A Study on Food Chain and It's Impact Assessment Utilizing Naturopathy and Ayurveda

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Key Word:

Abstract:

Intervention. Naturopathy, Ayurveda, Food Chain, Pollution The present study for find out the relationship between anxiety and effects of Naturopathy and Ayurveda on school students; because, health and well-being are a fundamental mater to enhancing the quality of life of the individual. Naturopathy and Ayurveda is a way of maintaining good health and works as well as curative and preventive technique to either eradicate a normative disease or maintain well-being of human life cycle. For the study, 30 lad and lady between the ages of 12 and 16 to a government school in the Murshidabad area were selected for investigating the Principles of naturopathic techniques on healing power of the nature, health workers as teachers, treatment of cause of illness, preventive treatment, and focus on overall well-being of the person. In this work all the naturopathic approaches like herbal medicine, ayurvedic medicine and unani medicine etc. will be discussed comprehensively. Naturopathy aims at enhancing the overall wellbeing of the body and Ayurveda also. Wherever most of the techniques in it are achieved to enhancing the body's self-healing tendencies. There are various techniques of naturopathy such as Ayurveda, Unani medicine, Yoga and meditation, Chromo therapy etc. will also be discussed in depth in this study. For Experiment Pre-test, post-test with naturopathy intervention design was setup upon the 30 students. After the 21 days naturopathy program conducted results were statistically inferred through analysis. Outcomes: According to the Anxiety Assessment Scale Girls were shown to have higher anxiety levels than boys. Analysis of the Data collected after implementing the intervention naturopathy program showed that student's anxiety levels were reduced substantially.

Introduction

Naturopathy can be effective in preventive phase and curing various ailments i.e. various forms of allergies, arthritis, digestive problems, depression and other mental issues, infertility and reduced immunity. Due to Pollution and Environmental Hazard the recent world is suffering due to health issue[1], [2], [3]. Basically, Water Pollution is the main significant aspects[4] [3] that deteriorated our daily lives standard and for the low grade of food, we suffer by cancer [4]. Carcinogenic element is impacted all food chain among the world. Our main approach is to reduce the medication i.e. chemicals from the human being

Naturopathy

It is very important for persons to take care of their health so they can take prevention in all parts of life, also a form of healthcare that combines modern treatment with traditional methods. Success depends on being fit in entire life. Here, it's important to know that, what health is and to sense health is wealth. As of the World Health Organization, "health" refers to a condition of complete mental, physical, and social wellness, as opposed to merely the absence of

disease or sickness. Being physically fit is an admirable objective because it signifies, you're in a state of well-being on life-style [5].

School students who frequently practiced yoga was shown to have greater self-control, less anger, more positive connections, greater openness, and fewer negative emotional reactions, according to a qualitative study on this research work. Adolescents who practice yoga may develop healthy habits and apply naturopathy aid they feel stress less among the daily life[5], [6]. Naturopathy is an active process that try to implement to achieve the research outcome and aware of, what they must do to live a better existence and then choose how to implement these changes, on their life-style.

Naturopathy is multifaceted, encompassing the needs of the body, the mind, and the soul. The eight interrelated aspects of naturopathy are an individual's emotional, physical, social, spiritual, vocational, intellectual, financial, and environmental health. (Constitution of world health organization, 1946).

Ayurveda

A multi-centric, open-labeled, prospective, comparative clinical study was conducted on 30 school students. 12-16 years of age was screened. All experiment is divided to two cohort was further divided into two groups: pre-test and post-test was advised for lifestyle modification[1], [7]. Ayurveda medication in addition to lifestyle modification and **Yoga**. Treatment and relative observation were given for 24 days. Data were analyzed through SPSS.

Objectives of The Study

- To find and observe the aftermath whether there is any significant impact between the pre-test and post-test on the level of anxiety after the implementation on elementary school students regards to the Naturopathy intervention program on behalf 30 students.
- To find out whether there is any significant impact of Ayurveda intervention programs on the level of anxiety of school students.

Research Methodology

- Specific Consideration of Inclusion and Exclusion Criteria for sample
 - i. Inclusion Criteria
 - Students who agreed to take part in the intervention program and know Bengali and/or English as well as the students who fall in the age group of 12-14 years
 - ii. Exclusion Criteria

Those students who had a disease history of acute or chronic illness and now a days they suffering for same, had just undergone surgery, or were using long-term antipsychotic drugs, we were excluded them.

Exclusion criteria: Subjects with cardiovascular diseases, liver disease, skin disorder, kidney disease, Microvascular injuries, Diabetes mellites, Thyroid disorders, Autoimmune disorders, Active malignant disease, Female subjects during menstruation, Pregnancy or lactation period, Subjects with any systemic illness, Obstructive sleep apnoea[2], [8].

Sample Collection

The present study was conducted on 30 school students having anxiety, and having ages between the age group of 12-16 years old and not currently practicing any exercise not under any therapies, meditation, or remedy. This study is based on an experimental design (single group, pre-test, and post-test design). The data was collected and analyzed

using the quantitative method. Anxiety disorder assessment was done from which data was collected from 30 students and analyzed through SPSS. 30 students who were having anxiety were selected. Participants ranged in age from 12 to 16 years old and were from both genders (17 lads and 13 ladies)[1], [7].

Naturopathy Intervention Program

A module of 24 days was developed with the help of subject matter experts to be given as a naturopathy intervention which was comprised of the following sessions:

Few Naturopathy therapies, Yogasan, Pranayam, breathing practice, meditation, and healthy diet tips were given during naturopathy intervention program. Naturopathy Therapies including mud therapy, eye washing, hydrotherapy and laughter therapy were given to the students[6], [9], [10]. Yogasan and Pranayam sessions given to the students by experts[5].

Case Study: A 14-year-old student was admitted to our intervention with complaints of intense itching, scarring, and raised black nonvisual skin in both feet, particularly around the ankles, for the past 7 years[4], [11], along with family's hypertension for the past year. The student was not currently under any medication and this outcome came from Ayurveda. The student took aspirin often in his childhood without the advice of a physician for cold issues and sinusitis[12], [13]. He had disturbed sleep and irregular bowel patterns. He had a history of incomplete voiding of urine for the past three months and had no relevance to any medical or surgical history. He was already diagnosed with chronic eczema in 2023.

Impact Observation on Pre-Intervention Sl. No. **Stress and Impact Students** Percentage (%) Verv Low 3.33 1. 1 2. 3 10 Low Medium 53.33 3. 16 High 7 23.33 4. 5. Very High 3 10 Sum **30** 100%

Table 1: Pre-Intervention

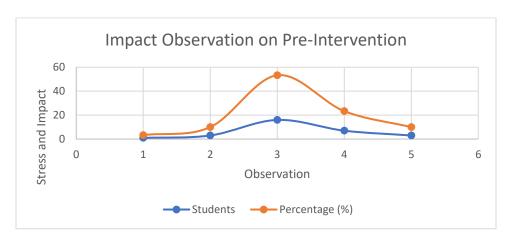


Figure 1: Pre-Intervention Graph

Table 2:Post-Intervention

Impact Observation on Post-Intervention			
Sl. No.	Stress and Impact	Students	Percentage (%)
1.	Very Low	6	20
2.	Low	8	26.66
3.	Medium	15	50
4.	High	1	3.33
5.	Very High	0	0
Sum		30	100%

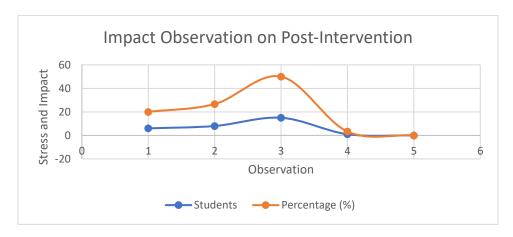


Figure 2:Post-Intervention

Discussion:

We have discussed about five relevant sub topic and elaborate its methodology with conclusion. The research approach on experimental tens to interpret including these sub topics. Our research outcome could be emphasized throughout below elaborated Terminologies:

1. Impact of Naturopathy, Unani, and Ayurveda on Human Health

Introduction

Naturopathy, Unani, and Ayurveda are ancient systems of medicine that have been practiced for centuries. They share a common philosophy of holistic healing, emphasizing the interconnectedness of mind, body, and spirit. These systems offer a natural and personalized approach to healthcare, focusing on preventive measures and addressing the root causes of diseases[3], [12], [13].

• Naturopathy

Naturopathy is a system of medicine that emphasizes the body's inherent healing ability. It utilizes natural remedies and lifestyle modifications to promote optimal health[5], [6]. Naturopathic practitioners may employ various techniques, including:

- 1. Herbal remedies: Using plants and herbs to treat diseases.
- 2. Homeopathy: Using diluted substances to stimulate the body's healing response.
- 3. Hydrotherapy: Utilizing water to promote healing and relaxation.
- 4. Nutrition: Emphasizing a healthy diet to support optimal health.

• Unani

Unani medicine, also known as Greco-Arabic medicine, originated in ancient Greece and Persia. It is based on

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the principles of humoral theory, which posits that the body is composed of four primary humors (blood, phlegm, yellow bile, and black bile)[1]. Unani practitioners use various treatments, including:

- * Herbal remedies: Using plants and herbs to balance the body's humors.
- * Dietary modifications: Adjusting the diet to maintain balance.
- * Bloodletting: Removing excess blood to restore balance.
- * Purging: Using substances to cleanse the body.
- Avurveda

Ayurveda, the "science of life," is an ancient Indian system of medicine that emphasizes individual constitution (dosha) and lifestyle[14], [15]. Ayurvedic practitioners use various techniques, including:

Panchakarma: A detoxification process involving massage, herbal enemas, and other therapies.

- * Herbal remedies: Using plants and herbs to balance the doshas.
- * Yoga: Practicing yoga to improve physical and mental health.
- * Meditation: Using meditation to reduce stress and promote relaxation.
- Shared Principles and Benefits
 - * Holistic Approach: All three systems emphasize a holistic approach to health, considering the interconnectedness of mind, body, and spirit.
 - * Natural Remedies: They primarily use natural remedies, such as herbs and plants, which can have fewer side effects compared to conventional medications.
 - * Preventive Care: These systems focus on preventive care, emphasizing lifestyle changes and dietary modifications to maintain optimal health.
 - * Personalized Treatment: Each system offers personalized treatment plans based on individual needs and constitution.
 - * Reduced Reliance on Medications: By addressing the root causes of diseases and promoting natural healing, these systems can reduce reliance on conventional medications.
- Conclusion

Naturopathy, Unani, and Ayurveda offer valuable contributions to human health. Their emphasis on natural healing, personalized treatment, and preventive care can help individuals achieve optimal well-being. While these systems may not be suitable for all health conditions, they can be a valuable complement to conventional medicine.

2. Impact and Outcomes of Naturopathy on the Food Chain for Human Health

Introduction

Naturopathy, a holistic system of medicine that emphasizes natural healing, can play a significant role in promoting sustainable food systems and improving human health. By focusing on environmental sustainability, ethical food practices, and individual well-being, naturopathy can help mitigate the negative impacts of food chain disruptions for beyond the life cycle syndrome on DNA derivatives[1], [2], [5], [6], [8], [11], [12], [13].

Naturopathy and Sustainable Food Systems

- Organic Farming: Naturopathy often promotes organic farming practices, which minimize the use of synthetic pesticides and fertilizers, protecting the environment and reducing the risk of chemical contamination in food.
- Local Food Systems: Encouraging local food production and consumption can help reduce the environmental impact of long-distance transportation and support sustainable farming practices.
- Biodiversity: Naturopathy recognizes the importance of biodiversity in agricultural systems, emphasizing the cultivation of a variety of crops to promote ecological balance and resilience.

Naturopathy and Ethical Food Practices

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- Ahimsa: The principle of non-violence is central to naturopathy. This extends to the treatment of animals and the environment, promoting ethical and humane food production practices.
- Fair Trade: Naturopathy often supports fair trade initiatives, which ensure that farmers and workers are treated fairly and receive a just compensation for their products.

Naturopathy and Individual Health

- Holistic Approach: Naturopathy takes a holistic approach to health, considering the interconnectedness of
 physical, mental, and emotional well-being. This includes addressing the root causes of health problems,
 which may be related to dietary factors and environmental influences.
- Personalized Nutrition: Naturopathy emphasizes personalized nutrition plans based on individual doshic constitution and health needs. This can help individuals optimize their dietary choices and minimize the negative impacts of food chain disruptions.

Outcomes of Naturopathy on Human Health

- Improved Nutrition: By promoting sustainable and ethical food practices, naturopathy can help ensure that individuals have access to a diverse and nutritious diet.
- Reduced Exposure to Toxins: Naturopathy can help reduce exposure to harmful chemicals and toxins in food by promoting organic farming and avoiding processed foods.
- Enhanced Digestive Health: A healthy diet and lifestyle, as advocated by naturopathy, can support optimal digestive function and reduce the risk of gastrointestinal disorders.
- Improved Overall Well-being: By addressing the root causes of health problems and promoting a holistic approach to well-being, naturopathy can contribute to improved quality of life.

Conclusion

Naturopathy plays a vital role in promoting sustainable food systems and improving human health. By focusing on environmental sustainability, ethical food practices, and individual well-being, naturopathy can help mitigate the negative impacts of food chain disruptions and create a healthier and more sustainable future.

3. The Impact of Food Chain on Human Health: An Ayurvedic Perspective

Introduction

Ayurveda, an ancient Indian system of medicine, offers a holistic approach to health and well-being that considers the interconnectedness of all aspects of life, including the food chain. According to Ayurveda, the food we consume has a profound impact on our physical, mental, and emotional health. Disruptions to the food chain can lead to imbalances in the body's doshas (fundamental energies) and contribute to various health issues[11].

Ayurvedic Principles of Food and Health

- Ahimsa: Non-violence towards all living beings is a core principle of Ayurveda. This extends to the food chain, emphasizing the importance of ethical and sustainable food practices.
- Sattvic Diet: A Sattvic diet, characterized by purity, lightness, and clarity, is considered optimal for health. It emphasizes whole, unprocessed foods that are in harmony with nature.
- Doshic Balance: Ayurveda recognizes three doshas—Vata, Pitta, and Kapha—that govern different aspects of our physiology. A balanced dosha state is essential for optimal health.

Impact of Food Chain Disruptions on Ayurvedic Health

• Dosha Imbalances: Disruptions to the food chain can lead to imbalances in the doshas. For example, excessive consumption of processed foods can increase Pitta, leading to inflammation and acidity.

- Ama: The accumulation of toxins (ama) in the body is a common consequence of consuming unhealthy foods. Ama can clog the digestive system and impair overall health.
- Disease: Chronic diseases such as diabetes, heart disease, and autoimmune disorders can be rooted in imbalances caused by dietary factors.

Ayurvedic Treatments for Food Chain-Related Health Issues

- Dietary Modifications: Ayurveda emphasizes the importance of tailoring one's diet to individual doshic constitution and health needs.
- Herbal Remedies: Herbs and spices are used to restore balance, detoxify the body, and address specific health concerns.
- Panchakarma: This comprehensive detoxification therapy involves a series of treatments to eliminate ama and restore doshic balance.
- Lifestyle Changes: Ayurveda emphasizes the importance of a balanced lifestyle, including regular exercise, adequate sleep, and stress management.

Conclusion

Ayurveda offers a comprehensive approach to addressing the health challenges arising from disruptions in the food chain. By understanding the principles of Ayurvedic nutrition and adopting a holistic lifestyle, individuals can promote their overall well-being and contribute to a healthier planet [10].

4. The Impact of Food Chain on Human Health: A Nutritional Perspective

Introduction

The food chain, a complex network of organisms interconnected by feeding relationships, plays a crucial role in maintaining ecological balance. However, disruptions to the food chain, often caused by human activities such as pollution, deforestation, and overfishing, can have far-reaching consequences for human health, particularly from a nutritional perspective [8], [11].

Key Nutritional Impacts of Food Chain Disruptions

Nutrient Deficiencies:

- Essential Nutrients: Disruptions in the food chain can lead to deficiencies in essential nutrients, such as vitamins, minerals, and omega-3 fatty acids. For instance, overfishing can deplete marine sources of omega-3 fatty acids, which are crucial for brain health and heart function.
- Micronutrients: Reduced biodiversity in food systems can limit the availability of micronutrients like iron, zinc, and vitamin A, which are essential for growth, development, and immune function.

Increased Toxin Exposure:

- Bioaccumulation: Toxins can accumulate in organisms as they move up the food chain, leading to higher concentrations in top predators. This phenomenon, known as bioaccumulation, can result in increased exposure to harmful substances like heavy metals, pesticides, and antibiotics in human diets.
- Contaminated Food Sources: Disrupted food chains can lead to contaminated food sources, such as fish contaminated with mercury or produce contaminated with pesticides.

Reduced Dietary Diversity:

• Monoculture Agriculture: Overreliance on monoculture agriculture, which involves growing a single crop in large quantities, can reduce the diversity of foods available, leading to a limited range of nutrients.

• Loss of Traditional Foods: Disruptions in local food systems can result in the loss of traditional foods that may have unique nutritional properties or cultural significance.

Health Implications of Nutritional Deficiencies and Toxin Exposure

- Malnutrition: Nutrient deficiencies can lead to malnutrition, characterized by inadequate intake of essential nutrients. This can result in various health problems, including stunted growth, weakened immune systems, and increased susceptibility to diseases.
- Chronic Diseases: Long-term exposure to toxins and nutritional deficiencies can increase the risk of chronic diseases such as heart disease, diabetes, and cancer.
- Neurological Disorders: Deficiencies in essential nutrients, particularly omega-3 fatty acids, can contribute to neurological disorders like Alzheimer's disease and depression.

Addressing Nutritional Challenges Through Sustainable Food Systems

- Promoting Biodiversity: Supporting biodiversity in agricultural systems can help ensure a more diverse and resilient food supply.
- Supporting Local Food Systems: Encouraging local food production and consumption can help reduce reliance on long-distance transportation and minimize the risk of contamination.
- Sustainable Fishing Practices: Implementing sustainable fishing practices can help protect marine ecosystems and ensure a healthy supply of seafood.
- Consumer Awareness: Educating consumers about the importance of sustainable food choices and the nutritional benefits of a diverse diet can drive positive change. By understanding the nutritional implications of food chain disruptions and taking steps to promote sustainable food systems, we can help ensure a healthier future for ourselves and generations to come.

5. Impact of Food Chain on Human Health: A Naturopathic Perspective

Introduction

The food chain, a complex network of organisms interconnected by feeding relationships, plays a crucial role in maintaining ecological balance. However, disruptions to the food chain, often caused by human activities such as pollution, deforestation, and overfishing, can have far-reaching consequences for human health. Naturopathy, a holistic system of medicine that emphasizes natural healing, offers a unique perspective on the relationship between food, the environment, and human health[1], [5], [7], [9].

Research Questions

- i. How does the disruption of the food chain impact human health from a Naturopathic perspective?
- ii. What are the specific nutritional deficiencies or imbalances that can arise due to disruptions in the food chain?
- iii. How can Naturopathic principles and practices help individuals mitigate the negative health effects of food chain disruptions?
- iv. What role can Naturopathy play in promoting sustainable food systems and protecting the environment?

Methodology

Literature Review: A comprehensive review of existing literature on the impact of food chain disruptions on human health, including studies from both conventional medicine and Naturopathy, will be conducted. Case Studies: Case studies of individuals experiencing health problems associated with food chain disruptions

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will be analyzed to identify common symptoms, underlying causes, and potential Naturopathic interventions. Expert Interviews: Interviews with Naturopathic practitioners and experts in environmental science will be conducted to gather insights into the relationship between food, the environment, and human health. Data Analysis: Qualitative and quantitative data will be analyzed to identify patterns, trends, and potential correlations between food chain disruptions and human health.

Expected Outcomes

Based on the research, it is expected that the following outcomes will be identified:

- o Nutritional Deficiencies: Disruptions in the food chain can lead to deficiencies in essential nutrients, such as vitamins, minerals, and omega-3 fatty acids.
- o Increased Toxin Exposure: Contaminated food and water can expose individuals to harmful toxins, including heavy metals, pesticides, and antibiotics.
- Digestive Health Issues: Disruptions in the gut microbiome, which can be influenced by dietary factors, can contribute to digestive problems such as irritable bowel syndrome (IBS) and inflammatory bowel disease (IBD).
- o Chronic Diseases: Long-term exposure to unhealthy food and environmental toxins can increase the risk of chronic diseases, including heart disease, diabetes, and cancer.

Naturopathic Interventions

- Naturopathy offers a range of interventions to address the health challenges associated with food chain disruptions. These may include:
- O Dietary Modifications: Emphasizing whole, organic foods, and minimizing processed foods can help improve nutrient intake and reduce exposure to toxins.
- o Herbal Remedies: Herbs and botanicals can be used to support digestion, detoxification, and overall health.
- o Lifestyle Changes: Stress management, regular exercise, and adequate sleep can help improve overall well-being.
- o Environmental Awareness: Educating individuals about the importance of sustainable food systems and environmental protection can empower them to make informed choices.

Conclusion

This research aims to provide a Naturopathic perspective on the impact of food chain disruptions on human health. By understanding the underlying causes and potential health consequences, individuals can take proactive steps to protect their health and support sustainable food systems.

Terminology for a Study on Food Chain and Impact Assessment Using Naturopathy and Ayurveda

Core Concepts

- Food Chain: The interconnected sequence of organisms that feed on each other.
- Impact Assessment: An evaluation of the positive or negative effects of a project, plan, or policy.
- Naturopathy: A system of healing that emphasizes the body's ability to heal itself, often using natural remedies and lifestyle changes.
- Ayurveda: A traditional Indian system of medicine that focuses on balancing the body's doshas (vital energies).

Specific Terms Related to Food Chain

• Primary Producer: Organisms that create their own food, such as plants. Primary Consumer: Organisms that eat primary producers, such as herbivores.

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- Secondary Consumer: Organisms that eat primary consumers, such as carnivores.
- Tertiary Consumer: Organisms that eat secondary consumers, often at the top of the food chain.
- Decomposer: Organisms that break down dead organisms and waste products, returning nutrients to the soil.

Related to Impact Assessment

- Environmental Impact Assessment (EIA): A systematic process to evaluate the potential environmental effects of a project.
- Social Impact Assessment (SIA): A process to evaluate the potential social effects of a project.
- Economic Impact Assessment (EIA): A process to evaluate the potential economic effects of a project.
- Sustainability Assessment: An evaluation of the long-term viability of a project or activity.

Related to Naturopathy and Ayurveda

- Dosha: The three vital energies in Ayurveda: Vata, Pitta, and Kapha.
- Ahar: Diet in Ayurveda.
- Digestion: The process of breaking down food into nutrients.
- Elimination: The process of removing waste products from the body.
- Natural Remedies: Treatments using natural substances, such as herbs, plants, and minerals.
- Lifestyle Changes: Modifications to behavior, such as diet, exercise, and stress management.

Potential Combinations

- Naturopathic Food Chain Analysis: Examining the impact of food choices on health and well-being from a naturopathic perspective.
- Ayurvedic Impact Assessment: Evaluating the potential effects of a project on the body's doshas and overall
- Sustainable Food Chain Assessment: Assessing the environmental, social, and economic impacts of a food
- Holistic Impact Assessment: Incorporating both Naturopathic and Ayurvedic principles to evaluate the overall impact of a project.

Conclusion:

We found that as of our applied methodology and terminology the certain experiment of this study Pre-Intervention of students was very high stress of impact along with risk on health issues but after intervention[6] of the experimental journey, we got low stress of impact. Therefore, the apply of the Naturopathic and Ayurvedic Intervention effect[7], [9] on Food Chain and all the relevant mechanism which one is worked on the Food Chain evolution within time consumed approach, we discuss throughout the five numbers of terminologies. If we focus on Terminology for a Study on Food Chain and Impact Assessment Using Naturopathy and Ayurveda which detailed about the all terms accurately.

Reference

- [1] "UNANI SYSTEM OF MEDICINE Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) Government of India." [Online]. Available: www.indianmedicine.nic.in
- S. K. M Mizanur Rahaman et al., "Computational Analysis of Gene Expression Patterns in Cancer Diagnosis and [2] Treatment Section A-Research Paper Eur," Chem. Bull, vol. 2023, no. 8, pp. 7229–7258, doi: 10.48047/ecb/2023.12.8.580.

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- [3] M. Rahaman, "Air and Noise Pollution Monitoring for an Area with Applying GIS, Remote Sensing and Internet of Things based Approach", doi: 10.13140/RG.2.2.25441.28000.
- [4] M. Rahaman, "GROUNDWATER QUALITY ASSESSMENT OF SIRSA RIVER BASIN FOR BADDIBAROTIWALANALAGARH INDUSTRIAL REGION," *Article in Journal of Industrial Pollution Control · Jr. of Industrial Pollution Control*, vol. 39, no. 2, pp. 1–10, 2023, doi: 10.4172/0970-2083.005.
- [5] Naveenkumar S and M. Mr, "Yoga and Naturopathy for managing Ankylosing spondylitis Case Report Yoga and Naturopathy Approach in the management of Ankylosing Spondylitis: A Case Report."
- [6] P. Ameya and P. M. Nair, "Role of Therapeutic Fasting along with Other Naturopathy and Yoga Modalities in Addressing Acne Vulgaris-A single Case Report," *J Fasting Health*, vol. 5, no. 3, pp. 103–106, 2017, doi: 10.22038/JFH.2017.25098.1093.
- [7] G. R. Tewani *et al.*, "Effect of health education-based yoga & naturopathy lifestyle interventions on personality of patients with non-communicable diseases: A randomized controlled trial," *Medicine (United States)*, vol. 102, no. 11, p. E33260, Mar. 2023, doi: 10.1097/MD.0000000000033260.
- [8] P. M. K. Nair *et al.*, "Characteristics of patients who use yoga for pain management in Indian yoga and naturopathy settings: a retrospective review of electronic medical records," *Frontiers in Pain Research*, vol. 4, 2023, doi: 10.3389/fpain.2023.1185280.
- [9] P. Nair, "Naturopathy and yoga in ameliorating multiple hormonal imbalance: a single case report," *Int J Reprod Contracept Obstet Gynecol*, pp. 916–918, 2016, doi: 10.18203/2320-1770.ijrcog20160612.
- [10] P. M. Nair and J. Raj, "Knowledge, attitude and practice of therapeutic fasting among naturopathy physicians: across sectional national survey," 2015. [Online]. Available: https://www.researchgate.net/publication/286921072
- [11] U. Payyappallimana and P. Venkatasubramanian, "Principles of Ayurveda for Food, Nutrition, and Health," 2015, pp. 15–36. doi: 10.1201/b18430-4.
- [12] U. Payyappallimana and P. Venkatasubramanian, "Exploring ayurvedic knowledge on food and health for providing innovative solutions to contemporary healthcare," Mar. 01, 2016, Frontiers Media S.A. doi: 10.3389/fpubh.2016.00057.
- [13] "GOVERNMENT OF INDIA MINISTRY OF AYURVEDA, YOGA & NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY (AYUSH) RAJYA SABHA UNSTARRED QUESTION NO. 2566 TO BE ANSWERED ON 22 ND DECEMBER, 2015 NATUROPATHY AND YOGA PRACTITIONERS IN THE COUNTRY."
- [14] D. Arankalle, G. R. Tewani, P. M. K. Nair, and J. Wardle, "Outcomes of a Medically Supervised Fasting Module on Healthy Females in a Controlled Residential Environment: A Brief Report," *Permanente Journal*, vol. 25, no. 4, 2021, doi: 10.7812/TPP/21.086.
- [15] A. Chauhan, D. Semwal, S. Mishra, and R. Semwal, "Ayurvedic research and methodology: Present status and future strategies," AYU (An international quarterly journal of research in Ayurveda), vol. 36, no. 4, p. 364, 2015, doi: 10.4103/0974-8520.190699.