

# **"KNOWLEDGE ATTITUDE AND PRACTISE TOWARDS MULTIVITAMIN SUPPLEMENTS AMONG GENERAL POPULATION OF INDIA"**

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# INTRODUCTION -

The first case of COVID-19, thereupon named SARS-CoV-2 were first observed in Wuhan City., China in December 2019.

Outbreak led to rapidly increase in the use of dietary supplements all over the world

Increase in the demand and consumption of Immunity Boosters increased.

Disturbing is that large number of people are consuming Dietary Supplements without any deficiency symptoms, and their effectiveness in such conditions is questioned.

However, people should not rely completely on dietary supplements by skipping or avoiding a balanced diet, instead maintain a balanced amount of nutrient in the body, so to correct the deficiency

An optimally functioning immune system is having adequate supply of micronutrients to the body

# **Literature Review -**

- Increased in mortality rate in the patients and socioeconomic disruption globally due to COVID-19.
- In the wake of COVID-19, Dietary supplements consisting of vitamins and micronutrients helps in boosting the immune system, and these are affordable and effective adjuvant approach for treating the acute respiratory tract complications of COVID-19.

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- **Potential Role of Multivitamin Supplements in COVID-19 Management:**

- **Vitamin – C:**

- Known as ascorbic acid.
- It's a water soluble.
- One of the well-known function of Vitamin – C has an antioxidant Activity, thus helps in attenuating lung inflammation in COVID Infection.

- **Vitamin – D:**

- Lipid-Soluble Micronutrients.
- Vitamin – D deficiency means having life threatening factor for severity of Corona infection.
- It provides modulatory action on adaptive immunity by resisting responses of T- helper cell type 1 and speeding up the induction of T – regulatory cells

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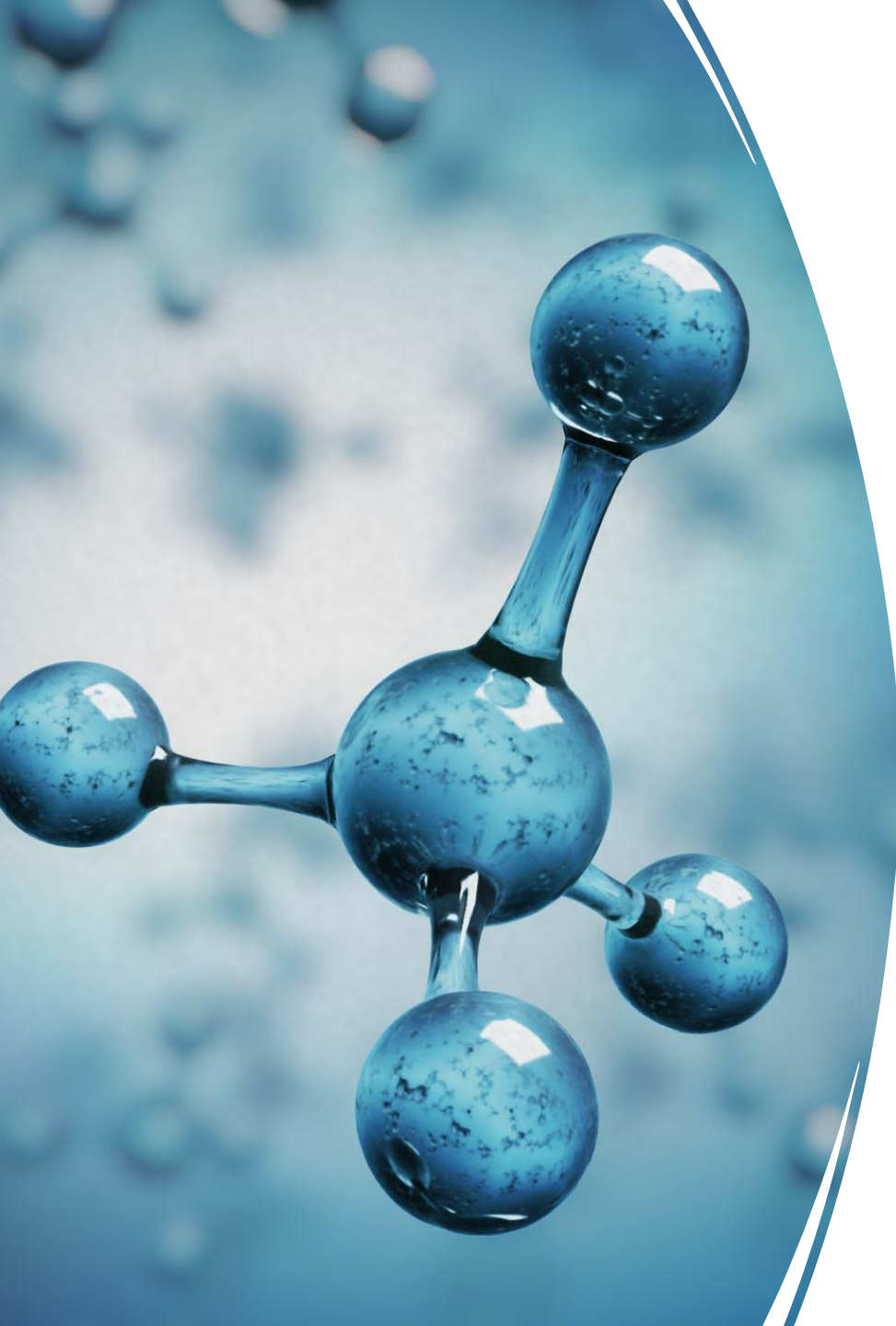
- **Melatonin:**
- Classical night time hormone, secreted by pineal gland.
- Powerful antioxidant and anti-inflammatory property.
- The regulation of Immune system is managed by circadian rhythm, modulated by pineal melatonin. Therefore, various condition which includes fatal viral infections, wherein pineal melatonin gets decreased, might affect the immune system of hosts and evidence reflects that the severe viral infection load, might suppress the production of pineal melatonin.

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- **Selenium:**

- Vital trace element, potent nutritional antioxidant.
- Exerts its action by binding with selenoproteins wherein it plays a vital role in decreasing the oxidative stress.
- Normally lack of Selenium and Selenoproteins Polymorphisms leads to Immune System Dysfunction in an individual.
- And so Selenium Supplementation is very Mandatory to improve the immunity levels as Lack of Selenium affects in several manner, including mutations, replication, and virulence. Hence, selenium plays a crucial contribution in COVID-19 Management.
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- Zinc:

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- Important for many biological processes, including Lipid Metabolism, Carbohydrate Metabolism.
- Involved in the regulation and formation of immune system and inflammatory responses. Therefore, zinc involvement in immune system function is obvious.

# **RESEARCH OBJECTIVE:**

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To assess the use of Multivitamin Supplements among General Population of India.

To understand knowledge, attitude towards Multivitamin Supplements among General Population of India



# Research methodology:

- **Type of Research:** Descriptive Study
- **Data Collection:** Primary data was collected from general population throughout the Pan India. Secondary data was collected from PubMed Articles, Published journals, Google Scholar etc.
- **Duration:** 22/03/2021 – 19/06/2021
- **Sample Size:** 250 citizens
- **Data Analysis:** The data analysis had been done by using Microsoft Excel.

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- **Inclusion Criterion**: All participants including COVID, Non-COVID Patients, Comorbid, Non-Comorbid Patients, Pregnant, Non-Pregnant Women, TB, Non-TB Patients, Fever, Non-Fever Patients, Diabetic, Non-Diabetic Patients are included in this study.
- **Exclusion criterion**: Participants with psychological illnesses, participants who are not willing to participate in this study are excluded.
- **Study Area**: Pan India.

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- **Data Collection Method:**

- Primary Data Collection: A Pretested Structured Questionnaires was framed for Data Collection from General Population of India.
- Secondary Data Collection: Journals, PubMed Articles, Google Scholar etc.

- **Data Collection and Analysis:**

- The responses obtained was collected, filtered, and statistically analysed using Microsoft Excel.
- **Measure of Ethics:** Respondents were assured of Privacy and Confidentiality.
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# Interpretation and Result:

- <https://drive.google.com/file/d/1aDzEZvXtzG8W1hSXBNLypMICWGtiADND/view?usp=sharing>

# CONCLUSION -

- This study has analysed the Knowledge attitude and practise towards Multivitamin Supplements among General Population of India.
- People are consuming Multivitamin Supplements, without consulting Doctor, practising Self-Medication, following Word of Mouth, getting influenced by the advertisements and then consuming, keeping a thought in a mind that, consuming multivitamin even if not detected with vitamin deficiency will boost immunity levels. and that too without consulting a doctor and taking maximum dose. This will actually result in complications.
- One should not consume Multivitamins without the advisory of the doctor. Without knowing the proper dose frequency, and up to how many days it should be continued taking, it can be dangerous to administered as it can harm the vital organs of the body. Maximum Respondents are not affected with COVID-19, still maximum respondents have consumed Multivitamin Supplements. Still number of respondents have Lack of knowledge regarding possible harm caused due to supplementing high dose of multivitamin, They are not even aware of interaction occurs when administered Multivitamin with either Milk, or calcium supplements, or any of the dairy products. If taken, so these all contain calcium which will make harder for the body to absorb certain ingredients of the multivitamins.

# Limitation:

- Generalizability is poor due to less sample size taken because of unavailability of the respondents, may be because of the Pandemic Situation.
- Interpretation of the data collected had to be done among, above 250 Respondents or more than 250 respondents had to be taken to study effectively.
- Participants with psychological illnesses, participants who are not willing to participate in this study are excluded.
- Random Sampling had to be done properly and equal number of respondents had to be taken including different age groups.
- Respondents between 13-19 years of age had to be excluded from this study.
- The topic had to be studied more on depth and questionnaires had to be framed accordingly and sequentially.

# Recommendation:

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- One should take proper, wholesome foods and not depend on Multivitamin Supplements as multivitamins are required in a small amount to work efficiently.
- Multivitamin Supplements should be taken as per the advisory of the doctor.
- One should not prefer taking Multivitamin Supplements unless and until one is having symptoms of vitamin deficiency. And if having symptoms of vitamin deficiency, one must consult it with doctor to avoid causing harm to vital organs of the body.
- One must take Multivitamin Supplements according to the prescribed and recommended dose.
- One must consume Multivitamin Supplements with glass full of water and should be aware of the interaction which will cause, when taken these supplements either with Milk, or calcium supplements, or any of the dairy products.

# Thankyou

Stay Safe, Stay Healthy

