

# Child India

October  
2023



Monthly e-Newsletter of Indian Academy of Pediatrics



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## Editor's Note

Dear friends,

Wishes from Child India to all contestants of our annual IAP elections. We thank all our esteemed colleagues who have made it possible.

October is Domestic Violence Awareness Month (DVAM), and domestic violence continues to be a profound and pervasive social and public health crisis, crossing lines of class, race, ethnicity, and sexuality. According to the National Coalition Against Domestic Violence, one in three women and one in four men have been victims of physical violence by an intimate partner within their lifetime. The campaign theme, 2023 'Every1KnowsSome1', strives to highlight how common domestic violence is and that it is more than physical violence.



Every October, the world marks Down's Syndrome Awareness Month. This 31-day event celebrates each unique and individual person with Down's Syndrome and works to raise awareness - tackling stereotypes and myths surrounding the syndrome.

World Cerebral Palsy Day, celebrated every year on October 6th, is a global observance that shines a spotlight on cerebral palsy and its impact on individuals, families, and communities. The theme 2023 - "Together Stronger." - highlights the importance of unity, collaboration, and mutual support within the cerebral palsy community and beyond. It emphasizes that when individuals, families, caregivers, and communities come together, they become a powerful force for positive change and inclusion.

The theme of International Day of the Girl 2023, celebrated on October 11th, according to the UNICEF website is, "Invest in Girls' Rights: Our Leadership, Our Well-being." The theme focuses on taking action to work for girls' and women's rights and gain progress on gender equality.

World White Cane Day 2023 was celebrated on October 15th with the theme "Know the Courtesy Rules of Blindness" to create awareness about the courtesy rules of blindness and promote accessibility and inclusion for people with visual impairment in all aspects of life, including education, employment, and community participation.

This, the Oct issue of Child India focuses on various aspects of our President Dr Upendra Kinjuwadekar's Action Plan - Sankalp: Sampoorna Swathya' and felicitates Hidden Gems of North Zone.

Happy reading!

**Dr Jeelson C Unni**  
**Editor-in-Chief**

## President's Address

Dear IAPans,

Festive greetings from CIAP!

In this issue I shall draw your attention to 2023's flagship program-SSS i.e., Sankalp: Sampurna Swasthya.

It is a program by IAP to educate parents/teachers/children in schools across India to address common and pressing health issues. SSS complements and supports the existing education initiatives of the Government of India and State Governments by adding expert advice, screening and interventional capabilities at a local level.



### Why IAP

IAP is the apex child health organization that sets professional standards and general guidelines for the treatment and care of children in India. IAP's 43,922 member pediatricians treat over 100 million children and are present in all districts of India. IAP is the largest professional childcare network in the world.

### The Problem

Lifestyle disorders have reached epidemic proportions and are increasing at alarming rates in low and middle income countries like India. Most have their roots in childhood behaviors. Some pressing issues that need to be addressed for children are:

- Nutrition and reading food labels to reduce consumption of Junk food
- Mental health
- Converting screen time to green time
- Sleep
- Physical activity and exercise
- Substance abuse
- Pollution

### The SSS Solution

IAP has designed a standardized training program, along with screening/planning tools and use- anywhere education. The aim is not only to educate parents/teachers/children but also to give them practical tools to screen for common problems, readily access relevant information, and intervene appropriately.

Due to its history, mandate, commitment, expertise, size and reach, IAP is uniquely positioned to take the best of science to reach schools and children across India. The SSS training program will be conducted in schools all over the country by member pediatricians of IAP.

### The Approach

IAP wishes to work with education boards at the state and central levels to customize/localize the SSS program, execute pilot programs, and conduct the program for all their schools.

Please do visit [iapsss.org](http://iapsss.org) to know more about it

In this issue we will showcase some hidden gems from the North Zone. Please do read about various achievements of our own colleagues.

Happy reading!

**Dr Upendra Kinjawadekar**

National President 2023

Indian Academy of Pediatrics

## Secretary's Message

Dear Colleagues,

Greetings,

**"It takes two flints to make a fire."**

I am pleased to report that in the month of October, we have achieved remarkable milestones in our various projects and initiatives. We have successfully conducted several workshops, campaigns, and events to promote child health and development across the country. We have also strengthened our collaboration with other organizations and stakeholders to advance our common goals and vision.

4th Executive Board meeting was held on 03rd October, 2023 physically at Puri, Odisha. We have also conducted several meetings in the month of October via Video Conferencing too. Includes a meeting on IAP Ethics Committee Meeting which was conducted on 03rd October. Meeting of Core Faculty of PVAC were held on 05th, 14th, 16th and 25th of October. A meeting with Returning Officer was held on 12th October to discuss regarding the IAP Election.

HPV meetings were scheduled with different zones and the core trainers from 16th to 21st October.

Virtual events regarding "Know your Secretary" and "Know your President" candidate were planned on 23rd and 26th October respectively.

Along with this, Indian Academy of Pediatric conducted workshops on the following modules under the Presidential Action Plan 2023. 3 of Infectious Case Condrum (ICC); 1 of Comprehensive Nutrition Module (CNM); 2 of Hit the bull's Eye-Clinical Clues; 1 of Life Beyond Pediatrics (LBP); 7 of Saksham; 4 of "B4E & Beyond" and 6 of "Good Practices in Pediatrics"

Regarding the ECD, 08 workshops in the month of October 2023. This month total of 06 Basic NRP and 08 Advanced NRP provider courses have been successfully conducted.

On behalf of IAP, I urge you to organize various activities in the best interest of the health and welfare of the country's children.

Long Live IAP, Jai IAP,

Yours sincerely,

**Dr Vineet Saxena**

Hon. Secretary General 2022 & 23



## President's Engagements



Happy to share that IAP was invited by AAP at their annual conference in Washington DC on 21st October 2023, in the Global Child Health Symposia.

In the 30 minutes talk IAP's various initiatives and in particular NC ECD as well as SSS were discussed.

Global leaders including our own IPA President Dr Naveen Thacker were present on the occasion.

In the panel discussion which followed the lecture, the curiosity about IAP's initiatives was evident from the audience questions.

Kudos and salutations to all the past leaders and 44000 IAPans for the commitment and dedication.

## President's Engagements



At the inauguration function of CZ Pedicon at Varanasi on 28-10-23 - Dr Ashok Rai, Dr DM Gupta, Dr Alok Bharadwaj and the team under the leadership of Dr Piyali Bhattacharya organised an excellent academic feast.



On 29th October at the extremely enriching annual DAFPAL conference at LTMG Hospital Mumbai. Also seen in the picture are Dr Mohan Joshi, Dean, LTMGH, Dr Jayashree Mondkar, President, DAFPAL, Dr Yashwant Gabhale and Dr Alka Jadhav.

## President's Engagements



On 29-10-23 received the Arogya Dnyaneshwar award at the hands of senior IAPan Dr Anil Mokashi at Virar.



Conducted SSS workshop with Dr Vaibhavi Barot at Dalwai Trust's Goregaon English School on 11-10-23



## President's Engagements



For the SSS workshop alongwith Dr Rekha Harish, Dr Rajeev Seth, Dr Anurag Agarwal and Dr Alok Bhandari at ITL Public School, New Delhi on 10-10-23



Executive Board Meeting was held at Puri on 3rd June. IPP Dr Remesh Kumar was felicitated for the huge contribution to IAP over the last 30 years.

## President's Engagements



Glittering inauguration ceremony of Mahapedicon 2023 at Mumbai on 13-10-23 alongwith Dr GV Basavaraja, Dr Vineet Saxena, Dr Samir Dalwai, Dr Ramakant Patil, Dr Amol Pawar and MahaIAP President Elect Dr Ramgopal Chejara.  
Most well attended state conference of the year

## President's Engagements

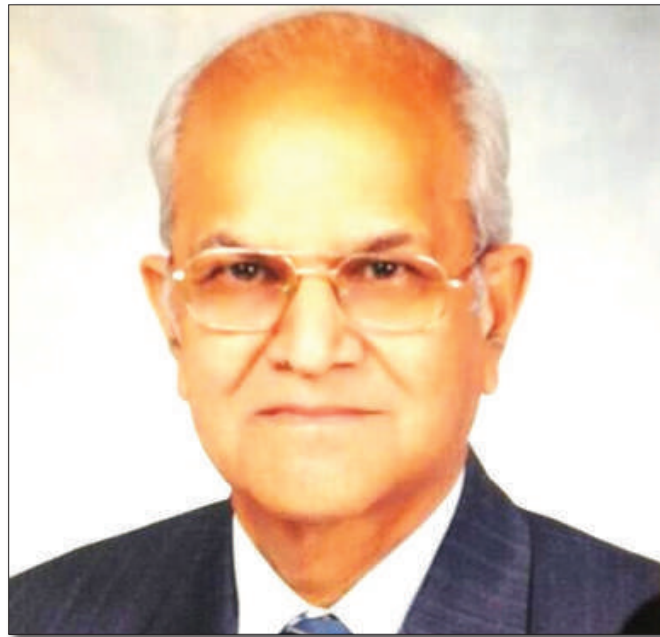


Adolescon 23 was a hugely successful conference held in the holy city of Amritsar. Dr Ajit Singh Chawla, Dr Sukanta Chatterjee, Dr RN Sharma, Dr Geeta Patil, Dr Manmeet Kaur and the team deserve a huge applause for the efforts.

## President's Engagements



At Karnataka Pedicon 2023

**President's Action Plan 2023****Hidden Gems - North Zone****Dr. O.N. Bhakoo**

**DR. O N BHAKOO**  
(MD Pediatrics AIIMS 1961)

- Ex –Prof. and Head of Pediatrics and Neonatology at PGI Chandigarh. (Retired in 1995) (62 years' experience). Had started Pediatrics in 1962 at PGI Chandigarh and Neonatology in 1970. Received training in Neonatology at Hammersmith Hospital London (1969-70) and at McMaster University Canada (1974-75). Worked as temporary advisor to WHO in 1978.
- Convened National neonatology Forum (NNF) in 1980 and was its President 1985-88. Started the first DM Neonatology Program in the country at PGI Chandigarh in 1989.
- Elected Fellow of IAP, National Academy of Medical Sciences and NNF.
- Member Scientific Advisory Committee. Of ICMR for Advanced center on Newborn Health Research at AIIMS New Delhi 2010 – 2015.
- Chairman Institute Ethics Committee of PGI Chandigarh 2011-2013.
- Life time achievement award in Neonatology of NNF 2012.
- K C Chaudhry Oration award of Indian Journal of Pediatrics in 2012.
- BNS Walia oration award of PGIMER Chandigarh 2017
- Award of appreciation for contribution in the field of Neonatal Jaundice by Stanford University, USA, Neo Designs India and AIIMS New Delhi 2018. Visiting Senior Consultant Max Hospital Mohali since 2012.

## President's Action Plan 2023

# Hidden Gems - North Zone

## Dr Ravinder Nath Salhan



### DR RAVINDER NATH SALHAN

MD, DCH, FIAP is a very senior paediatrician, graduate from the Rohtak Medical College, who served at Central Health Service, Govt of India from 1976-2009, in several distinguished positions; Medical Superintendent (MS) Safdarjung Hospital, New Delhi; OSD (DDG), Ministry of Health; MS RML Hospital, MS & Principal VMMC, Safdarjung Hospital; Addl Director General, Ministry of Health; Director, NEIGRIHMS, Shillong & Member Governing Body, PGI Chandigarh.

Post his retirement in 2009, he served as the Pro-Vice Chancellor SMU, and Dean, Manipal Institute of Medical Sciences, Gangtok, Sikkim, and later as the Vice President, National Board of Examinations(NBE), Delhi; Consultant Supreme Court Mandated committee of MCI, and Member Board of Governor, Medical Council India. He has been a member of many faculty selection committees; Member board of studies IGNOU.

His significant achievements included, playing a major role in establishment of VMMC, Safdarjung Hospital, Trauma centre at RML, Medical College at Shillong Meghalaya at Itenagar, Arunachal Pradesh. He has received WHO fellowships in India, and abroad; visited Asia, Europe, USA, and Consultant MCH project of SAARC. He served as the President of IAP Delhi, where he received life time achievement award. He was awarded Certificate of Advisor of Global Mental Health, at the World Psychiatric Congress, Melbourne, Australia.

#### Social & Charitable Work

Dr RN Salhan as Trustee of Chander Kanta Anand Foundation, established a Charitable clinic at Mukundpur Delhi at Mukadpur Delhi. He serves a large number of poor and needy patients from urban slum, free of cost, and helps in their comprehensive development of vulnerable children. As Chair of the Indian Child Abuse Neglect & Child Labour (ICANCL) group of IAP, he organised a very successful National conference at RML hospital Delhi on the theme "Care of the Village Child, which was attended by the Secretary Govt of India, officials and several dignitaries.

## President's Action Plan 2023

# Hidden Gems - North Zone

## Dr N K Jain



DR N K JAIN is the founder member of Gurugram chapter of IAP and had been the guiding force in its growth. Dr Jain is currently one of the senior patrons of the Gurugram branch.

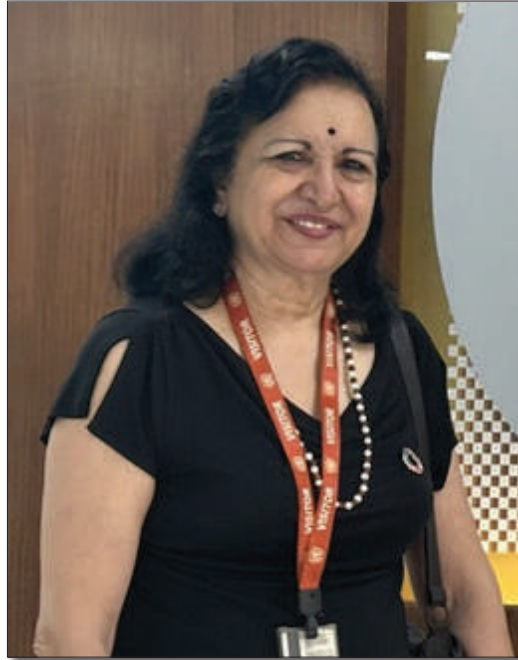
Dr NK Jain retired from the Haryana Civil Service (HCS) as its director general health services (DGHS)

His tireless and selfless helping spirit in helping and guiding every up is very uplifting at all IAP activities, he participates with great enthusiasm, which make him a very popular figure with everyone, the young and old alike.

## President's Action Plan 2023

# Hidden Gems - North Zone

## Dr. Indra Taneja



**DR. INDRA TANEJA** did her undergraduate degree from “Sophia College, Ajmer” and graduated with a MBBS degree from Lady Hardinge Medical Collage, New Delhi, India. She did her Pediatrics residency and Chief residency at University Hospital-Rutgers University, New Jersey Medical School and took over the attending position since 1978. For the first 17 years she was assigned as a “Pediatric Director for the Maternal-Infant Care Program” (MIC) at the New Jersey Medical School, UMDNJ. For the last 23 years she has been one of the key members of Primary care outpatient setting teaching and training medical students and residents.

Dr. Taneja’s clinical, educational, and research foci have always been centered on preventative care initiatives that promote equity in healthcare for children born into adverse socioeconomic or environmental circumstances.

During her 40 years of service at the University Hospital and the Rutgers University, she has been providing care for more than 40,000 children and adolescents. It is from working with such a diverse population -- socially, economically, and educationally -- that her earnest desire to address social issues and develop interventions to mitigate adverse influences in her clients’ life, has been fostered.

She has moved back to India since 2015 and is currently a Trustee of “Bal Umang Drishya Sanstha (BUDS)” NGO and a member of ICANCL & ISPCAN to serve on some specific social and health care issue affecting the adolescents and children with focus on neglect and abuse. Dr. Taneja visits regularly the schools in different villages of Mewat, Haryana to raise awareness to promote health and prevent diseases for young children and adolescents

Dr. Taneja is currently coordinating Health, Hygiene & Nutrition Program for BSPES (Bhagwati Sarla Paliwal Educational Society) in Jattari, Aligarh District UP to serve the needs of more than 900 under-privileged girls from neighborhood villages of Jattari.



## President's Action Plan 2023

### Hidden Gems - North Zone

#### Dr (Professor) Tulika Seth



Dr (Professor) TULIKA SETH is a Pediatric Haematology and Oncology expert at All India Institutes of Medical Sciences (AIIMS), New Delhi. She is a medical educator and has been teaching and training DM Hematology and PhD students at AIIMS, as well as guiding Pediatric students at AIIMS, New Delhi.

Community Based Research & National Cancer Control Program: She has taken the uncommon step of doing research in the community and has spearheaded many anti tobacco initiatives in Delhi slums and awareness in schools and colleges. Delhi in 1999 celebrated the first No Tobacco Day, under her leadership and she has been recognised by Rotary Club and government of Delhi for these activities. She has contributed to the national cancer control program. She was in charge of the AIIMS preventive oncology unit and performed important research and contributed to knowledge in this field. She has been working with several patient organisations - thalassemia, Sickle cell, hemophilia, ITP etc. to develop their advocacy and guide them in reaching their objectives and working on awareness and access to care through networking and regular meetings with patients and their families.

National Thalassemia and variant hemoglobinopathy guidelines & Working with Ministry of Tribal Affairs as Chair of committee to draft TOT material for Sickle Cell Anemia

Dr Tulika worked with other national experts and drafted the National Health mission 2016 National Thalassemia and variant hemoglobinopathy guidelines. She was selected by the Ministry of Tribal affairs as chairperson of committee to draft the training of trainers (TOT) material for sickle cell. She is examiner for clinical Hematology for national boards of examination and was governing body member for Delhi school of public health from 2020 till end of her tenure now.

Ethics Committee: She is active member of several ethics committees including stem cell ethics committee; she is member of rare disease committee for ICMR for research and therapeutics.

Academic Pediatric Haematology Research & Palliative Care: She is active in academics with more than 200 peer reviewed publications, 50 book chapters. She is a respected teacher and students are successfully leading hematology and bone marrow transplant centers nationally and internationally. She is on the board of a national hemophilia NGO based in Switzerland which oversees international projects for hemophilia and bleeding disorders. She is active in research and has many clinical projects and clinical trials to benefit hematology patients from all over the country. She is dedicated to her patients and providing comprehensive care including palliative care. She has constantly been working in the field to improve pediatric palliative care access and conducted workshops for last 20 years in this topic. She believes if we cannot cure we can always provide care.

**President's Action Plan 2023****Hidden Gems - North Zone****Dr Arun Wadhwa**

DR ARUN WADHWA finished MD Paediatrics from Safdarjung Hospital in 1988 and is a practicing Paediatrician in South Delhi since last 32 years.

**Social Work**

Along with his practice, he is the chief Patron of an NGO iCare. They run free camps on Sundays in the outskirt villages under the project 'Anemia Free Nation', doing health check-ups and distributing samples of iron and de-worming medication.

In academic field, he has been organizing weekly CME's every Thursday under the banner South Delhi Paediatric Study Group, non-stop since last eleven years. All this without taking up any official IAP post.

**Musical & Cultural Events**

Dr Wadhwa organized six musical events on a commercial scale, with South Delhi paediatricians as singers.

Even though not attached to a teaching hospital, he has numerous publications to his name in reputed journals. Regular faculty at IAP conferences and a member of ACVIP 2022-23.

## President's Action Plan 2023

# Hidden Gems - North Zone

## Dr Jagjit Singh Batra



### DR JAGJIT SINGH BATRA

Born in 1957 to a mother, an MA in English - teacher in a MCD school, and a father who was a Jawan with the Army Service Corps. Fought in the 1962 aggression at the NEFA border. Suffered from frostbite of his gums and lost all 32. Was discharged from the Army on medical grounds and served with the Ministry of External Affairs, till his retirement in 1987.

Two sons: elder one an Electrical Engineer from IIT Delhi. Younger one, a Paediatrician. Dad ruled! Dr Jagjit Singh Batra was Schooled at the FAPS, New Delhi. MBBS, MD (Paediatrics) from LLRM Medical College, Meerut. Practising at a private stand-alone Clinic for the past 39 years in Kalkaji, South Delhi.

Had a huge interest in Sports and Cultural Activities. Primary interest areas were High Jump and Short Sprints. Was the Athletics Captain at College. Also, a stage singer who worshipped Md Rafi Saab. Still do so. Have been formally learning Classical Hindi music from various Gurus for the past 8 years. Currently, from Fanish Pawar ji. Started formal learning late, at the age of 58 years. Now performing on stage shows, regularly. In Delhi and various cities of India, like Lucknow, Meerut, Mumbai and Pune.

Established the Sur Kilkari music group of Paediatricians of South Delhi in 2017. We have been presenting very successful shows at various Auditoriums of Delhi, every year, since then. At the first Peditalent contest held during Pedicon 2020 at Mumbai where singers were Paediatricians of all ages, from all over India; yours truly was awarded the first prize. The judges at this event were Sudesh Bhosle ji and Padma Wadkar ji (singer Suresh Wadkar's wife, and herself an accomplished singer).

Spouse is a graduate from IGMC, Nagpur. 2 daughters, both MBAs and married. Elder one's in Delhi married to a Pilot with Indigo. 2 sons. Younger one's with Google and hubby's with VISA Cards. Both in California.

1 son. Son is a B Tech, M Tech (Comp) from IIT, Delhi. PhD (Comp) from Berkeley and currently employed with United Health, based in California. Still single. Not for long. Waheguru Willing

## President's Action Plan 2023

# Hidden Gems - North Zone

## Dr Premalatha Krishnan



### DR PREMALATHA KRISHNAN, MD DCH PGDAP

#### Medical Social Work:

Run a weekly free clinic every Saturday at Arya Bal Kalyan Kendra, Bhim Nagar Gurgaon, since 1988. This area caters to small scale footpath vendors and other lower income groups. Along with some other volunteers we promote health education preventive education and lactation management; participated actively in pulse polio campaigns.

I work with another NGO "Khushboo Welfare Society" since 1995. This caters to children and adolescents with special needs. In 2006 four practitioners (including Me) and a psychologist formed a group "Samadhaan" to impart Life Skills education and Family Life education in schools and at our clinics to Teachers, parents and children/adolescents through workshops (purely voluntary). Also volunteers with Association of Adolescent and Childcare of India (AACCI).

During 1977 to 1984 I worked in remote areas in Himachal Pradesh and later Madhya Pradesh, taking care of families of defense personnel in their welfare centers

**Social Pediatrician:** In private consultant practice in Gurugram Haryana since 1988. Her consultant practice is primarily preventive and promotive as a grass root primary care provider. 30 to 40% of my practice consists of adolescents including Adolescent counseling, 30 to 40% are infants and children, with main emphasis on exclusive breast feeding, nutrition advice and health education. Parents of every child with diarrhea gets detailed instructions on how this episode should be the first and last.

#### Sports /Athletics

No longer athletically active after representing my college in inter collegiate sports events. Strongly advocates that spirituality and yoga should be incorporated into our daily interaction with our patients/parents

#### Education and Academic Achievements

MBBS- CMCH Vellore, Dec 1972, DCH (CMCH Vellore) --Oct 1976, MD-----From Madurai Medical College--March 1987, PGDAP -From Kerala University ----2013

Have been academically active in IAP Gurugram and presently one of the patrons of IAP Gurugram chapter.

Received lifetime achievement award of IAP Haryana in 2015

Scientific Chair of Adolescon 2010, Pedicon 2012, Harcon 2015, Neocon 2017 and Harcon 2021

I am a certified Infant Young Child Feeding (IYCF) consultant

I am a member of India Child Protection Medical Professional Network (ICPMPN)

## President's Action Plan 2023

# Hidden Gems - North Zone

**Dr D.N. Virmani**



**Dr D.N.Virmani** after PG in Pediatrics from Govt. Medical College Rohtak joined as Specialist in MCD in year 1975. Posted at SDN Hospital Shahdra, a populated area with poor & needy.

Life dedicated for medical social service to the poorest of the poor in Delhi

In year 1987 transferred to Kasturba Hospital, in the walled city of old Delhi, a populated area of poor & needy. Many of the children of this area were treated for GE, Pneumonia, Anemia, and Ricketts & TB. Became Head Department of Pediatrics (HOD) (Ped) with 50 bedded children ward & 30 bedded NICU. Superannuation in year 2009.

Working pro bono with charitable Medical center run by Arya Samaj D block Vikaspuri New Delhi. For daily 2 hours OPD for poor & needy children.

In year 2008, elected as Vice president IAP Delhi & in year 2010 as President.

In year Joint Secretary and Treasure Indian CANCL group of IAP.

He provides health care service on a regular basis within the schools of his region. He gives health talk & medical advice to school students from underprivileged back grounds.

## President's Action Plan 2023

### Hidden Gems - North Zone

#### Dr Uma Agrawal



#### DR UMA AGRAWAL

Dedicated her Life to Medical, Social and Community Services. Post retirement as HOD Pediatrics, Kasturba Gandhi Hospital, a 450-bed major Maternity & Children hospital under MCD, is working on the established a clinic for women and children in village HiranKudna, Delhi w.e.f. 1st July '03 catering to the health requirements of very poor, illiterate & also migratory population.

It gave me first hand experience of the problems regarding health needs & need for creating health awareness amongst masses. RCH training program for ANM/ LHV/ Dais, VCT (Voluntary testing for HIV after Counseling) & P.M.T.C.T (Prevention of Mother to Child Transmission) are now in routine at Kasturba Hospital.

Prior to Kasturba Gandhi Hospital, I have spent two decades as Pediatrician Incharge & DDO School Health Services West Zone M.C.D. This gave me an opportunity on one hand to enhance my administrative capabilities by controlling medical officers of various disciplines, public health nurse technicians & other staff. On the other hand it helped me to develop the sensitivity towards basic needs of a healthy mother & child. Inspired by my experience, an initiative of special school health program to involve not only school teachers but also parents were taken up by Delhi administration.

My unit also initiated prevention of blindness & primary vision check up by school children themselves after attending a seminar in AIIMS. So deep was my passion that Education TV made series of films named "Tai ki Chaupal" telecasted on national network to spread the message of child health through NCERT. Maintenance of environmental sanitation & proper segregation of bio medical waste & its management has become a routine with me.

Served as Secretary & Treasurer of Indian Child Abuse Neglect & Labour group, IAP. During that period membership rose significantly. Community Activities & Volunteer Experience for 25 years included associations with Dept. Of Social works, Delhi University, Member Consultative Committee Child Guidance Centre Department of Social Work, NCERT (Edu. TV), Involvements with NGO's like A.S.H.I., Samarth. Navjyoti, Prayas, Gramsewa trust. Life member of ASHI (Association of Social Health in India & Member Delhi State Core Group Quality Institutional Care & Alternative for Children, Delhi (Q.I.C.& A.C)

## President's Action Plan 2023

# Hidden Gems - North Zone

## Dr Praveen Khilani

### DR PRAVEEN KHILANI



#### Extra curricular activities

He is a musician, singer with own professional CD, plays Melodica, flute and congo drums. He has organized Group Vocal instrumental performances since college time and won various awards at intercollege festivals. He has organized musical performances by doctors for charities such as Mohan foundation spreading organ transplant awareness, and many more. For IMA IAP Musical programs he has been a top singing performer in many national events. For Delhi IAP in 2021 he organised "Swarsangam " a talent show by Pediatricians of all branches of Delhi IAP. In 2022 "Surkilkari" was actively organized by him for south Delhi IAP to promote healthy nutrition for children and discourage junk food.

#### Education and Academics

Dr Khilnani is pioneer in the field of pediatric intensive care, pulmonology, neonatal and pulmonary bronchoscopy. He graduated from MAMC, University of Delhi 1978. And obtained MD Anaesthesia AIIMS, New Delhi. He did he Pediatric residency training followed by a fellowship in Pediatric Critical Care, Cardia nd Neonatal intensive care from Harvard Medical School ( Massachuseets General Hospital & Boston Childrens Hospital). He has established many tertiary care centres in in USA, Dubai, India (Apollo, Max, BLK, Rainbow, Delhi and Medanta Medcity Hospital. He is US board certified in pediatics and Pediatric intensive care. He is the only Indian to receive the Master of Critical Care Medicine (MCCM) prestigious award by American College of Critical Care medicine.

He has been active member of "End of life" guidelines committee. He developed Basic paediatric intensive care course (BPICC) for IAP as well as PICU Protocols, neonatal and Paediatric mechanical ventilation workshop. He developed IAP guidelines for Paediatric intensive care 2002 later revised in 2020. He has been chairman IAP intensive care chapter and chancellor of College of pediatric intensive care running IAP fellowship in paediatric intensive care more than 60 institutes.

#### Social Work

He is active member of IAP CANCL group working against child abuse and exploitation.

**President's Action Plan 2023****Hidden Gems - North Zone****Dr Vinay Asawa****Dr. Vinay Asawa**

1. More than 70 letters to the editor in 'The Telegraph' raising political and social issues
2. Articles in many magazines
3. Prize in Puzzle Solving and Quiz Contest and Caption Contest
4. Prize in FM Radio
5. 2 Interactive Session in AIR
6. Drama and Elocution contest
7. Chess Winner in RG Kar Medical College contest
8. 3rd in swimming competition in Howrah Swimming Club
9. 10 medals in Marathon
10. 1st prize in Crossword solving in Times of India.



# Adolescent Nutrition

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Adolescence is one of the most rapid periods of growth, second only to infancy and adequate nutrition is the key determinant of health in this phase of life.

## Importance of optimal nutrition in adolescence

In adolescence, there is a gain of 15% of adult height and 50% of adult weight, a gain of 45% of adult skeletal mass and an increase in lean body mass in boys and an increase in fat deposition in girls. A poor dietary intake in adolescence results in delayed sexual maturation, decreased lean body mass and stature, decreased cognitive ability and poor school performance. Adolescent malnutrition; over and undernutrition and hidden hunger (micronutrient deficiencies) has deleterious effects on health over the entire life span. Gender discrimination, early marriage and pregnancy further compromise the nutritional status of adolescent girls. This in turn triggers the intergenerational cycle of malnutrition as the undernourished adolescent girl gives birth to an intrauterine growth restricted (IUGR) baby who is susceptible to increased morbidity and mortality throughout the life span.

In the last few decades, India has undergone a nutrition transition; there has been a decrease in consumption of traditional whole grain diet and an increase in intake of processed, refined ready to eat diet and a rise in sedentary activities like television and computer usage. Aggressive

advertising especially targeted at the youth has also resulted in an increased intake of junk food and beverages. With emergence of autonomy and independence in adolescence, the influence of family decreases and the dietary and physical activity patterns are determined to a large extent by peer attitudes and behavior and by media messages. Adolescents have a highly reactive limbic and reward system with an immature prefrontal cortex to control impulses. They get easily influenced by peers and social media influencers who claim to be health experts and exaggerate the unscientific benefits of a fad diet. Adolescents, who are in the process of forming their identity, may develop a sense of belonging to a group who follows a particular fad diet like veganism, keto or paleo diet. Habits formed in adolescence persist into adulthood. Unhealthy nutritional practices are one of the important contributors to the emerging epidemics of obesity, anemia, hypertension, hyperlipidemia, hypercholesterolemia, type 2 diabetes mellitus, eating disorders, caries and osteoporosis in the young.

Global disruptions including war, natural disasters, climate change and pandemics have worsened food insecurity in the world. Adolescents experiencing food insecurity have poorer diet quality, are less physically active, have poor physical and mental health, more school absences, and engage more frequently in substance use and high-risk sexual behavior.

These outcomes are associated with reduced educational attainment and productivity, leading to loss of human capital on a massive scale.

### **Nutritional status of Indian adolescents**

A Comprehensive National Nutrition Survey (CNNS) was conducted from 2016 to 2018 to assess the nutritional status, micronutrient deficiencies, dietary intake, risk of non-communicable diseases, physical activity levels and decision-making capacity of adolescents. The survey revealed that 4.5% of adolescents are overweight, 29% of boys and 19% of girls are undernourished, and 33% of girls and 25% of boys are short for age as a result of chronic malnutrition. Eighty-six percent of girls and 79% of boys have at least one micronutrient deficiency, with vitamin D deficiency being the most common in girls and folate deficiency being the most common in boys. Forty percent of adolescent girls and 18% of boys have anemia. Girls have poorer nutritional status compared to boys. Girls also have low autonomy in a patriarchal society, including decisions regarding food choices. Five percent of Indian adolescents have hypertension, 15% have high HbA1C and 30% have inadequate levels of HDL. The daily dietary patterns of the majority of Indian adolescents are inadequate. Only 45% of adolescents consume milk daily, 20% consume pulses and green leafy vegetables daily, and less than 10% consume fruits daily, while 30% consume fried food and 15% consume sweets on a weekly basis. Intake of energy-dense and processed foods peaks at 17 years of age. None of the adolescents met the daily recommendations for 60 minutes of physical activity with girls being more inactive than boys.

Research from India has revealed that 10-30% of adolescent girls and young female adults have disordered eating behaviour in the form of dieting and restrictive eating and body image issues range from 25 - 85%. This is seen more often among adolescents living in urban and slum areas and with higher socioeconomic status.

Disordered eating is associated with a desire for thinness, perfectionism, mood disorders, low self-esteem, high BMI, teasing by peers, media influence and poor family support. Body dissatisfaction is seen more commonly in girls than boys. Girls often aspire for thin figures while boys often aspire for muscular bodies. They often engage in skipping meals (especially breakfast), reducing portions, dietary restriction followed by binge eating, diet pill use, laxative abuse, and excessive exercise to attain their ideal body shape. Dissatisfaction with body image and disordered eating behavior are risk factors for eating disorders. Ketogenic (low-carbohydrate and higher in fat) diets have been used for the medical treatment of refractory epilepsy and gluten-free diets used for the medical management of celiac disease, but in recent years, these diets have been adopted as fads by adolescents and young adults for weight loss or detoxification/ 'cleansing' of the system. There has been a rise in popularity of fad diets like veganism, the Atkins™ diet, paleo, ketogenic diets, intermittent fasting, cabbage soup diet, the Zone™ diet, genetically modified diet, cauliflower diet, and alkaline diet for weight reduction, despite the absence of any supportive science.

### **Dietary recommendations for Indian Adolescents**

Recommended dietary allowances (RDAs) are the quantitative levels that meet the needs of nearly 98% of individuals in a particular life stage and sex group. Nutritional requirements in adolescence vary according to current weight, age, sex, pubertal stage and physical activity level. Current RDAs for Indian adolescent boys and girls along with recommended dietary portions are given in Tables 1 and 2. National Institute of Nutrition, Hyderabad in 2020 revised Dietary Guidelines for Indians. These guidelines recommend eating a variety of food from different food groups (figure 1), increasing the intake of fruits and vegetables, moderating the intake of edible oils, salt, ready to drink beverages, coffee, tea and processed foods and recommend

60 minutes of moderate physical activity for adolescents on a daily basis. Adolescents should follow the 'all diet approach' that emphasizes on overall eating patterns i.e eating should be at regular intervals, pleasurable, include food diversity and in moderation. This promotes a healthy relationship with food. Fad diets are not recommended in adolescence as they impair physical growth and development due to energy and nutrient deficit, these may foster eating disorders and result in social exclusion and withdrawal.

### Screening and Assessment of Nutritional Status in Adolescents

Nutritional status of adolescents should be assessed at every health care visit. Nutritional intake and concerns about body image form an important part of routine psychosocial screening using the HEEDSSS tool. Food frequency questionnaires, 24-hour dietary recall and food diaries can be used for a detailed dietary assessment. Physical activity levels, details of current or past weight control measures, food fads, body image issues, mental distress, peer and social media influencers and media usage should be evaluated. Family dietary practices and attitudes towards physical activity should be noted. Height, weight, BMI, waist circumference and blood pressure should be plotted on IAP growth charts. Anticipatory guidance regarding appropriate nutrition, physical activity, positive body image and media usage should be imparted. Parents should also be involved in this discussion. IAP guidelines on the fast and junk foods, sugar sweetened beverages, fruit juices and energy drinks should be shared with parents and adolescents. Obesity, hypertension, anemia, undernutrition, eating disorders, metabolic syndrome, non-alcoholic fatty liver disease or polycystic ovarian syndrome would require appropriate management. For management of nutritional disorders, pediatricians should be familiar with normal psychosocial development in adolescence, principles of motivational interviewing and counselling techniques of

effective goal setting and problem solving.

### Sports Nutrition

For competitive or professional athletes, the nutritional needs are best assessed by a registered dietitian or a sports medicine specialist. The needs will vary with age, sex, frequency, duration and training intensity, type of sport and physical activity level index, metabolic equivalents and basal metabolic rate.

It is recommended that all adolescents participating in sports should eat a nutrient dense diverse colourful thali/diet (Figure 1), enjoy regular joyful intuitive mindful meal and snack times, avoid JUNCS, skipping meals, overeating and fuel up and hydrate well before, during and after the physical activity session.

Two- three hours before a exercise session, a high carbohydrate, moderate protein, low fat and fiber is recommended with a snack, an hour prior (curds, nuts, fruits, cheese, smoothie, sprouts, milk). For an exercise session lasting more than an hour, healthy snacks are recommended every 1-2 hours. Post exercise, for recovery of muscle glycogen stores, a healthy snack is advised within 30 minutes, followed by a full meal after 2-3 hours. Adequate hydration is required to avoid exercise related heat injuries like heat cramps, exhaustion and heat stroke in adolescents. For a training session less than an hour water is the best replacement for fluid losses. Sports drink with glucose, electrolytes and water are recommended for sessions over 1hour. Energy drinks which are usually caffeinated with high glucose loads and sweetened fruit juices are not recommended as they cause spikes in blood glucose and may cause tachycardia and tremors due to the caffeine content.

A nutrient supplement is considered only if there is a micronutrient deficiency, amenorrhea, food insecurity, veganism or occurrence of multiple food allergies. Ergogenic aids are not recommended routinely. World antidoping agency has stringent rules and

substances like anabolic steroids, peptide hormones, erythropoietin, corticosteroids and diphenhydramine are banned.

Relative energy deficiency in sports (RED-S), previously called female athlete triad, is caused by low energy availability due to inadequate nutritional intake according to age, sex and level of physical activity. It seen in both male and female sportspersons. It presents with a decline in sports performance, amenorrhea in females, disordered eating and osteopenia (low BMD). It affects cognitive, gastrointestinal, skeletal, metabolic and endocrinal systems. Management is usually by a multidisciplinary team comprising of sports physicians, dieticians, psychologists, psychiatrists, orthopedic surgeons and endocrinologists with focus on restoring energy balance and treating presenting complaints.

### National Nutrition Programs

Anemia Mukht Bharat Program under National Nutrition Mission (POSHAN Abhiyan) aims to eliminate adolescent anemia. The Weekly Iron and Folic Acid Supplementation (WIFS) program includes supervised intake of weekly iron (100 mg) and folic acid (500 µg) tablets to all adolescents in school and in Anganwadis (for out-of school adolescents), biannual intake of albendazole tablet (400 mg), screening for anemia and referral for treatment and information and counseling regarding dietary intake, hygiene, and prevention of worm infestation.

Under the Mid Day Meal scheme, adolescents studying in government schools are provided with one third of their daily caloric and protein requirement on 200 working days in an year

Rashtriya Kishor Swasthya Karyakaram (RKSK) launched by Government of India in 2014, aims at reducing adolescent malnutrition and anemia by promoting consumption of locally available nutritious balanced diet, encouraging personal hygiene, food sanitation, imparting nutrition education in the community, reducing

gender discrimination, providing food and nutrient supplementation, food fortification and detecting and managing nutritional deficiencies. Most of the community and school-based nutrition education program is delivered through peer educators.

All stakeholders including government, community leaders, educational institutions, health care professionals, parents and adolescents themselves have a major role to play in ensuring appropriate adolescent nutrition at all levels of health care. Framing and implementing multicomponent programs in collaboration with all stakeholders, both at the global and national level are essential for improving the nutritional status of adolescents. Adequate nutrition paves the way to a healthy adolescent, productive adult and a prosperous nation!

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## Table 1 Recommended Dietary Allowances

### A2. Summary of Recommended Dietary Allowances (RDA) of Nutrients for Indians

Age Group	Category of work	Body Wt (kg)	Protein (g/d)	Dietary Fibre* (g/d)	Calcium (mg/d)	Magnesium (mg/d)	Iron (mg/d)	Zinc (mg/d)	Iodine (µg/d)	Thiamine (mg/d)	Riboflavin (mg/d)	Niacin (mg/d)	Vit B6 (mg/d)	Folate (µg/d)	Vit B12 (µg/d)	Vit C (mg/d)	Vit A (µg/d)	Vit D (IU/d)	
Men	Sedentary	65	54.0	0.83	30	1000	440	19	17	140	1.4	2.0	14	300	2.2	80	1000	600	
	Moderate				40						1.8	2.5	18						2.4
	Heavy				50						2.3	3.2	23						3.1
Women	Sedentary	55	46.0	0.83	25	1000	370	29	13.2	140	1.4	1.9	11	220	2.2	65	840	600	
	Moderate				30						1.7	2.4	14						1.9
	Heavy				40						2.2	3.1	18						2.4
Pregnant women**	55 + 10 GWG	55.5	0.83 (2 <sup>nd</sup> trimester, addl. 9.5g/day)	-	1000	440	27	14.5	220	2.0	2.7	13	2.3	570	2.45	80	900	600	
		68.0	0.83 (3 <sup>rd</sup> trimester, addl. 22g/day)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lactation 0-6m	55	63.0	0.83 (addl. 17g/day)	-	1200	400	23	14.1	280	2.1	3.0	16	2.16	330	3.2	115	950	600	
		59.0	0.83 (addl. 13g/day)	-	-	-	-	-	-	-	2.9	-	2.07	-	-	-	-	-	
Infants	0-6 m*	5.8	8.0	1.40	-	300	30	-	-	100	0.2	0.4	2	0.1	25	1.2	20	350	400
	6-12m	8.5	10.5	1.23	-	300	75	3	2.5	130	0.4	0.6	5	0.6	85	1.2	30	350	400
Children	1-3y	12.9	12.5	0.97	15	500	90	8	3.3	90	0.7	1.1	7	0.9	120	1.2	30	390	600
	4-6y	18.3	16.0	0.87	20	550	125	11	4.5	90	0.9	1.3	9	1.2	135	2.2	35	510	600
	7-9y	25.1	23.0	0.92	26	650	175	15	5.9	90	1.1	1.6	11	1.5	170	2.2	45	630	600
Boys	10-12y	34.9	32.0	0.91	33	850	240	16	8.5	100	1.5	2.1	15	2.0	220	2.2	55	770	600
Girls	10-12y	36.4	33.0	0.90	30	850	250	28	8.5	100	1.4	1.9	14	1.9	225	2.2	50	790	600
Boys	13-15y	50.5	45.0	0.89	43	1000	345	22	14.3	140	1.9	2.7	19	2.6	285	2.2	70	930	600
Girls	13-15y	49.6	43.0	0.87	36	1000	340	30	12.8	140	1.6	2.2	16	2.2	245	2.2	65	890	600
Boys	16-18y	64.4	55.0	0.86	50	1050	440	26	17.6	140	2.2	3.1	22	3.0	340	2.2	85	1000	600
Girls	16-18y	55.7	46.0	0.83	38	1050	380	52	14.2	140	1.7	2.3	17	2.3	270	2.2	70	860	600

\* Adequate Intake (AI)

Note: For adequate intake of Biotin and Pantothenic acid, refer to the text on summary of recommendations.

Protein requirement: additional 9.5g and 22.0g during 2nd and 3rd trimester for pregnant women, and 17.0g & 13.0g for lactating women respectively.

\*\* Additional requirement of protein is for 10kg gestational weight gain (GWG)

## Table 2 Estimated Average Requirements

### A7. Suggested food groups for a balanced diet to meet the EAR of different nutrients

Age group	Category of work	Body wt	Cereals/Millet (g)**	^Pulses & Beans (g)	GLV (g)	Vegetables (g)	Roots & Tubers (g)	Fruits (g)	Nuts (g)	Milk (ml)	Fats & oils (g)	Energy (kcal) obtained from these food groups	Crude protein (g) Obtained from these food groups
Men	Sedentary	65	260	85	100	200	100	100	40	300	30	~2080	72
	Moderate		370	120	100	200	100	100	45	300	40	~2680	90
Women	Sedentary	55	190	60	100	200	100	100	30	300	25	~1660	57
	Moderate		270	90	100	200	100	100	40	300	30	~2125	72
Pregnant women		55+10	220	75	150	200	100	150	40	400	30	~2020	72
Lactating women	0-6m		260	85	150	200	100	150	40	400	35	~2245	77
	7-12m		250	85	150	200	100	150	40	400	35	~2200	78
Infants	0-6m	5.8	Exclusive breastfeeding										
	7-12m	8.5	25	12	20	25	20	50	7	*milk	10		
Children	1-3yrs	12.9	100	50	50	100	50	50	10	350	20	~1110	38
	4-6yrs	18.3	160	60	50	100	50	75	15	350	20	~1370	46
	7-9yrs	25.3	200	65	100	150	100	100	20	400	25	~1710	59
Boys	10-12yrs	34.9	280	90	100	200	100	100	30	400	35	~2230	76
Girls	10-12yrs	36.4	250	85	100	200	100	100	30	400	30	~2060	70
Boys	13-15yrs	50.5	390	130	100	200	100	100	40	400	45	~2860	95
Girls	13-15yrs	49.8	300	100	100	200	100	100	35	400	40	~2410	81
Boys	16-18yrs	64.4	450	150	100	200	100	150	50	400	55	~3300	107
Girls	16-18yrs	55.7	315	105	100	200	100	150	40	400	40	~2490	85
Elderly	>60yrs	Man	170	75	100	200	100	150	30	400	25	~1740	62
		Woman	140	70	100	200	100	150	30	400	15	~1530	56

\*\* 20% to 30% of Cereals (weight in raw) should be from millets for adults. 20% of cereals (raw weight) should be from millets for children up to 10 years of age.

^ For non-vegetarians, 30g of pulses may be substituted with meat.

\* Continue breast milk, which is roughly 580ml per day.

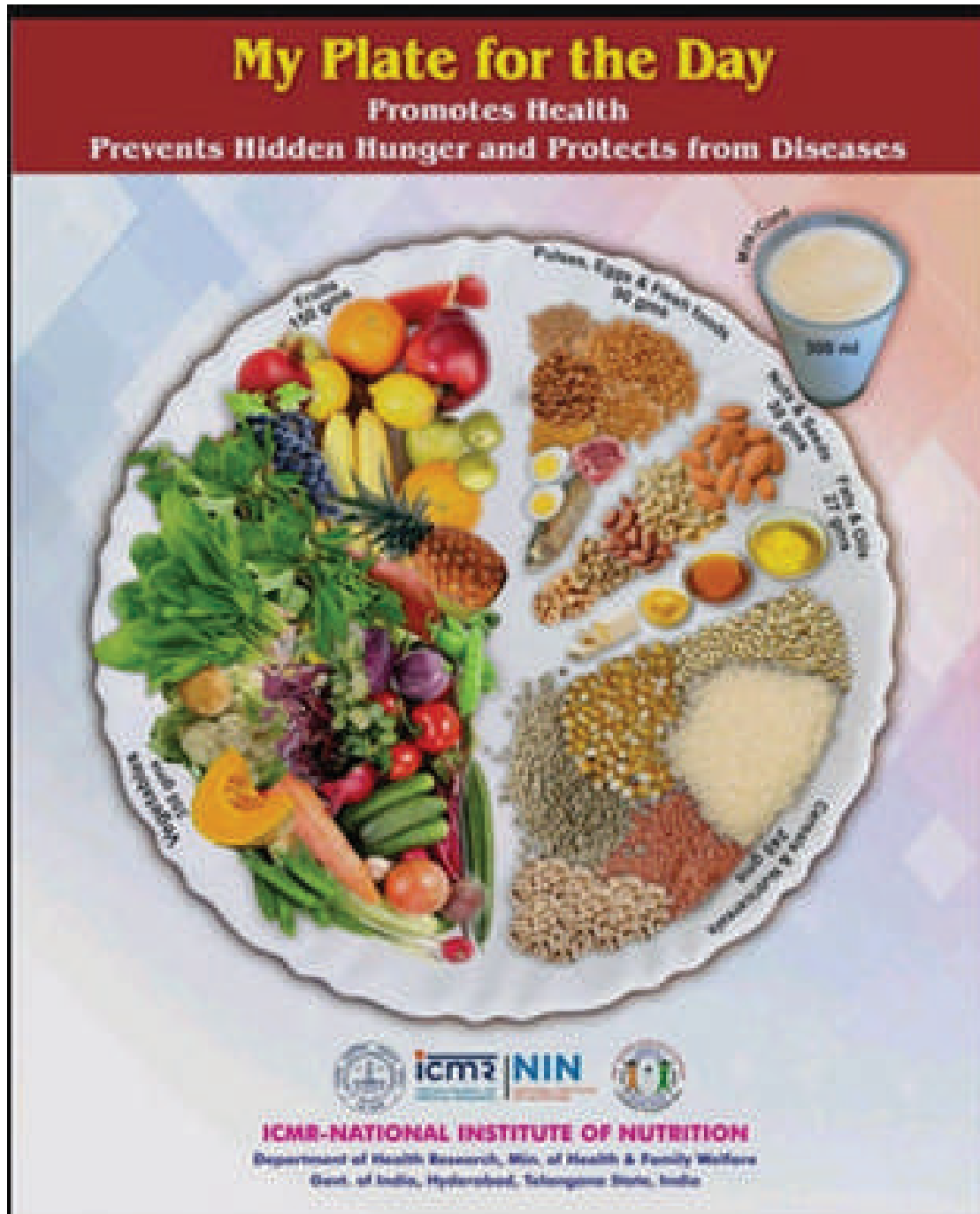
• Sugar should be less than 5% of the total energy requirements.

• No added sugar for children <2 years old.

• These suggested food groups are for children who are growing normally and for adults with normal BMI (18.5 to 23).

• The suggested diets provide <55% energy from carbohydrates and around 30% energy from total fats.

Figure 1 My Plate for the Day



## Health Promoting Schools



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### Introduction

Health Promoting Schools (HPS) is an approach that integrates health into a school's policies, culture, and activities. It promotes a holistic environment where students learn about and practise healthy behaviours. HPS is vital in enhancing students' well-being, reducing health disparities, and creating a foundation for a healthier, more successful life.

### Evolution of HPS

The concept of Health Promoting Schools (HPS) have evolved from the 1986 Ottawa Charter, which recognized the need for schools to address health issues. The World Health Organization (WHO) outlined key HPS components, including curriculum enhancement, a supportive environment, community involvement, and student participation. HPS have a substantial impact on students' health by fostering healthy habits, reducing risky behaviours, and improving physical and mental well-being. They also empower students to make informed health choices, creating a foundation for lifelong health, and contribute to reduced health inequalities and improved overall academic performance. HPS represents a holistic approach to education,

emphasising the interconnection between health and learning.

HPS emerged as a global strategy to improve children's health due to the recognition of the critical role schools play in shaping a child's well-being. It addresses the need for a comprehensive approach to health education, ensuring that schools become environments that support, educate, and nurture the health of students on a worldwide scale.

### Key components of HPS

The key components (as defined by the World Health Organization (WHO), are:

1. Health Education: Incorporating health into the curriculum to educate students on healthy behaviours.
2. A Supportive Environment: Creating a school environment that fosters physical, emotional, and social well-being.
3. Community Involvement: Engaging with the community to enhance students' health and well-being.

4. **Student Participation:** Encouraging active involvement of students in decision-making processes related to their health and the school environment.

### Key strategies

**1. Healthy School Policies:** Health-focused policies in schools establish guidelines and standards for promoting students' well-being. These policies shape the school environment, curriculum, and activities to prioritise health education, nutrition, physical activity, and mental health support. Their impact includes improved health outcomes, reduced risk behaviours, and enhanced overall well-being among students.

**2. Health Education:** Comprehensive health education in schools is crucial as it equips students with the knowledge and skills to make informed, healthy choices. Nutrition education promotes balanced diets, reducing obesity and related health issues. Physical activity education encourages active lifestyles, reducing sedentary behaviours. Educating students about responsible use of screen media helps prevent digital addiction and related health issues like sleep disruption and poor posture. Teaching good sleep hygiene fosters improved cognitive function, mental health, and overall well-being. Mental health education destigmatizes mental health issues, providing coping strategies. Awareness about environmental health encourages responsible behaviour and reduces exposure to pollutants. Education on addiction prevention equips students to make informed choices, minimising the risk of substance abuse or other addictive behaviours. Including these topics in health education ensures students are well-prepared to lead healthier lives. This holistic approach fosters lifelong well-being.

**3. Healthy School Environment:** Creating a health-promoting physical and psychosocial environment in schools is essential. It not only ensures the safety and well-being of students but also contributes to their overall academic

performance, mental health, and physical development. Such an environment supports healthy habits and fosters a conducive atmosphere for learning and personal growth.

**4. Partnerships:** Collaboration with healthcare agencies, governments, and local communities is instrumental in implementing Health Promoting Schools programs. Healthcare agencies provide expertise and resources, governments set policies and standards, and local communities offer support and engagement. Together, they create a holistic approach that enhances students' well-being and fosters a culture of health and education in schools. This collaboration ensures the success and sustainability of Health Promoting Schools initiatives.

**5. Student Participation:** Involving students in decision-making and health promotion activities within Health Promoting Schools empowers them as active participants in their own well-being. It fosters a sense of ownership, responsibility, and engagement, ensuring that health initiatives are student-centric, relevant, and more likely to succeed. It also nurtures leadership skills and a lifelong commitment to health.

### Global Implementation of Health Promoting Schools

**Europe:** Several European countries have successfully implemented Health Promoting Schools programs in collaboration with the European Network of Health Promoting Schools (ENHPS). For instance, in Finland, the "Healthy School" program promotes comprehensive health education, mental well-being, and a supportive school environment. In Ireland, the "Health Promoting School" initiative emphasises physical activity, healthy eating, and student involvement. These programs align with ENHPS guidelines, fostering a culture of health and well-being in European schools.



**North American Region:** In the United States, initiatives like the “Whole School, Whole Community, Whole Child” model, jointly developed by the CDC and ASCD, promote Health Promoting Schools. It integrates health into every aspect of a child’s educational experience. In Canada, the “Comprehensive School Health” approach is widely adopted. This approach is supported by the Public Health Agency of Canada and encompasses a range of activities to enhance the physical, emotional, and social well-being of students. These initiatives prioritise health education, physical activity, mental well-being, and community engagement, reflecting research-backed strategies for health-promoting schools.

**African Region:** Health Promoting Schools have made positive strides in addressing health challenges among African students. In Kenya, the “School Health Policy” has improved health education, sanitation, and access to healthcare. Ghana’s “Healthy School Concept” focuses on nutrition and disease prevention. These initiatives have shown improvements in student health and well-being, though challenges like limited resources persist.

**Asia:** China has embraced the Health Promoting Schools model, integrating it into the national education system with government backing. India, through the National Health Policy 2017, emphasises school health programs, and the School Health Programme of Government of India, under AYUSHMAN BHARAT, is a joint collaborative programme between the ministries of Health and of Human Resource & Development, targets both Education and Health implementers and is envisaged to facilitate an integrated approach to health programming and more effective learning at the school level. On 12 October, 2021, at Delhi, World Health Organization (WHO), along with several specialised agencies of the United Nations viz., United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Children’s Fund (UNICEF), United Nations Population Fund (UNFPA) and World Food

Programme (WFP), gave a call for action for “Making every school a health promoting school: Scaling up implementation of comprehensive school health programs for promoting health and well-being of students and staff.” India is also a signatory to the same Japan, while not directly adopting the HPS model, focuses on well-being education and integrates health topics into the curriculum.

Measuring the Impact of Health Promoting Schools: Broadly, the impact can be measured in terms of (a) Health Outcomes, and (b) Social and Economic Benefits. HPS can have a positive impact on various health outcomes, including reduced obesity rates, improved mental health, and enhanced academic performance. HPS can lead to broader societal and economic benefits, such as reduced healthcare costs and a more productive workforce.

### Integration into Education Systems

Integrating Health Promoting Schools into national education systems enhances scalability. When endorsed by governments, it becomes a standardised approach, reaching a wider student population. This approach ensures uniformity and sustainability, allowing for comprehensive health promotion across diverse schools and regions.

### Role of IAP

The Government of India rightly recognises that quality education and better health remains the task of not only the government, but of all stakeholders, to jointly engaged to bring about an improvement of the overall situation of health and well being of the students. The Indian Academy of Pediatrics (IAP) having been at the forefront in all issues concerning health and well-being of children in India since more than half a century, has launched its school-based initiative named Sankalp: Sampoorna Swasthya (SSS) as its flagship program, with several innovative approaches to HPS, including the use of technology and new pedagogical methods. The

Non-Communicable Disease Prevention Academy (NCDPA) chapter of IAP has developed the “Child Friendly School” initiative as the HPS program of IAP. It is a standards-driven school health program and system for accreditation of schools in India, the statement of 10 commandments of which was endorsed by the Executive Board of Indian Academy of Pediatrics (IAP) in its meeting on 19-20 March, 2022, with the conviction that it will be help to provide quality education and to ensure the safety and wellbeing of each child exposed to the school environment, and it was envisaged that the proposal document of NCDPA may become a role model in the formation of standards norms for the HPS initiative. The 10 commandments (abridged) of the program are-

1. Healthy Lifestyle awareness sessions targeted at primary prevention of behavioural risk factors skills, to be run every 3 months.
2. Annual BMI recording, serial tracking and referral if required.
3. Physical activity daily 30-45 minutes and for two minutes in between the classes.
4. Traffic light system based availability of foods in canteen.
5. Food should never be a part of reward or punishment.
6. Weight of the school bag should always be <math><1/10</math>th of the weight of the child.
7. A peer-based school squad should exist and be available for all students alike.
8. At least one teacher trained and certified Basic Life Support (BLS) provider.
9. At least one teacher trained in screening for learning disorders (LD), and one counsellor.
10. A safe and secure environment for all students

## Conclusion

Worldwide, and more so in south east Asia, execution challenges persist for HPS systems, including resource limitations, varying levels of commitment among schools, and cultural differences. Each country faces unique implementation hurdles, such as overcrowded classrooms in India, but they recognize the significance of fostering student well-being in a holistic manner. With the world moving towards the HPS system due to the immense benefits that it brings, no country or community can afford to be left behind. With India having made its firm commitment for the same, IAP too is geared up to play its part. Continued research and collaborations between governments, healthcare agencies, educational institutions, social organisations and all other stakeholders will be crucial for further advancement of the HPS agenda across the globe.

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## Mental Wellness in Children

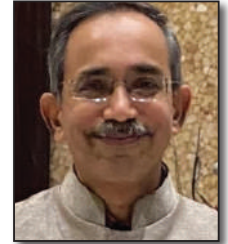
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'No Health without Mental Health' is the slogan followed by health related policy makers in many countries worldwide. Mental health & wellness is an important aspect of overall health of children. But last two decades of statistics on emotional health of children is showing a disastrous trend globally. Despite this shocking trend, there is something revolutionary happening in the world of scientific psychology. The emergence of concept of 'Emotional Intelligence' in children which has turned the child psychology upside down. Into the fourth decade since inception in 1990, this concept is now being applied world over for children and adolescents in families, schools and in healthcare to promote and foster emotional & mental wellness. The focus is now shifting from treating mental illness to promoting mental wellness in children at an early age. Pediatricians are in a unique position & can provide prevention, promotion & early intervention of mental health disorders in children

### INTRODUCTION TO MENTAL WELLNESS

#### What Is Mental Wellness?

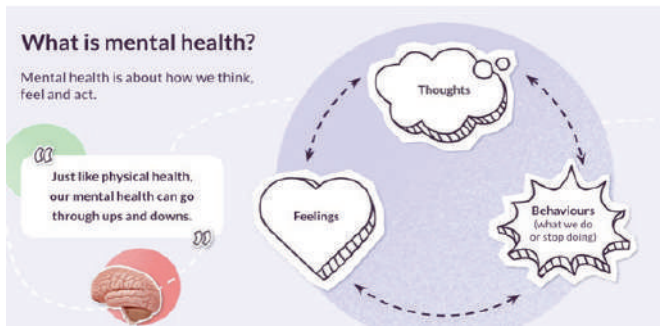
Mental Wellness in children is made up of their emotional, psychological, and social well-being. It influences how they think, how they feel, and how they act. Both genes and the environment affect their mental health & Wellness.

"Mental health is a state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (World Health Organization definition)  
Why Mental Wellness is Important ?

Mental health & wellness is not mere absence of Mental illness but presence of positive mental wellbeing. Mental Wellness is important as it has influence on cognition, perception, behaviour, handling stress and challenges, interpersonal relationships and decision making. Mental Wellness is the key to happiness as it provides the strength to cope with stresses & challenges of life boldly & develops stronger & more meaningful relationships

### Mental Health Disorders Burden in India

At any given point of time, it is estimated that about 9.8 millions of Indian aged 13–17 years suffer from serious mental illness which would be greater in number if the entire age spectrum of childhood and adolescence is considered. A study conducted in Lucknow estimated the prevalence of child and adolescent mental disorders as 12.1%.



## MENTAL WELLNESS IS ABOUT BALANCE

Being mentally healthy during childhood means reaching developmental and emotional milestones and learning healthy social skills and how to cope when there are problems. Mentally healthy children have a positive quality of life and can function well at home, in school, and in their communities.

Below are some of the ways in which we as pediatricians can help with child's mental health:

- Screen for mental health issues during well-child visits, identify warning signs of mental disorders, and provide customized counseling services.
- Provide parents with information and support on how to enhance child's mental health & wellness.
- Refer other mental health specialists for highly specialized treatment in severe cases.
- Work and regularly communicate with your child's teachers and caregivers to help understand child's unique needs, as mental illnesses can make going to school more difficult.

### Following are the red flags of mental illness in children :

Long lasting sadness or irritability, Extreme high or low mood, Excessive fear worry or anxiety social withdrawal, Dramatic changes in eating or sleeping habits and sudden changes noticed in the behaviour can point at some mental health issue in a child screening tools

There are age appropriate screening tools available for mental health screening VIZ ECSA, PSC, CBCL, Strengths & difficulties questionnaire. These can be used to screen for red flags in children at an early age. We have developed a novel digital 'EMOSCREEN' tool for screening children & adolescents from age group 0-18 yrs. This tool helps to not only know the risk score but also the trajectory of a mental illness if any and presence of any adverse childhood experience during early age (for details please contact the author of this article).

## HOW TO CULTIVATE MENTAL WELLNESS ?

Building mental wellness is about letting children understand how their thoughts, feelings and actions (behaviours) are connected. Nurturing their Emotional Intelligence (EQ) Skills is the most important way in building Mental Wellness. Recognizing when and how you can take positive actions is the first step in figuring out which coping strategies can help. Following are few strategies we as pediatricians can advise parents, children & adolescents

### Cultivate Emotional Intelligence skills in children from early age :

It turns out that many of the mental health disorders are all related to deficiencies in the basic emotion processing abilities encompassed in the concept of 'Emotional Intelligence' VIZ. able to tune into and express (accurately verbalise) your own and others emotions (emotional literacy skills), able to regulate these emotions in self and control impulses (Emotion Management skills), able to tune into other's emotions and show concern for them (Empathy skills), able to have an optimal relationship with self and others (Relationship Skills), able to have realistic accurate positive thoughts and feelings about challenging situations (Optimism skills) and able to harness and utilize emotions for self motivation and problem solving (Emotion harnessing skills). The good news is that all these emotional intelligence skills are learnable, teachable & enhanceable. We

as pediatricians can support parents in helping them cultivate these essential skills in children to foster mental wellness. Following are few strategies to cultivate Emotional Intelligence skills in children. Pediatricians can educate parents about these research proven tools

### **Name it to Tame it :**

When you have emotions, especially challenging or confusing ones, name them. When you name your emotions you can tame them. Do a Feelings Check & Ask yourself how you're feeling, and see what you notice. You Naming emotions (either out loud or in your head) like anger, sadness, or anxiety can reduce their intensity and help you manage them.

### **Reframing thoughts :**

Reframe your thoughts by asking yourself if they are true and helpful.

If you notice negative self-talk, think about treating yourself the same way you would treat someone you care about. Would you say negative or discouraging things to a friend? Probably not. Think about how you can be a friend to yourself through self-compassion, validation, and encouraging thoughts and words.

### **Emotion Journal :**

Take time to write down your thoughts and feelings during difficult situations. This can help you become aware of your emotions and the events that trigger them and can ease your mind in the moment. Be aware of your patterns of the behaviour when you are experiencing intense negative shades of feelings. Write down costs & benefits of your actions. Think of various options you have to act when you are having these feelings( eg. Anger). Select the best option which is most constructive. Emotion Journaling helps children to deal with difficult situations in a more resilient way.

### **Boost Children's Digital Wellness :**



Sometimes technology can have a negative impact on children's mental health, as we get caught in a cycle of comparisons or get lost in the news. Digital wellness is about having a healthy relationship with technology while using it in a responsible way.

Actions they can take to boost their digital wellness?

- Set time limits on social media
- Unfollow accounts that make you feel negative emotions
- Create opportunities to spend time with people "in real life"
- Follow accounts that make you feel happy
- Consider taking a break from social media—and think about other positive ways to spend your time.

### **Nurture a Healthy Mind Platter :**

The Healthy Mind Platter has seven daily essential mental activities necessary for optimum mental health. We Can discuss with children and give them time to make their own healthy mind platter

These seven daily activities make up the full set of "mental nutrients" that your brain and relationships need to function at their best. By engaging every day in each of these servings, you

promote integration in your life and enable your brain to coordinate and balance its activities

There are no specific amounts of time for this recipe for a healthy mind, as each individual is different, and our needs change over time too. The point is to become aware of the full spectrum of essential mental activities, and as with essential nutrients, make sure that at least every day we are bringing the right ingredients into our mental diet, even if for just a bit of time. Just as you wouldn't eat only pizza every day for days on end, we shouldn't just live on focus time alone with little time for sleep

(The Healthy Mind Platter was created by Dr. Daniel J. Siegel, Executive Director of the Mindsight Institute and Clinical Professor at the UCLA School of Medicine in collaboration with Dr. David Rock, Executive Director of the NeuroLeadership Institute)



**Healthy Mind Platter: Seven daily essential mental activities to optimize brain matter and create well-being**

## Focus Time

When we closely focus on tasks in a goal-oriented way, we take on challenges that make deep connections in the brain.

## Play Time

When we allow ourselves to be spontaneous or creative, playfully enjoying novel experiences, we help make new connections in the brain.

## Connecting Time

When we connect with other people, ideally in person, and when we take time to appreciate our connection to the natural world around us, we activate and reinforce the brain's relational circuitry.

## Physical Time

When we move our bodies, we strengthen the brain in many ways.

## Time In

When we quietly reflect internally, focusing on sensations, images, feelings and thoughts, we help to better integrate the brain.

## Down Time

When we are non-focused, without any specific goal, and let our mind wander or simply relax, we help the brain recharge.

## Sleep Time

When we give the brain the rest it needs, we consolidate learning and recover from the experiences of the day.

## Mindfulness :



Mindfulness practices encourage to "just notice" feelings, thoughts, and sensations. Children can practice Mindful Breathing as part of their morning or evening routines. Breathing at a calm pace can lower their heart rate, which helps when they are feeling anxious.

## Relaxation techniques :



In stressful situations, your muscles tense up and may even cause you physical pain. Stressful thoughts and emotions can also cause stomach-aches or headaches. Find activities that relax like exercising, listening to music, or finding a quiet spot to reduce stress.

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## Screen Time

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In today's digital age, the pervasive presence of screens in our lives has brought about some new-age morbidities with a pressing concern – the excessive and unregulated use of Screen Time, especially among children. Recognizing the gravity of this issue, inclusion of sessions on limiting and regulating screen time has become a pressing need for wellness and educational programs. This narrative highlights the rationale for the inclusion of such a session in Sankalp: Sampurna Swasthya (SSS) program of IAP, drawing on the recommendations of healthcare agencies like the World Health Organization (WHO), UNICEF, IAP, Govt. Of India, the Centers for Disease Control and Prevention (CDC), and various government health departments from around the world.

Screen Time, defined as the total time spent in a day watching screens of electronic devices such as smartphones, tablets, computers, and televisions, has witnessed an alarming increase among students in recent years.

Excessive or indiscriminate use of screen media has been associated with numerous ill effects on the health of children and adolescents, that include the following, and therefore calls for limiting recreational screen time, planning and self regulation to ensure judicious use of screen media.

### Physical health:

Obesity, sedentary lifestyle, disturbed sleep, head-ache, eye strain, neck, back, and wrist pains.

### Mental health:

Delayed speech, hyperactivity, aggression, violence, desire for instant gratification, poor concentration, FOMO (fear of missing out), FOBLO (fear of being left out), cyberbullying, media addiction, distorted perception of sex by exposure to pornography, drug use, self-harm, anxiety, and depression

#### Social:

Reduced socialization and social anxiety

#### Scholastic:

Decreased academic performance.

The WHO, in its guidelines on physical activity, sedentary behavior, and sleep for children under five, recommends limiting screen time because excessive screen time during early childhood has been linked to developmental issues, including delayed speech, cognitive impairments, and poor sleep patterns. Moreover, it has been associated with a heightened risk of obesity, as sedentary behaviors often replace physical activity.

UNICEF, the United Nations Children's Fund, supports these concerns, emphasizing the importance of safeguarding children's health and well-being. They advocate for the responsible use of screens and suggest that educational institutions incorporate sessions on the regulation of screen time to mitigate potential negative effects.

The CDC, a leading public health agency in the United States, echoes these concerns



by highlighting the links between excessive screen time and various health problems among children and adolescents. These include poor academic performance, behavioral issues, sleep disturbances, and an increased risk of depression and anxiety. Their research underscores the need for balanced screen time guidelines and education about its potential consequences.

The Indian Academy of Paediatrics has issued guidelines on Screen Time and Digital Wellness, not only for children, parents and families, but also for schools and Pediatricians. As per the IAP guidelines, children below the age of 2 years should not be exposed to any type of screen with the exception of occasional video call with relatives. Screen Time for those between the age of 2 and 5 years should not exceed 1 hour (the lesser, the better). For older children and adolescents, the key is balancing Screen Time with other activities required for overall development. Such activities include physical activity, age-appropriate duration of sleep, and time for schoolwork, meals, hobbies, and family time.

The Indian Psychiatry Association has also released guidelines for media use in children and adolescents. The ministry of Information and Broadcasting, Govt. of India, in association with National Council for Education, Research and Training (NCERT), has released PRAGYATA guidelines for digital education.

Government health departments across the globe are recognizing the gravity of excessive screen time among students. For instance, the Department of Health and Social Care in the United Kingdom advises that parents and schools take measures to limit screen time and encourage physical activity. Similarly, the Australian Government's Department of Health acknowledges the role of educational institutions in promoting healthy screen time habits.

Several countries have already incorporated Screen Time regulations into their national

policies. For example, France has implemented laws prohibiting smartphone use in schools to ensure a focused learning environment and reduce the temptation for students to engage in excessive Screen Time during school hours.

Incorporating a session on limiting and regulating screen time in a school training program is not only consistent with the recommendations of reputed healthcare agencies but also aligns with the evolving landscape of education. In a world where screens are integral to learning and communication, it is crucial to equip students with the knowledge and tools to strike a balance between digital engagement and healthy living.

Therefore, in the training modules of SSS, sessions on Screen Time are included to educate students about the potential consequences of excessive Screen Time and to empower and enable them to adopt practical strategies to manage their digital habits effectively. This includes setting screen time limits, identifying quality content, and cultivating healthy offline activities. The module for senior students also includes skill training in use of a tool specially designed to inculcate self regulation including adoption of several safety rules.

In conclusion, the inclusion of a session on limiting and regulating screen time in a training program for school students is a necessary step in addressing the growing concerns surrounding digital overuse. With the backing of healthcare agencies like WHO, UNICEF, CDC, and government health departments worldwide, it is evident that such education is crucial for safeguarding the physical and mental well-being of the younger generation. By providing students with the knowledge and tools to navigate the digital world carefully and responsibly, we empower them to lead healthier lives by self regulating and balancing their on-screen and off-screen lives in the challenging new digital age.

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# Sleep hygiene recommendations in school going children (2-12 years)

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**Background:** School going children must get the recommended duration of sleep as per the age. Sleep hygiene practices are essential in children for promoting healthy sleep patterns and overall well-being in children.

Sleep duration recommendation for age:

- Children (3 to 5 years) : 10 to 13 hours per 24 hours (including naps)
- Children (6 to 12 years) : 9 to 12 hours per 24 hours
- Teenagers (13 to 18 years) : 8 to 10 hours per 24 hours

## Consensus:

Creating a suitable sleep environment and ensuring an adequate number of sleep hours can significantly contribute to overall well-being.

- Maintain a consistent and regular bedtime and wake up time on all days
- Ensure the bedtime and wakeup time remains the same on weekdays and weekends. There should not be more than about an hour difference from 1 day to another.
- Avoid electronics, high-energy activities, and screen time at least 30 mins to an hour before bedtime.
- Beds are for sleeping. Try to use the child's bed only for sleeping.

- Keep the child's bedroom environment temperature appropriate, quiet, and comfortable
- Practice a regular bedtime routine. Bed time routine is a predictable series of events leading up to bedtime.

**Recommendation:** All school going children must be counseled on the steps for maintaining adequate sleep duration and good sleep hygiene.

## Sleep hygiene recommendations in adolescents (12-18 years)

**Background:** Sleep is essential for adolescents because it plays an important role in their physical and mental development. Adolescents require 8 and 10 hours of sleep per night. Unfortunately, research indicates that many teens get far less sleep than they need.

Factors that cause reduced sleep in adolescents include:

- Puberty: The human body has an internal clock called the circadian rhythm that impacts sleep. During puberty, this clock shifts by about two hours, so adolescents prefer to stay up two hours longer and sleep two hours later. This shift in an adolescent's circadian rhythm is called "sleep phase delay"
- Earlier school start times: Many high schools begin classes early in the morning, when an

adolescent's body still wants to be asleep.

- Increased school/after school/social obligations: It can be difficult to balance school work and extracurricular activities because of limited time after school
- Social Networking and Screen time: This adds to the sleep deficit by delaying sleep further.

### Consensus:

The following steps can be communicated to adolescents for maintaining good sleep hygiene:

- Maintain a consistent and regular bedtime and wake up time on all days
- Ensure the bedtime and wakeup time remains the same on weekdays and weekends. There should not be more than about an hour difference from 1 day to another.
- Avoid electronics, high-energy activities, and screen time at least 30 mins to an hour before bedtime.
- Use the bed only for sleeping and not as a couch or a desk to do homework.
- Maintain a regular winding down schedule before bedtime. Winding down can include changing into your pajamas, taking a warm bath or shower, reading a book or magazine, and/or listening to quiet music.
- The bedroom should be comfortable, dark, cool, and quiet during sleep time.
- Avoid daytime naps to catch up on sleep. If required, restrict naps to 20-30 minutes and ensure it is not close to the bedtime

- Indulge in at least 30 minutes of exercise daily during the daytime. This can include going for a run or a walk, or working out at a gym. Avoid vigorous exercises 2-3 hours before bedtime.
- Avoid eating large meals before bedtime.
- Avoid caffeinated or energy drinks at least 6 hours before bedtime.
- Avoid driving when sleepy.
- Expose yourself to sunlight in the morning to set your circadian rhythm

**Recommendations:** Factors which results in an adolescent's reduced sleep needs to be recognised. Counseling all adolescents on the above steps to maintain good sleep hygiene can impact their overall well-being and academic performance.

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## Reading Food Labels

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Food labelling plays a pivotal role in nutritional literacy and serves as a critical public health tool. It boosts public health awareness by facilitating an understanding of nutritional value and enables comparisons among similar food products to make healthier choices based on nutrition information. This article deciphers essential information on food labels and expounds on its significance for our health.

Nutrition labels assist consumers in making healthier food choices, providing essential data on nutrient content. These labels are valuable not only for healthy individuals but also for those with specific dietary requirements due to health conditions like hypertension or diabetes.

In India, the Food Safety and Standards Authority of India (FSSAI) establishes science-based standards for regulating food manufacturing, storage, distribution, sale, and import. This regulatory body ensures the availability of safe and wholesome food for consumers.

The World Health Organization (WHO) has issued recommendations for food marketing to children, prompting governments worldwide to limit the promotion of unhealthy foods to kids. To distinguish healthy from unhealthy foods objectively, nutrient profile models have been developed, consistent with international guidance for preventing chronic diseases. These models offer clear criteria for identifying foods suitable for advertising to children.

Front-of-pack (FOP) label contains the most catchy information and constitutes the principal display. The nutrient information displayed is based on WHO Population Nutrient Intake Goals for preventing diet related chronic diseases provides the acceptable levels of consumption of specific nutrients as a percentage of daily energy requirements. These goals are also useful as a guide for healthy diets. These goals cover nutrients like total fat, saturated fat, total sugars, added sugars, and sodium.

ENERGY- WHO Nutrient profile model for south-east asia region provides threshold criteria for nutrients in most food categories in the model are based on two main assumptions. i.e. the first is- daily energy requirement is approximately 2000-2150 kcal for a 10-11 year old, moderately active female and male child respectively. Therefore an average of 2000 kcals is used as the energy intake for calculation of Thresholds. Further, approximately 25% of the energy requirement is from each main meal (3 meals/day) and 10- 12% from snacks (2 snacks/day). Therefore, thresholds have been calculated on the basis that each 100 g of product provides approximately 230 kcals. This energy level also aligns with the threshold energy content of foods defined as energy dense

SUGARS- Total sugars refers to the total sugar content of the food product, which may be composed of intrinsic sugars incorporated within the structure of intact fruit and vegetables; sugars from milk (lactose and galactose); and all

additional monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups and fruit juices. Added sugars refers to monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer during processing or preparation. For the purpose of this nutrient profile model, the term 'added sugar' is used for consistency with available data in food composition tables. The WHO guidelines on sugars are for free sugars, covering monosaccharides (such as glucose or fructose) and disaccharides (such as sucrose or table sugar) added to foods by the manufacturer/cook/ consumers in addition to sugars naturally present in honey, syrups, fruit juices and fruit concentrates. Intrinsic sugars in, for example, fruits and vegetables are not considered free sugars. If the amount of energy (kcal) from free sugars [free sugars (g) x 4 kcal] is equal to or higher than 10% of the total energy (kcal) for the product, it is considered high in sugar, though a lower lower threshold of 5% is preferred & used for sugar sweetened beverages.

**TOTAL FAT**-The total fat content of a food product is composed of fatty acids from the three main groups (saturated fatty acids, mono-unsaturated fatty acids, and poly-unsaturated fatty acids). Trans-fat is a form of fat that results from the hydrogenation of unsaturated fatty acids or occurs naturally in the milk and meat of certain animals. If the amount of energy (kcal) from total fats [total fats (g) x 9 kcal] is equal to or higher than 30% of the total energy (kcal) in that food, the food is considered high in fats. The recommended cut off of energy (kcal) from saturated fats [saturated fats (g) x 9 kcal] is upto 10% of the total energy (kcal).

**SODIUM**- The recommended daily allowance for sodium is 2 gms (=5 grams of salt) as 1 g of sodium equals about 2.5 g of salt. Sodium content in food is considered excessive if the sodium (mg) to energy content (kcal) ratio is equal to or higher than 1:1 ie. Max RDA of 2000 mg of sodium with energy intake 2000 kcal

The daily value for fiber is set at 28g, and it is suggested we should get at least this much to maintain good health.) A product containing 9g of fiber/100g makes it a high fiber product.

**THE 5-20 RULE**- Guidelines for Daily Allowance (GDA) or Daily Value % (DV%) on food labels provide information about the percentage of daily nutrient requirements fulfilled by a specific food item. The DV is based on a 2000-calorie diet. If a nutrient gives less than 5% of our daily requirement (Daily Value), it's considered to be low in that nutrient. A nutrient that has more than 20% of our daily requirement, the food is high in that nutrient.

Unhealthy foods are those high in energy, sodium, sugar, and low in beneficial nutrients. These foods are typically rich in salt and sugar, often lacking essential nutrients esp. proteins, vitamins & fiber.

Processed foods are foods with added ingredients like salt, sugar, and fat, designed for longer shelf life and improved taste. These foods can be high in unhealthy components like excessive sodium, sugar, fat and many additives.

"FOOD ADDITIVE" (FA) is any substance which is normally not consumed as a food by itself/ as a typical ingredient of the food and added intentionally to a food for specific technical functions whether or not it has nutritive value. Processing of foods includes adding preservatives, coloring agents, artificial flavors, along with fat, salt and sugars, to ensure cheap & convenient food handling, safe transport with prolonged shelf life while making it hyperpalatable. They maintain the pH needed to prevent growth of bacteria, fungi or any pathogenic organisms. Other functions include coloring and flavoring to improve palatability, freshness, texture or appearance.

FA can be Direct and Indirect FA.

Direct -which are added to a food for a specific purpose. Most direct additives are identified on the ingredient labels. eg. xanthan

gum used to add texture.

Indirect-that come into contact with food as part of packaging, holding, or processing, food.eg.processing aids, food contact materials, packaging materials, cleaning agents, ion exchange resins, enzyme preparations, microorganisms, utensils, working surfaces, equipment, metal, plastic, paper, wood, detergents, sanitizers.

FAs are classified with codes internationally.

Preservatives- compounds to prevent/retard microbial spoilage of foods are of 2 types-

Class 1 Preservatives: include natural substances, e.g. salt, sugar, honey, vegetable oils, and spices. Their addition to foods is usually not restricted.

Class 2 preservatives: include chemical substances like benzoic acid, which can usually be added only in small amounts.

Overall, Class I preservatives are preferred over class II.

**Coloring Agents-** include dyes, pigments or substances to impart color to the food.

They could be natural colors like turmeric, or synthetic colors derived from fruits, vegetables and chemicals like tartrazine and sunset yellow.

**Artificial sweeteners-** are sugar substitutes e.g. saccharin and aspartame.

**Antioxidants-** are added to oils and fats to prevent oxidative rancidity, e.g. ethyl propyl, octyl gallates.

**Flavoring Agents-** include natural and synthetic compounds like menthol and vanillin.

Emulsifiers, Stabilizers & Thickeners- e.g. guar gum, gelatin, agar-agar.

**Humectants-** are moisture retention agents which control viscosity, texture, bulking, retention of moisture, reduction of water activity, control of crystallization and improvement of softness, e.g. polyhydroxyl alcohols.

**Flour improvers-** are bleaching and maturing agents used to bleach and mature flour, e.g. benzylperoxide.

**Curing Agents-** are additives used to preserve meats, give them desirable color and flavor & discourage microbial growth, e.g. sodium nitrite.

**Chelating Agents-** act as scavengers of metals which catalyze oxidation, e.g. ethylene diamide tetraacetic.

**Leavening agents-** cause expansion of dough and batter by releasing gases and giving a porous structure, e.g. yeast, baking powder and baking soda.

Classification of additives is based on criteria of their technological functions Stabilizers of physical characteristics

**Emulsifiers:** Substances that allow maintenance or formation of a homogeneous mixture of two or more non-miscible phases, e.g. water and oil.

**Thickeners:** macromolecules that preserve food textures such as viscosity or gelling effect, e.g. adding E-406 (agar-agar) to a jam preserves its texture.

**Anti-caking agents:** substances that prevent formation of clumps/lumps that affect product homogeneity & usually used in soups, sauces, juices or dairy products.

**Acidity correctors:** substances that control or alter the pH of food, to ensure there is no proliferation of undesirable bacteria which could health risks.

**Antioxidants:** are additives added mainly to fatty foods to delay or prevent rancidity due to oxidation can be natural / synthetic.

**Coloring agents:** substances used to modify/stabilise coloring characteristics of a food.

**Flavor enhancers:** substances that enhance

taste and/ or aroma of a food without altering its own flavor, widely used in sauces and soups. Monosodium glutamate is one of the most popular enhancers processed foods.

**Sweeteners:** these additives are used to provide a sweet flavor, similar to that of common sugar, can be nutritive or non-nutritive

**Aromatic substances:** that provide a new aroma and/ or correct the aroma of a food or beverage & obtained from extracts of vegetable origin.

**Improvers and correctors-** additives used in baking, wine making, or meat products, or to regulate the maturation of dairy products, such as cheese.

Reading food labels practically involves understanding the fat, salt, sugar content per serving size or the amount you consume. It includes comparing these values to daily permissible limits.

## CRITICAL INFORMATION ON FOOD LABEL

Front-of-pack (FOP) labels contain the most conspicuous information and serve as the primary display. Their visibility makes them more consumer-friendly. In contrast, nutritional information on the back of the pack is often less accessible due to the complexity of the data presented, involving numerous numbers that require interpretation.

1. Date of Manufacture and Date of Expiry/ Best Before date are crucial for freshness.

2. A list of ingredients helps individuals avoid products containing allergens. Common allergenic ingredients include milk casein, tree nuts (including peanuts), eggs, fish, shellfish, soybeans, and wheat proteins.

3. Many food products feature misleading or entirely false claims such as “fat-free,” “zero cholesterol,” or “sugar-free.” These claims can be

deceptive, eg. fat-free or diet products may still be calorie-rich.

4. Look for logos like FSSAI, ISI mark (for certain products like packaged drinking water), AGMARK (for agricultural products), and GREEN/BROWN dots indicating vegetarian or non-vegetarian items, Logo for fortified food, recyclable sign and the ‘Jaivik Bharat’ logo, launched by FSSAI for organic food, helps you identify authentic organic food.



5. Instructions for Use must be read and followed for optimal results.

6. Storage Conditions should be adhered to in terms of where to store the food product and for how long.

7. Serving Size and Net Weight provide information on how much of the product is in one serving and help consumers understand nutrient intake.

## Back of Pack:

8. The list of ingredients is presented in



descending order of quantity in small font. The weight of ingredients is often not mentioned.

9. Food Additives (FAs) are substances intentionally added to food for various purposes, such as preservation or enhancing flavor. These additives can be derived from plants, animals, minerals, or be synthetic. They are classified with international codes known as E numbers, which are present on food labels in the European Union. The details of each E code, including all its side effects, can be read from several apps available on standard play stores, or can be searched on search engines like Google.

Exercise 1. Study the back of pack of a popular soup powder pack.

- a) Read sodium and/or salt content in it.
- b) Compare the amount of sodium and salt contained in a serving, with their daily permissible limits.
- c) Convert sodium into salt or vice versa as the case maybe
- d) Understand the amount in relation to your daily permissible limits of salt and sodium (5 gms & 2 gms respectively).

### The result-

- a) A pack may have, say, 4936 mg Sodium in 100 gms
- b) The pack of 44 gms may have 4 servings (so ~11gms per serve; each serving will contain 543 mg sodium)
- c) To convert sodium to salt, multiply by 2.5 (ie  $543 \times 2.5 = 1357$  mg salt  $\approx 1.4$  gm salt in 11 gms of powder!!)
- d) Conclusion: Each serving of the soup contains about 30% of the total recommended salt intake for a person in a day.

Exercise 2: Take a packet of a popular biscuit, and follow the same sequence as above,

this time calculating not only the amount of salt/sodium in each serving and the entire pack, but also the amount of sugar in it, and comparing the same with the daily recommended limit of 25 gms of added sugar.

Exercise 3: Take a packet of biscuits and a bottle/can of soft drink, and in addition to sodium and sugar as per the steps mentioned above, also find the E-codes of additives used in it, and on an app for e-codes or search engine, find the name, use and risks (eg. allergies, carcinogenic) of each such E-code seen on the label of the two packs.



Image: Details of the additive searched through the E code, as found in an app.

Exercise 4: Take a pack of sweets and a pack of salted snacks, and in addition to the above,

search for salt/sodium in the sweets, and sugar in the salted snacks.

In conclusion, understanding food labels is essential for making informed dietary choices. It empowers consumers to select healthier options and avoid allergens or harmful additives, contributing to improved public health.

## Further reading

- For details about clarifications on claims, please refer to Pink Book by FSSAI.
- Regional Office for South-East Asia, World Health Organization. (2016). WHO nutrient profile model for South-East Asia Region. WHO Regional Office for South-East Asia. Available at <https://iris.who.int/handle/10665/253459>
- 'Indian Organic Integrity Database' Available in Jaivik Bharat portal at [www.jaivikbharat.fssai.gov.in](http://www.jaivikbharat.fssai.gov.in)

# Physical Activity in Children and Adolescents

## DR. ANIL SUD

MD ( Paediatrics), FIAP, FICMCH

Consultant Paediatrician, Jalandhar

Chairperson Non Communicable Diseases Prevention Academy (NCDPA)



India is experiencing a rapid health transition with a rising burden of Non-Communicable Diseases (NCD) surpassing the burden of communicable diseases such as water-borne or vector-borne diseases, TB, HIV, etc. In India, nearly 5.8 million people (WHO report, 2015) die from NCDs (heart and lung diseases, stroke, cancer and diabetes) every year or in other words 1 in 4 Indians has a risk of dying from an NCD before they reach the age of 70. The NCDs like Cardiovascular diseases, Cancer, Chronic Respiratory Diseases, Diabetes and other NCDs are estimated to account for around 60% of all deaths, thus making them the leading causes of death.

The major Causes of rising trend of NCDs is Unhealthy Diet, Physical Inactivity, Increasing Screen time and Air Pollution and rising trend of drug and Alcohol consumption.

Regular physical activity promotes both mental and physical health in people of all ages. Yet, today, more than 80% of adolescents and 27% of adults do not meet WHO recommended levels of physical activity. This affects not only individuals over their life course, but also places a financial burden on health services and society as a whole. (Global Status Report on Physical Activity-2022)

*WHO defines physical activity as any bodily movement produced by skeletal muscles that requires energy expenditure.*

## Physical Activity V/S Exercise

Exercise is a subcategory of physical activity that is planned, structured, repetitive, and purposefully focused on improvement or maintenance of one or more components of physical fitness. Physical activity includes a wide variety of activities. The activity can be work related like lifting or moving of boxes, transport related e.g. walking to school, going to market on foot, routine activities like household work or even related to hobbies like gardening

## Benefits of Physical Activity

- Controls body weight
- Increases good Cholesterol
- Keeps Blood sugar and B.P. in Check
- Decreases the risk of diseases of cardiovascular system and Cancer
- Strengthens bones and muscles
- Increases sports performance
- Academic performance enhanced with better grades.
- Protects against stress, depression and anxiety
- Improves physical appearance

## Types Of Physical Activity

1. **Aerobic:** Aerobic exercise is a physical activity that uses your body's large muscle

groups, is rhythmic and repetitive. It increases your heart rate and the oxygen consumption of your body. Examples are Brisk Walking, Running, Jogging and Jumping Rope.

Type of Physical Activity	Children	Adolescents
<b>Moderate-intensity aerobic</b>	Hiking, bike riding, brisk walking	Baseball, yard work, hiking, brisk walking
<b>Vigorous-intensity aerobic</b>	Bike riding, jumping rope, running, soccer, basketball	Jumping rope, bike riding, karate, basketball, cross-country skiing

**2. Muscle Strengthening:** Activities that make muscles do more work than usual activities of daily life. These are of 2 types:

Unstructured - rope or tree climbing, tug of war, playing with playground equipment

Structured - push-ups, pull-ups, climbing wall, exercises with hand held weights



**Types of Muscle-Strengthening Activities**

Type of Physical Activity	Age Group	
	Children	Adolescents
<b>Muscle-strengthening</b>	<ul style="list-style-type: none"> <li>Games such as tug-of-war</li> <li>Modified push-ups (with knees on the floor)</li> <li>Resistance exercises using body weight or resistance bands</li> <li><b>Rope or tree climbing</b></li> <li><b>Sit-ups (curl-ups or crunches)</b></li> <li>Swinging on playground equipment/bars</li> </ul>	<ul style="list-style-type: none"> <li>Games such as tug-of-war</li> <li><b>Push-ups and pull-ups</b></li> <li>Resistance exercises with exercise bands, weight machines, hand-held weights</li> <li>Climbing wall</li> <li>Sit-ups (curl-ups or crunches)</li> </ul>

**3. Bone Strengthening:** Activities that produce a force on the bones that promotes bone growth and strength. Bone Strengthening Exercises are of utmost importance as Peak bone mass is obtained by the end of adolescence Example are Jumping, Running, Hopping, skipping, gymnastics, Basketball and other active sports.

### Types of Bone-strengthening Activities

Type of Physical Activity	Age Group	
	Children	Adolescents
<b>Bone-strengthening</b>	<ul style="list-style-type: none"> <li>Games such as hopscotch</li> <li><b>Hopping, skipping, jumping</b></li> <li>Jumping rope</li> <li><b>Running</b></li> <li>Sports such as gymnastics, basketball, volleyball, tennis</li> </ul>	<ul style="list-style-type: none"> <li>Hopping, skipping, jumping</li> <li>Jumping rope</li> <li>Running</li> <li><b>Sports such as gymnastics, basketball, volleyball, tennis</b></li> </ul>



### WHO recommendations on physical activity

- Accumulate at least 60 minutes daily
- **Aerobic Activities:** moderate- or vigorous-intensity physical activity. Include vigorous-intensity physical activity at least 3 days per week.
- **Muscle-strengthening Activities:** Include on at least 3 days of the week, as part of the 60 or more minutes.

- Bone-strengthening Activities: Include on at least 3 days of the week, as part of the 60 or more minutes.
  - > 60 minutes additional health benefits
  - Appropriate for age, are fun, and offer variety
- [https://www.who.int/diet/physicalactivity/factsheet\\_young\\_people/en](https://www.who.int/diet/physicalactivity/factsheet_young_people/en)

## Metabolic equivalent

The metabolic equivalent of task (MET) is the objective measure of the ratio of the rate at which a person expends energy, relative to the mass of that person, while performing some specific physical activity compared to a reference,

- The Amount of energy Expended during exercise relative to the energy expenditure during rest
- Energy expenditure during rest = 1 MET = 3.5 ml of oxygen/kg/ min= 1 kcal/kg/ hour

The energy expended at rest is 1 kcal/ kg / hr = 1 MET\*

\*Metabolic Equivalents (METS) in Exercise Testing, Exercise Prescription, and Evaluation of Functional Capacity

## Resistance Training

- Weight training is not recommended in adolescents.
- Resistance training under supervision should be undertaken specially for adolescents taking up sports
- Resistance training includes Machine Based, free weight, plyometric, complex and functional training

## KEY MESSAGES

- Physical Activity is essential to have healthy body and healthy mind
- Accumulate at least 60 min of Physical Activity daily
- Most exercises should be moderate to vigorous
- Physical Activity should have element of fun
- All movements count

### Metabolic Equivalent Task (MET) Units of Common Leisure- Time Physical Activities.

Moderate Activities (3.0 - 5.9 METs)	Vigorous Activities (> 6 METs)
 <p>Brisk Walking (3-4 mph) MET- 3.0-5.0</p>	 <p>Very Brisk Walking (4.5 mph) MET- 6.3</p>
 <p>Badminton - recreational METs 4.5</p>	 <p>Jogging 5mph METs 8.0</p>
 <p>Basket ball Shooting Around METs 4.5</p>	 <p>Basket ball - Game METs 8.0</p>
 <p>Golf METs 4.3</p>	 <p>Bicycling (flat surface, light effort) METs 6.0</p>
 <p>Dancing - ballroom METs 3.0 - 4.5</p>	 <p>Swimming - leisurely METs 6.0</p>

**Talk Test :** To Gauge you can talk but not sing, the intensity is moderate.

**Talk Test :** During vigorous activities, you should not be able to say more than a few words without pausing to catch your breath.


## PEDICON 2024 – ANNOUNCEMENT



### RATES PEDICON 2024 KOCHI

Category	Early Bird upto 31Mar 23	Up to 30 Jun 23	Upto 30 Sep 23	upto 31 Dec 23	From 01 Jan 24
IAP member	11000	18700	27500	37400	45000
Accompanying	11000	18700	27500	37400	45000
Non IAP	16000	37400	44000	55000	66000
Accompanying	16000	37400	44000	55000	66000
PG student	6000	9000	10000	12000	16000
Accompanying	11000	18700	27500	37400	45000
SR citizen	-			11000	11000
Accompanying	11000	18700	27500	37400	45100
SAARC	\$250	\$250	\$300	\$550	\$750
Non SAARC	\$450	\$450	\$550	\$750	\$950
Corporates	25000	38500	44000	49000	60000
Accompanying	25000	38500	44000	49000	60000


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DR S. SACHIDANANDA KAMATH  
Organising Chairman

DR M. NARAYANAN  
Organising Secretary

DR M. I. JUNAID RAHMAN  
Organising Treasurer

**FOR ASSISTANCE**  
Contact Conference Secretariat @ 7012025938

## IAP Maharashtra

**Journal Journey**  
1st September, 9 PM

**Expert**  
Dr. Tukar Joshi  
Pediatric Endocrinologist  
Mumbai

**Guest Of Honor**  
Dr. Raju Shah  
Member of Parliament,  
Minister of State for Health,  
Government of Maharashtra  
President CMP-2005

**Expert**  
Dr. Jayant Deshpande  
Member of Parliament,  
Minister of State for Health,  
Government of Maharashtra

**Dr. Divya Bhosur**  
Assistant Professor,  
Babu Medical College & Hospital  
Mumbai

**Dr. Theresia M**  
Junior Resident  
DYWHS Medical College  
Kurla

**1 MMC POINT GRANTED**

**Dr. Chitra Kulkarni**  
Member of Parliament,  
Minister of State for Health,  
Government of Maharashtra

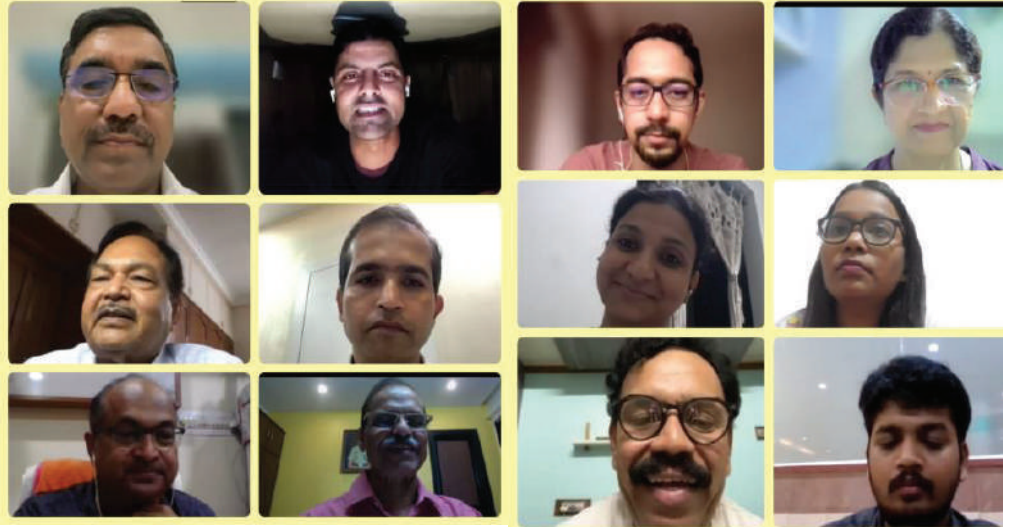
**Dr. Rahul Yessu**  
Member of Parliament,  
Minister of State for Health,  
Government of Maharashtra

**Dr. Atul Kanikar**  
Member of Parliament,  
Minister of State for Health,  
Government of Maharashtra

**Dr. Anurag Kulkarni**  
Member of Parliament,  
Minister of State for Health,  
Government of Maharashtra

**Dr. Anurag Kulkarni**  
Member of Parliament,  
Minister of State for Health,  
Government of Maharashtra

**Dr. Anurag Kulkarni**  
Member of Parliament,  
Minister of State for Health,  
Government of Maharashtra



**3rd September 2023**  
TIME: 7:00 - 9:30 PM

**IAP NAVI MUMBAI**  
CORDIALLY INVITES YOU FOR  
**CENTRAL IAP MODULE:**  
**SAKSHAM**

*Enabling Immunisation of School Children through Education*

**VENUE:** Hotel Tunga  
Primrose hall, second floor  
The Regenza By Tunga  
Plot no 37, Sector 30 A, Vashi  
Navi Mumbai 400703



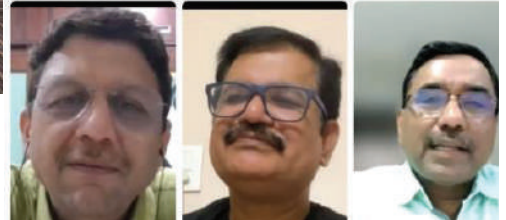
Indian Academy of Pediatrics is inviting you for a scheduled Zoom meeting.

Topic: **Changing Trends in Vaccinations at National level**

Date: **22 September 2023**  
Time: **6:30 pm**

**Panel Discussion: MMR, Influenza and JE Vaccines**

**Dr. Anurag Kulkarni** (Moderator)  
**Dr. Anurag Kulkarni** (Panelist)  
**Dr. Anurag Kulkarni** (Panelist)  
**Dr. Anurag Kulkarni** (Panelist)  
**Dr. Anurag Kulkarni** (Panelist)



## IAP Maharashtra



**NCPID 2023  
SILVER JUBILEE CELEBRATIONS**

**NCPID 2023  
SILVER JUBILEE CELEBRATIONS**

**NCPID 2023  
SILVER JUBILEE CELEBRATIONS**

**Dr. Vasant Khalatkar**  
President-Elect 2024  
**Unity, Academia & Progress : For IAP**

**MAHA IAP CASE CHALLENGE**

**FIFTH Episode** 15th September, 9 PM [CLICK.HOME.TD.COM](http://CLICK.HOME.TD.COM)

**Expert** **Guest Of Honor** **Expert**

**Dr. Narendra Navsodekar**  
Post-ACP, All India Institute of Medical Sciences, New Delhi  
Post-ICAP, All India Institute of Medical Sciences, New Delhi

**Dr. Vasant Khalatkar**  
Chairperson, IC-Children IAP  
Past Chairman, ACPFI

**Dr. Mahesh Namde**  
Chairman, Maharashtra IAP Council

**Team Kolhapur IAP Challengers**  
**Dr. Sunil Sheth**  
**Dr. Abhaneho Patankar**  
**Dr. Rajendra Chandorkar**

**Team RAIGAD IAP Challengers**  
**Dr. Mahesh Kore**  
**Dr. Uday Patil**  
**Dr. Vyanakesh Tankasband**



## IAP Maharashtra

**29th September 9 PM**

**IV Fluids In Sick CHILD**

Dr. Mahesh Mohite  
Senior Pediatrician  
Sri Child Care Hospital  
PUNE.

**Shock Beyond Cold & Warm**

Dr. Vinayak Patki  
Pediatric Intensivist  
Unhukul Akhanna Institute of Medical Sciences, SANGLI

**Guest OF Honor & EXPERT**

Dr. Sumeer Sadawarte  
IS Member  
MAHARAJ

**Moderators**

Dr. Parmanand Andankar  
IS Member  
MAHARAJ

**PLEASE CLICK HERE TO JOIN**

**29.09.23, 9 PM**

**TEAM MAHAJAP**

**Journal Journey**

2nd October, 8 PM

Dr. Anil Patil  
Secretary General  
MAHARAJ

**MIC POINT Guaranteed**



**KOLHAPUR ACADEMY OF PEDIATRICS**

**WORKSHOP OF NURSING CRITICAL CARE**

Sitting First Row [L to R]- Dr. Mahendra Dohal, Sis.Tito Mathur, Dr.Jasel Sheth, Dr. B. De.Amit Patil, Mrs.Geeta Awati, Dr.Pratibha Bhupali ,Dr. V. Dr.Sachin Murale



## IAP Navi Mumbai

### ACADEMIC –

1. 2<sup>nd</sup> October 2023: **MAHAIAP & Raigad IAP - JOURNAL JOURNEY!**  
Expert – **Dr. Pankaj Deshpande**, Senior Consultant Pediatric Nephrologist, Hinduja Hospital (Mumbai); Apollo Hospital (Navi Mumbai).  
<https://us02web.zoom.us/j/89995375604?pwd=WmE4RjNQMStCakxNSXk2NGY3T3V2QT09>  
<https://tinyurl.com/mahaiaplive>
2. 5<sup>th</sup> October 2023: **World Meningitis Day**  
Invasive Meningococcal Disease Case Talks  
Importance of early protection against IMD – **Dr V N Yewale**  
IMD Case Study – **Dr Satish Shahane**
3. 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup> October 2023: **23<sup>rd</sup> National Conference of AHA, IAP**  
Theme – I have stories to tell, are you listening  
Venue – Amritsar  
Faculty – **Dr Kalyani Patra, Dr Amog Shahane**
4. 10<sup>th</sup> October 2023: **Maha Academy of Pediatrics (MAHAIAP)**  
Women Committee comes with their Special Superfast Roller coaster rides of "TUESDAY TAKES"  
Theme: INFECTIOUS DISEASES  
Presentation of Dengue fever and Dengue shock syndrome – **Dr Gargi Bangar**  
<https://tinyurl.com/mahaiaplive>
5. 11<sup>th</sup> October 2023: **PedScape**, CME for Pediatricians by Apollo Hospital  
Introduction – **Dr V N Yewale**  
Expert Panelist – **Dr Leena Deshpande**  
<https://us02web.zoom.us/j/84561094487?pwd=TkpVMTx4b1dkLzAyUEJpOTIEEdEYxZz09>
6. 11<sup>th</sup> October 2023: "MAHAIAP CASE CHALLENGE"  
Team Navi Mumbai IAP- **Dr Priyanka Amonkar, Dr Asmita Patil, Dr Satish Shahane.**
7. 12<sup>th</sup> October 2023: **MAHAPEDICON 2023**  
**33<sup>rd</sup> Annual Conference Thane IAP**

#### Pre-Conference workshop – MGM, Navi Mumbai

Topic – **Unleashing the power of the peritoneum & peritoneum dialysis**

Co-ordinator – **Dr Jeetendra Gavhane**

Convenor – **Dr Pankaj Deshpande**

Faculty – **Dr Amol Madve, Dr Rajdeep Pal, Dr Pankaj Deshpande, Dr Vaishali More, Dr Preeti Inamdar.**

#### Meningococcal & other vaccines common dilemmas

Moderator - **Dr Satish Shahane**

#### Biologics in Pediatrics , Acute Rheumatological emergencies

Speaker – **Dr V Vishwanathan**

Newer antiepileptics

Speaker – **Dr Shekhar Patil**

## IAP Navi Mumbai

**Speaker – Dr Pankaj Deshpande**

**Anaphylaxis**

**Moderator – Dr Kalyani Patra**

**Speaker – Dr Vikram Patra**

**Acellular hexavalent vaccines**

**Speaker – Dr Jeetendra G**

**Clobazam in simple febrile seizures**

**Speaker – Dr Shilpa A**

**Under 5 wheezers**

**Speaker – Dr Sagar W**

**New frontiers in pediatric nutrition**

**Speaker – Dr U Kinjawdekar**

**Antibiotics & Probiotics: lets be holistic**

**Moderator – Dr Mangai S**

**IRIDA management, hemolytic disorders & bleeding disorders**

**Moderator- Dr Amit Saxena**

**Open forum vaccinology forum**

**Expert – Dr V N Yewale**

**Migraine – A Headache to manage & Common Household Poisoning**

**Chairperson – Dr Amog Shahane**

8. 19<sup>th</sup> October 2023: **CME/webinar of Adolescent Health Academy on d-IAP platform**

Topic: Reproductive Organs Issues in Adolescents

Panelist -**Dr Kalyani Patra**

<https://diapindia.org/event-details.php?event=2369&title=IAP-ADOLESCENT-HEALTH-CHAPTER>

9. 20<sup>th</sup> October 2023: As a part of Diamond Jubilee Academic Series: **Pg Reach of CIAP**

**NMIAP in association with Apollo Hospital Belapur**

Experts - **Dr S Balasubramanian & Prof Dr Srinivasan**

<https://us02web.zoom.us/j/89446445843?pwd=eGwvK28zNDVYNkhuL29lbXJPSUVSUT09>

<https://diapindia.org/event-details.php?event=2344&title=IAP-PG-Teaching-Sessions---Supported-by-Apollo-Institute-of-Child-Health>

## IAP Navi Mumbai

**2nd October, 9 PM**

**Expert** **Guest Of Honor** **Expert**

Dr. Vasan Khatkar  
Chairman, Maharashtra Chapter of IAP  
MRCPUK

**MRC POINT Granted**

Dr. Pratik Desai  
Dr. Parag Shah



**IMD CASE TALKS ROADSHOW**

We invite you to be part of the IMD case talk

**Navi Mumbai Association of Pediatrics**

A dedicated forum for experts' discussions of real-world cases and significant discussions on the critical importance of early protection against IMD.

5th October | 09.30 PM | Courtyard by Marriott, Sector 2, Navi Mumbai, Maharashtra 400705

Topic: Importance of Early protection against IMD  
**Dr. Vijay Yewale**  
Executive and Consultant Paediatrician, The Research Hospital, Sector 2, Navi Mumbai, Maharashtra 400705

Topic: IMD case study  
**Dr. Satish Shahane**  
Executive, IAP, Navi Mumbai

Sanofi | Sanofi Healthcare India Pvt. Ltd.

**ADOLESCON 2023**

THE ADOLESCENT FORUM ON PATIENTS

11th September, 9 PM



**WELCOME DELEGATES**

I HAVE STORIES TO TELL

**ADOLESCON 2023**

IF YOU LISTEN TO ME

11th September, 9 PM

**MAHAIAP CASE CHALLENGE**

7th Episode

**Expert** **Guest Of Honor** **Expert**

Dr. S. Shivaram  
Dr. Vasan Khatkar  
Dr. Pratik Desai  
Dr. Parag Shah

**MRC CREDIT**

**MAHAIAP Women Committee Presents Tuesday Takes!**

10th Oct. 9PM

**Experts**

Dr. Dr. D. Deshpande  
Dr. Dr. D. Deshpande

**Theme: INFECTIOUS DISEASES**

10th October, 9PM

TEAM MAHAIAP



**Apollo Children's**

**PedScape**

CME program for Pediatricians

October 11th, 2023 (Wednesday) | 3 pm - 4 pm

Click Here to Join Online

**PROGRAM SCHEDULE**

Topic: [List of topics and speakers]



**Life Time Achievement Award**

MAHARASHTRA STATE BRANCH OF INDIAN ACADEMY OF PEDIATRICS

**MAHAPEDICON 2023**

13th - 15th October 2023 | The Westin Mumbai Powai Lake

*to our Respected*

**Dr. Prashant Moralwar**

# IAP Navi Mumbai

**2nd October, 9 PM**

**Expert**

**Guest Of Honor**

**Expert**

**MMC POINT GRANTED**

Topic: **Best Medicine in Children**



**IMD CASE TALKS ROADSHOW**

We invite you to be part of the IMD case talk

In association with **Navi Mumbai Association of Pediatrics**

A dedicated forum for to depth exploration of real-world cases and significant discussions on the critical importance of early protection against IMD

5<sup>th</sup> October 09:30 PM

Courtesy by Marriott, Sector 7, Nerul, Navi Mumbai, Maharashtra 400706

Topic: Importance of Early protection against IMD

**Dr. Vijay Yewale**

Topic: IMD case study

**Dr. Satish Shahane**

Sanofi | Sanofi Healthcare India Pvt. Ltd.



**MAHAIAP CASE CHALLENGE**

7th Episode **11th September, 9 PM**

**Expert**

**Guest Of Honor**

**Expert**

**MMC POINT GRANTED**

Topic: **Best Medicine in Children**

**MAHAIAP Women Committee Presents Tuesday Takes!**

10th OCT, 9PM

**Experts**

Topic: **INFECTIOUS DISEASES**

PLEASE CLICK HERE TO JOIN

**10th October, 9PM**



**Apollo Children's PedScape**

CME Program for Pediatricians

October 11th, 2023 (Wednesday) 3 pm - 4 pm

**PROGRAM SCHEDULE**

Time	Topic	Speaker
3:00 PM	Introduction	Dr. Vinay Khadkekar
3:15 PM	Case Presentation	Dr. Anand Chavan
3:30 PM	Discussion	Dr. Anand Chavan
3:45 PM	Case Presentation	Dr. Anand Chavan
4:00 PM	Discussion	Dr. Anand Chavan
4:15 PM	Case Presentation	Dr. Anand Chavan
4:30 PM	Discussion	Dr. Anand Chavan



**Life Time Achievement Award**

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## IAP Navi Mumbai



**IAP ADOLESCENT HEALTH CHAPTER**

**Reproductive Organs Issues in Adolescents**

Go to [diopindia.org/event-calendar](http://diopindia.org/event-calendar) or [click here](#)  
**Thursday, 19th October 2023**  
**09:00PM - 10:30PM**

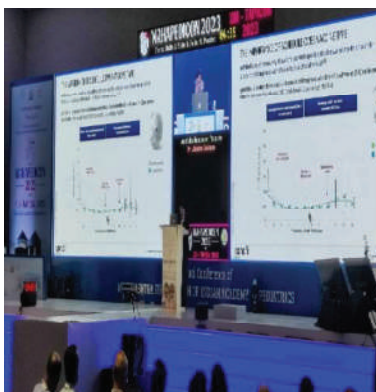
**DIAMOND JUBILEE ACADEMIC SERIES: pgREACH**

**JOIN US FOR PG CLINICAL TEACHING SESSION IN ASSOCIATION WITH NAVI MUMBAI ASSOCIATION OF PEDIATRICS AND APOLLO HOSPITAL**

**DR S BALASUBRAMANIAN**  
 MD, FRCR, FRCR (C), FRCR (P), FRCR (S), FRCR (N), FRCR (O), FRCR (A), FRCR (G), FRCR (E), FRCR (I), FRCR (M), FRCR (D), FRCR (U), FRCR (R), FRCR (L), FRCR (H), FRCR (K), FRCR (J), FRCR (F), FRCR (G), FRCR (C), FRCR (B), FRCR (A), FRCR (Z), FRCR (Y), FRCR (X), FRCR (W), FRCR (V), FRCR (U), FRCR (T), FRCR (S), FRCR (R), FRCR (Q), FRCR (P), FRCR (O), FRCR (N), FRCR (M), FRCR (L), FRCR (K), FRCR (J), FRCR (I), FRCR (H), FRCR (G), FRCR (F), FRCR (E), FRCR (D), FRCR (C), FRCR (B), FRCR (A)

**DR S SRINIVASAN**  
 MD, FRCR, FRCR (C), FRCR (P), FRCR (S), FRCR (N), FRCR (O), FRCR (A), FRCR (G), FRCR (E), FRCR (I), FRCR (M), FRCR (D), FRCR (U), FRCR (R), FRCR (L), FRCR (H), FRCR (K), FRCR (J), FRCR (F), FRCR (G), FRCR (C), FRCR (B), FRCR (A)

Go to [diopindia.org/event-calendar](http://diopindia.org/event-calendar) or [click here](#)  
**Time: 09:00PM - 10:30PM**  
**On Friday, 20th October 2023**  
 In Association With



## IAP Navi Mumbai

1. **Dr Amog Shahane** wrote a poem on **Adolescents** and was published in the **Souvenir** at **National Conference of AHA, IAP** held in **Amritsar**.
2. Interventional cardiologist **Dr Bhushan** presentation at **CSI ASIA PACIFIC** on successful neonatal interventions.
3. **Department of Pediatrics, MGM Hospital** was honoured by **Royal College of Pediatrics Child Health** as a centre for the clinical examination **MRCP-CH**.
4. **MAHAIAP Lifetime Achievement Award** will be given **Dr Prashant Moralwar** for his tremendous work for **Childcare, Social Care & for Organization** from **MAHAIAP**
5. **Dr Dhanya D**, Ped. Infectious Diseases Expert **Apollo Hospital** was invited as a **Guest of Honour by Boston children's top ranked hospital in US**. They arranged 1.5 hours guided tour covering many places in the 400 bedded hospital including critical care units.
6. **Dr Gargi B**, Ped Infectious Diseases expert was invited as a participant and expert in the recent **Pediatric Infectious Disease Conference in Rome**.
7. **Dr Upendra Kinjawdekar** was invited as a **speaker at the American Academy of Pediatrics Conference, USA** and also participated in a panel discussion.
8. Awards won at **Mahapedicon 2023** by **NMIAP**
  - 1) **The Best Branch award,**
  - 2) **Best Charity Day celebrations,**
  - 3) **Breastfeeding Week Celebration 1 St runner up,**
  - 4) **ORS week Celebration 2nd runner up.**
9. **Dr Bhushan C**, Ped. Cardiologist performed successfully **multiple ASD device closure** using two regular ASD devices 10 and 16 mm at **MGM Vashi Hospital**.

## IAP Navi Mumbai

