



HEALTHY INDIA 2047: LIFESTYLE MEDICINE FOR A SUSTAINABLE FUTURE

A White Paper for the Government of India and Stakeholders



A Road Map to a Healthier, More Resilient India

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Message from the Chairs

It is with great enthusiasm and a deep sense of responsibility that we present this White Paper on Lifestyle Medicine to the Government of India and stakeholders. This document is a culmination of collective expertise and extensive deliberation, and a significant step toward addressing the pressing health challenges of our nation through an evidence-based, preventive approach.

Lifestyle Medicine offers an opportunity to redefine how we approach health: shifting the focus from treating diseases to fostering wellness and resilience. By emphasising the pillars of physical activity, nutrition, mental and social health, sleep, environmental sustainability, and avoiding substance abuse, this approach aligns with the holistic vision of health as outlined by our traditions and modern medical advancements alike.

The journey to this White Paper has been marked by collaboration and consensus-building. From raising awareness through the book Lifestyle As Medicine: The Science of Healthy Living, to the robust discussions at the National Health Conclave on Lifestyle Medicine 2024, many other interactions and brainstorming sessions with stakeholders, and the meticulous refinement of these recommendations by our White Paper Committee, every step reflects our commitment to evidence-based policymaking. This document not only highlights key recommendations but also provides actionable strategies for integrating Lifestyle Medicine into India's public health framework.

As Chairs, we are inspired by the potential this initiative holds for transforming the health of our communities and for making a lasting impact on the nation's well-being. We extend our gratitude to the contributors, stakeholders, and experts whose insights have shaped this endeavor. We also call upon policymakers, healthcare leaders, and citizens alike to join hands in adopting and advocating for Lifestyle Medicine as a cornerstone of our collective health journey.

Together, we can lay the foundation for a healthier, more vibrant India.

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Executive Summary

In the face of an alarming surge in non-communicable diseases (NCDs) driven by urbanisation, technological advancements, and sedentary lifestyles, India confronts a significant health crisis. Diseases such as hypertension, diabetes, and cardiovascular conditions now dominate the nation's health burden, affecting both rural and urban populations. The urgency to address this epidemic should catalyse the integration of Lifestyle Medicine (LM) into India's public health strategy, with evidence-based interventions targeting the root causes of chronic illnesses. Lifestyle Medicine focuses on six core pillars: whole-food, plant-predominant diets; regular adequate physical activity; restorative sleep; stress management; avoidance of harmful substances; and positive social connections.

These principles align with India's health initiatives, such as the Fit India Movement and Vision 2047, and provide a framework for sustainable, preventive healthcare. This white paper was developed from a structured three-phase approach: **raising awareness** through a foundational publication titled Lifestyle as Medicine: The Science of Healthy Living; **building consensus** via the National Health Conclave on Lifestyle Medicine 2024, which convened stakeholders to identify actionable pathways; and **refining recommendations** through a White Paper Committee, ensuring alignment with global best practices and India's public health objectives.

General Recommendations

To integrate Lifestyle Medicine into India's healthcare system, the following general strategies are proposed:

Policy Integration: Align LM principles with national programs.

Capacity Building: Integrate LM modules into medical, nursing, and allied health curricula.

Public Awareness Campaigns: Educate citizens on LM benefits using national platforms and community settings.

Technological Leverage: Deploy digital tools for LM education, behaviour tracking and monitoring clinical parameters.

Enabling Access for All: Make available affordable and acceptable healthy lifestyle solutions for all.

Data Systems and M&E: Develop robust health data systems to support and track region-specific interventions.

Cross-Sector Collaboration: Foster partnerships across health, education, information and broadcasting, agriculture and food processing, science and technology, environment, and urban planning sectors.

Integrated Recommendations for Key Health Priorities under Each Pillar

The actionable strategies and recommendations under each pillar are summarised here. The complete document also suggests governmental and non-governmental bodies that can integrate these recommendations into already-existing programs.

Physical Activity

Expand initiatives under Fit India to include diverse demographics and targeted campaigns.

Strengthen physical education in schools and colleges to build lifelong exercise habits.

Incorporate exercise prescriptions into routine healthcare plans.

Promote structured exercise programs in workplace settings.

Nutrition

Promote whole-food, plant-predominant diets through education and public awareness.

Regulate the marketing and availability of unhealthy foods, especially near schools.

Enhance nutrition standards in hospitals to support healthier dietary practices.

Enable accessibility of affordable nutritional products within the reach of all in the community.

Social Health

Encourage social prescribing to combat loneliness and strengthen community connections.

Promote interest-based social clubs in communities to increase connectedness.

Implement conflict prevention programs and promote relationship support services.

Develop training modules on social connection for healthcare professionals.

Mental Health

Introduce mindfulness programs in schools, workplaces, and communities.

Expand access to counseling and stress management resources, particularly in underserved areas.

Integrate spiritual well-being into healthcare for holistic mental health care.

Restorative Sleep

Advocate for better sleep hygiene through public health campaigns and workplace policies.

Train healthcare providers to assess and address sleep issues as part of routine care.

Support research on the links between sleep, productivity, and chronic diseases

Environmental Health

Enhance air and water quality through stricter regulations and expanded monitoring.

Promote green spaces and urban planning that supports active living and biodiversity.

Encourage sustainable practices through education and community engagement.

Vision for the Future

Lifestyle Medicine offers a transformative approach to tackling India's health challenges, emphasising prevention and promoting well-being across the lifespan. With India's elderly population projected to exceed 20% by 2050, LM plays a critical role in supporting healthy ageing, extending lifespan, and improving healthspan, as highlighted by programs such as the Longevity India Initiative. Early interventions, such as regular health screenings and active ageing, will reduce healthcare costs and support economic productivity as the population ages. This white paper provides a comprehensive roadmap to position Lifestyle Medicine as a cornerstone of India's healthcare strategy, ensuring a future where healthier choices are accessible, sustainable, and empowering for all. More than a set of recommendations, it is a call to action. Aligning Lifestyle Medicine with Vision 2047 and the Sustainable Development Goals (SDGs) provides a unique opportunity for India to lead the world in preventive healthcare and sustainable living. By embracing Lifestyle Medicine, India can address its growing non-communicable disease (NCD) burden, ensure equitable access to healthcare, and build a healthier, more productive society.

Lifestyle Medicine in India: Background and Context

In the 21st century, advancements in technology, urbanisation, and sedentary lifestyles have led to a surge in non-communicable diseases (NCDs), which now dominate India's disease burden. Studies by the Indian Council of Medical Research (ICMR) reveal alarming statistics: one in three Indians has hypertension, four in five suffer from dyslipidemia (abnormal levels of cholesterol or triglycerides in the blood, increasing the risk of heart disease and stroke), and one in four has diabetes or prediabetes. In fact, one 2024 study with 19 lakh samples showed that one in two Indians have diabetes or prediabetes. These trends are equally prevalent in rural and urban areas, underscoring the urgent need for action.

Lifestyle Medicine (LM) is a branch of medicine that focuses on evidence-based lifestyle interventions to prevent, treat, and manage chronic diseases. It addresses modifiable lifestyle factors such as diet, physical activity, sleep, stress management, substance use, and social connections, which are critical in influencing conditions such as cardiovascular diseases, diabetes, obesity, hypertension, mental health disorders, and certain cancers. By targeting the root causes of these illnesses, Lifestyle Medicine emphasises sustainable lifestyle changes to improve health outcomes, reduce dependency on medications, and potentially reverse disease progression.

Globally, LM is built around six pillars as outlined by organisations such as the World Lifestyle Medicine Organisation, the Mayo Clinic, the American College of Lifestyle Medicine, the British Society of Lifestyle Medicine and the Indian Society of Lifestyle Medicine: whole-food plant-predominant eating patterns, regular adequate physical activity, restorative sleep, stress management, avoidance of risky substances, and positive social connections. Efforts to adopt LM principles are being increasingly supported by Indian public health programs. Initiatives such as the National Cancer Registry Program and the Fit India movement align with LM's emphasis on prevention. Drawing from the practices of the world's healthiest communities, the Blue Zones, India can integrate lessons on sustainable and community-driven approaches to health.

By empowering individuals to adopt healthier habits and integrating LM into public health policies, India can prioritise prevention, enhance well-being, and pave the way for a healthier, more sustainable future. But sustainable health improvements depend on the strengthening of the health system through carefully-crafted public health policies and an environment where making healthy choices is the most accessible and affordable option. This approach requires integrating LM principles into urban planning, education, healthcare systems, and workplace policies to ensure that preventive healthcare becomes a societal norm.

Through this document, we aim to catalyse a nationwide movement that prioritises preventive healthcare by addressing the root causes of lifestyle diseases/non-communicable diseases (NCDs) and consequently reducing the burden on healthcare systems. By integrating LM into public policy and community frameworks, we can inspire a culture of health that benefits individuals, families, and future generations.

¹ Indian Council of Medical Research (ICMR). (2017). <u>India: Health of the nation's states report</u>.

² Vora, H., & Kaur, P. (2024). <u>Prediabetes and diabetes in India: An HbA1c-based epidemiology study</u>. Diabetes Research and Clinical Practice, 217, 111889.

Buettner, D. (2010). The Blue Zones: Lessons for living longer from the people who've lived the longest. National Geographic Society.

The Evolution of the White Paper

This white paper is the culmination of a structured, three-step process aimed at integrating Lifestyle Medicine into public health systems. It builds upon foundational awareness, stakeholder consensus, and strategic policy refinement to provide a roadmap for embedding LM into India's healthcare framework.

Raising Awareness Through *Lifestyle as Medicine: The Science of Healthy Living*

The journey began with the publication of **Lifestyle as Medicine**: **The Science of Healthy Living**. This book, written by leading experts in the field, serves as a foundational resource, outlining the core pillars of Lifestyle Medicine. The book translates scientific research into practical strategies for healthcare professionals, policymakers, and the public, demystifying LM as a concept and making it actionable. It raises awareness among stakeholders by highlighting the potential of LM to prevent and manage NCDs, catalysing interest and dialogue within India's healthcare ecosystem. It is also an educational resource, inspiring the integration of LM principles into medical education and healthcare practices, and laying the groundwork for system-wide change. The book has been instrumental in raising awareness among healthcare professionals and policymakers about the transformative potential of LM in India.

Building Consensus Through the National Health Conclave on Lifestyle Medicine, 2024

Building on the awareness generated by the book, the National Health Conclave on Lifestyle Medicine 2024 brought together diverse stakeholders to explore actionable pathways for integrating LM into India's healthcare systems. Experts from the health sector, policy, and academia engaged in discussions on leveraging LM to address rising rates of NCDs, health inequities between rural and urban populations, and the economic burden of preventable diseases. The conclave discussions emphasised lifestyle modifications as a cornerstone of achieving health equity and economic sustainability. It provided a platform for collaborative engagement, uniting thought leaders in defining LM's role in India's public health narrative. The conclave was instrumental in moving the conversation from awareness to actionable frameworks, setting the stage for this white paper.

Refining Recommendations With the White Paper Committee

Following the conclave, a **White Paper Committee** was established to refine the policy recommendations. This step ensured alignment with India's existing health programs and global best practices. The committee emphasised the need for LM interventions at all stages of life, from childhood to old age, to maximise health outcomes. It recognised the critical role of policy in complementing individual efforts, particularly in addressing systemic barriers to health. It highlighted the necessity of robust frameworks to measure the impact of LM initiatives, ensuring accountability and continuous improvement. The committee's deliberations ensured that the recommendations presented in this white paper are evidence-based, actionable, and scalable.

General Recommendations

The following recommendations aim to create a supportive environment for the adoption of Lifestyle Medicine (LM) in India:

Integrate LM into National Frameworks: Incorporate LM principles into Vision 2047 and the Sustainable Development Goals (SDG) roadmap to ensure cohesive policy integration and alignment with national priorities; promote public-private partnerships to integrate LM services within schemes ensuring access to underserved populations.

Capacity Building: Provide training on LM principles to healthcare professionals, including doctors, nurses, and allied health workers, to enhance their ability to deliver preventive and holistic care; incorporate modules on physical activity, avoidance of substance abuse, sleep hygiene, social connectedness and stress management. The nutrition-related component is already taught in preventive and social medicine.

Public Awareness Campaigns: Launch mass media initiatives in multiple languages to educate citizens about LM and its benefits, leveraging national platforms like the Fit India Movement, Eat Right India and the National Program on Non-Communicable Diseases as well as community settings such as schools, colleges, women's associations, workplaces, religious groups, patient groups, etc.

Leverage Technology: Develop and deploy digital health tools to track health behaviours, deliver lifestyle education, and monitor clinical parameters.

Strengthen Health Data Systems: Conduct baseline health data collection across diverse socioeconomic, rural-urban, and geographic settings to account for lifestyle variations; introduce early health assessments at the school level; and invest in long-term health data systems to support region-specific and personalised Lifestyle Medicine interventions.

Monitoring and Evaluation (M&E): Establish a robust M&E framework to track the progress of LM interventions with measurable goals such as reductions in NCD rates, increased physical activity, improved nutrition literacy and better sleep hygiene, to ensure accountability and help refine policies and programs over time. Some sample metrics for monitoring are to reduce national NCD prevalence by 20% by 2030; increase adherence to recommended physical activity levels to at least 50% of the population by 2027; achieve 80% integration of lifestyle education in school curricula by 2027; and improve air and water quality in the top 10 most polluted urban areas by 2030.

Strengthen Cross-Sectoral Collaboration: Foster coordinated efforts between the ministries of health, education, agriculture and food processing, information and broadcasting, science and technology, environment, and urban planning to address the multifaceted determinants of health.

These steps will create a robust foundation for integrating LM into India's healthcare and public health systems, driving meaningful change in population health outcomes.

Integrated Recommendations to the Government and Stakeholders

India's robust public health framework provides an opportunity to integrate Lifestyle Medicine (LM) principles into existing programs and policies, amplifying their impact on the nation's well-being. By aligning LM recommendations with initiatives like the **Fit India Movement**, **the National Program for Non-Communicable Diseases**, **the Smart Cities Mission**, **Ayushman Bharat**, and the **National Education Policy (NEP) 2020**, among others, we can leverage these platforms to promote healthier lifestyles, prevent non-communicable diseases (NCDs), and enhance quality of life. This integration ensures that LM becomes a natural extension of ongoing efforts, creating a cohesive approach to addressing India's health challenges.

India's Vision 2047 and the Sustainable Development Goals (SDGs) also provide a compelling framework to integrate LM principles into the nation's long-term development strategy. Vision 2047 aspires to transform India into a global leader in health, economic resilience, and sustainable development, while the SDGs emphasise equitable health access, sustainable living, and societal well-being. Lifestyle Medicine aligns perfectly with these objectives by addressing the root causes of non-communicable diseases (NCDs), reducing healthcare costs, and promoting holistic well-being. By embedding LM into national programs, India can contribute directly to SDG Goal 3: Good Health and Well-Being, through disease prevention and health promotion strategies, and SDG Goal 11: Sustainable Cities and Communities, by advocating for urban planning that supports active living and environmental health. Vision 2047's focus on leveraging the demographic dividend and creating a productive, resilient population also finds synergy with LM, which fosters healthier habits across the life course.

Integrating LM with these global and national frameworks enables India to tackle its health challenges while advancing toward a future where preventive healthcare and sustainable practices form the foundation of public health policy. This alignment ensures that the country not only adds years to life but also life to years, fostering a healthier, more equitable, and prosperous society. The following sections illustrate how LM recommendations can blend with current policies, driving transformative change in public health while supporting sustainable development goals.

1. THE IMPORTANCE OF ADEQUATE EXERCISE OR PHYSICAL ACTIVITY

a. Promote physical activity as a public health priority by developing exercise programs, initiatives, and events that cater to diverse needs, ages, and abilities, launching public awareness campaigns to educate citizens about the benefits of adequate regular exercise and physical activity, and using mass media, social media, and community outreach programs to promote exercise and physical activity.

INTEGRATION:

Fit India Movement: Expand initiatives under Fit India to include targeted campaigns for different demographics.

National Health Mission (NHM): Partner with NHM to incorporate physical activity, nutrition, sleep hygiene, stress management and social connectedness promotion into health outreach programs.

b. Enhance physical education, nutritional education, avoidance of substance abuse, sleep hygiene, social connectedness in schools and colleges by advocating for comprehensive, evidence-based physical education curricula that prioritise long-term health and fitness, strengthening physical education in schools to promote exercise habits from an early age, and including the science and practice of physical activity and exercise as part of general education requirements for all undergraduate curricular programs, and particularly for medical and allied health professionals.

INTEGRATION:

Samagra Shiksha Abhiyan: Strengthen physical education as part of school curricula.

University Grants Commission (UGC): Encourage universities to mandate physical education for undergraduate programs.

c. Collaborate with healthcare providers to promote exercise as a preventive and therapeutic measure for chronic diseases, and integrate exercise and lifestyle prescriptions in the care of chronic and acute disease.

INTEGRATION:

Indian Council of Medical Research (ICMR): Develop guidelines for exercise prescriptions. Health and Wellness Centers (HWCs): Train healthcare providers to include physical activity promotion in patient care plans.

d. Foster healthy work environments by encouraging the implementation of workplace wellness programs and policies that incentivise companies to create environments conducive to a healthy and active lifestyle that limit sitting and sedentary behaviour, and by promoting physical activity and mental well-being among employees.

INTEGRATION:

National Programme for Non-Communicable Diseases (NP-NCD): Promote mandatory workplace wellness initiatives; establish work-life balance programs in all medical institutions of the country.

Ministry of Labour and Employment: Introduce guidelines for workplace wellness programs.

Corporate Sector: Introduce workplace wellness programs that emphasise LM principles, particularly mental health, nutrition and exercise.

e. Prioritise environmental and urban planning that promotes an active lifestyle, by investing in infrastructure development and maintenance of safe, accessible and well-maintained public spaces and recreational facilities.

INTEGRATION:

Smart Cities Mission: Include active lifestyle infrastructure in urban planning.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT): Fund park and recreational facility development.

f. Support research and innovation in exercise science by advocating for increased funding of research grants that foster collaboration between academia, industry and healthcare professionals; and by establishing a monitoring and evaluation framework to track progress, identify gaps, and inform policy decisions.

INTEGRATION:

Department of Science and Technology (DST): Increase funding for research in exercise science.

Digital India Mission: Develop centralised databases to monitor physical activity trends and outcomes.

2. BUILDING HEALTH THROUGH WHOLE-FOOD PLANT-PREDOMINANT NUTRITION

a. Promote Lifestyle Medicine principles generally, and whole-food, plant-predominant eating patterns specifically, at the primary and secondary education levels through the adoption of a tailored curriculum starting from age five.

INTEGRATION:

Samagra Shiksha Abhiyan: Incorporate Lifestyle Medicine principles and whole-food, plant-predominant nutrition education into school curricula under the holistic education framework.

National Education Policy (NEP) 2020: Align the curriculum with the policy's emphasis on health and well-being from early childhood.

Food Future Foundation: Leverage the foundation's comprehensive curriculum, including textbooks and workbooks on food and nutrition education, for a structured approach to instilling lifestyle values in students.

National Health Mission: Leverage monthly events such as Village Health, Nutrition and Sanitation Days (VHSNDs) to promote health and nutrition literacy at the community and family levels as an effective grassroots mechanism for delivering Lifestyle Medicine education and fostering behaviour change.

b. Integrate Lifestyle Medicine principles and whole-food, plant-predominant eating pattern education into medical school curricula (MBBS and MD), and continuing medical education programs.

INTEGRATION:

National Medical Commission (NMC): Advocate for curriculum reform to incorporate Lifestyle Medicine into undergraduate and postgraduate medical, nursing and allied health education.

Indian Medical Association (IMA), the Association of Healthcare Providers – India (AHPI), the Association of National Board Accredited Institutions (ANBAI), the Consortium of Accredited Health Organisations (CAHO) and Other Associations: Collaborate to include Lifestyle Medicine as part of Continuing Medical Education (CME) programs.

c. Recognise Lifestyle Medicine as a specialised field by the National Medical Commission (NMC) and integrate it into the post-graduate medical curriculum.

INTEGRATION:

National Medical Council (NMC) and the Ministry of Health: Establish a recognised board certification for Lifestyle Medicine, modeled on existing specialisations.

National Board of Examinations (NBE) and Health Sector Skills Council (HSSC): Introduce LM and nutrition training into NBE-accredited programs and courses for medical and allied health professionals.

d. Enforce regulations that restrict the sale of less healthy foods and beverages, such as foods high in sugar, salt, saturated fats, trans fats, and low in fibre (sugary drinks, chips, and candy, etc.) in school and college vending machines and stores; enforce policies that limit the advertising and promotion of unhealthy foods and beverages on or near school grounds.

INTEGRATION:

Mid-Day Meal Scheme (MDMS): Improve meal quality with whole-food, plant-predominant options.

Food Safety and Standards Authority of India (FSSAI): Effectively implement the Safe Food and Healthy Diets for School Children Regulations, 2019, which restrict the advertisement, marketing, and sale of ultra-processed foods high in saturated fat, trans-fat, added sugar, or sodium within schools and within fifty meters of school gates.

Ministry of Education: Collaborate with FSSAI to monitor compliance with these regulations in schools and colleges.

Ministry of Information and Broadcasting: Collaborate to limit advertisements promoting unhealthy foods in the media targeted at school-aged children.

Ministry of Finance: Explore implementing health taxes on low-nutrient, ultra-processed foods high in sugar, salt, and fat, and low in fibre, to discourage consumption and fund public health initiatives.

e. Establish policies to improve the nutritional quality of food served to patients and staff in hospitals and healthcare centres, limit the availability of sugary drinks, processed snacks, and high-fat foods, and provide a default whole-food, plant-predominant meal option for inpatients.

INTEGRATION:

Ayushman Bharat Health and Wellness Centers: Set whole-food, plant-predominant nutritional standards for meals provided in public health facilities.

National Food Security Act (NFSA): Leverage its framework to promote healthier dietary patterns, including whole grains, pulses, and fortified foods, aligning public food distribution systems with LM principles.

National Accreditation Board for Hospitals (NABH): Include whole-food, plant-predominant dietary guidelines as part of hospital and healthcare provider accreditation standards.

f. Support nutrition-related LM principles with financial incentives.

INTEGRATION:

Ministry of Finance: Provide tax exemptions for expenses related to LM services, such as dietary consultations, to make preventive healthcare more accessible.

g. Regulate the food industry to reduce salt, sugar, and fat content in processed and packaged foods while increasing dietary fibre to meet recommended nutritional standards.

INTEGRATION:

Food Safety and Standards Authority of India (FSSAI): Develop and enforce regulations for reducing sugar, salt, and fat in industrially produced ultra-processed foods, similar to international examples like Singapore's sugar limits in soft drinks⁴ and the UK's gradual reduction of salt in bakery items.⁵

Ministry of Health and Family Welfare: Collaborate with FSSAI to set nutrient-specific parameters for packaged foods, ensuring sugar, salt, and fat levels remain within safe limits while dietary fibre content meets minimum recommendations.

Digital India Mission: Develop a centralised database for monitoring compliance with food reformulation standards and tracking the impact on public health.

Industry Partnerships: Work with food manufacturers to promote gradual reformulation, minimising consumer resistance while improving the nutritional quality of products over time.

3. THE ROLE OF SOCIAL HEALTH

a. Develop a comprehensive policy on conflict management, incorporating clear communication protocols, mediation options and resolution timelines; integrate screen time management guidelines into the school curriculum, promoting digital literacy, digital hygiene and digital fasting.

INTEGRATION:

Ministry of Home Affairs: Collaborate to create guidelines for conflict resolution in public institutions.

Ministry of Education: Incorporate conflict management training in schools and colleges.

Samagra Shiksha Abhiyan: Include digital well-being as part of holistic education programs.

National Education Policy (NEP) 2020: Align the curriculum with the policy's focus on balanced digital usage and health.

b. Doctors should practice social prescribing and actively promote social connectedness as an integral component of social health and issue evidence-based advisories on loneliness, emphasising its negative effects and highlighting the importance of social connections for health and recovery.

INTEGRATION:

National Health Mission (NHM): Incorporate social prescribing as part of preventive healthcare programs.

AHPI, IMA and Other Associations: Conduct workshops and continuing medical education (CME) sessions on social health, and how to assess loneliness.

Insurance Companies: Partner with healthcare providers to incentivise participation in LM programs through premium reductions.

Ministry of Health and Family Welfare: Promote inter-generational conversations on healthy living and empower family caregivers to discuss Lifestyle Medicine within households.

⁴ Health Promotion Board. (2024). <u>WOG healthier food and beverage policy</u>. Singapore Government website.

⁵ Public Health England. (2020). Salt reduction targets for 2024.

c. Training Modules should be developed and included in curricula and healthcare training programs to emphasise the significance of relationships, social connection, conflict resolution, gratitude, kindness, compassion and forgiveness as key components of social health.

INTEGRATION:

National Medical Commission (NMC) and National Board of Examinations (NBE): Mandate social health modules in medical education.

Health Sector Skills Council (HSSC): Collaborate with partners such as NIMHANS to build capacity among healthcare professionals.

d. Civil Society Organisations should promote community awareness about the benefits of building and maintaining relationships, and implement conflict prevention programs (e.g., workshops or seminars on emotional intelligence, active listening, and collaborative problem-solving) to improve interpersonal relationships and prevent conflicts.

INTEGRATION:

NGOs and Community Organisations: Partner with grassroots organisations to conduct awareness campaigns.

Corporate Social Responsibility (CSR): Encourage private-sector funding for community relationship programs..

e. Establish support groups for funding and help organisations develop and offer relationship support services to assist individuals and communities in strengthening social connections.

INTEGRATION:

Ministry of Social Justice and Empowerment: Allocate resources for community-based support programs.

National Health Mission (NHM): Include relationship support services under mental health initiatives.

f. Researchers should initiate and support studies on the public health impact of social connection and loneliness, with a particular focus on interventions relevant for the Indian context and collectivist societies, to better understand the unique social dynamics in these contexts.

INTEGRATION:

Indian Council of Medical Research (ICMR): Fund social health research, including the development of a standardised survey on loneliness relevant to the Indian context.

Digital India Mission: Develop centralised databases for research on social connectivity and public health trends.

4. NURTURING MENTAL HEALTH AND SPIRITUAL WELL-BEING

a. Introduce mindfulness and stress reduction programs in schools, colleges, and workplaces to equip individuals with tools to manage stress effectively.

INTEGRATION:

Samagra Shiksha Abhiyan: Embed mindfulness practices into school curricula.

Corporate Wellness Programs: Partner with organisations to introduce mindfulness training in workplaces.

b. Ensure the availability and accessibility of mental health services, including counseling and stress management workshops, especially in underserved communities.

INTEGRATION:

National Mental Health Programme (NMHP): Expand coverage to include stress management resources.

Tele-Mental Health Assistance and Networking Across States (Tele-MANAS): Offer remote counseling services for stress management.

c. Recognise and incorporate patients' spiritual beliefs and practices into healthcare plans to promote holistic well-being.

INTEGRATION:

National Medical Council (NMC) and National Board of Examinations (NBE): Include training modules on spiritual care, including widespread practices such as yoga and meditation, in medical education.

Ayushman Bharat: Incorporate spiritual well-being programs in Health and Wellness Centers.

d. Support community programs that foster social connections and spiritual growth, thereby contributing to improved mental health outcomes.

INTEGRATION:

Ministry of Culture: Fund initiatives promoting traditional practices and spiritual growth.

Ministry of Social Justice and Empowerment: Facilitate the establishment of community networks that promote LM principles through social health programs and grassroots initiatives.

NGOs: Organise community engagement events that build social well-being and empowerment, such as those held by Bangalore-based non-profit **Vayah Vikas**.

e. Develop educational initiatives addressing the risks of substance abuse and provide resources for prevention and recovery.

INTEGRATION:

Ministry of Education: Introduce substance abuse education in schools and colleges.

Ministry of Social Justice and Empowerment: Create public awareness campaigns targeting at-risk groups.

f. Enhance support for community rehabilitation centers that offer holistic treatments integrating physical, mental, and spiritual health aspects.

INTEGRATION:

National Health Mission (NHM): Fund and expand community rehabilitation initiatives.

NGOs and Civil Society Organisations: Partner with local groups to provide support services.

g. Incorporate health and wellness practices into the hospitality sector by promoting sustainable dining options, wellness programs, and affordable whole-food plant-based items; extend these practices to budget and uncertified hotels through partnerships and training programs.

INTEGRATION:

Ministry of Tourism: Collaborate with the Hotel Association of India (HAI) to promote wellness tourism and adopt sustainable practices across all hotel categories.

Hotel Association of India (HAI): Partner with health organisations and government bodies to create checklists and standards for wellness programs, including yoga, Ayurvedic therapies, and healthy, whole-food plant-forward menu options.

5. THE ROLE OF SOCIAL HEALTH

a. Implement public health campaigns to educate individuals about sleep hygiene practices, such as maintaining consistent sleep schedules and creating restful environments, to improve mental and physical health.

INTEGRATION:

National Health Mission (NHM): Include sleep hygiene education in health outreach programs. Cities can organise "Sleep Awareness Weeks" to educate communities with workshops, health check-ups, and awareness sessions in schools, workplaces, and community centres. Local health workers and educators can help reach underserved populations.

Ministry of Information and Broadcasting: Utilise mass media for awareness campaigns on sleep health.

b. Encourage healthcare providers to routinely assess sleep patterns during medical evaluations and offer appropriate interventions.

INTEGRATION:

Indian Council of Medical Research (ICMR): Develop evidence-based guidelines for sleep assessments.

Health and Wellness Centers (HWCs): Train healthcare providers to address sleep-related issues.

c. Incorporate education on the importance of sleep and its impact on health into school and college curricula, emphasising practical strategies for improving sleep hygiene.

INTEGRATION:

Samagra Shiksha Abhiyan: Introduce sleep health education into holistic school programs. National Education Policy (NEP) 2020: Align sleep health content with the policy's focus on overall well-being and life skills.

d. Encourage organisations to implement workplace policies that limit overtime, reduce shift work irregularities, and promote adequate rest periods, fostering a culture of better sleep hygiene.

INTEGRATION:

Ministry of Labour and Employment: Develop and enforce guidelines for workplace practices that support healthy sleep.

Corporate Wellness Initiatives: Partner with employers to raise awareness about the importance of sleep and its role in productivity and mental well-being.

e. Increase funding and support for research on sleep disorders and their association with chronic diseases, mental health, and productivity to inform national sleep health policies.

INTEGRATION:

Indian Council of Medical Research (ICMR): Prioritise sleep research in public health studies.

Department of Science and Technology (DST): Fund interdisciplinary research initiatives exploring sleep and its societal impacts.

6. ENVIRONMENTAL HEALTH AND SUSTAINABLE LIVING

a. Tobacco Control: Expand tobacco harm reduction strategies, integrate sustainability into tobacco cessation programs, and address environmental impacts from tobacco production and waste.

INTEGRATION:

National Tobacco Control Programme: Incorporate harm reduction strategies and sustainability goals into tobacco cessation initiatives.

Swachh Bharat Mission: Address littering from tobacco product waste, such as cigarette butts and packaging.

FSSAI (Food Safety and Standards Authority of India): Monitor and regulate harmful tobacco substitutes.

State Health Departments: Strengthen enforcement of tobacco control laws and promote harm reduction strategies at the grassroots level.

Public-Private Partnerships: Collaborate with industry and NGOs to develop innovative solutions for tobacco waste management and cessation support.

b. Air, Water, Waste, and Renewable Energy: Enforce stricter emission norms, promote electric vehicles (EVs), incentivise safe waste disposal, expand air and water quality monitoring, ensure access to safe drinking water, implement waste segregation and decentralised processing, and expand solar, wind, and bioenergy projects.

INTEGRATION:

National Clean Air Program (NCAP): Increase targets and focus on high-pollution regions.

Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME): Boost EV adoption.

Jal Jeevan Mission: Ensure safe drinking water access.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT): Promote wastewater treatment/reuse.

Swachh Bharat Mission: Strengthen waste management practices in urban and rural areas.

Waste to Energy Programme: Promote clean energy conversion technologies.

National Solar Mission: Expand solar energy projects.

Ujiwala Yojana: Promote LPG stoves in rural areas.

National Bio-Energy Mission: Develop bioenergy alternatives.

State Pollution Control Boards: Implement air quality monitoring and emission standards.

IMA, AHPI, the Public Health Foundation of India (PHFI), the Health and Environment Leadership Platform (HELP) and Other Organisations: Guide hospitals on sustainable practices such as waste segregation and energy efficiency.

c. Green Spaces and Biodiversity: Increase parks, promote green roofs and vertical gardens, and expand protected forest areas with legal protections.

INTEGRATION:

National Afforestation Program, AMRUT and the Smart Cities Mission: Support tree plantations and urban reforestation efforts based on the Miyawaki Method⁶ to promote biodiversity and active living.

Heritage City Development and Augmentation Yojana (HRIDAY): Enhance green spaces in urban areas, and promote community-driven initiatives such as organic kitchen gardens.

Compensatory Afforestation Fund Management and Planning Authority (CAMPA): Expand protected forest areas.

d. Green Spaces and Biodiversity: Increase parks, promote green roofs and vertical gardens, and expand protected forest areas with legal protections.

INTEGRATION:

National Action Plan on Climate Change (NAPCC): Implement climate-resilient infrastructure.

PM Fasal Bima Yojana: Support crop diversification and drought-resistant crops.

National Disaster Management Authority (NDMA): Strengthen early warning systems.

National Mission for Sustainable Agriculture (NMSA): Encourage conservation agriculture, including promoting no-till farming to conserve soil carbon.

e. Environmental Education: Introduce environmental education in schools, mass media campaigns, and public consultations.

INTEGRATION:

Samagra Shiksha Abhiyan: Include environmental topics in school curricula.

National Environmental Awareness Campaign (NEAC): Support citizen participation and grassroots efforts.

f. Research, Innovation, and Policy Support: Fund environmental research, improve monitoring, and develop evidence-based policies.

INTEGRATION:

IMPRINT India: Promote academic research in environmental innovation.

National Green Tribunal (NGT): Strengthen enforcement of environmental laws.

Digital India Mission: Create centralised databases for policy-making and compliance.

⁶ Miyawaki, A. (2019). Reforestation for life. IGES-Japanese Centre for International Studies in Ecology.

Summarised Recommendations

Pillar	Key Recommendations	Aligned National Programs
Physical Activity	Strengthen physical education in schools and colleges to promote lifelong exercise habits.	Fit India Movement, Samagra Shiksha Abhiyan
	Develop workplace wellness programs to encourage physical activity and reduce sedentary behaviour.	ICMR, NP-NCD
	Incorporate exercise prescriptions into healthcare plans for chronic disease prevention and management.	Health and Wellness Centers
	Invest in safe and accessible recreational spaces to support community-level physical activity.	AMRUT, Smart Cities Mission
	Support research, M&E in exercise science.	Digital India Mission
	Educate students on whole foods and plant-based diets starting from primary education.	Samagra Shiksha Abhiyan, NEP 2020
Nutrition	Integrate LM principles of nutrition into medical, nursing and allied health curricula.	NMC, Medical Associations
	Improve nutrition literacy in communities through village-level events and awareness campaigns.	Village Health, Nutrition, and Sanitation Days (VHSND)
	Enhance the quality of hospital meals by including plant-based options and minimising processed foods.	Ayushman Bharat Health and Wellness Centers, NABH
	Enforce regulations to reduce unhealthy food marketing and restrict the sale of low-nutrition foods near schools.	FSSAI, Mid-Day Meal Scheme
	Regulate the food industry to reduce sugar, salt, and fat in packaged foods while increasing dietary fibre.	FSSAI, Digital India Mission
Social Health	Promote social prescribing to strengthen community connections and combat loneliness.	National Health Mission (NHM)
	Include digital well-being and conflict resolution education in school curricula.	National Education Policy (NEP) 2020
	Develop training modules for healthcare providers on the role of relationships and social connections in health.	NHM, NMC, National Board of Examinations (NBE)
	Establish community support groups for relationship building and social health awareness.	NGOs, CSR Programs
	Promote intergenerational conversations on health and lifestyle within families.	NHM, ICMR

Pillar	Key Recommendations	Aligned National Programs
Mental Health	Introduce mindfulness and stress reduction programs in schools, colleges, and workplaces.	Samagra Shiksha Abhiyan, Corporate Wellness Programs
	Expand access to counselling and stress management services, especially in underserved areas.	National Mental Health Program (NMHP), TeleMANAS
	Integrate spiritual care into healthcare plans to promote holistic mental well-being.	Ayushman Bharat Health and Wellness Centers
	Develop community networks to support mental health and reduce stigma around seeking help.	Ministry of Social Justice and Empowerment, NGOs
Restorative Sleep	Launch nationwide campaigns to raise awareness about sleep hygiene practices.	NHM
	Train healthcare providers to assess sleep patterns and address sleep-related issues routinely.	HWC, ICMR
	Include education on sleep hygiene in school and college curricula.	Samagra Shiksha Abhiyan, NEP 2020
	Encourage workplace policies that limit overtime and irregular shifts to support better sleep hygiene.	Ministry of Labour and Employment, Corporate Wellness Initiatives
Environmental Health	Expand tobacco harm reduction strategies and integrate sustainability into tobacco cessation programs.	NTCP, Swachh Bharath, Public- Private Partnerships
	Enforce air pollution emission norms, water quality monitoring and access to safe drinking water.	National Clean Air Program, FAME, Jal Jeevan Mission, AMRUT
	Promote sustainable waste management practices, including segregation, recycling, and waste energy projects.	Swachh Bharat Mission, Waste to Energy Program
	Increase green spaces and biodiversity through urban planning and afforestation programs.	Smart Cities Mission, National Afforestation Program, CAMPA
	Invest in renewable energy projects, including solar, wind, and bioenergy.	National Solar Mission, National Bio-Energy Mission

The Way Forward for Wellbeing

As India grapples with rising health challenges, Lifestyle Medicine (LM) offers a transformative approach to enhancing both lifespan and healthspan. By focusing on evidence-based interventions such as balanced whole-food plant-predominant nutrition, regular adequate physical activity, stress management, social health, and restorative sleep, LM directly addresses the root causes of non-communicable diseases, which are the leading contributors to premature mortality and disability in India. These interventions promote healthy ageing, delay the onset of age-related conditions, and improve quality of life across the lifespan.

With 10.5% of India's population currently aged 60 and above, and this figure projected to exceed 20% by 2050,⁷ the integration of LM into healthcare systems has never been more urgent. Initiatives such as the Longevity India Initiative at the Indian Institute of Science (IISc), Bangalore, exemplify how LM principles can complement scientific advancements, such as identifying biomarkers of ageing and developing interventions for age-related diseases. These efforts not only align with LM's goals of prevention and health promotion but also contribute to building a productive and resilient ageing population, reducing healthcare costs, and supporting India's long-term development goals.

The roadmap outlined in this white paper provides a comprehensive strategy for embedding LM into India's public health systems and national programs. Encouraging physical activity, fostering healthy nutrition, enhancing sleep hygiene, promoting social and mental well-being, and addressing environmental health are key steps in tackling health inequities and improving outcomes. Lifestyle Medicine is not just about preventing disease but about creating environments where healthier choices become the most accessible and natural options. By leveraging existing initiatives like Vision 2047 and the Sustainable Development Goals (SDGs), LM offers actionable solutions for a sustainable and healthier future. By empowering individuals, fostering community resilience, and aligning with national priorities, LM holds the potential to transform India's healthcare landscape. It offers a path to a healthier, more equitable, and sustainable future, ensuring that as India adds years to life, it also adds life to years.

⁷ International Institute for Population Sciences (IIPS) and United Nations Population Fund (UNFPA). (2023). *India ageing report 2023 - Caring for our elders: Institutional responses*.

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Photographs

The virtual launch of Lifestyle As Medicine: The Science of Healthy Living - 20 September 2024



Speakers - Dr. Vinod K Paul, Dr. Randeep Guleria, Dr. Devi Prasad Shetty, Dr. Pratima Murthy, Dr. Alexander Thomas

The inauguration of the National Health Conclave on Lifestyle Medicine - 15 October 2024



From left to right - Dr. Bhabatos Biswas, Dr. Jachin Velavan, Dr. Girdhar Gyani, Mr. KN Shanthkumar, Dr. Samuel Hansdak, Dr. Alexander Thomas, Dr. Sunil Khetarpal, Dr. Glory Alexander, Ms. Shayna Parekh and Ms. Divya Alexander

The Round Table on Lifestyle Medicine and Longevity - 13 December 2024



Seated dignitaries - Mr. Prashant Prakash, Mr. Kris Gopalakrishnan, Prof. Deepak Saini, Dr. Alexander Thomas and Ms. Shayna Parekh

Glossary

1. Ayushman Bharat Health and Wellness Centers

Primary healthcare facilities in India that provide comprehensive services, including NCD prevention, health promotion, and LM-based interventions.

2. Blue Zones

Regions of the world where people live significantly longer and healthier lives, often attributed to shared lifestyle practices such as plant-predominant diets, physical activity, social connections, and a sense of purpose.

3. Community-Based Interventions

Health initiatives delivered at the community level, leveraging local resources and participation to promote LM principles and address public health challenges.

4. Digital Health Tools

Technologies such as mobile apps, wearable devices, and telehealth platforms used to track health behaviours, provide education, and deliver healthcare services.

5. Health Data Systems

Mechanisms for collecting, analysing, and utilising health-related data to guide public health interventions, track progress, and address region-specific health needs.

6. Health Equity

The principle of ensuring that all individuals have fair and just access to healthcare and the opportunity to achieve optimal health, regardless of socioeconomic status, geographic location, or other barriers.

7. Healthspan

The period of life during which an individual is in good health, free from chronic disease and disability, as opposed to lifespan, which is the total number of years lived.

8. Lifestyle Medicine (LM)

A branch of medicine that focuses on evidence-based lifestyle interventions, including whole-food plant-predominant nutrition, adequate physical activity, restorative sleep, stress management, social connections, and substance avoidance, to prevent, treat, and manage chronic diseases.

9. Longevity India Initiative

A research initiative at the Indian Institute of Science (IISc) that identifies biomarkers of ageing and develops interventions to promote healthy ageing and extend healthspan.

10. Non-Communicable Diseases (NCDs)

Chronic conditions such as diabetes, cardiovascular diseases, chronic respiratory disease, hypertension, obesity, cancer and mental health disorders, which are primarily caused by lifestyle and environmental factors.

11. Preventive Healthcare

A proactive approach to health that focuses on preventing diseases through lifestyle modifications, regular screenings, and early interventions.

12. Restorative Sleep

Sleep that is sufficient in quality and duration to rejuvenate physical and mental health, enhancing overall well-being.

13. Sleep Hygiene

A set of behavioural and environmental practices, such as maintaining a consistent sleep schedule and creating a restful sleeping environment, that promote healthy and restorative sleep.

14. Social Prescribing

A practice where healthcare professionals refer individuals to community-based services or activities, such as exercise classes, social groups or counseling, to improve their well-being and reduce isolation.

15. Sustainable Development Goals (SDGs)

A global framework of 17 goals established by the United Nations to address urgent challenges such as poverty, inequality, climate change and health, with a focus on achieving sustainable development by 2030.

16. Ultra-Processed Foods

Products that have undergone significant industrial processing and contain ingredients not commonly found in a typical kitchen, such as artificial additives, preservatives, and flavour enhancers. These foods are often high in sugars, unhealthy fats, and salt, and low in nutritional value.

17. Vision 2047

India's long-term development roadmap aiming to transform the nation into a global leader in health, sustainability, and economic resilience by the 100th anniversary of independence.

18. Whole-Food, Plant-Predominant Eating Patterns

A dietary pattern centered on minimally-processed plant foods, such as fruits, vegetables, whole grains, legumes, nuts, and seeds, while limiting or avoiding animal products and ultraprocessed foods.