Dr Sreekanth Burri, Dr Srinivas P

Aim-The association between Healthy Eating Index (HEI)-2020 and diabetic kidney disease in type 2 diabetes patients

Objectives
1. To assess baseline demographic and nutritional characteristics of participants.
2. To evaluate Healthy Eating Index (HEI) scores among the study population.
3. To analyze associations between HEI score and demographic variables.

Results
A total of 150 participants were included in the study. The mean age of participants was approximately 58.6 ± 12.8 years. Among the participants, 50.7% were male and 49.3% were female. Most participants were categorized as overweight or obese according to BMI classification. Hypertension was observed in a significant proportion of the population. Lifestyle factors such as smoking status, alcohol consumption, and physical activity were also analyzed.

The mean Healthy Eating Index score among participants was approximately 60–62, indicating moderate adherence to healthy dietary guidelines. The majority of participants fell into the moderate HEI category, while smaller proportions had high or low HEI scores.

Baseline characteristics including waist circumference, HDL cholesterol, total cholesterol, blood urea nitrogen, and uric acid levels were also analyzed. Statistically significant differences were observed in several metabolic parameters between groups.

Conclusion
The study demonstrates the usefulness of the Healthy Eating Index as a tool to evaluate diet quality. Participants with higher HEI scores showed better overall nutritional profiles. Promoting adherence to healthy dietary patterns may contribute to improved long-term health outcomes.

ABS014

Titile: Protein Energy Wasting in Maintenance Hemodialysis Patients at a Tertiary Care Center: Anthropometric Assessment Using ISRNM Criteria

Presenter Name: Dr Vamshi Krishna
Coauthor Name: Dr Manjusha Yadla, Dr Sreekanth Burri, Dr Srinivas P

Aim

To evaluate the prevalence of Protein Energy Wasting among maintenance hemodialysis patients at a tertiary care center using ISRNM criteria and anthropometric indicators.

Objectives

- To assess anthropometric measurements including MAC, TSF, MAMC and MAM.
- To determine prevalence of PEW using ISRNM diagnostic criteria.
- To evaluate diagnostic performance of anthropometric indicators using ROC curve analysis.

Methods

Study Design: Cross-sectional observational study conducted at a tertiary care center Study Population: 118 patients receiving maintenance hemodialysis.
Inclusion Criteria: Age ≥18 years and dialysis duration ≥3 months.
Exclusion Criteria: Acute illness, infection or severe edema.
Anthropometry: MAC, TSF, MAMC and MAM were measured using standardized techniques.
Statistical Analysis: Continuous variables expressed as mean ± SD. Comparisons between groups performed using independent t-test. ROC analysis evaluated diagnostic accuracy. Logistic regression identified predictors of PEW.

Conclusion

In conclusion, this study assessed anthropometric indicators for diagnosing Protein Energy Wasting (PEW) among maintenance hemodialysis patients in Telangana using ISRNM criteria. Among the evaluated parameters, mid-arm muscle circumference (MAMC) demonstrated the highest diagnostic accuracy (AUC = 0.88) for identifying PEW. Simple anthropometric measures such as MAC, TSF, MAMC and MAM are useful tools for routine nutritional assessment in hemodialysis patients, particularly in resource-limited settings.The MAMC values observed in this cohort were lower than the Frisancho reference standards but comparable to other Asian dialysis populations, highlighting the need for population-specific anthropometric references. Further studies including larger cohorts and healthy reference populations are needed to establish regional standards for nutritional assessment in dialysis patients.

ABS015

Titile: Correlation of Visceral Adiposity Index, Visceral and Subcutaneous Adipose Tissue Thickness, Mid-Arm Circumference, Triceps Skinfold Thickness and Carotid Intima-Media Thickness with Cardio-Kidney-Metabolic Risk in Patients on Maintenance Hemodialysis

Presenter Name: Dr Anoop Mehta
Coauthor Name: Dr Manjusha Yadla, Dr Sreekanth Burri, Dr Srinivas P

Objectives
To evaluate the correlation of Visceral Adiposity Index (VAI), visceral and subcutaneous adipose tissue thickness (VATT, SATT), mid-arm circumference (MAC), triceps skinfold thickness (TSF), mid-arm muscle circumference (MAMC), and carotid intima-media thickness (CIMT) with CKM Syndrome stage in maintenance hemodialysis patients, and to identify adiposity thresholds predictive of advanced CKM stage.

Methods
This cross-sectional study enrolled 39 CKD Stage 5D patients from a single tertiary nephrology unit. Post-dialysis anthropometry (BMI, waist circumference, MAC, TSF, MAMC) and pre-dialysis blood pressure were recorded. Fasting blood samples were collected for hemoglobin, glucose, lipid profile, renal biochemistry, and serum albumin. Abdominal ultrasonography (VATT and SATT, mean of three epigastric readings), echocardiography, and carotid intima-media thickness measurement were performed. VAI was calculated using the Amato et al. gender-specific formula (TG and HDL in mg/dL). CKM Syndrome stage was assigned per the AHA 2023 Presidential Advisory. Spearman correlation and ROC analysis were used for statistical evaluation.

Formulae: VAI formulae (TG and HDL in mg/dL): Male VAI = [WC / (39.68 + 1.88 × BMI)] × (TG / 91.23) × (50.66 / HDL); Female VAI = [WC / (36.58 + 1.89 × BMI)] × (TG / 71.74) × (58.78 / HDL). MAMC (cm) = MAC (cm) − 0.314 × TSF (mm).

Results
Thirty-nine patients were enrolled (mean age 52.4 ± 11.8 years; 64% male; dialysis vintage 18.2 ± 12.6 months). Mean VAI was 3.84 ± 1.62, VATT 32.4 ± 9.1 mm, SATT 18.2 ± 6.4 mm, and CIMT 0.92 ± 0.18 mm. CKM stage distribution: Stage 2 (30.8%), Stage 3 (41.0%), Stage 4a (20.5%), Stage 4b (7.7%). VAI and VATT correlated significantly with CKM stage ($p < 0.01$). CIMT increased progressively across CKM stages (0.76 to 1.18 mm; $p < 0.01$). Triglycerides correlated positively (rho = 0.41, $p = 0.01$) and HDL inversely (rho = −0.38, $p = 0.02$) with CKM stage. VATT ≥28 mm predicted CKM Stage ≥3 with AUC 0.76 (sensitivity 80%, specificity 69%). SATT did not independently predict CKM stage ($p = 0.31$).

Conclusions
Visceral adiposity — quantified by VAI and VATT — and CIMT correlate significantly with CKM Syndrome stage in CKD 5D patients, whereas SATT does not independently predict CKM stage. A VATT cutoff of ≥28 mm (AUC 0.76) offers a practical bedside screening tool for identifying high-risk dialysis patients. Anthropometric markers (MAC, TSF) showed moderate CKM association. These findings support routine visceral adiposity and vascular assessment for CKM risk stratification in dialysis populations.

ABS016

Titile: Assessment of 'My Food Plate' Consumption in CKD Patients on Maintenance Hemodialysis Using 24-Hour Dietary Recall

Presenter Name: Dr Afsha farooqui
Coauthor Name: Dr Manjusha Yadla, Dr Sreekanth Burri, Dr Srinivas P

A cross-sectional observational study was conducted among 100 CKD-5D patients undergoing maintenance hemodialysis to assess dietary intake using the My Food Plate model. Dietary intake was assessed using a 24-hour recall method and correlated with biochemical parameters. More than half of the patients demonstrated poor adherence to renal dietary recommendations.

Introduction
Chronic kidney disease stage 5 patients on dialysis require strict dietary management to prevent complications such as hyperkalemia, hyperphosphatemia and protein energy wasting. Visual dietary models such as My Food Plate can help patients understand appropriate food portions and meal composition.

Methodology
Study design: Cross-sectional observational study.
Study population: 100 CKD-5D patients undergoing maintenance hemodialysis.
Dietary assessment: 24-hour dietary recall method.
Statistical analysis: Descriptive statistics and Pearson correlation analysis.

Conclusion
The study help us understand that diet among dialysis patients is suboptimal.Significant discrepancies exist between recommended renal dietary intake and actual consumption in CKD-5D patients. Nutritional counseling and structured dietary tools such as My Food Plate can improve adherence.

ABS017

Titile: The Impact Of Intradialytic Aerobic Training On Functional Capacity And Biochemical Markers In Patients Undergoing Hemodialysis

Presenter Name: Dr Rishabh Jhala

Chronic kidney disease (CKD) is a progressive and irreversible condition that significantly impairs physical functioning and quality of life. Patients undergoing maintenance hemodialysis often experience reduced functional capacity, muscle weakness, fatigue, and biochemical abnormalities due to prolonged inactivity and metabolic disturbances. Intradialytic exercise has been proposed as a supportive intervention to improve physical performance and physiological outcomes in these patients. The present study aimed to evaluate the impact of intradialytic aerobic training on functional capacity and biochemical markers in patients undergoing hemodialysis.

This randomized controlled study was conducted at the dialysis unit of Nizam's Institute of Medical Sciences (NIMS), Hyderabad. A total of 68 patients with CKD stage 5 undergoing hemodialysis for more than three months were recruited and randomly allocated into two groups: an experimental group (n=34) and a control group (n=34). The experimental group received intradialytic aerobic training using a cycle pedal exerciser for 30 minutes, three times per week for eight weeks, along with breathing exercises. The control group performed breathing and maintenance exercises only. Functional capacity and dyspnea were assessed using the Six-Minute Walk Test (6MWT) and Modified Medical Research Council (mMRC) scale. Biochemical markers including serum urea, calcium, phosphate, glomerular filtration rate (GFR), and hemoglobin were measured before and after the intervention.

Results demonstrated a significant improvement in functional capacity in the experimental group compared to the control group, evidenced by increased walking distance and decreased Rate of Perceived Exertion (RPE) during the 6MWT ($p < 0.001$). Dyspnea scores showed mild clinical improvement, although the change was not statistically significant. Among biochemical markers, serum urea showed significant improvement, while serum calcium, phosphate, GFR, and hemoglobin did not demonstrate statistically significant changes between groups.

In conclusion, intradialytic aerobic training using cycle ergometry significantly improves functional capacity and reduces perceived exertion in patients undergoing hemodialysis. Although its effect on biochemical parameters and dyspnea was limited, incorporating structured aerobic exercise during dialysis sessions may be a beneficial adjunct therapy to enhance physical performance and overall patient well-being.

ABS018

Titile: Prevalence and Determinants of Sarcopenia in Dialysis-Dependent Chronic Kidney Disease Patients: A Cross-Sectional Study at Gandhi Hospital

Presenter Name: Dr Yashaswini Saraswathi

Objectives

1. To determine the prevalence of sarcopenia risk among maintenance hemodialysis patients across the multi-centre network using the SARC-CalF tool
2. To characterise the sociodemographic and clinical profile of at-risk patients (by age, sex, and centre)
3. To provide an evidence base for integrating routine sarcopenia screening into standard dialysis care in this setting

Methodology

Study Design and Setting

This was a hospital-based, multi-centre, cross-sectional observational study conducted across 25 hemodialysis centres constituting the hub-and-spoke dialysis network under the Department of Nephrology, Gandhi Medical College & Hospital, Hyderabad, Telangana.

Study Population- 1330 patients

Observations

SARC-CalF score is more than 11 in 661 patients (49.4%) in patients who are on maintenance hemodialysis

The prevalence of sarcopenia is highest in >60 years patients (67.6%) followed by 51.6% in individuals <40 years, 44.7% in those aged 40–50 years, 53.6% in the 51–60 years group, while the highest prevalence was observed in individuals older than 60 years, a relatively high prevalence was also seen among those younger than 40 years.

Conclusion

Sarcopenia risk, as assessed by the SARC-CalF tool, is highly prevalent **(49.7%)** among maintenance hemodialysis patients across Telangana's dialysis network.

The SARC-CalF tool is simple, non-invasive, rapid, and cost-effective — making it highly suitable for integration into routine monthly dialysis assessments across hub and spoke centres

ABS019

Titile: Prevalence of Sarcopenia in Patients with Chronic Kidney Disease: A Cross-Sectional Study from a Tertiary Care Center in Telangana

Presenter Name: Dr Rohit Sharma
Coauthor Name: Dr Swarnalatha Guditi, Dr Vijay Chander Bukka

Background
Sarcopenia is the progressive loss of skeletal muscle mass and strength. It is increasingly recognized as an important complication in patients with Chronic Kidney Disease (CKD). It is associated with reduced physical performance, increased hospitalization, and poorer quality of life. Despite its clinical significance, data on the burden of sarcopenia among CKD patients in India remain limited, particularly in tertiary care settings.

Objectives
This study aimed to determine the prevalence of sarcopenia among patients with chronic kidney disease attending a tertiary care center. Additionally, the study sought to evaluate the relationship between sarcopenia and selected demographic and clinical variables, including age, stage of CKD, and nutritional status, in order to better understand its burden in this patient population.

Methods
A cross-sectional observational study was conducted at Nizam's Institute of Medical Sciences, Telangana. Fifty adult patients diagnosed with chronic kidney disease were enrolled consecutively after obtaining informed consent. Demographic characteristics, clinical history, and relevant laboratory parameters were recorded. Sarcopenia was assessed using established diagnostic criteria incorporating measurements of muscle mass, muscle strength, and physical performance. Muscle mass was estimated using calf circumference, while handgrip strength was used to assess muscle strength. Functional performance was evaluated using gait speed.

Results
Among the 50 patients with chronic kidney disease included in the study, sarcopenia was identified in a substantial proportion of participants. The prevalence was higher among older individuals and those with advanced stages of CKD. Patients with sarcopenia demonstrated significantly lower muscle strength and reduced functional performance compared with those without sarcopenia. Additionally, trends suggested an association between sarcopenia and indicators of poorer nutritional status. These findings highlight that muscle wasting is a common but underrecognized complication in patients with CKD receiving care at a tertiary referral center.

Conclusions
Sarcopenia is a frequent comorbidity among patients with chronic kidney disease and may contribute to functional impairment and adverse clinical outcomes. Routine screening for sarcopenia using simple clinical and functional assessments may facilitate early identification and intervention. Larger, multicenter studies are warranted to better define the determinants of sarcopenia and develop targeted strategies for prevention and management in CKD populations.

ABS020

Titile: Menstrual Distress Questionnaire (MEDI-Q)

Presenter Name: Dr Gayatri

Instructions - Please carefully review the list of provided symptoms. Please answer question A, for each symptom that you have experienced during your periods in the last 12 months. If you did not experience a particular symptom, please answer "No" and skip to the next symptom on the list. However, if you did experience a symptom, please also answer questions B, C, and D regarding the impact of that symptom on your functioning and quality of life.

A. On average, in the past year on the days you had your period, did you…				If you had this symptom, to what degree it interfered with your quality of life, your recreational or work activities, or your social relationships…													
				B. …on days when you were menstruating?				C. …during the premenstrual phase (in the 7 days before the start of menstruation)?					D. …during the other days (outside the menstrual/premenstrual phase)?				
	Yes, more than half of the times I've had my period	Yes, less than half the times I've had my period	No *(Skip to next item)*	*Not at all*	*A little*	*Moderately*	*Very much*	*Not at all*	*A little*	*Moderately*	*Very much*	Never had this symptom during the premenstrual phase	*Not at all*	*A little*	*Moderately*	*Very much*	Never had this symptom during the other days
1. …have pain in your lower abdomen?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2. …have pain when urinating?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3. …have pain during bowel movement?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4. …have muscle/bone/joint pain?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5. …feel bloated or did you experience breast tenderness?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6. …experience nausea?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7. …have headaches?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8. …have digestive problems (heartburn, uncomfortable sense of fullness after meals …)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9. …have diarrhea?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
10. …have constipation?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
11. …have discomfort due to vaginal bleeding (fear of stains or odors, discomfort from the tampon, difficulty or embarrassment during sexual activities…)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
12. …have the feeling of being dirty?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
13. …feel excessively sad (easily crying, little drive to do things, loss of interest in usual activities …)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

A. On average, in the past year on the days you had your period, did you…				If you had this symptom, to what degree it interfered with your quality of life, your recreational or work activities, or your social relationships…													
				B. …on days when you were menstruating?				C. …during the premenstrual phase (in the 7 days before the start of menstruation)?					D. …during the other days (outside the menstrual/premenstrual phase)?				
	Yes, more than half of the times I've had my period	Yes, less than half the times I've had my period	No *(Skip to next item)*	*Not at all*	*A little*	*Moderately*	*Very much*	*Not at all*	*A little*	*Moderately*	*Very much*	Never had this symptom during the premenstrual phase	*Not at all*	*A little*	*Moderately*	*Very much*	Never had this symptom during the other days
14. …feel emotionally unstable (fluctuating mood, rapid transition from one mood to another even in response to minimal stimuli…)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
15. …feel irritable or short-tempered (feeling nervous, not being able to bear unexpected events, people or situations, feeling angry easily…)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
16. …feel impulsive (driven to act without thinking or planning…)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
17. …feel anxious (agitated, tense, excessively insecure or indecisive, fearful that something bad could happen at any moment …)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
18. …excessively hungry (desire to overeat, loss of control over food…)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
19. …feel a lack of hunger?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
20. …have insomnia (inability to fall or stay asleep)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
21. …experience excessive sleepiness (sleeping during the day, not being able to get up in the morning …)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
22. …feel excessively tired (sluggish, with little energy…)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
23. …have low sexual desire (reduced drive to have sexual activities, lack of sexual fantasies …)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
24. …have difficulty concentrating?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

25. Did you have sexual interactions that included vaginal penetration in the last year?	☐ Yes	☐ No *(end the questionnaire) (0)*			
25A. On average, in the last year on the days you had your period, did you have pain during sexual interactions that included vaginal penetration?	☐ Yes, more than half of the times I've had my period I had pain during vaginal penetration (2) ☐ Yes, less than half of the times I've had my period I had pain during vaginal penetration (1) ☐ No, I never had pain during vaginal penetration *(end the questionnaire) (0)* ☐ I never had vaginal penetration on the days I had menstrual flow because I would have had too much pain (2) ☐ I never had vaginal penetration on days when I had menstrual flow for reasons other than pain *(end the questionnaire) (0)*				
25B. On days when you were menstruating, to what degree this pain (or avoiding vaginal penetration) interfered with your quality of life, your recreational or work activities and your social relationships?	☐ Not at all	☐ A little	☐ Moderately	☐ Very much	
25C. During the premenstrual phase (in the 7 days before the start of menstruation), if you had this symptom, to what degree it interfered with your quality of life, your recreational or work activities, or your social relationships?	☐ Not at all	☐ A little	☐ Moderately	☐ Very much	☐ Never had this symptom during the premenstrual phase
25D. During the other days (outside the menstrual/premenstrual phase), if you had this symptom, to what degree it interfered with your quality of life, your recreational or work activities and your social relationships?	☐ Not at all	☐ A little	☐ Moderately	☐ Very much	☐ Never had this symptom during the other days

MEDI-Q - Scoring Instructions

STEP 1 – Sub-items computation

- For each item (1-25):

1.Assign a frequency score (A) based on the answer to Question A, as follows:

2 Yes, more than half of the times I've had my period	1 Yes, less than half the times I've had my period	0 No

For item 25, use the scores reported in parentheses.

For items with a frequency score equal to zero, it is possible to directly assign a final item score of zero since the remaining subitems B, C and D have not been filled out.

2. Assign a menstrual distress score (B) based on the answer to Question B, as follows:

0 Not at all	1 A little	2 Moderately	3 Very much

3.Assign a premenstrual distress score (C) based on the answer to Question C, as follows:

0 Not at all or Never had this symptom during the premenstrual phase	1 A little	2 Moderately	3 Very much

4.Assign an intermenstrual distress score (D) based on the answer to Question D, as follows:

0 Not at all or Never had this symptom during the other days	1 A little	2 Moderately	3 Very much

5. Compute the Δ Distress score, by subtracting D from B: Δ Distress score = B – D
   1.– D
   If the result is negative, use a score of 0 instead.

6. Compute the final item score, based on its frequency score (A) and its Δ Distress score as follows:

		Frequency score (sub-item A)		
		0	**1**	**2**
Δ Distress score (B – D)	**0**	0	0	0
	1	0	1	2
	2	0	2	4
	3	0	3	5

STEP 2 – General distress indices computation

1.MEDI-Q Total Score: add up all the item scores calculated in the previous step. This score ranges from a minimum of 0 to a maximum of 125.

2. MEDI-Q Menstrual Symptoms (MS): the total number of items for which the final score is greater than zero. It indicates the number of symptoms that cause greater distress during the menstrual period compared to the intermenstrual period. This score ranges from a minimum of 0 to a maximum of 25.

3. MEDI-Q Menstrual Symptoms Distress (MSD): it is calculated by dividing the MEDI-Q Total Score by MEDI-Q MS. It indicates the average distress of menstrual symptoms for which the subject reported an exacerbation compared to the intermenstrual phase. This score ranges from a minimum of 0 to a maximum of 5.

4.MEDI-Q Menstrual Specificity Index (MESI): it indicates the proportion of symptoms for which the subject reported an exacerbation during the menstrual phase compared to both the premenstrual and intermenstrual phases. It is calculated by counting the number of items for which the score for subitem B is greater than both C and D, and dividing this number by MEDI-Q MS. This score is between 0 and 1, where 0 indicates that all menstrual symptoms cause the same distress even in the premenstrual phase, while 1 indicates that all symptoms cause greater distress in the menstrual phase compared to the premenstrual phase.

Titile: Evaluation of a Wrist-Wearable Bioimpedance Device for Body Fluid and Muscle Mass Estimation in Hemodialysis Patients: A Pilot Clinical Study

Presenter Name: Ms Renu Raj

Introduction

Volume status estimation remains a key challenge in the management of chronic hemodialysis (HD) patients. Due to the intermittent schedule of thrice-weekly hemodialysis, patients often experience significant weight gain between sessions (interdialytic weight gain), followed by substantial fluid removal during dialysis (intradialytic weight loss). This pattern creates a recurring cycle of cardiovascular stress which contributes to all-cause mortality(1). Despite multiple available tools, there is no universally accepted method to objectively assess the volume status and exact amount of fluid to be removed during a dialysis session.

Traditional clinical markers such as blood pressure, clinical examination, body weight changes and chest radiograph suffer from poor sensitivity(2,3). Techniques such asLung ultrasound , cardiac echocardiography, venous excess ultrasound(VEXUS) has been reported to have good outcomes, but they are highly operator dependent and need extensive training which limits their widespread use(4,5). Conventional bio-impedance analysis (BIA) devices have been employed in this context and may overcome the inter-observer variability to some extent but suffer from limitations such as bulkiness, high cost, and non-continuous data collection. A novel wrist-wearable BIA device may overcome all these challenges by enabling real-time, non-invasive, and portable monitoring of body fluid and composition status.This study aimed to assess the correlation between the wearable BIA device and conventional BIA measurements for fluid and muscle mass estimation. Additionally, it sought to evaluate the feasibility, clinical utility, and prognostic value of wearable BIA technology in optimizing dry weight, assessing nutritional status, and predicting clinical outcomes such as hospital readmission and mortality.

Results

One hundred and forty patients were screened for inclusion into the study out of which 68 patients excluded (30 had active infection, 7 had recent MI, 6 patients had CLD, 20 patients denied consent while 5 patients had not completed minimum 6 months since HD initiation) . Seventy two patients were enrolled ; 46 (63.8%) were male , mean age was 44 (± 6.7) years, 22 (30 %) were on thrice weekly while 50 (70%)were on twice weekly dialysis schedule.

A strong positive correlation was observed between the study parameters and the reference standard. The correlation coefficient for Total Body Water (TBW) was R = 0.93024. Excess fluid showed a correlation of R = 0.89983, while muscle mass demonstrated a correlation of R = 0.89972.

Bland-Altman analysis demonstrated a random distribution of errors with slight skewness. For Total Body Water (TBW) and muscle mass, a tendency toward negative bias was noted near the -2SD limit, while excess fluid measurements showed a slight positive bias approaching the +2SD limit.

Agreement between devices improved with increasing degrees of fluid overload: moderate agreement was observed when excess fluid was <3 L, good agreement between 3–6 L, and very good agreement when excess fluid exceeded 6 L

Chi-square analysis revealed a significant association between low muscle mass adjusted for height and low serum albumin levels, with a sensitivity of 77.7%. The wearable device demonstrated potential superiority over serum albumin in detecting malnutrition. Among patients with severe volume overload and low muscle mass (n = 24), 18 had low serum albumin levels. This subgroup may represent individuals at higher risk for readmission and adverse outcomes.

Discussion

This single-center pilot study demonstrated that the wrist-wearable device correlates strongly with conventional BIA in estimating TBW, muscle mass, and excess fluid in HD patients. While excess fluid measurements tended to be slightly underestimated by the wearable, the device performed well in severely volume-overloaded individuals (>6% body weight). Differences between devices may be attributed to electrode size, frequency range, and skin impedance.

The wearable device offers added value by assessing nutritional status (e.g., muscle mass) and may outperform serum albumin in identifying malnourished individuals. Given the high prevalence of malnutrition in CKD and its impact on morbidity and mortality, this tool may assist clinicians and dietitians in tailored interventions.

Additionally, the device's portability and ease of use position it as a promising tool for remote and continuous monitoring, with potential utility in other high-risk populations (e.g., heart failure, ICU patients). This was a single-center study with a small sample size, reflecting its pilot nature. Findings require further validation in larger, multi-center cohorts to confirm generalizability and clinical applicability.

The wrist-wearable BIA device demonstrates strong agreement with conventional BIA for assessing body fluid and nutritional status in HD patients. Its compact design, affordability, and real-time monitoring capability make it suitable for widespread clinical and even patient-level use. Early identification of volume overload and malnutrition could improve outcomes and reduce hospital readmissions.

Titile: Energy and Protein Requirements in CKD

Dr Abhilash Chandra
Consultant Nephrologist,
Dr Ram Manohar Lohia Institute of Medical Sciences, Gomti Nagar, Lucknow

Chronic kidney disease (CKD) is an expanding global health challenge, with a particularly high burden in countries like India, where access to renal replacement therapy remains limited. In this context, nutritional management is not merely supportive but a key therapeutic strategy aimed at slowing disease progression and improving quality of life.

A central principle in CKD care is the balance between energy and protein intake. Adequate energy intake—typically around 30–35 kcal/kg/day—is essential to prevent catabolism. When calorie intake is insufficient, the body breaks down endogenous protein stores, leading to increased urea generation and worsening uremic symptoms. Thus, protein restriction without adequate caloric support can be counterproductive.

Protein intake in non-dialysis CKD is generally recommended at 0.6–0.8 g/kg/day. This modest restriction helps reduce nitrogenous waste production, mitigate glomerular hyperfiltration, and decrease proteinuria. In carefully selected and motivated patients, very low-protein diets (0.3–0.4 g/kg/day), supplemented with ketoanalogues, may offer additional benefits by reducing metabolic burden while preserving nutritional status. These ketoanalogues act as nitrogen-free precursors of amino acids, enabling protein synthesis without increasing urea load.

Beyond quantity, the source of protein is equally important. A plant-dominant diet is increasingly favored due to its lower generation of uremic toxins, reduced phosphorus bioavailability, and beneficial effects on gut microbiota. This approach aligns well with both renal and cardiovascular protection.

Nutritional prescriptions must be individualized and dynamic. While protein restriction is beneficial in earlier stages of CKD, requirements increase once dialysis is initiated to compensate for protein losses. Regular monitoring of weight, muscle mass, and biochemical parameters is essential to avoid protein-energy wasting and ensure safety.

In conclusion, appropriate energy and protein management represents a cornerstone of CKD care. When tailored to the patient and supported by careful monitoring, dietary intervention can effectively reduce metabolic complications and delay the progression to kidney failure, making it one of the most practical and impactful tools in nephrology practice.

FACULTY TALKS

Title: Managing Sodium and Fluid in CKD

Dr Prodip Kumar Doley,
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Prof and Head, Dept of Nephrology,
Gauhati Medical College, Assam

Chronic kidney disease (CKD) is frequently complicated by sodium and fluid retention due to impaired renal excretory capacity, contributing to hypertension, edema, and accelerated cardiovascular morbidity. Effective management of sodium and fluid balance is therefore a cornerstone of CKD care. Dietary sodium restriction, typically to less than 2 g/day of sodium (approximately 5 g of salt), helps reduce extracellular volume expansion, improves blood pressure control, and enhances the efficacy of renin–angiotensin–aldosterone system inhibitors. Individualized fluid management is equally important, particularly in advanced CKD where reduced urine output predisposes patients to volume overload. Clinical assessment of volume status through physical examination, weight trends, and adjunct tools such as bioimpedance or ultrasound can guide therapy. Loop diuretics remain the main pharmacologic strategy for managing volume overload, often requiring higher doses as kidney function declines. Patient education regarding dietary sodium, adherence to fluid recommendations, and regular monitoring is essential to prevent complications. A multidisciplinary approach integrating dietary modification, pharmacologic therapy, and careful monitoring can significantly improve blood pressure control, reduce hospitalization due to fluid overload, and slow cardiovascular complications in patients with CKD.

FACULTY TALKS

Title: Potassium and Phosphorus Restriction – Practical Tips

Ms Archana Sinha,
Senior Dietician, SGPGIMS, Lucknow

Introduction: Chronic kidney disease (CKD) is a global health problem. As kidney function declines, the body's ability to excrete certain minerals particularly phosphorus and potassium is significantly impaired. Elevated serum phosphorus contributes to mineral bone disorders and vascular calcification, while hyperkalemia can lead to life-threatening cardiac arrhythmias. Careful dietary management of these minerals is essential.

Dietary Potassium: Hyperkalaemia develops as GFR declines. Dietary modifications are now recommended only to treat hyperkalaemia and not as a preventative measure. Causes of hyperkalemia need to be identified and rectified after taking history from patients and reviewing the medicine prescription. The dietary potassium sources (fruits, vegetables, legumes, and nuts) are also abundant in fiber and other micronutrients. It is suggested to avoid routinely restricting them unless serum potassium level is high and non-dietary causes of hyperkalaemia have been addressed. Leaching of vegetables is only required for patients with hyperkalaemia. Patients should be advised to choose low potassium fruits and vegetables in case of hyperkalemia. Many patients are using rock salt, low sodium salt etc which are high in potassium

Bioavaibility of potassium: Patients should be educated regarding potassium content and bioavailability of common Indian foods. Plant-based potassium is less bioavailable than animal foods and food additives. Hidden potassium sources include ultra-processed foods containing potassium additives (almost 100% bioavailable), salt substitutes, and potassium preservatives.

Dietary Phosphorus intake: Dietary phosphorus restriction is challenging for kidney patients especially those on dialysis needing high protein diet.
Sources and bioavaibility of phosphorus: It is vital to consider amount of dietary phosphorus, its type (organic vs. inorganic), source (animal vs. plant), protein-to-phosphorus ratio, and bioavailability. Animal and plant proteins contain organic phosphorus. Animal proteins have higher phosphorus bioavailability (40%-60%) than plant proteins (20%-40%) due to presence of Phytates, which are not readily available. Low bioavailability of plant-based phosphorus helps in planning a diet limited in phosphorus with adequate protein for dialysis patients.
Beverages like colas, enhanced meats, frozen meals, processed or spreadable cheeses, instant foods, and refrigerated bakery products are rich in inorganic phosphorus > 90 % of which is bio-available. Food additives have high bioavailability (~100%). Patients should develop a habit to look for word "phos" on ingredient lists in to be aware of hidden phosphorus sources.

Egg white has lowest phosphorus to protein ratio <2 : 1. Soaking foods in water and boiling them can help reduce dietary phosphorus/gram of protein.

Conclusion: Effective control of phosphorus and potassium intake is fundamental in the nutritional management of CKD patients. Regular monitoring and individualized dietary advice with practical and patient-centered dietary guidance is crucial.

FACULTY TALKS

Title: Role of Trace Minerals in CKD

Dr Bhanu Prakash
ICMR-National Institute of Nutrition, Hyderabad

Diabetic kidney disease (DKD) is one of main reasons of chronic kidney disease (CKD). Altered mineral levels leading to adverse outcomes are widely reported in diabetes but limited in DKD, in the Indian scenario. To explore the status of minerals, a hospital-based case-control study was taken up with 54 healthy controls and 140 subjects with type 2 diabetes wherein 74 subjects with diabetes, and CKD formed the DKD group, and 66 subjects with diabetes, no CKD formed the diabetic no-chronic kidney disease (DNCKD) group. High-resolution inductively coupled plasma mass spectrometry was used to evaluate the blood levels of minerals. The median values of plasma Ca in the DKD group were significantly lower compared with the DNCKD and control groups. Furthermore, plasma Ca levels lowered with declining kidney function, as evidenced by the estimated glomerular filtration rate (eGFR) and albuminuria segregation. However, in the DKD group, eGFR correlated positively with the plasma levels of Ca ($r= 0.422$, $p=0.001$), Cr ($r= 0.351$, $p=0.008$), Mn ($r= 0.338$, $p=0.011$), Fe ($r= 0.403$, $p=0.002$), Cu ($r= 0.274$, $p=0.041$) and negatively with Se ($r= -0.486$, $p<0.001$). Plasma calcium levels are lower in the DKD group with a strong positive association with eGFR, indicating its role in predicting the onset and progression of kidney function decline.

FACULTY TALKS

Title: Role of Keto Analogues in Low-Protein Diet

Dr K S Nayak,
Director, Department of Nephrology and Renal Transplant Services,
Gleneagles Fortis Hospitals Hyderabad

Low-protein diets have been one of the cornerstones in the management of chronic kidney disease (CKD) for more than six decades. Apart from mitigating the accumulation of nitrogenous wastes and metabolic disturbances, both of which are characteristic of advanced stages of CKD, such diets also reduce the quantities of sulfates, phosphates, potassium, and sodium ingested, thus leading to a more favorable metabolic profile. Several meta-analyses have indicated the beneficial effect of low-protein diets in retarding the progression of CKD. When combining Ketoanalogues with low protein diets, the results are amplified, as the salutary reduction in hyperfiltration in nephrons is additive and helps prevent malnutrition.

FACULTY TALKS

Title: Nutrition Assessment Tools in CKD (SGA, BCM, Bioimpedance)

Dr Balaji Krushnan
Senior Consultant,
Kauvery Hospital, Chennai

Nutrition Assessment Tools in Chronic Kidney Disease

Protein Energy Wasting (PEW) is a frequent and under-recognized complication in chronic kidney disease (CKD), associated with adverse outcomes. Nutritional assessment is challenging due to fluid overload and metabolic factors.

The Subjective Global Assessment (SGA) remains a simple and reliable bedside tool with prognostic significance. Objective methods such as bioimpedance analysis and Body Composition Monitoring (BCM) provide additional insight into body composition and hydration status, especially in dialysis patients.

A combined approach enables early detection of malnutrition and sarcopenia, allowing timely intervention. Routine nutritional assessment should be an integral part of CKD management to improve patient outcomes

FACULTY TALKS

Title: Debate: Plant-Based vs Mixed Diet in CKD – Which is Better?

Dr Anurag Gupta - Plant-Based

Senior Consultant Nephrologist
Sir Ganga Ram Hospital, New Delhi

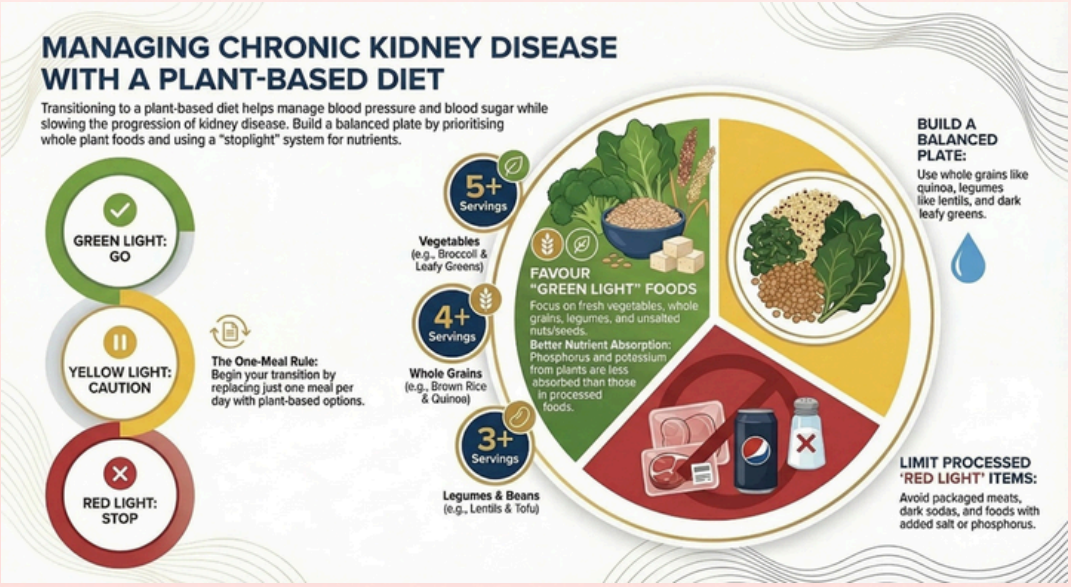
Plant-based diets (PBDs) are increasingly recognized as beneficial in managing chronic kidney disease (CKD), shifting focus from restrictive diets to nutrient-rich, whole plant foods. These diets emphasize grains, legumes, fruits, and vegetables while minimizing animal products, offering multiple advantages that address underlying disease mechanisms rather than just symptoms.

Plant proteins help preserve kidney structure by avoiding the hyperfiltration caused by animal protein, thereby reducing glomerular stress and slowing GFR decline. PBDs also help manage metabolic acidosis, as they are generally base-producing; consuming fruits and vegetables can be as effective as sodium bicarbonate therapy while also improving blood pressure and weight.

Mineral balance is better regulated with plant-based foods. Phosphorus from plants is less bioavailable due to phytate binding, and despite higher potassium content, fiber-rich foods enhance gastrointestinal excretion, reducing hyperkalemia risk.

Additionally, PBDs promote a healthier gut microbiome, reducing harmful uremic toxins linked to kidney damage and cardiovascular disease. Concerns about protein adequacy are unfounded, as plant diets meet requirements and provide all essential amino acids.

A practical CKD diet includes minimally processed plant foods while avoiding red meat, dairy, and processed items with phosphate additives.



FACULTY TALKS

Title: KDIGO Nutritional updates - translating evidence into everyday practice

Dr Deodutta Chafekar
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Sahyadri Super Speciality Hospital, Maharashtra

The Kidney Disease: Improving Global Outcomes (KDIGO) guidelines provide evidence-based recommendations that help standardize care for patients with chronic kidney disease (CKD). Recent KDIGO nutritional updates emphasize the importance of integrating current scientific evidence into practical, patient-centered dietary management. Translating these recommendations into everyday clinical practice requires collaboration between nephrologists, dietitians, and other healthcare professionals.

A key focus of the updated guidance is individualized nutrition therapy. Rather than applying a uniform diet for all CKD patients, KDIGO encourages tailoring dietary plans based on disease stage, biochemical parameters, comorbidities, and patient lifestyle. Recommendations include careful management of protein intake, sodium restriction to control blood pressure and fluid balance, and monitoring of potassium and phosphorus to prevent metabolic complications. Adequate energy intake and attention to micronutrient balance are also emphasized to prevent malnutrition, which is common in advanced CKD.

Implementing these guidelines in routine care involves patient education, regular nutritional assessment, and the use of simple, culturally appropriate dietary strategies. By translating KDIGO's evidence-based recommendations into daily practice, healthcare providers can support better metabolic control, slow disease progression, and ultimately improve the quality of life for individuals living with CKD.

Title: Diet in CAPD vs APD – Practical Differences

Dr Sampath Kumar
Consultant Nephrologist,
Meenakshi Mission Hospital, Madurai

Introduction

In India, the burden of End-Stage Renal Disease (ESRD) is rising at an alarming rate, with the prevalence of Chronic Kidney Disease (CKD) estimated at approximately 16.38% as of 2026. While Hemodialysis (HD) remains the dominant modality, Peritoneal Dialysis—both Continuous Ambulatory Peritoneal Dialysis (CAPD) and Automated Peritoneal Dialysis (APD)—is gaining traction due to its home-based convenience and cost-effectiveness. In 2024, the number of dialysis patients in India crossed 2.2 lakh, yet the penetration of PD remains relatively low at approximately 11%. Despite being a life-saving therapy, the "dialysis-first" mindset often focuses on clearance of urea and creatinine while neglecting the patient's nutritional status.

Diet advise – Neglected Part

In the Indian clinical context, dietary advice is frequently the most neglected part of the management protocol. Patients are often overwhelmed by the technicalities of bag exchanges or cycler settings, leaving little room for detailed nutritional counseling. This is particularly dangerous in PD, where Protein-Energy Wasting (PEW) is highly prevalent, affecting between 20% to 60% of patients. Cultural nuances, such as the predominantly vegetarian diet in many Indian states, further complicate the ability to meet high protein requirements. Without a dedicated renal dietitian, many patients fall into the trap of "over-restriction," leading to malnutrition, muscle wasting, and increased susceptibility to peritonitis.

PD vs. HD: Why the Advice Differs

The dietary approach for a PD patient is fundamentally different from that of an HD patient due to the continuous nature of the treatment.

- Fluid and Sodium: Unlike the intermittent "peaks and valleys" of HD, PD provides continuous ultrafiltration, allowing for a more liberal fluid intake.
- Potassium: Because PD occurs daily, potassium accumulation is less of a concern. Many PD patients struggle with hypokalemia and are encouraged to eat high-potassium foods like bananas and tomatoes—foods strictly forbidden for HD patients.
- Protein Loss: The peritoneal membrane is porous. Patients lose approximately 8–10 grams of protein per day through the dialysate effluent. Consequently, PD protein requirements (1.2- 1.5 G/kg/D) are higher than those for HD.
- The Glucose Factor: PD fluid contains dextrose. Patients absorb roughly 300–500 calories daily from the dialysate itself, necessitating a lower carbohydrate intake from food.

Vegetarian Diets in the Indian Context

For most Indian patients, vegetarianism is not a choice but a religious and cultural mandate. A Vegetarian Renal Diet is suited for PD management due to the phosphorus-protein paradox. While animal proteins have a phosphorus absorption rate of 70–80%, plant-based phosphorus is bound to phytates, resulting in an absorption rate of under 50%. This allows patients to consume protein-rich lentils and legumes without excessive phosphorus spikes. Furthermore, the high fiber content in a vegetarian diet prevents constipation, a leading cause of catheter malposition and enteric peritonitis.

FACULTY TALKS

Sodium, Water, and Hypertension: CAPD vs. APD

Sodium management and the resulting impact on hypertension differ significantly between modalities due to sodium sieving.

- APD (Automated PD): The use of shorter dwell times (1–2 hours) leads to "free water transport" through aquaporins without proportional sodium movement. This results in a lower concentration of sodium in the effluent, potentially leaving the patient in a positive sodium balance and increasing the risk of volume-expanded hypertension.
- CAPD (Manual PD): Utilizes longer dwell times (4–6 hours), allowing sufficient time for sodium to move via diffusion. This results in superior total sodium removal, making blood pressure management often more straightforward. Consequently, APD patients often require stricter dietary salt and fluid restriction compared to CAPD patients.

The Diabetic Challenge: Managing the "Internal Meal"

Indian PD patients with Type 2 Diabetes must account for the dextrose absorbed from the bags. This "invisible" sugar can lead to weight gain and hyperglycemia.

- Medication Timing: Oral agents should coincide with the strongest dwells. APD patients often require higher basal insulin to counter nocturnal glucose absorption.
- The Icodextrin Advantage: Using Icodextrin for long dwells reduces glucose absorption and improves ultrafiltration.
- Safety Warning: Patients using Icodextrin must use GDH-FAD or Glucose Oxidase glucometers; older GDH-PQQ meters may read maltose as glucose, leading to dangerous over-insulinization.

Patient Education and Counseling Tips

To ensure success, clinicians should use the following strategies:

- The "Protein First" Rule: Teach patients to eat their protein (dal, paneer, egg whites) at the beginning of the meal before they feel full from rice or rotis.
- Visual Portions: Instead of grams, use "katori" (bowl) measurements. Advise two katoris of thick dal or sprouts per meal.
- The "Invisible Sugar" Analogy: Explain that a 2.5% glucose bag is like adding several spoons of sugar to their blood, helping them understand why they must avoid sweets and white rice.
- Stool Monitoring: Educate that "a clear bowel means a clear bag." Constipation stops the dialysis from working; daily fiber or natural laxatives like Isabgol are mandatory.
- Thirst Management: For APD patients, suggest sucking on ice chips or using small cups to manage the thirst triggered by sodium sieving.

Conclusion

Diet in Peritoneal Dialysis is not merely supportive; it is a core component of "Technique Survival." In India, shifting the focus from "restriction" to "optimization"—emphasizing plant proteins, managing glucose, and understanding modality-specific fluid needs—is essential for improving the longevity and quality of life for PD patients.

Title: Nutrition in Hemodialysis Patients – Common Pitfalls

Ms Sunitha Premalatha
Consultant Nephrologist,
Meenakshi Mission Hospital, Madurai

Nutrition management in patients undergoing hemodialysis is complex and often misunderstood, leading to several preventable nutrition pitfalls. Unlike pre-dialysis chronic kidney disease, where protein restriction is emphasized, patients on hemodialysis require increased protein intake (approximately 1.2 g/kg/day) due to dialysis-related losses and a catabolic state. Failure to adjust this often results in protein-energy wasting and poor outcomes. Another common issue is the indiscriminate restriction of potassium-rich foods such as fruits and vegetables. Current evidence supports individualized potassium management based on serum levels, residual kidney function, and medications, rather than blanket avoidance, which may lead to micro-nutrient deficiencies.

Phosphorus control also presents challenges. Many patients unnecessarily restrict natural protein sources while overlooking highly absorbable phosphorus from processed foods and additives. Similarly, fluid overload frequently occurs because patients underestimate hidden fluid sources like soups and beverages. Energy intake is another overlooked factor; inadequate calories force the body to utilize protein for energy, worsening malnutrition. Regular follow up by a trained renal dietitian allows timely adjustments in the diet, based on changes in the laboratory values ,dialysis adequacy clinical condition and nutritional status.

In conclusion, nutritional care in hemodialysis should shift from rigid restriction to individualized, evidence-based nutritional strategies tailored to the Indian population.Recognizing and addressing these common pitfalls can significantly improve patient's nutritional status, treatment outcomes, reduce complications, and enhance quality of life.

FACULTY TALKS

Title: Intradialytic Nutrition – Tools and techniques

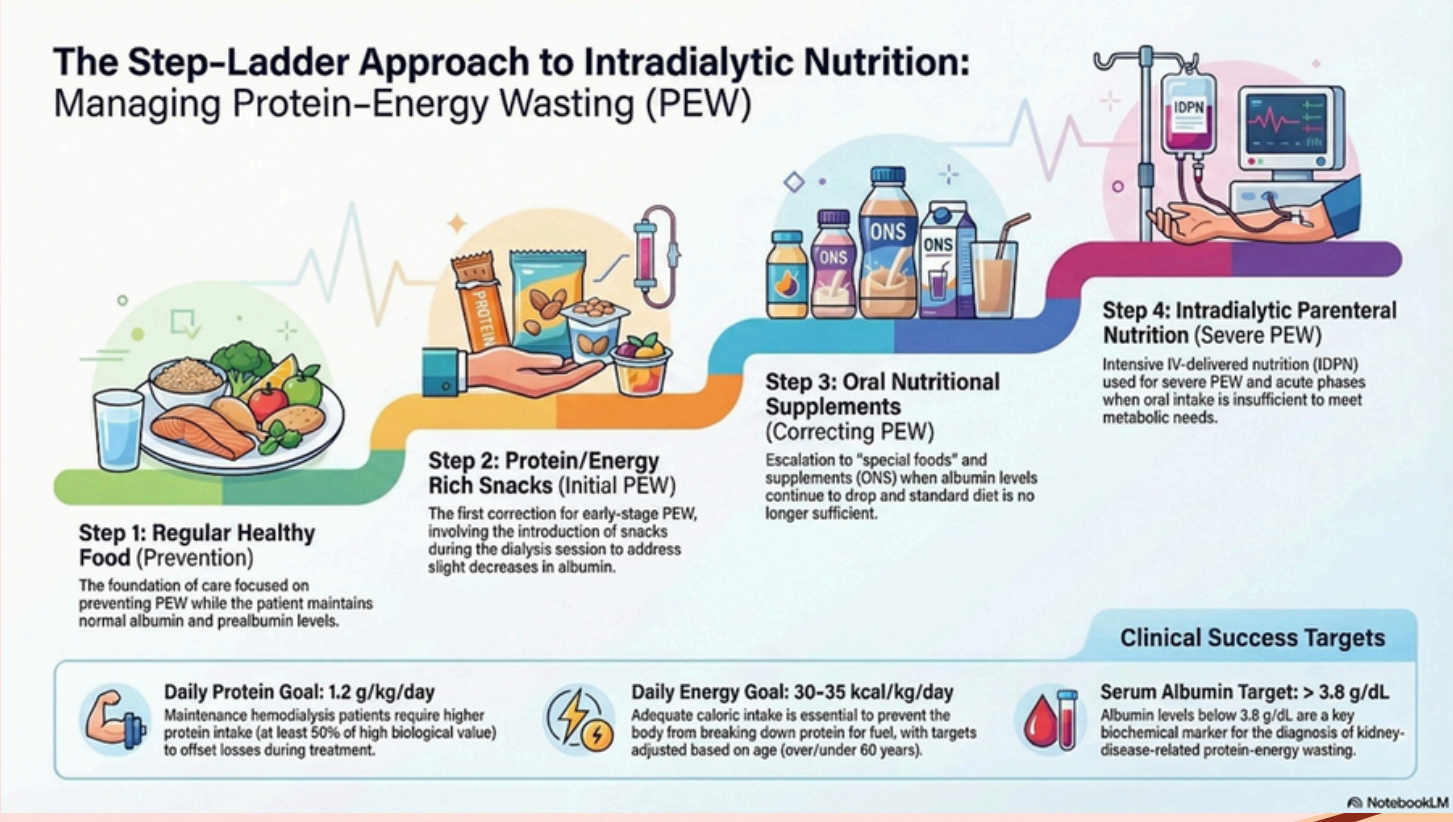
Dr Nisha Jose

Associate professor Nephrology, CMC, Vellore

Protein–energy wasting (PEW) affects a substantial proportion of patients receiving maintenance hemodialysis and is strongly associated with adverse clinical outcomes. The dialysis procedure itself promotes a catabolic state through amino acid losses, inflammation, and metabolic stress. Intradialytic nutrition offers an opportunity to counter these effects by utilizing dialysis time for targeted nutritional intervention.

A stepwise approach can be adopted in clinical practice. Initial management focuses on optimizing the dialysis diet and ensuring adequate energy and protein intake (approximately 30–35 kcal/kg/day and ≥1.2 g/kg/day of protein). Patients with early nutritional decline may benefit from intradialytic oral nutrition, including protein-energy snacks or renal-specific oral nutritional supplements. When oral intake remains insufficient despite these measures, intradialytic parenteral nutrition (IDPN) may be considered in selected patients with significant PEW.

Combining structured nutritional assessment with timely escalation of interventions allows dialysis units to address malnutrition proactively and improve nutritional status in patients undergoing maintenance hemodialysis.



FACULTY TALKS

Title: Case-Based Discussion: Designing CKD Diets for Vegetarian and Non-Vegetarian Patients

Ms Nancy Sahmi
Chief Dietician & Head Department of Dietetics PGIMER, Chandigarh

Chronic kidney disease is an irreversible disorder which is characterised by the gradual loss of function of kidneys, impaired filtration, and accumulation of metabolic wastes in the body. Nutritional management holds utmost importance in managing the progression of the disease. Both vegetarian and non-vegetarian diets have gained attention in intervention considering their different effects on renal physiology, nutritional status, metabolic load and long-term outcomes for the disease.

In recent findings, the Plant-Dominant Low-Protein Diet (PLADO) is gaining major interest in managing kidney functions. It includes low protein (0.6–0.8 g/kg/day) sourced ≥50% from plants such as legumes, soy, whole grains, and the rest of protein comes from high biological value animal sources like eggs, dairy, fish and poultry. Percipient planning ensures adequacy of amino acids and essential micronutrients like Vitamin B complex, Zinc and haem iron. Most of the Indians fall in Lacto- vegetarian / Ovo -vegetarian or flexitarian categoryof PLADO diets. CKD diets planned on this dietary pattern should typically include whole grains, nuts & oil seeds, fruits and vegetables which have a good nephroprotective potential, as they generate a lower amount of intraglomerular pressure and a reduced amount of renal hyper-infiltration .Inclusion of dairy/eggs/ fish/poultry will help fulfil the requirement of a complete essential amino acid profile of a low protein CKD diet ; yet will pose increased phosphorus burden if not worked out in judicious combinations in balance to plant based diet.

A 56 year old female suffering from stage 3-4 CKD with creatinine of 3.5 mg /dl and potassium at 6.5 mEq /L, high blood pressure, loss of appetite, weight loss of 6 kg in 2 months, lacto-vegetarian . On nutritional assessment , she has a low BMI, loss of appetite partly because of self - imposed restrictions due to CKD diet misconceptions. Intervention requires meticulous counselling about a healthy renal diet emphasising on high energy, high quality protein food combinations in a low protein diet while limiting high-potassium foods and processed items.

Therefore, emphasize on hybrid dietary approach is required , which will help in reducing metabolic load, cardiovascular risk, and better management of the disease.

FACULTY TALKS

Title: Reading food labels (Na, K,P)

Dr Ashwin Bhikhubhai Dabhi, (Dietitian)
MD ESPEN DIPLOMA
Distinguished Freelance Consulting and
Counselling Physician Nutritionist and Scientist

Nutrition labels serve as a crucial, mandatory, and standardized tool on most pre-packaged foods (e.g., cereals, snacks, canned goods) to inform consumers about the nutritional content of a products and facilitate healthier choices. They provide a snapshot of key nutrients—calories, fats, sodium, sugar, fibre, and protein—based on a defined serving size. In some regions, labels may not align with local cooking habits or cultural practices, leading to lower compliance or trust. Some consumers find the information too technical, leading to low usage despite high awareness.

Managing nutrition labels for kidney failure requires shifting from a focus on calories and fat to a strict monitoring of sodium, phosphorus, potassium, and protein to prevent fluid buildup, high blood pressure, and mineral imbalances.

Title: Diet in Acute Kidney Injury – ICU and Ward Settings

Dr Sandeep Mahajan
Professor Nephrology. AIIMS New Delhi

Nutritional management in Acute Kidney Injury (AKI) is a dynamic process, often challenging due to the hypercatabolic state, multi-organ failure, and the need for renal replacement therapy (RRT). The primary goals are to prevent protein-energy wasting (PEW), minimize metabolic derangements, and support healing. Dietary strategies differ significantly between ICU and ward settings, largely based on the severity of the illness, catabolic rate, and metabolic stability.

Nutritional Management in the ICU Setting
Patients with AKI in the ICU are often critically ill, frequently with sepsis or trauma, leading to high protein turnover and increased nutritional requirements.

- Energy Requirements: Recommendations suggest 20–30 kcal/kg/day, with energy requirements primarily dictated by the underlying critical illness rather than the AKI itself. Early enteral nutrition (within 48 hours) is preferred, with a gradual increase to 80%–100% of the feeding goal after the initial acute phase.

- Protein Intake: High protein intake is essential to counter catabolism. Recommended intake ranges from 1.3 to 2.0 g/kg/day, or up to 2.5 g/kg/day in patients on continuous renal replacement therapy (CRRT) to compensate for amino acid losses in the effluent. However, some studies indicate that high protein (over 1.3 g/kg/day) in patients not on dialysis may potentially slow recovery, suggesting a need for careful individualization.

- Method of Feeding: Enteral nutrition is preferred over parenteral, with standard formulas used unless severe electrolyte imbalances exist.

Nutritional Management in the Ward Setting

Patients with AKI on a general ward are typically more stable, often suffering from prerenal AKI (e.g., dehydration), medication toxicity, or post-renal causes.

- Energy and Protein: The focus is on reversing the underlying cause. Protein is generally less restricted than in chronic kidney disease, typically around 0.8–1.0 g/kg/day for non-catabolic patients.

- Dietary Focus: The diet should aim to address fluid overload and electrolyte imbalances (high potassium/phosphate).

- Monitoring: Frequent re-assessment of serum creatinine and urea is necessary to tailor protein intake as kidney function improves.

Key Considerations for Both Settings

- Fluid and Electrolytes: Careful management of sodium, potassium, and phosphate is essential, with more strict limitations required for patients with low urine output or who are pre-dialysis.
- Avoiding Prolonged Fasting: Fasting at the time of diagnosis is associated with increased mortality. Early, safe nutrition should be prioritized.
- Micronutrients: RRT causes significant losses of trace elements (e.g., selenium, copper) and vitamins, requiring supplementation.

Conclusion

Diet in AKI is not "one size fits all." It must be individualized based on the stage of AKI (KDIGO criteria), metabolic status, and presence of renal replacement therapy. While ICU patients require high-protein, energy-dense feeding to combat hypercatabolism, stable ward patients need a more targeted diet focusing on reversing the renal injury without oversupplying protein.

FACULTY TALKS

Title: Pediatric CKD – Growth, Calories and Protein -

Dr Mehul A. Shah

Senior Consultant Pediatric neurologist, Apollo hospitals, Hyd

Introduction: Chronic kidney disease (CKD) in children presents unique challenges including age based assessment of kidney function, different etiological factors, and supporting growth. The prevalence of pediatric CKD has never been systemically analysed and the current data significantly underestimates the global burden.

Risk factors for CKD include congenital anomalies (hypodysplasia, posterior urethral valves, vesico-ureteric reflux), inherited conditions (ARPKD, infantile nephronophthisis, podocytopathies, single gene mutations, etc), steroid resistant nephrotic syndrome, chronic glomerulonephritis, severe AKI, medications, and preterm – IUGR babies.

CAKUT (Congenital Anomalies of the Kidney and Urinary Tract detected on antenatal scans) accounts for 30-35%, failure to thrive, polyuria, polydipsia, recurrent vomiting, delayed milestones, recurrent UTI's, Vitamin D resistant rickets, and unexplained anemia are the major presenting features.

Assessment should include anthropometry with growth chart, blood pressure, urine examination, renal parameters, and ultrasonography.

Growth retardation is a hallmark of pediatric CKD, affecting 30–50% of children. The first two years of life are most vital for avoiding irreversible growth loss and hence, it is important to regularly monitor height, weight, and BMI. A height velocity below the 25th percentile or SDS < 2.0 for age and sex or height < 3rd percentile are significant indicators of growth failure. Short stature at the time of dialysis initiation is an independent predictor of poor outcomes, including increased hospitalization and mortality rates. Early intervention is important for best growth outcomes.

Growth failure in children with chronic kidney disease (CKD) is multifactorial:

A] Non-modifiable factors such as age at onset of CKD, severity of CKD, genetic causes and etiology. Of these, younger children and severe CKD has the most severe impact.

B] Modifiable factors such as malnutrition (poor intake), anemia, metabolic acidosis, mineral bone disease, chronic inflammation, Growth hormone resistance, and use of corticosteroids.

Poor caloric intake due to anorexia, dietary restrictions, vomiting, or feeding difficulties is a major contributor, leading to insufficient energy availability and subsequent protein catabolism. Metabolic acidosis further worsens growth by increasing protein breakdown and impairing bone formation, while disturbances in calcium, phosphate, and vitamin D metabolism result in renal osteodystrophy and poor linear growth. Anemia, chronic inflammation, delayed puberty, and steroid use also negatively impact growth.

Energy intake: Nutritional management is central to improving outcomes. Energy intake should generally be maintained at 100–120% of the recommended dietary allowance (RDA) for age, and may be higher in infants, children with growth failure, or those on dialysis. Adequate caloric intake is essential to prevent protein from being used as an energy source and to support normal growth and response to therapy.

Protein targets in CKD [Table 1]: While there were initial reports of protein restriction in adults, there has never been any role of protein restriction in children. The emphasis is on maintaining growth and preventing malnutrition. Protein intake should be 100 – 140% of DRI [CKD stage 2-4] and in CKD Stage 5d: 100% of DRI + additional loses (HD, add 0.1 gram/kg/day and on PD, add 0.15 to 0.3 gram/kg/day). On the other side, excessive protein intake beyond RDI especially if blood urea is very high can cause high blood phosphorus and metabolic acidosis.

Sodium management is also an important component and in most children, dietary salt restriction of 2-4 grams per day is required to control edema and hypertension. Packaged, processed, canned, & fast foods are high in sodium and needs to be restricted. Herbs, lemon, spices and pepper can be used to improve flavour.
On the other range, children with hypodysplastic kidneys, PUV before reaching CKD Stage V have salt wasting and some children on PD require additional salt intake.

Growth hormone in CKD: Growth failure is frequently noted in children with CKD and co-relates with severity of CKD. Both European and NAPRTCS data have shown that 30-40% of children with CKD have short stature (height < 1.88 SDS). A key mechanism underlying growth failure is dysfunction of the growth hormone (GH - insulin-like growth factor (IGF-1) axis. Although GH levels are often normal or elevated in CKD, there is significant peripheral resistance due to decreased GH receptor expression in target cells & liver as well as reduced IGF-1 bioavailability and increased binding proteins, leading to impaired growth plate activity and reduced linear growth.
A number of studies have shown beneficial effects of GH Rx in CKD Stage 3-5, more in CKD stage 3-4 > CKD 5d, and pre-pubertal children. Recently, the effectiveness was confirmed by IPPDN [despite unsatisfactory calorie intake]. There are variable results due to severity of CKD, other modifiable factors, and compliance, with cost being an important factor.
Indications for GH therapy are height below 3rd %ile, or height velocity below 25th percentile or SDS < 2.0 in children with CKD stage 3-5 and 1 year post renal transplant. Pre-requisites before initiation of GH therapy are correction of metabolic acidosis, anemia, MBD, and ensure adequate nutrition & calories. The dose is 0.05 to 0.5 mg/kg/day for 2-3 years or more, usually higher to overcome resistance, with monitoring of height velocity and variable factors every 3-4 months.
Side effects include glucose intolerance, intracranial hypertension, slipped capital femoral epiphysis, etc. GH therapy to be discontinued if there are side effects or lack of response (< 2cms per year compared to pre-treatment velocity).

How to provide nutritional needs in children? Breastfeeding is preferred method in infants with CKD followed by whey based infant formula. If there is volume restriction or vomiting or gastro-esophageal reflux, concentrating formula is an option [standard – 13 grams/100 ml, 67 Kcal, 1.3 grams protein / 100 ml], gradually increase by 1-3% to 20%. One needs to watch for renal solute load, osmotic diarrhea, vomiting, hyperkalemia, hyperphosphatemia and Vitamin A excess.

Other options in infants is to fortify breast milk / infant formula with glucose polymers, MCT oil, and human milk fortifiers (has additional potassium).

In infants > 1 year, special renal formula such as Nepro HP / Fresubin HP that has higher protein, higher calorie (2 cals per ml) & low potassium / phosphorus content can be used.

Role of gastrostomy tube: In children below 2 years (and some situations, 2-5 years), who are unable to meet their nutritional requirements orally, gastrostomy tube feeding is an important intervention. PEG or surgically placed G tube is often performed at the time of PD catheter placement (it should be insisted by the primary nephrologist). Children are encouraged to take per-oral feeds and supplemental feeds provided through G tube. Gastrostomy feeding can be given as bolus or continuous (including overnight) feeds, improving total energy intake and growth outcomes. This approach helps overcome dietary limitations, supports catch-up growth, and enhances the response to other therapies, including growth hormone. Although several studies have shown improvement in weight, height, BMI SDS, some have not shown improvement.

In summary, growth failure in pediatric CKD results from an interplay of nutritional deficiency, metabolic derangements, and hormonal resistance. Effective management requires early, individualized, and multidisciplinary intervention, with particular emphasis on maintaining adequate energy and protein intake, correction of metabolic acidosis, treatment of anemia, management of MBD, and using supportive measures such as gastrostomy feeding & GH therapy when necessary to optimize growth and development. Adequate dialysis and, ultimately, kidney transplantation significantly improve growth outcomes.

Age Group	Energy [Kcal/kg/day]	Protein [gram/kg/day]
0 – 6 months	93 – 120	1.5 – 2.0
7 – 12 months	72 – 82	1.2 – 1.7
1 – 3 years	72 – 95	1.05 – 1.5
4 – 13 years	48 – 93	0.95 - 1.35
14 – 18 years	38 - 63	0.85 – 1.20

Title: Nutrition in Elderly Patients with CKD and Frailty

Dr Garima Agarwal
Lead Consultant Nephrologist and Renal Transplant Specialist,
Manipal Hospitals, Bengaluru

In India, "older person" or "senior citizen" is conventionally defined as age ≥60 years in government policy and official statistical reporting, although some international geriatric literature still uses ≥65 years. For CKD, KDIGO continues to define disease as abnormalities of kidney structure or function for ≥3 months with implications for health, classified by Cause, GFR category (G1–G5), and Albuminuria category (A1–A3); the present discussion is limited to non-dialysis CKD G3–G5.

The Indian context matters. CKD burden in India is substantial (roughly ~ 13% of the population) and appears to be rising; contemporary Indian data show a large rural representation among CKD cohorts, while Longitudinal Ageing Study in India (LASI)-based analyses show that frailty, pre-frailty, malnutrition, and sarcopenia are all common in older adults, with generally worse burden in women, poorer groups, and rural residents. In one recent LASI-based frailty analysis, frailty affected 29.2% and pre-frailty 58.8% of older Indians, with higher prevalence in rural than urban settings and marked state variation. Indian sarcopenia data also show higher prevalence in rural groups and association with inadequate protein intake.

Frailty is a broader clinical syndrome of reduced physiological reserve and vulnerability. Whereas Sarcopenia is a muscle disorder - loss of muscle strength, mass, and performance. It is an important driver of frailty, but frailty is wider than sarcopenia. Frailty can be assessed using a frailty framework such as Fried phenotype: unintentional weight loss, exhaustion, weakness (grip strength), slow walking speed, and low physical activity; ≥3 = frail, 1–2 = pre-frail. In CKD patients, both these conditions often overlap, so in a renal clinic you may screen for both. SARC-F is a 5-item questionnaire used to screen for people at risk of sarcopenia. The 5 questions cover: SARC-F = Strength, Assistance walking, Rise from chair, Climb stairs, Falls. Handgrip strength is not a full frailty index by itself, but it is a very practical and powerful marker of muscle strength and functional reserve. A simple practical clinic approach in India is often SARC-F + handgrip strength, mainly to flag possible sarcopenia / functional decline or frailty, but it cannot fully replace formal frailty assessment.

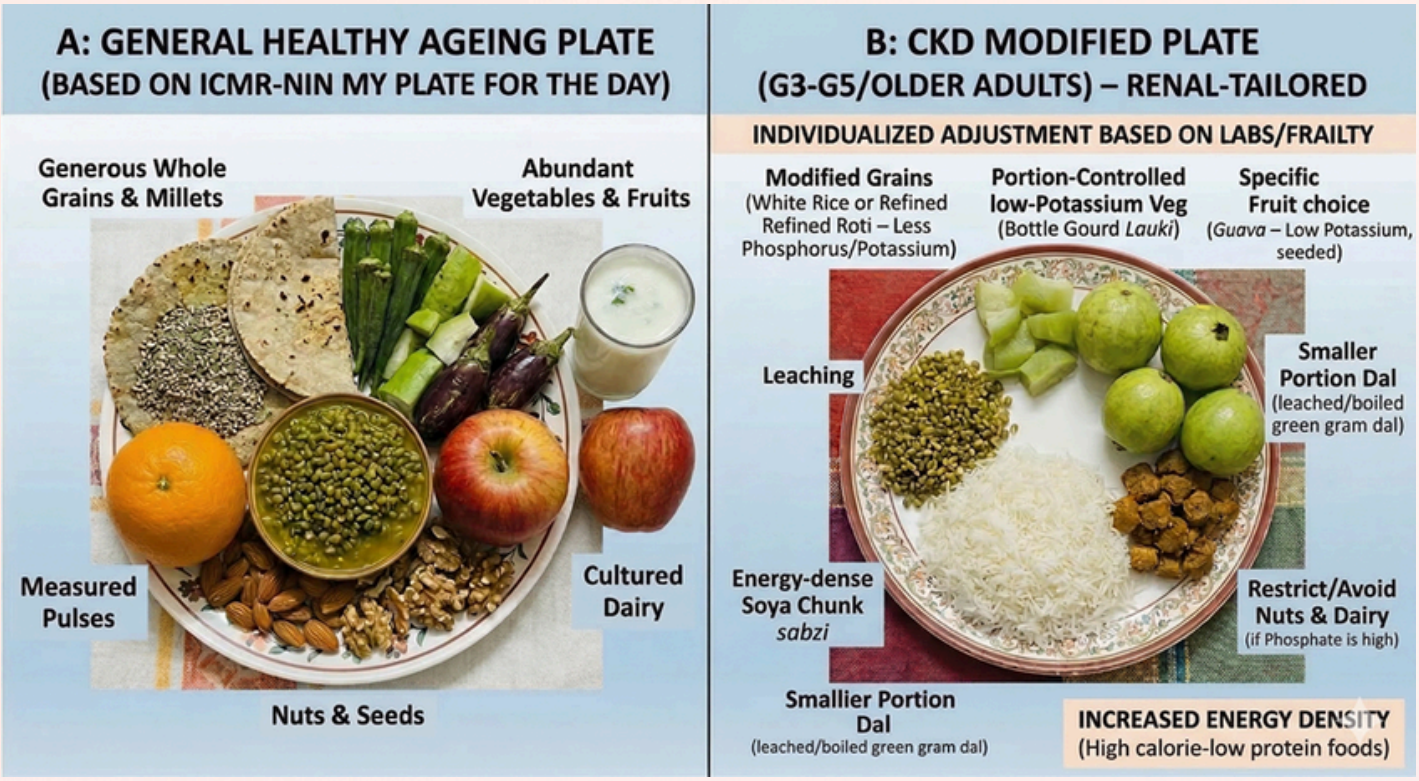
The main nutritional challenge is that standard CKD restriction can easily worsen protein–energy wasting (PEW) or accelerate frailty/sarcopenia if applied indiscriminately. PEW in CKD refers to depletion of body protein and energy stores and is not synonymous with simple low BMI or generic malnutrition. KDOQI 2020 recommends, for metabolically stable CKD 3–5 not on dialysis, an energy prescription of 25–35 kcal/kg/day and protein restriction to 0.55–0.60 g/kg/day, or 0.28–0.43 g/kg/day plus ketoacid analogues under specialist supervision; handgrip strength may be used as a functional nutritional marker, and oral nutritional supplements may be trialled for at least 3 months when counselling alone does not achieve targets in those at risk of or with PEW.

KDIGO 2024 is more clinically nuanced for older adults: it suggests maintaining ~0.8 g/kg/day protein in adults with CKD G3–G5, avoiding high protein intake >1.3 g/kg/day, but explicitly states that in older adults with CKD G3–G5, avoiding high protein intake >1.3 g/kg/day, but explicitly states that in older adults with frailty or sarcopenia, higher protein and calorie targets should be considered. That is the key pivot for this population.

So what is the most sensible strategy in older Indian CKD G3–G5 with frailty risk? In practice, do not start with a blanket low-protein prescription. Start with phenotype and stability. In the metabolically stable, non-frail patient with progressive CKD, 0.6–0.8 g/kg/day remains reasonable, depending on progression risk, symptoms, and diet quality. In the older patient with recent weight loss, low grip strength, poor intake, recurrent illness, functional decline, or clear sarcopenia/frailty, it is usually safer to target toward the higher end—around 0.8 g/kg/day and sometimes above this, individualised—while ensuring adequate calories, rather than pushing strict protein restriction that worsens PEW. This is aligned with KDIGO's older-adult practice point, though the evidence base is not strong and much of it is indirect rather than India-specific.

The rest of the diet should be targeted, not fear-based. KDIGO recommends sodium <2 g/day (<5 g salt/day), but not in sodium-wasting states. For potassium, KDIGO no longer supports indiscriminate avoidance of all fruit and vegetables; instead it recommends an individualised approach, with restriction aimed mainly at foods rich in bioavailable potassium, especially processed foods, in those with hyperkalaemia history or periods of increased risk. That is highly relevant in India, where many older patients are unnecessarily told to avoid nearly all fruits, pulses, curd, milk, and vegetables, leading to monotonous low-calorie diets. Phosphate advice should similarly focus on processed foods and phosphate additives rather than automatic elimination of all protein sources; KDIGO emphasises renal dietitian-led tailoring for phosphorus, potassium, sodium, and protein.

For Indian food translation, the most useful message is: preserve intake quality before restricting variety. Vegetarian patterns can meet pragmatic targets using measured portions of dal, mixed pulses, curd/dahi, paneer, milk, soy, tofu, roasted chana, groundnut, and regionally familiar cereals such as atta, rice, jowar, bajra, and ragi, with potassium tailoring based on labs rather than blanket bans. Non-vegetarian patterns can use egg white, fish, and modest portions of chicken as higher-biologic-value protein when appetite is low. The ICMR–NIN nutrient framework and Indian dietary guidance remain useful background for food-based counselling, but CKD-specific tailoring must override generic "healthy ageing" advice where hyperkalaemia, acidosis, or phosphate retention are present.



A practical monitoring plan for Indian clinics is simple: record weight trend, appetite, dietary recall, SARC-F, handgrip strength, gait speed or chair-rise, serum bicarbonate, potassium, phosphate, and functional history every 1–3 months depending on severity. Red flags are unintentional weight loss, falling intake, recurrent hyperkalaemia from poor counselling, repeated advice to stop major food groups, low bicarbonate, low grip strength, falls, slow gait, and declining ability to shop/cook/eat independently. When these appear, think less about stricter CKD restriction and more about incipient PEW/frailty.

Bottom line

In older Indians with CKD G3–G5 not on dialysis, the best nutrition strategy is individualised moderation rather than rigid restriction: adequate calories first, protein tailored to frailty risk rather than eGFR alone, sodium restriction for most, selective potassium/phosphate restriction based on labs and food form, early treatment of acidosis, and routine linkage with resistance exercise and frailty screening. The major practical error in India is not "too much liberalisation"; it is over-restriction leading to poor intake, PEW, and loss of function.

Title: Nutrition in Obesity with CKD – Balancing Weight Loss and Renal Safety

Dr Arpita Roy Chaudhary
Professor of Nephrology, SSKM Hospital, Kolkatta

Obesity , over few decades, is rising constantly and has taken an epidemic shapewith many adverse consequences on cardio-kidney-metabolic health.

Why should we consider it as a public threat?
As per the World Health Organization (WHO) there are 2.5 billion overweight adults and 890 million with obesity worldwide (representing 43% and 16%, respectively, of the global adult population). Generalised obesity is defined based on BMI cut points while abdominal obesity is defined based on waist circumference (WC) or various waist related indices like waist to hip ratio (WHR) or waist to height ratio (WHtR). Compared to other ethnicities, Asian Indians have a distinct susceptibility to develop T2D and other obesity-related metabolic disorders at a lower BMI. The 'Asian Indian Phenotype', marked by high levels of abdominal fat, insulin resistance, and dyslipidaemia with low HDL cholesterol and high serum triglycerides even with normal BMI, is believed to be a primary factor underlying this heightened risk.

Nephrologists are particularly concerned .Compared with normal-weight individuals (18.5<BMI<25), overweight individuals (25< or =BMI<30) had elevated risk for KD (RR=1.40; 95% CI 1.30-1.50); obese individuals were at much higher risk (RR=1.83 (1.57-2.13)). Obesity in women was associated with a higher risk than in men (RR=1.92 (1.78-2.07) vs 1.49 (1.36-1.63); P<0.001). Results from cohort studies in patient populations and cross-sectional and case-control studies all indicated a positive association between BMI and risks for KD outcomes. Recently published GBD 2025 study showcased the rising global burden of CKD and has generated publicly available estimates of chronic kidney disease deaths, prevalence, years of life lost, years lived with disability, and disability-adjusted life-years across age, sex, and location since 1990. High BMI has been identified as one of the driver of incident CKD next tohigh Fasting sugar and high systolic BP, and also comes as the third important cause of CKD related DALYs .Obesity is already identified as a risk factor for cardiovascular mortality which is far more common in early stages of CKD compared to CKD patients requiring KRT.

Is obesity all bad?
The epidemiological data also revealed an " Obesity paradox".Obesity, a risk factor for de novo chronic kidney disease (CKD), confers some survival advantages in advanced CKD. This so-called obesity paradox is the archetype of the reverse epidemiology of cardiovascular risks which shows an opposite trend when we look at similar risks in general population. Lean and thin CKD population, face poor health consequences in short term due to PEW and inflammation. Overnutrition may be the long term killer , versus undernutrition is the short-term killer. Hemodynamic stability of obesity, lipoprotein defence against circulating endotoxins, protective cytokine profiles, toxin sequestration of fat mass, and antioxidation of muscle may play important roles.

FACULTY TALKS

Treatment of obesity in CKD. The weight loss interventions include nonpharmacological (Diet and Exercise) and pharmacological (medication and bariatric surgery) approach.

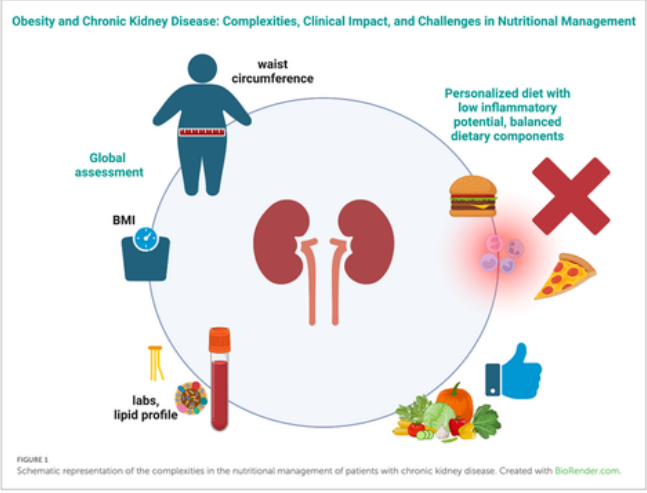
Can dietary interventions (Low carb or keto diet vs control diet) leading to weight loss (> 10%, 5-10%, , <5%) retard CKD progression, will it behave different in diabetic or nondiabetic CKD ? In spite of number of RCTS on board good quality studies with less limitations are few. But diet and exercise should be practised as the first intervention to lose the first 5-10% of body weight. .Stage of obesity also have an impact on additional intervention, > 40 BMI may need bariatric surgery.

Several medications are currently licensed for obesity treatment, and, among these, incretin mimetics have the most available data on kidney outcomes. Incretin mimetics currently licensed or in development include glucagon-likepeptide-1 receptor agonists (GLP-1 RA), combination GLP-1 RA and glucose-dependent insulinotropic polypeptide (GIP) RA, combination GLP-1 RA and glucagon RA, and triple combinations with GLP-1 RA, GIP RA, and glucagon RA. At present, GLP-1 RA and dual GLP-1/GIP RA have the most data to inform obesity management in people with or without kidney disease.

Dialysis and transplantation are not listed as contraindications to using GLP-1 RA or GLP-1 RA plus other peptides, although there is a lack of evidence of kidney benefits in patients with GFR < 15 ml/min per 1.73 m2. But very obese recipients delisted from potential recipient list may enjoy the benefit of weight loss for inclusion in wait-list.

Health risks for rapid weight loss has also been highlighted in a study reporting intentional weight loss in a cohort of obesity class II, 2831 CKD patients with 6.8 yrs follow up) earlydeclineof serumalbuminan increase in systolic blood pressure and higher mortality.A secondary analysis revealed steep changes infatfree mass (FFM)increased theassociationbetweenBMItrajectoriesand death, while slower rate of FFM change attenuated the risk.

So the nutritional intervention may be obesity centric, but overall treatment approach should be multidisciplinary and should be patient centric.



SOURCE: Conte and Molfino, Frontiers in Nutrition

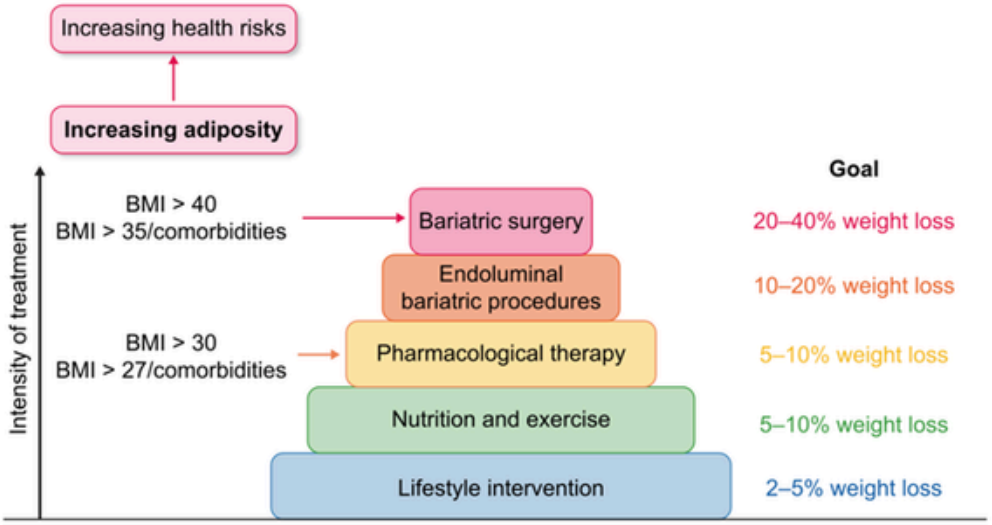


Figure 1: Obesity treatment pyramid.

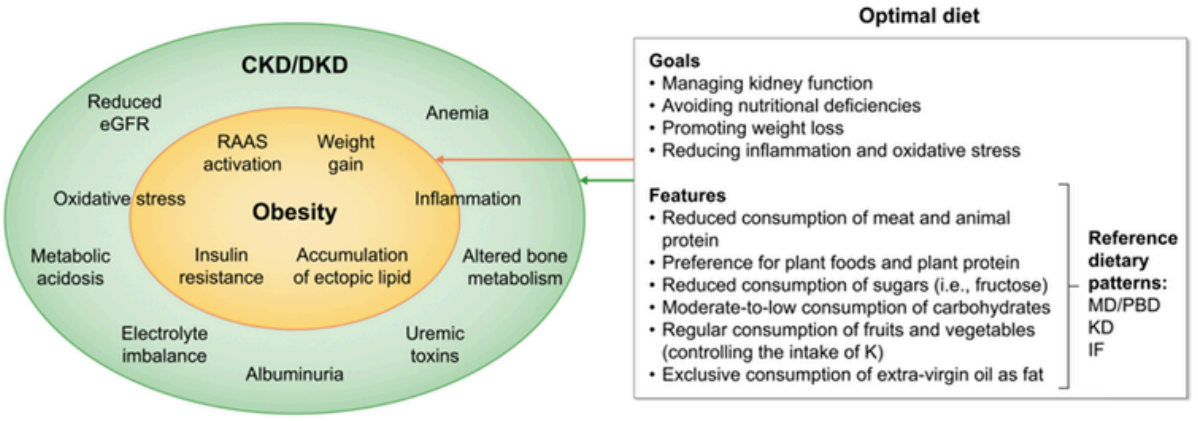


Figure 2: "Obesity-centered" approach as the optimal nutritional strategy for patients with obesity and CKD. RAAS, renin–angiotensin–aldosterone system; K, potassium.

Title: Diet in Patients on Tube Feeding / Jejunostomy with Renal Failure

Dr Biju Potakkat
Professor & Head, Department of Surgical Gastroenterology,
Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry

Many patients with chronic renal failure suffer from moderate to severe malnutrition. They usually complain of anorexia, loss of taste and other indigestion symptoms. Some of them need tube feeding either by nasogastric, nasojejunal or by feeding jejunostomy. This is especially important in patients suffering from other associated diseases like immunological disorders. The quantity and contents of the feed need to be modified for patients with renal failure. Several formula feeds are available and many of them are modified to ensure that lean body mass is maintained but there are no side effects to the already compromised kidneys. As a good proportion of these patients are on dialysis, this further adds to the challenges in nutritional recommendations. Nutritional recommendations change in post transplant patients suffering from malnutrition. Because of the immunosuppression, the intestinal flora also may change and this affects the absorption. This presentation focuses on the challenges in patients with renal failure on tube feeding and find solutions to improve their nutritional status.

FACULTY TALKS

Title: Intermittent Fasting in CKD and Diabetes – Friend or Foe?

Dr Sanjeev Nair (Friend)
Consultant Nephrologist,
Apollo Speciality Hospital, Vanagaram, Chennai

Intermittent Fasting: Physiology, Promise and Prudence

Intermittent fasting (IF) has moved from a lifestyle trend or fad to a serious clinical and academic question, especially in diabetes and CKD. The discussion is no longer only about weight loss or convenience. It now touches physiology, metabolic adaptation, renal safety, and the difference between short-term food restriction and true starvation. A useful way to frame the subject is to start from basic physiology and then move toward the limits of current evidence.

Physiology textbooks describe the body as moving between fed and fasting states every day. That alone weakens the idea that fasting is inherently unnatural or automatically harmful. The real question is not whether humans ever fast, but which fasting pattern is useful, for whom, and under what supervision. The strongest argument in favor of intermittent fasting is that it fits normal human metabolism. After meals, the body is in an absorptive state driven mainly by insulin. Between meals and overnight, it shifts into a post-absorptive state in which glucagon, glycogenolysis, gluconeogenesis, and lipolysis maintain energy supply. This is routine physiology, not an emergency response.

This physiological fact matters because detractors of IF often treat it as a stressor in itself. A better distinction is between physiological fasting and prolonged starvation. Short, structured fasting windows are not the same as malnutrition, dehydration, or cachexia. They represent a controlled extension of a state the body already uses every day.

All of this brings us to diabetes and kidney disease. The argument for IF in these conditions is built on upstream metabolic benefit. IF can improve insulin sensitivity, reduce weight, lower blood pressure, and reduce glycemic burden. In diabetes, these are significant changes, because they target the drivers of microvascular and macrovascular disease. In early CKD, the same effects may reduce glomerular stress and albuminuria.

There is also a mechanistic appeal. Fasting activates pathways linked to cellular repair, including improved autophagy, reduced oxidative stress, and changes in nutrient sensing. These mechanisms are attractive to nephrologists because they align with what we know about kidney injury, inflammation, and metabolic overload. The concept is not that fasting is magic. It is that it may restore a more favourable metabolic rhythm.

This is not to say IF can be indiscriminately promoted. The evidence in established CKD is still thin, especially in stage 4 and 5 disease. Most supportive data come from animal models, short observational studies, or small human cohorts. This makes broad claims risky. There are practical hazards too. Patients with advanced CKD can be vulnerable to volume depletion, AKI, electrolyte shifts, and medication timing issues. The risk is higher when diabetes is brittle, when insulin or sulfonylureas are involved, or when oral intake is already inconsistent. In such patients, fasting may create instability rather than benefit.

Another issue is misclassification. Not all "fasting" is equal. A gentle 12 to 14 hour overnight fast is not the same as a compressed 6 to 8 hour eating window. Much of the public debate clubs multiple streams of fasting under a broad IF basket, which creates confusion and often inflates alarm.

A sensible clinical position is that intermittent fasting is physiologic, potentially useful, but not for everyone. It may be a reasonable option in selected patients with diabetes and stable early CKD, provided there is medication adjustment, hydration advice, and close follow-up. It should not be presented as a blanket rule for all CKD patients.

Intermittent fasting deserves discussion because it is biologically plausible and clinically promising. It does not deserve alarmism and outright rejection.
The real task for nephrologists is selection, supervision, and precision rather than enthusiasm or rejection.

FACULTY TALKS

Title: Intermittent Fasting in CKD and Diabetes – Friend or Foe?

Dr Nagaraju Naik (Foe)
Associate Professor of Nephrolgy,
SDM College of Medical Sciences, Dharwad

Intermittent fasting is less of diet and more of eating pattern. It is not what you eat but when you eat. While intermittent fasting has gained popularity for weight management, its application in patients with Diabetes Mellitus and Chronic Kidney Disease presents significant clinical risks. The primary arguments against intermittent fasting in these populations is metabolic instability and physiological strain.

The most immediate danger for diabetic patients, especially those on insulin or sulfonylureas is fasting-induced hypoglycemia. Strict fasting windows significantly increase the risk of "dead-in-bed" nocturnal hypoglycemic events. Without precise, hour-by-hour medication titration, the lack of exogenous glucose leads to dangerous drops in blood sugar levels.

In CKD, the kidneys lose the ability to maintain homeostatic balance. Prolonged fasting can lead to rapid fluctuations in potassium, phosphate, and sodium. In advanced stages (CKD 4–5), these imbalances can trigger cardiac arrhythmias. Furthermore, the risk of dehydration during fasting windows can cause prerenal acute kidney injury, potentially accelerating the transition to end-stage renal disease.

Chronic kidney disease patients are already predisposed to muscle wasting. Unless caloric and protein intake is meticulously managed during the feeding window, intermittent fasting can exacerbate Protein-Energy Wasting. This loss of lean body mass is a strong predictor of mortality in both diabetic and renal populations.

Paradoxically, Intermittent fasting can lead to "rebound hyperglycemia." Large meals consumed during short feeding windows cause massive postprandial glucose spikes. Glycemic variability is often more damaging to the vascular endothelium than a steady, slightly elevated blood sugar level, increasing the risk of diabetic microvascular complications.

FACULTY TALKS

Title: Nutrition in Patients with Recurrent Renal Calculi

Dr Ravi Kushwaha,
Additional Professor
Department of Nephrology
SGPGIMS, Lucknow

Recurrent renal calculi (kidney stones) is a prevalent clinical condition influenced by both metabolic abnormalities and dietary habits. Nutrition plays a dual role in either promoting or preventing stone recurrence. Diets high in oxalate-containing foods, sodium, and animal protein, along with inadequate fluid intake, significantly increase the risk of stone formation, especially calcium oxalate stones. In contrast, sufficient hydration, appropriate dietary calcium, and intake of citrate-rich foods help lower urinary saturation and prevent crystal formation. Effective prevention relies on personalized dietary modifications guided by stone type and metabolic assessment. Key nutritional recommendations include increasing fluid consumption, limiting salt and animal protein, and encouraging a diet rich in fruits and vegetables to support optimal urinary composition. Such targeted dietary interventions are essential for minimizing recurrence and enhancing long-term patient outcomes

FACULTY TALKS

Title: Gut-Kidney Axis: Role of Probiotics and Prebiotics in CKD

Dr Georgi Abraham
Director of Nephrology & Senior Consultant,
The Madras Medical Mission; Professor of Medicine, Pondicherry Institute of Medical Sciences

The society for Renal Nutrition and metabolism has made significant impact on patient care since its inception. The eating pattern of Indian kidney disease patients are diverse depending upon cultural, religious belief and socio-economic status, their food intake varies. As the most populous country in the world with a 17.2% prevalence of CKD (LANCET 2016), we face enormous challenges in terms of provision of adequate diet, elimination of myths and provide better health for kidney disease patients in India. Initiatives by different professionals have made some changes in the pattern of food consumption in our CKD patients. However, a lot of effort is still required to optimize nutrition therapy.

Varies studies have shown significant protein energy wasting is present 68-93% of patient on dialysis from middle and lower socio-economic status, challenges in access to care or 50% of patient with advance CKD eGFR <15 ml/min/1.73m^2 (CJASN 2018) and high salt and potassium consumption leading to sudden death in dialysis and CKD stages 4 & 5 non-dialysis patients. Indian studies and data are providing in depth analysis of malnutrition in different socio-economic classes of patients.

We as a group should use scientific methods including dietary recall to access our patients to evaluate extend of malnutrition rather than simply imitating developed country data and management. Body composition monitoring at bedside, biochemical parameters including lipid profile and other anthropometric measurements should lay down platform for Indian patients. The leaders in nutritional therapy across the country should be saluted for their tireless efforts in combatting malnutrition.

The SRNMCON organized by Prof. Swarnalatha Guditi and Dr. Praveen Kumar Etta and their team will organize a successful annual conference at Hyderabad and I wish them all the best.

Title: Kidney Disease & Hyperkalemia: Integrated Diet-Drug Strategies

Dr Rajasekhara Chakravarthi
Senior Consultant Nephrologist,
Yashoda Hospitals, Hitec City, Hyderabad

Patients with Chronic Kidney Disease (CKD) are at significant risk of developing hyperkalemia.

This is due to

1) The decreased GFR leading to inability to excrete potassium. This is especially true in the later stages of CKD.

2) Medications Even in earlier stages of CKD the risk of hyperkalemia is increased with the use of medications which delay the progression of CKD, eg ACE i's, ARB's, Finrenone etc. which are now the standard of care for CKD patients.

3) Metabolic acidosis

4) Type IV RTA (diabetic CKD)

For a long time managing these patients was not easy as potassium correction in acute situations is usually done in the hospital setting.

In chronic hyperkalemia apart from prescribing no potassium diet many times the protecting drugs like ACE I's, ARB's and finrenone are discontinued making the CKD progression faster.

The only treatment in such situations was to use potassium binders commercially available (sodium and calcium salts). This has changed with two molecules becoming available in the recent years. Zirconium salts and Patiromer. Let us learn about these two molecules which are going to change the way we manage patients with hyperkalemia.

PLACES TO VISIST

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Chilkur Balaji Temple

Chowmahalla Palace

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SRNMCON 2026

SOCIETY OF RENAL NUTRITION AND METABOLISM
18TH & 19TH APRIL, HYDERABAD

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