

Dr. R. Varadarajan
Founder President of NES-SVB



Insights

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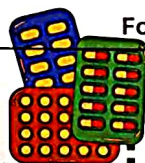
THE DESK OF THE PRESIDENT

My Dear Students,

Our commitment at Saraswathi Vidya Bhavan's College of Pharmacy is to provide a safe and intellectually challenging environment that will empower students to become innovative thinkers, creative problem solvers and inspired learners to thrive in the twenty-first century. Our college upholds high standards and benchmarks for each student in academic performance, extracurricular activities and ensuring a strong foundation for their holistic development. It is with pride that we hold these high standard and ask each of our students to commit to maintaining the extraordinary record of achievement and contribution that has been the legacy of SVBCP students. We have walked an incredible journey of 31 years in the midst of this journey we have earned various honours , awards and accolades. These achievements should empower you all with a stronger resolve to work yet harder until college reckoned as one of the best . I'm very happy that the students have successfully published the new edition of "SVBCP TIMES".

Dear students, your enthusiasm published and willingness make me really very proud. Wish you a meaningful, enjoyable and memorable year 2024-25.

Dr. R. Varadarajan
Founder President of NES-SVB



<VISION>

To stand distinguished as a center of Excellence that foster talent, research aptitude, entrepreneurship, human values and holistic development of competent healthcare professional to fulfill the requirement of the industry.

<MISSION>

- To provide state-of-the-art infrastructure and a teaching-learning environment that is conducive for holistic development.
- To instill the values of discipline, integrity, humanity and professionalism required for the healthcare sector.
- To nurture young professional leaders to work towards novel research ideas, innovation and entrepreneurial thinking for benefit of the community, at large.

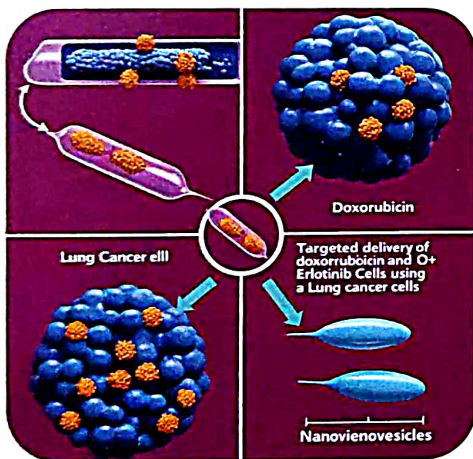


Synergizing Functionality in Pharmaceutical Applications with Co-processed Excipients: An Updated Review

Excipients act as a carrier material of Active Pharmaceutical Ingredients. But the drawbacks related to the use of traditional excipients is overcome by the use of Co-processed Multifunctional excipients. The objective of this article is to review the synergizing functionality in pharmaceutical application with the co-processed excipients in various types formulation such as Direct Compression, Orally disintegrating tablets, sustained release tablets, etc. The co-processed excipients emerge in the combination of two or more excipients which possess their individual properties and give the appropriate results which may not be seen with just a physical mixture of traditional excipients. This article gives the overall definition of Co-processed excipients, need of Co-processed excipients, selection of Co-processed excipients, several methods used for manufacturing processes of Co-processed excipients and their applications in formulation of Directly compressible tablets, Orally disintegrating tablets and sustained release tablets along with examples with their advantage. The concern for Regulatory Affairs is also an important aspect to be taken into consideration.



Targeted Delivery of Doxorubicin and Erlotinib to Lung Cancer Cells Using Biomimetic Nanovesicles



This study focuses on developing biomimetic nanovesicles (NVs) derived from A549 lung cancer cells to co-deliver doxorubicin (DOX) and erlotinib (ERL) for enhanced targeting of lung cancer cells. The NVs were found to be spherical structures with a size range of 100-200 nm, indicating an adequate size range for cellular uptake. The encapsulation efficiencies were $40 \pm 2\%$ for DOX and $93 \pm 1\%$ for ERL. Release studies showed that 60% of DOX and 85% of ERL were released from the nanovesicles after 72 hours. Cellular uptake studies showed preferential internalization of NVs by A549 cancer cells compared to MRC-5 non-cancerous cells. Cell viability assays indicated higher viability in MRC-5 cells treated with NVs compared to A549 cells, suggesting the nanosystem's potential to selectively target cancer cells while sparing non-cancerous tissues. Clonogenic assays confirmed the findings, showing long-term survival of MRC-5 cells and a significant reduction in A549 cell survival following NV treatment.



Shilajit: A natural phytocomplex used in traditional medicine

Shilajit is a complex substance with a range of beneficial constituents that contribute to its pharmacological activities. Its use in traditional medicine highlights its historical significance, but barriers to broader acceptance and usage in modern healthcare remain. Thus the aim of this paper is to summarize literary findings of different research works by the scholars around the world with modern techniques as well as emphasising the importance of Shilajit as described in classical texts.



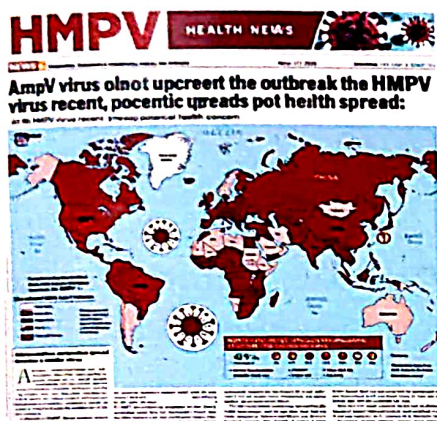


Chitosan as a sustainable biopolymer: A comprehensive review

Chitosan, a biopolymer derived from chitin, is emerging as a leading material in advanced wound care due to its biocompatibility, biodegradability, hemostatic properties, and antimicrobial activity. This review explores its structure, sources, and role in promoting wound healing. Chitosan-based wound sealants mimic the extracellular matrix, enhancing tissue repair with minimal scarring and enabling controlled drug delivery. Additionally, recent advances in chitosan-based nanocomposites, electrospun nanofibers, and hydrogels highlight its potential in modern wound care solutions.



HMPV VIRUS: Recent outbreak in China and its Global Implications.



The recent outbreak of Human Metapneumovirus (HMPV) in China has raised significant public health concerns due to its rapid transmission and potential to cause severe respiratory illnesses. Although HMPV is a well-documented pathogen, its resurgence, particularly among vulnerable populations such as young children, the elderly, and immunocompromised individuals, necessitates a comprehensive investigation. This review explores the virological characteristics, clinical manifestations, transmission dynamics, and epidemiological trends of HMPV, with a particular focus on the current outbreak in China and its global implications. Additionally, it examines potential contributing factors, public health responses, and preventive strategies. Given the absence of targeted antiviral therapies or vaccines, the emphasis on surveillance, early detection, and mitigation measures is paramount. This outbreak underscores the critical need for international collaboration in infectious disease monitoring, research, and policy development to enhance global pandemic preparedness.



Review on Piperine as A Natural Bioenhancer in Field of Nanotechnology

Bioavailability of drugs is the most important issue when the drug is poorly bioavailable as it affects the oral absorption of the drug, given for a longer period of time. Poorly soluble drug never reaches the plasma and doesn't show pharmacological effect as it remains sub therapeutic. In recent years several approaches have been introduced to increase the oral bioavailability as it will decrease the dose of drug and increase absorption, but with discovery of natural bio enhancer piperine in the field of nanotechnology as it will increase permeability of the drug by forming nanoparticles, nanocomposites, nanofibers, Nano capsules. Bioenhancers are plant-based molecules which enhance the bioavailability of the drug and show its therapeutic effect. This review article concludes the bioavailability enhancing property of piperine in field of nanotechnology.





ACHIEVEMENTS



UG project was selected for Final Round in 19th AVISHKAR Research Convention



Our college secured third place in the Street Play competition at the UDAAN Fest held by DLLE



We participated in NES-SVB Sports and achieved First and Second Prize in most of the Games



OUR SUPPORT PILLARS



Dr. R. VARADARAJAN
Founder President, NES-SVB



Dr. BALASUBRAMANIAN V.
Director, SVB-NES



Dr. SANDHYA PARAMESWARAN
I/C Principal, SVBCP

We the students of SVBCP are grateful to the Founder President, Director NES-SVB and the Principal of our college for giving us this opportunity to create newsletter and propagate the innovative ideas that develop in the field of Pharmacy.

GUIDES

Dr. MANASI CHOGALE

Ms. NANDINI BANERJEE

Samiksha Bangar Ly
Rutuja Pawar Ly
Geetesh Poojari Ly
Atharwa Bhuskute Ly

Yash Bari TY
Vanitha Mudhalayar TY
Ayushya Upadhyay TY
Shravani Tandel TY

Kajal Gupta SY
Vansh Chopra SY
Roshni Poojary SY
Yash Rozekar SY

CLASS REPRESENTATIVES

