

Action Report

International Conference on Relevance and Importance of Health and Wellness in COVID-19

July 2020



Knowledge Partner

Partner

Letter from Minister



अश्विनी कुमार चौबे
Ashwini Kumar Choubey



सत्यमेव जयते

सर्वसामु निरुपद्रव



स्वास्थ्य एवं परिवार कल्याण राज्य मंत्री
भारत सरकार
MINISTER OF STATE FOR
HEALTH & FAMILY WELFARE
GOVERNMENT OF INDIA



Message

It gives me immense pleasure to extend, my warmest congratulations and sincere greetings to ASSOCHAM and HUL for organizing Web Conference on Relevance and Importance of Health and Wellness in Covid 19.

The COVID-19 outbreak has made us all realize the importance of Self-Care. While properly washing hands and avoiding crowds is a prerequisite to stay safe in current situations, it's important to also take steps to boost one's immune system. Prevention is better than cure. While there is no specific medicine for COVID-19, preventive measures to boost our immunity are the need of the hour.

I would like to wholeheartedly congratulate ASSOCHAM and HUL for organising Web Conference on Relevance and Importance of Health and Wellness in Covid 19 which is the subject of paramount importance.

(Ashwini Kumar Choubey)

New Delhi

Dated: 10 July, 2020

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Letter from Minister



श्रीपाद नाईक
SHRIPAD NAIK

राज्य मंत्री (स्वतंत्र प्रभार)
आयुर्वेद, योग व प्राकृतिक चिकित्सा, यूनानी, सिद्ध,
सोवा-रिग्पा एवं होम्योपैथी-(आयुष) मंत्रालय एवं रक्षा राज्य मंत्री
भारत सरकार

MINISTER OF STATE (INDEPENDENT CHARGE) FOR
AYURVEDA, YOGA & NATUROPATHY, UNANI, SIDDHA,
SOWA-RIGPA, HOMOEOPATHY-(AYUSH) &
MINISTER OF STATE FOR DEFENCE
GOVERNMENT OF INDIA



Message

Thank you all for joining us today in these challenging times, when the strength of one's immune system is of paramount importance.

Never before has the whole of humanity faced a single common enemy that has affected each of us personally as this.

The COVID-19 outbreak has made us all realize the importance of Self-Care. While properly washing hands and avoiding crowds is a prerequisite to stay safe in current situations, it's important to also take steps to boost one's immune system.

Considering the importance of body's natural immunity in the wake of ongoing crisis, our Hon'ble Prime Minister has consistently highlighted the benefits of Ayurveda and urged the nation to follow the recommendations of the Ministry of AYUSH to use the gifts of nature for a healthy and happy life.

Prevention is better than cure. While there is no medicine for COVID-19 as of now, preventive measures to boost our immunity are the need of the hour.

Important though it is, the ability to do has however proved elusive for several reasons. The immune system is precisely that a system, not a single entity. To function well, it requires balance and harmony. There is still much that researchers don't know about the intricacies and interconnectedness of the immune response.

Without further ado, let's begin. Thanks once again for being here stay safe stay healthy!

Thank you.


(Shripad Naik)

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Foreword



COVID-19 brought global economies to their knees, as countries dealt with health and economic crisis. Global supply chain disruption, demand shock, rising pressure on health infrastructure

and high incidence of job and income loss underlined the crisis.

India's response to control and mitigate infection was timely, with the Government also introducing an economic package worth 10% of the country's GDP. The focus on economically supporting the most vulnerable segments was as essential as the healthcare support provided. The Aarogya Setu mobile application is a critical channel created by the Government of India to connect citizens with essential health services. At the same time, the Government is promoting Ayurveda and Yoga to help strengthen immunity.

The preventive measures of social distancing increased sanitization, and the essential lockdown has had a significant impact on economic activity. Businesses are now focusing on creating a strategy for the new normal. The way of conducting business, selling, catering to customers and even product portfolio, is expected to change.

While many consumer preferences are brought on by fear of infection, changes related to health and wellness will have a long-term bearing on business practices. The pandemic has also mainstreamed the conversation on mental health. In coming times, industries would focus on embedding the health perspective across all facets of their operations. The significantly impacted sectors need policy and economic support from the Government and a renewed

strategy to manage future growth. While technology has played a crucial role during the crisis, the future roadmap for businesses, industries and Governments must also focus on tech-driven innovation.

This black swan event will change many aspects of human life and by extension businesses. The need of the hour is for industries and Governments to maintain agility and work together to address the emerging needs of consumers. Additionally, it is time for all stakeholders to get together and support the vulnerable MSME players. This would also support India's vision of becoming self-reliant.

Dr. Niranjan Hiranandani

President, ASSOCHAM

Founder & Managing Director,
Hiranandani Group of Companies



Foreword

The unfolding COVID-19 pandemic has significantly impacted the health and economic facets across global economies. Countries are dealing with this double-edged black swan event, wherein an economic crisis also accompanies the health emergency.

The limited understanding of the virus and lack of treatment led to shockwaves and a rise in fear among people. Governments were quick to get in action and instituted lockdowns to control the spread of infection. However, these essential lockdowns brought economic activity to a halt.

Studying and understanding the mutation of the virus is helping evaluate the impact of the strains. As the understanding of the contagion improves, various treatments are under evaluation across the world. The scientific community has come together to find a vaccination for the virus. In the interim, the focus has shifted towards maintaining and strengthening

immunity. Till a standardised treatment is available, the easiest way to safeguard oneself is to wear a mask, wash hands regularly and maintain social distancing.



India has turned to its heritage to tide through these troubled times by promoting yoga and ayurvedic medicine to improve the health and well-being of people. These measures are essential to ease the pressure on the stressed healthcare system of the country. Amidst the COVID-19 pandemic, the Ministry of AYUSH has issued an advisory on various immunity-enhancing steps from the time-tested approaches of Ayurveda to help boost immunity. At the same time, there is significant evidence to prove that yoga practices help the body's ability to respond to stress effectively.

The pandemic brought on significant supply chain disruptions, with many large and small businesses closing their doors. There has been an overnight shift, pushing companies and consumers into the deep-end of the e-commerce pool. Consumer behaviour is changing across the world and impacting various industries, as the lens through which consumers look at products and brands is shifting.

The 3-day web conference on the 'Relevance and importance of Health and wellness in COVID-19', brought forth various suggestions from veteran industry stakeholders on managing the current crisis and preparing for the future. ASSOCHAM, supported by Primus Partners India and Hindustan Unilever Limited, brings forth the recommendations of the esteemed panellists and we hope that this is useful across sections as a guide to the shifting environment.

Deepak Sood
Secretary General
ASSOCHAM



Foreword

The unprecedented crisis is impacting our lives on many fronts – social, economic and our overall wellbeing (physical, mental, emotional and spiritual). We are forced to rethink how we work and live. ASSOCHAM organized a web-conference on 'Relevance and Importance of Health and Wellness during Covid-19 days.'

The conference brought together more than 20 thought leaders from research, industry, academia and government sectors to have a holistic discussion on various relevant topics. The conference had 3 parts – the virus, the disease and treatment options; health, nutrition and wellness practices in CoVID days; and 'New Normal' – impact on MSME businesses and emerging health & wellness trends.

The conference received overwhelming response as we had more than 10,000 participants from 14 countries including USA, Canada, UK, Australia, Netherlands, Singapore etc. Various relevant and important topics were discussed and debated.

This report presents a synthesis of the discussions and actions proposed by different eminent experts. The proposed actions may help our country to fight against the crisis. As ASSOCHAM team we humbly request the Govt of India to consider the recommendations.

Once again, I thank Hon'ble Minister of State Health and Family Welfare Shri Ashwini Kumar Choubey ji and Hon'ble Minister of State AYUSH Shri Shripad

Naik ji, for gracing and blessing the conference. I would also like to extend my sincere thanks to Dr Niranjan Hiranandani (President, ASSOCHAM), Mr Deepak Sood (Secretary General, ASSOCHAM) and Mr Sudhir Sitapati (Executive



Director and VP Food & Refreshment, Hindustan Unilever Ltd) for their contributions to make the conference successful.

Last but not least, my profound gratitude and thanks to all session chairs and eminent thought leaders who joined us in this discussion. Your contributions were immensely valuable.

Arun Mishra

Co-Chair, Health & Wellness Committee, ASSOCHAM
Head, Global Nutrition Regulatory Affairs, Unilever
Head, Global Health & Wellness Regulatory Affairs, Unilever
Member, Scientific Body, Indian Pharmacopoeia Commission, MoH&FW, GoI
Visiting Faculty, NUS-DUKE Medical Centre, Singapore
Visiting Faculty, NIPER, Ahmedabad
Visiting Faculty, IIM Ahmedabad



Foreword

The world has been shaken by the unfolding COVID-19 pandemic, which has evolved from a health disaster to an economic crisis. In India, the pandemic has significantly impacted various sectors as they deal with supply chain disruptions, lowering demand, limited labour, and changing consumer preferences.

As with crises in the past, human behaviour is likely to change drastically, leading to a significant shift in the way business is conducted and products are consumed.

The global scientific community, with the support of the public and private sectors, is working towards finding a standardized treatment for this novel contagion. In the interim, preventive measures are being promoted to contain and mitigate the spread of infection and strengthen immunity. However, many of these preventive measures, such as social distancing, hinder the current way of doing business. Various manufacturing and services sectors are struggling to maintain operations.

Consumer behaviour is also undergoing a paradigm shift, brought on both by the rising fear of infection and the increasing focus on health and wellness. Industries are witnessing a consumer change in the selection of products, shopping channels, mode of payment, etc. The almost overnight push into the deep-end of the e-commerce pool has helped many industries survive this crisis. The rising dexterity and comfort in online

shopping are pushing businesses to adopt online channels. At the same time, technology is being embedded across functions to facilitate business continuity.



In the coming times, the focus on health, sustainability and wellness will witness a renewed vigour across industries. As businesses reopen and economic activity gains momentum, they are faced with various developments that challenge the status quo. At the same time, these Indian businesses need to be ready to embrace the impending prospects of growth in the long-term.

With this report, we aim to bring forth the recommendations of various panellists of the 3-day web conference on the 'Relevance and importance of Health and wellness in COVID-19'. We hope that these inputs will encourage to take a undertake relevant actions that can strengthen India's health response and facilitate industries in better understanding the change in consumer behaviour.

Nilaya Varma
Co-Founder & CEO
Primus Partners India



Context

ASSOCHAM conducted a 3-day international web conference on the 'Relevance and importance of Health and wellness in COVID-19'. Supported by Ministry of Ayush, Primus Partners India, and Hindustan Unilever Ltd., the series aimed to analyze the current and future scenario amidst the black swan event that brought global economies to their knees.

The first session focused on 'COVID19 – The Virus, The Disease and Treatment (Current and Future)', while the second session discussed the topic 'Health, Nutrition and Wellness in COVID-19'. The last session explored the 'New Normal' - Impact on MSME businesses and emerging health and wellness business areas. These sessions included various panelists.

The esteemed panelists shared their views and experiences on the evolving understanding of the contagion and the way this pandemic has changed personal and professional lives and in turn, impacted the industries.

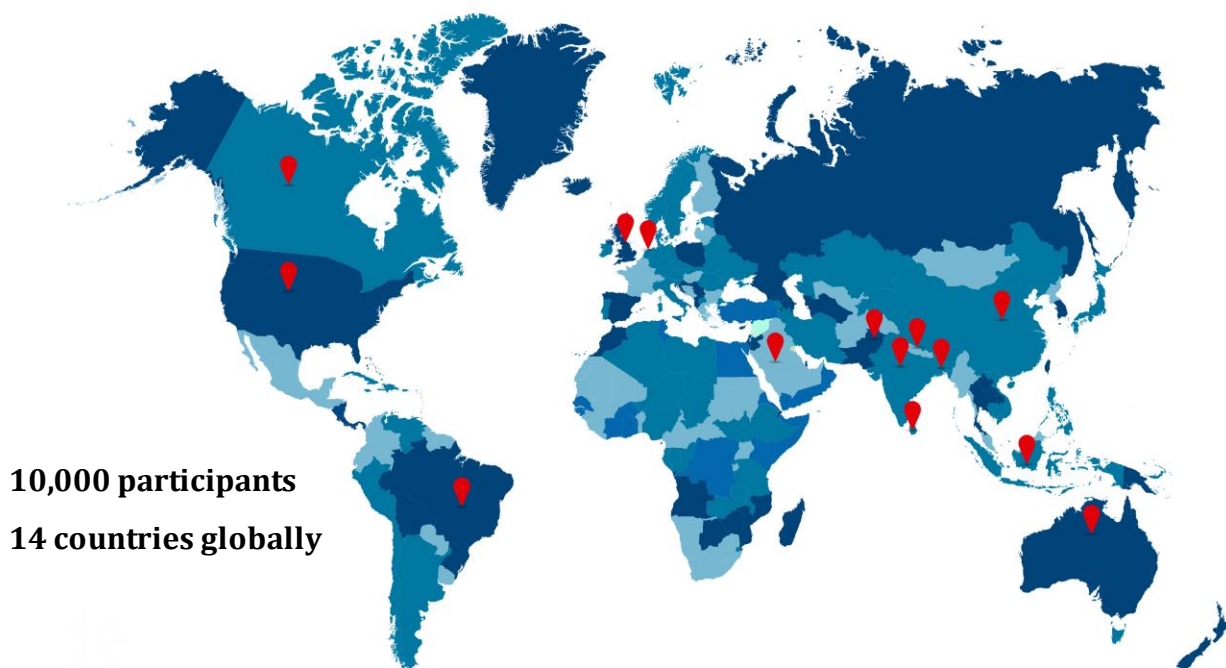
This report captures the key actions, thoughts shared by the speakers, along with their recommendations on improving the health and wellness space. We hope that these inputs encourage all stakeholders to undertake relevant actions that can strengthen India's health response and facilitate industries in better understanding the change in consumer behavior.

Session 1: COVID-19– The virus, the disease and Treatment (current and future)

Session 2: Health, Nutrition and Wellness practices in COVID days

Session 3: New Normal – Impact on MSME businesses and emerging Health & Wellness business areas

Webinar Participation



Industry Recommendations



Create a sub-committee with industry players in organic industry to discuss, brainstorm policy and regulatory framework that can address challenges by the MSMEs engaged in the food industry

Create a framework wherein leading players in each industry segment must volunteer for mentoring and guidance support for MSMEs, sharing best practices and lessons from their journey

Government should support the evolution of newer business opportunities for MSME, such as Tele-Health and ePharmacy, which would need a new set of regulations and norms. Sandboxes can help explore cost-effective digital platforms without compromising on the patient and consumer safety.

Urgent need to institutionalize a clear regulatory regime around Over the Counter (OTC) medicines, to ensure adequate medical care during troubled times. OTC regulation is also important for effective implementation of ePharmacy and Tele-Medicine regulations since both have reference to OTC medicines.

Support MSMEs engaged in traditional medicine to generate evidence that can facilitate registration of these medicines in other markets, by streamlining the clinical trial regulations. AYUSH hospitals and health care facilities should be upgraded to generate quality evidence.

To support the ailing hotel industry, the electricity charges and duties should be waived off by 10%. Additionally, electricity charges to be calculated as per actual consumption, with no fixed charges.

Property taxes should be waived off for 1 year. Post that Property Tax calculation should be standardized for both, owned and leased property. The current property tax is charged double for leased and rental properties.

In a bid to maintain immunity and nutrition security, the government should create a framework of nutrition surveillance. All places serving meals, especially schools should strengthen the feeding and nutrition ecosystem.

Accelerate micronutrient supplementation and fortification to ensure the immunity of citizens is maintained and incidence of infections is controlled. New products which focus on micronutrients should be provided eased regulatory processes.

Maternal, Infant, and Young Child Nutrition (MIYCN) actions should be maximised through targeted district-level programs that can increase mortality

India should focus on promoting nutraceuticals, health supplements, foods for special dietary purposes, immunity building & therapeutic preparations, drinks made from nuts/seeds/dry fruits, nutritional powders, herbal and spice tea, jaggery/sesame candies, etc.

Setting-up food safety management systems in India that can help imbibe procedures to identify authentic natural ingredients and grow these to produce high-quality and trustworthy products. Also, product-use-information on labels should be standardized and easy to understand

Expert views

"In lower respiratory infections such as COVID, nutrition is intricately linked to the immune response and severity of infections. Poorly nourished individuals are at a greater risk and severity of respiratory tract infections. A healthy wholesome diet, rich in micronutrients, essential amino acids and fatty acids, is crucial, but isn't accessible to many."

Dr. Hemalatha R, Director, ICMR-NIN

"Immunity is the first and last line of defence in the human body, and over and above the importance of nutrition and exercise are two powerful mechanisms, quality sleep and emotional wellness. I look forward to taking about both of them and teaching simple lifestyle methods to improve both."

Luke Coutinho

"India has made good gains on the nutrition front over the past few years, we need to maintain the momentum- let COVID not be a reason for slackening of our pace."

Dr. Shariqua Yunus, WFP

"Ensuring and restoring public health in Covid-19 crisis hold highest priority for Gujrat govt. We have pioneered many new regulatory pathways to ensure accessibility and availability of required hygiene and medicine products not only for Gujrat but for the country as well. A holistic approach on health & wellness will help us to fight against the virus and disease. I thank ASSOCHAM and conference chair Mr Mishra for bringing this valuable conference together for the nation."

**Dr. Hemant Koshia,
Food and Drug Control Administration**

"Ensuring health and wellness are critical to fight against corona virus. Immunity is first defence of our body in this fight. Ayurveda has a rich understanding on this subject and recommends responsible consumption of ashwagandha, mulethi, tulsi, ginger, cardamom etc in form of tea/ kadha to build immunity. Also, yoga and Pranayama help to reduce mental and physical stress."

Dr. Raghu, Ministry of AYUSH



The outbreak

In December 2019, China alerted the World Health Organization (WHO) about a cluster of unusual pneumonia cases in Wuhan city, Hubei province, China. The virus was still unknown. Several of the infected people worked at the city's Huanan Seafood Wholesale Market. Officials in China ruled out the recurrence of the Severe Acute Respiratory Syndrome (SARS) and finally identified the novel virus as belonging to the coronavirus

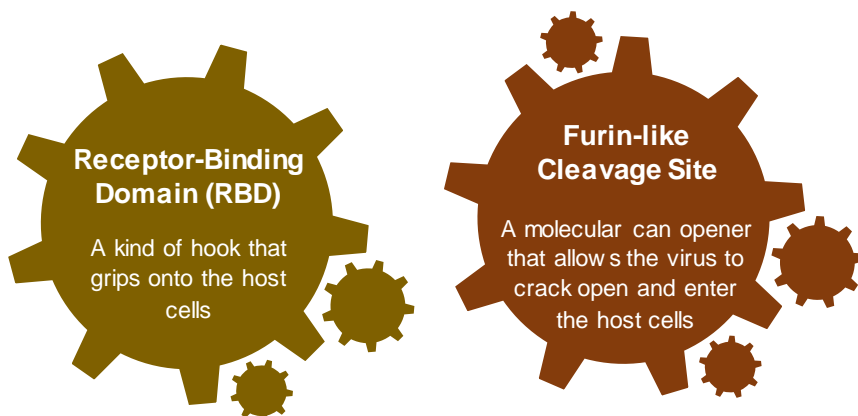
family. Later human-to-human transmission was also confirmed. On 30th January 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a Global health emergency, and then on 11th March 2020, World Health Organization (WHO) declared COVID-19 a global pandemic.

The Virus

Coronaviruses are a type of virus, which encompasses a large set of illness, including the common cold and other respiratory infections. The first incidence of severe infection by coronavirus was the 2003 Severe Acute Respiratory Syndrome (SARS) epidemic in China, and the second was the 2012 Middle East Respiratory Syndrome (MERS) in Saudi Arabia. The 2019 novel coronavirus has been named Sars-CoV-2; it is called novel because it is a new form of the virus. The disease is called coronavirus disease 2019 or COVID-19. This was first noted when a bunch of pneumonia cases were

reported in Wuhan city of China in December 2019, and since then it has continued to spread worldwide.

The virus was extensively tested by leading scientists to determine its origin, and whether it is a naturally occurring virus or the product of genetic engineering. The genetic template of armatures on the outside of the virus was analyzed to determine how it grabs and penetrates the outer walls of human and animal cells called the spike proteins. They focused on two things, specifically, receptor-binding domain and cleavage site.



Scientific studies revealed that RBD protein of SARS-CoV-2 spike proteins have evolved to effectively target a molecular feature on the outside of the human cells called ACE2, a receptor involved in regulating blood pressure which led the scientists to conclude that it is a natural virus. In addition, the result was also supported by data on SARS-CoV-2's overall molecular structure, which

did not look like that of a laboratory made virus. These two facts together - the mutations in RBD portion of the spike protein and its distinct molecular structure - show that the virus is a product of natural evolution.



Mutations in Coronavirus

The jump of SARS-CoV-2's jump from animals to human was possible because RNA viruses mutate continuously. Coronaviruses are RNA viruses with just RNA strands as its genetic material that have about 26000-32000 bases in their length. But the novel coronavirus is different from its cousins, as it mutates slowly, though it mutated successfully to jump from animal to humans.

According to reports, the novel coronavirus has mutated into two strains - the original S-type which originated in Wuhan and the L-type that evolved from the S-type. It has also been reported that the virulent L-strain of the coronavirus is responsible for high mortality, though no conclusive evidence has been found yet. An analysis of the mutation of the virus is crucial for vaccine development. The Indian Council of Medical Research (ICMR) has undertaken the study of the mutation of the novel coronavirus strain in India over the past few

months. According to the Global Initiative on Sharing All Influenza Data (GISAID), India has witnessed a maximum difference in the novel coronavirus strain to be between 0.2 to 0.9 per cent, as compared to the strains in other countries. Three strains of the virus have been traced in India, one was from Wuhan, and the other two were from Italy and Iran.

All viruses tend to gain minute genetic changes as they multiply and spread. The SARS-CoV-2 variant which circulated in the earliest regional outbreaks, did not have the D614G mutation that is now dominating most global regions. The severity of symptoms in infected people owing to this small mutation, or its impact on increasing mortality is to be determined.

Research has shown that the ability of the COVID-19 virus to impact cells has displayed significant increase based on a minor genetic mutation, owing to the rise in the density of functional spikes on the virus. According to the Scripps Research Department of Immunology and Microbiology, the D614G mutation offers greater flexibility to the spike's backbone, which allows newly made viral particles to navigate the journey from producer cell to target cell fully intact.

The Disease

The novel coronavirus sticks on to the receptors on healthy cells through its spike surface proteins and the viral proteins bust into cells through Angiotensin-Converting enzyme 2 (ACE2) receptors. Once inside, it kills healthy cells and gains dominance.

The spike proteins surrounding the coronavirus interact with molecules on the surface of a cell invade the host. Each spike protein comprises of three components that combine to form a 'trimer' structure.

The virus is highly transmissible and has been spreading very rapidly. It can spread from an infected person to another individual, even before the symptoms are developed. It is carried on respiratory droplets when we talk, sneeze and cough and these can land on surfaces or in someone's mouth or nose. The droplets are

relatively heavy and do not travel far, quickly sinking to the ground.

The easiest way to safeguard oneself is always to wear a mask, wash our hands regularly and maintain social distancing. The virus affects everybody, but a study published in the European Heart Journal in May 2020, reported that men have higher concentrations of ACE2 in their blood than women, making men more vulnerable to COVID-19 than women. Everybody is expected to be affected by the contagion, though co-morbidities are what makes people susceptible to disease, not age. Since immunity levels also make a significant difference, yoga, ayurvedic medicine, and dietary changes are of critical importance.



The Treatment

Currently, there is no standard treatment available for COVID-19, but various medicines are being tested to evaluate if they can cure the disease. Globally, investigations into the virology of SARS-CoV-2 are improving the understanding of the physiological and immunological processes underlying the clinical manifestations of the contagion. Such studies, in turn, are crucial for the identification and rational design of effective therapies.

Multiple clinical trials are also underway across the world, with scientists trying to closely study the virus and come up with a vaccine or medicine. Various fast-tracked vaccines showcase the prevention of infections in the lungs of animals such as monkeys, mice, etc. However, at present, the lack of published data is making it difficult to evaluate claims.

The early data offer a direction that coronavirus vaccines might generate a robust immune response. Animal data can help improve the understanding of how coronavirus vaccines work, to help identify the most promising candidates.

In line with global efforts, six Indian companies are also working on a vaccine for COVID-19, to find a preventive for the widely spreading contagion. Homoeopathic and ayurvedic medicines are also under testing for their efficacy in managing the disease. People have been advised to follow the recommendations from the Ministry of AYUSH, to boost immunity and use home remedies to stay fit, along with yoga and proper diet plans. One of the treatments under testing is plasma therapy, wherein the plasma sample of a recently recovered patient is taken and injected to an infected patient. This therapy leverages the antibodies from recovered patients to help fight the virus. Scientists continue to test how long the antibodies to SAR-CoV2 last.

Indian drug regulator Drug Controller General of India (DCGI) in late April approved Glenmark pharmaceuticals for clinical trials of the antiviral tablet Favipiravir in India. Glenmark is the first Indian company to initiate phase-3 clinical trials on Favipiravir for COVID-19 patients in India.

Currently, since there is no treatment for the virus, and the only practical approach is to repurpose already approved drugs for other diseases, if they can be used

for COVID-19. One such drug is Remdesivir, which has helped people recover faster and also lowered the death rate among critically ill patients. Other medicines like lopinavir and ritonavir are also being tested to cure COVID-19.

ICMR rational use of medicine centers (RUMC) designed and conducted a cross-sectional study which was coordinated by St. John Medical College, Bangalore on prophylaxis for COVID-19 among healthcare workers in India. It included doctors, nurses and health personnel and support staff. Information was collected using an online form on demography, drug use, adverse effects etc. and a multivariate logistic regression analysis was conducted to ascertain the impact of age, gender, and a dose of the drug on adverse effects. The study concluded that the most common adverse effect was gastrointestinal, seen more commonly in younger females and in those taking 800 mg, while hypoglycemia and cardiovascular effects were just 1%. Compared to other doses, 800mg on day one had no increased adverse effects except for gastrointestinal. Therefore, the use of hydroxychloroquine (HCQ) for prophylaxis in healthcare workers was recommended by ICMR to be safe.

As mentioned by Dr Denis Xavier in the ASSOCHAM webinar, a cohort study has also been initiated which will include all individuals involved in the care of COVID-19 patients such as doctors, nurses,





hospital staff, etc. irrespective of them taking HCQ for prophylaxis. 1,250 participants from 8 centers have been recruited, and the aim to collect several thousand. The study will have a wider representation across the country. The follow-up will be after 12 weeks, adherence to medication, and adverse effects will be studied, verifying the status of infection and providing an idea of efficacy.

India has opened more than 850 COVID dedicated hospitals and health centers, which have more than 1,90,000 beds and more than 30,000 ICU's. With around 681 labs for testing of patients, more than 40,00,000 tests

have been conducted. The manufacturing of oxygen cylinders and ventilators is also being pushed domestically.

Of all the patients infected with COVID-19, around 10% show severe symptoms and death rate in India is 2.8% which also includes patients who have other ailments such as diabetes, blood pressure, cardiac problems, etc. Less than 8% of people need oxygen, and less than 0.48% of people need ventilators.

India's new, national clinical management protocol for the management of COVID-19

On June 13, 2020, the Health Ministry in India released a national clinical management protocol, which suggested an early use of the anti-malarial drug hydroxychloroquine (HCQ), as part of the COVID-19 treatment to achieve meaningful effects and recommended that the drug should be avoided in patients with severe disease. The new protocol is based on the clinical severity of the

infection - mild, moderate or severe. It also discusses infection prevention and control practices based on these three stages of severity and specifies investigational therapies for a defined sub-group of patients.

Symptoms

- COVID-19 patients usually display symptoms such as fever, cough, fatigue, shortness of breath, along with other symptoms
- Children have not reported fever or cough as frequently as adults
- The elderly and immune-suppressed patients are likely to present atypical symptoms such as fatigue, loss of appetite, diarrhea, and absence of fever

- Severity of the disease is higher in people with:
 - Age more than 60 years (increasing with age)
 - Underlying non-communicable diseases (NCDs) — diabetes, hypertension, cardiac disease, chronic lung disease, immune-suppression and cancer

Major risk factors

Treatment

- The protocol allows the use of HCQ, remdesivir and off-label use of tocilizumab
- It allows convalescent plasma therapy on specific groups of patients
- However, the azithromycin has been removed from the treatment protocol



The outbreak

Proper nutrition is an essential part of leading a healthy lifestyle. Combined with physical activity, your diet can help you to reach and maintain a healthy weight, reduce the risk of chronic diseases such as heart disease and cancer, and promote your overall health. A proper nutrition means your body gets all the nutrients, vitamins, and minerals it needs to work its best. Engaging in a wellness routine with a focus on good nutrition, exercise, sleep, and stress management can boost health and well-being and strengthen our immunity during these uncertain times.

Ayurveda or Ayurvedic medicine is a system of traditional medicine native to India, which uses a range of treatments, including panchakarma ('five actions'), yoga, massage, acupuncture and herbal medicine, to encourage health and wellbeing. Basic ayurvedic techniques include dietary changes, herbal medicine, acupuncture (practiced by some practitioners), meditation, breathing exercises and yoga.

Ayurveda is also believed to be effective in treating a range of disorders like anxiety, stress, asthma, Digestive problems, high blood pressure and high cholesterol levels, among others. AYUSH is the acronym for the medical systems that are being practiced in India such as Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homeopathy. The Ministry of AYUSH was established by the Government in November 2014, to ensure the optimal development and propagation of AYUSH systems of health care.

The unprecedented COVID-19 pandemic has challenged global healthcare systems and the lack of standard treatment has pushed people to focus on the immune system, as the first line of defence against disease-causing bacteria and viruses.

Given the lack of a vaccine or standard medicine for the treatment of coronavirus, the possible prevention route is to ensure improved immunity. The healthy immune system is crucial in a body's response against infectious disease. While maintaining social distancing, wearing a mask and sanitizing are essential prevention measures, one of the best ways to protect against the contagion is to strengthen the immune system.

The prophylactic and therapeutic potential of traditional and complementary medicine systems such as Ayurveda and Yoga are effective prevention and an adjunct treatment option for COVID-19. During the COVID-19 pandemic, the Ministry of AYUSH has taken several collaborative initiatives to drive research with the Council for Scientific and Industrial Research (CSIR), public health institutes, and through its research councils and national institutes. It has also issued an advisory on various immunity-enhancing steps from the time-tested approaches of Ayurveda to help boost immunity.

India's Aarogya Setu app

The Government of India in early April launched the Aarogya Setu mobile application to connect citizens with essential health services.

The app is an open-source cross-platform which helps the Government in contact tracing, syndrome mapping and supports citizens in self-assessment through a digital mobile service.

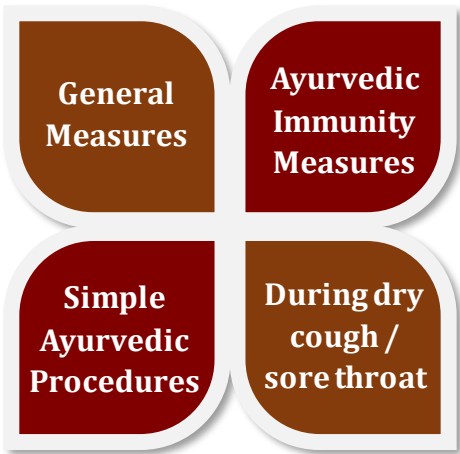
The App is aimed at augmenting the initiatives of the Government of India in reaching out to and informing the users of the app about risks, best practices and relevant advisories pertaining to the containment of COVID-19.



AYUSH Practices

Ministry of AYUSH recommends the following self-care guidelines for preventive health measures and boosting immunity with special reference to respiratory health.

- Drink warm water throughout the day
 - Daily practice of Yogasana, Pranayama, and meditation for at least 30 minutes as advised by the Ministry of AYUSH
 - Spices like Haldi (Turmeric), Jeera (Cumin), Dhaniya (Coriander), and Lahsun (Garlic) are recommended in cooking
- Take Chyavanprash 10gm (1tsf) in the morning. Sugar-free preparation for diabetics
 - Drink herbal tea (Kadha) made from Tulsi (Basil), Dalchini (Cinnamon), Kalimirch (Black pepper), Munakka (Raisin) - once or twice a day
 - Golden Milk- Half teaspoon Haldi (turmeric) powder in 150 ml hot milk - once or twice a day



- Nasal application - Apply sesame oil/coconut oil or Ghee in both the nostrils (Pratimarsh Nasya) in the morning and evening
 - Oil pulling therapy - Take 1 tablespoon sesame or coconut oil in the mouth. Do not drink, Swish in the mouth for 2 to 3 minutes and spit it off followed by a warm water rinse
- Steam inhalation with fresh Pudina (Mint) leaves or Ajwain (Caraway seeds) can be practiced once in a day
 - Lavang (Clove) powder mixed with natural sugar/honey can be taken 2-3 times a day in case of cough or throat irritation

The AYUSH Ministry and the Council of Scientific and Industrial Research (CSIR) have been working together on validating four AYUSH formulations against COVID-19. These formulations will be analysed as an add-on therapy and standard care for COVID-19 patients. As a vaccine is still some time away, other methods to help in the fight against COVID-19 are being developed.

to address some of the significant issues that the traditional medicines are facing in India. The task-force will work towards a three-pronged strategy: documenting health practices, supporting research on chosen practices, and drafting protocols for AYUSH practitioners treating COVID-19 patients.

The Ministry has created an interdisciplinary taskforce comprising of members from multiple research agencies,



Zinc Immunity

Zinc is a critical factor in maintaining the human immune system as it is associated with many biological functions in the human body. Zinc is an essential micronutrient for more than 300 enzymes in the body, and also plays a role in many critical functions such as protein and DNA synthesis, wound healing, cell division and is essential to our body for to get a proper sense of taste and smell.

Research suggests that zinc helps control infections as it taps the brakes on the immune response, preventing out-of-control inflammation which can be damaging or even deadly to the human body. Zinc helps in activating the defence response of the immune system and reducing the levels of harmful chemicals such as cytokines. Zinc may also prove useful in the fight against COVID-19 as it is proven to be effective at slowing the rate of replication for similar viruses such as SARS and the common cold. Numerous studies have shown that zinc has a broad-

spectrum antiviral activity against a variety of infections. Zinc also maintains robust immune responses by producing cytokine and by modulation of immune cell activity.

Zinc deficiency depresses the human immune function, as it is essential to develop and activate T-lymphocytes. The current crisis mandates an increased use of zinc, as a lower level of zinc in humans makes them susceptible to pneumonia and other infections.

Being a trace mineral, only a small amount of Zinc is needed for the human body to remain healthy - a requirement which can be fulfilled by healthy food intake.

Daily Zinc Requirement

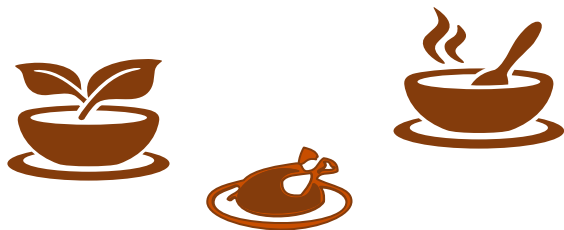
Adult female:
10 mg/day



Adult male:
12 mg/day



Naturally occurring in plant and animal foods including meat, whole grains, seed, nuts, etc. zinc, offers the human body immuno-nutrient properties and works against viral infections.





Mental health during the COVID-19 crisis

Mental health impacts the way people think, feel, and act, based on their emotional, psychological, and social well-being. Significant at all life stages, from childhood through adulthood, the conversation of mental health has come to the fore, during the pandemic. With countries being locked down and social distancing measures being implemented by most of the countries for the foreseeable future, and the continuous barrage of COVID-19 cases and economic impact has led to high levels of anxiety and mental health concerns.

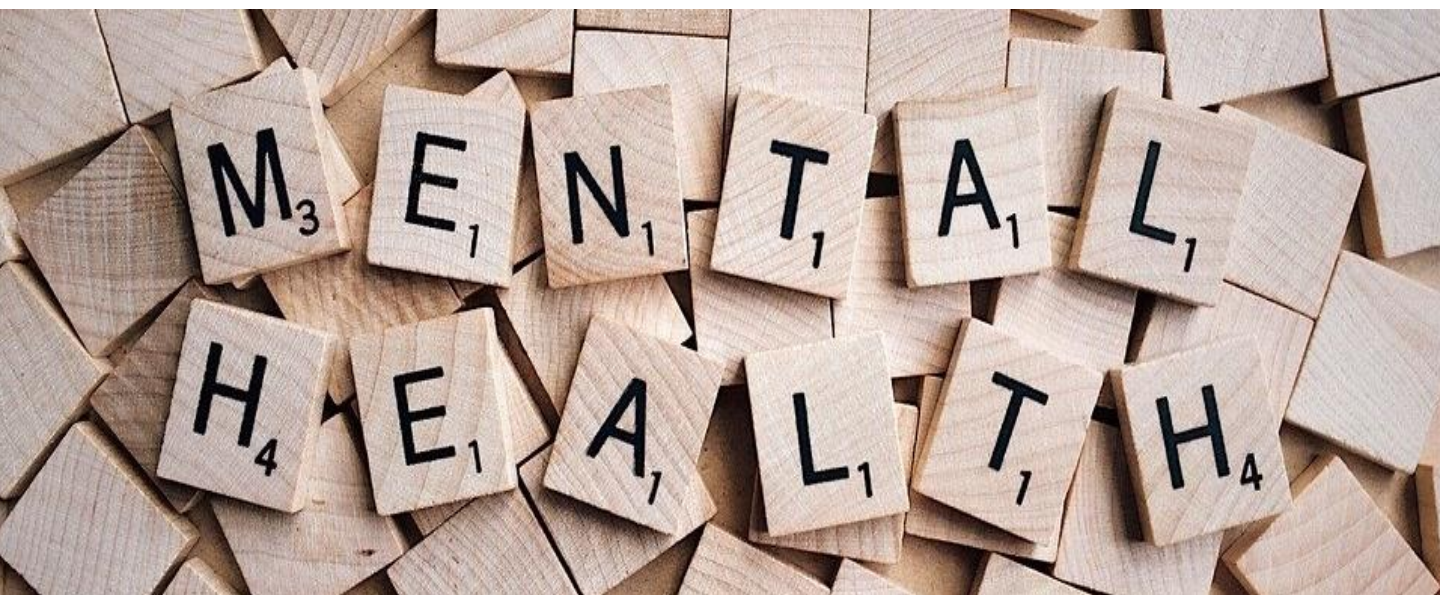
In India, many people have lost jobs, earnings, savings, and some are struggling for essential resources because of the lockdown. This, combined with the massive disruption and change in the lifestyle of most of the people, has led to a significant increase in stress for people and made managing mental health critical. Now more than ever, people should pay attention to their mental well-being, both at a personal and community level.

Globally, infections have surged and overwhelmed hospitals. Many people contracting the virus are either asymptomatic or have mild to moderate symptoms, and these people are being recommended home quarantine or being shifted to quarantine facilities outside of hospitals, to preserve hospital beds for more severe cases. In India, too, hospital beds are being reserved for more severe cases.

There is also a critical need to reduce the pressure on the frontline workers by focusing in the mental well-being at the self, family, and community level. Communities should come together to provide psychological support to manage despair and stress among people who have lost jobs/income, have become lonely due to social distancing, have been infected or managing patients. Suicide prevention and psychological first-aid are essential to help save lives and reduce emotional distress.

By boosting their immune system, people can prevent catching the disease, or in case of infection, many would be able to recover without being admitted to an already overburdened hospital. Instead, being home quarantined or shifted to a quarantine facility and released early.

A healthy lifestyle, good digestive health, and select dietary supplements can play a crucial role in optimizing the immune response to viral infections. At the same time, people should focus on social managing stress, anxiety, and depression. There is an urgent need for India to boost investment in mental health and push the Mental Healthcare Act, 2017, (MHCA), provides mental health care to all and proposes a suicide prevention policy.





Role of AYUSH in Mental Wellbeing

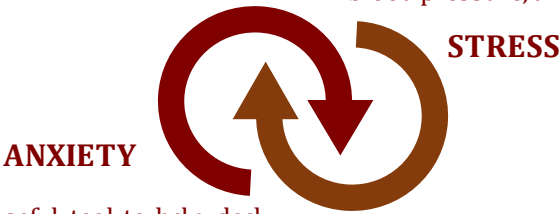
AYUSH practices, especially yoga, has emerged as an essential tool of mental wellbeing and has received growing interest from both yogis and scientists alike. The benefits of yoga for mental health traverse several areas ranging from mood and anxiety disorders to stress reduction. Yoga has a strong bearing on mental health as it focuses on harmonizing the body and mind, through various breathing exercises, asanas and meditation.

The scientific study of yoga reveals that mental and physical health are not just intricately linked but are identical. The evidence of yoga being a relatively low -risk, high-yield approach to improving physical and mental health is growing within the scientific community. There is also ample evidence to prove that yoga practices help to increase heart-rate variability, which highlights the body's ability to respond to stress effectively.

Ayurveda too has produced significant results in treating mental issues such as depression, anxiety, and OCD.



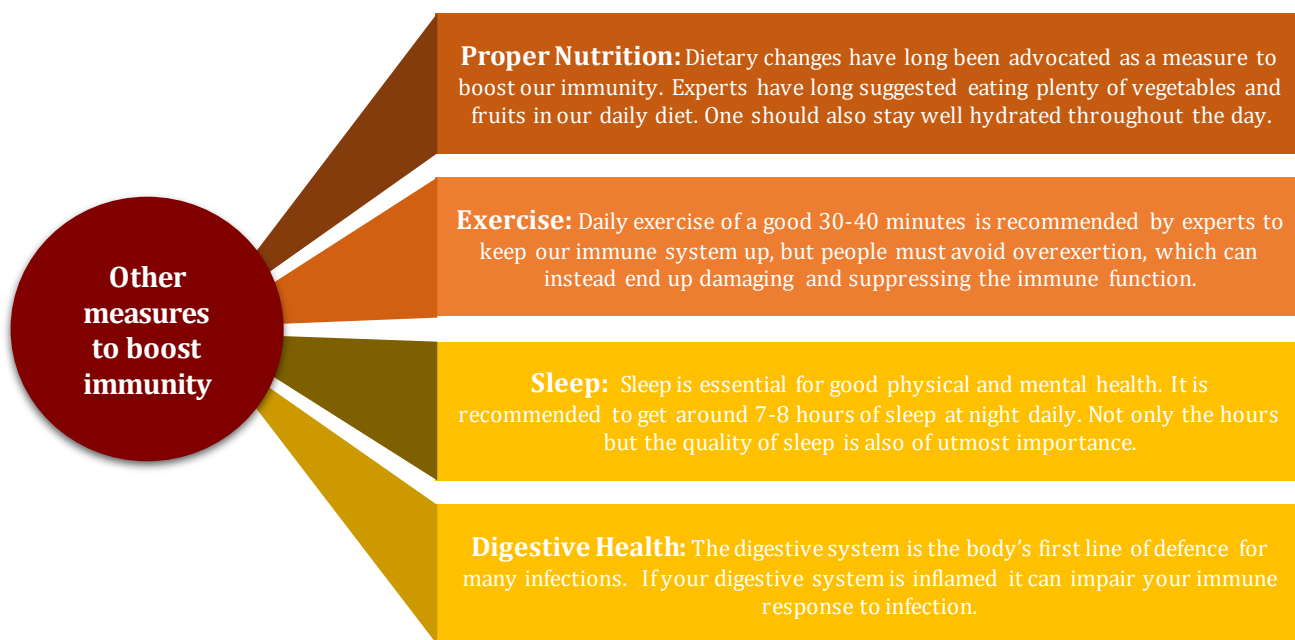
The benefits of yoga to deal with stress are seen with the reduction of cortisol (stress hormone) levels in our body. This, in turn helps to reduce the heart rate, lower blood pressure, and ease our respiration.



Yoga has proven itself as a useful tool to help deal with depression and especially anxiety. Through its deep emphasis on meditation, breathing exercises, and asanas, Yoga can help an individual deal with and help get rid of problems like anxiety.

Ayurvedic drugs help to provide a complete change in the patient, while allopathy only deals with specific symptoms of the condition. Ayurveda recommends dietary and lifestyle changes, along with yogic exercises and herbal treatment. It has proved to be an alternative form of

treatment for mental illnesses, which not only includes treating the disorder but also helps to bring in a change in the lifestyle of the person to prevent such future illnesses.



Companies have been focusing on mental health and well-being programs for some time. With the COVID-19 pandemic, the mental health of employees has gained more importance.

- In light of the unfolding crisis, a leading technology player mandated its employees to take a collective mental health day. The initiative, called 'A Day for Me' encouraged all workers to take a day off to rest on May 22. The company has also been inviting experts to join employee check-in sessions to encourage conversations on mental health.
- The company had earlier provided an employee assistance program and offers mindfulness and resilience training.

Some of the other leading mental health programmes undertaken by corporate organizations for their employees include:

- A global financial services company as part of its efforts to destigmatize mental health problems, launched a 'This Is Me' campaign, where employees were encouraged to share elements of their personal life not exclusive to mental health problems.
- A global bank implemented a 'Determined to Lead' program, which set clear and consistent expectations

for how to lead employees. The organization gave its managers access to support tools. To better support employees, it offered a targeted mental health awareness program to equip line-managers with tools to identify and support mental health issues in the workplace.

- A Global consulting firm, appointed its first Chief Well-being Officer and launched its 'Mental Health at Work' campaign. These efforts provided not only mental health first-aid training, along with other resources, to improve employees' mental, physical, and emotional well-being.
- An FMCG player has many internal employee resource groups and programs focused on mental health. The company's mental health team has recruited more than 1,000 employees across 32 countries.
- Leading coffee chain runs an app to help its employees improve their mental health and better deal with anxiety and stress. It also trains store managers on how to assist workers who are experiencing a mental health issue.

COVID-19 changing consumer behavior



The unfolding COVID-19 crisis has changed the way of life, across the world, with people changing the way they live, work, make purchases and even think. The business world has been severely impacted, as well. With significant supply chain disruptions, many retailers are closing their doors, and consumers are looking at products and brands through a new lens. Almost overnight, practically everybody has been pushed into the deep end of the e-commerce pool. In just a few days, a high level of dexterity and comfort in online shopping has been witnessed across the board. Though it is too early to claim whether this new change from offline retail shopping to online commerce will be permanent, the rising fear of infection is likely to keep many people away from venturing into public places such as shopping malls, movie theatres with the same enthusiasm as before. The changed scenario at retail sites is expected to be underlined by a bottle of sanitizer, and mask, which would be essential items for anyone going outside of their homes. Moreover, there could be paranoia about the social distancing to be maintained.

- As things start to reopen, people would visit retail shops, but the new normal suggests that the number of people stepping out would be lower.
- The trend of contactless will also witness a steady rise. The focus on hygiene and social distancing are

pushing customers to prefer everything to be contactless from delivery to payments.

- With sanitization becoming critical, malls, shops, offices, and other public places will have to be regularly sanitized for the safety of the employees and the public at large.
- There is also an increasing focus on nutrition, with significant importance being placed on diet. Consumers would not only demand stringent hygienic practices but also look at nutrition value when purchasing food products. Restaurants, food processing plants, etc. will have to showcase their focus on the safety measure and precautions taken during the preparation and delivery of high-nutrition food.
- The need to keep immunity higher, to mitigate infection, has started pushing the trend of preventive healthcare, with more Indian consumers relying on Ayurveda and immunity-boosting products, which can stave infections and help people remain fit. Over the year, many FMCG brands had been going local and relying on old-age herbs and medicines to enhance their products. This trend would see a significant uptick.

Many schools across Europe are opening, as a measure to boost the economy, as it is difficult for adults to return to work if schools and daycare centers are closed. Countries such as Norway, Denmark, Poland and France are re-opening the schools by bringing back the youngest first. Scientific research on children infected with COVID-19 is still an emerging area, though infected children are found to not be as severely ill as adults, with most recovering without hospitalization. The specific role of children in the transmission of the virus is still unclear.

With the opening of schools, precautions are being taken across the world –

- Each desk is at least two-meters apart
- Students would have to regularly wash hands in between periods and before and after eating
- Children would leave the classroom at staggered times
- Toilets would be cleaned daily, and frequently touched surfaces are disinfected twice daily

No school in Europe has made it compulsory for parents to send their children to school. In India, there has been no macro announcement yet about the re-opening of schools by the Government.



Healthcare

COVID-19 is challenging the body's ability to manage new threats and ailments. Global healthcare will undergo a radical change in the post-COVID-19 world. The contagion has significantly impacted health and wellness across the globe with loss of life and livelihood, affecting health and morale. Compared to earlier, when people would only visit the doctor after the onset of symptoms,

people are now actively looking at preventive healthcare and living healthy as the first option, with many practicing prevention therapies. The future approach to healthcare will be holistic, wherein people will focus on overall 'health and wellness'.

Preventive healthcare gains prominence

Preventive healthcare presents a new business opportunity which has seen tremendous growth in the past few months, which is likely to continue in the foreseeable future. Given the rise in immunity consciousness, immune supplements are expected to witness an uptick. Consumers are now rethinking their health habits and prioritizing vitamin products, including C, D, and multivitamins with immune support.

Higher cost of healthcare and insurance

The high cost of healthcare is expected to increase further, along with the cost of health insurance. In India, a COVID patient's treatment can set a family back by lakhs of rupees in hospitalization, and post-care. At the same time, underwriting norms for health insurance are expected to get more robust, and pre-existing conditions would have stringent terms.

Digital platforms & wearables for health

Many consumers are turning to various digital platforms to understand health concerns and related remedies. The recent trend of health wearables and digital applications is expected to be driven further. There has been an emergence of wearables which track health parameters. Such devices can help consumers get rid of unconscious habits by training one's mind by giving a mild vibration against actions which can spread infections, such as touching the face, nail-biting, etc.

Digital applications are being used across the world to cascade relevant information by the Governments and track regions with a high incidence of infection. The Aarogya Setu app is now compulsory for Government employees and citizens travelling. It analyses data on the location of the user to identify if the user has encountered an infected person.

Telehealth to ease pressure on hospitals

During the crisis, Telehealth and telemedicine have gained prominence. Telehealth is the delivery of health and related services such as medical care, provider and patient education, health information services, and self-care through telecom and digital communication technologies. The Government of India introduced the Telemedicine Practice Guidelines in March 2020. In recent months, large hospitals have moved towards telemedicine, which supports people in managing their infections at home, easing overburdened hospitals.

There would also be an emergence of the Internet of Medical Things (IoMT), wherein a patient's vital signs would be monitored and stored on the cloud, allowing doctors to access the health statistics of a patient easily.

Technology to analyze community health

Artificial Intelligence (AI) and Machine Learning (ML) will also be leveraged to benchmark patient data and analyze learnings from like-profiled patients.

Focus on medical device supply chain

The Indian medical devices industry is struggling due to supply chain disruptions. The reliance on imports, especially from China, for crucial parts has led to limited production. Though India has witnessed an increase in the manufacturing of PPEs, ventilators and other protective gear, indigenized medical devices will become crucial.



Restaurants

The restaurant segment is among the few sectors that have been hit harder by the COVID-19 pandemic and the ensuing lockdown, than others. The lockdown mandated people to stay indoors and eating-out has come to a complete halt significantly impacting the restaurant industry which relied primarily on dining. The change in the eating-out culture would reflect the new realities of

the post-COVID world, as more people eat at home or order-in.

With the lockdown gradually lifted, the operations of restaurants are expected to be slow, especially in metros that are struggling with a higher incidence of COVID-19 infection.

People spending more time at home, coupled with the fear of infection, home cooking has made a resurgence, to become part of the new normal. The belief that home-cooked is healthier and safer is driving this trend further.

The emerging trend of ready-to-eat (RTE) and ready-to-cook (RTC) products, which had been picking up gradually in the Indian market, are witnessing a rise during these times. With more people preferring to avoid crowded places, the RTE and RTC segments would command a higher share of the Indian food services industry.

With rising health concerns, the demand for street food will decline, especially for the middle-class. This would pave the way for more pop-up kitchens formats to come up – selling small quantities freshly made food from home kitchens. This trend would be supported by food delivery platforms, which promise contactless deliveries.

With consumers becoming extra cautious on cleanliness and proper sanitization of the venue, staff and materials, coupled with social distancing, the frequency of the visits would reduce. In line with the trends across industries, the restaurant sector is witnessing an uptick in the buzzword-contactless. This trend is driving the food delivery segment, supported by contactless payments.

Many high-end restaurants would operate with 50% seating and staff, to adhere to social distancing norms. Traditional menu cards may get replaced by digital menus available on phones and scanning QR codes would allow guests to place orders through their phone. At the same time, the ticket would automatically be generated in the kitchen. Many restaurants which did not focus on home deliveries and takeaways, would focus on this channel to cater to customers.

The placement of restaurants will also shift, revering the previous preference for malls, as various dining brands have started looking at moving back to high-streets from malls. Malls were preferred owing to the high footfall, which will be sparse in the near future and bring a higher risk for infection. Additionally, the higher rental of malls would deter restaurants, struggling with lower demand to continue operations in such spaces.

Impact on industries



FMCG & Retail

The unorganized segment has dominated the Indian retail sector. In 2019, the segment commanded as much as 85% of the market, showcasing the significant potential for digitalization. The Indian retail industry is expected to transform owing to technology-disruptions, driven by artificial intelligence and data-led opportunities. Pre-COVID-19, the e-commerce and organized retail

sector were expected to experience a 3X growth by 2024. The changing consumer preferences have been driving the need for the digitization of stores and increased integration of MSMEs across the value chain, which will further accelerate the growth of data-driven retail.

Higher independence products and channels

In the coming times, the products and services that make people more independent will witness an increase in demand. Items like washing machines and dishwashers would be in demand to reduce dependence on support staff for household chores. The heightened focus on hygiene will prompt consumers to be willing to pay for sanitation efforts in malls, cinema halls, etc. The role of offline stores is likely to change, focusing on experience and collection. Consumers, to avoid crowds, would prefer to 'buy and pay online, maybe pick-up in-store', as a way of stepping out of their homes.

Omnichannel for all retail brands

The government is expected to limit the number of people allowed to enter malls and other retail locations so that consumer confidence in visiting retail establishments return. Most consumers too will be unsure of how to navigate a post-COVID-19 consumer world and many would prefer to continue the digital commerce journey. Retailers would need to innovate and devise new strategies to help consumers navigate between online and offline experience journeys seamlessly by investing in an omnichannel world.

Altering product lines

Product lines are being modified by leading FMCG players to accommodate consumers preference for healthy and nutritious foods, health supplements, immunity-boosting preparations, etc. At the same time, the rise in demand for hygiene and safety is pushing the demand for personal and home care products, with many leading brands introducing categories of hand wash and sanitizers. Even garment manufacturers have added products such as masks, gloves and PPEs to cater to the rising demand, during these sluggish times.

Branded Food Commodities

The rising fear of infection would drive consumer behavior across segments, especially the purchase of food commodities. In India, many food commodities have been not sold in branded retail packing. While the trend has improved over time, a large proportion continues to be sold loose - wheat, rice, pulses, spices, etc. However, in the coming days, branded food commodities are expected to witness an increased demand owing to the perception of quality, hygiene, safety standards and source credibility. Customer re-assurance on these parameters will help create a more robust organized segment for food products.

Rural consumption-driven growth

With the reverse migration of workers to their villages from cities, a good monsoon, an increased government expenditure of 40k crore through MNREGA and public projects, such as the faster implementation of the Jal Jeevan Mission, to provide employment to migrant workers are likely to ensure increased demand from rural India and an area for FMCG companies to focus on.

Panellists at the webinar



Sudhir Sitapati **Executive Director, Foods & Refreshment**

Mr. Sudhir Sitapati (43) joined HUL in 1999 as a Management Trainee from IIM Ahmedabad.

In 2017 Sudhir was awarded the Young Alumni Achiever at his alma mater IIMA.

Sudhir was appointed as Executive Director, Foods & Refreshment w.e.f. July 1, 2018. He joined the company in 1999 and has worked on various roles in Customer Development and Marketing, most recent being the Executive Director, Refreshment

Sudhir is the author of the book titled, 'The CEO Factory: Management Lessons from Hindustan Unilever'

Before his appointment as the Executive Director, Refreshment Sudhir was Regional Category Vice President, Refreshment (South Asia & Africa), Unilever. He brings a rich experience of working in diverse markets in Europe, South East Asia and Africa in addition to India.



Dr. (Prof) Y K Gupta **President, AIIMS Bhopal**

Hon'ble President Ministry of Health and family welfare, Government of India, Dr. YK Gupta M.B.B.S (1974) (Pharmacology, 1979) from King George's medical college Lucknow, is professor and head, department of pharmacology and spokesperson at All India institute of medical sciences (AIIMS), New Delhi. He earlier served as sub Dean, AIIMS (1996 – 2001). and Director, Indian Institute of Toxicology Research (IITR, CSIR), Lucknow from 2003 to 2005. Dr. Gupta is in charge of National Poison Information Centre and is also National Scientific Coordinator of Pharmacovigilance Program of India (PvPI).

He has been honoured with fellowships of National Academy of Medical Sciences (FAMS), Indian Pharmacological Society (FIPS), National Academy of Science (FNASc), Indian Academy of Neurosciences (FIAN) and Society of Toxicology (India) (FST). He has more than 180 publications in International and National journals and several chapters in books to his credit.

Dr Gupta is recipient of several awards including Young Scientist Medal from Indian National Science Academy, Shakuntala Amir Chand Prize, Chandrakanta Dandiya Prize, G. Achari Oration Award, Major General S. L. Bhatia Oration Award, AEB Honours Award, C. L. Malhotra Prize, etc.

Dr. Gupta is currently President of Society of Toxicology, India and Dean Indian Society for Rational Pharmacotherapeutics, and was President of the Indian Pharmacological Society (2005- 2006). He is the Editor of the Indian Journal of Physiology and Pharmacology and member of number of editorial board of several international and Indian journals.

Panellists at the webinar



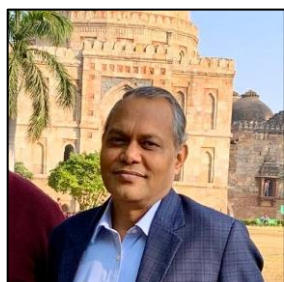
Padma Shri Dr Shashank R Joshi **Dean, Indian College of Physicians**

Dr. Shashank R. Joshi is an Indian endocrinologist, diabetologist and medical researcher, considered by many as one of the prominent practitioners of the trade in India.

Dr. Shashank R. Joshi is the President of two important organizations, the Indian Academy of Diabetes and the Association of Physicians of India. He is also the Dean of Indian college of Physicians. He was also a former President of the Research Society for Study of Diabetes in India (RSSDI) and the All India Association of Advancing Research in Obesity. He is

the former Vice President of the Association of Physicians of India and is now its Advisory Board member.

He was honoured by the Government of India, in 2014, by bestowing on him the Padma Shri, the fourth highest civilian award, for his services to the field of medicine.



Ram Vishwakarma **Director, Indian Institute of Integrative Medicine**

Dr. Ram Vishwakarma has expertise in new drug discovery, medicinal chemistry, organic synthesis, chemical biology and glycobiology, and has over 200 publications and 35 patents.

Dr Ram Vishwakarma is Director of Indian Institute of Integrative Medicine Jammu. Prior to joining IIIM, he worked (2005-2009) as Vice-President at Piramal Life Sciences, Mumbai on NCE discovery on cancer, inflammation and drug-resistant infections.

Prior to that, he was a staff-scientist at NII, New Delhi

working on chemical-biology of GPI anchors. He did his Ph.D. from CDRI, Lucknow and post-doctoral work from University of Cambridge on biosynthesis of Vitamin B12.

He is an elected fellow of the National Academy of Sciences and was awarded Sun Pharma (Ranbaxy) Research Award (2014) in the Pharmaceutical Sciences.

Panellists at the webinar



Dr. Denis Xavier MD, MSc (Clin Epi)

Dr. Denis Xavier Serves on ICMR, DBT research advisory and project evaluation committees. He is the Professor of Pharmacology, St. John's Medical College. He was the Ex Vice Dean of post graduate studies and the head of Division of Clinical Research at St. John's Research Institute. Dr. Denis along with Dr. Prem Pais set up the Clinical Research Division at St. John's in 1999.

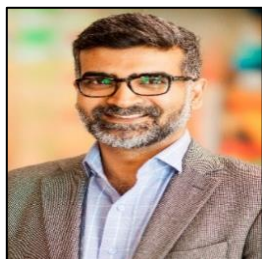
He is the Chairman NH academic ethics committee, member NIMHANS and ICMR NCDIR human ethics committee. He also runs courses in Research Methods, Biostatistics and Evidence Based Medicine since 2009; trained about 2000 from India and 7 other countries in 23 courses.

Dr. Xavier is the Principal Investigator of the NIH (USA) Center of Excellence to counter chronic diseases

(2009-14). He has Developed research collaborations in about 180 Centers across India and 2 other Asian countries; to date recruited over 95,000 participants in over 30 large clinical projects.

He has/ is serving on about 25 international research steering committees.

He completed his medical training at St. John's and a masters in clin Epi at McMaster university, Canada.



Arun Mishra Head, Global Nutrition Regulatory Affairs and Head, Global Health and Wellness Regulatory Affairs, Hindustan Unilever Ltd.

Arun is a senior regulatory expert. He brings a strong diverse international regulatory experience of over 20 years of India, Europe and Emerging markets including Asia Pacific.

Previously he worked as Executive Vice President, Regulatory Affairs for GSK Consumer Healthcare. Prior to GSK Consumer Healthcare he was heading regulatory function for Abbott and Senior Director Regulatory Affairs (Emerging markets) for GlaxoSmithKline based at the HQ in UK, where he was responsible developing and leading regulatory strategy for Emerging Markets and Asia Pacific. He has also worked for Pfizer Global R&D in UK, and as Head Regulatory Affairs for Pfizer India. Arun has successfully led global regulatory strategies for number of NCEs that are 'blockbuster' now.

Arun is on various national committees to shape the external regulatory environment and visiting faculty for various national and international institutes.

Arun is well recognized in Emerging Markets for his leadership and diverse domain expertise. In addition to his Bachelor degree in Biology, he has done his Masters in Pharmaceutical Medicine from Ireland, Biology from Netherlands, and a degree from Harvard in Leadership & Authority.

Panellists at the webinar



Padma Shri Dr. (Prof.) B M Hegde MBBS (Madras), MD (Lucknow), MRCP (U.K.), FRCP (Lond, Edin, Glasg, & Dublin), FACC (U.S.A.), PhD (Hon. Causa), FAMS

A born teacher, Prof. B. M. Hegde started teaching in a medical school almost from his 23rd year and still does that when he gets a break. Starting as a tutor he rose to be the Vice Chancellor of Manipal Academy of Higher Education (Manipal University). He trained in some of the best institutions in India, the UK, and the USA under great legendary teachers whose flair must have rubbed on him too. He was one of the rare Indians appointed a regular Visiting Prof of Cardiology at The Middlesex Hospital Medical School, University of London way back in 1982. He was also the first Indian teacher to be invited to examine at the Royal College's final examinations since 1988 both in the UK and laterally in Ireland.

Professor Hegde is also the Co-Chairman of the TAG-VHS Diabetes Research Centre, Chennai and the Chairman of Bharatiya Vidya Bhavan, Mangalore. Professor Hegde feels that inexpensive bed side medicine practised by a compassionate doctor is the future of the healing sciences. Late Nani Palkhiwala, a

great Indian jurist used to call him "a cardiologist with a heart."

One of India's highest civilian awards, Padma Bhushan, was awarded to him in 2010. Dr. B C Roy National Award in the category of Eminent Medical teacher, the highest medical award in India, Dr. J C Bose award for research in life sciences, Distinguished Physician of India award, Best teacher, best researcher, best orator awards many times over, Karnataka Rajyotsava award, Vaidya Ratnakara award from Shankaracharya, twelve Gold Medal Orations and 88 other named orations are but a few awards that adorn his mantelpiece.



Dr. Hemant Gordhanbhai Koshia Commissioner, Food and Drug Control Administration, Gujarat

Dr. H G Koshia is working as Commissioner at Food and Drug Control Administration (FDCA) Gujarat in January 2009. He was selected as Joint Commissioner in 2001 through competitive selection process conducted by Gujarat Public Service Commission (GPSC). He joined FDCA, Gujarat as Drugs Inspector in 1986. He had worked as Vice President Vice President of Global Regulatory Affairs in Amneal Pharmaceuticals Inc, New York, USA.

He is actively representing nine national & state level committees like Drugs Consultative Committee, Govt. Of India, New Delhi, Pharmaceutical Advisory Forum, Dept. of Pharmaceuticals, Govt. of India, New Delhi,

etc. and also played a vital role in the implementation of e-governance in the State of Gujarat.

Dr. Koshia persuaded his graduation & post-graduation in Pharmacy at L.M. College of Pharmacy, Ahmedabad. He holds Diploma in Business Management from Rajendra Prasad Institute of Communication and management, Mumbai.

Panellists at the webinar



Luke Coutinho **Holistic Lifestyle Coach, Integrative Medicine**

Luke Coutinho, is a globally renowned Holistic Lifestyle Coach in the field of Integrative Medicine. Luke's approach towards prevention and healing revolves around four important pillars: Balanced Nutrition, Adequate Exercise, Quality Sleep and Emotional Detox.

Luke's programs work across preventive medicine as well as cancer, diabetes, cardio-vascular and auto-immune diseases. It has positively impacted the health of children and adults to achieve their health & wellness goals. Wellness being the need of the hour, Luke has Co-founded RESET - Holistic Living Concepts, a one-of-a-kind facility for individuals who are voyaging towards holistic well-being. Along with

this, he is an adviser and Head of Integrative Lifestyle and Nutrition at Pure Nutrition and also the Co-founder of GOQii, a digital healthcare platform with personalized coaching.

He has also authored a range of books on wellness like The Great Indian Diet with Shilpa Shetty, The Dry Fasting Miracle – From Deprive to Thrive and the Magic Weight loss Pill : Lifestyle with Anushka Shetty.



Dr. A. Raghu **Joint Adviser (Ayurveda), Ministry of AYUSH,** **Government of India**

Dr. Raghu is currently working as Joint Adviser (Ayurveda), Ministry of AYUSH, Government of India from February, 2016. Earlier, he has worked as Deputy Adviser (Ayurveda), Assistant Adviser, and Research Officer in then Department of AYUSH, Government of India. He was also the Post-graduate Teacher in the Department of Basic Principles at Institute of Post-Graduate Teaching & Research in Ayurveda, (IPGT&RA), Gujarat Ayurveda University, Jamnagar during 2000-February, 2002. He teaches international students about Ayurveda, Gujarat Ayurveda university, Jamnagar and Lecturer at Alva's Ayurveda Medical College, Moodbidri, Karnataka.

Dr. Raghu is also a member of editorial board and technical contributor for many publications. He has presented more than 40 papers in various seminars & workshops at national and international level.

He won a gold medal from Gujarat Ayurveda university 02 times for best paper presentations and

was awarded the "vagbhata puraskaram" by "sw adesi science movement" in 1999 for the best paper presentation. He participated as WHO temporary adviser the 3rd WHO interregional training workshop during 18-20 June 2014.

Dr. Raghu completed his M. D (Ayurveda)- Basic principles from University of Kerala, B.A.M.S. (Ayurvedacharya) from University of Calicut and Diploma in Yoga & Naturopathy (DYN) recognized by CCRYN. He is proficient in MS office.

Panellists at the webinar



Dr. Hemalatha R
Director, ICMR-National Institute of Nutrition

Dr. Hemalatha, the Director of the ICMR-National Institute of Nutrition has carried out extensive research in the realm of Nutrition, Infection and Immunity with special emphasis on women and child health, preconception nutrition and the first 1000 days of life. Dr. Hemalatha is the President Elect of the Nutrition Society of India (NSI) for a four year term starting in 2020. She is an expert member of various task force committees of the Ministry of Women and Child Development, Ministry of Health and Family Welfare, Government of India; Food Safety and Standards of India (FSSAI), National Technical Board on Nutrition and National Council of Nutrition of NITI Aayog.

She has conducted a battery of experiments on gut and vaginal microbiome and Inflammation that have generated vital information on the impact of unhealthy diet and inflammation on foetal growth and pregnancy outcomes. She has spearheaded several funded projects and has written and published more than 200

papers.

She has served as Joint Secretary of the Nutrition Society of India and received awards such as PV Ramana Rao Gold Medal, Dr. Rajammal P Devadas Memorial Award, the 46th Kamla Puri Sabharwal Memorial Award from the Lady Irwin College and Change Maker Award from the Save the Children organization.

She has completed MBBS, MD from Gandhi Medical College, Hyderabad. She is a Fellow of the International Union of Nutrition Sciences (FIUNS), Fellow of the National Academy of Medical Sciences (FNAMS), and Fellow of the Telangana Academy of Sciences (FTAS).



Dr. Shariqua Yunus
Head of Unit and Programme Officer (Health & Nutrition), United Nation World Food Programme

Dr. Shariqua Yunus is a medical doctor and a public health practitioner having over 18 years of experience of working on health and nutrition issues in India and in the South Asia Region; including 10 years with the World Food Programme as the head of

the Nutrition and School Feeding Unit. She completed her MBBS MD (Community Medicine) from Jawaharlal Nehru Medical College, Aligarh Muslim University.

Panellists at the webinar



Ameve Sharma
Founder, Kapiva Ayurveda

Ameve Sharma, the scion of the 100-year old Baidyanath Group, founded Kapiva Ayurveda with a vision of transforming people's lives through the food they eat. An MBA from INSEAD, he spent five years in his family business and worked with top consulting firm McKinsey & Co before his own entrepreneurial plunge.

His stint at McKinsey gave him a bird's eye view of India's changing consumer landscape and inspired him to launch Kapiva Ayurveda – a brand improving people's lives through better quality foods packed with the goodness of nature. Kapiva Ayurveda has made a dent in the rapidly growing functional foods market.

Leveraging the robust supply chain of Baidyanath and

their past experience, he aims to build Kapiva into an iconic functional foods brand consumed by millions of people every-day. The brand has recently raised a Series A round led by Fireside Ventures, India's leading consumer goods VC fund. It has also raised funding from other marquee investors such as 3one4 Meridian, family office of TV Mohandas Pai, Madhusudan Kela and promoters of market leading food brand Gits Foods.



Dr. Subodh Jindal
President - All India Food Processors'
Association and Managing Director, Excelsior
Food & Chemical Industries

Dr. Jindal is President of All India Food Processors' Association and Chairman, Taxation & Foreign Trade Committee, AIFPA. A food processor for over 38 years, Dr. Jindal is well versed in the operation of food industry and has made immense contribution to the growth of the sector as member of various Government and Industry bodies.

He takes keen interest in R&D activities and holds to his credit the development of many culinary products and ready-to-eat-foods which have found special applications in the hospitality sector in domestic and foreign markets.

Dr. Jindal has chaired and organized a large number of conferences and seminars in different areas of food

processing including technical matters, regulatory & environmental issues, financial & taxation concerns, standardization, packaging systems, global competition and energizing the farmer-processor joint working to save wastage of perishable agri-produce and enhance the income of farmers.

Panellists at the webinar



Gautam Gupta
CEO, Paradise Biryani, Hyderabad

In a career spanning over two decades, Gautam has deep experience in consumer businesses across multiple sectors. Currently, he is the CEO of Paradise Biryani, Hyderabad- the largest Biryani player in the country with presence across 10 cities and growing.

First decade of his career was with marquee FMCG companies – Reckitt Benckiser and ITC where he donned various responsibilities in sales, trade marketing and brand management areas. His association with Samara started in 2010 with pharmacy

chain- Guardian Lifecare, where he was the CEO before moving to food service sector within Samara portfolio. He was the CEO of Pizza Hut business at Sapphire foods during his early integration phase.

Gautam holds an MBA degree from Indian Institute of Management (IIM), Lukhnow and also received his B. Tech degree from the Indian Institute of Technology (IIT), Delhi.



Manoj Kumar
Founding partner, Val-More Action Advisory

Mr. Manoj Kumar has 32 years of rich general management, marketing and sales experience working with leading consumer companies like GlaxoSmithKline, Procter & Gamble, Gillette and Unilever. He is the Founding Partner of Val-More Action Advisory which helps businesses to connect future dots and deliver multi stage growth.

In his last corporate role, he was Managing Director of GSK Consumer Health business in India/ Indian sub-continent, where he led GSK's Nutrition, Digestive, OTC and Oral Care businesses. Prior to this, he was Managing Director of P&G in Australia & New Zealand

and in West Africa.

He is alumni of University of Chicago Booth School of Business and Indian Institute of Management Ahmedabad.

Panellists at the webinar



Mr. Siddharth Menon
Chief Marketing Officer, Drums Food
International Pvt. Ltd.

Siddharth Menon is Chief Marketing Officer at Drums Food International, makers of India's first Greek yogurt – Epigamia. At Epigamia, Sid's role is to drive growth through strategic initiatives that bring the brand essence to life across online and offline channels.

Before joining Drums Food, Siddharth headed the North business for Colgate-Palmolive where he generated market share growth through his detailed go-to-market strategy and execution. Prior to that, he was spearheading growth in volume and revenue as

Marketing Manager for Colgate Dental Cream, Colgate Palmolive's largest brand.

He drives awareness, experience, and advocacy of Epigamia through an integrated marketing approach and uses consumer-driven insights to influence product innovation and roll-out strategy.

Siddharth holds a B. Comm degree from MMK College in Mumbai and an MBA from JBIMS Mumbai.



Rahul Chauhan
Director- Regulatory and Medical Affairs, South
Asia at Reckitt Benckiser (India) Pvt. Ltd.

Currently Heading the Regulatory and Medical Affairs function for South Asia at Reckitt Benckiser. A very large and complex business with strong brands across categories like healthcare, personal care and Hygiene.

Regulatory Affairs and Pharmacovigilance professional with extensive work experience in Pharmaceuticals, Biologicals, OTC, Medical Devices, Ayurvedic Preparations, Cosmetics, Pesticides, and Consumer Goods. He has led regulatory Function in major pharmaceutical and FMCG companies like MSD, Eli Lilly and Reckitt Benckiser (RB).

Rahul has many publications in his name and is the current co-chair of North Chapter at Indian Society of Clinical Research (ISCR) and OTC council at FICCI.

Panellists at the webinar



Sarika Mishra, Bcom. MBA (Finance)

Sarika Mishra is co-founder and CEO of Emm & Bee Natural Products LLP. She has over 10 years of extensive international Banking experience of working in India and UK.

Sarika is an internationally oriented, problem solver and a team player with creative bent. She enjoys listening to music, travelling, and dancing (Bollywood and Salsa) in her leisure time. She is passionate about working out in the gym and Yoga and believes in mind and body healing through ancient Indian Ayurveda.

Her belief has led her to explore the ancient method of

cooking oil extraction method (Iakadi Ghani) and its benefits, usage and a step towards sustainability and bringing a paradigm shift in the way we feed our bodies by going back to roots and ancient Indian practices.

She is a Commerce graduate with an MBA Finance degree from university of Mumbai.

About ASSOCHAM

ASSOCHAM initiated its endeavor of value creation for Indian industry in 1920. Having in its fold more than 250 Chambers and Trade Associations and serving more than 4,50,000 members from all over India. It has witnessed upswings as well as upheavals of Indian Economy and contributed significantly by playing a catalytic role in shaping up the Trade, Commerce and Industrial environment of the country.

Our legacy has helped build a strong foundation for future endeavors wherein we serve as the Knowledge Chamber for the industry and become the conduit between them and the Government to foster development of a New India. Seen as a proactive and forward-looking institution, ASSOCHAM is fully equipped to meet the aspirations of Corporate India in the new world of business.

ASSOCHAM has emerged as the fountainhead of Knowledge for Indian industry, which is all set to redefine the dynamics of growth and development in the technology driven cyber age of 'Knowledge Based Economy'. We aim to empower Indian enterprise by inculcating knowledge that will be the catalyst of growth in the technology-driven global market and helps them upscale, align and emerge as formidable player in respective business segments.

Aligned with the vision of creating a New India, ASSOCHAM works as a conduit between the industry and the Government. ASSOCHAM is seen as a forceful, proactive, forward looking institution equipping itself to meet the aspirations of corporate India in the new world of business. ASSOCHAM is working towards creating a conducive environment of India business to compete globally.

As a representative of Corporate India, ASSOCHAM articulates the genuine, legitimate needs and interests of its members. Its mission is to impact the policy and legislative environment so as to foster balanced economic, industrial and social development.

ASSOCHAM derives its strength from its Promoter Chambers and other Industry/Regional Chambers/Associations spread all over the country.

About Primus Partners

Primus Partners has been set up to partner with clients in 'navigating' India, by experts with decades of experience in doing so for large global firms. Set up on the principle of 'Idea Realization', it brings to bear 'experience in action'.

'Idea Realization'— a unique approach to examine futuristic ideas required for the growth of an organization or a sector or geography, from the perspective of assured on ground implementability.

India is and will continue to be a complex opportunity. Private and Public sector need trusted advisory partners in order to tap into this opportunity. Primus Partners is your go-to trusted Advisory for both public and private sector organizations involved intricately with nation building, and the creation and growth of robust corporations as engines of progress.

Our core strength comes from our founding partners, who are goal-oriented, with extensive hands-on experience and subject-matter expertise, which is well recognized in the industry. Our core founders form a diverse cohort of leaders from both genders with experience across industries (Public Sector, Healthcare, Transport, Education, etc), and with varied specialization (engineers, lawyers, tax professionals, management, etc).

Primus Partners brings experience of working in more than 30 countries with private and public sector, including working with Government of India, building and leading large consulting teams at the leadership level, and creating one of the largest public sector consulting practice in India. They also represent 200 person years of experience in leading global and Indian consulting firms and the public sector.

The founding team is supported by a distinguished advisory board that includes experts with leadership experience across government, large corporate and notable civil society organizations.

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