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# Jnana Vahini

Monthly Newsletter - Gokula Education Foundation (Medical)

Volume - 16 | Issue - 8 | August - 2025

## Ramaiah University of Applied Sciences signs MoU with National Institute of Advanced Studies

In a historic collaboration, RUAS and NIAS, sign an MoU, for a joint Doctoral program, aligning the research thrust areas of, Social Sciences, National Security, Policy and Sustainability. NIAS PhD scholars will be registered and awarded their doctoral degree from MSRUAS.

Eminent faculty from NIAS will be adjunct faculty in various departments at RUAS to enhance the knowledge of students and enable seamless collaborations between the two organizations. The proximity to the Health Sciences campus of RUAS with NIAS, will ensure synergistic interactions for the researchers in areas of advanced health sciences research, partnerships in collaborative project proposals, utilization of resources at RUAS and a strong research partnership. The MoU, was signed by Prof. Kuldeep Kumar Raina, Vice Chancellor, RUAS, and Prof. Sailesh Nayak, Director, NIAS on 25th August, 2025.

Dr. Govind R Kadambi, Pro-Vice Chancellor, RUAS, S. Ashok Rao, Registrar, RUAS, Dr. Shalini C Nooyi, Principal & Dean, Ramaiah Medical College & Hospital, Dr. Dheepa Srinivasan, Dean, Research, RUAS, Dr. B S Nandakumar, Associate Dean- Research, RUAS and others were part of the programme.

RUAS, marks a significant milestone for RUAS researchers. Both leaders emphasized the complimentary capabilities and strengths of respective organizations, in ensuring impactful research outcomes towards a Vikshit Bharat.

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# From Collaboration to Community: Ramaiah's August Highlights

The month of August has been one of the remarkable achievements, meaningful collaborations, and inspiring milestones for Ramaiah University of Applied Sciences (RUAS) and Ramaiah Medical College.

The signing of the **MoU with the National Institute of Advanced Studies (NIAS)** stands as a historic step towards strengthening interdisciplinary research. This collaboration, anchored in social sciences, national security, sustainability, and advanced health sciences, reflects RUAS's commitment to research with national relevance. It is a vision aligned with Viksit Bharat and sets a new benchmark for institutional partnerships.

Equally inspiring are the strides in **academic and community engagement.** From celebrating **World Breastfeeding Week** with awareness camps at anganwadis to hosting India's first national conference on pediatric critical care nursing, our faculty and students continue to bridge the gap between knowledge and society. The remarkable scoliosis surgery performed by our orthopedic team exemplifies the life-changing impact of clinical excellence supported by multidisciplinary collaboration.

Our faculty and residents continue to bring laurels to the institution with national and international recognitions—whether in ophthalmology, endocrinology, obstetrics, anatomy, or anesthesiology. Each award and fellowship reinforces our culture of academic rigor and innovation. The **student-led startup HealAI,** emerging victorious at the National Bio-Entrepreneurship Competition 2025, is a proud reminder of what mentorship and entrepreneurial spirit can achieve when nurtured at RUAS.

The **Voluntary Body Donation Program,** a cornerstone of Ramaiah's legacy since 1998, also received renewed focus this month. It embodies selflessness and fuels transformative training and research, ensuring that the generosity of donors lives on in every future medical innovation and safe surgical procedure.

At the same time, our academic community has not shied away from addressing global health challenges, with thought-provoking contributions **on endocrine-disrupting chemicals** and their implications for public health. Such knowledge dissemination underscores RUAS's role in shaping both policy and practice.

As we celebrated **Independence Day 2025** with cultural vibrancy and unity, it became clear that our strength lies in our people—the faculty, students, staff, and the community we serve. With new colleagues joining and others moving on to new journeys, we are reminded that institutions thrive on continuity and change alike.

August has truly been a month of progress and pride. Let us carry this momentum forward, with renewed energy and commitment, towards creating knowledge, transforming care, and impacting society in meaningful ways.

The Department of Community Medicine, on World Breastfeeding Week, organized an awareness camp at the Anganwadi centers of the outreach areas in Rural and Urban PHC Mathikere, educating mothers about breastfeeding techniques and their benefits.

Dr. Ananth Bhandary, Prof. & HOD, Dept. of Ophthalmology received a gold medal from Bombay Ophthalmologist's Association for exemplary work in the field of Ophthalmology. He was also awarded at ISCKRS conference New Delhi for outstanding contribution in the field of Ophthalmology.

Dr. Jillela Saran, final year Post Graduate won the KP Srivastava Gold Medal for his presentation on the novel research of the association of the bony and ligament injuries of the ankle.

The Departments of Pediatrics, OBG and Nursing celebrated World Breastfeeding Week 2025 by organizing a program on 1st August 2025 at Ramaiah Medical College and Hospital.


As part of World Breastfeeding Week celebrations, the team from Ramaiah Medical College visited Anganwadi at J.K. Basavanna Nagar on 5th August, 2025. They conducted a program on breastfeed awareness and health education, reaching out to 30 mothers with valuable information and support.

The Department of Medical Education Unit, Ramaiah Medical College organized a workshop on Entrustable Professional Activities (EPA) on 7th August, 2025. The event was atteneded by medical colleges across Karnataka and RUAS including allied branches like dentistry, nursing, pharmacy, and physiotherapy.

India's First Annual National Conference on Pediatric Critical Care Nursing was organized on 1st to 3rd August, 2025. The chief guest for the programme was Dinesh Gundu Roa, Minister of Health and Family Welfare of GOK. Prof. K K Raina, Vice Chancellor, RUAS, Dr. Shalini C Nooyi, Principal & Dean, Ramaiah Medical College & Hospital, and others were present. The week long programme was filled with leading pediatric critical care experts and nursing leaders for an inspiring day of keynotes, debates and panel discussions.

Dr. Nandini. G, Prof. Dept. of OBG, reserved a certification in Cosmetic Gynecology conducted by Indian college of Cosmetic Gynecology.

Anti ragging week was inaugurated at RINER on 12th-18th August, 2025 as part of the UGC anti ragging policy to spread awareness amongst the students. Dr. Girish Chandra, Prof. Dept of Forensic Medicine, RMC, Prof. Usha, Ramaiah Law College and Inspector Girish from Sadashiv Nagar police station and others were part of the programme.

Dr. Lalitha K, Prof. Dept. of Community Medicine was invited as panelist to talk on health hazards and public health at "A Panel discussion on understanding Mercury" jointly organized by Christ University, Consumer voice, Foundation for sustainable Health India and WHO on 12th August, 2025.

Dr. Vinayak V Maka has achieved the Professional Certificate in Hospital Management from the Indian Institute of Management Bangalore.

The Medical Education Unit conducted DM/M.Ch training program on 5th August, 2025 in Ramaiah Medical College.

The department of General Surgery Ramaiah Medical College in collaboration with Zen hospital's Mumbai took part in live Surgeries of Dr. Roy Patankar and team on 3rd August, 2025. Wide range of surgeries and in-depth explanation of each step of the procedures executed in perfection.

Dr. Adarsh Shah 2nd year DM Endocrinology resident has won 1st prize for oral presentation for his original research on thyroid at ITSCON 2025 at Mumbai which is national conference of Indian Thyroid Society.


Dr. Pramila Kalra, Prof. & HOD has been elected as President Elect of Indian Thyroid Society which is national society of Thyroid disorders.

Ramaiah University of Applied Sciences celebrated Independence Day 2025. Prof. K K Raina, Vice Chancellor, RUAS, hoisted the flag. Students from various departments participated in cultural events.

Dr. Prasanna Kumar T, Prof. Dept. of Respiratory Medicine was invited as a guest speaker to deliver a talk on “Frontiers in Bronchoscopy” in a conference “SCOPES “ hosted by Department of General Medicine at Sri BGS Global institute of Medical Sciences on 18th August, 2025.

The department of OBG conducted a one day CME programme on ‘Endocrinological Aspects in Gynecology’ on 24th of August, 2025.

The program was attended by more than 100 delegates. Poster presentation competition was also organized which was attended by participants from various medical colleges. Dr. Shalini C Nooyi, Principal & Dean, Ramaiah Medical College & Hospital, Dr. Joythi, Prof. & HoD, Dept. of OBG, Dr. Manjula, Assoc, Prof, Dept. of OBG others were present during the programme.

Congratulations to the Doctors for being recognized as the Best Doctors South 2025 from the Outlook magazine.

(From L to R) Dr. Chandrakiran, Prof. & HoD, Dept. of ENT, Dr. Mahendra JV, Prof. & HOD, Dept. of Neurology and Dr. Shravan, pediatric orthopedics.

Dr. Ajoy SM from the Department of Orthopedics took over charge as the President of the Indian Foot and Ankle Society today.

Dr. Jyothi KC, Dr Anupama K and Dr Radhika PM won 3rd prize in Rangoli competition held on the occasion of Ganesha Chaturthi Celebrations at RUAS On August 28, 2025.

# Scoliosis Surgery Gives New Life to Young Boy

In a remarkable demonstration of medical expertise and teamwork, a complex scoliosis deformity correction surgery was successfully performed on a 15-year-old male patient diagnosed with dextroscoliosis and kyphosis – a condition marked by a rightward curvature of the spine.

The surgery took place on June 27, 2025, and was led by the experienced orthopaedic team of Dr. Ravikumar T.V, Dr. Mahesh, and their dedicated surgical staff. Providing crucial support during the procedure. The anaesthesia team was headed by Dr. Geetha, ensuring a safe and smooth perioperative course.

Scoliosis, especially in adolescent patients, can cause both physical discomfort and psychological distress. This corrective procedure aimed to restore spinal alignment, improve posture, and prevent further progression of the curve, all of which were successfully achieved.

The patient is now recovering well and is expected to regain full function in due course, with continued physiotherapy and follow-up care. This successful outcome highlights the collaborative strength of our hospital's surgical and anaesthesia departments in managing complex paediatric spine cases.


Dr. Janaki M G, Prof. Dept. of Radiation Oncology participated as a panelist in the management of locally advanced Breast Cancer organized by Global Health Academy, "Best of ASCO' (American Society of Clinical Oncology) on 24th August, 2025.

At the International Workshop titled "Delivering Digital Health Strategies: Ayushman Bharat Digital Mission (ABDM) & Ayushman Bharat Arogya Karnataka" at JSS Medical College, which was organized by the JSS Academy of Higher Education and Research (JSS AHER) on August 19th 2025 in partnership with the University of Wolverhampton, U.K., Dr. Nanda Kumar B S, Prof. of Community Medicine, Associate Dean, Research and Innovation, RUAS, was invited as a key speaker on emerging health technologies for health care delivery.

Dr. Shylaja D K, Assoc. Prof. Dept. of Anatomy was a Resource Person at rapid review “Perio Pratham” on 5th & 6th August, 2025 at Faculty of Dental Sciences, RUAS and also delivered a guest lecture on Trigeminal nerve & Facial artery.


Dr. Ashwini C A & Dr. Komala N were Resource Persons for Preconference Workshop “Integration of Technology in Anatomy Education” at SDM Medical College, Dharwad.


Dr. Ashwini C A, Prof. & HoD, Dept. of Anatomy, was felicitated for her contribution and services as EC Member, Treasurer and President (2024-25) towards Karnataka Chapter of Anatomists during the Silver jubilee function on 22nd August, 2025 at SDM Medical College, Dharwad.

Dr. Manjula NV, Assoc. Prof. Dept. of OBG, chaired a session on ‘Robotics in Gyne Onco Surgeries’ for the BSOG Aster Oncology Clinical Meet on 10th August, 2025, at Bengaluru.


Dr. Veena Vidya Shankar, received best presentation award under oral presentation category at KCACON 2025 on 23rd August, 2025 at SDM Medical College, Dharwad


Dr. Jyothi K C, received best presentation award under poster presentation category at KCACON 2025 on 23, August, 2025 at SDM Medical College, Dharwad.

Janeta M, received best Oral paper presentation award at KCACON 2025 on 23rd August, 2025 at SDM Medical College, Dharwad. She was guided by Dr. Anupama, Associate Professor, Anatomy Department.

Dr. Jyothi KC won third prize in Rangoli competition on the occasion of Independence Day at RUAS on August 14, 2025.

Dr. Jyothi KC, Dr Anupama K and Dr Radhika PM won 3rd prize in Rangoli competition held on the occasion of Ganesha Chaturthi Celebrations at RUAS On August 28, 2025.


Dr. Jyothi GS, Prof. & HOD, Dept. of OBG, was a speaker at the Asia Oceania Conference on Genital Infections and Neoplasia , AOGIN INDIA 2025, Jaipur on 30th August, 2025. She spoke on the topic - Gender Neutral HPV Vaccination: Greater Reductions in HPV Prevalence. She was also an Expert Panelist for OBGYN at the Vaxiquest Symposium and for the Lauch of Trivalent Influenza Vaccine in India, on 23rd August, 2025. She was a panelist at the Cutting edge International Conference for the session on - Prediction of Pre-eclamsia/FGR by Biomarkers and was one of the faculty for the Launch of the - Wheel of Wellness for Women of FIGO ( Federation of International Society of Obstetrics and Gynaecology). Dr. Jyothi was an external moderator for the case presentation, on the topic of Multiple pregnancy, at the EMock PG CME 2025 , at PSG Medical College, Coimbatore. Dr. Jyothi chaired a session for the BSOG Aster Oncology Clinical Meet 10th August, 2025, at Bengaluru.

The department of Anaesthesiology was actively involved in the Annual State Conference of Indian Society of Anaesthesiologists Karnataka State Chapter conducted in Mangalore from August 7th to 10th (KISACON 25). Dr. Geetha C R, Dr. Tejesh C A and Dr. Prapti Rath were invited faculty during the conference.

Dr. Shailaja Shetty, Senior Professor Dept. of Anatomy was honored with Memento & Certificate of Appreciation at SDM Medical College, Dharwad on the occasion of 25th year Silver Jubilee Celebrations of Karnataka Chapter of Anatomists Association for her exemplary leadership, dedicated service and commitment as an `Esteemed Office Bearer' and her valuable contribution towards the association as an Executive Committee Member (1999-2003), Joint Secretary (2004-2006) & Vice President (2007-2012). She was also a Resource Person at rapid review "Perio Pratham" on 5th & 6th August, 2025 at Faculty of Dental Sciences, RUAS and also delivered a Guest Lecture on Muscles of Mastication and Temporo Mandubular Joint.

Dr. Prapti Rath, Assoc. Prof. Dept. of Anaesthesia was an invited Faculty for Airway Workshop in ISACON KARNATAKA 2025 in Mangalore at K. S Hegde Medical Academy on 7th August 2025. She was also one of the Judges for Trainee Talent Session and Poster Presentation for Postgraduates.

The Centre for National Security Studies (CNSS) conducted a three-day National Security Programme for the young officers at the ASC Centre & College, New Domlur, on 26th August, 2025.

The programme delivered interactive lecture sessions and group discussions by experts from military, industry, academia and government sectors, informing young officers about India's national security architecture, and introduced the domains of non-traditional security threats, emerging security challenges, and the role of civilians in military sectors in building overall national preparedness.

Maj Gen JV Prasad, Director of CNSS highlighted the goal behind the formation of CNSS and introduced its four verticals.

# World Breastfeeding Week 2025 Calls for Collective Action and Sustainable Support

As Pamela. K. Wiggins, the IBCLC lactation counsellor quotes in her book, “Breastfeeding is a gift by the mother to herself, to her baby and to the Earth”. World health organization with the yearlong campaign on maternal and newborn health titled “Healthy beginnings, hopeful futures”, urges governments and the health community to ramp up efforts to end preventable maternal and newborn deaths and prioritize women’s longer-term health and well-being. World Breastfeeding Week(WBW), first celebrated in 1992, a year after World Alliance for Breastfeeding Action (WABA) was formed in response to the Innocenti Declaration of 1990, signed by WHO and UNICEF recognized breastfeeding as a fundamental right for infants and mothers, urging governments and stakeholders to act in four key areas:

1. Appointing nati1onal breastfeeding coordinators
2. Ensuring training for all health care workers
3. Implementing the International Code of Marketing of Breast-milk Substitutes
4. Enacting maternity protection laws in line with ILO standards

Every year from August 1st to 7th, the world comes together to celebrate WBW as a global campaign uniting healthcare workers, mothers, policymakers and civil society organizations.

The 2025 theme, "Prioritize Breastfeeding: Create Sustainable Support Systems," underscores two critical imperatives:

1. Recognizing breastfeeding as a public health and developmental priority
2. Ensuring that all women receive the long-term, reliable, and systemic support necessary to breastfeed successfully.

Colostrum, the first breastmilk produced after childbirth is rich in antibodies and acts as the infant’s first vaccine. Breast milk is uniquely tailored to meet a baby's needs and provides optimal nutrition for the first 6 months of life, with continued benefits up to 2 years. It provides essential nutrients, antibodies and protective factors for the infant's growth and development. It reduces the risk of infections like diarrhea, pneumonia and ear infections, but also protects against long term complications of type 2 diabetes, asthma and childhood obesity.

Breastfeeding has to be prioritized because it is far more than a feeding method. It is natural, requires no preparation, sustainability and is cost-effective requiring no packaging, manufacturing or transportation, making it eco-friendly. It is a health intervention that benefits not only the child but also the mother. Breastfeeding supports faster postpartum recovery, lowers the risk of postpartum hemorrhage, osteoporosis, breast and ovarian cancers in the mother. It also fosters emotional bonding through skin-to-skin contact and promotes mental well-being. WHO estimates that over 820,000 children under five could be saved annually if optimal breastfeeding practices were followed worldwide

The Baby-Friendly Hospital Initiative (BFHI) is a global effort by the WHO and UNICEF to promote and protect breastfeeding. Introduced in India in 1993 to implement the 10 steps to successful breastfeeding, it aims to create a healthcare environment that supports mothers in achieving their infant feeding goals. Our institution is BFHI accredited hospital.

While breastfeeding is natural, there are many challenges faced by mothers in terms of physical, emotional and structural barriers that prevent them from breastfeeding exclusively or for as long as recommended. To address these challenges, the focus must shift from placing the full responsibility on mothers to building strong, consistent and sustainable support systems that empower them. By training the healthcare workers in breastfeeding counseling and lactation management, ensuring Baby-Friendly Hospital Initiative (BFHI) standards being implemented and monitored and integrating breastfeeding support into antenatal, perinatal and postnatal care help in sustaining this support system to the mother-baby dyad. With proper support to the mother at home and at workplace

apart from hospital, breastfeeding promotes maternal confidence, well-being, and economic independence. It strengthens traditional knowledge and maternal care practices across generations. Employers should be encouraged to adopt family-friendly workplace policies to support breastfeeding mothers.

As we face growing challenges like urbanization, economic pressures, misinformation, and corporate interests, this theme reminds us that breastfeeding must not be left to chance or individual effort—it requires collective, institutional, and political commitment. To enable women to breastfeed safely and successfully, society must move beyond awareness to action.

As we celebrate World Breastfeeding Week 2025, let us move from intention to implementation.

Dr. Prarthana Karumbaiah K
Assoc, Prof. Department of Pediatrics

# Student's Startup from RUAS Selected for IIMB's NSRCEL & Wins NBEC 2025

HealAI (GVA Health), a student-led startup from RUAS co-founded by Aditya B. V. (Ramaiah Medical College), Gaurav Kumar (MSRIT), and Vishal Shetty (MSRIT), has won NBEC 2025, India's largest life sciences entrepreneurship competition, securing a cash prize of INR 2,00,000 at the grand finale on August 23, 2025.

Rising from a pool of 4,000+ startups from across the country, HealAI's proprietary machine learning-powered mobile app for monitoring diabetic foot ulcers stood out for its innovation and impact.

The winning idea began as project under the guidance of Dr Chitra S, Professor & HOD of Endocrinology, Dr Thippeswamy, faculty of Ramaiah Institute of Technology, Dr Sreekar Pai, Professor of General Surgery, Ramaiah Medical College and Dr Suyash Gupta, DM Endocrinology resident, Ramaiah Medical College. Additionally, they benefited from the support provided by Dr Shalini Chandrashekar Nooyi and her team at RMC, RUAS.

Translating a project into a viable business venture requires nurturing support, steady mentorship, and a guiding hand at every critical turn. A series of mentoring sessions was organized for HealAI by the Centre for Entrepreneurship (CFE) faculty including Dr Sonali Gupta and Dr Mueen Ahmed. The CFE team helped in refining their problem statement, strengthening their pitch, and improving their product. This sustained guidance empowered them to achieve remarkable milestones: emerging as runner-up at the Hult Prize Campus Finale, being recognized among the top student startups in India with incubation (Campus Founders Program) at NSRCEL, IIM Bangalore, and being selected for the MEITY TIDE grant at C-CAMP.

This victory underscores that the most impactful innovations arise when students address real-world problems around them and that collaboration across disciplines is essential to creating transformative solutions. HealAI's success stands as both an inspiration and a blueprint for nurturing the next generation of student entrepreneurs at RUAS.

# Endocrine Disrupting Chemicals: The Invisible Hormone Hijackers

**Hormones: The Body's Silent Regulators**

Human body run on a finely tuned system of hormones. Hormones are microscopic messengers, produced by glands such as the thyroid, pancreas, ovaries, and testes, control everything from growth and reproduction to metabolism, sleep, and mood. Even subtle disturbances in hormone signalling can have profound effects on health.

Due to urbanisation and industrialisation in the recent decades there is a new threat to this fine balance, they are called as Endocrine Disrupting Chemicals (EDCs).

**What Are Endocrine Disrupting Chemicals?**

EDCs are a diverse group of synthetic or naturally occurring compounds that alter hormone action. They may:

- Mimic hormones and "trick" the body into responding inappropriately.
- Block hormone receptors, preventing natural hormones from doing their job.
- Interfere with hormone production, transport, or breakdown, leading to imbalances.

Unlike classical toxins, EDCs may cause effects at very low doses, particularly during vulnerable windows of development—such as in the womb, early childhood, or puberty.

**Where Do They Come From?**

EDCs are not rare chemicals locked away in laboratories; they are present in our daily environment:

- Plastics: Bisphenol A (BPA) in bottles, phthalates in soft plastics.
- Pesticides and insecticides: Widely used in agriculture and household sprays.
- Cosmetics and personal care products: Parabens, synthetic fragrances, hair dyes.
- Household materials: Flame retardants in furniture, non-stick cookware, detergents.
- Food packaging: Cans lined with epoxy resins, plastic wraps.
- Industrial pollutants: Dioxins, polychlorinated biphenyls (PCBs).

Everyday habits—drinking from a disposable water bottle, reheating food in plastic containers, spraying a mosquito repellent—can become sources of exposure.

**Health Concerns Linked to EDCs**

Research shows chronic, low-level exposure to endocrine-disrupting chemicals (EDCs) may cause:

1. **Metabolic Disorders** – "Obesogens" that disrupt fat cells and insulin, raising risk of obesity, fatty liver, and type 2 diabetes.
2. **Reproductive Health** – Linked to declining sperm counts, infertility, menstrual issues, early puberty, and possibly PCOS.
3. **Thyroid Disorders** – Pesticides and flame retardants can impair thyroid hormone function.
4. **Cancers** – Possible links with hormone-sensitive cancers (breast, prostate, endometrial, thyroid).
5. **Neurodevelopment** – Prenatal exposure tied to reduced IQ, learning and behavioural problems, and early puberty.

**When to Test for EDCs?**

Routine testing isn't advised as assays are costly, hard to interpret, and safe reference levels aren't clear. Testing may be considered for:

1. **Occupational Exposure** – Workers in pesticide, plastic, chemical, or waste industries.
2. **Unexplained Disorders** – Early-onset obesity, metabolic syndrome, diabetes, infertility, or recurrent pregnancy loss.
3. **Children's Health** – Developmental delays, early puberty, or birth anomalies with suspected environmental links.
4. **Research/Public Health** – Large-scale monitoring (e.g., BPA, phthalates) to guide policy.

**How to reduce the impact?**

While avoiding EDCs completely is unrealistic, small choices can significantly reduce exposure:

- Use glass, ceramic, or stainless steel containers instead of plastic.
- Avoid microwaving or heating food in plastic.
- Choose fragrance-free and paraben-free personal care products.
- Prefer fresh food over canned and packaged items.
- Wash fruits and vegetables thoroughly to reduce pesticide residues.
- Ventilate rooms regularly to reduce indoor chemical buildup.

Endocrine disrupting chemicals are an invisible but significant threat to modern health. Their widespread presence, subtle effects, and potential to harm future generations make them an issue we cannot ignore. Through awareness, cautious choices, we can take meaningful steps to safeguard the health of ourself and our families.

Manjunath P R
Associate Professor
Department of Endocrinology

# Voluntary Body Donation Program – Remarkable Journey of Ramaiah Medical College

In today's era of rapid medical advancement, voluntary body donation is one of the most selfless and impactful contributions an individual can make. While organ donation saves lives immediately, body donation ensures the growth of medical education, surgical training and scientific research that will benefit generations to come.

Voluntary Body Donation program was initiated in 1998 at Ramaiah Medical College. At the time, medical colleges faced severe shortage of cadavers for teaching. Legally, according to the Karnataka Anatomy Act all unclaimed bodies were handed over only to the Government institutions. The current scenario, law mandates post-mortem for all unclaimed bodies, making them also unsuitable for preservation and teaching. However, the amendment of act allows the private medical colleges to procure bodies through voluntary body donation program.

Despite these challenges, the voluntary body donation program was launched by Ramaiah Medical College with robust institutional backing and widespread community goodwill has now steadily grown. Renowned persons such as Chief Justice of India Dr. Chandrasekhar and Kannada cine actor Mr Lokesh pledged their bodies, has contributed by lending visibility and credibility to the initiative.

Further, 'Abhinandana' an annual event to acknowledge the noble intention of donors was initiated in 2009. Beyond being a tribute, the program also serves as a community platform, featuring awareness talks on cardiovascular care, respiratory health, ENT and skin concerns, physiotherapy and rehabilitation.

Ramaiah records around 400 new registrations every year, with 30–35 pledges each month. Most

donors are between 50 and 85 years old, often after fulfilling their family responsibilities. Today, the program has over 7,000 registrations and continues to expand through word-of-mouth, awareness talks at senior citizens' forums, and outreach with groups like Rotary Club, Lions club and HAL.

To honour the generosity of donors, the institution provides tangible benefits: free annual health check-up, free basic investigations, concessions on advanced diagnostics, hospital admissions and treatments at Ramaiah Medical College Hospital. Donors receive a Voluntary Body Donation (VBD) card to avail these services.

The registration process is simple and open to anyone above 18 years. Donors fill a form, provide two witness signatures of relatives and submit passport sized photos. Each donor receives an ID card, an acknowledgment letter and a certificate of honour. Registration can be done before death by the donor or after death by family members, as the law considers them the custodians of the body. Free ambulance services for body transportation and temporary cold storage facility for 72 hours for body preservation at institution is being provided.

As body donation serves a higher purpose, Ramaiah Advanced Learning Centre uses soft-embalmed cadavers that allow greater flexibility, enabling realistic surgical training. Each year over 250 workshops are conducted for medical students, postgraduates, surgeons and external participants. Training covers areas ranging from orthopaedic and skull base surgeries to robotic-assisted techniques and dental implants. The body donation program also supports undergraduate, postgraduate and faculty research and medical device innovation.

Collaborations with institutions like the IITs have led to advancements in biomedical implants and surgical tools.

The strength and the sustainability of the program lies not just in its numbers, but in the dedicated efforts of multiple departments like Anatomy, Forensic Medicine, Medical Social Welfare; Casualty Medical officers, hospital Public representative officers and telephone operating staff.

While technology such as virtual dissection and 3D simulations continues to evolve, Anatomy faculty affirm that nothing can replace the tactile and three-dimensional understanding of anatomy gained through cadaveric dissection. For aspiring surgeons, this hands-on training is the foundation for safer and more effective patient care.

**A Donor's Words**

"Soul will find peace for having donated the body to the 'Temple of Research.' I am thankful to Ramaiah College for this seamless service." – A Donor

Voluntary body donation is a gift that transcends life. It is an act of generosity that drives medical progress, equips future doctors, and safeguards countless patients. Voluntary body donation program showcases, when science and society come together, the legacy of a donor continues to live on in every life that is healed.

- Ragi Saggere

Corporate Communications, GEF (M)

Ramaiah Institute of Nursing Education and Research organized a simulation workshop on Nasogastric Tube Insertion and Intravenous Cannulation on 11th August, 2025, as part of the academic requirements of the subject Nursing Education. The event aimed to enhance clinical competence by integrating theory with hands-on practice under expert guidance.


Ramaiah Medical College celebrated the birth anniversary of Dr. S.R. Ranganathan which is observed as National Librarians' Day on 12th August, 2025. The program was organized by the RMC Central library to honour Dr. Ranganathan's immense contribution to the world of information science and librarianship. The event was attended by Dr. Shalini C Nooyi, Principal & Dean Ramaiah Medical College & Hospital, Dr. B.S. Nandakumar, Associated Dean (Research), RUAS & Head, DRP, Ramaiah Medical College, Dr. Naik Shalini Ashok Associate Professor & Faculty In-charge of the Library, Yethiraju B.N Librarian & entire library staff, and students from various departments.

RINER students participated and won the 2nd prize in Ramaiah Ganeshotsav Rangoli Competition on 28th August, 2025 organized by NSS, RUAS.

Fifteen faculty members from Ramaiah Institute of Nursing Education and Research (RINER) participated in a Faculty Development Programme (FDP) on "MINDSHIFT-21ST Century Skill Development Educator's workshop" organized by Tagore Institute on 30th August 2025. The programme focused on strengthening teaching competencies through sessions on behavioral skills, communication skills, and problem-solving strategies.

The Department of Community Health Nursing, Ramaiah Institute of Nursing Education and Research (RINER) organized a two-day Workshop on Screening for Risk Factors of Common Non-Communicable Diseases (NCDs) on 28th and 29th August 2025 at the RINER Auditorium. The workshop aimed to strengthen the knowledge and skill competencies of nursing students in the early detection of NCD risk factors, integrating theory with practical application.

# Obesity and Appetite Regulation

Obesity refers to a chronic, relapsing progressive disease characterized by excessive adiposity which often impairs health underlying a multifaceted health condition influenced by hunger, appetite, and energy balance regulation. Positive energy balance is usually associated with abundance of food, low physical activity, and genetics or environmental factors resulting in excess deposition of energy stored as fat. Since obesity is a chronic disease and not just dependant on BMI, the terminology has changed to Adiposity Based Chronic Disease(ABCD). The management of obesity should follow the approach that is followed for any chronic disease, viz., we need to initiate interventions (medical nutrition therapy, lifestyle changes and behaviour modification) and keep titrating these with time in order to achieve our treatment goals. The following sections will deal with the appetite and energy regulation and how recent ICMR INDIAB findings shed light on the magnitude of the issue in India.

1. Mechanism of appetite regulation: Research has elucidated the central and peripheral mechanisms regulating hunger, appetite, and energy expenditure. When this balance is disrupted, fat begins to accumulate, and obesity ensues.

**Central mechanisms:**

The hypothalamus is critical to appetite and energy expenditure. This region coordinates with other areas of brain and receives inputs from the gastrointestinal tract, pancreas, liver, adipocytes/fat cells, and hormones regulating appetite and energy expenditure.

- The two main systems in hypothalamus regulating appetite include prohormone pro-opiomelanocortin (POMC), which suppresses appetite. The second system secretes neuropeptide Y (NPY) and Agouti-related protein (AgRP), which stimulate appetite. Mutations in the gene involved in these two systems can result in syndromic causes of obesity.
- Other signal includes: Cocaine and Amphetamine-regulated Transcript (CART), serotonin and Orexin A and B.
- Other factors like use of highly processed, sugary foods can interfere with the brain's reward systems acting at the hedonic centre, making us crave more highly palatable food. Ghrelin, a hormone produced by the gut, also increases the hedonistic drive to eat.
- Altered sleep wake cycle can disrupt the orexin signalling and promote an increase in appetite.

**Peripheral mechanisms:**

- Adipocytes: There are mainly two types of adipocytes: white and brown. White adipose tissue, usually found in subcutaneous tissue store excess glucose as triglycerides, a type of fat. Brown adipose tissue is important in energy expenditure as it is the main site of thermogenesis and promote energy expenditure by improving insulin sensitivity, cellular glucose consumption, and free fatty acid oxidation found in the supraclavicular region and upper trunk.
    - In obesity, excessive white adipose tissue gets accumulated in sites like liver, around the waist and heart and is termed as ectopic fat deposition which secretes inflammatory mediators triggering insulin resistance and putting the individual at a higher risk of developing cardiac-renal and metabolic complications like fatty liver disease.
    - There is also a third type of adipose tissue called the beige adipose tissue where white adipose tissue acquires certain properties which enable them to mediate the actions similar to brown adipose tissue resulting in increased energy expenditure. Physiologically, it is mediated by increased sympathetic stimulation, thyroid hormone, stress, and exercise. This transformation is a potential target for obesity pharmacotherapeutics
- Ghrelin, also called the "hunger hormone," rises before meals, prompting appetite.
- Leptin, a peptide hormone produced by adipocytes or fat cells, signals to the brain a state of energy storage indicative of satiety.

Leptin level is decreased in starvation, which increases appetite whereas in states of excess energy storage it increases satiety. However in obesity, this signal can become ineffective—a condition known as leptin resistance.

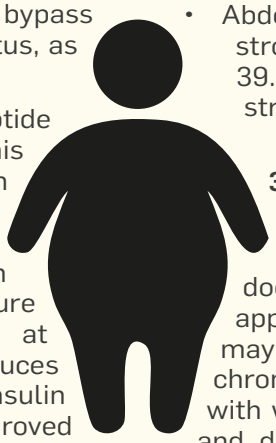
- Pancreatic hormones:
  - o Pancreatic polypeptide slows gastric emptying and suppresses appetite by inhibiting the hypothalamic neurons
  - o Amylin increases leptin and insulin sensitivity, slows gastric emptying, and suppresses glucagon production, a hormone involved in mediating insulin resistance.
- Incretins:

Glucagon-like peptide 1 (GLP-1): This hormone is secreted by intestine after direct contact with fat, protein, and glucose and neuronal input from the proximal intestine. GLP-1 has a variety of peripheral and central effects. This hormone promotes satiety by its action on hypothalamic nuclei. GLP-1 stimulates insulin release from the pancreas, slows gastric emptying, and suppresses glucose production by the liver and inhibits glucagon release, a hormone which promotes insulin resistance. Naturally secreted GLP-1 has a half-life of around 5 minutes, owing to rapid breakdown by an enzyme in the target tissues. GLP-1 agonists are novel therapeutic targets in treating diabetes and obesity. GLP-1 levels are lower in obesity, prediabetes, and diabetes. Improved glucose control has been observed in post-gastric bypass surgery patients with type 2 diabetes mellitus, as the procedure enhances GLP-1 levels.

Glucagon-dependent insulinotropic polypeptide (GIP): GIP is an incretin similar to GLP-1. This hormone is also secreted by the intestine in response to glucose and fat absorption and is also degraded by an enzyme in target tissue. GIP promotes triglyceride formation in adipose tissue, enhances energy expenditure and suppress appetite by acting at hypothalamus similar to GLP-1 and reduces insulin resistance and stimulates insulin secretion. Tirzepatide is an FDA-approved combined GLP-1-GIP medication indicated for glycaemic control in type 2 diabetes mellitus. One of the drug's secondary effects is weight reduction.

- Gut Microbiome

Gut microbiome's impact on weight regulation is nonetheless significant. Gut microflora metabolizes carbohydrates, proteins, and fatty acids. Research has shown an association between altered gut bacterial diversity leads to inflammation, insulin resistance and obesity



**2. The Numbers: What ICMR-INDIAB Reveals About Obesity in India**

**a. Metabolic Subtypes—Even 'Slim' Can Be Unhealthy**

A large national ICMR study involving over 113,000 adults found that:

- 43.3% are Metabolically Obese Non-Obese (MONO)—they may appear slim but suffer from high blood glucose, cholesterol, or blood pressure.
- 28.3% are Metabolically Obese Obese (MOO)—both visibly overweight and metabolically unhealthy.
- Only 26.6% are Metabolically Healthy Non-Obese (MHNO).
- A mere 1.8% are Metabolically Healthy Obese (MHO).

Thus, over 71% of Indian adults are metabolically unhealthy, regardless of appearance.

**b. Widespread Obesity: Generalized vs. Abdominal**

Another recent analysis reported:

- Generalized obesity affects 28.6% of adults (about 254 million people).
- Abdominal obesity—which often correlates more strongly with metabolic risks—is even higher at 39.5% (~351 million people). This correlates strongly with ectopic fat deposition enhancing insulin resistance.

**3. Why It Matters: Biology Over Weight**

These findings emphasize that excessive nutrition and lack of physical activity alone doesn't cause obesity. Factors affecting appetite regulation and energy expenditure may drive obesity as well. Sleep disorders and chronic psychosocial stress positively correlates with weight gain and increase the risk of obesity and diabetes. Sleep deprivation and poor sleep quality increase appetite by reducing leptin and upregulating ghrelin and orexin. High rates of abdominal fat, metabolic dysfunction, and silent conditions like prediabetes significantly heighten health risks—even in people who look healthy.

**4. Practical Tips for Better Appetite Regulation and Metabolic Health**

1. Eat wisely—not just less
2. Sleep more, stress less
3. Move your body consistently
4. Get regular health check-ups
5. Focus on early action for prediabetes

**Take-Home Message**

Obesity and appetite issues are rooted in complex biology. The latest ICMR-INDIAB numbers highlight how invisible yet widespread metabolic disturbances are in India—particularly among those who appear slim. Understanding appetite control is important to identify the risk factors, mitigate them and to prevent diabetes, heart disease, and more.

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The Sky is the Limit

Snap By - Dr. Girish Chandra YP