

REVOLUTIONIZING MEDICINE: ADVANCEMENTS IN 3D BIOPRINTING FOR TISSUE ENGINEERING

Keerthana Gopidalai, Jessica Akumarthi

Viswanadha Institute of Pharmaceutical Sciences, Visakhapatnam
gopidalaikeerthana3620@gmail.com, Contact No. 7093283195



Abstract: In recent years, 3D bioprinting has emerged as a groundbreaking technology with the potential to revolutionize the field of medicine, particularly in tissue engineering and regenerative medicine. This abstract delves into the remarkable advancements achieved in the realm of 3D bioprinting and their profound implications for healthcare. 3D bioprinting involves the precise deposition of bioinks containing living cells and biomaterials to fabricate complex, functional tissues and organs layer by layer. This technique holds the promise of addressing the critical shortage of donor organs, enabling personalized medicine, and advancing our understanding of human biology. One of the most significant breakthroughs in 3D bioprinting is the development of bioinks that closely mimic the native extracellular matrix, allowing for the creation of tissues with improved functionality and integration into the body. Researchers have successfully bio printed tissues such as skin, cartilage, and even miniaturized organs for drug testing and disease modelling. Innovative bioprinting methods, like organ-on-a-chip systems, are enabling the study of diseases and drug responses with unprecedented accuracy. This abstract also highlights the challenges and opportunities that lie ahead. Ethical considerations, regulatory frameworks, and long-term safety assessments are vital aspects that must be addressed as 3D bioprinting moves toward clinical applications. In conclusion, 3D bioprinting is poised to revolutionize medicine by offering novel solutions to age-old healthcare challenges. This presentation will provide a comprehensive overview of recent advancements, showcasing the potential of 3D bioprinting to transform the landscape of tissue engineering and regenerative medicine..

Keywords: Bioprinting, Fabricate complex, Bioink, Tissue Engineering, Extracellular Matrix, Revolutionize medicine.

QbD APPROCH IN HPLC

Puniparthi Sunitha

Bharath Institute of Higher Education and research, Chennai
sunithapuniparthi7@gmail.com, Contact No.9059123653



Abstract: Absorption, distribution, metabolism, excretion, and toxicity (ADME/T) models using In-silico (computer-aided molecular design) have been adopted by an increasing number of pharmaceutical researchers to create effective drugs. We anticipate being able to clearly describe the creation of in silico models for physicochemical qualities, ADME properties, and toxicity assessment while highlighting modeling techniques, applications in drug discovery, and potential benefits and downsides Rational drug design strategies are used to explain how therapeutic molecules that bind to a target location (such as a cellular protein or nucleic acid) are created. . A strategy for identifying lead molecules for additional research that involves determining a compound's drug ability based on a detailed analysis of its medicinal properties. Quantitative structure-activity relationship (QSAR), docking of molecular structures, virtual high-throughput screening, and other approaches are also used in silico drug creation. A target-to-hit and hit-to-lead strategy is utilized to find leads. This disconnect between chemical optimization and ADME/T screening has led to the rejection of numerous candidate medications with high in-vitro efficacy due to their poor drug ability. These issues thus impede the evaluation of the drug's in-vivo efficacy and safety and cause a delay in the research and development process. Early evaluation of compound drug ability will be crucial for increasing R&D productivity and efficiency. The in-silico drug design research using the rational drug technique is inefficient for following investigations because it takes a long time and necessitates several animal tests. Design prefers the novel approach for further drug research because in-silico approaches have been extremely helpful in determining targets and drug prediction.

Keywords: In-silico drug design, Modeling, Rational Drug Design, In-vitro, Absorption, Protein, Drug molecules, Potential.

IMMUNOMODULATION IN CANCER THERAPY

Samyakt Jain, Ankit Jain

IPS Academy College of Pharmacy, Indore
samyakt41199@gmail.com, Contact No.9111405252



Abstract: The immune system recognizes neoepitopes that result from gene alterations that turn normal cells into malignant cells. This process is known as immunological surveillance. At least initially, tumor-specific antigens trigger adaptive T-cell responses that lead to the total destruction of cancer cells. Actually, these immune-suppressive systems are improving cancer treatment. The development of immune-suppressive networks by cancer cells is visible at every stage of the cancer immunity cycle. By generating immunosuppressive and antigenic factors (such as vascular endothelial growth factor) and tumor-reactive T cells (defective dendritic cell maturation and activation, defective T-cell activation), tumor endothelial functions as both a physical barrier for T cells and an active immune suppressor. It also facilitates T-cell trafficking (immune-suppressive chemokine milieu) and T-cell cross-over of the tumor vasculature. Soluble immunosuppressive molecules (produced primarily by these cells, such as transforming growth factor β , interleukin-10, adenosine, and indoleamine 2,3-dioxygenase, among many others), as well as tumor-associated immune-suppressive leukocytes (regulatory T cells, myeloid-derived suppressor cells), which either block or inhibit their immune responses to their tumor antigen target. By avoiding antigen recognition (such as by suppressing the major histocompatibility complex class I molecules) or, for example, by upregulating a number of membrane receptors that induce apoptotic signals in T cells (such as tumor necrosis factor-related apoptosis-inducing ligand) or immune tolerance (PD/L12), cancer cells can finally elude the last stage of an immune attack and immune rejection. The targets that are in the effector phase are among the most significant types of immunotherapy. Monoclonal antibodies that block cytotoxic T cell antigen-4 and PD1/L1 receptors provide therapeutic advantages in a number of tumor types and long-lasting benefits in terms of survival, compared to conventional cytotoxic chemotherapy or even targeted therapy.

Keywords: Neoepitopes, Immune-suppressive systems, Monoclonal antibodies, Apoptosis, T-lymphocytes, Cancer.

POTENTIAL OF 3D BIOPRINTED ORGANS

Pudi Tanuja

Maharajah's college of pharmacy, Phoolbaugh, Vizianagaram
puditanuja@gmail.com, Contact No: 6309270748



Abstract: 3D bioprinting is a multi-disciplinary technology that involves layer-by-layer deposition of living cells, growth factors and biomaterials to fabricate three-dimensional structure. Future advantages of 3D bioprinting include organ transplants, efficient drug testing on bioprinted tissues and advancements in regenerative medicine. 3D bioprinting applied in several fields include organ transplantation, tissue engineering, disease modelling, dental applications, cosmetic and personal care testing, orthopedics. Bioprinting is applicable in cancer research and in creation of liver organoids, these models can be used to study liver diseases. Bioprinting can be applied to create functional cardiac tissues to study heart diseases. It has organ regenerating capacity to overcome the shortage of organ transplantation. But limitation of 3D bioprinting technology is the creation and use of bioprinted tissues and organs may raise complex tissues related to the intellectual property patenting of biological materials. 3D bioprinting shows a great promise in various applications but it is not a direct cure for diseases. This technology can be cost, and accessibility ongoing research and technological advancements aim to overcome these demerits making 3D bioprinting a more viable and impactful tool in the future of medicine.

Keywords: 3D bioprinting, Organ-regeneration, Tissue engineering, liver disease, Cancers.

NANOBOTS AS AN ALTERNATIVE FOR TREATMENT TO VACCINES FOR COVID-19 PATIENTS

G. Sarath Chand*, N. B.V. Sivaram

Sir C R Reddy College of Pharmaceutical Sciences, Eluru.

sarathchandudiseva@gmail.com, Contact No.9676479372



Abstract: The paper explores the potential of nanobots as a treatment alternative for COVID-19 patients, highlighting their unique properties such as small size, improved solubility, and multi-functionality. It suggests that nanobots could be used to kill the virus from its root and prevent its spread, offering new opportunities in prevention, diagnosis, and treatment strategies. COVID-19 replicates inside living cells, affecting all life forms and increasing genetic diversity. Despite the 2,412,226,768 vaccine doses administered, their effectiveness remains uncertain. This paper aims to study vaccine effectiveness and explore medical nanobots as an alternative. Nanobots, 0.1–10 micrometer devices, are computer programs designed to read DNA sequences and produce particular proteins. They are required for tasks like actuation, sensing, manipulation, propulsion, assignaling, and nanoscale information processing to combat COVID-19. The advantages of nanobots include precision medicine, early diagnosis, targeted therapy, improved drug delivery, and regenerative medicine. Disadvantages include toxicity, price, regulation difficulties, ethical questions, and a lack of knowledge. In conclusion, nanorobots offer a promising alternative to vaccination for COVID-19, with the potential to destroy viruses and infected cells quickly, providing new hope for the future of vaccines.

Keywords: Nanobots, Covid19, Vaccines, Antiviral therapy, Nanotechnology, Viruses.

HERBAL DRUG TECHNOLOGY – A STINT IN PHARMACY

Sailu Venkatesh, Manoj Lekireddy, Divya Gunji, Monish R, Sai Sony, Rekha Devi A*, Niranjan Babu M

Department of Pharmaceutics, Seven Hills College of Pharmacy, Autonomous, Tirupati.

rekhadevi@shcptirupati.edu.in, +919502602342



Abstract: Herbal remedies typically contain only one or more plant raw materials as active ingredients, or a mix of the two. Medicinal plant parts can be utilized whole or powdered and dried as vegetal raw materials. Algae, mushrooms, and lichens can also create exudates rubbers, conditioners, or resins that don't require the special technological processes. The usage of herbal preparations, which include essential oils, tinctures, fatty oils, were derived from plant by specialized technological procedures including distillation, pressing, extraction, and others and other extracts were determined by therapeutic outcomes. Since ancient times, herbal remedies have been utilized extensively around the world. Both doctors and patients have acknowledged the superior therapeutic efficacy of herbal remedies due to their lower side effect rate when compared to contemporary medications. The absence of effective modern therapies, the problem of chronic diseases, the adverse effects of chemical drugs, the resistance of bacteria to certain synthetic drugs, and significant investments in drug discovery and development have all contributed to the reported resurgence of herbal drugs in recent years. For phytotherapeutics to improve patient compliance and prevent repeat, a systematic strategy is required to administer the ingredients over time. By raising bioavailability and lowering toxicity, herbal novel drug delivery systems (NDDS) contribute to increased therapeutic value in addition to decreasing frequency. Herbal nanosize medication's offers aspiration for improving effectiveness and solving issues related to plant-based remedies. Therefore, it is imperative that nanocarriers be incorporated into the regular medical system as NDDS in order to combat more chronic diseases.

Keywords: Herbal Drug Technology, Herbal Remedies, Chronic diseases

LAB ON A CHIP (LOC)

Reshma Parveen Shaik

Maharajah's College Of Pharmacy, Phoolbaugh, Vizianagram
shaik.reshmaarveen2004@gmail.com, Contact No. 9392070359



Abstract: Lab on a chip is the sophisticated technique that miniaturizes the large-scale laboratory operations on a simple and single chip which works on the principle of microfluids. For studying DNA sequencing, and biochemical analysis. The chip contains a sensor on which wide laboratory operations like mixing, electrophoresis, separation can be done in no time and give sensitive results. LOC are used in detecting the diseases like diabetes, CVS disorders, cancers, bacterial and viral infection by using specific protein markers which are synthesized during disease conditions. The widely used LOC is the pregnancy test kit which detects the by detecting the pregnancy hormone. LOC are used in point-of-care diagnosis like malaria, pregnancy, blood glucose and others. Recently scientists have developed an LOC which detects the presence of corona virus by using just a drop of blood. The virus is detected by identifying the antibodies. LOCs are made up of silicon, glass, polymer, and paper containing a network of microchannels for fluid movement, sensors, series of electrodes placed at working positions, and some electrical circuits. LOC are used as they are cost effective, easy to use, response in no time, easy to carry. Research is going on in increase the ease of use of smartphones for cholesterol, anemia, CVS monitoring and customizing the chip according to experiment.

Keywords: Lab on a chip, DNA sequencing, Point-of-care devices, Microfluids, Electrophoresis, Microchannels

PHYTOCHEMICALS AGAINST CANCER: EXPLORING PLANT BASED COMPOUNDS

Suraj Kumar

RIMT UNIVERSITY, College of Pharmacy, Mandi Govindgarh, Punjab
surajkumar098890@gmail.com, Contact No. 9939231682



Abstract: Cancer continues to pose an enduring global health challenge, affecting millions of individual's annually. A startling 18.1 million new instances of cancer are expected to be diagnosed worldwide in 2020. Modern technology has been used in the tenacious fight against cancer to lessen the frequently severe side effects of treatment. While conventional cancer therapies like chemotherapy and radiation therapy have made considerable strides in managing the disease, alternative methods that focus on cancer prevention and risk reduction are gaining popularity. Chemotherapy may lead to various side effects, including neuropathy, hair loss, blood clotting problems, and gastrointestinal issues. Phytochemicals, or organic bioactive substances found in plants, have gained recognition as potent allies in the fight against cancer. Furthermore, there has been a strong focus on preclinical research involving plant-based medicines. That investigation has inspired novel strategies in cutting-edge clinical trials meant to successfully treat cancer. Our understanding of medicinal plants, their bioactive components, chemical modifications, and the possible advantages of using herbs are all aided by phytochemical study. It emphasizes how these organic compounds work to combat different kinds of cancer cells and how they are used in cancer treatment. The crucial role that plants play in the fight against a variety of malignancies, including those that affect the blood, breast, stomach, oral cavity, colon, lung, and liver. In vitro investigations repeatedly show the capacity of secondary metabolites included in plant extracts to inhibit cancer cells. These findings offer persuasive evidence of the potential of plant-based chemicals as potent anticancer drugs.

Keywords: Cancer, Medicinal plants, Bio-active components, Anti-cancer therapy, Phytoconstituents.

PHYTOTHERAPUETIC POTENTIAL OF KITCHEN SPICES - *CORIANDRUM SATIVUM L.*

Setty Anil Kumar

Narayana Pharmacy College, Nellore
anilsetty2004@gmail.com, Contact No. 8328094216



Abstract: Coriander (*Coriandrum sativum L.*), Apiaceae [umbelliferaceae] family is among most widely used medicinal properties a member of the Plant, possessing nutritional as well as Dhaniya medicinal it is an annual herb plant and used as a Spice from ancient times. The fresh leaves of this plant are called cilantro. The seeds, leaves, & fruits of this Plant are Edible and have an aromatic odors, and are used as a flavor in curries, soup. For the preparation of considered as a medicinal herb in traditional medicine system as it has various properties like they act as analgesic, -anti-inflammatory, anti-oxidant, anti-hypertensive anti-diuretic, anti-bacterial ,menstrual disorder , anti-diabetic and anti-microbial. According to modern history, many life threatening diseases were cured by preparing pastes from roots, barks, herbs and different plant leaves. Aspirin, sandal wood, clove oil, basil leaves and clove oil are the few examples of the plants which are having medicinal activity used even today in pharmaceutical industries. Coriander leaves and seeds are full of vitamin K which helps in blood clotting and lowers the heart diseases.

Keywords: Anti-Hypertensive, Anti-inflammatory, Anti-oxidant, limonene, Nutrients.

AMELIORATING UTILITY OF KITCHEN SPICES *CUMINUM CYMINUM* IN VARIOUS AILMENTS

Sree Mahalakshmi Pasumarthy*, Ramya Ramisetty

Narayana Pharmacy College, Nellore
Pasumarthysreemahalakshmi3@gmail.com, Contact No. 9390133056



Abstract: As we consider Ayurveda as the traditional system of Indian medicine, where plant herbs are used for the treatment of various ailments. These plant remedies not only cure the symptoms but the whole human body. In this we are dealing with a spice which is normally available at our homes and daily used in so many food preparations. Cumin is a Herbal annual plant belonging to the family Apiaceae in many countries like middle east India, China and several Mediterranean countries including Tunisia cumin is normally used as a kitchen species and popular as flowering agent in many curries preparation cumin treats many gastrointestinal problems which cause chronic abdominal pain and changes in stool consistency and alter bowel habit with the doses 20 drops of cumin essential oil per day. Green cumin essential oil is more effective for diabetes type-II patient. Cumin also treats cholesterol by decreasing LDL Level for weight loss. It also acts as anti-cancer agent. The plant constituents produce lesser side effects when compared to drugs using in today's world. They also help in increasing the resistance power of the human body.

Keywords: Terpinol, Diabetes, Cholesterol, Weight loss, Irritable Bowel Syndrome.

E-POSTERS

REVOLUTIONIZING MEDICINE: ADVANCEMENTS IN 3D BIOPRINTING FOR TISSUE ENGINEERING

Keerthana Gopidalai, Jessica Akumarthi

Viswanadha Institute of Pharmaceutical Sciences, Visakhapatnam
gopidalaikeerthana3620@gmail.com, Contact No. 7093283195



REVOLUTIONIZING MEDICINE: ADVANCEMENTS IN 3D BIOPRINTING FOR TISSUE ENGINEERING

Presented by

KEERTHANA GOPIDALAI*, JESSICA AKUMARTHI
 VISWANADHA INSTITUTE OF PHARMACEUTICAL SCIENCES

INTRODUCTION: Tissue engineering has emerged as a promising field that integrates principles of engineering, biology, and material science to create functional biological tissues. One of the groundbreaking technologies driving this field forward is 3D bioprinting, which allows for the precise fabrication of complex, three-dimensional structures using living cells, biomaterials, and growth factors. Over the past decade, 3D bioprinting has witnessed remarkable progress, offering immense potential for the development of tissue constructs for transplantation, drug testing, disease modeling, and personalized medicine. This presentation aims to provide an insightful overview of the latest advancements in 3D bioprinting technology and its applications in tissue engineering, emphasizing its transformative impact on modern medicine.

APPLICATIONS:

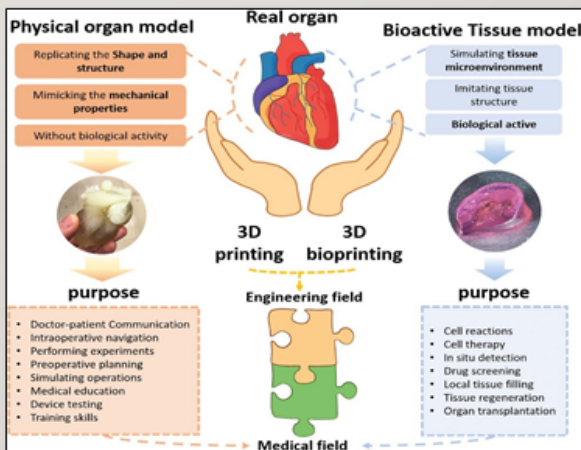
- Tissue engineering & Regenerative medicine.
- Organ printing for pharmaceutical research.
- Anatomical & physiological models for teaching.
- Wound healing and skin substitutes.
- Bioprinting of cartilage and bone.



"PRINT THE FUTURE WITH US"



BIO INK: Bioink is a cell-laden hydrogel structure that is a major component of 3D bioprinting. The cells are encapsulated in a preferred polymeric hydrogel structure. This bioink is usually extruded from the nozzle of customized bioprinter. Natural polymers such as gelatine, collagen, hyaluronic acid, alginate, chitosan, cellulose, and silk fibroin have been studied extensively as the polymeric support in the bioink formulation. Decellularized ECMs are recently been used to formulate bioinks.



Future Prospects in 3D Bioprinting:

- ✓ Multi-material and Multi-cellular printing.
- ✓ Incorporating Artificial Intelligence (AI).
- ✓ Bio fabrication of Organ-on-a-chip systems.
- ✓ Personalized Medicine and Patient-specific constructs.

Recent Examples:

- Cardiac patch by Organovo.
- Bio fabricated ear for Microtia treatment.

NANOBOTS AS AN ALTERNATIVE FOR TREATMENT TO VACCINES FOR COVID-19 PATIENTS

G. Sarath Chand*, N. B.V. Sivaram

Sir C R Reddy College of Pharmaceutical Sciences, Eluru.

sarathchandudiseva@gmail.com, Contact No.9676479372



NANOBOTS AS AN ALTERNATIVE FOR TREATMENT TO VACCINES FOR COVID-19 PATIENTS

G.SARATH CHAND¹, DR.N.B.V.SIVARAM²

¹M Pharmacy, Department of Pharmaceutics, Sir C R Reddy College Of Pharmaceutical Sciences

² Professor, Head of Department, Department of Pharmaceutics, Sir C R Reddy College Of Pharmaceutical Sciences
SIR C R REDDY COLLEGE OF PHARMACEUTICAL SCIENCES, (Approved by AICTE AND PCI), ELURU, AP-534007.

ABSTRACT

The paper explores the potential of nanobots as a treatment alternative for COVID-19, highlighting their unique properties such as small size, improved solubility, and multi-functionality. It suggests that nanobots could be used to kill the virus from its root and prevent its spread, offering new opportunities in prevention, diagnosis, and treatment strategies.

INTRODUCTION

COVID-19 has caused 177,108,695 confirmed cases and 3,840,223 deaths globally. Despite the 2,412,226,768 vaccine doses administered, their effectiveness remains uncertain. This paper aims to study vaccine effectiveness and explore medical nanobots as an alternative. COVID-19 replicates inside living cells, affecting all life forms and increasing genetic diversity.



EFFECT OF VACCINES

Vaccination has been used to control COVID-19 globally, but it has had adverse effects and is not guaranteed to prevent virus development. In India, over 26,000 cases of AEFI and 488 deaths were reported due to complications. Healthcare systems struggle, and multidisciplinary research is needed to develop alternative antiviral therapies.

Applications of Nanobots

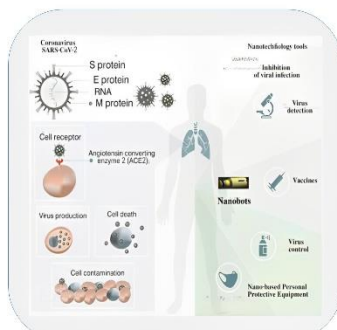
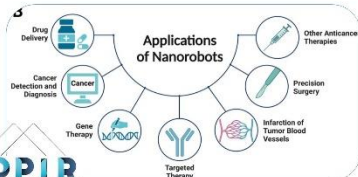


Figure 1: The Schematic representation of SARS-CoV-2 infection and the tools of nanotechnology which can be used to prevent and control COVID-19

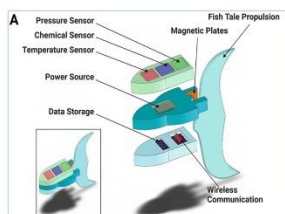


Figure 2: Some Essential Parts needed for a nanobots.

NANOBOTS:

- These 0.1-10 micrometer devices are able to manipulate and arrange atoms in a manner similar to that of Lego pieces.
- Sometimes referred to as **nanobots**, **nanomachines**, or **nanomites**, nanobots are computer programs designed to read DNA sequences and produce particular proteins.
- Nanobots are required for tasks like **actuation**, **sensing**, **manipulation**, **propulsion**, **signaling** and nanoscale information processing in order to **combat COVID-19**.

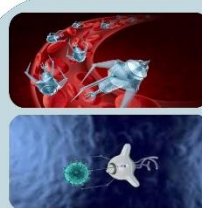


Figure 3: Nanobots catching hold before destroying coronavirus



Figure 4: Nanobots for elimination of Coronavirus by fanning technique.

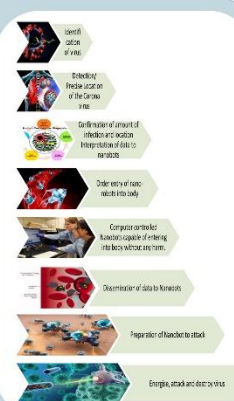


Figure 5: Entering of nanobots in human body

Advantages of Nanobots:

- Precision medicine
- Early diagnosis
- Targeted therapy
- Improved drug delivery
- Regenerative medicine

Disadvantages of Nanobots:

- Toxicity
- Price
- Difficulties with regulation
- Ethical questions
- A lack of knowledge.

CONCLUSION:

Nanobots offer a promising alternative to vaccination for COVID-19, with the potential to destroy viruses and infected cells quickly, providing new hope for the future of vaccines.

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AMELIORATING UTILITY OF KITCHEN SPICES *CUMINUM CYMINUM* IN VARIOUS AILMENTS

Sree Mahalakshmi Pasumarthi*, Ramya Ramisetty

Narayana Pharmacy College, Nellore

Pasumarthysreemahalakshmi3@gmail.com, Contact No. 9390133056



AMELIORATING UTILITY OF KITCHEN SPICES - CUMIN (*CUMINUM CYMINUM*) IN VARIOUS AILMENTS

Sree Mahalakshmi Pasumarthi*, Ramya Ramisetty

* Assistant Professor, Dept of Pharmacology, Narayana Pharmacy College, Nellore, A.P, India

ABSTRACT

As we consider Ayurveda as the traditional system of Indian medicine, where plant herbs are used for the treatment of various ailments. These plant remedies not only cure the symptoms but the whole human body. In this we are dealing with a spice which is normally available at our homes and daily used in so many food preparations. Cumin is a Herbal annual plant belonging to the family apiaceae in many countries like middle east India, China and several mediterranean countries including Tunisia cumin is normally used as a kitchen species and popular as flowering agent in many curries preparation cumin treats many gastrointestinal problems which cause chronic abdominal pain and changes in stool consistency and alter bowel habit with the doses 20 drops of cumin essential oil per day. Green cumin essential oil is more effective for diabetes type-II patient. Cumin also treats cholesterol by decreasing LDL Level for weight loss. It also acts as anti-cancer agent. The plant constituents produce lesser side effects when compared to drugs using in today's world. They also help in increasing the resistance power of the human body.

INTRODUCTION

Cumin is an herbal plant and it is also an annual plant which belongs to the family Apiaceae cumin is cultivated in many countries like middle east, India, China and several Middle Terrance countries including Tunisia. its fruit is known as cumin seed. These are used in two purposes like cooking and medical uses its normally used for food preparation and preparation of popular spices and it is used as a flavoring agent in many curries' preparation cumin is also used in many traditional medicines for treating different diseases including hyperlipidemia, cancer, and diabetes, high blood pressure, heart diseases, weight loss, digestive issues act as a natural laxative aid in curing infections or wounds in excretory system and relieves hemorrhoids. Black cumin seeds have been used in folk medicine as a treatment for various diseases which was used 2000 years ago in middle eastern countries. The black cumin seeds having long history to treat many diseases as traditional Arabic herbal medicine.

Chemical constituents

Cumin aldehyde, Terpinene, Sabinene, Thujene, α -pinene, Eucalyptol, Terpeneol



CONCLUSION

The cumin seeds are having long history to treat many ailments. The known spice present in our home is safe with out side effects. Now-a-days chronic diseases are recovered with natural polyphenolic constituents of plants.

Activity

Use

Irritable bowel syndrome

The patients is in observation for some days and the Course is 20 drops per day or cumin essential oil and observe the changes.

Diabetes

Patients are divided into 3 groups by selecting then randomly and by changing the doses to each group like 100 mg and 50 mg per day before and after 8 weeks of time. It maintains the sugar levels

Dyslipidemia

Cumin for 40-45 days of taking cumin 3 to 5 drops of cumin extract were added to the patients diet three times a day. It decrease in the level of LDL after receiving cumin.

Weight loss

The patients with age of 18-50 years old 72 people were selected divided in to three groups as A,B,C and each group will be treated with different doses high dose will give significant results

Anti cancer

Shows effect in primary cancer lines and various primary cancer cells combination with conventional chemotherapeutic drugs

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PHYTOTHERAPUETIC POTENTIAL OF KITCHEN SPICES - *CORIANDRUM SATIVUM L.*

Setty Anil Kumar

Narayana Pharmacy College, Nellore
aniksetty2004@gmail.com, Contact No. 8328094216



PHYTOTHERAPUETIC POTENTIAL OF KITCHEN SPICES – Coriander [*Coriandrum sativum L.*]

Setty Anil Kumar*,
Student at Narayana Pharmacy College, Nellore

ABSTRACT

Coriander [*Coriandrum sativum L.*], Apiaceae [umbelliferaeae] family is among most widely used medicinal properties a member of the Plant, possessing nutritional as well as Dhaniya medicinal it is an annual herb plant and used as a Spice from ancient times. The fresh leaves of this plant are called cilantro. The seeds, leaves, & fruits of this Plant are Edible and have an aromatic odors, and are used as a flavor in curries, soup for the preparation of considered as a medicinal herb in traditional medicine system as it has various properties like they act as analgesic, -anti-inflammatory, anti-oxidant, anti-hypertensive anti-diuretic, anti-bacterial menstrual disorder, anti-diabetic and anti-microbial. According to modern history, many life threatening diseases were cured by preparing pastes from roots, barks, herbs and different plant leaves. Aspirin, sandal wood, clove oil, basil leaves and clove oil are the few examples of the plants which are having medicinal activity used even today in pharmaceutical industries. Coriander leaves and seeds are full of vitamin K which helps in blood clotting It lowers your heart diseases.

Chemical constituents:

Coriander consist of about 0.3-1% of volatile oil, 13% fixed oil, and 20% of proteins. The chief volatile components are D-(+)- linalool along with other constituents like, borneol, p-Cymene, camphor, geraniol, limonene, and alpha-Pinenes leaves contains vitamin A, vitamin C and Vitamin K. Chemical formula of coriander - C48H7O4



Introduction

- Coriander [*Coriandrum sativum L.*]. Coriander is a Greek word Kori's meaning (bed bug) andannon [a fragrant anise] Coriander which is a commonly known as "Dhaniya" "(or)"Dhaniya" Coriander other synonyms (or) names Fructus coriander, coriander fruit, cilantro, Chinese parcel
- Coriander consist of dried ripe fruits of *Coriandrum sativum Linn.* belonging to family is Apiaceae [umbelliferaeae] coriander plant are the main source of numerous traditional plant it is an modern medicinal systems plant-based on drugs commonly called Phyto medicines ethnobotanical and Ethnomedicinal effects, traditional and therapeutic values and bio chemical profile of *Coriandrum sativum* has been in the use for a health benefits since ancient times.

Conclusion

Coriander [*Coriandrum Sativum L.*] an ancient spice that is used globally in various culture due to its culinary and therapeutic properties, it is used in almost all the traditional of medicines system is one of the essential oil medicinal plant each part of the coriander. has an aroma and important phytochemicals comprising of significant biological properties like antimicrobial, anxiolytics, anti diabetic, anti hypertensive

Activity

MOA

Antihypertensive	Coriander interact with calcium ions and the neurotransmitter acetyl choline, which helps relax tension blood vessel additionally to manage high blood pressure.
Anti-Inflammatory Effect	The anti-inflammatory effects may be attributed to certain bioactive compounds present in coriander, which can help reduce inflammation in the body.
Anti-oxidant activity	The phenolic & carotenoids extract of the plant is found to be more effective in protecting the cells oxidative damage as it shows the higher hydroxyl radicals scavenging potential.
Diuretics	The chemical constituents of coriander seeds were analyzed for the diuretic effect in anesthetized rats, the out come indicated an increased in filtration rate with a mechanism similar to the standard drug. The Extract of fruits of coriander was also Exhibited a diuretic effect in the rats.
Dyslipidemia	Coriander is an rich content of anti oxidant and dietary fibers plays a pivotal role in reducing LDL. Bad cholesterol levels coriander contains phytosterols.
Analgesic activity	Coriander [<i>Coriandrum sativum L.</i>] fruits contains high percentage of linalool, α -pinene, γ -terpinene and limonene

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