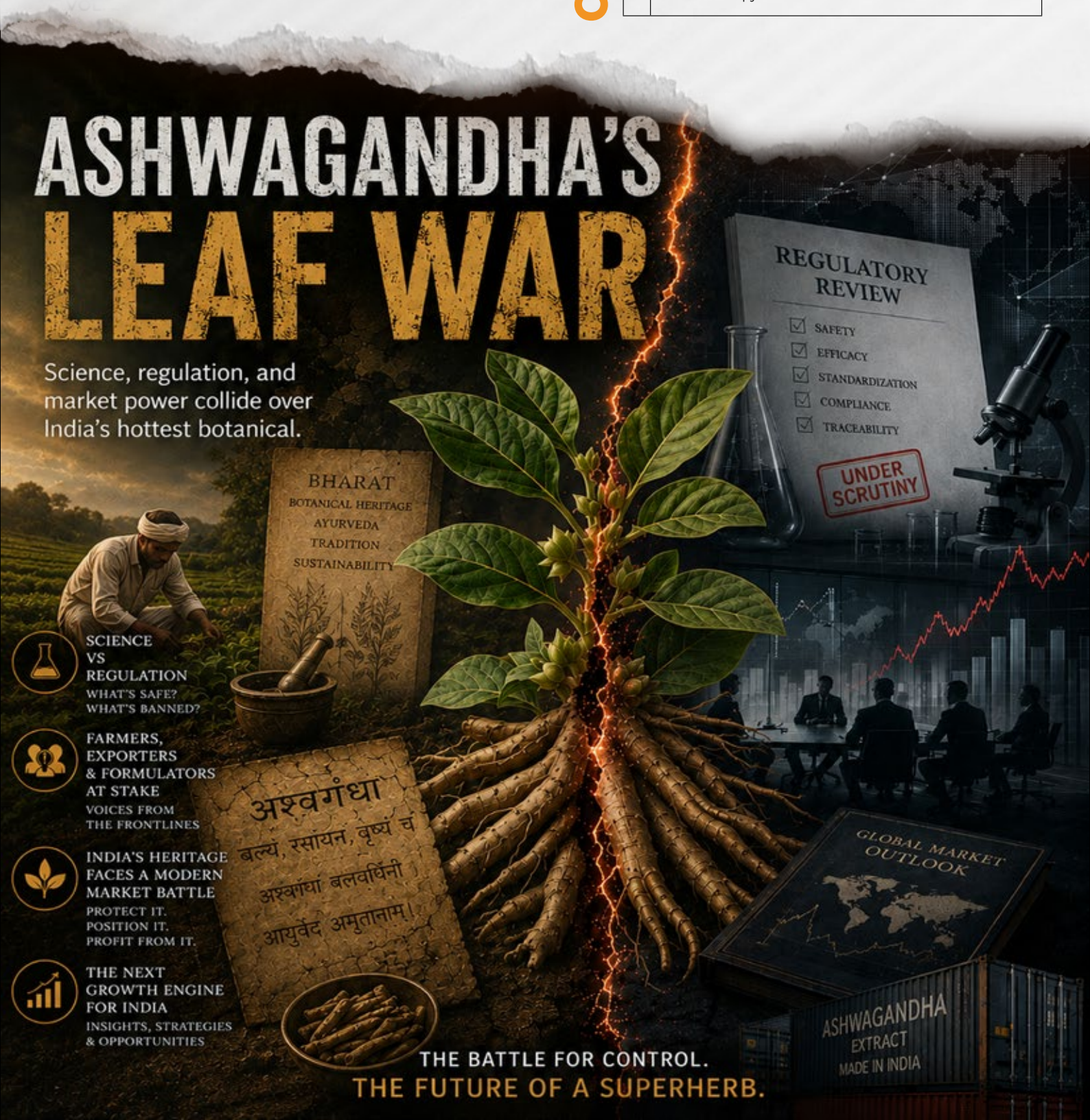
MAY 2026
VOL. 15 | ISSUE 05

THE NUTRA ECONOMIST

nutrify today

INTELLIGENCE • INNOVATION • IMPACT

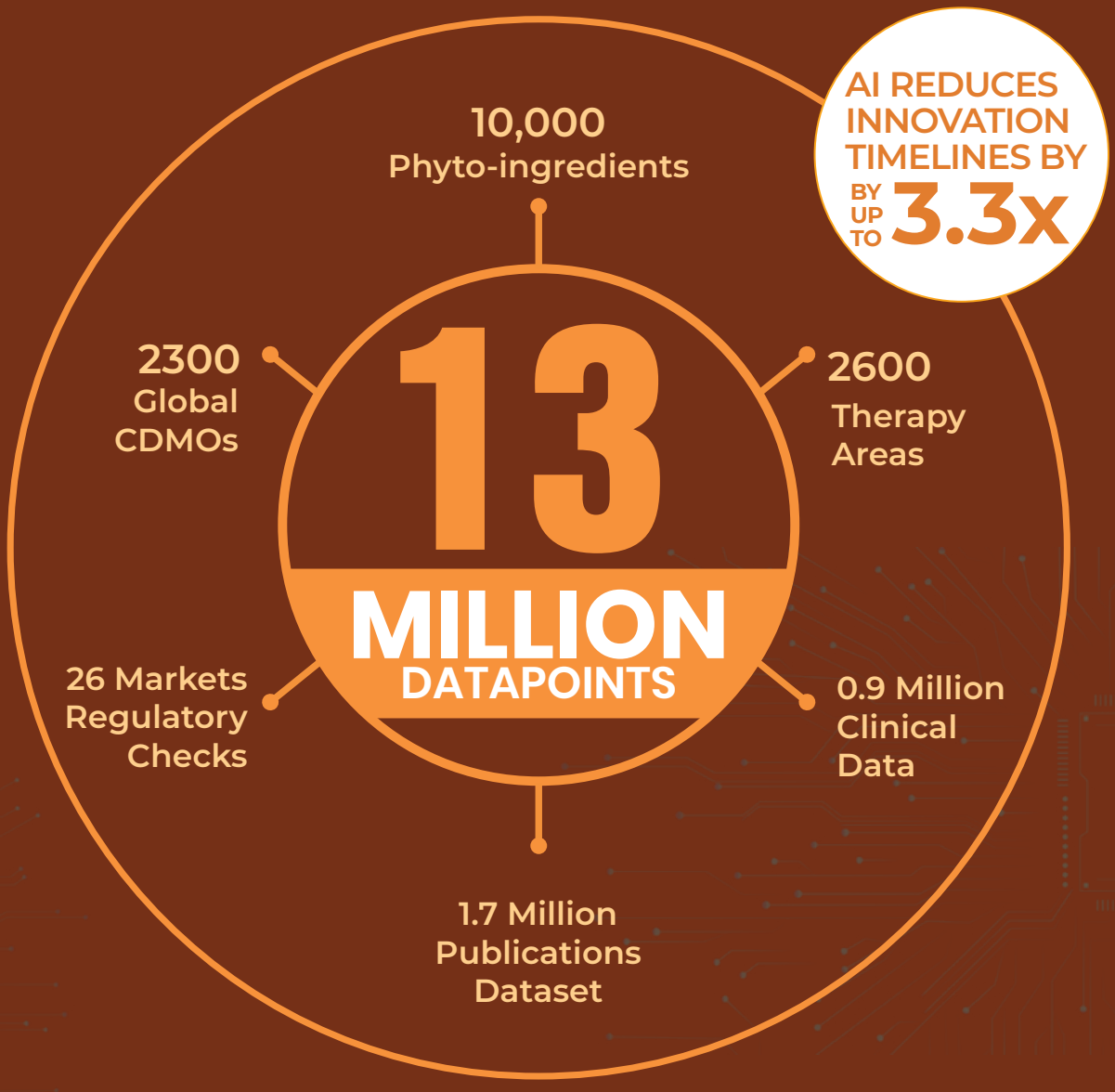
CONTENTS



GENIE™
Nutra Innovation Partner

WORLD'S LARGEST AI POWERED NUTRACEUTICAL DATABASE

For Faster, Smarter Nutra Innovation, Responsibly !



How can companies leverage this Intelligence ?

GenEI™	ConcierGENIE™	NutrifyAI™
Discover. Innovate. Launch DIY modules with annual subscription - based access to datasets	**White Glove Innovation** White Glove Innovation From concept to finished products in your warehouse, your NI partner all the way	**Ask & Seek the Nutraverse** Prompt based accurate responses from the curated Genie Dataset

NuToday India Pvt. Ltd. **Reach out to us with your queries on hello@nutrifytoday.com**

nutrify today - SUITE®

Networthing the Networks

1:1 DEAL MAKING

INNOVATION SHOWCASE

CURATED PANELS

REGULATORS
DECISION MAKERS
INVESTORS
INDUSTRY SHAPERS
FOUNDERS
MANUFACTURERS
INNOVATORS
AND MORE..

GLOBAL TRENDS

300+ GLOBAL CXOS

The Definitive Nutra Forum

DEAL-MAKING. LEARNING. PROBLEM SOLVING

4th & 5th June 2026

INVITE-ONLY I DECISION-GRADE

MUMBAI

Supported By

वाणिज्य एवं उद्योग मंत्रालय
MINISTRY OF COMMERCE AND INDUSTRY

MOFPI
MINISTRY OF FOOD PROCESSING INDUSTRIES
GOVERNMENT OF INDIA

INDIA CHAMBER
INDIA CHAMBER OF BUSINESS AND COMMERCE

https://nutrifycsuite.com/

Magazine Index

FROM THE DESK OF CHAIRPERSON, NUTRIFYTODAY

PRIYANKA SRIVASTAVA

Chairperson, NutrifyToday

The nutraceutical industry has crossed the point where inspiration alone is enough. We are now in a phase where science, regulation, capital, manufacturing discipline, market access, and responsible storytelling must move together. That is the spirit in which SUMFLEX has come to life across two powerful destinations: Nutrify Today Eurasia SUMFLEX in Tashkent on 21–22 May, and the Global C-Suite SUMFLEX on 4–5 June. Together, they represent more than events; they mark the emergence of a global convergence platform for CEOs, investors, scientists, policy leaders, and market builders committed to shaping a responsible nutraceutical industry and scaling it with integrity.

SUMFLEX has been designed differently because the industry now needs a different learning architecture. Traditional conferences inform, but transformation demands something deeper. SUMFLEX focuses on lateral learning, adjacent learning, and experimental learning. It brings leadership into live situations, real business questions, and action-oriented exchanges. The “while doing it right there” reality-show format is not a gimmick; it is a response to the speed at which the nutraceutical world is changing. Companies can no longer afford to learn slowly, in isolation, or only within familiar categories. They must learn from neighbouring sectors, regulatory shifts, consumer behaviour, biology, investment logic, and markets opening in real time.

This is why the two-destination journey matters. Tashkent signals the rise of Eurasia as a serious nutraceutical opportunity. Uzbekistan is no longer a market to be observed from the sidelines. It is emerging as a strategic bridge between Central Asia, the Middle East, Europe, and South Asia, with a young population, evolving healthcare needs, and growing interest in preventive wellness and supplementation. In this edition, our insight article on Uzbekistan as a supplement market examines why the country deserves closer attention and how it may shape regional nutraceutical growth. Future growth will not be limited to saturated markets. It will be built by those who understand new geographies early and enter responsibly.

Mumbai represents another dimension of the SUMFLEX vision. With stronger international government participation, the Global C-Suite SUMFLEX aligns with a fundamental ambition: making Mumbai the Davos of Nutra. Mumbai has the commercial density, scientific ecosystem, financial connectivity, entrepreneurial energy, and global accessibility required to become the nerve centre of nutraceutical leadership. If Davos became the place where the world discusses macroeconomic and geopolitical direction, Mumbai can become the place where the nutraceutical world discusses science-led growth, responsible innovation, regulatory harmonisation, and market creation.

This edition also turns attention to a larger civilisational question: the shift from economy to biology. For decades, China’s rise has been discussed through infrastructure, manufacturing scale, exports, and economic strategy. Today, the conversation is moving into biology. From population health to biotechnology, from nutrition to human development indicators, biology is becoming a new frontier of national competitiveness.

Our feature on China and India examines this changing gear, including the provocative discussion around population height and what it reveals about nutrition, public health, social development, and long-term competitiveness. The China–India comparative series is not about simplistic rivalry; it is about understanding how nations convert policy, food systems, science, and social investment into biological outcomes.

No responsible nutraceutical magazine can ignore the tensions surrounding ashwagandha. A miracle medicinal plant celebrated across traditional systems, modern research, global supplement markets, and consumer wellness culture now finds itself caught between science, business debate, regulatory scrutiny, and competitive wars. The challenge is not whether ashwagandha has value. The challenge is how that value is validated, communicated, protected, and commercialised without overclaiming or undermining trust. Heritage is powerful, but heritage must be supported by evidence, quality standards, transparent claims, and responsible market conduct.

Across these themes runs one common thread: the future belongs to ecosystems, not isolated companies. The nutraceutical industry cannot scale on product enthusiasm alone. It must scale through credibility. That credibility will come from science that is translated well, manufacturing that is consistent, regulation that is respected, investors who understand long-term value, governments that enable responsible growth, and CEOs willing to learn beyond their comfort zones.

Nutrify Today exists to connect these dots. We are not merely reporting on the industry; we are helping architect conversations that can move it forward. SUMFLEX is an extension of that purpose. It is where learning becomes collaboration, collaboration becomes strategy, and strategy becomes market-building.

As you read this edition, we invite you to engage deeply with its ideas: the rise of Uzbekistan, the biology of national competitiveness, the ashwagandha debate, and the global leadership model emerging through SUMFLEX. Each article reflects a sector in motion, full of opportunity but also in need of discipline.

We look forward to welcoming you to the first-ever no-delegate Nutrify Today C-Suite SUMFLEX 2026; a platform built for decision-makers, not spectators. Enjoy the edition, and join us as we work toward a more responsible, science-led, globally scalable nutraceutical future.

DAY 1 AGENDA 4th JUNE, 2026

SESSION - 1 - TECHNOLOGY AND GROWTH STRATEGY	
09:30 - 09:35	**MEDHAVI SRIVASTAVA** Introduction to summit
09:40 - 09:50	**Inauguration & Lamp Lighting**
09:55 - 10:05	**INDUSTRY WELCOME NOTE (Government Officer)**
10:10 - 10:20	**EMCEE - DANIELLE MASTERSON** - NutraIngredients
10:25 - 10:55	**FIRE SIDE CHAT:** What Really Creates Durable Scale in Nutraceuticals **REHAN KHAN** - Managing Director - MSD **MODERATOR** - **RAJARAM SANKARAN** - Partner - Heidrick & Struggles
PANEL DISCUSSION **When Does Nutra Become Investible**	
11:00 - 11:40	**MODERATOR** **NITIN LATH** - Managing Director - Alvarez and Marsal **PANELISTS** **AMAL KELSHIKAR** - Executive Director - Torrent Pharma **ATISH MAJUMDAR** - President - Mankind Pharma **DIPANJAN BASU** - Co-Founder and Partner - Fire Side Ventures **YONI GLICKMAN** - Managing Partner - Peak Bridge VC and Chairman Suan Nutra
PANEL DISCUSSION **Can India Move Up the Nutra Ingredient Value Ladder**	
11:45 - 12:25	**MODERATOR** **DAVID FOREMAN** - Industry leader and Influencer - USA **PANELISTS** **SHAFIULLA HIREHAL NURUDDIN** - Managing Director - Greenspace Herbs **DR. BENNY ANTONY** - Co-Founder & Managing Director - Arjuna Natural Pvt. Ltd. **SAIF MEHKRI** - Co-Founder - Bio-Gen Extracts **VIVEK PARACHUR** - Co-Founder & CEO - Olene Lifesciences **DR. SREERAJ GOPI** - Co-Founder - Atomin & Molecule Labs
12:30 - 13:00	**FIRE SIDE CHAT:** The hunger Code – What GLP-1 is teaching the world about Obesity, Nutrition and Metabolic Control **DR. VIKRAM MUNSHI** - Founder - White Space Consulting (**MODERATOR**) **DR. DANA COHEN** - Integrative Medicine **VIKRANT SHROTRIYA** - Managing Director - Novo Nordisk **GREG MACPHERSON** - Founder - SRW Laboratories | Pharmacy Direct. Pharmacist & longevity scientist
13:05 - 13:15	**AI Application Models in Healthcare: From Analytical Intelligence to Clinical Trust and Commercial Scale** **DR. ANAND SWAROOP** - Co Founder - Nutrify Today | President - Cepham Inc.
13:20 - 13:35	**NUTRIFY AI - FASTER DECISIONS. SMARTER COMMERCIALIZATION**
	DR. MUKUND KAMATH - Member - Management Council **KHASIM** - Executive Director - Nutrify Today
13:35 - 14:30	**LUNCH**

SESSION - II - SCALE UP, SUPPLY CHAIN, MARKET INSIGHTS	
14:40 - 14:45	**WELCOME BACK SPEECH - MEDHAVI SRIVASTAVA**
14:45 - 14:55	**EMCEE - AMY SUMMERS** - Founder & President - Pitch Publicity® & INICIVOX®
PANEL DISCUSSION **Fake Nutrition: Anatomy of a Crime**	
15:00 - 15:40	**MODERATOR** **CHANDRAMOULI N** - CEO - TRA Research **PANELISTS** **ASHIT MOHAN IPS** - Former Director - General of Police **DR. SHOBIT JAIN** - Ex ED - FSSAI, Joint secretary - Min. of Youth Affairs and Sports **DR. K.U. METHEKAR** - Joint Director - FSSAI, West **DR. PRABODH HALDE** - Head of Global Regulatory - Marico
WHY GREAT HEALTH PRODUCTS FAIL GLOBALLY	
15:45 - 16:00	**SOM DUTTA SINGH** - Founder and CEO - Assiduus
PANEL DISCUSSION **Can Supply Chain Build the Nutra Business**	
16:05 – 16:45	**MODERATOR** **SOM DUTTA SINGH** - CEO - Assiduus **PANELISTS** **VIKAS BANSI** - Business Director - India Healthcare Himalaya Wellness Company **SRIRAM PADMANABHAN** - Business unit Director - Dabur India Ltd. **SIDDHARTH VACHASPATI** - Industry leader - Ex P&G - Country Sales Director **MANSI KHANNA** - Chief Operating Officer - Dr Reddys - Nestle Health Science **BORNA BANDARI** - CEO - Cymbiotika Middle East
PANEL DISCUSSION **Who Really Builds Nutra Scale: Ingredients, Influence, or Distribution**	
16:50 – 17:30	**MODERATOR** **HITESH PATEL** - Joint Managing Director - K Patel Phyto Extracts **PANELISTS** **DAVID FOREMAN** - Industry leader and Influencer - USA **MORGAN YOUNG** - President - Freeman Nutra **MUAYAD ABU ALI** - Commercial and Business Development - Pharma Plus **DEEPAK AGARWAL** - Founder - Auric
17:35 – 18:00	**SCAN TO SCALE** **DR. MUKUND KAMATH** - Member - Management Council
18:05 – 18:20	**THE LIFT** **AMY SUMMERS** - Founder & President - Pitch Publicity® & INICIVOX®
18:25 – 18:40	**US Market Insights** **LEN MONHEIT** - Chief Executive Officer - ITC USA

BOARD ROOM SERIES

LOTUS VENUE

PANEL DISCUSSION Synergizing Regulation and Technology to Advance Responsible Nutrition in India	
12:00 – 12:45	**MODERATOR** **DR. PRABODH HALDE** - Head of Global Regulatory - Marico **PANELISTS** **MS. ANUPAMA PATIL** - Assistant Commissioner - FDA - Maharashtra **DR. NARENDRA TRIPATHI** - Medical Affairs - Bafco **MINI NAIR** - Founder - Primagena Tech **DR. NANDAN JOSHI** - Head Medical Affairs - Dr Reddys - Nestle Health Science

PANEL DISCUSSION When Does Nutra Become Mainstream Healthcare	
15:00 - 15:45	**MODERATOR** **DANIELLE MASTERSON** - NutraIngredients **PANELISTS** **VIKRANT SHROTRIYA** - Managing Director - Novo Nordisk **RAHUL ADHAKMOL** - COO - BSV **RAHUL BIBHUTI** - CEO - Reckitt Indonesia

PANEL DISCUSSION Who Will Control Nutra Scale: Platforms, Pharmacies, or Distribution	
16:00 - 16:45	**MODERATOR** **DANIELLE MASTERSON** - NutraIngredients **PANELISTS** **SANDEEP SAXENA** - Founder - Trubare Managing Partner - Antal International **SUMIT ANAND** - CEO - Inamo **RAJESH JAIN** - Managing Director - Arihant group of companies **JUILEE DANDEKAR** - Director Business Development - Sanofi Consumer Healthcare

PANEL DISCUSSION Can Nutra Earn Pharma-Grade Trust	
17:00 - 17:45	**MODERATOR** **DANIELLE MASTERSON** - NutraIngredients **PANELISTS** **SUDARSHAN JAIN** - Secretary General - Indian Pharmaceutical Alliance (IPA) **ANIL MATAI** - Director General - OPPI **DR. BENNY ANTONY** - Co-Founder & Joint MD - Arjuna Natural Pvt. Ltd. **C.R. CHENTHIR KUMARAN** - President - Subrosa Health & Capital India

PODCAST	
17:45 – 18:15	**MODERATOR** **DANIELLE MASTERSON** - NutraIngredients **GUEST** **DR. BENNY ANTONY** - Joint Managing Director - Arjuna Naturals

ECONOMIC ALLIANCE SERIES

WORKSHOP ECONOMIC ALLIANCE OPPORTUNITY: INTERNATIONAL	
15:00 - 16:00	**PRESIDING KEY DIGNITARY** **INTERNATIONAL MINISTRY – INDUSTRY MEET**

DAY 2 AGENDA 5th JUNE, 2026

09:00 - 09:10	**Introduction – Context Setting - Host** **DR. BALKUMAR MARTHI** - President - Nutrify Today Academy
09:15 - 09:25	**Inauguration & Lamp Lighting**
09:30 - 09:50	**Scale-Up Without Scandal: Why the Future of Botanicals Depends on Authentication, Quality-by-Design, and Regulatory Credibility** **DR. IKHLAS KHAN** - Director - NCNPR - Director FDA Centre of Excellence
PANEL DISCUSSION **The Master Formulator Show**	
09:55 – 10:40	**JURY** **DR. BALKUMAR MARTHI** - President - Nutrify Today Academy **PANELISTS** **DR. GOURINANDAN TONPE** - Co-founder - Thinking Forks Consulting Pvt Ltd **DR. SREERAJ GOPI** - Founder - Molecules BioLabs **DR. GANESH BAGLER** - Professor - Computational Gastronomy at IIIT - Delhi **DAVID FOREMAN** - Founder - Herbal Pharmacist **DR. AKANKSHA JAIN** - NRDC
10:45 - 11:00	**AI-Enabled R&D: From Herbal Science to Faster Commercial Innovation** **JEAN PORRACHIA** - Head of R&D - Himalaya Wellness
11:05 – 11:20	**The Quantum Ayurveda** **TAHIRA HS** - Chief of Research and Development - Green Space Herbs
11:25 – 11:40	**Can we engineer a botanical like a molecule** **DR. IWIN BENNY** - Clinician Scientist - Arjuna Natural
PANEL DISCUSSION **Research opportunities in the AI era : From Formula to Clinical Credibility: How Nutraceutical R&D , and Medical Affairs Must Co-Create the Next Generation of Evidence-Based Products**	
11:45 – 12:25	**MODERATOR** **DR. ANAND SWAROOP** - Co Founder-Nutrify Today | President - Cepham Inc. **PANELISTS** **DR. RACHANA BHOITE** - Head Nutrition Science and Clinical Research - DRL **DR. MADHAVI MARATHE** - Head Clinical Nutrition Science - Sun Pharma **DR. BAIDYANATH MISHRA** - Head R&D - Dabur India **DR. KANCHAN JAISWAL** - Head Nutrition Science and Clinical Affairs - Mankind
12-30 - 12:45	**Beyond Ingredients : How Delivery Science will decide the next winners in Nutraceuticals** **DR. SREERAJ GOPI** - Founder - Molecule BioLabs
12:50 - 13:05	**Nutrify Gen AI demo** **DR. MUKUND KAMATH** - Member - Management Council **KHASIM** - Executive Director - Nutrify Today
13:10 – 13:25	**From Pulse to Pattern : The Hidden Physics of Healing in Ayurveda** **DR. MANNAN GANDHI** - Managing Director - Ayurveda Clinic

13:30 – 14:30	**LUNCH BREAK**
14:30 - 14:40	**Introduction & Context Setting** **MANDIRA BEDI** - Wellness Expert
14:40 - 14:55	**THE MASTER FORMULATOR JURY – WINNER SELECTION** **DR. BALKUMAR MARTHI** - President - Nutrify Today Academy **DR. BAIDYANATH MISHRA** - Head R&D - Dabur India **DR. GANESH BAGLER** - Professor - Gastronomy at IIIT Delhi **DAVID FOREMAN** - Founder - Herbal Pharmacist **JOMY JOSE** - Chief Supply Chain Officer - Arjuna Natural
15:00 – 15:15	**Proof-Market Fit** **SHIVAM HINGORANI** - Founder - Ace Blend
PANEL DISCUSSION **From Prescription to Platform: How Doctor-Entrepreneurs Are Rewiring Consumer Healthcare**	
15:20 - 16:00	**MODERATOR** **DR. YASHAWANT KUMAR** - Founder & CEO - Benefic Nutrition **PANELISTS** **DR. ABHINAV GUPTA** - Founder - Curavitalis **DR. RAMESHWAR KUMAR** - Founder - LeDawai
16:05 : 16:10	**Innovation Ingredient** **DR. BINU T. KURUVILLA** - Chief Innovation Officer - Arjuna Naturals Pvt. Ltd.
16:15 : 16:20	**Innovation Ingredient** **TAHIRA HS** - Chief of Research & Development - Green Space Herbs
16:25 - 16:35	**Distribution Is Destiny: How Startups Can Crack Market Access, Quick Commerce and Global Scale** **SUMIT ANAND** - Founder - iNAMO
PANEL DISCUSSION **From Lived Experience to Scaled Health Brands: How Women Founders Are Building the New Consumer Wellness Economy**	
16:40 - 17:20	**MODERATOR** **AMY SUMMERS** - Founder & President, Pitch Publicity® & INICIVOX® **PANELISTS** **TAMANNA SINGH** - Founder - Menoveda **ANUSHA BHUSHAN** - Founder - Sloom Labs **DR. SNEHA REDDY** - Founder - Natal and Her **YASHNA GARG** - Founder - Yugap Nutrition
PANEL DISCUSSION **From Product to Power Brand: What It Really Takes to Scale a Nutra Startup**	
17:25 - 18:05	**MODERATOR** **JOZIE HABIB** - Founder - Mumma Zone **PANELISTS** **SATYADEV TIWARI** - Managing Director - Vol Sante **KARTHIK SWAMINATHAN** - Managing Director & CEO - Truhealthy Wellness Pvt. Ltd **PARTH AMIN** - Founder - Decode Age **ANKUR KHAITAN** - Fireside ventures

PANEL DISCUSSION **Can CDMOs Co-Create the Next Nutra Brands**	
11:00 - 11:40	**MODERATOR** **DANIELLE MASTERSON** - NutraIngredients **PANELISTS** **SURESH GARG** - CMD & Founder - Zeon Lifesciences Ltd **SUBBA RAO** - Managing Director - Crius Lifesciences **SRIRAM SUBRAMANIUM** - Executive Director & Board Member - Zuventus Healthcare **ABHIJIT BASAK** - VP- BD - Alkem Laboratories
PANEL DISCUSSION **Is the Next Nutra Unicorn Born on the Shelf or the Algorithm**	
11:50 - 12:30	**SOM DUTTA SINGH** - Founder - Assiduus **DANIELLE MASTERSON** - NutraIngredients
PANEL DISCUSSION **Can Herbal Wisdom Meet Medical Nutrition**	
12:40 - 13:20	**MODERATOR** **SAMEER JOSHI** - COO - Cepham inc **PANELISTS** **RAJAT SAHNI** - VDS Lead - Himalaya Wellness **DR. NANDAN JOSHI** - Head Medical Affairs - Dr Reddys - Nestle Health Science **DR. NAMITA SRIVASTAVA** - Head Regulatory - BrightLifecare
PANEL DISCUSSION **TRUST AT SCALE: Clinician-Led Nutraceuticals in the AI & GLP-1 Era**	
15:00 - 15:40	**MODERATOR** **DAVID FOREMAN** - Industry leader and Influencer - USA **PANELISTS** **DR. DANA COHEN** - Integrative Medicine Healthcare Professional **DR. JAMES MUNRO** - Healthcare Professional **DR. NANDAN JOSHI** - Head Medical Affairs - Dr Reddys-Nestle Health Science
PANEL DISCUSSION **Boardroom to BOM: Can AI Orchestrate Nutra Innovation at Enterprise Scale**	
15:50 - 16:30	**MODERATOR** **DANIELLE MASTERSON** - NutraIngredients **PANELISTS** **DR. ANAND SWAROOP** - Co-Author - AI Applications in healthcare **AMIT SRIVASTAVA** - Architect - Nutrify Genie AI
PANEL DISCUSSION **Can Wellness Brands Build Wealth at the Farm Gate**	
16:45 - 17:15	**MODERATOR** **DANIELLE MASTERSON** - NutraIngredients **PANELISTS** **MICHELLE MARTIN** - President & COO - Cypress Minerals **SAMEER JOSHI** - COO - Cepham Inc

ASHWAGANDHA'S LEAF WAR

Is India Protecting a Heritage Herb—or Shrinking Its Own Wellness Goldmine?

There comes a moment in every high-growth ingredient's life when it stops being merely a plant and becomes a balance sheet. Ashwagandha has reached that moment.

For decades, the herb sat comfortably in India's Ayurvedic imagination: ancient, earthy, stress-relieving, sleep-supporting, masculine, restorative, almost mythic. Then global wellness discovered it. What was once sold as a traditional rasayana became a capsule, a gummy, a protein-stack add-on, a sleep formula, a testosterone-support blend, a nervous-system adaptogen, and a branded extract with international margins. Ashwagandha moved from the vaidya's shelf to the global nutraceutical aisle.

And suddenly, the most uncomfortable question emerged: who owns the definition of Ashwagandha?

Is it the classical text? The regulator? The farmer? The exporter? The branded extract company? The toxicologist? The court? Or the consumer who simply wants to sleep better?

India's current Ashwagandha dispute is being framed as a safety issue. That is partly true. But it is also a market-structure issue, a regulatory-process issue, a farmer-economics issue, a global-trust issue, and, quite possibly, an intra-industry positioning battle hiding under the respectable language of science.

The immediate trigger is clear. The Ministry of AYUSH's April 2026 directive instructed industry to "use only Ashwagandha roots" in AYUSH drugs and products, while stating that the use of leaves in crude, extract, or any other form is "strictly prohibited." FSSAI followed with an advisory asking food business operators not to use Ashwagandha leaves in food products. On paper, this appears precise. In market reality, it is explosive.

The government has not banned Ashwagandha. That distinction matters. The root remains permissible. The war is over the leaf, aerial parts, and root-plus-leaf or whole-plant extracts. But in the export market, nuance travels poorly. Once a buyer hears "India restricts Ashwagandha leaves," the entire category can begin to smell of regulatory uncertainty.

That is why this controversy has created such commotion. It is not because one botanical leaf has suddenly become glamorous. It is because Ashwagandha is now a serious commercial asset. A recent syndicated industry release placed India's Ashwagandha supplements market at around USD 300 million in 2024, projected to reach USD 710 million by 2033. Those numbers are not just supplement-market trivia.

They describe a rising value chain of farmers, processors, extractors, contract manufacturers, clinical researchers, exporters, and global wellness brands.

When a regulator redraws the boundary of a plant, it also redraws the profit pool.

Root-only companies gain comfort. Leaf-based and whole-plant players face reformulation, inventory risk, export hesitation, and possible reputational damage. Farmers who could monetize aerial biomass may lose value. Exporters fear that foreign buyers will read Indian caution as Indian confession. Branded extract companies begin defending their chemistry. And competitors, inevitably, begin whispering.

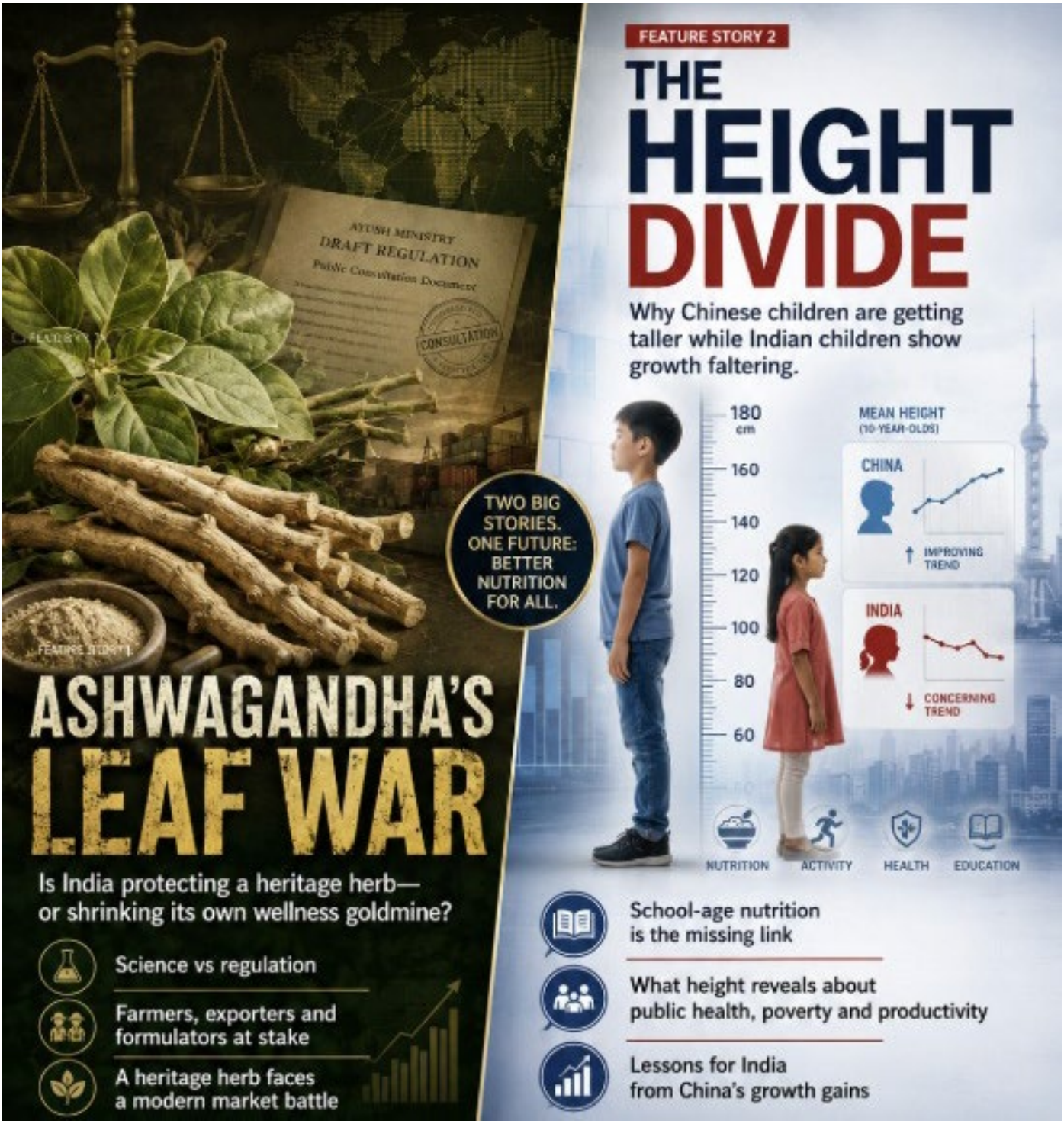
This is where the spicy question must be asked without turning reckless: is this an assassination of Ashwagandha?

No. Not of Ashwagandha as a herb. But it could become a commercial amputation of part of the Ashwagandha economy if handled bluntly.

The government is not irrational to examine safety. Ashwagandha is not spinach. It contains bioactive compounds. Different plant parts may have different concentrations of withanolides, including Withaferin-A. International pharmacovigilance reports have raised concerns about liver injury in users of Ashwagandha-containing products. The Netherlands Pharmacovigilance Centre Lareb reported additional liver-toxicity cases after an earlier warning. Australia's Therapeutic Goods Administration has also warned consumers about possible gastrointestinal events and very rare liver injury. The U.S. National Institutes of Health notes that Ashwagandha appears well tolerated for short-term use, but long-term safety is not well established and liver-function concerns have been reported.

A serious regulator cannot ignore such signals. But a serious regulator also cannot treat every signal as a conviction.

The crucial question is not: "Is there any adverse event anywhere?" In nutraceuticals, that question is too crude. The better questions are: Which product? Which plant part? What dose? What extraction ratio? What Withaferin-A profile? What contaminant testing? Was it a single-ingredient product or a cocktail? Was the plant part verified? Was the consumer already vulnerable—liver disease, thyroid disorder, pregnancy, medication use? Was the product bought online from an unregulated channel? Was the label honest?



This is where the present debate becomes deeply uncomfortable. Some international safety discussions involve "products containing Ashwagandha," not necessarily verified Ashwagandha leaf products. Some herbal products may contain multiple ingredients, undeclared substances, or contaminants. That does not exonerate Ashwagandha. But it does prevent a scientifically clean indictment of the leaf as a class.

Industry, for its part, is also not a neutral saint in this story. The latest public push for a "science-led, product-specific review" comes through a syndicated/advertorial route, not an independent investigative report. That does not make the arguments false, but it means readers must recognize the framing: this is an industry case being made in public, not a judicial finding and not a regulatory conclusion.

Still, the industry's core question is valid: why a broad restriction when the problem may be product-specific?

The chronology raises legitimate process concerns. The 2021 AYUSH advisory argued that leaves were not expressly mentioned in classical texts and needed more safety and efficacy study. Industry bodies such as HADSA and SHEFEXIL pushed back and submitted evidence. A stakeholder panel or expert process was discussed. Yet the uploaded industry chronology states that the expert committee report was not made public or shared with industry stakeholders.

It also claims there is a list of 62 scientific references supporting leaf or whole-plant use, including in-vitro, animal, and human clinical research,

and says no India-specific pharmacovigilance signal has been identified through the national AYUSH safety network for leaf and aerial parts.

That is not proof that leaves are safe in every form. But it is enough to demand sunlight.

Regulation without transparency creates suspicion. In a sector already full of legacy claims, half-science, brand wars, and export anxieties, opacity becomes oxygen for conspiracy. If the expert report is persuasive, publish it. If the concern is Withaferin-A, specify acceptable thresholds. If high-potency proprietary extracts are the problem, name the risk parameters. If labeling is weak, mandate plant-part disclosure. If adverse-event reporting is thin, create a compulsory pharmacovigilance system for nutraceutical-grade botanicals. But do not make the entire market guess the science behind the sword.

The Karnataka High Court's interim stay for certain petitioners adds another layer. The court has not declared Ashwagandha leaves safe. It has not invalidated consumer-safety concerns. It has simply given interim relief, limited to petitioners, while the legal challenge proceeds. That is a procedural pause, not a scientific verdict. But the very fact that companies have gone to court shows how high the stakes have become.

This is now a boardroom issue.

Every CEO in India's nutraceutical and herbal-export space should study this controversy carefully. Today it is Ashwagandha leaf. Tomorrow it could be another botanical, another extract, another molecule, another part of a plant that was once treated casually but has become commercially valuable. India cannot build a global nutraceutical industry on regulatory surprise. Nor can it build one on romantic heritage claims unsupported by modern safety discipline.

The real path forward is not prohibition versus permissiveness. It is classification.

Root, leaf, aerial parts, root-plus-leaf extracts, standardized extracts, high-Withaferin-A extracts, fermented extracts, and multi-ingredient formulas should not be treated as if they are the same commercial object. They are different risk profiles.

They deserve different standards. India should mandate clear plant-part labeling, extraction-ratio disclosure, withanolide and Withaferin-A specifications, contaminant testing, dosage limits, contraindication warnings, and adverse-event reporting. Products for sleep, stress, hormone support, sports nutrition, and liver-vulnerable consumers should not be regulated with the same lazy template.

This controversy is not a reason to weaken regulation. It is an opportunity to upgrade it.

Ashwagandha is not just an ingredient. Dr. J. L. N. Sastry called it "a torchbearer of Ayurveda." That is emotionally true, but commercially incomplete. A torchbearer can illuminate or burn. The job of regulation is to prevent burning without extinguishing the light.

The sharper truth is this: once a heritage botanical becomes a global growth asset, every molecule develops a lobby. The leaf has become political because it is economic. The root has become regulatory because it is traditional. Safety has become strategy because trust is the ultimate export currency.

India should not allow Ashwagandha to be assassinated by alarmism. Nor should it allow Ashwagandha to be defended by nostalgia. The winner in this dispute should not be the loudest industry camp, the most cautious bureaucrat, or the cleverest lawyer. The winner should be evidence ; published, interrogated, product-specific, and enforceable.

If India handles this with blunt prohibition, it exports fear. If it handles this with loose heritage rhetoric, it imports mistrust. But if it handles this with transparent science, India can turn a messy controversy into the world's most credible botanical-regulation model.

Ashwagandha is having its stress test. The irony is almost too perfect.

WHY CHINESE CHILDREN ARE GETTING TALLER WHILE INDIAN CHILDREN SHOW GROWTH FALTERING : A REPORT

NutrifyToday Market Research Bureau

The strongest scientific conclusion is not that "all Indian kids are shrinking." The more precise conclusion is:

China has achieved a broad secular height gain among children and adolescents. India has made some official under-5 nutrition progress, but the gains are too slow, uneven, and vulnerable to shocks; several studies show cohort-level height stagnation or decline among Indian young adults and pandemic-era child growth setbacks.**

Height is a cumulative biological audit of food quality, maternal health, infections, sanitation, health care, puberty, and poverty from conception through adolescence. It is not explained mainly by genetics at the population level. The Lancet/NCD-RisC study says height and BMI in school-aged children reflect nutrition and living environment, and low height/low BMI are linked with morbidity, cognition, education, and later productivity. It also concludes nutrition policy must extend through the full school-age and adolescent period, not only under age five.

1. What the data actually says

China: strong secular height gain

The NCD-RisC/Lancet pooled analysis used 2,181 population-based studies and 65 million participants to estimate height and BMI for ages 5–19 across countries. It found that from 1985 to 2019, China had among the world's largest height gains: **largest gain for boys and third largest for girls among emerging economies. At age 19, China's mean height gains were larger than India's by 3.5 cm for boys and 2.3 cm for girls.

China's recent official data also points in the same direction: the National Health Commission announced in 2025 that the average height of Chinese children aged 6–17 rose by 2.1 cm for boys and 2.2 cm for girls over five years.

A study of eight Chinese national student health surveys from 1985–2019 found that height, weight, and BMI increased significantly** among Chinese adolescents aged 13–18. The warning is that cardiorespiratory fitness fell, so China's success is not "perfect nutrition"; it is taller children with a rising obesity/fitness challenge.

India: official under-5 improvement, but still severe growth failure

India's official NFHS-5 comparison shows improvement from NFHS-4: under-5 stunting fell from 38.4% to 35.5%, wasting from 21.0% to 19.3%, and underweight from 35.8% to 32.1%. So at the national under-5 level, India is not uniformly "shrinking."

But the burden remains very high: roughly one in three Indian children under five is stunted. The 2025 Poshan Tracker, while not directly comparable to NFHS because it covers Anganwadi-enrolled and measured children, reported 6.44 crore children under five measured, with 33% stunted, 14% underweight, and 5% wasted.

India: "shrinking" signal appears in cohorts and shocks

A PLOS One analysis of Indian adult height using NFHS-II, III, and IV reported worrying cohort patterns. Between NFHS-III and NFHS-IV, women aged 15–25 had a small decline of 0.12 cm, poorest women declined 0.57 cm, Scheduled Tribe women aged 15–25 declined 0.42 cm, and men declined more sharply: 1.10 cm among men aged 15–25 and 0.86 cm among men aged 26–50. The authors argued that the decline demands urgent inquiry into non-genetic determinants.

A 2024 Communications Medicine analysis of NFHS-5 child data found that children measured after the COVID shock had worse anthropometric outcomes. In matched comparisons, post-COVID children surveyed in 2020 had 1.6% higher stunting, 4.6% higher underweight, 2.4% higher wasting, and lower height-for-age z-scores than similar pre-COVID children; the poorest households were most affected.

Interpretation: China is experiencing a population-level height catch-up. India's problem is not simple national shrinkage; it is incomplete catch-up plus pockets of true height decline among vulnerable cohorts, amplified by poverty, maternal nutrition, infections, diet quality, sanitation, and system shocks.

2. The biological model: how children become taller or remain stunted

The scientific model is:

Final height = genetic potential × environmental realization.

At the individual level, genetics matters. At the population level, rapid changes over one or two generations are overwhelmingly environmental. The Lancet study explicitly notes that genetics explains only a small part of differences across countries or changes over time; nutrition, pregnancy exposures, puberty, protein, fats, micronutrients, infections, water, sanitation, and health care are key pathways.

A useful way to think about child height:

Driver	How it affects height
Maternal nutrition	Determines fetal growth, birthweight, birth length, and early growth reserve.
Protein quality	Supports linear growth, muscle, immune function, and growth-plate biology.
Micronutrients	Iron, zinc, vitamin A, vitamin D, B12, folate, iodine, calcium affect growth, appetite, immunity, bone development, and cognition.
Infection burden	Repeated diarrhoea, worms, respiratory infections, and chronic inflammation divert nutrients away from growth.
Sanitation	Poor WASH causes enteric infection and environmental enteric dysfunction, reducing nutrient absorption.
Puberty timing	Undernutrition can delay or blunt adolescent growth spurt; obesity can alter puberty timing.
School-age nutrition	Catch-up growth is possible after age five, but only if food, health, sleep, and activity improve.

This is why China's height gains are not a mystery: the country improved several drivers at once. India has improved some, but not enough, and not consistently across states, castes, tribes, gender, and income groups.

3. Why Chinese children are getting taller

3.1 Diet quantity and protein quality improved

Food supply and protein availability rose sharply in China over decades. FAOSTAT/Our World in Data tracks protein supply as grams per person per day and defines it as food available at the end of the supply chain, with FAO food-balance-sheet data covering 1961–2023. This is a national food-system signal, not a direct individual intake measure, but it captures the macro shift toward more abundant diets. ([Our World in Data][7])

Mechanistically, this matters because height growth requires not just calories but **high-quality protein, essential fats, calcium, zinc, iron, B12, vitamin D, vitamin A, and iodine**.

The Lancet analysis identifies protein, fats, micronutrients, infections, water, sanitation, and care as interacting determinants of height trajectories.

3.2 China invested in school-age nutrition, not only infancy

China's Nutrition Improvement Program for rural compulsory education is a major part of the story. By the end of 2021, the rural student nutrition program had reportedly benefited **350 million students**. In program regions, average heights of male and female students rose **4.2 cm and 4.1 cm from 2012 to 2021**, and delayed growth in rural students in central and western China fell to **2.5%**, down **5.5 percentage points** from 2012. ([People's Daily Online][8])

Academic evidence also supports school feeding as a height intervention. A study of China's large rural school meal program found that participation was associated with **higher height-for-age z-scores** among students aged 6–16, although effects were weaker among the most vulnerable children, which is a useful design warning for India. ([ScienceDirect][9])

3.3 China targeted rural inequality

China's school nutrition intervention focused on rural and underdeveloped counties. This matters because secular height gains are strongest when the bottom of the distribution improves. When rural children move from chronic hunger, poor protein quality, and low micronutrient intake to reliable meals, the national average height rises.

3.4 Health, sanitation, and surveillance improved together

China's growth gains are not only a meal story. They are also a public-health story: vaccination, primary care, poverty reduction, school monitoring, sanitation, and diet diversification. The eight-survey China student health evidence shows height, weight, and BMI rose significantly over 34 years, and the authors identify nutritional status, biological maturity, physical activity, and national policies as likely influences. ([Frontiers][2])

3.5 China's warning: taller does not automatically mean healthier

China's adolescents are taller and heavier, but cardiorespiratory fitness declined substantially from 1985 to 2019. So India should not copy a "more calories at any cost" model. The target should be **taller, leaner, stronger children**, not a shift from stunting to obesity. ([Frontiers][2])

4. Why Indian children remain short or show cohort decline

4.1 India's under-5 stunting is still extremely high

Even after improvement, **35.5% under-5 stunting** means chronic growth failure remains mass-scale. Stunting is not just short height; it is a marker of cumulative nutritional, infectious, and social deprivation. The Lancet evidence links low height and low BMI with impaired cognitive development, lower educational performance, and reduced later work productivity.

4.2 Maternal and adolescent nutrition are weak links

Indian child growth is intergenerational. Short, anemic, undernourished adolescent girls become mothers at nutritional disadvantage; their babies are more likely to be growth-restricted, and the cycle repeats.

NFHS-5 anemia prevalence is severe: **57.0% among women 15–49**, **59.1% among adolescent girls**, **52.2% among pregnant women**, and **67.1% among children 6–59 months**. ([Press Information Bureau][10])

The Comprehensive National Nutrition Survey found broad micronutrient gaps: vitamin A deficiency was **18% in preschool children**, vitamin D deficiency ranged **14–24%**, zinc deficiency reached **32% among adolescents**, vitamin B12 deficiency was **14% among preschoolers, 17% among school-age children, and 31% among adolescents**, and folate deficiency rose to **37% among adolescents**. ([Health Nutrition India][11])

4.3 Complementary feeding is the single biggest early-childhood food gap

NFHS-5-based data show only **10.8%** of Indian children aged 6–23 months receive a minimum acceptable diet; UNICEF India similarly reports that only about **11%** receive a diet meeting both diversity and frequency requirements. ([Health Nutrition India][12])

This means most Indian toddlers are not getting enough dietary diversity at the exact age when growth velocity, brain development, immunity, and gut maturation are most sensitive. This is not merely a poverty issue; it is also a counselling, food-system, maternal-time, cultural, and program-delivery issue.

4.4 India's diet problem is quality, not only calories

India has improved foodgrain availability and safety nets, but child growth requires more than rice and wheat. The biologically relevant gap is **protein quality plus micronutrient density**: dairy, eggs, pulses, legumes, nuts, oilseeds, green leafy vegetables, fruits, fortified foods, and, where culturally acceptable, fish/meat. A cereal-heavy diet can meet satiety but still fail linear growth.

4.5 Sanitation and infection suppress growth

India's height problem cannot be solved by food alone. Poor sanitation and unsafe water increase diarrhoea, worm burden, and environmental enteric dysfunction, reducing nutrient absorption and increasing inflammation.

A PLOS One district-level analysis found that after adjusting for socioeconomic status, maternal education, and calorie availability, a **10% increase in open defecation was associated with a 0.7 percentage-point increase in stunting and severe stunting**; open defecation differences explained **35–55% of the stunting gap** between low- and high-performing districts in the study. ([PLOS][13])

A JAMA Network Open study of **134,882 Indian children and adolescents aged 0–18** found poor sanitation—open defecation and lack of boiled/filtered water—was associated with lower height-for-age z-scores across childhood and adolescence. It concluded that improved sanitation may benefit growth even beyond age five. ([JAMA Network][14])

4.6 India underinvests in the "next 7,000 days"

Global nutrition policy often emphasizes conception to age two. That is necessary, but insufficient. Adolescence is a second major growth window. The PLOS adult-height study notes that adolescence is a period

in which children gain around **20% of adult height**, and argues India must examine adolescent nutrition, including for boys, not only girls. ([PLOS][5])

India's Mid-Day Meal program shows the importance of school-age nutrition. A Nature Communications study found that children born to mothers with full exposure to India's Mid-Day Meal scheme had **0.40 SD higher height-for-age z-scores**, with stronger associations in low socioeconomic strata. The study estimated MDM was associated with **13–32% of India's HAZ improvement from 2006 to 2016**. ([Nature][15])

The implication is powerful: school meals can improve not only today's children but also tomorrow's children through better-nourished and better-educated future mothers.

4.7 COVID exposed system fragility

The pandemic disrupted health care, food systems, income, school meals, Anganwadi services, and immunization. The 2024 NFHS-5 analysis found worse post-COVID child growth outcomes, especially among poorer households. This supports the idea that India's child growth gains are fragile and can be reversed by shocks. ([Nature][6])

5. Strategic solution for India: a "0–19 Linear Growth Mission"

India should not frame this only as "malnutrition reduction." It should frame it as national human-capital growth: height, lean mass, cognition, immunity, school performance, and productivity.

The mission should cover preconception to adolescence, with district-level execution.

Pillar 1: Build a national child-growth intelligence system

India measures weight far more actively than linear growth. That biases the system toward treating acute undernutrition but missing chronic height faltering.

Recommended actions:

1. Measure length/height-for-age, weight-for-age, weight-for-height/BMI-for-age for every child from Anganwadi through school.
2. Create a district dashboard tracking HAZ, stunting, wasting, underweight, anaemia, diet diversity, school meal coverage, sanitation, and infection burden.
3. Audit Poshan Tracker measurements with independent third-party anthropometry because height measurement errors are common.
4. Flag children with falling HAZ trajectory, not only those already below -2 SD.

The key metric should shift from "food distributed" to centimeters of healthy linear growth protected.

Pillar 2: Treat adolescent girls and boys as future parents

India's intervention window should start before pregnancy. The biological cycle is: adolescent undernutrition → short/anemic mother → low-birthweight or growth-restricted baby → stunted child → short adult.

Recommended package:

* Weekly iron-folic acid with adherence tracking.
* Deworming and infection management.
* B12, folate, zinc, vitamin D/calcium strategies in high-deficiency geographies.
* Menstrual health and anemia screening in schools.
* Delay early marriage and early pregnancy.
* Add adolescent boys to nutrition programming, because male cohort height decline is also documented.

Pillar 3: Fix the first 1,000 days with food quality, not just counselling

The first 1,000 days remain non-negotiable, but India's weak point is complementary feeding from 6–23 months.

Recommended actions:

* Make minimum acceptable diet the central KPI for every district.
* Move from cereal-heavy take-home rations to protein- and micronutrient-dense foods.
* Provide locally acceptable combinations: egg, milk/curd/paneer, pulses, soy, chana, peanuts, sesame, millets, vegetables, fruits, and fortified staples.
* Use home visits to teach responsive feeding, meal frequency, handwashing, and illness feeding.
* Track children 6–23 months separately because they are the highest-return group.

A realistic national goal: raise minimum acceptable diet from roughly 11% to 40% by 2030, with the poorest districts monitored monthly.

Pillar 4: Upgrade Anganwadi and school meals into growth meals

India already has the platforms: ICDS/Anganwadi and PM-POSHAN. The issue is nutritional quality, reliability, palatability, and monitoring.

Recommended design:

Daily protein anchor: egg, milk, curd, paneer, soy, dal, chana, or peanut/sesame-based alternatives.
Micronutrient anchor: green leafy vegetables, vitamin-A foods, fortified rice where used, double-fortified salt, and region-specific fortification.

Fat quality: small amounts of healthy oils, nuts, or seeds to improve energy density for young children.

Menu diversity: rotate foods to avoid monotony and improve intake.

Local procurement: dairy cooperatives, women's SHGs, FPOs, poultry clusters, pulse producers.

Outcome audit: height velocity, anemia, attendance, and learning, not only meal counts.

India should learn from China's rural school nutrition program: reliable meals for school-age children can shift height trajectories, especially when targeted to poorer regions.

Pillar 5: Attack sanitation as a growth intervention

To solve height, India must treat sanitation as nutrition. The priority is not just toilet construction but **toilet use, safe child-faeces disposal, faecal-sludge management, clean water, and handwashing**.

Recommended actions:

* Target blocks with high stunting plus high open-defecation exposure.
* Monitor village-level toilet use, not just toilet ownership.
* Add water quality testing and chlorination/filtration in schools and Anganwadis.
* Pair nutrition counselling with hygiene and diarrhoea prevention.
* Treat repeated diarrhoea and worm infections as growth-failure risks.

The sanitation evidence is too strong to ignore: open defecation and unsafe water are repeatedly associated with lower height-for-age in India. ([PLOS][13])

Pillar 6: Protect school-age catch-up growth

India should treat ages **5–19** as a second opportunity, not a lost cause. The Lancet study explicitly argues for nutrition and health interventions from birth through adolescence, including school meals, affordable nutritious foods, clean water, sanitation, and facilities for sports.

Recommended actions:

* Annual height, weight, BMI-for-age, and anemia screening in schools.
* Upgrade PM-POSHAN through class X, at least in high-burden districts.
* Add structured physical activity to prevent the China-style trade-off of taller but less fit children.
* Provide targeted nutrition for thin adolescents and obesity prevention for overweight adolescents.
* Link school health records with primary health centres for follow-up.

Pillar 7: Use district-level precision, not one national menu

India's stunting problem is geographically and socially clustered. Scheduled Tribes, poorer households, rural belts, some high-fertility states, and food-insecure districts require stronger packages.

Recommended segmentation:

1. High stunting + high wasting districts: emergency child growth package, SAM/MAM management, protein-dense rations.
2. High stunting + low wasting districts: chronic diet diversity, WASH, maternal/adolescent intervention.
3. High anemia districts: IFA adherence, deworming, B12/folate/iron diagnostics, diet diversification.
4. Tribal and remote districts: local food procurement, mobile health teams, culturally appropriate menus.
5. Urban slums: creches, safe water, sanitation, migrant food security, Anganwadi access.

Pillar 8: Make it an economic productivity mission

Low height and low BMI impair cognition, education, and future work productivity. India should therefore treat linear growth as a national economic indicator, not only a health indicator.

Suggested national targets:

Indicator	Current reference point	Proposed target
Under-5 stunting	35.5% in NFHS-5	<25% by 2030; <15% by 2040
Minimum acceptable diet, 6-23 months	~10.8-11%	>40% by 2030
Anemia, children 6-59 months	67.1%	<40% by 2030
Anemia, adolescent girls	59.1%	<30% by 2030
School-age height monitoring	fragmented	annual universal measurement
High-burden district meal quality	variable	protein anchor daily

These are proposed operational targets, not official government targets.

6. The policy package India should launch first

First 100 days

1. Select the **200 highest-burden districts** using stunting, anemia, MAD, sanitation, poverty, and tribal/rural indicators.
2. Conduct independent height/weight validation in Anganwadis and schools.
3. Launch a **6–23 month diet rescue campaign**: counselling plus actual food access.
4. Add a daily protein anchor to Anganwadi hot meals and school meals in pilot districts.
5. Fix IFA, deworming, vitamin A, ORS-zinc, and growth-monitoring stockouts.
6. Identify children with falling height velocity, not only severe acute malnutrition.
7. Create a district "growth war room" chaired by the DM with health, WCD, education, water, sanitation, agriculture, and food departments.

First 12 months

1. Reform take-home ration quality: fewer empty calories, more protein and micronutrients.
2. Publish district dashboards for HAZ, anemia, MAD, WASH, and meal quality.
3. Expand adolescent nutrition to boys and girls.
4. Use women's SHGs and local producers for eggs, dairy, pulses, vegetables, and fortified foods.
5. Introduce independent meal-quality audits: calories, protein, micronutrients, palatability, consumption, leakage.
6. Pair every high-stunting block with safe-water and sanitation interventions.

Three-year plan

1. Universal annual school anthropometry from class I to XII.
2. PM-POSHAN upgrade in high-burden districts through secondary school.
3. State-specific food baskets: dairy-heavy in some regions, egg/fish where acceptable, pulses/soy/chana/peanut/sesame in vegetarian areas.
4. Routine anemia and micronutrient surveillance using sentinel districts.
5. Nutrition-sensitive agriculture: pulses, millets, oilseeds, vegetables, fruits, dairy, eggs.
6. Build a child-growth research network to evaluate interventions through quasi-experimental rollouts and district RCTs.

7. Bottom line

China's children are growing taller because multiple systems improved together: food supply, protein quality, rural school meals, poverty reduction, health care, sanitation, and monitoring. India has improved some child nutrition indicators, but the improvement is too slow and uneven; India still has mass stunting, severe anemia, poor complementary feeding, micronutrient deficiency, sanitation-linked growth suppression, and weak adolescent nutrition.

The India solution is not a single supplement, not a single food, and not only a first-1,000-days campaign. It should be a 0–19 national linear-growth strategy: maternal nutrition, infant feeding, protein-rich public meals, micronutrient correction, sanitation, school-age catch-up, adolescent health, and hard district-level accountability.

NUTRA UZBEKISTAN: THE PREVENTIVE HEALTH LAUNCHPAD FOR CENTRAL ASIA AND THE CIS

NutrifyToday Market Research Bureau

Uzbekistan is no longer just an emerging Central Asian economy. It is becoming one of the region's most attractive preventive health and nutraceutical opportunities. For supplement companies, functional nutrition brands, pharmacy players and wellness investors, Uzbekistan offers a rare combination: a young population, rising consumption, strong pharmacy trust, growing digital commerce and strategic access to surrounding Central Asian and CIS markets.

The demographic opportunity is compelling. Uzbekistan has a population of more than 37–38 million, making it the largest population base in Central Asia. More than 55% of the population is under 30, while projections indicate the country could reach 41 million people by 2030 and nearly 51 million by 2050. This creates a long-term consumer base for preventive health, children's nutrition, women's wellness, sports nutrition, beauty supplements and healthy aging products.

The macroeconomic backdrop is also supportive. Uzbekistan's real GDP grew 7.7% in 2025, after 6.7% in 2024. Private consumption increased 9.2% in real terms, driven by higher wages and remittances, while national poverty declined from 8.9% in 2024 to 5.8% in 2025. For nutraceutical companies, this matters because supplement adoption usually accelerates when consumers move from basic healthcare spending toward preventive, lifestyle and self-care categories.

The pharmacy channel is already proving that health consumption is expanding. Retail pharmacy sales of medicines and food supplements reached approximately USD 2.0 billion in 2024. That represented 19% growth in local currency and 9.2% growth in dollar terms. Although total physical volume declined 4.9% to 614 million packs, food supplements showed growth in packages, indicating that supplements are behaving differently from the broader medicine category.

This is one of the strongest business signals in the market. Food supplement sales grew 32.4% in 2024, supported by new product launches, price growth and increasing consumption in packs. Imported food supplements increased their monetary share from 58% to 63%, while domestic products remained stronger in physical volume. This suggests a two-tier opportunity: premium international brands can win in urban pharmacy and e-commerce channels, while affordable formats will be necessary for national scale.

Tashkent should be the first commercial launchpad. The capital accounted for 31.3% of pharmacy sales of medicines and food supplements in 2024, reflecting stronger purchasing power, better pharmacy infrastructure and higher exposure to modern wellness trends. At the same time, regional expansion should not be ignored. Samarkand, Bukhara, Namangan, Andijan and the Fergana Valley can become important second-wave markets once brands establish trust in Tashkent.

Pharmacy remains the most important first channel. In Q1 2025, Uzbekistan's retail pharmaceutical market reached USD 520 million and 151 million packs. Chain pharmacies are also consolidating, with organized chains accounting for over 40% market share. This means nutraceutical companies should not enter Uzbekistan only as online sellers. The winning model will combine pharmacy listing, pharmacist education, distributor strength, healthcare professional engagement and strong in-store visibility.

Digital commerce is the second major growth channel. Uzbekistan's e-commerce market reached approximately USD 1.2 billion in 2024, equal to 3.8% of retail. Industry forecasts suggest e-commerce could reach USD 1.8–2.2 billion by 2027, with penetration rising to 9–11% of retail. Health and beauty currently represents only 2% of online purchasing, which makes it an underpenetrated white-space category for supplements, beauty nutrition, probiotics and sports nutrition.

The digital consumer base is already large. Uzbekistan recorded 32.7 million internet users in early 2025, representing nearly 89% internet penetration, along with 33.9 million mobile connections. Instagram alone had approximately 11.7 million users, with advertising reach growing more than 33% year-on-year. This supports a clear conclusion: the Uzbek supplement consumer may buy through pharmacies, but discovery will increasingly happen through mobile-first education, influencers, Telegram communities, Instagram reels and marketplace content.

Uzum is especially important for market access. The platform reported nearly 16 million monthly active users in 2024, representing almost 40% of the country's population. Its commerce GMV reached approximately USD 345 million, growing 2.4 times year-on-year. For supplement companies, Uzum and similar platforms can become the bridge between formal retail, digital payments, delivery and consumer analytics.

Category strategy should be built around real consumer needs, not imported wellness jargon. Uzbekistan's preventive health demand is likely to grow fastest in immunity, vitamin D, iron support, magnesium, omega-3, probiotics, collagen, women's wellness, children's nutrition, energy and sports recovery.

Public-health indicators further reinforce the need for responsible nutrition support. Anaemia affects approximately 59% of women, while around 1.5 million adults are estimated to be living with diabetes, with a large percentage still undiagnosed. This creates substantial demand for prevention-oriented wellness products and nutritional support solutions.

Uzbekistan can also become a regional base. Geographically, it is the only country bordering all four other Central Asian states ; Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan — while also connecting toward Afghanistan and broader Eurasian corridors. The country's total trade turnover reached nearly USD 66 billion in 2024. This makes Uzbekistan strategically useful for companies planning wider Central Asia and CIS expansion, especially through Russian and Uzbek language packaging, regional warehousing, local distributors and pharmacy-chain partnerships.

The recommended go-to-market strategy is clear.

First, register a focused portfolio of high-velocity SKUs: immunity, women's health, children's nutrition, magnesium, probiotics and beauty supplements.

Second, launch through Tashkent pharmacy chains and trusted distributors.

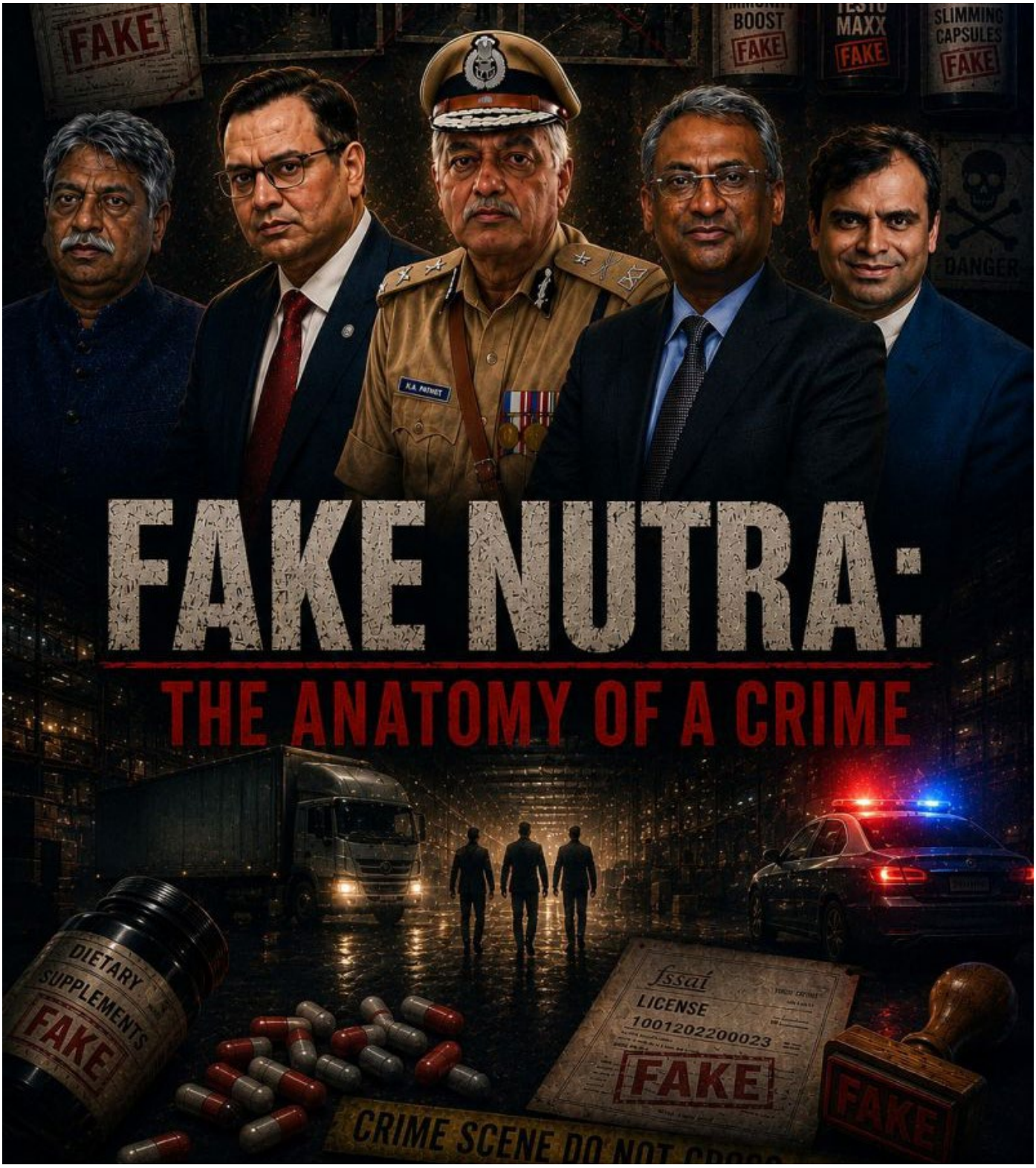
Third, build digital demand through Uzum, Telegram, Instagram and healthcare educators.

Fourth, expand into regional cities with affordable monthly packs and pharmacy-led awareness.

Fifth, use Uzbekistan as a test market for broader CIS communication, pricing and channel execution.

The companies that win in Uzbekistan will not be those with the largest catalogue. They will be those that combine scientific credibility, affordable pricing, pharmacy trust, digital education, local-language packaging and regional ambition.

For nutraceutical companies seeking the next growth frontier, Uzbekistan is no longer a peripheral opportunity. It is steadily emerging as one of the most promising preventive health gateways to Central Asia and the CIS.



A fake nutraceutical product rarely looks like a crime at first glance. It looks like a discount. A “doctor-recommended” claim. A glossy label. A QR code. A gym-trainer referral. A marketplace listing with thousands of positive reviews. A promise of faster immunity, faster fat loss, faster testosterone, faster recovery, faster youth.

The crime begins not when the bottle is opened, but when trust is manufactured.

This is why Fake Nutra: The Anatomy of a Crime is not just a dramatic title. It is perhaps the most accurate way to understand one of the fastest-growing hidden risks inside the modern wellness economy.

Every crime scene has a victim, a motive, a weapon, an escape route and evidence left behind.

In fake nutra, the victim is the consumer.
The motive is high profit with low fear.
The weapon is a copied label, false claim, fake licence, under-dosed formulation, hidden ingredient, counterfeit pack or duplicate product identity.

The escape route is fragmented accountability across manufacturers, contract packers, packaging printers, distributors, online sellers, gyms, retailers and marketplaces.

The timing of this discussion could not be more critical.

India's nutraceutical market is estimated to have crossed USD 30 billion in 2024 and is projected to continue growing at double-digit CAGR over the next five years. Preventive healthcare, sports nutrition, immunity support, beauty-from-within, gut health and healthy ageing are rapidly moving from niche categories into mainstream consumer behavior.

Online nutraceutical sales are also accelerating faster than traditional retail.

But every fast-growing industry creates two parallel economies: the responsible economy and the exploitative economy.

The responsible economy builds science, traceability, manufacturing quality and consumer trust.

The exploitative economy studies loopholes. Counterfeiters understand one important truth: consumers today are emotionally vulnerable to health promises. They are not only buying protein powders, botanicals or supplements. They are buying confidence, body image, longevity, performance, energy and hope.

That makes nutraceuticals uniquely vulnerable to claim manipulation.

A label can quickly move from "supports wellness" to "reverses diabetes."

From "supports immunity" to "guarantees disease prevention."

From "fitness support" to "muscle explosion."

The danger becomes even greater in categories where consumers expect fast visible outcomes: weight loss, sexual wellness, sports nutrition, testosterone boosters, performance products and anti-ageing solutions.

But the fake nutra problem has more than one face. Some products are fake. They may carry a fabricated brand, false manufacturer details, fake licence numbers, illegal claims or ingredients that do not match the label.

Some products are duplicate. These are often more dangerous because they imitate successful brands, copy packaging, replicate bottle shapes, misuse logos, clone label design, reproduce QR codes or mimic batch details.

To the consumer, the duplicate may appear identical to the original. The product may sit beside the genuine pack in a marketplace search result, gym retail counter or local supplement store.

This is where the crime becomes sophisticated.

A fake product sells deception.
A duplicate product steals identity.
An adulterated product hides danger.
A misbranded product manipulates information.
An under-dosed product cheats efficacy.
A contaminated product threatens health.

Together, they form the dark supply chain of fake nutrition.

Globally, regulators have repeatedly found supplements adulterated with undeclared pharmaceutical substances, stimulants and other risky ingredients.

This is where fake nutra stops becoming merely a compliance issue and starts becoming a public-health risk.

The modern counterfeit operator no longer resembles the old image of a small illegal factory hidden in an industrial lane.

Today's fake and duplicate supply-chain ecosystem can include anonymous online sellers, copied marketplace listings, duplicate labels, fake batch numbers, misused licences, parallel distributors, cross-border sourcing, packaging printers, social-media promotions, influencer-driven claims and rapidly disappearing digital storefronts.

In many cases, by the time enforcement begins, the seller identity has already vanished.

This is why the fake supplement economy behaves increasingly like organized supply-chain crime.

The challenge becomes even more complex because not every problematic product is identical.

Some products are counterfeit.
Some are duplicate.
Some are adulterated.
Some are fake.
Some are misbranded.
Some are merely non-compliant.
Some misuse claims aggressively while technically maintaining legal documentation.

That grey zone creates confusion for consumers and enforcement alike.

India's regulatory ecosystem is strengthening significantly, with increasing surveillance, risk-based inspections, food-testing infrastructure and e-commerce advisories.

But the scale of the market means that regulation alone cannot solve the problem.

The real issue is traceability.

Can a consumer verify who manufactured the product?

Whether the licence is genuine?
Whether the batch exists?
Whether the seller is authorized?
Whether the QR code is unique or cloned?
Whether the packaging is original or duplicated?
Whether the claims are approved?
Whether the formulation inside the bottle matches the label?

In most cases today, the answer remains uncertain.

And that uncertainty is exactly where fake and duplicate products survive.

The future of responsible nutraceuticals may depend on one important shift:

The bottle itself must become a witness.

The next phase of anti-counterfeit systems will likely involve product serialization, tamper evidence, batch traceability, seller authentication, consumer verification systems, AI-led anomaly detection, geo-tagged scan histories, packaging forensics and integrated marketplace intelligence.

A simple QR code may no longer be enough.
If the same QR code appears in multiple cities, across unrelated sellers or after the batch expiry period, the system should know. If a product is scanned in impossible distribution patterns, the system should know.
If a duplicate pack uses a cloned identity, the system should raise an alert before the consumer is harmed.
The industry must move from “displaying identity” to “proving identity.”

Equally important is the role of responsible industry itself.

The nutraceutical sector cannot position itself only as a victim of fake and duplicate products while ignoring channel indiscipline, uncontrolled discounting, unauthorized resellers and exaggerated marketing narratives.

Responsible brands, ingredient suppliers, contract manufacturers, packaging vendors, marketplaces and associations must increasingly function as intelligence partners.

Because fake and duplicate products do not survive only due to weak regulation.

They survive because somewhere in the system, silence becomes profitable.

The larger risk is reputational.

India is attempting to position itself as a global nutraceutical innovation and manufacturing hub. The country has strong strengths in Ayurveda, botanicals, functional ingredients, contract manufacturing and preventive healthcare science.

But trust is the currency that determines whether an industry scales globally.

One major counterfeit or duplicate-product crisis can damage years of scientific and export credibility.

This is why fake nutra is not simply a food-safety issue.

It is economic crime.
It is identity theft.
It is science crime.
It is trust crime.

And perhaps the most uncomfortable question facing the industry today is this:

When a consumer buys a health supplement, does the system actually know the truth behind the bottle?
Because in fake nutra, the truth is often hidden.
But the damage is very real.

SUSTAINABILITY: OUR RESPONSIBILITY, OUR FUTURE

We live in a world facing unprecedented environmental challenges. Climate change, deforestation, resource depletion, and pollution are not distant threats; they are present realities demanding urgent action. Sustainability is no longer a choice but a necessity for the survival of our planet and the well-being of future generations.

It's about responsible resource management, minimizing our environmental footprint, and fostering a balanced relationship with nature. Businesses, governments, and individuals all have a crucial role to play in this global shift towards a sustainable future. Embracing sustainable practices is not just an ethical imperative; it's also becoming an economic one, as consumers increasingly demand environmentally conscious products and services.

At K. Patel Phyto Extractions, we're not just discussing sustainability, we're actively implementing it. Our commitment begins with a deep respect for the origins of our materials. We work directly with farmers, promoting sustainable agricultural methods that minimize environmental impact and ensure the long-term health of the land.

We also believe in fair partnerships, ensuring farmers receive equitable compensation for their work. This secures the high quality of our extracts and empowers local communities, contributing directly to environmental preservation at the source.

Traceability is a cornerstone of our operations. We maintain rigorous systems to track our materials from origin to final product, ensuring transparency and accountability. This guarantees the safety and quality of our extracts and builds trust with our customers. Beyond sourcing, we are dedicated to minimizing our environmental footprint. We've invested in renewable energy, including solar panel installations to power our facilities.

We also prioritize responsible water management, implementing strategies to minimize consumption. Furthermore, we employ efficient waste management processes to reduce waste and promote recycling. We are committed to supporting environmental awareness and education within our organization and the wider community. At K. Patel Phyto Extractions, we don't just envision a sustainable future; we're building it, one responsible step at a time.

VIRAJ PATEL

Joint Managing Director,
K. Patel Phyto Extractions

BEYOND A SPICE: CURCUMIN'S EMERGING ROLE IN MODERN CANCER THERAPY

NutrifyToday Market Research Bureau

Curcumin, the active compound in turmeric (Curcuma longa), has evolved from a traditional anti-inflammatory to a promising candidate in cancer research. Earlier studies showed its ability to inhibit tumor growth, metastasis, and key signaling pathways such as NF-□B and PI3K/Akt. Today, research highlights more advanced mechanisms.

Curcumin can induce ferroptosis, an iron-dependent form of cell death effective against resistant tumors. It also enhances immune response by increasing tumor-fighting CD8□ T cells and modifying the tumor microenvironment. In cancers like colorectal cancer, it has demonstrated both tumor suppression and immune activation.

A major limitation of curcumin has been its poor bioavailability. However, advances in nanotechnology such as nano-encapsulation, liposomal, and nanomicellar formulations are improving its stability, absorption, and tumor targeting. These innovations also enable theranostics, combining treatment with real-time tumor imaging for more precise care.

Curcumin is now being evaluated in clinical trials for cancers including cervical and colorectal cancer, both as a standalone and adjunct therapy. It also shows potential in preventing precancerous conditions.

With a strong safety profile but limited large-scale trials, curcumin's future lies in improved delivery systems and combination therapies. It is rapidly transitioning from a traditional remedy to a scientifically validated tool in modern oncology.

DEBJIT GHOSH

Research Consultant
Green space herb

OUR PARTNERS

Co-Presented By
Green Space Herbs

Powered By
Arjuna Natural

Co-Powered By
ASSIDUUS GLOBAL

Co-Powered By
ZEON A Promise of Good Health

Co-Powered By
Atomin Innovations Group
Molecules Next Gen Ingredients

Lanyard Partner
Crius Group

Associate Partner
BIOAXION INNOVATIONS

Associate Partner
KP Authentic Botanical Extracts
K. PATEL PHYTO EXTRACTIONS

Hydration Partner
ReHydr8 Natural Spring Water

Social Responsibility Partner
A Thousand Plus

Industry Body Partner
IPA Innovation. Quality. Global Reach.

Compliance Intelligence Partner
Lex AVA Partners LLP

Market Insight Partner
Brought to you by NutraIngredients

Nutra Instant Commerce Partner
inAmo

Responsible Nutrition Partner
Since 1930
Himalaya Wellness Company

Industry Body Partner (OTC)
OPPI
Organisation of Pharmaceutical Producers of India

Industry Body Partner
HADSA
Health Foods and Dietary Supplements Association

SME Advancement Partner
CASMB

Innovation Partner
NRDC
National Research Development Corporation

Academic Partner
Centurion University

Media Partner
EXPRESS PHARMA
India's Foremost Pharma & Biotech Magazine

nutrify today®

nutrify today ACADEMY®
Nutra Upskill Partner

GET INSIGHTS OF ONGOING TRENDS IN NUTRACEUTICALS AND INNOVATIONS AND WORK TOWARDS ACHIEVING A COMPETITIVE ADVANTAGE IN NUTRACEUTICAL INDUSTRY. LEARN FROM GLOBAL LEADERS AND EXPERTS FROM THE INDUSTRY.

Duration: 3 months

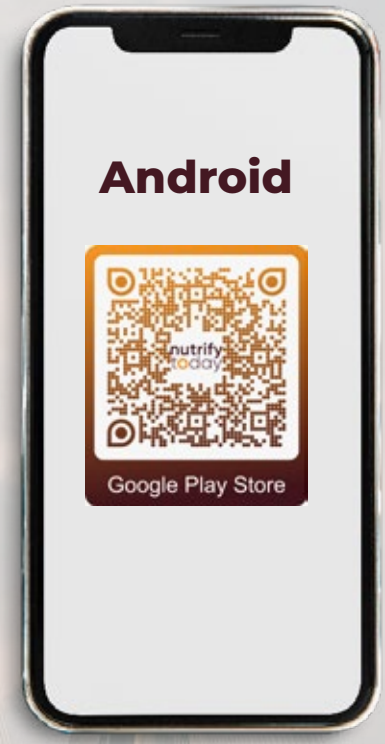
For the First 50 Registrations

- Full Course: Rs. 2499
- Single Module: Rs. 2499
- 1 Short Video: Rs. 2499

OTC MARKETING MANAGEMENT	NEW PRODUCT DEVELOPMENT & COMMERCIALIZATION	APPLIED PSYCHOBIOTICS – A NEW PROMISE IN NEUROPSYCHIATRY
INDIAN REGULATORY SYSTEM	APPLIED PROBIOTICS FOR FOOD TECHNOLOGY & PHARMACEUTICALS	PLANT AUDIT AND PRODUCT REGISTRATION IN NUTRACEUTICALS
PROCESS VALIDATION IN NUTRACEUTICALS	NUTRACEUTICALS FOR NUTRITIONISTS AND DIETITIANS	NUTRACEUTICALS: CHEMISTRY, CLINICAL STUDIES AND PROCESSES

REGISTER NOW

Download app now: “nutrifytoday”



For any business enquiries, please write to us: hello@nutrifytoday.com

Contact our team

Speaking/ Partnership/Delegate Opportunity

Akansha Kuriyal

akansha@nutrifytoday.com

+91 98331 96127

Khasim M

khasim@nutrifytoday.com

+91 99715 72969

https://nutrifycsuite.com/