

अंक-10 वर्ष-03

दिसंबर- 2023

नई उड़ान

त्रैमासिक विज्ञान पत्रिका

Education for
**Good Health
and Well-Being**

Curiosity
leads to
Discovery

Phenolic content
**in Tea
samples**

पीरियड्स की
जानकारी

सिर्फ महिलाओं की
नहीं जिम्मेदारी



Special Attraction (Vision Quest)

Sh. Himanshu Gupta, IAS
Director Education
Directorate of Education, GNCT of Delhi

Sh. M. Shrikanth
Scientist, ISRO
Mission Director Chandrayaan- 3



doesciencemagazine@gmail.com



FROM THE DESK OF THE DIRECTOR



Science has a significant impact on human lives. Everything surrounding us is the result of scientific experiments and discoveries. With its omnipresence, science has contributed to various areas of development. The health-care industry is one of them.

Covid-19 has claimed 15 million lives, including front-line healthcare workers. Covid treatments have disrupted essential health services in 92% of countries. As a result, global life expectancy and immunization have regressed while anxiety and depression disorders and deaths from tuberculosis and malaria have increased. Science and healthcare are closely interconnected and there is need to come up with measures that enhance the positive use of science in the healthcare system.



The current issue of the magazine focuses on spreading awareness in community about the importance of good health, healthy lifestyles as well as people's right to quality health care services.

'Curiosity leads to Discovery' under Student's Innovation, 'From Seeds to Symphonies' under Teacher's Innovation & 'A night of Victory under Moonlight' under Vision Quest are also the other attractions of this edition.

I congratulate the entire team of "NAI UDAAN" for their continuous efforts in serving a compendium of knowledge to a large number of readers through very informative, innovative & creative ideas.


Bhupesh Chaudhary

नई उड़ान

त्रैमासिक विज्ञान पत्रिका

संरक्षक

भूपेश चौधरी

निदेशक (शिक्षा विभाग)

प्रधान सम्पादक

जरीन ताज

अतिरिक्त शिक्षा निदेशक

उप प्रधान संपादक

डॉ. सुधाकर भीमराव गायकवाड़

उप शिक्षा निदेशक

(विज्ञान शाखा)

उप प्रधान संपादक, प्रबंधन

संजय सुभाष कुमार

उप शिक्षा निदेशक

(परीक्षा विभाग)

सम्पादक

पुण्डरीकाक्ष कौडिन्य (प्रधानाचार्य)

(रा० प्र० वि० वि० राजनिवास मार्ग)

सम्पादक-मण्डल

बी.पी. पाण्डेय (ओएसडी, स्कूल ब्रांच)

कुन्दन कुमार दुबे (ओएसडी, विज्ञान शाखा)

सुमन रेलन, प्रवक्ता (अंग्रेजी)

GGSSS, B-1, वसंतकुंज

भावना सावनानी, प्रवक्ता

(जीव विज्ञान)

सर्वोदय कन्या विद्यालय, पटपड़गंज

रोहित उपाध्याय

(टी जी टी गणित)

GBSSS, न्यू फ्रेंड्स कॉलोनी

डॉ. नील कमल मिश्र

(टी जी टी विज्ञान)

सर्वोदय बाल विद्यालय, फतेहपुर बेरी

रविंद्र कुमार ,

(टी जी टी, विज्ञान)

GBSSS आदर्श नगर, नंबर -1

चन्दन झा ,

(टी जी टी, विज्ञान)

GBSSS, धिदोरनी

डिजाइन एवं ग्राफिक्स

नवीन कुमार श्रीवास्तव

(कला अध्यापक)

सर्वोदय बाल विद्यालय, फतेहपुर बेरी

‘एक तन्दुरुस्ती हजार नियामत है’ यह कहावत आपने सुनी ही होगी। संयुक्त राष्ट्र संघ ने सम्पूर्ण विश्व के लिए सतत् विकास के लक्ष्यों का निर्धारण करते समय ‘सभी के लिए स्वास्थ्य’ भी एक लक्ष्य निर्धारित किया है। आज पूरा विश्व अनियन्त्रित कार्यप्रणालियों, असन्तुलित भोजन सम्बन्धी आदतों, गुणवत्ताहीन भोज्य सामग्री के साथ विभिन्न तरह के सामाजिक और मानसिक दबावों के दौर से गुजर रहा है, जिसके कारण बच्चों से लेकर वयस्कों तक शारीरिक और मानसिक स्वास्थ्य सम्बन्धी समस्याएं बढ़ रही हैं। आपाधापी और अत्यवस्थित जीवन शैली के इस दौर में यह जरूरी हो जाता है कि हम न केवल अपने स्वास्थ्य के प्रति गम्भीर रहें अपितु बच्चों के लिए सन्तुलित जीवन का एक उदाहरण प्रस्तुत करें ताकि बच्चे स्वास्थ्य के महत्व को समझें और उनमें अच्छी आदतों का निर्माण हो।

आम तौर पर हम स्वास्थ्य को केवल ‘शारीरिक’ स्वास्थ्य तक सीमित समझ लेते हैं तथा सारा प्रयास यही तक सिमट कर रह जाता है जबकि हमारे स्वास्थ्य में उन घटकों की भी बहुत महत्वपूर्ण भूमिका होती है, जो हमें दिखाई नहीं देते हैं। विश्व स्वास्थ्य संगठन ने स्वास्थ्य की परिभाषा देते हुए लिखा है- “स्वास्थ्य वह स्थिति है, जब व्यक्ति शारीरिक, मानसिक व सामाजिक तीनों रूप से स्वस्थ होता है।” केवल रोग या बीमारी का न होना ही स्वास्थ्य नहीं है। वर्तमान में इनके साथ आध्यात्मिक और व्यावसायिक आयामों को जोड़ा गया है। ये कारक भी हमारे स्वास्थ्य को बहुत अधिक सीमा तक प्रभावित करने लगे हैं। इन सभी आयामों पर विस्तार से चर्चा की जरूरत है। आयुर्वेद से लेकर आधुनिक चिकित्सा एवं स्वास्थ्य विज्ञान इन उद्देश्यों को लेकर विभिन्न प्रकार के शोध निष्कर्षों को प्रस्तुत कर रहा है।

‘नई उड़ान’ पत्रिका के इस अंक को ‘सभी के लिए स्वास्थ्य’ विषय पर केन्द्रित रखते हुए यह प्रयास किया गया है कि पाठक इस विशेष उद्देश्य की ओर अपना ध्यान आकर्षित करेंगे तथा अपने जीवन में स्वास्थ्य की भूमिका को समझते हुए बेहतर स्वास्थ्य की ओर अग्रसर रहेंगे। नियमित स्तम्भों के अन्तर्गत सुन्दर ग्राफिक्स और रेखांकन के साथ ज्ञानवर्धक व सुरुचिपूर्ण सामग्री प्रस्तुत है। छात्र-छात्राओं के साथ सभी पाठकों से यह अपेक्षा है कि वे अपनी प्रतिक्रियाओं से अवगत कराते रहेंगे। नए वर्ष की शुभकामनाओं सहित पत्रिका का यह अंक सादर आपकी सेवा में प्रस्तुत है।

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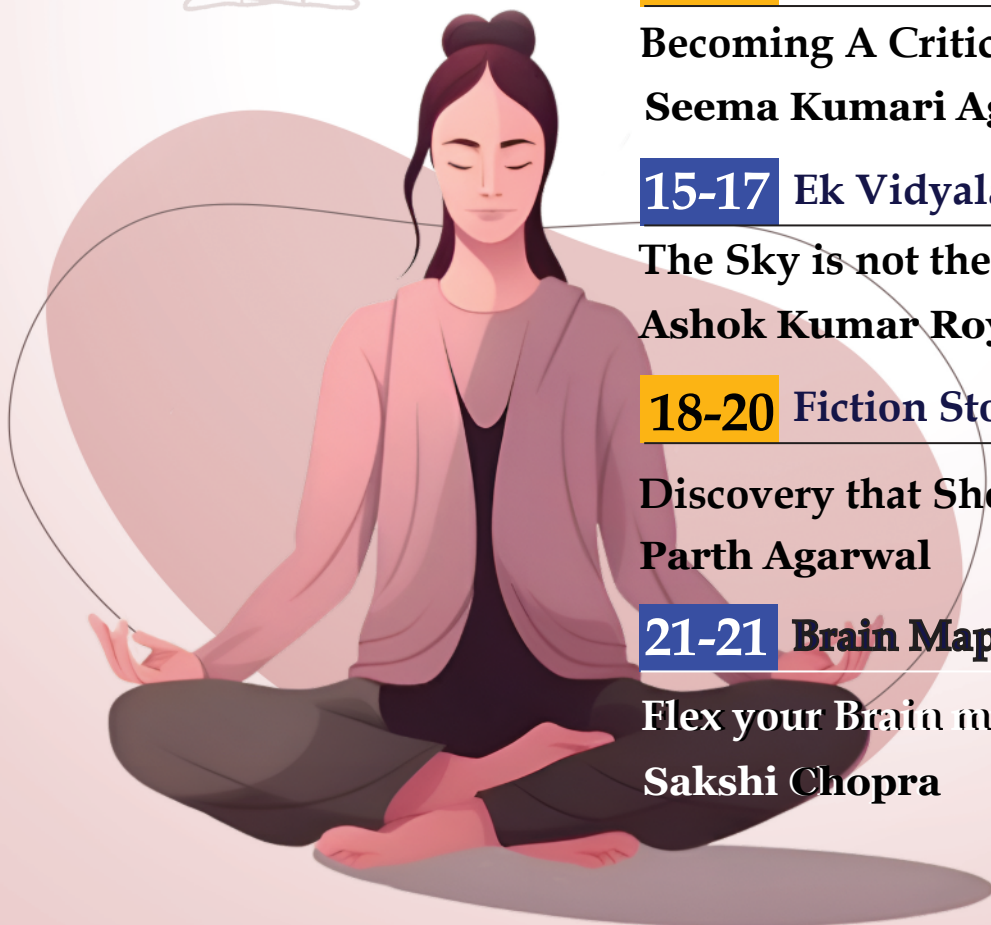
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Education for Good Health and Well-Being

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared vision for peace and prosperity for a more sustainable and better world for all. Through a General Assembly Resolution, the United Nations outlined 17 Global Goals known as the Sustainable Development Goals (SDGs) to eradicate poverty, protect the environment and the planet and promote the well-being of all.

These 17 SDGs are comprehensive individually but are also interlinked with the need for convergence at three levels: Global, Local, People for accelerating the SDG progress by further focusing on Strategic priority setting, systemic change followed by practical action with dedication and commitment from all stakeholders in advocating the transformation.

Among these 17 SDGs, one of the crucial goals



Sustainable Development Goal 3 (SDG 3) - Good Health and Well-Being

relates to Good Health and well-being (SDG 3). Well-being is a feeling of satisfaction with life, a state characterised by health, happiness, and prosperity.

Good health concerns the care of the human body and everything that can be done to protect it from sickness and intoxication and enable access to care.

SDG 3 focuses on ensuring healthy lives and promoting well-being for all ages. This goal addresses various aspects of global health, aiming to reduce maternal and child mortality, combat major diseases, and provide access to essential healthcare services, thus ensuring healthy lives for all.



knowledge skills and empowers the individual to address the issues of development, which would benefit the community. It enables them to develop an understanding and a perspective of the physical and social environment.

Healthy people are the foundation for a healthy economy. In turn, a developed country and education play a crucial role in achieving the targets of SDG 3 by creating individuals who can help promote good health and well-being for the benefit of society, the economy, and the country. Education helps to provide

Schools are the Nurture which nourish and nurture young mind and body to contribute effectively to the development of society and the Nation. Schools' contribution towards achieving sustainable development goals through active involvement of pupils and creating awareness among the masses is critical. Several initiatives have been conceptualised and implemented to strengthen the correlation between school activities and SDG achievement, especially SDG 3.

Education for Good Health and Well-being

It provides relevant knowledge and information about nutrition, physiology, hygiene, family planning, sex education and reproductive health.



• Early Childhood Care and Education

Learners at this stage begin to develop socio-emotional literacy, learning to manage feelings, build relationships and understand others' emotions by learning with fun, play, movement and active recreation.

• Primary Education

At this stage, learners acquire basic knowledge about mental and emotional health, as well as about sexual and reproductive health and rights. They develop the relevant abilities to express feelings healthily, manage emotional and physical stress, and seek



assistance if necessary. As a result, understanding of others' differences and emotions are promoted.

• Secondary Education



Health education at this level includes learning about the factors for communicable and non-communicable diseases and the links between the quality of nutritional intake, environmental factors and lifestyle choices. Through research and evaluation, learners acquire the necessary skills to critically analyse factors affecting health and disparities.

In parallel, they develop responsibility for their health and well-being as part of their own choices and behaviours, as well as for the choices and circumstances of others.

In addition to imparting the above health and well-being-related learning, the school has taken several dedicated, innovative initiatives towards creating educated, skilled and healthy children of the Nation, thus stepping towards achieving SDG 3.

• Parent Teacher Meeting/ Mega PTM



Through PTM, parents are regularly apprised about the student's performance, allowing teachers to understand the students' socio-emotional needs. The discussion is not only limited to academic performance but

also relates to physical and mental well-being. The PTM encourages students to improve academic performance, widen their skills and promote a healthy lifestyle, including good nutrition and physical well-being.

• Counselling



Schools are integrating social workers, specialised counsellors, and community representatives into the educational system to provide regular counselling sessions to students. This helps monitor children's mental and emotional health for early detection and framing of mitigation strategies.

• Regular Health Check-ups



Growth assessment of students, along with routine health check-ups to stop the progression of eyesight issues, hearing difficulties, oral health issues, etc., are regularly undertaken.

Vaccination and health card monitoring are also vital preventive measures against diseases.

• Nutrition

Nutritious mid-day meals for the growing needs of young children are served, supple-



mented by weekly Iron folic acid tablets and biannual deworming practices. Schools have also initiated the campaign to overcome malnutrition amongst school children by periodic anthropometric assessments and

need-based interventions, including mini snack breaks and regular parental counselling, thus creating action-based interventions on the importance of good nutrition for a "healthy body and mind".

• Sports and Yoga

Along with good nutrition, regular exercise and physical fitness are essential for effective learning and cognitive development. Schools organise sports meets, competitions, and yoga sessions to realize the importance of physical fitness for overall health and well-being.



• Community extension service

Schools are also centres for active community-based services.



These include cleanliness drives (Shramdaan), plantation drives, community-based vaccination centres, blood donation camps and awareness campaigns like sanitation and basic hygiene,

organ donation, prevention of vector-borne diseases, The Education Department has been working towards achieving various Sustainable development Goals in collaboration with State and Central Govt. The recommendations and implementation of National Education Policy 2020, which focuses on high-quality, inclusive education for all individuals, would enable the creation of a Nation with responsible, capable, motivated, skilled, empathetic, balanced, productive and healthy citizens for the country.

Deepika Mahalwal

Lecturer Home
Science, GGSSS, MB
Road, Pushp Vihar





Vision Quest

The Directorate of Education,
Science Branch, GNCT of Delhi,



hosted
its 4th
edition
of remarkable event,
"Vision Quest,"
on 18th of October,
2023, at the ICAR
Convention Center,
National Agricultural Science
Centre in New Delhi.

A Night of Victory Under Moonlight!



The platform is designed to nurture the inquisitive minds of our students for direct interaction with distinguished individuals who have excelled in their respective fields. Himanshu Gupta, IAS & Director Education himself lead the conversation and interacted with the distinguished guest along with a group of students who were selected from various government and private schools from each district. A direct interaction with their role models would help in catering to their curiosity.

The Guest of Honor for this event was Sh. M. Srikanth, Scientist & Mission Director of Chandrayaan-3 at ISRO.

He has served as the Mission Director of Chandrayaan-3 and is a pioneer in the field of space science. He is presently working at UR Rao Satellite Centre of the Indian Space Research Organisation (ISRO) in Bengaluru. He led the team that successfully orchestrated the journey of Chandrayaan-3 to the Moon.



M. Srikanth, the project Director of Mission Chandrayaan, has earned laurels through his visionary leadership and unwavering dedication. His meticulous guidance steered the mission to remarkable success, marking a milestone in India's space exploration journey. Srikanth's expertise and commitment have propelled the nation into the forefront of lunar exploration.



Chandrayaan-3 director tells kids to work hard, be honest

Tunes News Network
New Delhi: Hard work from a young age, sincerity and honesty were the three mantras, M. Srikanth, the scientist and mission director of Chandrayaan-3, shared with students of city schools on Wednesday. The interaction was part of the Directorate of Education's (DoE) Vision Quest event. Director, DoE, Himanshu Gupta, moderated the interaction. Students present were from various schools in the city.



चंद्रयान-3 के मिशन डायरेक्टर ने बच्चों को दिए सफलता के मंत्र





It was a wonderful opportunity for our students, who asked a variety of questions from the guest about his role model, lifestyle of a space scientist, challenges faced in navigating Chandrayan-3, why the Vikram Rover was decided to land on the south pole of moon, How ISRO been able to cut down the cost? black holes, future missions and many more! Students even asked the worthy DE by asking him for more research based educational platforms and his vision for 21st century skills to be incorporated in syllabus.





M Srikanth fondly remembered his father and shared that his father is his role model who always motivated him to steer ahead steadily but firmly! Joining ISRO was a major milestone in his career. He shared about his growth as an engineer and how a review mechanism in an organisation helps individuals to perform better. He talked about the culture of appreciation in his organisation, how success is celebrated as a team and failure is reviewed by the organisation.



When asked about his favourite assignment, he sailed us to memory lane of roughly 23 projects he is associated with and concluded that, the more the mission was challenging, the more it became favourite because each journey itself was a learning milestone.

An indigenous technology amalgamated with passion is sufficient to cut the cost of any big project. We can achieve big milestones with sheer dedication, passion and a feeling for 'Country first'. He got emotional while narrating the work culture and encouraged the young minds to



join the challenges and feel proud of the nation. Passion, Hard work, Discipline and Dedication for the nation! These were the four Mantra given by the Hon'ble guest!

He met the 'Team Nai udaan' on stage and attended the launch of its 9th edition. He applauded the efforts of the team and congratulated respected dignitaries, Sh.Himanshu Gupta, DE; Madam Zareen Taj, ADE; Dr. Sudhakar Gaikwad, DDE Sc Branch and Sh.Sanjay Subhash, DDE Exam Branch.

The students had a gala time at the event. The teachers accompanying were in all awe of the wonderful exposure and a great learning experience!

The program was telecasted Live on YouTube and was seen by large number of students across all the schools at their premises.

https://www.youtube.com/live/LrQWmC-G_koc?si=DqtSTjzyBzGb6_i0

Suman Relan

Lecturer English
Gssss, B -1,
Vasant Kunj



The event was published by some leading Newspapers too!



"Tiny, but mighty! Microgreens pack a powerful punch of nutrients in their petite forms, adding vibrant flavors and colors to your plate. #NutrientPowerhouse"

The World of Microgreens

Microgreens, the youthful and delicate greens that grace our plates, emerge from the germination of diverse vegetable seeds and herbaceous plants. This includes a spectrum ranging from aromatic herbs to untamed edible varieties. Bursting with flavor and nutrients, these miniature greens offer a vibrant and nutritious addition to culinary creations, enriching both taste and visual appeal.

The harvesting timeframe for microgreens in India, influenced by species selection (Di Gioia and Santamaria 2015) and growing conditions, spans 7 to 21 days post-germination. Cotyledon leaves fully develop, and the first true leaves emerge before harvest. Unlike sprouts, microgreens consist of single shoots with cotyledon leaves and/or the first true leaves. Unlike sprouts, microgreens' edible part is harvested by cutting young seedlings above the growing medium. Sprouts, on the other hand, involve germinating seeds soaked in water, often in darkness, with the entire sprout, including seedling, radicles, and remnants of seeds, being the edible portion.

Recently, these little wonders have become a big deal in India because they're hailed as a 'superfood,' loaded with goodies like fibers, minerals, vitamins, and antioxidants (Xiao et al. 2012, Di Gioia et al. 2017).



Broccoli microgreens ready to harvest. Photo: Francesco Di Gioia, Penn State

They're great when eaten raw and can spruce up salads, appetizers, sandwiches, and even pizzas, giving a burst of both Colour and flavor (Di Gioia and Santamaria 2015).

What's even more awesome is that these mini greens don't demand much space or fancy gardening equipment. Forget about fertilizers or sprays - you can easily grow them at home on your windowsill, porch, balcony, or a kitchen shelf. It's a simple and sustainable way to have fresh greens at your fingertips.



Vegetables that can be cultivated as Micro Greens

Various vegetable species are commonly cultivated as microgreens, including beet, Swiss chard, spinach, amaranth, lettuce, carrot, celery, fennel, onion, and cucumber. Microgreens are also generated by sprouting cereals such as barley, oat, wheat, corn, and pseudo-cereals like quinoa. Legumes like pea, bean, lentil, clover, chickpea, and fenugreek, as well as fiber species like sunflower and flax, are included in the production of microgreens.

Interestingly microgreens are produced also using the seeds of aromatic herbs such as basil, cilantro, dill, chives, and cumin, or using the seeds of some wild edible species such as borage (*Borago officinalis* L.), wild chicory (*Cichorium intybus* L.), common dandelion (*Taraxacum officinale* Weber), sea asparagus (*Salicornia patula* Duval-Jouve), etc.

All these species characterized by different shape, color, and taste are an expression of our rich agrobiodiversity and largely vary for their content of minerals and phyto-nutrients. The inclusion of a mix of these species in the diet in the form of microgreens may provide a variety of colors and nutrients for a weekly healthy diet as recommended by the 2015-2020 Dietary Guidelines for Americans.

What species are not suitable to grow as microgreens?

Some common vegetable crops like tomato, pepper, eggplant, and potato are not edible at the seedling stage and are not suitable to produce microgreens because they contain alkaloids which at high levels are toxic for humans. If using wild species, it is very important to recognize the plants from which seeds are collected because many spontaneous species contain toxic compounds while they may look like edible plants. Therefore, if you are not a plant expert refrain from using wild plants to produce microgreens. Also, you should exclude any species for which you may have an allergic reaction.

Micro green Awareness

Initiating microgreen awareness

and hands-on practice holds immense significance in enhancing our daily lives. Understanding the cultivation, harvesting, and utilization of microgreens empowers individuals to incorporate these nutrient-rich greens into their diets, promoting health and well-being. By fostering awareness and practical skills, we encourage a sustainable and accessible source of fresh, home-grown produce, contributing to healthier eating habits and a more environmentally conscious lifestyle.

Health and well being benefits of Micro Greens

Introducing microgreens into children's diets can bring several health benefits. Packed with essential nutrients like vitamins A, C, and K, these tiny greens support the growth and development of young bodies. The antioxidants in microgreens strengthen the immune system, helping children stay healthy. Additionally, the dietary fiber in these greens aids in digestion, preventing issues like constipation. With their vibrant flavors, microgreens make nutritious foods more appealing to children, fostering early habits of healthy eating. This sets the stage for lifelong well-being, optimal growth, and cognitive development.

Microgreens – A Micro snacks in the moni break in DoE, Delhi School

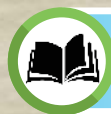
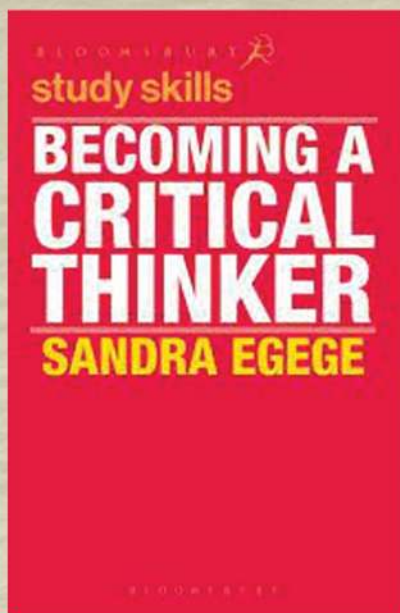
The Directorate of Education (DOE), guided by its vision of fostering a responsible, dynamic, and progressive education model, has taken significant strides in integrating microgreens into their schools. To realize this initiative, 30 master trainers have been meticulously trained to oversee the implementation of microgreen projects across the extensive network of 1050 schools. The aim is to cultivate microgreens within the school premises, ensuring their availability to students during their mini snack breaks. Spearheading this transformative endeavor are Mr. B.P. Pandey (OSD, School Branch) and mentors Priyanka Sehrawat, Sunita Chauhan, and Vikas Drall, who are set to lead the way in bringing this innovative and health-conscious project to fruition in DOE schools in the near future. This

initiative not only promotes nutritional awareness but also aligns with the broader vision of progressive education within the Directorate.

Karamjeet Singh

Lecturer English
Govt. Co-ed Sarvodaya
Vidyalaya
Rampura





Book Review

Need to know

Critical Thinking is very crucial and important. Everyone's belief system is based on some bias and the perceptions they have. One has to be very careful while it comes to believing what they see or read. In the post-truth era, this book will really help the readers to have a better understanding of things.

Becoming A Critical Thinker

This book comes handy when we talk about the things that really matter for our young readers. We are living in a world filled with loads of information. And AI is making it difficult for the receivers to identify and has verify if the information be it written, audio or visual is correct or not.

This book has 12 chapters. It provides a variety of activities to develop critical mindset. Our students often select their streams after class 12, whichever subject they study; this book will equip them with the tools to become an effective critical thinker.

Chapter 1: Why Critical Thinking Matters: Research, Knowledge and epistemology

This chapter begins with why critical thinking matters? What is the importance of critical thinking and what is the critical thinking process? What is research and the process of research? It also talks about knowledge and what knowledge claims and statements are. What is justification and what counts as proof or evidence when it comes to knowledge? At the same time it sheds light on knowledge and epistemology as well.

Chapter 2: Overcoming Barriers- Cognitive Biases

The human race grows with some biases. Every culture has its own set of biases. This chapter talks about, how do we know that "something" is true or false. What constitutes the barriers to knowledge-false beliefs, fake news and personal bias. What is cognitive bias and how we have a belief preservation.

Why does an individual preserve or perpetuate a false belief? It is always easy to judge people by saying that s/he is biased, but how do we know if we are biased? As earlier we are living in a world filled with information, in other words we are living in a post-truth era! Which makes critical thinking more relevant.

Chapter 3: Overcoming Barriers- Problems with Perception

Seeing things in one way is okay but thinking that only this is the only way makes it a challenge. This chapter talks about epistemology and perception. What is scepticism about knowledge?

Having perception is okay but what are the problems with perception? This chapter helps the readers to understand the bent stick or the necker cube-inside/outside phenomena. Our perspective matters: how perceptions influence our beliefs? Knowing how our beliefs can influence our perceptions is important. We observe many things, how can we make it a tool so that our observations will become more reliable.

Chapter 4: Knowledge Claims- Recognising and Writing an Argument

This chapter talks about knowledge claims and justification, why and when to use an argument? What is an argument? What is persuasive writing and identifying an argument? When we hear someone saying something, is it an explanation or argument? How to differentiate between these two? What is argument structure and argument mapping?

Chapter 5: Critiquing the Logic of the Argument- Logical Thinking and Common Fallacies

This chapter talks about knowledge, justification and logic. How can one can assess arguments, what are the types of justification for arguments. We have heard of reasoning but, what are inductive and deductive reasoning and how those can be used. What are the strengths and limitations of inductive and deductive arguments? At the same time this chapter also shed light on the problems with inductive and deductive reasoning. Knowing about local fallacies is an important aspect of this chapter.

Chapter 6: Critical Thinking and Digital Literacy- Evaluating the Information Source

Everyone has access to the internet, a Pandora box of information. Which makes it important that we talk about the need for digital literacy. This chapter talks about the reliability of information we have access to? How do we check for credibility? Does it matter if it is wrong? What does verification mean. Assessing credibility is a must if we are sharing information with someone. Those who can easily remember referring to Wikipedia for their school project, can we use it nowadays? Evaluating information sources for academic purposes is necessary.

Chapter 7: Critiquing the Literature- How Do You Know That Is So?

This chapter talks about academic texts and critical thinking. How reading academic articles are related to critical thinking. How one can review (critique) an academic article and what are the sets for evaluating and critiquing an academic article. This chapter also deals with the nuances of writing the review.

Chapter 8: Critiquing the Evidence- Quantitative and Qualitative Research Methodologies

This chapter talks about critiquing the evidence, the types of evidence and the research process. How one can critique or evaluate a casual justification, and how to set up a research. It also sheds light on qualitative and quantitative research methodologies and mixed methods. We come across several types of data, how one can critique research data. What are the precautions one has to keep in mind when dealing

statistics and how to infer and process them into meaningful information for all. At the same time this chapter also talks about critiquing qualitative research. How one can make his/her work reliable by being rigorous.

Chapter 9: Writing an Argument- Making it Persuasive

This chapter talks about critical thinking and writing a convincing argument. What makes a good/strong argument and how can one write a persuasive argument? What counts as enough evidence? What can we infer? What qualifies our claims? How one can use inference as indicators. What are some other useful discourse markers and how we can use it to provide balance and avoid contradictions by following the logical structure of ideas.

Chapter 10: Writing (Critical) Literature Reviews

This chapter talks about addressing “the literature”, types of literature reviews and writing a literature reviews. Some most common complaints from lecturers and their thesis examiners. The tone is very important when it comes to writing anything, and when someone is reviewing, choosing the right critical language is very important.

Chapter 11: Critical Thinking as Critical Self-Reflection

This chapter talks about how thinking critically about oneself will lead to self-reflection. Having a critical thinking disposition and the need for critical self-reflection. This chapter also talks about self-reflective practices in different fields including education. The role of self-reflective journal is discussed in this chapter.

Chapter 12: Critical Thinking at the Workplace

This chapter talks about the complexity of work-life in the contemporary world. How critical thinking is seen as a future skill-set. Having critical thinking is relevant to employment as this is related to public/civil service as well as government. Industry and business are looking for the people who have it in them. Becoming a critical thinker will help the readers to develop the critical reasoning skills by:

- Recognising bias, false beliefs and fake news
 - Distinguish between explanations and arguments
 - Evaluate information sources objectively
 - Critique different research methodologies, and
 - Construct a persuasive, critical argument of our own.
- A must read!

**Seema Kumari
Agarwal**

PGT- Pol Sc
GGSSS Sec 5, Dr
Ambedkar Nagar



Chandan Jha

TGT Natural science
GBSSS Ghitorni
1720034





Ek Vidyalaya Aisa bhi

एक विद्यालय ऐसा भी!

कौन कहता है कि आसमान में सुराख
नहीं हो सकता,
एक पत्थर तो तबियत से उछलो चारों!

दिल्ली शिक्षा में हो रहे नवीनतम प्रयोगों को देखने
के लिए सर्वोदय विद्यालय, सेक्टर 8, रोहिणी में 'टीम
नई उड़ान' का आगमन हुआ।

उप-प्रधानाचार्या सुश्री भारती कालरा ने अपने
विपरिचित अन्दाज़ में मुस्कुराते हुए उनका स्वागत
किया।

Need to know

इस विद्यालय में हुए
अभिनव प्रयोगों को
विद्यांजलि के राष्ट्रीय स्तर
के पोस्टर्स पर भी देखा
जा सकता है।
विद्यांजलि भारत सरकार
की एक ऐसी पहल है,
जिसका उद्देश्य सामुदायिक
और निजी क्षेत्रों द्वारा
विद्यालयों को सशक्त
बनाने में भागीदारी
सुनिश्चित करना है।



पुस्तकालय, वह
स्थान, जहाँ ज्ञान
की खोज और
संग्रहण का सफर
शुरू होता है, एक
सजीव विद्यालय की
सफलता की नींव
है।

यहाँ शिक्षा का मकसद सिर्फ पाठ्यक्रम पूरा
करना ही नहीं, बल्कि एक "देशभक्ति
पार्क" के माध्यम से छात्रों को राष्ट्र से प्रेम
और समर्पण की भावना सिखाना भी है।



पूर्णता की ओर बढ़ने
के लिये योग शिक्षा!
यह न केवल शारीरिक,
बल्कि मानसिक और
आध्यात्मिक स्वास्थ्य
को संतुलित करके
समृद्धि की दिशा में
बढ़ने में मदद करती
है।

ऐसी प्रयोगशालाएं, जहां हर विषय का अध्ययन
सरल और सुविधाजनक हो, "ओपन लर्निंग" के
द्वार खोलती है जो छात्रों की सोच को सफलता के
नए आयामों तक पहुंचा सकें।

विद्यालय प्रांगण में जहां तक नज़र दौड़ाएँ, दूर तक फैले ग्रीन कॉरिडोर का एहसास होता है। ऊँचे घने वृक्ष, हर्बल एवं किचन कॉर्नर्स के साथ साथ “वेस्ट मैनेजमेंट” और “बेस्ट आउट ऑफ़ वेस्ट” थीम्स , विद्यालय का आर्ट के प्रति लगाव का स्पष्ट संदेश देते हैं।

विद्यालय का हर कोना एक कहानी कहता है। कहीं विद्यार्थियों द्वारा किए गए नवाचार, कहीं अध्यापकों का नवीनतम प्रयास, कहीं विद्यालय द्वारा उठाए गए कदम और कहीं अभिभावकों की सक्रिय भूमिका। एक दृढ़निश्चयी प्रधानाचार्य और ऊर्जावान उप-प्रधानाचार्या के साथ कर्मठ विद्यालय स्टाफ़, उत्साही स्टूडेंट्स और संपूर्ण भागीदारी के साथ विद्यालय प्रबंधन समिति , ये सभी मिलकर इस विद्यालय को ऊंचाईयों तक ले जाते हैं।



इस विद्यालय में कई ऐसे नवाचार हैं जो उल्लेखनीय हैं ।

शोभित रीडिंग कॉर्नर से शुरुआत करते हैं, यह इस विद्यालय का प्रमुख आकर्षण है। यह एक सुखद संयोग ही है कि यह रीडिंग रूम सिर्फ इसी विद्यालय के छात्र छात्राओं के लिए नहीं, अपितु समाज के अन्य जरूरतमंद बच्चों के लिए भी पढ़ने के लिए समुचित व्यवस्था उपलब्ध करवाता है। ऐसे बहुत सारे छात्र जो पढ़ने के इच्छुक हैं किंतु उन के पास संसाधन नहीं है, यह

विद्यालय उन्हें सारी सुविधाएं मुफ्त उपलब्ध करवाता है। विद्यालय के दौरान और बाद भी यहाँ पढ़ने के लिए समुचित व्यवस्था की गई है। यह रीडिंग रूम 8:00 बजे प्रातः से लेकर 8:00 बजे रात्रि तक खुला रहता है।



‘फिजिक्स वाला’, बहुवर्चित एवं देशभर में विख्यात कोविंग सेंटर इस विद्यालय की विशेष उपलब्धि है! इस केंद्र की स्थापना श्री अलख पांडे जी तथा श्री प्रतीक



माहेश्वरी जी की कृपा से संभव हुई। यह केंद्र न केवल आधुनिक उपकरणों से सुसज्जित है, पिछले कुछ वर्षों में देश के प्रतिष्ठित इंजीनियरिंग तथा मेडिकल कॉलेज में 50 से ज्यादा बच्चे इस कोविंग से लाभान्वित हुए हैं। यहां यह उल्लेख करना महत्वपूर्ण हो जाता है कि “फिजिक्स वाला” कोविंग सेंटर पूर्णतया निशुल्क कोविंग प्रदान करता है।

कक्षा छठी से दसवीं स्तर के छात्र-छात्राओं को विज्ञान विषय के अध्ययन में रुचि एवं प्रयोगात्मक संवर्धन के लिए "अगस्त्या फाऊंडेशन" के मार्गदर्शन में जूनियर

साइंस लैब एवं मैथ्स लैब को विकसित किया गया है। यहां छात्रों को विज्ञान एवं गणित विषयों में कौशल एवं ज्ञान हासिल करने के लिए उपकरण एवं सामग्री उपलब्ध है। अगस्त्या फाऊंडेशन ने इस लैब के लिए निदेशक भी उपलब्ध कराया है!

गत वर्ष, क्षेत्रीय स्तर पर आयोजित “जिज्ञासा” नामक विज्ञान प्रतियोगिता में इस विद्यालय के छात्र एवं शिक्षक क्रमशः प्रथम और द्वितीय स्थान पर रहे।

विद्यालय प्रधानाचार्य तथा उपप्रधानाचार्या के विशेष प्रयास एवं समाज के कुछ विशिष्ट बुद्धिजीवियों एवं शिक्षाविदों के सहयोग से, “विद्यांजलि”, जो कि केन्द्र सरकार का पूरे भारत के स्कूलों में चलाए जाने वाला एक महत्वपूर्ण कार्यक्रम है, में यह विद्यालय देशभर में अग्रणी स्थान पर रहा है।

टीम नई उड़ान ने यहाँ बच्चों और शिक्षकों से विस्तृत चर्चा की। नई उड़ान का संकल्प है बच्चों की जिज्ञासा, विश्लेषण, रचनात्मकता जैसे गुणों को उजागर करना।

यह सभी भाव इन सब से बातचीत में झलक रहे थे। यह कहना अतिशयोक्ति नहीं होगा कि छात्रों के बेहतर भविष्य को निखारने का प्रयास इस विद्यालय का दृढ़ संकल्प है।

Ashok Kumar Roy

Lecturer English
Sarvodaya Vidyalaya,
Rohini, Sec-8





Storytelling has existed in all human cultures and each culture incorporates different elements of truth and fiction into Storytelling. "Milesian Tales" were an early example of Fiction Story.

Discovery that Shook the entire World

My grandfather was 79 years old when he was admitted to the hospital as he was not keeping well. He loves me a lot. One Saturday night, my father and I were really worried about him and prayed to God for his recovery and well-being. That night, I went into a deep sleep and saw a dream.

It was 28th Dec 2050. There was a new disease called "SynthWavoXenoViral Disorder" that was spreading faster than any other disease ever. The disease was causing humans to lose their mind and become Inhuman. Doctors were in the process of studying the cause of the disease and working on the medication.

It was found out that mobile networks operating at 12G wavelength were causing a major impact on the human brain. These waves damaged the essential neurons and turned humans into Inhuman.

The world was at the peak of technological

innovations and inventions.

There were robots and infrastructure available in each house to convert it into a hospital room. However, all of it was in vain in front of this new disease impacting globally.

Governments all over the world joined hands together to curb this disease. However, it was still spreading.

I saw that my grandfather had also become affected by it. We had to lock him in a room.

The doctors across the world were working together to develop a vaccine for this brain infection. After doctors from across the world failed multiple times, doctors from India discovered based on Ayurveda. It was made from a soft mixture of Tulsi, Neem and Peepal plants. These plants are almost becoming extinct and there were only a few left around the banks of river Ganges.

I saw that my grandmother, had grown these rare plants in her backyard. My father after coming to know about it discussed with my grandmother and started preparing the medicine.

We managed to get the medicine made at home and gave it to our grandfather. He soon calmed down and we helped him sit in a bright sunlit spot in the house. Soon his health improved.

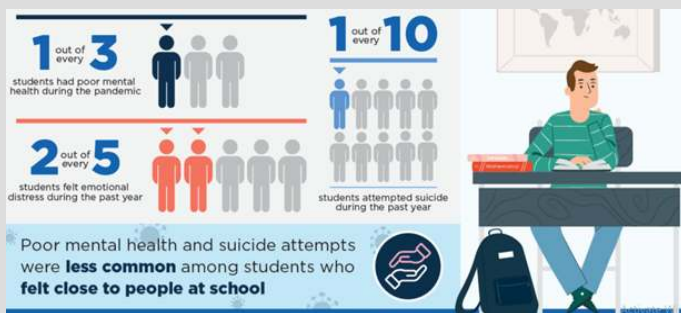
My mother started giving him a healthy diet consisting of fruits like apples, bananas, and vegetables like spinach, peas, cabbage, etc.

Soon the medication was commercialized and made readily available.

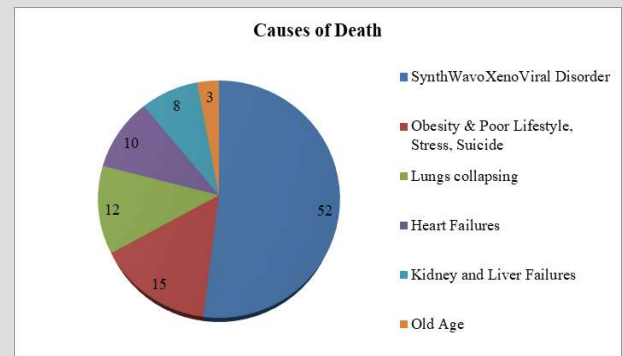
The world started healing. People started returning to the basics which encompasses patience, respect for each other and responsibility towards making a healthy world. The hunger to fulfill human desires instantly is the root cause of why technology sometimes overcomes humans.

Governments acknowledged this quickly analyzing the causes of the deaths. Following was the statistics collated:

S. No.	Causes of Death	Percentage
1	SynthWavoXenoViral Disorder	52
2	Obesity & Poor Lifestyle, Stress, Suicide	15
3	Lungs collapsing	12
4	Heart Failures	10
5	Kidney and Liver Failures	8
6	Old Age	3



Causes of Death



The above statistics were a complete surprise where the deaths had increased due to diseases and failures. The natural deaths due to old age were the lowest.

Government came up with a program promptly mandated for the well-being of their respective citizens. They came up quickly with gadgets and devices to track and monitor the real things which were never thought earlier.



Limited use of devices giving radiations like mobile and laptop:

Government induced a chip which will monitor usage of the device. After crossing maximum of 1 hour, device will get pulled off for a user under the age of 18 and they will not be able to use it further.





Planting trees and increase natural greenery:

Due to wide spread technology widespread, there were hardly any plants, trees left. Government mandated that every house needs to put minimum 2 plants in a month.

Taking care of your parents and elderly

It was all decided and acknowledged among the citizens that children cannot leave their parents alone when they are old. People were made to work from home when they are with their parents.



Exercise Daily

When you remain physically active and exercise daily, your blood flow improves in your entire body. With the increased blood flow, the number of oxygen increases and you feel more energetic, fresh and mentally active.



Be Social, as Much as You Can

Isolation and lack of communication are the two biggest reasons for depression and mental and physical illnesses. No matter how busy your family and work life is, try to dedicate some time to friends and socialize with them.

Find and Practice New Hobbies

Government started building up infrastructure to encourage for pursuing various types of hobbies. Hobbies help us keep busy and engaged. When you have an interest in some activities and enjoy doing them, you take healthy steps to improve your emotional well-being. Ayurveda and other hidden treasures were unfolded to cure

masses. India became the leader and other countries started following it up.

My grandmother woke me up as I was shivering and I shared my dream with her. She took out an old book and found a page to make a medicine which I saw in my dream. She then took it to the hospital and gave it to her grandfather. In a few days, he started recovering. We soon got him discharged from the hospital. Since then all of us have been taking care of our respective health and well-being.

Parth Agarwal

Student, 8-B
Apeejay School
Panchsheel Park



Reference:

1. Wellbeing - <https://wellbeing-project.org/9-tested-tips-to-improve-your-wellbeing-and-quality-of-life-post/>

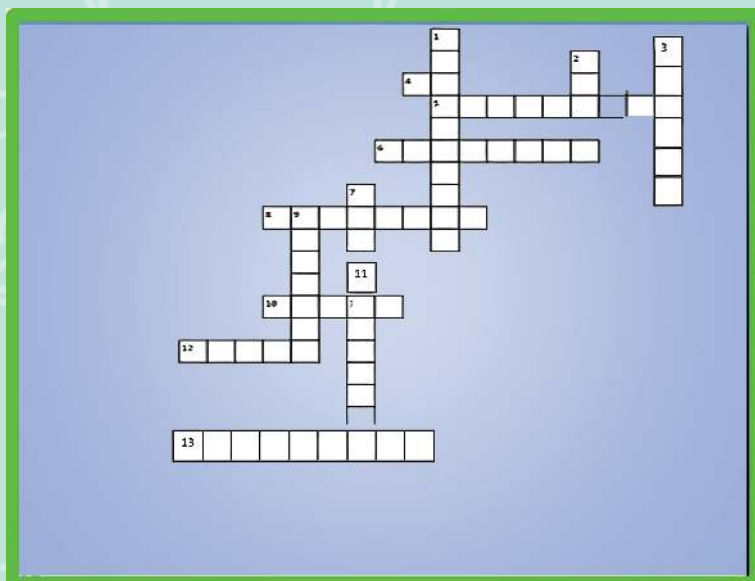


Brain mapping

Need to know

Let's unlock the mysteries of the mind through brain mapping, paving the way for a deeper understanding of cognition and neurological complexities.

FLEX YOUR BRAIN MUSCLES



ACROSS

4. Creators of the SDG's.

5. Painkiller and anti-inflammatory drug; one of the World Health Organization Essential Medicines.

6. The disease that is also called the sugar disease.

8. The World Health Organization announced the eradication of which infectious disease in 1980?

10. The color of SDG 3.

12. Cause of 2014 global health scare.

13. The practice of commercially exploiting naturally occurring biochemical or genetic material.

DOWN

1. Over 2 billion people lack access to basic___?

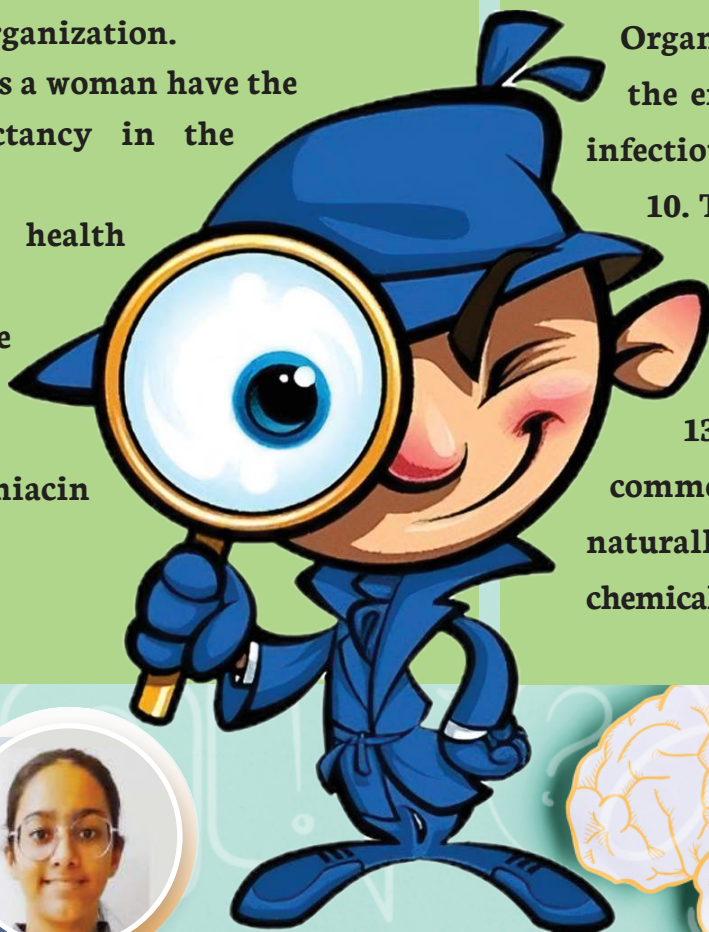
2. Global Health Organization.

3. In which city does a woman have the highest life expectancy in the world at 93.5 years?

7. 1918 worldwide health threat?

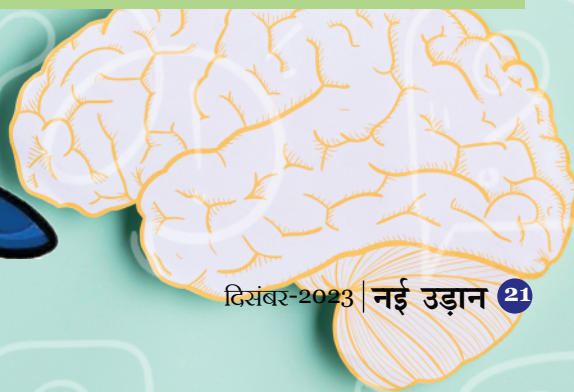
9. Infectious disease caused by a mosquito bite?

11. What does niacin deficiency cause ?



Sakshi Chopra

VIII- G
Adarsh Public
School



The answers are given somewhere in this edition, look for them

Need to know

Celebrating the remarkable journey of Bidhan Chandra Roy, a visionary leader whose legacy continues to inspire generations. His contributions to healthcare and governance are etched in history, leaving a lasting impact on our nation.



Journey of a Scientist

BIDHAN CHANDRA ROY

An Eminent personality

Early Years and medical education

Dr. Bidhan Chandra Roy's journey into medicine commenced with a remarkable display of academic prowess and dedication from an early age. Born on July 1, 1882, in Patna, Bengal Presidency, his passion for learning led him to Calcutta Medical College, a prestigious institution where he embarked on his medical education.

At Calcutta Medical College, Dr. Roy's diligence and thirst for knowledge distinguished him among his peers. His academic excellence became evident as he delved into the intricate world of medicine. His unwavering commitment to his studies not only showcased his intelligence but also hinted at his future contributions to the field of healthcare.

Completing his medical education in 1909, Dr. Roy emerged not only as a qualified physician but also as a young individual poised to make a lasting impact in the realm of healthcare. His time at the medical college laid a robust foundation for his future endeavors, instilling in him the values of compassion, dedication, and a

fervent desire to contribute meaningfully to society through the field of medicine.

This phase in Dr. Roy's life was pivotal, shaping his outlook and nurturing the seeds of a visionary leader committed to advancing the cause of good health and well-being for the nation. His success at Calcutta Medical College marked the inception of a remarkable journey that would ultimately redefine healthcare in India.

Leadership in Indian medical association

Dr. Bidhan Chandra Roy's leadership in the establishment of the Indian Medical Association (IMA) stands as a pivotal moment in his career and in the advancement of healthcare in India.

In 1928, Dr. Roy played a crucial role in the formation of the Indian Medical Association, an organization that aimed to unify medical professionals across the country. As the president of the IMA, he became a driving force behind fostering collaboration, knowledge exchange, and the advocacy of improved healthcare practices and policies.

Under Dr. Roy's guidance, the IMA became a platform where medical professionals could come together to address common challenges, share advancements in medical science, and collectively work towards enhancing the quality of healthcare services. His vision for the IMA was not only centered on professional development but also on advocating for the health and well-being of the population at large.

Dr. Roy's leadership within the IMA laid the groundwork for a collaborative healthcare ecosystem in India. His ability to bring together diverse medical professionals under a single banner facilitated the exchange of ideas, promoted advancements in medical research, and helped in setting standards for ethical medical practice. Through his tenure as the president of the IMA, Dr. Roy's efforts were instrumental in shaping the direction of healthcare in the country. His visionary approach and dedication to improving the medical landscape set a precedent for the role of professional organizations in fostering growth, unity, and progress within the healthcare sector, leaving an indelible mark on India's healthcare system.

Political Leadership

Dr. Bidhan Chandra Roy's tenure as the Chief Minister of West Bengal from 1948 to 1962 marked a significant phase in his career, where he translated his vision for healthcare reforms into tangible actions, impacting the lives of millions in the state.

Global recognition and awards

The recognition and awards bestowed upon Dr. Bidhan Chandra Roy, notably the Bharat Ratna, stand as a testament to his exceptional contributions to medicine and public service, both within India and on the global stage.

In 1961, Dr. Roy was honored with the Bharat Ratna, India's highest civilian award, in acknowledgment of his remarkable achievements and pioneering work in the field of healthcare and public welfare.

This prestigious award, presented by the Government of India, recognized his outstanding leadership, unwavering commitment, and significant

impact on the healthcare landscape of the nation.

The Bharat Ratna is a symbol of the highest honor and esteem that the country bestows upon individuals who have made exceptional contributions in various fields, including social service, arts, science, and public affairs. Dr. Bidhan Chandra Roy's recognition with this prestigious award was a testament to his dedication and tireless efforts in advancing the cause of good health, well-being, and the greater good of society. Moreover, beyond national boundaries, Dr. Roy's contributions to the field of medicine and healthcare earned him global recognition and admiration. His visionary leadership, groundbreaking initiatives, and substantial impact on healthcare policies and practices garnered respect and admiration from the international community.

The Bharat Ratna conferred upon Dr. Bidhan Chandra Roy not only celebrated his individual accomplishments but also symbolized the acknowledgment of the crucial role played by healthcare professionals and leaders in shaping the welfare of society. It served as a fitting tribute to his lifetime of exceptional service, leaving an enduring legacy that continues to inspire and guide generations in the pursuit of excellence in healthcare and public service.

Contributions made by Dr. Bidhan Chandra Roy

He made quality health services available for common people. He established some leading medical institutions like Calcutta R.G.Kar Medical College, the Jadavpur T.B. hospital, Chittaranjan Seva Sadan, Kamala Nehru hospital, Victoria institution and Chittaranjan Cancer hospital. He played a key role in establishing the Indian institute of mental health and infectious disease hospital, and the first ever postgraduate medical College in Calcutta.

National doctor's day is celebrated in his memory on 1st July.

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Ayesha Siddiqui

Sarvodaya Kanya
Vidyalaya, No.2
Mandawali





STEAM-BASED STERILIZATION OF DENTAL TOOLS FOR REMOTE AREAS

Researchers at IIT Madras have developed a steam-based sterilization system for dental instruments so that medical camps can be held in rural and isolated locations. This solar-thermal steam-based sterilization system for dental instruments have been developed to aid in the operation of medical campuses in outlying and rural locations where water and electricity availability may be problematic. Renewable energy-based stations (such as solar energy) strategically positioned in rural locations provide power, steam, and other uses for the portable steam cylinders for this project. In order to efficiently sanitize the instruments using such transportable steam storage, the team additionally created unique sterilization chambers. The following are some benefits of the technology created by IIT Madras: .



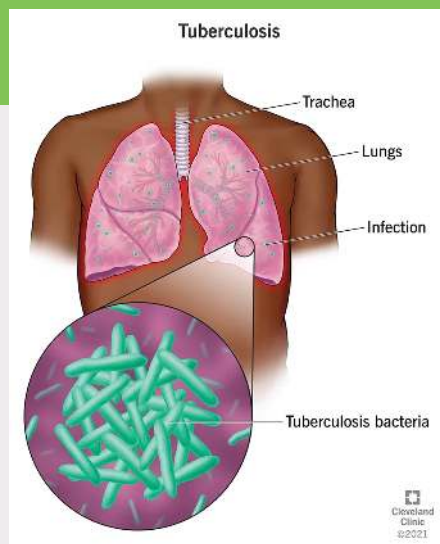
- A small, lightweight steam storage tank designed for sanitizing dental equipment in isolated locations
- A vacuum-assisted multi-layer insulation system is integrated to maintain useful heat for over seven hours.
- An exothermic capsule integration system will improve the steam storage cylinder's efficiency.
- Helps collect waste steam and repurpose it for possible uses in healthcare, agriculture, etc.
- Does not require the usage of an external heating source.

INDIA'S EFFORTS FOR MANAGING TB HAILED IN WHO'S GLOBAL TB REPORT 2023

The World Health Organization (WHO) recognized India's accomplishments in its Global TB Report 2023, stating that since 2015, the country has successfully decreased the incidence of tuberculosis by 16 per cent and the mortality rate from it by 18 per cent. The report stated that India has reversed the impact of COVID-19 on the TB program and achieved enormous strides in increasing case detection. It also added that the country's mortality rate from the disease has decreased by 18 per cent during the same time period. Over fifty meetings were held between the health ministry and the technical teams of WHO after this. The team from the ministry presented all newly generated evidence at the meetings, including data from the Ni-kshay portal, which records each TB patient's lifecycle as well as the in- country mathematical modelling established.

The research states that in 2022, over 24.22 lakh TB

cases were declared, surpassing the pre-COVID levels, marking the highest-ever notification of cases in India due to increased case detection tactics. The government's major initiatives, like the decentralization of screening services through Ayushman Bharat Health and Wellness Centers, the scaling up of molecular diagnostics to block levels, specialized active case-finding drives, and private sector engagement, have resulted in a significant gap in missing cases.



REVERSIBLE INHIBITION OF SPERM UNDER GUIDANCE (RISUG)

RISUG is a nonhormonal injectable male contraception created to take the place of surgical vasectomy, the sole technique of male sterilization currently in use worldwide. It functions by physically obstructing the vas deferens, a duct that transfers sperm from the epididymis to the ejaculatory ducts during ejaculation, preventing the creation of sperm. It provides a long-lasting, reliable, and safe method of family planning. After injection, it starts to work two months later and lasts for up to ten years. It has no negative effects on reproductive health, local inflammation at the injection site, or pyrexia. It has a lower failure rate than the breaking rate of male condoms. Therefore, RISUG is a highly effective, low failure-rate, one-use male contraception. RISUG is a perfect option for a mass contraceptive delivery program because it requires a standard dosage of 120 microliters, which eliminates the need for customization.

INCLUSION OF INDIAN MEDICINE SYSTEM ON WHO'S LIST

The Union government has pushed for the inclusion of Indian system of medicine in the 11th revision of the International Classification of Diseases (ICD), as the second module of a supplementary chapter on conditions treated with traditional medicine. The traditional Indian system of medicine includes Ayurveda, Siddha, Unani and Yoga, Naturopathy, and Homoeopathy streams of medicine. This move is intended to put the Indian medical system on the global map and give it a common, standard language. ICD addresses a broad spectrum of illnesses, ailments, wounds, and variables pertaining to health. For healthcare professionals around the world, the ICD acts as a common language that enables them to exchange standardized data. The inclusion of the Indian system of medicine would enable a more thorough approach to reporting adverse events and integrating traditional medicine into insurance and reimbursement systems.

AIR POLLUTION LINKED TO HIGHER INCIDENCE OF TYPE 2 DIABETES

A new study conducted in Delhi and Chennai suggests that breathing in polluted air may raise the risk of type 2 diabetes. High blood sugar levels were linked to breathing in air containing a lot of particulate matter, particularly PM_{2.5}. The new assessment is part of the Centre for cArdiometabolic Risk Reduction in South Asia (CARRS) Surveillance Study. The study is a component of the chronic disease research that India has been conducting since 2010. Between 2010 and 2017, 12,000 men and women in Delhi and Chennai participated in the study. Air pollution exposure models and satellite data were used to assess their blood sugar levels on a regular basis. Studies investigating the relationship between diabetes and fine particulate matter with a diameter of less than 2.5 micrograms (PM_{2.5}) are rare in very polluted areas like India. The researchers discovered that blood sugar levels rose after one month of exposure to PM_{2.5}, and blood sugar levels rose after a year or longer. They discovered that the risk of diabetes rose by 22% for every 10 micrograms/m³ increase in the two cities' yearly average PM_{2.5} level. It also suggested Indians are more prone to diabetes than the Western population given the pathophysiology of Indians, low BMI with a high proportion of fat.

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Neha Yadav

Lecturer Biology
RSKV East Vinod
Nagar





BHU Special Courses of Study (Diploma and certificates)

The Banaras Hindu University offers admission to various Diploma and Certificate Courses under Special Courses of Study in some Faculties/Departments of the University as well as at Rajiv Gandhi South Campus, Barkachha, Mirzapur. Name of the courses, Course code number, eligibility requirements, number of seats and fee etc. can be accessed by visiting the official website.

<https://www.bhuonline.in/>

<https://d2bpq0k0hmyes4.cloudfront.net/pdfs23/SES%20Information%20Bulletin%202023.pdf>

For BHU UET one can visit previous edition of Nai Udaan

https://www.edudel.nic.in/welcome_folder/NaiUdaan/December21_Nai_Udaan.pdf

NATA (National Aptitude test in Architecture) 2024

NATA is an aptitude test that assesses a candidate's innate ability through a variety of testing formats and cannot be taught, learnt or induced. NATA measures the aptitude of the applicant for specific field of study i.e. Architecture, through assessment of cognitive skills, visual perception and aesthetic sensitivity tests, logical reasoning and critical thinking ability, etc., besides the learning that the candidate has acquired over the past few years and is related to the specific field of study.

Eligibility 10+2

Registration starts March 2024 (keep an eye on the official website)

Exam date 06/04/2024

For more details visit

<https://www.nata.in/>

https://www.nata.in/NATA_BROCHURE_2024_30_12_2023.pdf?v123

NEST (National Entrance Screening Test) 2024

National Entrance Screening Test (NEST) is a compulsory test for students seeking admission to National Institute of Science Education and Research (NISER), Bhubaneswar and University of Mumbai - Department of Atomic Energy Centre for Excellence in Basic Sciences (UM-DAE CEBS), Mumbai. Both NISER and UM-DAE CEBS were set up by Department of Atomic Energy, Government of India in 2007. Their mandate is to train scientific manpower for carrying out cutting edge scientific research and for providing input to scientific programmes of Department of Atomic Energy and other applied science institutions in the country. NEST 2023 will be conducted in around 120 cities across India.

Eligibility 10+2 or its euqivalent from any regonised board or university with Phy, Chem, Bio and Maths.

Registration starts Feb 2024 (tentative)

Exam date June 2024 (tentative)

For more details visit

<https://www.nestexam.in/>



NDA NA 2024

Union Public Service Commission (UPSC) is responsible for conducting the NDA Exam twice every year to select eligible male and female candidates for the admission to Army, Navy, and AIR Air Force wings of NDA and Indian Naval Academy Courses (INAC). For the year 2024, NDA 1 Notification 2024 was released on 20th December 2023 on the official website of UPSC, and for NDA 2, the notification will be released on 15th May 2024.



Registration starts 20 Dec 2023 to 9 Jan 2024

Registration link

<https://upsconline.nic.in/upsc/OTRP/>

Exam date 21/04/2024

For more details visit

<https://upsc.gov.in/examinations/National%20Defence%20Academy%20and%20Naval%20Academy%20Examination%20%28I%29%2C%202024>

Notification for the same can be accessed by clicking on **<https://upsc.gov.in/sites/default/files/Notification-NDA-NA-I-2024-Eng-20122023.pdf>**



Anjali

TGT, Natural Science
GGSS NO-2, SEC-5
DR.Amberdkar Nagar



Diving into the realms of knowledge, this research article serves as a beacon of enlightenment. Each meticulously crafted word is a step towards contributing to the ever-expanding tapestry of human understanding.

Comparative analysis of Antimicrobial content and total Phenolic content of various Tea samples

Introduction

Tea is a common beverage for the global population. So common, that after water, it is the most widely consumed drink in the world. The tea is an infusion of leaves that has been consumed for centuries as a beverage and is valued for its medicinal properties. The phytochemical screening of tea leaves revealed the presence of alkaloids, saponins, tannins, catechin and polyphenols. Tea leaves are known for its antimicrobial activity against many microorganisms. In this experiment we attempted to show that the tea we consume everyday as beverage, is it really helpful to us or not?

2a. Rationale of the study

- What is the beneficial aspect of having tea?
- Does it have any anti-microbial activity?
- If yes, which component of tea imparts this property?

2b. Strategy and experimental design

- Preparation of tea extract (4 tea samples)
- Estimation of the bactericidal activities of tea extracts (*E. coli* and *P. syringae*)
- Estimation of total phenolic content and profiles of tea samples (Spectrophotometer & TLC analysis)



Materials and Methods

- Tea samples (Processed tea, Green tea, Seabuckthorn tea, Fresh tea leaves)
- Reagents (Folin-ciocalteu reagent, Sodium carbonate solution)
- Equipment (Spectrophotometer, Table top Centrifuge)
- Various lab consumables (Falcon tube, Eppendorf tube, Whatman filter paper)



Spectrophotometer

Thin Layer Chromatography

Preparation of tea extract

Weigh tea sample (1 gm), and add 5 ml 70% methanol in a falcon tube. Incubate at 65 oC for 10 min, vortex, and spin the samples at 6000 rpm for 10 min. Collect the supernatant, re-spin & store the supernatant for further use at 40C.

(B) Optimizing the paper disc experiment

Bacterial colony inoculated into 5 ml sterile nutrient broth in a sterile test tube



Tubes were subjected to gentle shaking and incubated at 370 C for 10-12 hours



1. Plated different dilutions of bacterial culture in plates- (2 OD, 0.6 OD, 0.1 OD) (~200µl)
2. Incubation temperatures (370C, 280C)
3. Different amount of tea extracts (10µl, 50µl, 100µl)

Plates incubated for 16-24 hours and zone of inhibition recorded



(C) Spectrophotometric determination of phenolic content in tea extracts

- Prepare the standard curve using 10 µl of known amounts (0-50 µg) of Gallic acid.
- Added 10 µl each of unknown tea sample extract to an appropriately labelled test tube (in triplicates).
- Added 1.25 ml of Folin&Ciocalteu's reagent and 1 ml sodium carbonate to each tube and mixed well.
- Incubated at room temperature for at 1 hour and absorbance measured at 765 nm in a UV-VIS Spectro-

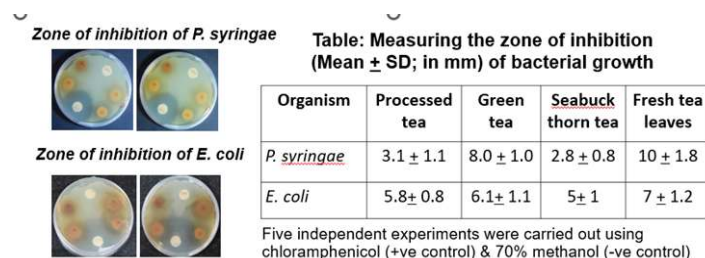
photometer.

(D) Thin layer chromatography

- A fixed amount of (5 µl) of each tea extract was taken and spotted in a TLC sheet and air dried in room temperature
- TLC plate was kept in a beaker containing ca. 100 ml solvent [petroleum ether: ethyl acetate (7:3)]
- Setup kept aside for separation for 30 minutes
- TLC sheet was taken out and the bands were visualized

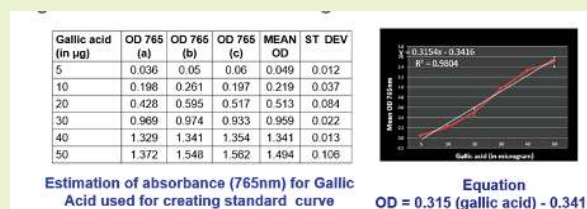
4. Observation & Results

(A) Antimicrobial activity of methanol extract of different tea samples



CONCLUSION: Fresh tea leaves extract exhibited greater antimicrobial activity, as evident by larger zones of inhibition against the tested bacteria followed by green tea.

(B) Spectrophotometer determination of gallic acid standard

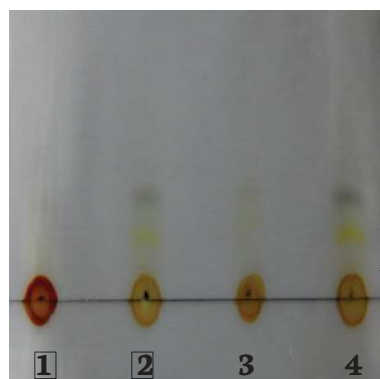


(C) Estimation of total phenolic content in tea extract

SAMPLE	OD 765 (A)	OD 765 (B)	OD 765 (C)	Mean OD	ST DEV	Gallic acid (100 per mg tissue)
B. Blank	0.002	0.002	0.013	0.006	0.006	0.0000
1. Processed tea	1.094	1.053	1.02	1.056	0.037	4.3445
2. Green tea	1.864	1.956	1.951	1.924	0.052	7.0966
3. Seabuckthorn tea	1.01	1.004	1.045	1.020	0.022	4.2304
4. Fresh tea leaves	2.045	2.063	2.045	2.051	0.010	7.5003

CONCLUSION: Fresh tea leaves have the highest accumulation of total phenolic content followed by Green tea.

(D) Thin Layer Chromatography of tea extract



- The presence of phytochemicals in tea extracts were analyzed by thin layer chromatographic method. The solvents used were petroleum ether and ethyl acetate (7:3 ratio) as mobile

phase.

- According to the number of components (polyphenols) in tea extract, the bands were clearly visible
- 1-Processed Tea
 - 2-Green Tea
 - 3- Seabuckthorn Tea
 - 4- Fresh tea leaves

CONCLUSION: Fresh tea leaves (4) and Green Tea (2) show two prominent bands, and correlates well with the highest phenolic content. Hence these tea are more beneficial and healthy to consume.

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Yamini Bisht

PGT, Biology,
Sadhu Vaswani
International School





पीरियड्स की जानकारी सिर्फ महिलाओं की नहीं जिम्मेदारी

हमें जानने से पहले आपसे कुछ सवाल



क्या आप मासिक धर्म या पीरियड्स के बारे में कुछ जानते हैं? कितना जानते हैं? क्या आप अपने मन में इसके बारे में बेहतर तरीके से जानने समझने की जरूरत महसूस करते हैं? और अगर कभी करते हैं तो क्या किसी से बात करते हैं? अपने कभी अपने आस पास किसी को पीरियड्स की समस्याओं की चर्चा करते हुए सुना है?

Need to know

प्राचीन समय में मासिक धर्म के दौरान महिलाओं का विशेष ध्यान रखा जाता था। महिलाओं को इस समय में अलग कक्षा में रखा जाता था, ताकि वे अन्य लोगों से अलग रह सकें।

इन सभी सवालों का जवाब अक्सर ना में मिलता है और लड़कियां और महिलाएं अपनी पीरियड्स की समस्याओं से जूझती रहती हैं और किसी को कुछ समझा नहीं पाती क्योंकि समाज इस विषय पर जागरूक ही नहीं है। लोग सिर्फ अनजान ही नहीं हैं बल्कि बहुत सारी भ्रांतियों से ग्रस्त हैं।



पीरियड्स के बारे में बात ना किए जा सकने वाली मानसिकता का हल तलाशते हुए हम जानकी देवी राजकीय

सर्वोदय कन्या विद्यालय मयूर विहार

फेज-1, पॉकेट-2 की छात्राओं ने निर्माण किया है 'आओ बात करें' कॉमिक्स का।

हमारी टीम- **Periods Buddy**- EMC कार्यक्रम के

अंतर्गत बिजनेस ब्लास्टर्स आइडिया के तौर पर बनाई गई है जिसमें दिल्ली सरकार द्वारा, समाज से जुड़ी समस्याओं को दूर करने के लिए प्रत्येक विद्यार्थी को दो हजार रुपये Seed money के रूप में दिए जाते हैं।

हमने ये आइडिया चुना क्योंकि अपने शोध में हमने पाया कि पीरियड्स की परेशानियों को दूर करने का उपाय उसकी खुले मन से चर्चा करने में छुपा है। हमारी कॉमिक्स बनाने का प्रथम एवं अंतिम उद्देश्य पीरियड्स के बारे में बातचीत को सरल एवम् सहज बनाना है।



पीरियड्स जिन्हें हम हिंदी में मासिक धर्म के नाम से जानते हैं लड़कियों में होने वाली एक स्वस्थ जैविक क्रिया है जो इस बात को दर्शाती है कि लड़की का शरीर अब गर्भ धारण करने के लिए तैयार हो रहा है। इस प्रक्रिया में लगभग एक माह के अंतराल पर लड़कियों को रक्तस्राव होता है।

यह एक अत्यंत सामान्य व प्राकृतिक क्रिया है किंतु समाज में इसको लेकर लोगों का व्यवहार बहुत असामान्य है। एक प्राकृतिक और सहज क्रिया के बारे में बात करने में लोग इतना असहज महसूस करते हैं कि लड़कियां अपने आपको लेकर असहज हो जाती हैं।

यह समाज लड़के और लड़कियों दोनों से मिल कर बना है और आवश्यक है कि लड़के या पुरुष भी इस प्रक्रिया को समझें और जानें। एक वर्ग के लोग दूसरे वर्ग की शारीरिक एवम मानसिक क्षमताओं तथा प्रक्रियाओं को नहीं जानेंगे तो सुंदर एवम् स्वस्थ समाज बनाने में अपनी पूर्ण भूमिका नहीं निभा पाएंगे।

हमारी टीम, **Periods Buddy** ने सभी आयुवर्ग के लोगों में जाखकता लाने के लिए EMC बिजनेस ब्लास्टर्स में कॉमिक्स बनाई है जिसमें हमने बड़े ही आसान शब्दों में रोचक चित्रों से भरी कहानियों के द्वारा पीरियड्स से जुड़ी स्वास्थ्य समस्याओं, मिथकों और अंधविश्वासों से लड़ने की मुहीम शुरू की है।

हम अपने समूह **Periods Buddy** के द्वारा मासिक धर्म के बारे में कॉमिक बुक्स बना कर बच्चों और बड़ों को माहवारी के बारे में शिक्षित कर रहे हैं और शैक्षिक संस्थानों और पब्लिक लाइब्रेरी को इसमें सम्मिलित

कर रहे हैं।

हमारी टीम **Periods Buddy** की हर सम्भव कोशिश है कि अधिक से अधिक लोग पीरियड्स के बारे में जानें और इसके बारे में बात करने से ना हिचकिचाएं। पीरियड्स के कारण ही हम सभी इस दुनिया में आते हैं, इसमें कुछ भी गंदा नहीं है। अपितु यह सबसे पवित्र रक्त है जो किसी शिशु के निर्माण की ताकत रखता है। जहां बाकी सारे रक्तस्राव जीवन लेने के लिए होते हैं यह एकमात्र ऐसा रक्तस्राव है जो जीवन देने के लिए होता है।

हमारी टीम के हर सदस्य ने बहुत मेहनत से कॉमिक्स की स्क्रिप्ट, पात्र, डायलॉग और ग्राफिक्स तैयार किये हैं। और बहुत ही आसान और मजेदार भाषा में इन्हे बनाया है। यह कॉमिक्स अभी हिन्दी और अंग्रेजी भाषा में बनाई गई है और भविष्य में और भी भाषाओं में बनाई जायेगी।

हमारी टीम **Periods Buddy** की कोशिश बस यही है कि हमारे द्वारा उठाया गया यह कदम सफल हो और सभी लोगों को माहवारी के बारे में जानकारी हो ताकि लड़कियां अपने पीरियड्स के दिनों में डर कर नहीं बल्कि खुशी से रहें और साफ एवं स्वस्थ पीरियड्स का अनुभव करें। हम उस दिन के इंतजार में हैं जब एक एकल पिता को अपनी बेटी को बड़ा करने में किसी रिश्तेदार या पड़ोसी आंटी की आवश्यकता न पड़े। और सेनेटरी नैपकिंस को घर लाने के लिए लोगों को किसी काली पॉलीथिन का इस्तेमाल न करना पड़े। आप सभी के सहयोग से ही ये कार्य संभव है और ज्यादा से ज्यादा हमारा साथ दीजिए।

धन्यवाद।

Nivedita

SKV Janki Devi Pkt 2
Mayur Vihar
Phase- 1



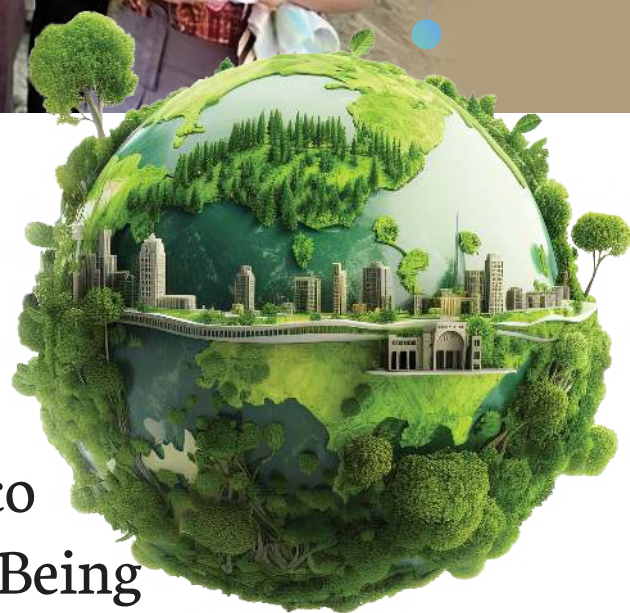


Eco club incharges in schools play a crucial role in fostering environmental awareness among students. They often collaborate with students to implement Eco friendly initiatives contributing to a greener and more sustainable school environment.



From Seeds to Symphonies

The Green Warriors' Innovative Eco Journey for Good Health and Well Being



In the heart of our educational realm, amidst the dynamic corridors where knowledge intertwines with ambition, an unsung hero thrives—the Green Warriors, our school's Eco Club. Beyond its conventional role, it emerges as a dynamic force, a symphony of sustainability orchestrating the holistic well-being of students, teachers, and the wider community.

As the steward of this green movement, I, the Green Warriors' in-charge, embark on an innovative journey. Imagine our school grounds transformed into a vibrant tapestry of blossoms—a living testament to our commitment to environmental stewardship. Yet, it's not just about

aesthetics; it's about sowing seeds of change and nurturing them into a flourishing reality.

The Youth Club, our transformative platform, stands as a beacon where knowledge converges with attitudes, molding behaviors that shape healthy lifestyles. In this nurturing environment, students metamorphose into confident and responsible citizens.

The unsung heroes? The Green Warriors, scattered seeds in the fertile soil of academia, fostering environmental awareness among the future torchbearers of our planet.



between students and the natural world. The wisdom of sustainable practices passed down from experienced teachers to enthusiastic students creates a harmonious cycle of learning and unlearning. It's an educational symphony where the notes of the past harmonize with the melodies of the future.

In this tapestry of green initiatives, the Green War-

Central to our mission is the creation of awareness, nudging students' consciousness towards environmental mindfulness. Through campaigns, workshops, and interactive sessions, our Eco Club becomes a megaphone amplifying the urgent need for conservation and sustainable living. The impact reverberates not only within the school walls but resonates in the minds and hearts of the students, transcending into the wider community.

Yet, our significance extends beyond awareness. We are incubators for experiential learning, providing students with hands-on opportunities to connect with nature. Planting a sapling becomes a lesson in responsibility, nurturing, and patience—a tangible link between individual actions and the well-being of the environment.

Innovations abound as we immerse ourselves in eco-friendly endeavors, creating a ripple effect that transcends the immediate surroundings and infiltrates the health and well-being of the entire school ecosystem. Gardening, for instance, contributes not only to cleaner air but also serves as a therapeutic outlet for stress relief, benefiting both students and teachers alike.

Moreover, the Green Warriors serve as a bridge between generations, fostering interconnectivity

rriors become the thread that weaves together a narrative of empowerment and transformation. It's not just about cultivating plants; it's about cultivating responsible citizens who understand the delicate dance between human existence and the environment.

As the Eco Club In-charge, I passionately lead initiatives fostering holistic well-being and environmental consciousness among students. Our Green Warriors wielded brushes and pens as their weapons, creating a vivid tapestry of awareness within the school. They painted the walls with vibrant posters, each stroke a plea to protect our environment.

In the quiet hum of creativity, essays were woven like spells, casting a charm of consciousness. With every stroke of the brush and dance of the pen, a fortress of awareness emerged, guarding the sacred realms of air, water, soil, and wildlife. Our warriors, armed not with swords, but with colors and words, stood valiantly, champions of a greener world, leaving an indelible mark on the canvas of environmental consciousness.

In our school, awareness blooms like a vibrant garden. From tree-planting symphonies to eco-craft ballets, we dance to nature's tune, nurturing minds with sustainable melodies.

1.Tree Plantation Drives:

Organize events to plant trees within the school premises or nearby areas to emphasize the importance of greenery and carbon sequestration.

2.Waste Segregation Workshops:

Conduct workshops to educate students on proper waste segregation practices, promoting recycling and reducing the environmental impact of waste.

3.Eco-Friendly Craft Workshops: Engage students in creative projects using recycled materials to encourage upcycling and demonstrate the value of reusing resources.

4.Energy Conservation Campaigns: Run campaigns to raise awareness about the importance of saving energy, promoting practices such as turning off lights and electronic devices when not in use.

5.Water Conservation Programs: Initiate projects and campaigns to highlight the significance of water conservation, encouraging students to adopt water-saving habits and techniques.

6.Biodiversity Walks: Arrange guided nature walks within the school premises to explore and appreciate the local flora and fauna, fostering a connection with the environment.

7.Organic Gardening Initiatives: Create and maintain an organic garden within the school, involving students in gardening activities to teach them about sustainable agriculture practices.

8.Outdoor Classroom Sessions: Utilize outdoor spaces for education, combining learning with exposure to fresh air and nature for a holistic approach.

9.Eco-Friendly Workshops: Enhance awareness of eco-friendly living through workshops on upcycling and sustainable practices.

10.Water Conservation Initiatives: Educate on water conservation through workshops, instilling responsibility for the environment and personal health.

11.Environmental Clean-up Drives: Combine



physical activity with environmental consciousness to improve the local ecosystem and foster community responsibility.

12.Nutrition Awareness Campaigns:

Raise awareness about healthy eating through informative sessions, posters, and pamphlets, emphasizing

balanced diets for mental and physical health.

As the Green Warriors in-charge, my innovations unfold as a harmonious blend of creativity and purpose. From interactive green campaigns sparking curiosity to eco-friendly competitions igniting the spirit of friendly rivalry, every initiative is a brushstroke on the canvas of sustainability. Our “Green Challenge” invites students and teachers to collaboratively undertake tasks contributing to the well-being of our shared environment.

In conclusion, the Green Warriors in our school are not merely engaged in an extracurricular activity—it’s a movement, a revolution silently unfolding in the corridors of education. It’s about more than just flowers and campaign boards; it’s about cultivating a mindset that recognizes the symbiotic relationship between personal well-being and environmental health. As the Green Warriors continue to flourish, so too does the promise of a greener, healthier, and more harmonious future for our students, teachers, living beings, and the world they inhabit.

The Eco Club, led by the dedicated Green Warriors, cultivates a holistic well-being by intertwining environmental stewardship with education. Through innovative initiatives like the “Green Challenge,” it fosters a symbiotic relationship between personal health and environmental vitality.

From therapeutic gardening to experiential learning, the club becomes a creative catalyst for a greener, healthier future.

Nisha Sharma

Sarvodaya Kanya
Vidyalaya, No.2,
C-Block, Yamuna Vihar





A finer example of how curiosity leads to discovery. Our surroundings are abundant in projects that can lead to research if our students are given ample opportunity!

Curiosity leads to Discovery

‘Tulsi is a better antibiotic than Neem. Lantana leaves show antibacterial activity. Have you tried Tulsi Herbal Wraps for sprouting seeds’

The aims and objectives of Science education as envisioned by NEP 2020 is not merely factual knowledge of scientific matters but the cultivation of scientific outlook and scientific inquiry among students. In this experiential learning plays a crucial role as it emphasizes active engagement, application of science and equips students with the skills, competencies, and mindset required for success in the 21st century.

Simple queries of the two friends led to a series of experiments resulting in a series of amazing findings. The queries were

‘Why do dogs eat away lantana plants from my garden?’

How can I protect sprouted grains from microbial attack and increase shelf life without using synthetic chemicals?

explanation and solution to their queries.

Lantana is one of the 100 species of the most invasive of the IUCN list. Lantana has been of great interest for phytochemical, biological and pharmacological studies. We wanted to confirm that Lantana leaves which have a strong smell, may have antimicrobial activity that is why dogs eat them when they are unwell. Lantana is also identified as an invasive variety of weed in Delhi that has infested 30% of the Delhi ridge area. If the substance / metabolite in the lantana have some medicinal value then this substance can be purified on a commercial scale and used as medicine and on the other hand we can utilize this invasive shrub.

Nanya Gupta & Aavya Shrivastava of Class VIII of Delhi Public School, R K Puram under the mentorship of their Biology Teacher, Ms Niva Chhonkar carried out a Research Project to get a scientific

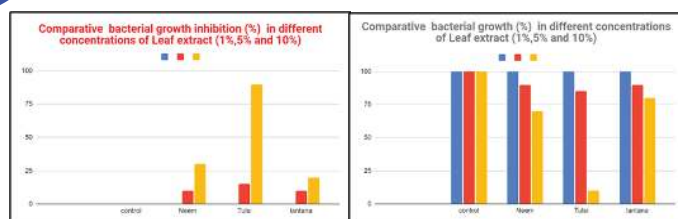


The experiment consisted of 2 phases, First to make leaf extract of Lantana and assess its antimicrobial properties on the bacteria and compare with the already established antimicrobial properties of Neem and Tulsi. Secondly, depending upon the results from the first phase, create Herbal Sanitizing Wraps using Neem, Tulsi and Lantana for growing sprouts.

The most common bacteria, E.coli was used for the studies as its doubling time is 20 minutes. It grows very fast. Common fungi- Rhizopus (Bread Mold) and Aspergillus (found as black powder on onions these days) were also. Used for the study.

Different concentrations of leaf extracts were used to test the bacterial growth inhibition. Bacterial Growth Inhibition was studied in two ways.

After Data Analysis it was interpreted that Lantana has a substance/chemical that inhibits bacterial growth. Surprisingly contrary to our belief, Tulsi was more effective in stopping E.coli bacterial growth than Neem.



We made Tulsi, Neem and Lantana Herbal Wraps to grow the sprouts of (gram (*Cicer arietinum*) & moong dal (*Vigna radiata*)

COMPARISON OF RATE OF INFECTION IN THE SPROUTS WITH DIFFERENT HERBAL WRAPS								
DAYS	CONTROL		TULSI WRAP		NEEM WRAP		LANTANA WRAP	
	Chana	Moong	Chana	Moong	Chana	Moong	Chana	Moong
DAY 1	SOAKING FOR 12 HOURS AND PUTTING IN HERBAL WRAPS							
DAY 2								
DAY 3								
DAY 4	x	x	x	x	x	x	x	x
DAY 5	✓	✓	x	x	x	x	x	x
DAY 6	✓	✓	x	x	x	x	x	x
DAY 7	✓	✓	x	x	✓	✓	✓	✓
✓ -Microbial Growth			x -No Microbial Growth					



Sprouts grown in Tulsi Wraps had longer shelf life meaning microbes took longer time to infect the sprouts

Possibly the neutral pH of Lantana Leaf extract soothes the stomach of dog and the antimicrobial substance /secondary metabolite inhibits the bacterial

infection that is making the dog sick.

This time we used a yellow variety of Lantana hence for future studies red or purple flower variety can be used. Antimicrobial activity of leaf extracts can be tested on common fungi. Using the herbs would be environmental friendly, non- chemical, low cost and an easy method to delay microbial infection and increase shelf life of the sprouts. Later ‘Sanitizing wipes’ for sanitizing surfaces and ‘Sanitizing Tissue’ can be developed for packing lunch instead of aluminum foil.

ACKNOWLEDGEMENTS

Mr B K Chaturvedi, Chairman: DPS Society, Ms Padma Srinivasan, Principal: DPS RK Puram for supporting the project, Ms Kavita Verma & Dr Vartika Mathur Zoology Lab, Sri Venkateswara College for their help.

Niva Chhonkar

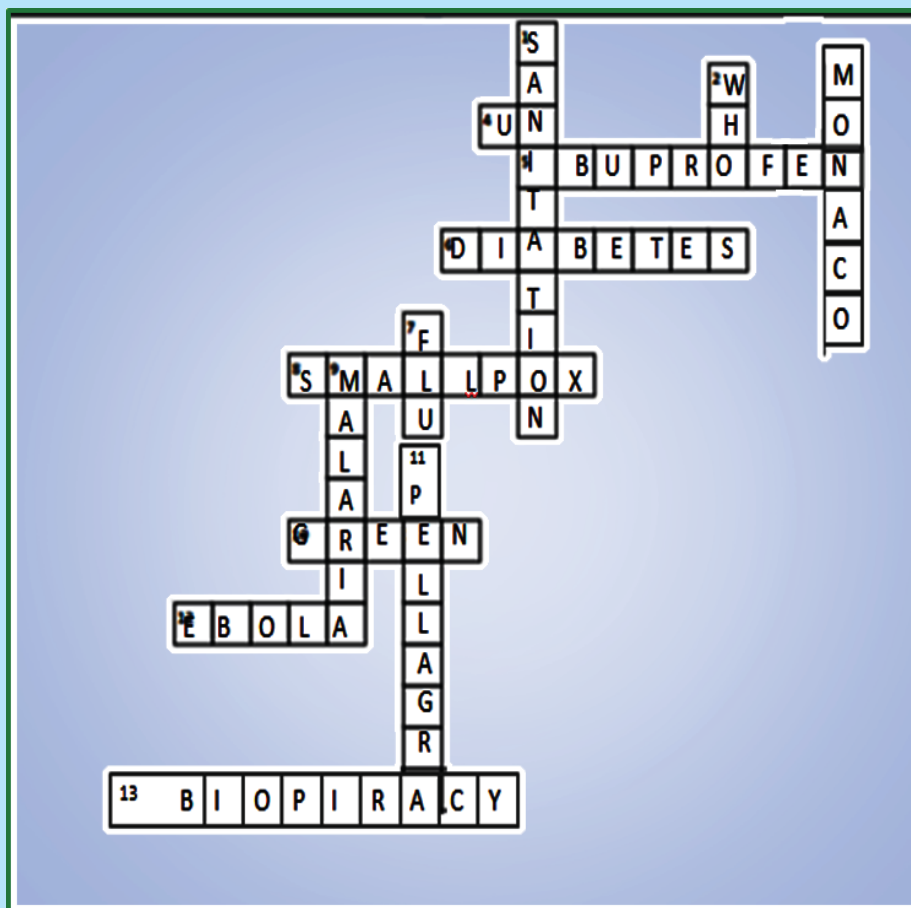
Head Biology
DPS
RK Puram



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(ANSWER) FLEX YOUR BRAIN MUSCLES



#OurBuddingArtists

Posters received for 'Good Health and well-Being'



Amrita Singh

TGT drawing
E I'd- 20181245

GGSSS, Mohan Garden -1618264



Mehak
Student
GGSSS,
JJC, MPK,
1925340

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Khel-Khel me

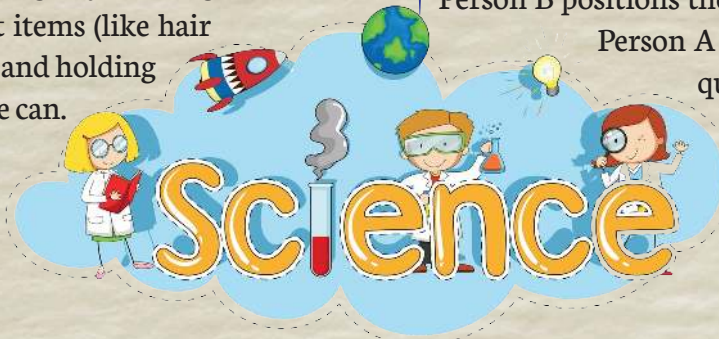
Static Electricity Race



This clever science game teaches us about static electricity.

Start by rinsing and drying aluminum cans, marking a "start" and "finish" line, and giving each racer a balloon.

How to play the game: Move your aluminum can to the finish line by using the electric charges on the balloon! we can make the charge by rubbing the balloon on different items (like hair or clothing) and holding it against the can.



Racing Ramps

When you listen to the name of the game, you may have known as it is related to racing. Just collect the toys like cars, and balloons, that can be rolled on a ramp. Now if your child likes to play with blocks, make a ramp with blocks and roll the cars, balls, and balloons on the ramp. You may think what is the science in this game?

Through this game, you can explain about weight and speed. Based on the weight and speed of the objects, some of them moving faster while some of them are moving slowly.

Body Part Bingo

"Human Body Bingo" cards help us learn about human anatomy. They're made with cute animated drawings of body parts like the brain, heart, stomach, and lungs. Gather playing pieces (and find an announcer) before starting the game.

Reaction Time Challenge

Our bodies don't respond to a stimulus right away. You can demonstrate the delayed connection between the brain and body with this simple reaction time test from science sparks.

Here's how to do it: Grab a 30-centimeter ruler. Person A holds out the ruler with their arm outstretched toward the ceiling. Person B positions their hand near the bottom of the ruler. After Person A drops the ruler, Person B tries to grab it as quickly as possible. Make sure to record the measurements! Once everyone has three turns, find the average of each person's scores. The player with the lowest measurement has the fastest reaction time.

Solar System

We can learn about the solar system with the help of some clay or colorful dough. As most of us are very much interested in space, the sun, and everything, We learn quickly about planets and the names of the planets.

To play this game, take the different colors of dough and make the planets like take the blue ring for Saturn, red for Mars, and more. Explain the facts of planets along with the names.



Shiwansh Singh Chauhan
5th F, Balvant Ray Mehta
Vidya bhawan



Our stories on Social and Print Media



"Yoga is the journey of the self,
to the self, through the self."
RSKV West Vinod Nagar



Our students as NCC Cadets participating
in #InternationalDayofYoga2023 event!



#999Challenge

9 rounds of Surya Namaskar and
9 minutes of meditation for 9 days



पहल: छात्राओं के लिए बनाया 'नो-एंगर जोन'

■ सविता चौधरी

नई दिल्ली। छात्राओं को सुरक्षित माहौल देने के लिए दिल्ली के एक सरकारी स्कूल ने अटूट पहल शुरू की है। महिला छात्रों के लिए 'नो-एंगर जोन' नामक एक सुरक्षित जगह बनाई गई है। इस जगह पर छात्राओं को अपनी भावनाओं को व्यक्त करने का अवसर मिलेगा।



सभी शिक्षा अधिकारी कक्षा शिक्षक से लेकर नो-एंगर जोन में संचालित की अपनी परीक्षाओं को सही में लिखकर लिखने में सक्षम रहेंगे।

कक्षा से बाहर आने पर लगाते हैं गले

स्कूल में जाने पर सबसे पहले छात्राओं को गले की बांध को एक पाँच पर लिखकर 'नो-एंगर जोन' का विवरण जगह के बोर्ड में डालनी होगी है। फिर छात्रा का परीक्षा करने, लैपटॉप लिखने, रसुआ को जमाने, गीत गाने, नृत्य करने, गुरुकुल जाने के सभी संभावित को करनी है। जब छात्रा खुद को शांत महसूस करके बाहर निकलती है तो उन्हें गले लगाकर स्वागत भी दिया जा रहा है।



Yoga Cum Meditation Session
@GGSSS NO. 1 B BLOCK YV
#PPC2024



Mental Health Week is being celebrated across all #DelhiGovtSchools
with great zeal & responsibility.

'नई उड़ान' वैज्ञानिक विज्ञान पत्रिका का प्रकाशन शिक्षा निदेशालय, दिल्ली सरकार द्वारा किया जाता है।

कार्यालय रूम न-2 शिक्षा निदेशालय, पुराना सचिवालय, दिल्ली-54

ई मेल: doesciencemagazine@gmail.com

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