

THE AWARE CONSUMER

UNLOCKING CONSUMER POTENTIAL

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FOOD SAFETY & NUTRITION

The nutraceuticals market, including dietary supplements and functional foods, is on a high growth trajectory in India as more and more consumers actively seek healthy alternatives to supplement their diet.

GOVERNMENT PERSPECTIVE

K L Sharma, Joint Secretary to the Government of India, Ministry of Health & Family Welfare, on proposed amendment to Food Safety & Standards Act, 2006

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AFTERWORD

Why public private partnership is required to tackle the issues of food safety and security in India

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PLUS

OUT OF THE BOX • MY MARKET • IN FOCUS • THE LAST MILE

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BUSINESS
is PATIENT
SAFETY.

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VIEWPOINT

BEJON KUMAR MISRA | bejonmisra@consumerconexion.org

Food for Thought: Is Your Plateful Safe?

“Public private partnership is undoubtedly the need of the hour, with the government partnering with the industry and the civil society in its agenda to ensure food safety and security for the consumers at large.”

THE THIRD ISSUE of *The Aware Consumer Report* serves up much food for thought. Yes, literally, as we take up the issue of food safety and standards in India. A burning concern the world over, in India we find the issues are further compounded by lack of clarity regarding laws and regulations governing food safety. The scenario has become still more complicated with the relatively recent entry of a new category of food products variously called dietary supplements, health food, functional food, nutraceuticals, et al. While the industry players struggle around the nomenclature, the consumer is none the wiser despite a deluge of a confounding variety of products made available through a plethora of misleading advertisements making tall claims without any scientific data or evidence on what is **HEALTHY**. Meanwhile, the dietary supplements market in India is on a high growth trajectory, forecast to be worth around US\$ 6.1 billion by 2020, on the back of India's growing middle class with rising disposable incomes and proportionately increasing lifestyle diseases. It does call for immediate policy intervention to monitor the growing market and ensure that the consumers are not shortchanged in the name of health foods.

The government is already in the act of reworking the Food Safety and Standards (Amendments) Bill 2014, taking into account multiple perspectives and latent issues surrounding food (Read the interview of Shri K L Sharma, IAS, Joint Secretary to the Government of India, Ministry of Health and Fam-

ily Welfare, in *Government Perspective—Interview* for details). The earlier single point of view of looking at food safety from the prism of adulteration has now undergone a paradigmatic shift with the government working to include multiple perspectives, as the FSS Act 2006 seeks to migrate from the regime of prevention to risk assessment and risk mitigation. There will be more clarity for all stakeholders in the new technology-based system and standardisation with international best standards like Codex.

Food security and safety are inextricably linked write our experts, and expound ways of ensuring both in the country. India's huge undernourished population calls for not just food security but healthy food. Dietary food supplements can become the panacea for ills of poverty like undernourishment, anaemia, malnourishment, vitamin and essential micronutrients deficiencies, if this large base of the pyramid is enabled to access health food at an affordable price. In such a scenario, multi-stakeholder initiatives can act as a booster dose. Food safety, however, cannot be the responsibility of the government or the industry alone. It is as much a consumer right as a responsibility to ensure that we are served safe food—at home and outside. **AN AWARE CONSUMER IS A SAFE CONSUMER.**



“
Be A Participant Not A
Spectator In
Consumer Efforts
They Are For
Our Benefit.”

FOURWORD on Food & its Safety



“Safe Food does not necessarily mean chemically clean...it must also be... physiologically acceptable...”

V Prakash, FRSC, Distinguished Scientist of CSIR-India, Director of Research, Innovation and Development, JSSMVP, JSS TI Campus

NATURE PROVIDES FOOD, if untouched by humans, perhaps in its most **Natural Form**. With the greed of increasing the productivity, production and eliminating other plants and growing the plants that we need or the animals we rear, or the ocean population we alter, there are several checks and balances that the humans introduce, which ends up with more complications than otherwise. However, one cannot just totally depend upon nature to produce and feed the nearby 9.5 billion population by the middle of this century. Therefore, in a typical public domain how does the consumer get the awareness of what is Food Safety similar to what we define as a safe driving versus driving safe.

I brought in this concept of driving because Food Safety has become a very difficult subject all around the world with the advent of modern packaging on the one side, which keeps the shelf life prolonged to a long term, but at the same time brings in various side effects that come along with the chemicals that are added to food (of course many of them are safe based on science). In all these, the food from land all the way to sea, including today's safety hazards that we are talking about, has an effect on health and the way we eat, and the way we do not exercise, and the so called “dining table consumer” who feels he has a software to detoxify food! This complicates the matter and not only increases the marketability of unknown products but also ends up with ‘**Junk Diet**’ and not ‘**Junk Food**’ as most people say! No food is junk unless it is made a junk diet!

The Food Safety in a country is always regulated and this needs to be a **strict food regulation** and there needs to be transparent regulation and at the same time the procedures of recall, of communicating to the consumer and also penalty for manufacturers who mislead the consumer or lure the public into buying unethically must be viewed with a superfast, clear legal system in establishing not only high levels of scientific basis for the Safety but also communicate with the vulnerable risk groups in society. We are eating some foods and the long term effect in consuming such food which is not suited to an individual(s).

Therefore, **Safe Food** does not necessarily mean chemically clean, it must also be, what I term as ‘**physiologically acceptable**’, and therefore, the risk assessments must include in the long run such compliance between Food and Physiology. Are we ready for it? The consumer is trying to reach out many issues on sensitisation of these Food Safety matters not only to the manufacturers but also to the regulators in taking the issue closer to the heart and the brain as it reaches to the stomach!

Is this not coming to a holistic issue of Safe Food for the Consumer?

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The nutraceuticals industry, including dietary supplements and functional foods, is slated to reach a staggering US\$ 6.1 billion by 2020. However, it needs policy support to attain its true potential.



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ARUN JAITLEY, **FINANCE MINISTER**

“Whether *Make in India* is made for consumers within India or outside is not so relevant. The principle today is that consumers across the world like to buy products that are cheaper and of good quality.”

THEY SAID IT

ROUNDUP

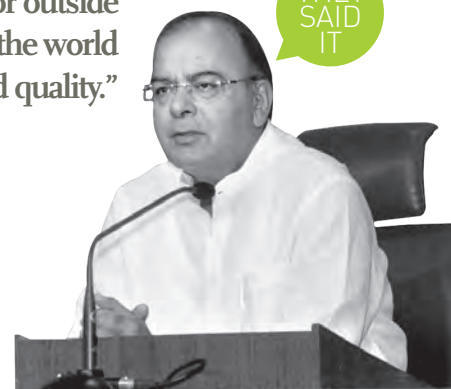


PHOTO: THINKSTOCKPHOTOS.IN

Cos Fail to Respond to Aspirations of Rural Consumers Need to build trust and loyalty

RURAL CONSUMER Rising disposable incomes coupled with fast-penetration of smartphones and internet in India's hinterland has awakened the aspirations of rural consumers. They are purchasing high-quality and branded products like their urban counterparts. However, according to a report by consulting firm Accenture, businesses in India are risking their competitiveness by failing to respond to the changing needs and behaviour pattern of rural consumers. While Indian firms have built their physical footprint in rural regions, there is a need to build trust and loyalty in these markets. The survey said 71 per cent of respondents purchased branded products and 59 per cent see them as trustworthy and reliable, while

42 per cent indicated that product upgrading was a reason for spending more in a category. Rural women and children are playing significant roles in the purchase and even visit nearby towns to buy goods and services. While seven per cent said advertisements influence their purchase decisions, one per cent listened to village heads and six per cent took a call on the advice of shopkeepers. Rural consumers were better networked and proactively sought information through multiple sources, exhibiting a significant shift in rural consumption patterns. Indian businesses however are still using conventional marketing channels, such as celebrity endorsed advertisements, to reach these consumers.

DATA BRIEFING

71%
respondents
purchased
branded
products

PHOTO: THINKSTOCKPHOTOS.IN



Govt Launches National and State Consumer Helplines Invites applications for Consumer Care Centres

HELPLINE The Department of Consumer Affairs (DCA) under the Ministry of Consumer Affairs, Food and Public Distribution launched the national consumer helpline as well as the state consumer helplines (SCHs) in December 2014. Under Centre for Consumer Studies (CCS), a resource management portal for state helplines is functioning at Indian Institute of Public Administration (IIPA) to act as a nodal agency to integrate state helplines, coordinate its activities and to host a central information technology (IT) system. The national consumer helpline also functions from IIPA under the CCS. Besides, the Department intends to integrate consumer grievance and helpline mechanism under one common IT platform with a single toll free-number across the country. The DCA has also invited applications from registered voluntary consumer organisations (VCOs) for running consumer care centres (Grahak Suvidha Kendras) across the country. The pilot locations include Pune, Jaipur and Ahmedabad, Bhubaneswar, Patna, Kolkata, Lucknow, Chandigarh, Bengaluru, Chennai, Hyderabad, Guwahati, Shillong, Raipur, Bhopal and New Delhi. The Pune centre is likely to start in April this year.

RBI Guidelines to Protect Consumers' Interests Soon

GUIDELINES The Reserve Bank of India (RBI) will soon come out with detailed guidelines to protect consumers from being cheated by its regulated entities. RBI Executive Director N S Vishwanathan said, "The Financial Sector Legislative Reforms Commission (FSLRC) report recommends adoption of consumer protection framework that will empower and require regulators to ensure consumer protection for the financial activities regulated by them." The apex bank is in the process of framing comprehensive consumer protection regulations based on domestic experience and global best practices. In June 2013, RBI had issued a circular saying that private placement norms which are applicable to non-NBFCs will be applicable to Non-banking Financial Companies (NBFCs) as well, on their question relating to fund raising needs under the new Companies Act. NBFCs also cannot raise funds through private placement from more than 49 people at a time and are allowed to convert, subject to meeting the norms. RBI plans to open this licensing window on tap, thus there is a possibility of NBFCs including MFIs in the sector becoming small banks.



PHOTO: THINKSTOCKPHOTOS.IN

QUICK BYTE ON CONSUMERS

PHOTO: THINKSTOCKPHOTOS.IN



Life Insurance Claims to get 60 Days' Window The Insurance Regulatory and Development Authority will make it mandatory for companies to settle life insurance claims within 60 days as against earlier six-month time-frame. As per new rules, if a claim is not settled within 60 days, the beneficiary can take the insurer to court.



PHOTO: THINKSTOCKPHOTOS.IN

Govt to Empower Consumer Bodies Mulls regulator for direct selling industry to protect consumers

POWER The government plans to amend the Consumer Protection Act, 1986, to provide more teeth to the consumer protection bodies and thus make the redressal mechanism easy and universally accessible. The amended Bill to be introduced in the Budget Session of Parliament seeks a Consumer Interest Protection Authority with powers to suo motu launch proceedings. Besides, the proposed law facilitates only one chance for appeal to the defaulting companies to mitigate the long process of litigation.

The present set up, with three levels of courts at district, state and national levels, causes inordinate delays leading to unnecessary harassment to consumers. "We are trying to simplify the proceedings, trying to make the process easy by having no revocations," said Consumer Affairs, Food and Public Distribution Minister Ram

Vilas Paswan. The government would broaden the consumer redress mechanism by inducting people from different walks of life, besides those from judicial and legal backgrounds, he added. The new legal regime would enable consumers seeking compensation up to ₹2 lakh to argue their cases without the help of a lawyer and

provisions to raise the imprisonment term for hoarding to one year and to make the offence non-bailable.

The government has also set up an inter-ministerial committee, with representatives from the Ministry of Information & Broadcasting and

the Ministry for Health and Family Welfare to look into misleading advertisements. While urging the Bureau of Indian Standards (BIS) to undertake a massive consumer awareness programme, especially in regional languages, Paswan also called upon the use of social media to

"The new legal regime would enable consumers... without the help of a lawyer..."

Power to Consumers: A Consumer Interest Protection Authority to initiate suo moto proceedings and a separate regulator for the burgeoning direct selling industry are some of the crucial steps on the anvil to empower consumers.



spread consumer awareness. Social media is being looked upon as a mass awareness tool for programmes of social importance. He called upon BIS to develop an excellent product certification system on par with international standards in order to make Indian goods acceptable worldwide, saying this is a prerequisite for the ambitious *Make In India* campaign to succeed. The BIS has formulated 19,000 standards out of which 6,000 are internationally comparable. It certifies 933 products with an ISI mark. At present, ISI certification is compulsory for 123 products, but the minister said that the number of certified products would need to increase.

The Union government has also provided an assistance of ₹1 crore to Bangalore-based National Law School of India University to set up an online consumer mediation centre. It would deal mainly with unfair trade practices where people are exploited by manufacturers or service providers. The online redressal centre will look into the cases which can't be handled by district consumer redressal forums.

The government is considering a regulator for the direct selling sector to safeguard interests of consumers by distinguishing between genuine and fraudulent players. Ficci-KPMG report on direct selling places India as one of the biggest consumer markets in the world. According to the report, the direct selling industry in the country is estimated to be worth around ₹7,200 crore and it has the potential to reach a size of ₹64,500 crore by 2025. The sector has the potential to engage over 10 million women as direct sellers by 2025, the report said.

CONSUMER SURVEY

Busy Indian Consumers Prefer Ready-to-Cook Food: Report

REPORT The ready-to-cook (RTC) food market in India is predicted to grow backed by factors like increasing working population and rising per capita disposable income, reveals a report by TechSci Research. As per the report *India Ready-to-Cook Food Mar-*

ket Forecast & Opportunities, 2019, the impetus to RTC products is apparent in the last five years, with increased migration of a large number of population from rural and semi-urban towns to metropolitan cities in search of jobs. RTC food market has been segmented into

dessert mixes, snack mixes and curry making enablers. The RTC food products market in India is estimated to have touched US\$ 120 million in 2013 and is projected to grow at a CAGR of around 22 per cent from 2014 to 2019, the RTC report forecast.

US Lawmaker Files Legislation Law to address burden of loan on students and take a lenient view



PHOTO: THINKSTOCKPHOTOS.IN

FOREIGN US Representative and a Democrat John K Delaney, in January this year, filed legislation to help address Americans struggling with student loan debt. Under the present US law, student loan debt is treated different from other forms of debt and cannot be discharged. However, the amended law would make student loans dischargeable under bankruptcy. Student loan debt is one of the top forms of debt collected in the industry. According to the *Impact of Third-Party Debt Collection on National and State Economies* survey by ACA International and Ernst & Young, student loan debt was 25.2 per cent of total debt collected in 2013. The Consumer Financial Protection Bureau (CFPB) estimates that there is an outstanding student loan debt of worth US\$ 1.2 trillion in the US, with over 7 million people in default on their loans. A report by The Institute for College Access & Success said 69 per cent of graduates in 2013 graduated with student loan debt, owing an average of US\$ 28,400.



PHOTO: THINKSTOCKPHOTOS.IN

IN THE DOCK SBI Asked to Pay Compensation for ATM Fraud

COMPENSATION Maharashtra government has asked the State Bank of India (SBI) in Nagpur to pay ₹3 lakh compensation to a senior citizen who lost ₹3.77 lakh to fraudulent ATM transactions. The amount would increase with compound interest of 12 per cent per month if the bank fails to pay in due time. While delivering the verdict, the tribunal, headed by state IT secretary Rajesh Agrawal, called upon the banks to safeguard customers' interests with the augmentation of more consumer-friendly policies as cyber crimes span across regions. Established under Section 43A of the Information Technology (IT) Act, the tribunal asked SBI to pay the money within a month to the complainant to recover his loss incurred. However, complainant Motiram Tekam was told to bear the loss of ₹77,000 as he handed over his debit card to an unknown person.

Tekam had been using debit card to withdraw his monthly pension. After his card didn't dispense cash on his visit to an ATM kiosk twice on December 17, 2013, he brought the matter into the notice of bank officials. As he needed money, Tekam went again to the ATM kiosk and faced the same problem. In the meantime, an unknown person offered him help. While Tekam was entering password, the unknown person quietly changed the original card. Another day, when Tekam went to withdraw his money, he was shocked to find that ₹3.77 lakh had been debited from his account. He claimed ₹5 lakh in damages to the tribunal, which included extra ₹1.23 lakh incurred on legal course and travelling.



Spreading Consumer Awareness: *The Aware Consumer Report* being launched in Bangalore by the eminent panel and participants in the lively discussion that followed.



THE AWARE CONSUMER QUARTERLY REPORT II LAUNCHED IN BANGALORE

Experts call for consumer awareness in emerging market channels

The second edition of *The Aware Consumer Quarterly Report* was launched by Chief Guest P Ravikumar, Additional Chief Secretary to the Government of Karnataka, in Bangalore on October 15, 2014. Present on the occasion were G Gurucharan, Additional Secretary to the Government of India, Department of Consumer Affairs and other officials of the state. The report was focussed on consumer awareness in the changing market dynamics with the proliferation of disruptive emerging channels of distribution like e-commerce and direct selling. Launching the report, Chief Guest P Ravikumar said, "There will be protection regulations taken up for the consumers," adding, "The state will look into suggested amendments for the betterment of the consumers."

The panel discussion began with Bejon Kumar Misra, Chief Editor of the Report and a renowned international consumer expert, saying, "The best friend of the consumer is competition and if you bring in healthy competition, the consumer is bound to become the king and will therefore be empowered in making an informed choice which will give them the best value of money." According to him, report on e-commerce was produced keeping in mind this approach to empower the consumer. Gurucharan, who chaired the panel discussion on the topic, *Why The Aware Consumer*, held on the occasion, hailed e-commerce as "the next big transformative force in the marketplace". Emphasising the disruptive nature of e-commerce he said, "There is definitely a need for some kind of

an authority which will be able to ensure the better protection of the consumers." Talking about Flipkart's fiasco, L Mansingh, Former Consumer Affairs Secretary, opined, "Suddenly everyone is ganging up against Flipkart, but as Indians we should be proud that out of total obscurity two fellows have come up to a level where Amazon, which is the grandfather of e-commerce, is taking a defensive position against Flipkart and we should be proud that Indians are capable of doing that." With that, he requested Gurucharan to look into this issue and come up with independent statutory regulations for ensuring consumer protection.

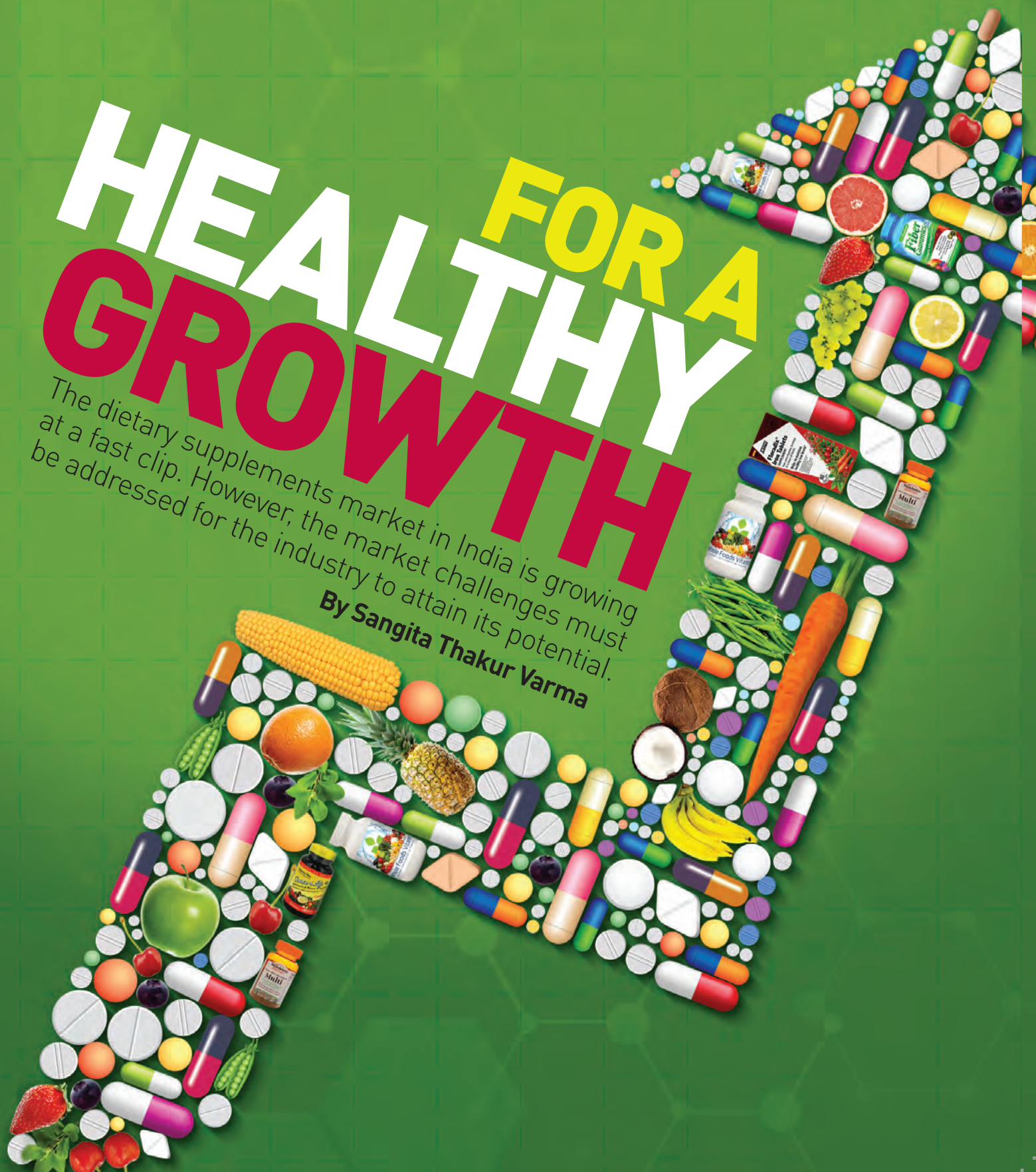
On the question of modern sales channels like, e-commerce, direct selling, multi-level marketing, etc., Gurucharan elaborated, "These are modern ways of selling which will increasingly grow and our effort should be to ensure that the e-commerce sector grows and more consumers in India are able to access e-commerce, but in our anxiety to try and regulate it, we shouldn't become a hurdle or pose regulatory hurdles. Although at the same time, we should ensure that consumers who become vulnerable are provided with adequate protection." Keshav Desiraju, Secretary to the Government of India, Department of Consumer Affairs, had launched the first edition of the Report on July 30, 2014 in Delhi. 

**“Let's
Not Fall
Victims
to Fraud
Be Aware”**

HEALTHY FOR A GROWTHY

The dietary supplements market in India is growing at a fast clip. However, the market challenges must be addressed for the industry to attain its potential.

By Sangita Thakur Varma



An increasingly health conscious India is pushing the demand for dietary supplements. So much so that the Indian health supplements industry is one of the most rapidly growing markets in the Asia Pacific region. According to RNCOS, a leading business consulting service firm, the industry is anticipated to grow at a CAGR of around 20 per cent over the period 2014–2019. It also forecast, the industry will grow to US\$ 6.1 billion by 2019–2020. The industry had a good innings in 2013 when dietary supplements witnessed a growth of 14 per cent in terms of current value sales to reach ₹40 billion and vitamins by 12 per cent in terms of current sales, according to a Euromonitor report titled, *Vitamins and Dietary Supplements in India*. The total nutraceuticals market grew from US\$ 1 billion in 2008 to US\$ 1.8 billion in 2013 and was projected to cross US\$ 2 billion in 2014. The market grew at a CAGR of around 16 per cent during 2009–13, according to TechSci Research. According to a Frost & Sullivan report titled *Indian Nutraceuticals: Insights into Changing Market Dynamics*, the penetration of nutraceuticals in India was around 15 per cent in 2013. India's demand share in the global nutraceuticals market (valued at US\$ 168 billion in revenues in 2013) was around 2 per cent, earning around US\$ 2 billion. This figure is expected to double to US\$ 4 billion in 2018, as the Indian market will grow at a compound annual growth rate (CAGR) of 17.1 per cent.

US\$ 6.1 billion

Size of nutraceuticals industry by 2020, growing at CAGR of 20% over 2014–19.

NASCENT MARKET, DIVERSE DEFINITIONS

The 44th meeting of the Drugs Consultative Committee held on July 20, 2012, had raised concerns over the manufacture and sale of products containing vitamins in quantities which fall either into prophylactic category or therapeutic category as specified under Schedule 'V' to the Drugs and Cosmetics Rules, 1945, but licenced under Food Safety and Standards Act 2006, as Dietary Supplements/Nutritional Supplements/Nutraceuticals. These products, it said, were being manufactured by non pharmaceutical players and the committee also red flagged the medicinal claims being made by such manufacturers. It questioned whether such products could be licenced under the FSS Act 2006.

The Indian definition lists down the ingredients a dietary product must have and its general properties. It does not include traditional medicine under it. According to this definition, nutraceuticals are foods for special dietary use. These foods are processed or formulated through a special process and are meant for specific dietary requirements that are the result of physical or physiological conditions, a specific disease or a disorder. The compositions of these foods must differ significantly from the Indian Standard

(IS) composition of regular food of comparable nature.

A most important distinction is that such a product "does not claim to cure or mitigate any specific disease, disorder or condition" and does not include a drug whether scheduled or *ayurvedic, sidha and unani*.

Globally, the food and

research feature

DIETARY SUPPLEMENTS—AN INDIAN PERSPECTIVE

dietary supplements industry is divided on the implications of the terminology. A still nascent market which has evolved in most countries in the last 15 years or so, the dietary supplements landscape is complicated by the different definitions and sets of guidelines adopted by various countries. The US, one of the most evolved markets, terms nutraceuticals as dietary supplements, while in Japan it is known as food for special health use and in Canada, as Natural Health Products. Laws governing the industry are also different, as while US, Canada and EU have separate definitions and guidelines for dietary supplements and functional foods, Japan has just one set of rules. Again, while in Canada traditional and herbal medicines are included in the definition of dietary supplements and in the US herbs and botanicals are part of nutraceuticals, Japan does not include them.

Research firm RNCOS uses nutraceutical as an umbrella term and subdivides the Indian market into functional food and beverages, and dietary supplements categories, while a Ficci-Frost & Sullivan whitepaper titled *Global Nutraceuticals Industry: Investing in Healthy Living*, explicitly points out that though the term “nutraceuticals is in vogue, there is no universally accepted definition of the term. It broadly defines it as “foods or food derived substances in extracted form, which claim to provide medicinal and health benefits” and adds that the term is so broad that it includes functional foods/beverages, dietary supplements, and any other type of food that provides health benefits fit into the category. The whitepaper restricts the term nutraceutical to functional foods and beverages and dietary supplements for the purpose of the report.

India - Nutraceuticals Market (Billion US\$), 2014 & 2020

Source: RNCOS



DISCERNIBLE TRENDS

Oats, probiotics, nuts, tomato products, yoghurt, sports and energy drinks, etc., fall in the functional foods category while vitamins, minerals, fibres and fatty acids in the form of tablets and capsules, are a part of dietary supplements. The functional foods segment captures the lion's share in the overall market, while the other two segments hold a lesser market share due to relatively lower consumer confidence in such types of products. Shushmul Maheshwari, CEO, RNCOS, finds an upswing in the demand for functional food and beverages in recent years,

which he attributes to the development of “innovative products”.

The consumer base in India can be distinguished by their preferences. “The age-group of 18-30 years is the largest consumer of functional foods and beverages,” observes Maheshwari. Working professionals and student population comprise the largest consumers of energy drinks in India; the image and fitness conscious urban youth is shifting towards protein supplements. The distinct trends can be clubbed under: energy based drinks, digestive health products, ayurvedic and herbal products and probiotics. Energy based drinks are fast emerging as the Indian youth's and working professionals' preferred drink at social gatherings, during study breaks and physical activity like sports or gym. It is driving the market for functional foods and beverages. Digestive health products such as biscuits, juices and oats, on the other hand, have found an increasing consumer demand across categories but especially in women and children, as health conscious mothers try to instill better eating habits in the children.

Karan Chechi, Research Director, Tech-Sci Research, finds Indian consumers are predisposed towards herbal and ayurvedic products, and this is encouraging players to start the manufacturing ayurvedic dietary products. While Chywanprash is one of the most popular dietary supplements consumed by both rural and urban Indians, there is a spike in demand for various other herbal supplements as well. Probiotic dietary supplements, an emerging segment in India, have gained traction in the past few years as companies concentrate on awareness campaigns to educate consumers about their many benefits.

According to Chechi some key trends that



67%
of vitamin and dietary supplement market is made up of urban consumers

33%
comprises rural consumers



36%
Share of vitamins and minerals in the total Indian nutraceutical market

Source: Research and Markets

Nutraceuticals Market Segmentation

Dietary Supplements

Functional Foods

Functional Beverages

are expected to positively shape up the market in the coming years are food fortification and encapsulation. Food fortification offers a solution against diseases caused by nutrient deficiency that can be rectified to an extent with the consumption of nutraceuticals. Encapsulation involves incorporation of food ingredients into capsules, so that consumers are able to easily distinguish between pharmaceuticals and supplements.

NUTRITION—NEED OF A DEVELOPING NATION

In developing countries, where poverty and hunger are major issues, food safety and nutrition are poorly grasped concepts. India is currently battling food security, for, as per 2011 census, 8.6 million people in the country are facing chronic hunger. In this scenario, the percentage of people who are properly nourished is rather small. According to a FICCI-Ernst & Young knowledge paper, the imbalances in nourishment patterns give rise to three categories of people—about 80 million over-nourished population; 380 million under-nourished and approximately 570 million who are taking sufficient calories but are still undernourished as their intake of nutrients is very low.

In the period 2012–2014, India had approximately 190.7 million undernourished people, about 15 per cent of the country's population. The world average is 11.3 per cent. There was an increase of 2 million undernourished people in India from 2010–2012. While the least developed countries showed a reduction of 32 per cent in the prevalence of undernourished people, India

showed a 21 per cent reduction. The FICCI-Ernst & Young report, *Nutraceuticals – Critical supplement for Building a Healthy India*, analysed the dietary patterns of Indians and found that undernourishment in India was even worse than some sub-Saharan countries. In fact, even among the proportion of population with sufficient nutrition intake, the micronutrient consumption was found to be low, leading to nutrition deficiencies in urban as well as rural pockets. A growing population, meanwhile, was consuming excess calorie-high fat diet. Nearly 40 per cent of the total deaths and 30 per cent of

the total disease burden in developing countries is due to nutrition related factors. Statistics released by International Food Policy Research Institute (IFPRI) in October 2014 said that one-third of women and children under five in India are underweight, though the country has made good progress in combating malnutrition. Underweight children have reduced IQs by 5 per cent and stunted children's IQs are reduced by 11 per cent.

Anaemia is a silent killer in India with every second woman anaemic and one in every five maternal deaths occurring due to anaemia. Vitamin D deficiency has taken an epidemic proportion with a prevalence of 70–100 per cent in the general population. Vitamin Angels quotes Government of India statistics provided to the WHO, which says that 62 per cent of all preschool-age children are vitamin A deficient (WHO Global Database on Vitamin A Deficiency, Geneva, World Health Organisation, 2009). According to experts, the entire population of India is at the risk of iodine deficiency disorders as the soil of the region is deficient in the vital nutrient. Though iodine fortified salt is available in India, it was found that an estimated 350 million do not have access to iodised salt and form the high risk group. It is an irony that malnutrition, which refers to both under and over nutrition is a developing world burden.

In September 2014, on world heart day, a government data was quoted in the media putting the prevalence of heart failure in the country due to coronary heart disease, hypertension, obesity, diabetes and rheumatic heart disease in the range between 1.3

India – Nutraceuticals Market by Segment, 2014



9%
Share of probiotics in the total Indian nutraceutical market



5%
Share of omega-3 fatty acids in the total Indian nutraceutical market

Source: Robinson Pharma, Inc.

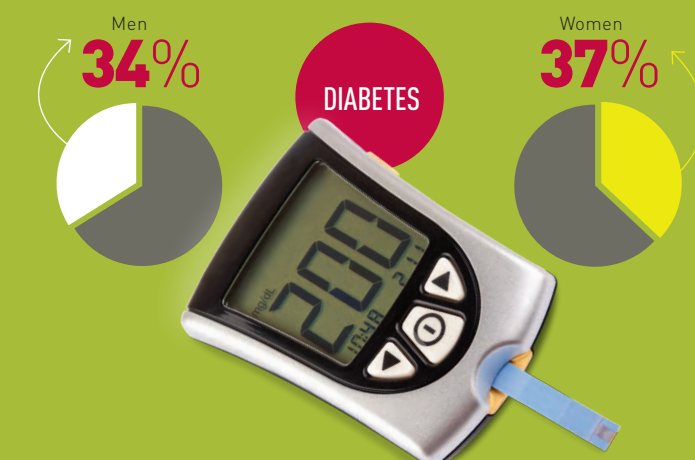
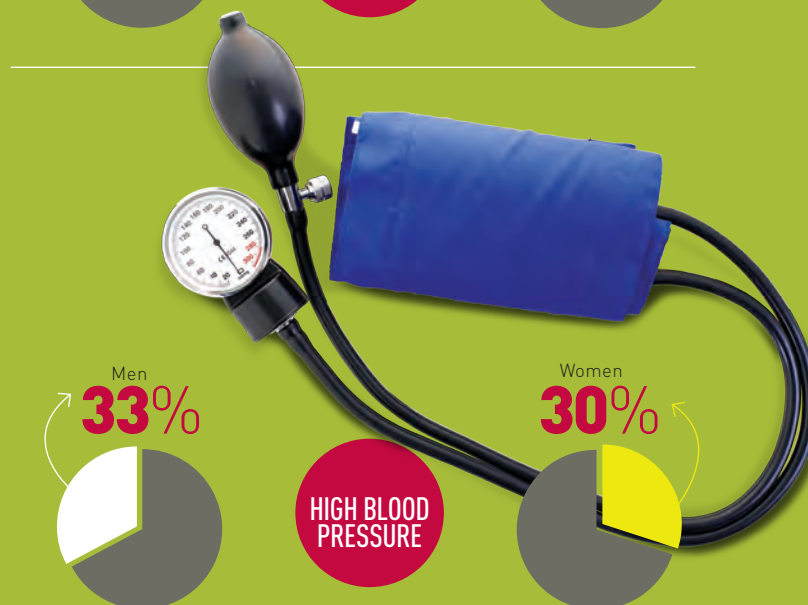
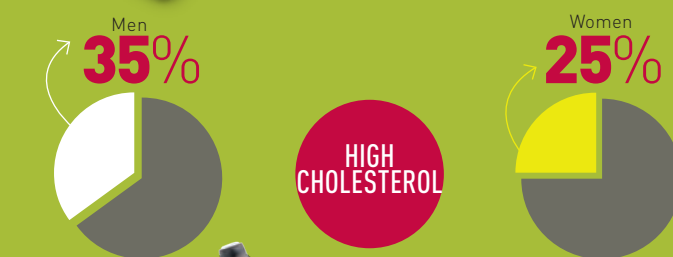
to 4.6 million. The annual incidence of heart failure was 491,600 to 1.8 million. A Prospective Urban Rural Epidemiologic (PURE) study published in August 2014, said that the incidence of cardiovascular diseases was increasing in middle to low income countries like India. A largely lifestyle disease, CAD is now said to have replaced communicable diseases as the biggest killer with an estimated at 30 per cent in urban and 15 per cent of the rural population suffering from high blood pressure and heart ailments. Obesity, a largely urban lifestyle phenomenon, has reached alarming proportions increasing by around 20 per cent. About 40 per cent of the diseases in the country are being attributed to cardiovascular related diseases. Diabetes has taken an epidemic form with around 67 million affected and is projected to grow exponentially through 2020, making India the country with the highest number of diabetics (Source: Robinson Pharma, Inc.). The report says that approximately 40–50 per cent cardiovascular disorders, 35–50 per cent cancers, and 20 osteoporosis cases are attributable to dietary factors. According to the Ficci-Frost & Sullivan report, the cost of productivity loss due to nutrition related disorder mortality would be 1.2 per cent of the GDP in 2015.

A research titled *Nutraceutical – A Bright Scope and Oppourtunity of Indian Healthcare Market* says, the incidence of premature chronic diseases appearance, disease progression, morbidity and mortality can be attributed to some extent to dietary factors. Dietary supplements are cited by experts as an antidote to combat malnutrition at the bottom of the pyramid, and also lifestyle diseases. Being complementary to drugs, they can help reduce over-dependence on medicines. It is clear that India needs vital nutrients—both macro and micro—to drive a healthy and sustainable future. Undeniably then, a vast consumer base in India must be educated about the need to supplement their daily food with intake of external nutrients like dietary supplements and health food.

MIDDLE CLASS MARKET OPPORTUNITY

Even six to seven years ago, Indian consumers did not consider it necessary to supplement their regular meals with vitamins and dietary supplements. According to the Euro-

PREVALENCE OF LIFESTYLE DISEASES IN INDIA, 2012





Dietary supplements hold the key to not only lifestyle diseases but to the problems of underweight and malnutrition faced at the BoP.

monitor report, this was because the Indian diet consists of all the important food groups. However, the scenario is rapidly changing now as says Chechi, "Growing concern over critical health diseases is expected to boost demand for dietary supplements in India over the coming years." He adds that Indian consumers are also exhibiting a rising interest in alternative medicines which is providing a platform for such product manufacturers to establish their presence in the Indian market. Changing lifestyles, especially in the fast paced urban centres, are forcing consumers increasingly to look for such dietary add on, pressed for time to either cook or eat proper meals and at the same time the social pressure to look and be healthy. In fact, a recent TechSci research has revealed that the ready-to-cook (RTC) food products market in India is estimated to have touched US\$ 120 million in 2013 and is projected to grow at a CAGR of around 22 per cent from 2014 to 2019. Vitamins and dietary supplements are considered the quick fix solutions to stay healthy and this is a growing market for manufacturers. Maheshwari also attributes the growing health supplements market to ageing population and changing lifestyles, and says that the demand for protein supplements is specifically seeing a spike among the urban youth as they exhibit the desire to maintain fitness and build a strong physique.

Currently, dietary supplements is being viewed as a middle class opportunity in India given that nearly 400 million people in the country belong to the category. The Indian middle class is aspirational with rising disposable incomes, affluence and awareness. Inhabiting India's rapidly globalising urban centres, they are increasingly adopting healthy lifestyle and incorporating dietary supplements in their food to overcome the prohibitive cost of healthcare. The rising awareness about the role of nutrition in health is also driving many physicians to prescribe health food along with medicine in order to improve general well being. The emergence of newer distribution channels like direct selling and e-commerce with dedicated portals to wellness products has also led to a spike in awareness regarding nutrition supplements and as a corollary

their consumption. Lifestyle ailments are an inevitable outcome of affluence and with rising need for preventive healthcare, there is an uptick in the consumption of dietary and food supplements leading to double digit growth of the industry.

MARKET PROFILE

According to TechSci Research, though dietary supplements comprise merely 10 per cent of



"Companies need to work on developing customised products at affordable pricing."

Karan Chechi
Research Director
TechSci Research

the worldwide food industry, it is growing at a steady clip across the globe. India, with its rich biodiversity and traditional knowledge has all the requisites to emerge as the world leader in dietary supplements. Though currently functional foods lead the share in the market, there is mega opportunity in the dietary supplements category, especially herbal, as the market matures. According to a Frost & Sullivan report, the segment share of vitamins and minerals is 36 per cent of the total nutraceutical market in India, probiotic has a 9-per cent share and omega-3 fatty acids has 5 per

cent share of the market. The fortified foods market is forecast to grow at a CAGR of 21.7 per cent by 2018. Historically, an ingredient export-focused market, the Indian dietary supplements industry is changing to answer the rising domestic demand with most companies now concentrating on launching tailored products for an Indian palate. In India, the market is largely dominated by pharmaceutical and FMCG companies. However, while pharmaceutical companies mostly occupy the dietary supplements space of the market, FMCG companies are majorly focussed on functional foods and beverages, says Chechi.

Within India, there is a discernible regional consumption pattern with the highest demand for dietary supplements emerging from the northern region. This is followed closely by the southern and central regions of the country. Explaining the trend Chechi says, "In Northern India, states such as Delhi, Haryana, Punjab and Uttar Pradesh are key demand generators for nutraceutical products." According to an RNCOS report, the market is mainly focussed in the southern region, followed by the eastern region with three major states of Andhra Pradesh, Tamil Nadu and West Bengal.

HURDLES TO GROWTH

There is still a major lack of awareness among a majority of Indian population regarding nutraceuticals or the need for including dietary and health supplements in their diet. Maheshwari enlightens, "Indian consumers' awareness about conventional nutraceutical ingredients such as omega-3 fatty acids or lutein is very limited." The ignorance is especially acute at the rural level which is an impediment in the market penetration. As a result, the consumers in the lower income group mainly consume prescription based dietary supplements alone. It is only at the middle to higher income group levels that the consumer knowledge is higher and consumption of functional foods and supplements also increases. Maheshwari also points to the "growing apprehensions amongst people about the safety of the nutraceutical products" as another reason for low consumption levels in India when compared to developed countries/regions such as the

US, Europe, and Japan where the percentage of population consuming nutraceuticals is much higher. Dietary supplements manufacturers must change the perception of the people by removing the ambiguities surrounding it. This is the biggest hurdle to the growth of the market and a more legal definition of the term nutraceutical will help it shed the dubious image largely created by various players defining their products under different criteria. The confusion occurs as at the same time there are products in the market claiming to have health benefits as also medicinal value.

Maheshwari says that pharma companies are likely to continue dominating the nutraceutical industry “as there seems to be not much information available to new players who would like to invest in this sector”. There is no regularised system for setting up manufacturing plants for nutraceutical products which makes it difficult for new players to enter the unknown territory. Lack of regulations also makes it difficult for them to avail subsidies. Moreover nutraceuticals are categorised as either foods or drugs and so pricing and quality also become issues.

Since nutraceuticals are not a part of pharma and drugs formulation, rules and regulations also tend to be different for this segment. As a result, there is some confusion in the minds of new entrants about the dos and don'ts of the Indian regulatory system. Dietary supplements fall under the purview of Food Safety and Standards Act of India, 2006 (FSSAI), which regulates its manufacturing, storage, distribution, sales and imports in the country. **In Chapter 4, Article 22 of FSSAI, it has been stated that nutraceuticals can only be used for oral administration, can be utilised as conventional foods and cannot claim to cure any specific disease. Dietary supplements have been defined as having characteristics of not a conventional food, formulated in the form of powders, granules, tablets, capsules, liquid, jelly and other dosage forms. FSSAI defines functional food as that which impacts specific functions in the body that may provide additional health benefits or remedy from some disease condition, following the addition/concentration of a beneficial ingredient, or removal/substitution of an ineffective or harmful ingredient.**

Maheshwari finds FSSAI lacking in teeth to effectively safeguard consumer interest

and observes, “We believe that the regulation in India is not stringent enough to ensure consumer safety. FSSAI should play a significant role in defining standards to streamline the dietary supplements market in India, which must include the quality of raw materials, safe manufacture of products, health claims, labelling, distribution and storage.”

There are other areas of concern as well that are an impediment to market growth. The Food Safety and Standard Rules that




“Regulations in India are not stringent enough to ensure consumer safety.”

Shushmul Maheshwari
CEO, RNCOS

became effective from May 5, 2011, is applicable to domestic and foreign companies alike. The Food Safety and Standard Authority also issued regulations with respect to licensing and registration of food business, packing and labeling, food products standard and additives, etc. Although there is a single legislation and there are specified authorities to regulate the manufacture, distribution and sale of nutraceuticals, functional foods and dietary supplements in India, there is a lack of clarity on specific regulations for registration of nutraceuticals, permitted additives,

etc. These are some of the challenges in the path of entrepreneurs and foreign companies intending to launch nutraceutical products in India. “Nutraceuticals continues to be a gray area amidst the pharma and nutrition market in India,” says Maheshwari, adding “no direct FDIs have been seen in this sector.” However, the market has benefited from foreign investments in the pharmaceutical market, as the majority of the Indian nutraceuticals market is dominated by pharma companies. Given India's vast natural resource and the growing demand for phytochemicals and plant extracts from across the world, regulatory hurdles must be removed to encourage export. As regards consumers, the government must frame rules so that only correct information about the intake of nutraceuticals is given by players and health claims are backed by scientific evidence, as a mandatory requirement. Dietary supplements manufacturers themselves are pushing for clear laws as by checking unregulated practices, it will benefit genuine players.

GOING FORWARD

Customisation is picking up pace gradually, as there exists huge potential for cultural customisation and inclusion of natural ingredients, thereby encouraging manufacturers to foray into the field of herbal medicines. To tap a large chunk of the population, companies would be required to price their products appropriately, especially in a price sensitive market like India. Introducing attractive pricing models, encouraging widespread product availability and boosting awareness related to health benefits of nutraceutical products are certain key steps that can allow companies to strengthen their market positioning. To conclude with Chechi, “The nutraceuticals market in the country is expected to notch a strong growth in the coming years driven by the entry of new players including foreign multinationals.” Backed by scientific research on the relationship of food and health and the role that dietary supplements play in preventive healthcare, the Indian consumers are increasing their daily consumption of health food. 

(Source: Interviews, various reports & secondary research)

“CLAIM YOUR
Consumer Right Now
An Aware
CONSUMER
is Protected Consumer”



PHOTO: THINKSTOCKPHOTOS.IN

RISING AWARENESS, EXPANDING MARKET

Food supplements industry is on a high growth path in India with innovative and research backed products. **BY SANGITA THAKUR VARMA**

Health foods, dietary supplements, vitamins, probiotics, prebiotics, et al...till a few years back, for the Indian consumer at large, these were mere concepts mostly found on dedicated shelves of upmarket stores than a part of their daily meal. They may have out of curiosity checked a label or two and even tried a product, but had not taken a fancy to it. However, all that is changing now and how! From five grain NutriChoice biscuits that promise a complete breakfast (3 biscuits + 1 banana) to oatmeal cookies and oat noodles, the functional foods basket in India has undergone a radical change. The day may now begin with a swig of Yakult, a cup of probiotic Nestle curd may accompany a typical lunch and the night may end with a hot glass of Horlicks. Though still

not much wiser on the whole spectrum of nutraceutical offerings, the Indian consumer is 'likin' it'. So what is Health Food?

Towards a Healthy Food Basket

From a consumer perspective, the health food market can be better understood from the following three categories that broadly explain why each food is good for you:

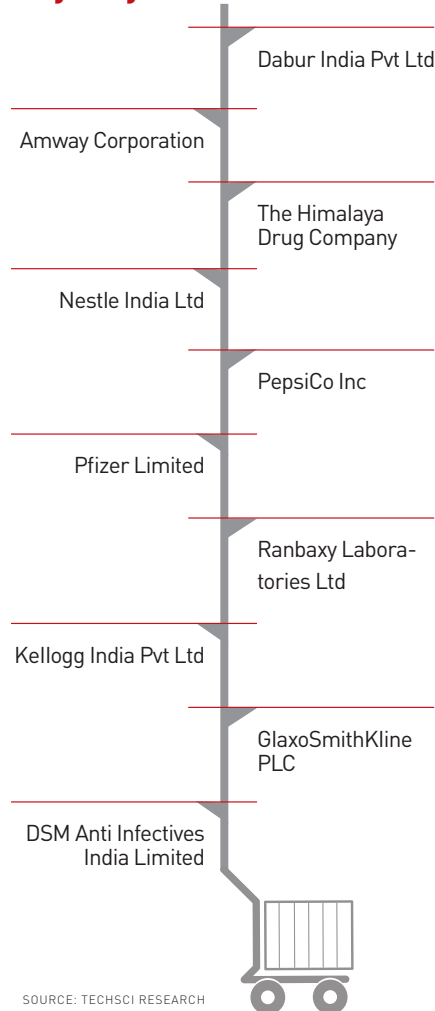
- **Good for You:** Food that is low cholesterol, has zero per cent trans-fat and includes edible oils, snacks and biscuits, beverages like diet colas, skim milk, curd and ice-creams that proclaim to offer these benefits.
- **It's Functional:** It is foods that has been fortified with ingredients as iodine and iron. These foods are nutritional and have disease preventing properties.
- **Sourced from Nature:** Health food is largely natural, that is, it contains no preservatives or chemicals. Organic food or food with natural colour and flavouring agents or natural extracts fall under this category.

For urban consumers, the health food cart is now overflowing with goodies with foreign and the domestic labels as market players offer customised and innovative products to cater to the evolving health conscious palates of Indian consumers. The innovation though is not restricted to only FMCG players, but has moved beyond to restaurants. As a results, even as dairy health supplements and juice categories are the leaders with variants such as probiotic, prebiotic, mineral-fortified, zero fat, high fiber, etc., the hotel industry has evolved healthy platters for the health conscious patrons. The consumer feels happy as there is a lesser burden of "guilt" to contend with while dipping into a bowl of sugarfree low fat dessert made with organic ingredients.

Educating Consumers, Expanding Reach

The industry is playing an important role, somewhat different from the usual promotional track adopted by FMCG companies. Since the market in India is in a nascent stage, there is an acute awareness gap. In many consumer pockets, there are a number of misconceptions as also complete absence of knowledge regarding the importance of dietary supplements and functional food. Market players thus, first need to educate the

Key Players



consumers regarding the health benefits of the product before it sells. In this context, the awareness campaign run by Yakult is worth mentioning. As a result, functional food is no longer just health food but super food, and has penetrated most food categories with manufactures now offering everything from oil, salt, fats, dairy, snacks and beverages to fortified water. These products are now in the mainstream market in India.

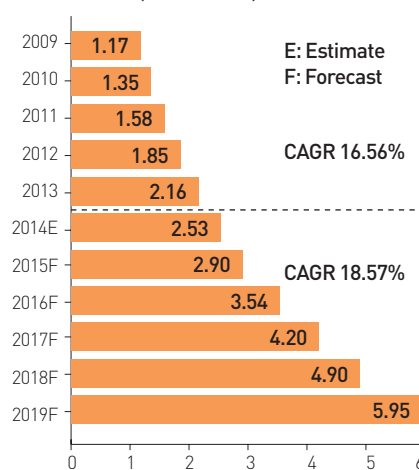
Another relevant factor driving the consumption of health and functional food is the increasing evidence being provided by parallel scientific studies regarding the healthy effects of consuming food supplements, for instance, a high fibre diet to control lifestyle diseases such as diabetics. The personal care industry too is providing clinical research in favour of foods such as probiotics as the ultimate skin food. Be it Omega 3 or Vitamin B12, Calcium or Vitamin D, iron or phosphate, scientist are coming up with studies that provide a clue to their natural sources.

Innovate for Opportunities

As the Indian consumer market for food supplements evolves, there is an increasing need for product innovation on the part of the manufactures to tap into emerging segments with differentiated needs. There is also a pertinent need to make the products more palatable. Food manufacturers are already working into these areas and coming up with tailored products and value additions to enhance the taste. Smart packaging and advanced technology with ongoing research with food scientist have been rigorously adopted. Companies also realise that since the health benefits are not immediately discernible and are long term improvements, they need an industry standard to substantiate their claims. Till that happens, the industry will be pushed by the rising demand from an increasingly aware consumer. However, products with ingredients such as soy proteins; oat bran, psyllium, and soy fibres; Bifidobacterium and Lactobacillus probiotics; omega fatty acids; cranberry and garlic extracts; calcium, magnesium and zinc minerals and vitamins A and C, are finding increasing acceptance as their benefits are supported by clinical research. Report-linker forecasts these ingredients will be the maximum growth areas in food supplements portfolio going forward. For now, dietary

India Nutraceuticals Market Size

India Nutraceuticals Market Size, By Value, 2009–2019F (US\$ Billion)



supplements are greatest opportunity areas.

The market for herbal and dietetic supplements is specially strong in India. Looking at the opportunity, several leading pharmaceuticals companies have also forayed into the space and are expanding their portfolio of products for various therapeutic segments. According to experts, this trend will continue to grow pushing the growth of the dietary supplements industry. Several global players with expertise in the area have also entered the nutraceuticals market or are expanding their footprints with widening product portfolios. These include popular names like Amway, DuPont, BioCorrex, Monsanto, Abbott Laboratories, Herbalife, Novartis, etc. Domestic players are giving hot competition to the multinationals with their better understanding of Indian palate and include prominent names as Dabur India, Himalaya Global Holdings, Cadila Healthcare, Parry Nutraceuticals, Sami Labs, and others.

Major Players

A recent survey put the number of registered and non-registered nutraceuticals, herbs and related companies in India at more than 8,000. However, most of these players are small and medium enterprises. According to a February 2014 Verify Markets report, in 2013, the food supplements market in India was estimated at US\$ 2,045 million growing at a fast clip and expected to double its size within the next five years. The report also said that pharmaceutical companies that consider food supplements as an extension of the healthcare sector lead the dietary supplement category. FMCG companies, on the other hand, are launching products in the functional food and beverage category and rapidly expanding their presence. In 2013, domestic companies in the nutraceutical market occupied 55 per cent of the market share, while international companies had 45 per cent share. Nutrition and food safety concerns have resulted in the Government of India paying more attention to the industry. The overall growth potential of the industry is just beginning to be exploited and it is imperative that customised products, affordable pricing and distribution strategy are developed to reach out to the customers along with regulations to ensure that the rapidly proliferating market does not become a misguided mis-

sile. TechSci Research points to the fact that the per capita spending on nutraceutical products in India is significantly low as compared to the global average. This offers considerable growth opportunities for the future.

A report published in May 2014 by Euro-monitor International titled *Vitamins and Dietary Supplements in India*, had forecast that the market is expected to grow by a value

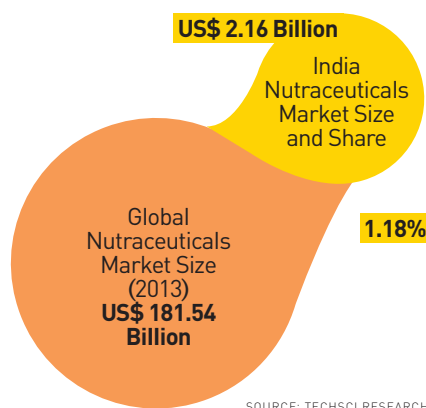
CAGR of 9 per cent at constant 2013 prices during the forecast period of 2013–2018.

Amway India Enterprises Pvt Ltd was the leading player in 2013 with a 24 per cent value share, while Chyawanprash witnessed the strongest value growth of 19 per cent to reach ₹9 billion in 2013. As regards dietary supplements, the market witnessed a growth of 14 per cent in 2013 in terms of current value sales to reach ₹40 billion, with dietary supplements becoming an essential part of the daily diet of urban consumers due to increased product awareness and aggressive marketing by leading companies such as Amway India Enterprises Pvt Ltd, Dabur India Ltd and Ranbaxy Laboratories Ltd.

International brands continued to dominate vitamins and dietary supplements with companies as Amway India Enterprises Pvt Ltd with its large number of brands, aggressive marketing and the expanding loyal consumer base, continuing to lead. Amway's portfolio of trusted brands like Nutrilite, Nutrilite Kids Chewable and Nutrilite Siberian Ginseng and Gingko Biloba amongst others were the highest selling products due to the company's goodwill in the Indian market. It remains the leading consumer health company in India as it continues expanding its direct selling footprints via single and multi-level marketing. Apart from increasing the number of distributors or Amway Business Owners, the company is also aggressively marking its online presence to maintain its lead.

Dabur India with 8 per cent market share enjoyed the second spot in 2013. In third quarter of current fiscal, the consolidated profit of the company is expected to increase 19 per cent year-on-year to ₹289 crore, according to a survey of analysts by CNBC-TV18. The company has carried out portfolio wide changes launching new advertisements that would help it connect with a younger target audience. Though 2014 proved to be a challenging year for most FMCG companies with growth rates showing a sharp fall in most consumer products segments due to challenging environment, they adopted an aggressive strategy towards rural market expansion. In 2014, rural markets accounted for 40 per cent of Dabur's revenue, George Angelo, ED, Sales, Dabur, was quoted as saying at a seminar in August 2014. As a part of its rural strat-

Global vs India Food Supplements Market



Key Trends



egy, the FMCG major targeted penetrating 10 states comprising about 360 districts, which promised 70 per cent of the potential in rural India. However, Dabur focussed on only 312 districts. Its product line includes Real Fruit Juices, Dabur Chyawanprash, Dabur Shilajeet Gold, and *ayurvedic* medicines under LiveVeda Brand.

Though 2013 was a challenging year for Emami and it had to reduce its marketing and promotional budget and could not promote its products aggressively, in 2014-2015, the company had chalked out plans to work more aggressively on its product promotion. In the third quarter ended December 31, 2014, at ₹183.70 crore, the company reported a 21.9 per cent increase in consolidated net profit, with the advertisement and sales promotional spends being the highest during this period. Its portfolio of brands comprises some products that are household names including Zandu, Zandu Balm, Himani, Navratna, BoroPlus, Fair and Handsome, Emami Vasocare, Emami Mentho Plus, Himani Fast Relief, Zandu Sona Chandi Chyawanprash Plus, Zandu Kesari Jivan, etc.

Herbalife International India Pvt Ltd, a subsidiary of Herbalife International of America, Inc., entered India consumer health market in 1999. Today, it is a leading player in the food supplements industry of India especially as a weight management and nutrition company. It employs the direct selling channel and its products are easily available across the country. With a cadre of high performing Indian sportspersons as its brand ambassadors in the country, the company has come to be known as a nutrition company of repute. In 2014, it signed on ace Indian pistol shooter and world No. 1 Heena Sidhu as the fresh face to promote its portfolio of nutritional food products including Formula 1 Nutritional Shake Mix, Energy Drink Mix Afresh as well as personal care products. The company had witnessed steady growth in 2013 and held a 7 per cent of the market share ranking third.

With the aim to be known as a “wellness company”, as Philippe Haydon, CEO, Himalaya Drug Company was quoted as saying in a media interview, the company worked towards targeting middle-income consumers in order to market its herbal and *ayurvedic*

Trends

- Vitamins and dietary supplements witnessed strong growth in 2013 at 13 per cent in terms of current value
- Paediatric vitamins and dietary supplements witnessed the strongest growth in the period 2008–2013, in terms of current CAGR at 36 per cent.
- Increased awareness and trust in brands, for instance, Nutrilite Kids Chewable by Amway India Enterprises Pvt Ltd and Herbalife Dinoshake by Herbalife International India Pvt Ltd, encouraged consumers to try these products.
- Vitamins grew by 12 per cent in terms of current value sales in 2013. The growth was attributed to brands such as Nutrilite, Becosules and Neurobion amongst others.
- Dietary supplements witnessed growth of 14 per cent in 2013 in terms of current value sales to reach ₹40 billion.
- Chyawanprash, one of the oldest herbal/traditional dietary supplements invented in India, witnessed the strongest value growth of 19 per cent in 2013 to reach ₹9 billion.
- Combination herbal/traditional dietary supplements continued to be more popular in 2013 and witnessed stronger growth at 14 per cent to reach ₹2 billion.
- Herbal/traditional combination dietary supplements were nearly four times the size of non-herbal combination dietary supplements as consumers continued to prefer herbal formulations due to their longstanding presence in the country and lack of side effects.
- General health dietary supplements continued to dominate with a 78 per cent market share as most of the brands available in 2013 catered to general health requirements, such as Liv 52, Nutrilite Siberian Ginseng with Gingko Biloba and Nutrilite CH Balance.
- Tonics and bottled nutritive drinks witnessed value growth of 6 per cent in 2013 to reach ₹2 billion. Growth was driven by brands such as Forever Living, Safi and Cinkara.
- Awareness of OTC medicines continues to be low.
- Health and wellness witnessed strong growth among urban consumers.
- Competition between domestic and international companies remains intense.
- Chemists/pharmacists are the leading retail channel in 2013.
- Sports nutrition is expected to witness the strongest value growth at constant 2013 prices over the forecast period of 2013–2018.

(SOURCE: EUROMONITOR INTERNATIONAL: VITAMINS AND DIETARY SUPPLEMENTS IN INDIA, MAY 2014)

products. It also penetrated the men's grooming market with a set of targeted products. In 2013, it held 2 per cent share of the food supplements market with plans to expand the presence of its herbal healthcare products to every Indian home. In 2014, the company had set an ambitious target of US\$ 1 billion revenues, of which it hoped to garner half from domestic sales. By 2020, the company expects to earn ₹3,000 crore from the domestic market with almost 50 per cent of this revenue coming from personal care products vertical at ₹1,400 crore. Its most popular healthcare product is Liv 52.

With an overall share of 4 per cent in 2013, Ranbaxy Laboratories Ltd ranked fifth among all the consumer health companies. In the vitamins and dietary supplements segment, the company ranked third with 8 per cent

market share. In 2014, the company was acquired by pharmaceuticals major Sun Pharma. However, it was a rough and tumble year for the pharma company.

Shree Baidyanath Ayurved Bhawan, enjoys longstanding consumer goodwill in India. With a portfolio spanning 700 products in India and international markets, the company ranked 38th in consumer health in 2013. However, its herbal/traditional dietary supplements segment ranked third holding 6 per cent value share. As health consciousness and proclivity for all things organic and natural become stronger in a maturing market scenario, food supplements market for natural, herbal, traditional and organic vitamins and dietary supplements is forecast to grow the strongest. 🌱

(Based on secondary research)

BY INVITATION

DR POOJA JAIN ASSOCIATE PROFESSOR, DEPT OF NUTRITION & HEALTH EDUCATION, DAULAT RAM COLLEGE, UNIVERSITY OF DELHI

Food Safety in a Globalised World

In a world sans borders, collaboration is the key to ensure safe food for all.



ACCESS TO SUFFICIENT amounts of safe and nutritious food is key to sustaining life and promoting good health. Safe food supplies support national economies, trade and tourism, contribute to food and nutrition security and underpin sustainable development. Urbanisation and changes in consumer habits, including travel, have increased the number of people buying and eating food prepared in public places. Globalisation has triggered growing consumer demand for a wider variety of foods, resulting in an increasingly complex and longer global food chain. Food supply chains now cross multiple national borders. Good collaboration between governments, producers and consumers helps ensure food safety.

As the world's population grows, the intensification and industrialisation of agriculture and animal production to meet increasing demand for food creates both opportunities and challenges for food safety. Climate change is also predicted to impact food safety, where temperature changes modify food safety risks associated with food production, storage and distribu-

tion. These challenges put greater responsibility on food producers and handlers to ensure food safety. Local incidents can quickly evolve into international emergencies due to the speed and range of product distribution. Serious food-borne disease outbreaks have occurred on every continent in the past decade, often amplified by globalised trade.

Unsafe food poses global health threats, endangering everyone. Infants, young children, pregnant women, the elderly and those with an underlying illness are particularly vulnerable. Food-borne diseases impede socio-economic development by straining health care systems, and harming national economies, tourism and trade. Food-borne illnesses are usually infectious or toxic in nature and caused by bacteria, viruses, parasites or chemical substances entering the body through contaminated food or water. Unsafe food can cause more than 200 diseases ranging from severe diarrhoea to debilitating infections including meningitis and can lead to long-lasting disability and death. Food-borne and water-borne diarrhoe-

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Dr Jain has several presentations and papers in national journals to her credit. She is also a regular resource person on nutrition and an editor, author and translator of books on health education of the community.

al diseases kill an estimated 2 million people annually, mostly children and particularly in developing countries. Chemical contamination can lead to acute poisoning or long-term diseases, such as cancer. Examples of unsafe food include uncooked foods of animal origin, fruits and vegetables contaminated with faeces, and raw shellfish containing marine biotoxins.

Food safety, nutrition and food security are inextricably linked, particularly in places where food supplies are insecure. Unsafe food creates a vicious cycle of disease and malnutrition, threatening the nutritional status of the most vulnerable particularly infants, young children, elderly and the sick. When food becomes scarce, hygiene, safety and nutrition are often ignored as people shift to less nutritious diets and consume more 'unsafe foods'—in which chemical, microbiological, zoonotic and other hazards pose a health risk.

New threats to food safety are constantly emerging. Globalisation of food supply, changing food consumption patterns, evolving farm-level practices, newer food components and changing



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by Invitation

DR POOJA JAIN //



Codex Alimentarius Commission is a joint inter-governmental body... that has created harmonised international food standards..."

processing techniques, shifting population demography, emerging pathogens and antimicrobial resistance—all pose challenges to national food safety systems. Increases in travel and trade enhance the likelihood that contamination can spread internationally.

As our food supply becomes increasingly globalised, the need to strengthen food safety systems in and between all countries is becoming more and more evident. That is why the WHO is promoting efforts to improve food safety, from farm to plate (and everywhere in between) on World Health Day—April 7, 2015. The topic for World Health Day 2015 is food safety. Food safety is a shared responsibility. It is important to work all along the food production chain—from farmers and manufacturers to vendors and consumers. WHO's Five keys to safer food offer practical guidance to vendors and consumers for handling and preparing food:

Key 1: Keep clean

Key 2: Separate raw and cooked food

Key 3: Cook food thoroughly

Key 4: Keep food at safe temperatures

Key 5: Use safe water & raw materials

World Health Day 2015 is an opportunity to alert people working in different government sectors, farmers, manufacturers, retailers, health practitioners, as well as consumers, about

the importance of food safety, and the part each can play in ensuring everyone can feel confident that the food on their plate is safe to eat.

Every consumer has the right to safe food. The responsibility of ensuring food safety rests jointly with all the main players—international organisations, government authorities, food business operators and the consumers. Global organisations play an important role in setting harmonious standards for food trade which is expanding beyond the boundaries of different nations. The government, at the national level, sets up food laws through the legislative process and lays down rules and regulations for their effective implementation. Food industry, at its end, must exhibit self-discipline and follow food standards and codes of practice set by national and international agencies. Finally, the consumers must be aware of their rights and should learn to assert themselves individually or collectively to demand food that is wholesome and safe.

The Codex Alimentarius Commission is a joint inter-governmental body of the Food and Agriculture Organisation (FAO) of the United Nations and WHO, that has created harmonised international food standards to protect the health of consumers and ensure fair trade practices. This collection of international food standards, guidelines and codes of practice covering all the main foods and processes is known as Codex Alimentarius or Codex Standards. This has become an international reference point not only for the consumers, food producers and processors but also for the national food control agencies and international food trade.

Over the last six decades, the Government of India has formulated multiple food laws, standard-setting agencies and enforcement bodies for different sectors of food. However, changing consumer demands, laws at national/international level, scientific advancements and challenging business environment necessitate the

regular upgrade of existing food laws. To promote innovations in food business, to encourage the investors and include the component of consumer education, the Government of India has introduced the Food Safety and Standards Act (FSS Act), 2006. This recently formulated Act is modern in approach and will gradually replace the following earlier mandatory laws:

- Prevention of Food Adulteration Act, 1954
- Fruit Products Order, 1955
- Meat Food Products Order, 1973
- Milk and Milk Products Order, 1992
- Vegetable Oil Products (Control) Order, 1947
- Edible Oils Packaging (Regulation) Order, 1988
- Solvent Extracted Oil, De Oiled Meal and Edible Flour (Control) Order, 1967
- Essential Commodities Act, 1955

The food safety and standards related rules and regulations came into effect in the year 2011. The various regulations are:

- The Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011
- The Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011
- The Food Safety and Standards (Packaging and Labelling) Regulations, 2011
- The Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011
- The Food Safety and Standards (Laboratory and Sample Analysis) Regulations, 2011
- The Food Safety and Standards (Prohibition and Restriction on Sales) Regulations, 2011

In the context of food safety, product information, particularly that given on the label, is very important. Food labelling is compulsory and must adhere to the specifications given by the Food Safety and Standards Regulations, 2011. An aware consumer



is one who will comprehend the importance of product information, make informed choices and prevent contamination and growth or survival of food-borne pathogens by correct storage, preparation and usage.

In large amounts, pesticides have been found to cause different illnesses including cancer and therefore are a food safety concern. Organic foods are defined as those foods that are grown without the use of synthetic fertilisers or pesticides. India Organic is a certification mark for organically farmed food products manufactured in India. The mark certifies that an organic food product conforms to the National Standards for Organic Products established in 2000.

Another concern related to food safety is associated with the genetically modified (GM) foods. GM foods are foods in which the genetic material (DNA) has been altered in a way that does not occur naturally. GM foods are controversial and the controversies involve consumers, biotechnology companies, governmental regulators, non-governmental organisations and scientists. The key areas are whether GM food should be labelled, the role

Is this food safe?

An aware consumer is one who will comprehend the importance of product information, make informed choices and prevent contamination and growth or survival of food-borne pathogens by correct storage, preparation and usage. In large amounts, pesticides have been found to cause different illnesses including cancer and are a food safety concern.

of government regulators, the effect of GM crops on health and the environment, the effects of pesticide use and resistance, the impact on farmers, and their roles in feeding the world and energy production. Following the promulgation of the FSS Act, 2006, the FSSAI is empowered to regulate genetically modified (GM) foods. The FSSAI now intends to meet its regulatory obligations by implementing a safety assessment and approval process for GM foods that leverages existing regulatory capacity within the Government of India. The government must act with utmost caution, taking all stakeholders on board.

Ensuring food safety is an important public health issue in the current scenario. Laws and regulations are pretty much in place but their effective implementation needs to be emphasised. Everyone from producer to consumer, must act responsibly to make sure that safety of food is maintained from farm to fork. No vested interests should be allowed to override food safety if we want to reduce the burden of malnutrition and infection in our country. 🇮🇳

(Views expressed here are of the author.)

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Benefits.”**



PHOTO: THINKSTOCKPHOTOS.IN

An Authority without Teeth?

There is an urgent need to equip the Central Drugs Standard Control Organisation with a clear direction and more authority to enable it to discharge its mandated role. BY SANJAY K OJHA

India's drug regulatory authority, Central Drugs Standard Control Organisation (CDSCO), has been facing flak from stakeholders and the government. In July 2014, then Union Health Minister Dr Harsh Vardhan called the regulatory agency a 'snake pit of vested interests'. His remark came at a time when advocacy groups had launched a campaign against corruption in healthcare industry and written an open letter to Prime Minister Narendra Modi in this regards. The drug regulator is accused of failing to discharge its role to check substandard drugs, provide stimulus to the medical devices industry and monitor clinical trials. Rajiv Nath, Forum Coordinator, Association of Indian Medical Device Industry (AIMED) and Joint Managing Director, Hindustan Synergies & Medical Devices, says, "The CDSCO is doing its job with partial success. The problem is its limited autonomy and mandate and highly centralised structure—you write all letters only to the DCGI, which understandably has no time to read the avalanche of daily correspondence."

The US, Vietnam, Sri Lanka and a few African countries have banned several Indian pharmaceutical companies in recent years for being 'not of standard quality' (NSQ). Fingers were raised over the working of CDSCO when 14 women died in Chhattisgarh's Bilaspur in November 2014 as a result of botched sterilisation procedures. Initial investigations identified the use of adulterated and substandard drugs as a prominent factor responsible for the deaths. The manufacturing licences of two firms—Chhattisgarh's Mahawar Pharma and Uttarakhand's Technical Lab & Pharma—were temporarily suspended based on preliminary reports. Mahawar Pharma was banned from manufacturing medicines in 2012 too, after it was found to have produced fake generic drugs.

This raises some questions: How did this firm continue with its production after the ban? Why did Chhattisgarh government purchase drugs from the blacklisted company? Has CDSCO failed to deliver its

mandated job? Kaushik S Desai, Honorary General Secretary, Indian Pharmaceutical Association, refutes these allegations levelled at CDSCO, saying, "There is a difference between the roles of central licensing authority and state licensing authority. You can't blame CDSCO for everything. It is the joint responsibility of both the authorities."

The Indian pharmaceutical industry today is a global powerhouse of generic drugs and ranks high among developed countries in terms of technology, quality and range of medicines produced. According to a McK-insey report, the Indian drug industry is likely to be the world's second biggest market worth US\$ 40 billion by 2020, after the USA. The industry exported drugs worth

"Though the government is coming out with price control regulations, there has not been an agreement between it and the industry over the pricing mechanism..."

Kaushik S Desai

Honorary General Secretary
Indian Pharmaceutical Association

by 2017. Apparently, the watchdog has not been able to flex its muscles in tune with the pharma industry's growth momentum. Desai reasons, "CDSCO is doing its work. It's not that the regulatory agency is not doing its work, but the pace is slow. It is both ways. Sometimes, the industry does not provide necessary documents to the agency at proper time, thus it has to go slow." Obviously, CDSCO is at a crossroads. In the light of the demand for an overhaul of the drug regulatory authority, a look at the major challenges impacting the growth of the Indian pharmaceutical sector is revelatory.

Substandard Drugs

India is the third largest exporter of phar-



US\$ 14.84 billion in 2013-14. Its growth rate was 9 per cent during 2000–2005, which jumped to 14 per cent during 2009–14. In its September 2014 list of misbranded drugs, released in October 2014, CDSCO declared 45 drugs, cosmetics and medical devices as substandard. A recent analysis by ASSOCHAM revealed that the fake drugs market in India is likely to cross the US\$ 10 billion mark

maceuticals to the US with 40 per cent of its generic requirement being met by India. Besides, India is one of the biggest suppliers of drugs to East Asian and African countries. Since May 2013, after the Ranbaxy story broke out, 15 Indian companies have been flagged by the US FDA for poor 'data integrity' and a few sporadic cases of Indian drugs banned in East Asian coun-

tries and African countries for being NSQ. Industry experts, however, blame it on the “perception crisis outside India where Indian companies are competing with Chinese counterfeits of popular Indian brands and are fighting a campaign against their generic medicines being declared spurious by Europeans and the US. “I am not sure if it’s for the genuine safeguard of American consumers or a tactic to act as a non-tariff barrier and deterrent to low-cost Indian drugs,” opines Nath. Desai adds, “Unless it is the government that takes the sample and declares a drug fake, it is not so.” DCGI says Indian drug regulators have always maintained a strict vigil over quality of drugs manufactured throughout the country. So, where is the problem? Nath is quick to respond, “The department that is supposed to help them grow has little to show for achievement under past governments. It is not under the Ministry of Health & Family Welfare (MHFW) but is housed in the Ministry of Chemicals & Fertilizers (MCF). The solutions have not been holistically applied for national needs and are based on specific segments. The worst hit is the API industry, as Chinese imports and chemicals flourish. Yet, the MCF has failed to protect domestic bulk drug manufacturers.”

Medical Devices

As per a PwC report, the diagnostics market is the fastest growing segment of India’s healthcare industry, forecast to grow to US\$ 17 billion by 2021 from US\$ 3.4 billion in 2011. The Indian medical devices industry, however, is not happy with growth projection as it finds it hard to cope in absence of a regulatory framework. “A medical device is a highly innovative engineering field in a state of constant flux and development. The notification of regulatory controls through the prism of Drugs & Cosmetics Act, 1940 on notified medical devices is impractical and will be flouted,” reasons Nath. He elaborates, “The Indian medical devices industry has been facing multiple challenges. As manufacturing in most cases is not viable, producers import finished devices, subassembly or components, as import duty on devices is zero or negligible at 5 per cent. Besides, it’s difficult to win the trust of doctors and hospitals without endorsement of a licensing

or certifying body. Retailers and corporate hospitals prefer imports as they usually have no MRP on unit pack and margins are unrestricted compared to domestic products with MRP, limiting margins of retailers. The government has tried to regulate some devices (14+8) with incomplete and incorrect regulations. This is only harassment for existing players and makes India more import-dependent.”

In 2006, the government introduced the Medical Devices Regulation Bill, 2006 in Parliament to provide legislation to the industry, with the establishment of Medical Device Regulatory Authority of India (MDRA). The enactment of the Bill, unfortunately, didn’t see the light of the day. The

Drugs and Cosmetics (Amendment) Bill, 2013—which was meant to amend the Drugs and Cosmetics Act, 1940—met the same fate. AIMED is, hence, rooting for proper regulation to monitor the medical devices industry. In its letter to the Ministry of Health in August 2014, AIMED called for a regulatory framework for medical devices incorporating international best practices and standards. Desai supports the concerns raised by Nath, saying, “There is a need to bring more items into the gamut of medical devices. As most medical devices are imported, they should be regulated.”

Clinical Research

India is an attractive location for clinical

CDSCO: Roles & Responsibilities



In India, pharmaceuticals are controlled under the Drugs and Cosmetics Act, 1940. The Act regulates import, manufacture, distribution and sale of drugs in India. The central government via CDSCO, which functions under the Ministry of Health and Family Welfare, works on developing standards and regulatory measures for drugs, diagnostics and devices.

As the regulator of imported drugs, CDSCO works with Drugs Technical Advisory Board and Drugs Consultative Committee. Central Drugs Laboratory is assigned to undertake testing of such drugs. Other works comprise screening of drug formulations, monitoring adverse drug reactions, participation in the WHO’s good manufacturing practice (GMP) certification scheme and screening of applications for granting ‘no

objection certificates’ for export of unapproved or banned drugs.

Under the Drug and Cosmetics Act, 1940, the regulation of manufacture, sale and distribution of drugs is done by the state authorities, while CDSCO is responsible for approval of new drugs, clinical trials in the country, laying down the standards for drugs, control over the quality of imported drugs, coordination of the activities of state drug control organisations and providing expert advice with a view of bring about the uniformity in the enforcement of the Act.

Drug Controller General of India, who heads CDSCO, is responsible for approval of licenses of specified categories of drugs such as blood and blood products, intravenous (IV) fluids, vaccine and sera. There are six zonal offices of CDSCO at Mumbai, Kolkata, Chennai, Ghaziabad, Ahmedabad and Hyderabad and four sub-zonal offices at Bangalore, Goa, Jammu and Chandigarh.

(Source: Secondary Research)

research industry—pegged at over ₹3,500 crore and growing at 10–12 per cent annually—as it possesses a highly skilled workforce and a large population available for low-cost clinical trial recruitment. Clinical research is crucial for India because it bears a sixth of the global population and a fifth of the global disease burden. “Since 2011, clinical research has enjoyed good growth. However, the government has brought in several stringent guidelines and regulations. These must come to a normal level, which is not the case right now,” says Desai. In 2013, the government brought into effect new compensation guidelines on the conduct of clinical research in India through a gazette notification, which proved to be detrimental for the industry. Earlier, the compensations were restricted only to the cases where medication being tested had caused either injury or death. With the 2013 notification, clinical trials became more expensive in India. The CDSCO drafted a new protocol making it mandatory for all clinical trial participants to provide video-recorded consent, which included an explanation of all potential adverse health risks. Some drug developers are of the view that these guidelines are extremely strict and worry that it may lead many companies to consider holding trials in other countries.

Drug Pricing

The issue of drug pricing has dogged the Indian pharmaceutical industry for long. After the National Pharmaceutical Pricing Authority (NPPA), in July 2014, capped prices of 108 non-essential drugs to improve affordability for the masses, several drugs companies and investors questioned the move. Industry experts warned that attempts to control the price of too many drugs in India could halt the industry growth momentum and even hurt consumers in the long run. “Though the government is coming out with price control regulations, there has not been an agreement between it and the industry over the pricing mechanism. The government must balance between affordability and accessibility,” Desai opines. Sharing his view, Nath says, “The DPCO is a regressive regulation with unrealistic expectations and a policy to define very low gross mar-

gins for traders. This leads to development of innovative ways to bypass regulatory control by affected manufacturers and limited availability of essential medicines at times to consumers.”

In order to infuse confidence in the pharma sector, two months later, the Union government, reduced the power of the NPPA to set prices on non-essential drugs. The NPPA is now allowed to cap prices of what are deemed “essential medicines”, which means the drugs that are used most by the general masses.



“The CDSCO is doing its job with partial success. The problem is its limited autonomy and mandate and highly centralised structure...you write all letters to the DCGI.”

Rajiv Nath

Forum Coordinator, Association of Indian Medical Device Industry (AIMED)

Way Ahead

The Government of India, in January 2015, released the draft of Drugs and Cosmetics (Amendment) Bill, 2015, to amend the Drugs and Cosmetics Act, 1940, for upgradation and introduction of provisions for clinical trials and regulation of medical devices. The Bill, which is set to be introduced in the Budget session of Parliament, proposes to expand the scope of the Act to cover new areas and “regulate the import, manufacture, distribution and sale of drugs, cosmetics, medical devices and conduct of clinical trials and for matters connected therewith or incidental thereto”. It provides for an Ethics Committee that shall be responsible for overseeing the conduct of clinical trial, and safeguarding the rights,

year, secured ₹900 crore (US\$ 142 million) funding boost to strengthen its regulatory infrastructure. In the same month, the NPPA issued the draft for setting up price monitoring and resource units (PMRUs) in the states and Union territories, which would provide all necessary support to the state drug controllers and the drug pricing authority. Desai concludes, “Indian pharmaceutical companies must now focus more on niche markets as the generic drugs market is too crowded. Biosimilars and biologics are the areas which are the future of pharmaceuticals industry. The government is promoting generics and it is a good move for the common men, but then generics can’t generate much revenue.”

(Based on interviews & secondary research)

“The new regime seeks to move away from prevention to **risk assessment and mitigation of risk...**”

The Food Safety and Standards (Amendment) Bill, 2014 was withdrawn to widen its scope. **K L Sharma, Joint Secretary to the Government of India, Ministry of Health & Family Welfare**, discusses the finer points being reworked into the Bill with *Sangita Thakur Varma*.

Q What are the current issues around food safety and standards that led to the Food Safety and Standards (Amendment) Bill, 2014? Why was the Bill withdrawn in November last year?

Essentially, the amendment Bill that was introduced earlier in 2014 had a very limited scope. Now, over a period of time, a number of representations have come from the people and food business operators. In addition, we have noticed certain inconsistencies in the Act. Therefore, in order to ensure that we have a comprehensive overview of the entire Act, which sought to migrate from the adulteration perspective to risk-based assessment, a committee has been set up under Secretary, National Disaster Management Authority. This committee along with other stakeholders is currently taking a comprehensive look at the Act and trying to work out what kinds of changes would be required in the Act

in order to understand both—the perspective and the interest of the consumers as well as the food business operators. Its twin objectives are sought to be met and the committee is currently examining the Act. However, it will take some time as lots of representations have been made and changes have been suggested by the people from across the country.

Q What changes is the government seeking to bring about in storage, manufacturing, distribution, sale and import with the amendment to the regulatory framework?

Basically, the problems regarding adulteration were brought up repeatedly and earlier the issue predominated with the old regime focussed on prevention of adulteration. The new regime that is sought to be created through FSS Act seeks to move away from prevention to risk assessment and mitiga-

tion of risk. It's a paradigm shift that we are seeking to bring through the proposed amendment. We are trying to look at all the caveats and create a dispensation in which the risks associated with adulteration and unhealthy foods are removed to a large extent. This is the basic perspective. Prevention of adulteration is just one aspect of healthy food regime. Ensuring healthy and wholesome food from all perspectives is the aim of the Act. At the same time, when the Act was being enacted, one of the important issues under consideration was the shelf life of food products. Food products must not be rendered unfit for consumption because they cannot be made available for longer use. Hence, processing of the food for making it available for longer use was one of the objectives at that time. It was sought to be achieved without compromising on the safety and wholesomeness of the food. Now that the Act has been in operation for nearly



PHOTOS: SUBHOJIT PAUL

Government Perspective

\\ INTERVIEW

four years, whatever difficulties have been encountered or problems faced during its operation, are being taken into account now. We will have a new Act after introduction in the Parliament and approval processes are completed including the approval of the Cabinet. This is what we are working on.

The Act then is going to provide a basis for the food manufacturers to look at what kinds of standards and what kinds of deviations in those standards are permissible; the range within which they can add additives, preservatives and things like that. In addition to the provisions through the Act, these safety standards will also be achieved through the process of standardisation. In the last meeting of the FSSAI, about 12,500-13,000 standards have been considered and approved. These standards are based on international standards and are used by the Codex. Therefore, harmonising with these standards, there is going to be a new set of standards shortly, and the current problems being faced in terms of product approval and the like by manufacturers will be reduced to a large extent.

Q What about distribution and imports?

Distribution is a part of the food safety and standards process. Once you store the food and store it in proper environment, then its shelf life is what is prescribed on the product packaging, that is, labels thereof. To that extent, distribution also is covered under the Act.

The amendment to the Act per se will not impact imports of food products, but because we are going for harmonisation of food standards with international standards and with Codex standards, it will be impacted. As a result, there is going to be an improvement in the process. There will be speedier clearance disposal at the port. That is what is to be achieved through the process of standardisation. But actually the amendment would be looking more at the inherent deficiencies in the Act that came up because there were attempts to move from one way of looking at food to looking at it from a different perspective—that of mitigation of risks and carrying out assessment of the risks. The combination of the two, that is, the amendment in the Act and laying the standards for more and more products,



will pave the way for proper migration from adulteration regime to risk assessment and mitigation regime.

Q There have been controversies regarding labelling of ingredients on imported food products, that is, certain countries do not make it mandatory to mention all the ingredients on the pack, but in India it is required that all ingredients are mentioned. What is the role of FSSAI in such situations?

There are two kinds of problems that have occurred. One is that the ingredients that are required to be specified in accordance with our regulations are not specified fully by some of the exporters. The other issue, as far as the information given by FSSAI is concerned, is that some of the ingredients are actually not in use in those countries which are exporting final products to India. We can't allow that food to be imported into our country which is not safe and is not in use in the country of export. Actually, these are all problems that will arise in the initial implementation of a new regime due to wholesale migration from one way of looking at things to a paradigm shift. But with passage of time, with some changes in the system and with people becoming adjusted to the system and to the environment, these

will get addressed in the longer perspective.

Q Though the Bill/Act is to ensure food safety and standard, what role can it play in improving issues like malnutrition especially among women and children?

It doesn't have a direct link and cause-effect relationship. But availability of wholesome food through longer shelf life will ensure affordability of food items. The food will become more affordable and it will be available for a longer duration. For example, vegetables and fruits, if they are unprocessed, can last for 10 days. But if they are stored in cold storage, they can last longer. But when they are processed, they can remain available for much longer shelf life, even without the cold storages. The Act has two purposes—one is from the perspective of consumers—you safeguard their health and make available nutritious food over a longer period of time and the other is from the perspective of the industry—reduction of wastage is one of the major concerns and the Act will look at enabling it.

Q Dietary supplements market is growing rapidly in the country. What kind of regulatory challenges do you foresee and how is the government planning to tackle these problems? In



“In the amendment... we are going to be more specific as to the meaning of different terminologies...If there is vagueness in the law, implementation itself becomes a difficult issue.”

K L Sharma

fact, the terms nutraceuticals, health supplements, health foods, etc., itself pose challenges. How will the amendment address these issues?

In the amendment that we are carrying out, we are going to be more specific as to the meaning of different terminologies, proprietary food, nutraceuticals, dietary supplements, organic food, etc. We have much more clarity and we are getting still more suggestions from people as to how to define them. If there is vagueness in the law, implementation itself becomes a difficult issue. I think this is one of the areas that will get addressed once we have a new law.

Q How is the current government planning to raise awareness around food safety and standards in India?

You must have noticed *Jago Grahak Jago* (JGJ) campaign. JGJ is jointly funded by Department of Consumer Affairs and Department of Health & Family Welfare through FSSAI. A huge amount that is being spent on the campaign and the message is also reaching the masses, especially through the medium of radio and other mass media vehicles. Some of the campaigns of JGJ are so attractive that children memorise them. So, information and communication is a key element in raising

awareness about food safety and standards in India and it is already happening. JGJ will continue to spread the message through various platforms.

Q Do you have any separate programmes for consumer awareness?

We have to leverage all the resources of the government. The government must act in unison and the message that has to go out, has to go loud and clear and it has to go in one voice. This is the reason why the two departments have tied up together. Though the Department of Consumer Affairs takes most of the burden, part of it is borne by us as well. This is a good programme (JGJ), and good investment in terms of dissemination of information and reach. I think there is no other programme with this kind of reach.

Q What kind of capacity building do you think is required in the government to improve food safety & standards? What role do you see for the government?

If we want to have an effective regulation in any sector, we need to have people who are competent and also in sufficient numbers. We have already approved the regulations for recruitment in the FSSAI. The authority will be now recruiting people and more

recruitments will take place as we go along. With the passage of time, we will create more positions in the authority. However, in addition to people recruitment, in order to ensure that we do not spend excessively on human resources, we are leveraging the e-governance resources. There are systems already in place and they are proposed to be installed at all ports, units, zonal offices, etc., of the FSSAI. Once we have both these measures in place, that is people and systems, we should be in a position to address the capacity constraints.

Q What suggestions do you have for other stakeholders like NGOs and the private sector in terms of improving food safety & standards?

From the perspective of the government, there must be constant dialogue, ongoing evaluation of what is available, what is being offered, what are its pitfalls, how it can be improved, etc. Food safety is a not a one-time affair, but something which has to be upgraded continuously. Hence, people in scientific and research field, in NGOs, food producers and all other stakeholders, must sit together and think in terms of investing in R&D to enable availability of newer technology for ensuring wholesome food to the people at large. This is how I perceive it. 🍷

OUT OF THE BOX

SANGITA THAKUR VARMA

Power Foods

Phytonutrients derived from fruits and vegetables are being touted as the new superfoods by health practitioners across the world. A study by Nutrilite Health Institute tells us why.



CUCUMBERS CONTAIN PHYTONUTRIENTS

that have cancer fighting properties, Acai berries, the superfood that help fight free radicals in the body and prevent diseases like cancer, heart disease, brain dysfunction, etc., are one of the richest sources of phytonutrients in a fruit. Pistachio, dragonfruit, kiwi fruit—all contain high amounts of phytonutrients and are being touted as health foods. The health news these days is liberally pushing the importance of phytonutrients in human wellness.

With the world consumers taking note of the importance of phytonutrients in their daily diet, the *Global Phytonutrient Report* commissioned out by the Nutrilite Health Institute of Amway and published in the the British Journal of Nutrition in September 2014, came as a timely reminder to consumers to up their intake of fruits and vegetables in order to avail the benefits of phytonutrients. It was a startling discovery that worldwide there was a shortfall in the fruit and vegetable consumption by people. The

minimum recommended consumption of fruits and vegetables by the World Health Organisation (WHO) per adult is five servings per day (400 gm). The study found that globally adults would have to double their consumption to reach the recommended minimum, as only 1 in 4 adults met the minimum servings requirement, leaving a vast majority—60 to 70 per cent adults—out of the loop.

The study conducted across 13 regions of the world, analysed the variety and types of fruits and vegetables specific to each region and the servings consumed by the people residing therein. Using this data and other relevant literature, Nutrilite drew inferences regarding the polynutrient intake of the people inhabiting these 13 regions. The 13 geographies covered are food clusters and included Americas and Australia, e.g., United States, South/Central America, e.g., Mexico, South America, e.g., Brazil, Southern Europe, e.g., Italy, Western Europe, e.g., Germany, Northern Europe, e.g., Sweden, Eastern Europe,



Take the Phytonutrient Challenge

Do you get enough fruits and vegetables to support your health?

New research shows you most likely are not.

e.g., Russia, Asia (A), e.g., China and India, Asia (B), e.g., Japan and Korea, Northern Africa/Middle East, e.g., Morocco, Central Africa (A), e.g., Cameroon, Central Africa (B), e.g., Nigeria, and Southern Africa, e.g., South Africa.

The study analysed a total of nine fruit and 10 vegetable categories for the purpose of the research and found that the quantity and variety of fruits and vegetables varied across the world. As a corollary, the quantity and variety of phytonutrient consumption also varies from region to region. The phytonutrients vary from source to source. For instance, tropical and subtropical fruits, like plantains are rich source of alpha-carotene and beta-carotene, mangoes have beta-carotene, papayas (beta-cryptoxanthin) and guavas are rich in lycopene. Fruiting vegetables, on the other hand, like tomatoes are rich in alpha-carotene, beta-carotene, and lycopene, corn has lutein/zeaxanthin and eggplants is a rich source of anthocyanidin. The fruit and vegetable categories selected

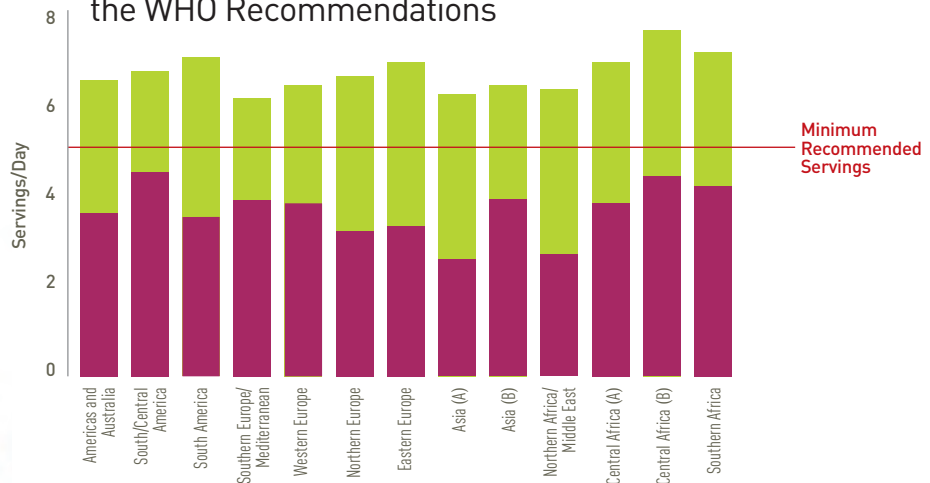


PHOTO: THINKSTOCKPHOTOS.IN

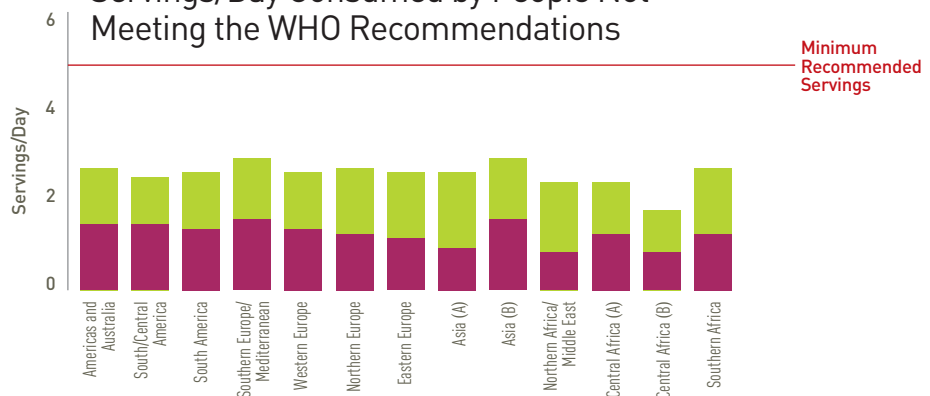
for the purpose of the study included:

- 1. Tropical/Subtropical fruits:** bananas, plantains, figs, mangoes, mango-steens, avocados, guavas, pineapples and papaya.
- 2. Citrus fruits:** oranges, lemons, limes, grapefruit, tangerines, mandarins, and clementines.
- 3. Melons:** watermelons, cantaloupes, and other melons.
- 4. Pome fruits:** apples, pears, and quinces. Berries: strawberries, raspberries, gooseberries, currants, blueberries, cranberries, and grapes.
- 5. Fruiting vegetables (excluding cucurbits)/Mushrooms:** tomatoes, okra eggplants, maize, mushrooms, and truffles.
- 6. Brassica vegetables:** cabbages, broccoli, cauliflower and other brassicas.
- 7. Fruiting vegetables (including cucurbits):** pumpkins, squash, gourds, cucumbers and gherkins, chillies, and peppers (e.g., green peppers).
- 8. Leafy vegetables:** lettuce, chicory, spinach and other leafy vegetables.
- 9. Root vegetables:** carrots and turnips.

Average Number of Fruit and Vegetable Servings/Day Consumed by People Meeting the WHO Recommendations



Average Number of Fruit and Vegetable Servings/Day Consumed by People Not Meeting the WHO Recommendations








The report also pointed to other factors such as the form in which fruits and vegetables are consumed (e.g., cooked or raw) affecting the impact of phytonutrient intake. The report's findings point not only to the gap between the recommended level and actual consumption but also the regional variations in consumption.

Understanding Phytonutrients

So what is this superfood? Surprisingly, phytonutrients are nothing

exotic or expensive despite being a rich source of health for human beings. Often referred to as phytochemicals, they are compounds found in plants and each phytonutrient performs a different function in the plant, working together to preserve a plant's vitality. Some can protect the plant from UV radiation while others protect it from insect attack. When vegetables and fruits are consumed by humans, the same phytonutrients work to promote good health in them. While some act as antioxidant, others

Select Phytonutrients and Associated Health Benefits

	COLOUR CATEGORY	PHYTONUTRIENT	EXAMPLES OF ASSOCIATED HEALTH BENEFITS	EXAMPLES OF FRUITS/VEGETABLES
	GREEN	Lutein/ Zeaxanthin	Vision health	Spinach, lettuce, kale, broccoli
		Glucosinolates	Cellular health	Broccoli, bok-choy, cabbage, mustard greens
	RED	Lycopene	Prostate health, lung, stomach health, heart health	Tomatoes, watermelon, red grapefruit
		Ellagic Acid	Cell health	Raspberries, strawberries
	WHITE	Quercetin	Blood vessel and heart health, bone and joint health	Onions, apples, radicchio
	PURPLE/BLUE	Anthocyanidins	Heart health, cell health, skin health, digestive health, brain health	Grapes, blueberries, eggplants
	YELLOW/ORANGE	Alpha-carotene	Vision health, healthy growth and development, heart health	Carrots, plantains, pumpkin
		Beta-carotene	Vision health, healthy immune function, healthy growth and development, heart health, bone health	Carrots, Chinese cabbages, plantains, cantaloupe
		Hesperidin	Heart health	Oranges, lemons, limes
		Beta-cryptoxanthin	Heart health, bone health, joint health	Oranges, tangerines, papayas

are anti-inflammatory or promote liver health. Fruits and vegetables, though the primary sources of phytonutrients, are not the only ones. All other plant foods, be it whole grains, legumes, beans, nuts or seeds, herbs or spices, all contain phytonutrients. The colour of a vegetable or a fruit is a clue to the particular phytonutrient contained in it as often it is the pigment imparting the rich hue to them. That is the reason that nutritionists advise a colourful diet. Blue or purple fruits and vegetables are rich in flavonoids (blueberries, blackberries and red cabbage); tomatoes, guava, and watermelon that are red or pink are rich source of lycopene, green foods are rich in chlorophyll and include like kale, spinach, and collard greens, while carrots, winter squash, papaya, and melon that are yellow-orange are high in beta-carotene. Though most phytonutrients are the pigment

providing agents in a plant, garlic, onions, and leeks that are off-white, are potent sources of sulfur-containing phytonutrients.

“Phyto” is a Greek term meaning plant and even tea, which is again a plant source is a rich in phytonutrients. Though many plant-based foods contain a number of different phytonutrients, the study of the different phytonutrients each contains is limited as yet. This is all the more reason to increase consumption of a variety of fruits and vegetables to ensure that we consume the maximum number of phytonutrients. The *Global Phytonutrient Report* provides colour coded guide to select phytonutrients with their associated benefits (see box above).

A key finding of the report threw light on the regional consumption pattern. While the average intakes of fruit and vegetable servings of



Solution: Eat at least five servings (400g) of colorful fruits and vegetables per day. Power up your plate with a variety of fruits and vegetables to get a range of health benefits. When diet is not enough, eat plant-based supplements.

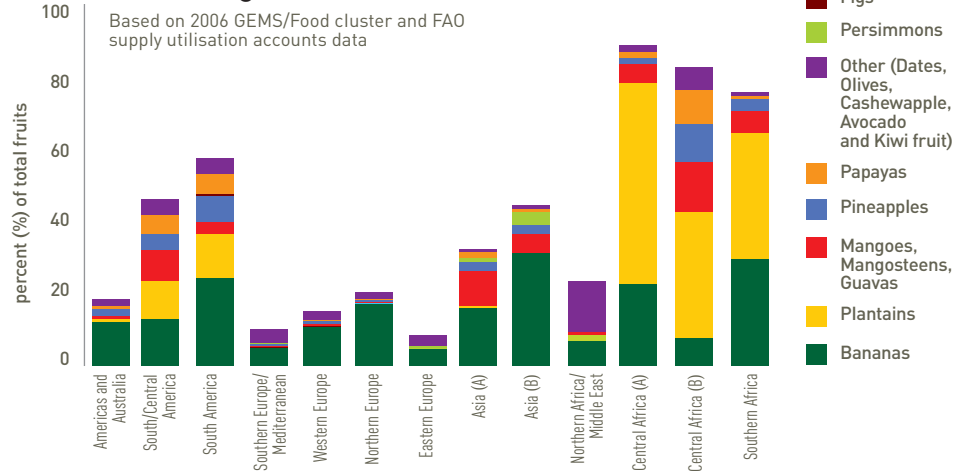
adults in all regions around the world was found to be below the recommended minimum of at least five servings daily, it ranged from 2.7 servings per day in Northern Africa/ Middle East to 4.2 servings per day in South America. The majority of adults (60–87%) worldwide reported consuming fewer than five servings of fruits and vegetables per day. It was a key insight of the study that populations consuming low amounts and variety of fruits and vegetables are also consuming low quantities and varieties of phytonutrients. The reasons for the low average intake of fruits and vegetables and in the final analysis polynutrients, ranged from cost of fruits and vegetables to convenience or their availability and also their quality. In developing countries like India, fruits and certain vegetables are also expensive and hence out of reach of the general masses.

Perceptions of the nutritional value of fruits and vegetables also differ from region to region and also individual to individual depending on the degree of awareness. Fruits and vegetables are also seasonal in most cases and not all varieties are cultivated in all geographies. This impacts their availability. Other factors impacting the intake of phytonutrients include, limited access to transportation, cooking facilities and safe food storage options.

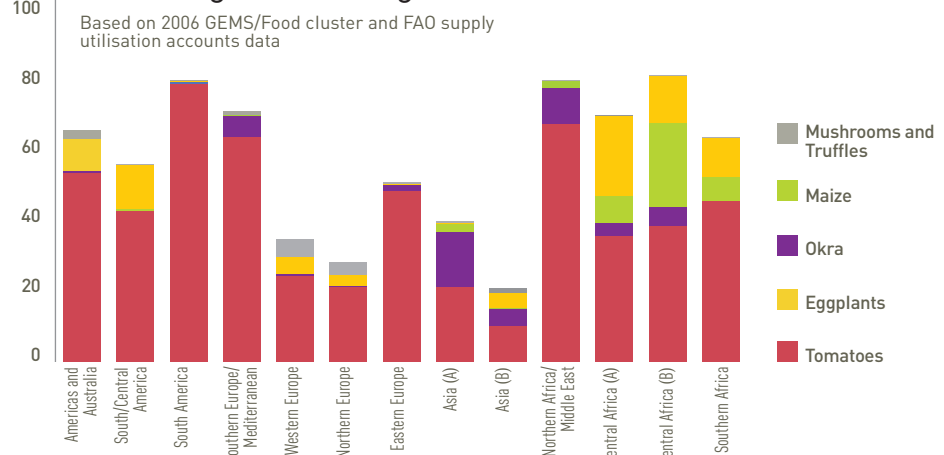
Variety is the Key

Though this study is far from being exhaustive or definite on phytonutrients, given the lack of data available at the global level about the amount and variety of specific fruit and vegetable intake, making it challenging to assess the role of intake variety on health, as well as to make robust estimates of phytonutrient intakes, the report came up with enough evidence to support the important role of phytonutrients. It also gave an insight into the availability of a variety of fruits and vegetables that are rich sources of phytonutrients across the world. For instance, tropical and subtropical fruits are widely available globally and account for the vast majority of total fruit available in Central Africa (A and B) and Southern Africa, representing 79-93 per cent of total fruits. Bananas and plantains are the most available tropical fruits across most regions, mangoes, mangosteens and guavas also make a contribution to the available fruits across all regions, and are most available in Central Africa (B), Asia (A) and South/Central America. These fruit types are good sources of vitamins A, C and E, as well as phytonutrients, such as alpha-carotene and beta-carotene (e.g., plantains), beta-cryptoxanthin (e.g., papayas) and lycopene (e.g., guavas). Alpha-carotene and beta-carotene have been shown to be important for maintaining eye health, while beta-carotene and beta-cryptoxanthin play a protective role in bone health by minimising bone loss

Variety of Tropical/Subtropical Fruits as a Percentage of Total Fruits



Variety of Fruiting Vegetables as a Percentage of Total Vegetables



due to ageing. In the vegetables group, for example, the fruiting vegetables, excluding cucurbits, account for the greatest proportion of total available vegetables in most regions. This category accounted for 23–53 per cent of vegetables available in all regions except northern regions of Europe and parts of Asia (B). Tomatoes are the most common fruiting vegetable across all regions, and corn accounts for a portion of fruiting vegetables, particularly in Central Africa (A and B) and South/Central America. In Asia (A) and Northern Africa/Middle East, eggplants were more commonly available. Tomatoes are rich sources of

the carotenoid lycopene and a source of alpha-carotene and beta-carotene. Corn is a good source of lutein/zeaxanthin, which have been found to be protective for eye health especially in ageing populations, and eggplants contain anthocyanidin and other phenolic compounds, which have been shown to support cell health. Looking at the regional differences and also the presence of different phytonutrients in different varieties of fruits and vegetables, it can be safely concluded that consumption of a combination of fruits and vegetables in recommended servings is mandatory for human health. 🍌



Dr Ramesh V Bhat is an international food safety specialist, currently working for improved facilitation and phytosanitary handling in GMS Project, Ministry of Commerce, Government of Cambodia. He is the founder of Centre for Science, Society and Culture and the past deputy director of National Institute of Nutrition, Hyderabad. He had earlier worked with the Ministry of Health, Government of Lao PDR, MOC, and Bhutan Agriculture Food Regulatory Authority, Government of Bhutan and FAO Regional Office for Asia and the Pacific, Bangkok on food safety issues.

FROM FARM TO PLATE, IS YOUR FOOD SAFE?

The lackadaisical regulatory approach will neither ensure food security nor its safety. It is time India tightens its control over the entire food chain to ensure its citizens' health. **BY DR RAMESH V BHAT**

It is well recognised globally that food contamination poses considerable risk to public health. In the modern globalised era, the international obligations relating to ensuring food safety throughout the food chain—from farm to plate—represent a major challenge. The importance of food safety goes beyond human health to impact the economy. The quality attributes of a food product have an impact on its value in the domestic as well as the international market. It is extremely important to put safeguards in place to avoid acute or chronic food related illnesses in humans and animals as these play an important role in the national economy by reducing the public health cost of food-borne diseases.

Since access to food export market depends on meeting the regulatory requirements of the importing countries, these safeguards ensure enhanced foreign exchange earnings through increased export of agricultural commodities. International agencies such as the Food and Agricultural Organisation (FAO) and the World Health Organisation (WHO) have been advocating the building of strong national food safety control management, inspection services and laboratory services in addition to maintaining food-related epidemiological data, and improving information dissemination education, communication and training. As far as the principles of the food control systems are concerned, the issues for consideration include an integrated farm to table concept, risk analysis, transparency, and regulatory impact assessment. A national food control strategy should ideally involve a single agency system with adequate funding and powers rather than multiple agencies. The issues that are specific to developing countries include primary processing and marketing, food processing, regulation of street foods, food control infrastructure and resources.

Food Control

Food control is a mandatory regulatory activity by the government to provide consumer protection and ensure that all foods during production, handling, storage, processing and distribution are safe, wholesome and fit for consumption, conform to safety quality and safety requirements, and are honestly and accurately labelled as prescribed by law. The confidence of the consumer in the safety and quality of food depends mostly on their perception as to the effectiveness of food control measures. The government needs to assign a particular department with the responsibility for all matters pertaining to food safety, coordination between departments of the central government, the state governments and the local bodies—their responsibilities and functions.

Appropriate food legislations and its proper implementation by strictly enforcing them is essential. Food standards and codes of practice, authorities empowered to make rules and regulations, systems of

coordination between government agencies, consultation process with the industry and the consumer organisations, analysis of food laws and regulations addressing food adulteration and contamination, hygiene, additives, labelling, licensing of premises, offences and penalties for non compliance, inspection and analysis of foods, are all of paramount importance. Food inspection is an important part of food control. Modern risk-based inspection changes the focus from end-product testing and compliance verification of a product or premises to assessment of the controls that are in place to address food-borne disease risk factors. This prevention-based approach is most suitable where resources for inspection are meagre.

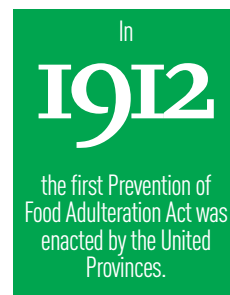
Indian Scenario—Past and Present

India's past history of food safety is a glorious one, as evidenced by the traditional cultural practices of *madi* (religious purity), *shuchi* (cleanliness), *jootha* (pollution through saliva) and avoidance of tasting while cooking, etc. During the British rule, Bombay government was the first to take steps for preventing adulteration of food through the Bombay Act II of 1899. Upto 1912, the law was applied only to *ghee*. The first Prevention of Food Adulteration Act was enacted by the United Provinces in 1912. Public analysts were appointed only in 1933. The Government of India passed the Agriculture Produce (Grading and Marking) Act in 1937. The voluntary ISI (certification marks) Act was introduced in 1952 and the Prevention of Food Adulteration (PFA) Act, compulsory for internal trade, was introduced by the central government in 1955. Other Acts that were introduced include, the Fruit Product Order (FPO) in 1955, Export Quality Control and Inspection Act in 1963, Solvent Extracted Oil, Deoiled

Meal and Edible Flour (Control) Order in 1967 and the Meat Products order in 1973.

A workshop on National Strategy for Food Quality Control conducted at the National Institute of Nutrition in 1981 had identified a number of deficiencies and constraints in the Indian scenario:

- Food system problems such



the last mile

\\ FOOD CONTROL

as inadequacy of post harvest drying and storage facilities, inadequate guidance in the use of agricultural inputs such as pesticides and veterinary drugs, unhygienic and insanitary environments, and food handling practices, lack of quality control processing, prevalence of a large unorganised sector in the food system with a multitude of middlemen, large scale distribution of unpacked food in bulk and retail sale, a plethora of itinerant merchants, and absence of control as regards animal feed.

- Infrastructure deficiencies such as general inadequacy of infrastructure for food quality control implementation in terms of manpower and resources, lack of qualified and trained inspectorate, shortage of well equipped laboratories and trained staff, lack of coordination, etc.
- Other related matters such as inadequacy of research and development efforts to improve food systems and inadequacy of innovation, lack of public awareness of food safety matters, inadequacy of programmes to keep consumers informed about nutrition and food safety and the lack of meaningful cooperation between government, trade and industry. This resulted in a serious credibility gap and inadequate community involvement, consumer education and guidance.

The result of these deliberations was a workshop in December 2003 on National Strategy for Ensuring Food Safety. It put forth a series of recommendations including the establishment of a statutory autonomous agency that would be responsible for implementing an integrated science-based system for the control of food safety and quality in the entire farm to table food chain in the country. The Food Safety and Standards Authority of India (FSSAI) in 2001 and the Food Safety and Standards Act 2006 followed based on these recommendations as an integrated and comprehensive step to ensure that the food safety standards in India compared favourably with global standards.

Current Status of FSSAI & the FSS ACT

Despite several years of existence, the authority is yet to be fully geared to meet



PHOTO: THINKSTOCKPHOTOS.IN


Different Strokes: Stringent regulations are in place for export items, but none for food grown for home consumption.

the challenges of food safety in India. Its functioning needs to be streamlined, ranging from appointment of staff, organising various meetings of scientific panels and harmonisation of food laws and regulations to bring them on par with international standards, promoting good practices and implementing vital issues like registration of establishments licensing procedure, etc. The agency must accelerate progress in making new standards and reviewing existing ones, setting right the implementation machinery both at the Centre and the states, creating awareness among the stakeholders and settling court cases from the PFA era and issues such as writ petitions regarding compulsory registration and licensing of majority of food business establishments including street foods. The roles and functions of the chairman and the chief executive officer have not been clarified. Only three of the chain of 72 state food laboratories have been accredited and only 36 of them are being upgraded to be capable of analysing food contaminants. A perusal of the latest available report of the FSSAI (2010-2011) indicates that the percentage of adulteration of food samples as found by the four central food laboratories namely CFL, Kolkata (4.5%), CFL Mysore (20.5%), CFL Pune (51%) and CFL Ghazi-

abad (70.6 %) vary widely, raising uncertainty about the actual state of food safety. The state governments have also been tardy in implementing the Food Safety Act.

In the Indian scenario, the regulatory approach as regards food safety can be divided into the following categories:

- No regulations are applied to commodities grown and consumed at the home level.
- Regulatory limits have been laid down for foods traded in the domestic market, but these are implemented in a tardy manner.
- Stringent regulations for commodities meant for export is actively pursued even with trace back mechanisms, leading to a scenario where the best of our agricultural commodities are exported and the remaining lot is circulated in the domestic market.
- There is no regulation for animal feeds, paving the way for contaminants entering the food chain, besides having an economic impact due to productivity loss.

Currently, India is attempting to take steps to ensure that all its citizens have food security as defined by the World Food Summit. In order to attain this goal, merely passing a Food Security Act will not suffice; it is essential that food safety aspects are also looked into. 

(Excerpted from a published article in Nutrition Foundation of India newsletter—NFI Bulletin)

**“Competition
is not only
the basis of
Protection
to the
Consumer, But
is the incentive
to Progress.”**

HERBERT HOOVER



Report on the Food Safety and Standards (Amendment) Bill, 2014

The Bill was presented to the Rajya Sabha on November 28, 2014 and laid on the Table of Lok Sabha on the same day.

The Food Safety and Standards (Amendment) Bill, 2014 (hereinafter referred to as the Bill) was introduced in the Rajya Sabha on February 19, 2014 and referred to the Department related Parliamentary Standing Committee on Health and Family Welfare on the February 24, 2014, for examination and report.

As per the information furnished by the Ministry of Health and Family Welfare on the Bill, the Parliament enacted the Food Safety and Standards Act, 2006 (FSS Act) to consolidate the laws relating to food in the country, to lay down science-based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import. In pursuance to the same, the Food Safety and Standards Authority of India (Food Authority) was established in 2008. The Bill seeks to amend sections 5 and 92 of the Food Safety and Standards (FSS) Act, 2006 (34 of 2006) and to insert a new section, 'section 7A', to

take over the difficulties affecting the overall functioning and implementation of various provisions of the Food Safety and Standards Act, and to delineate clearly the roles of the Chairperson, and the Chief Executive Officer of the authority for its smooth functioning. It will also help in faster notification of standards of food products.

According to the Statement of Objects and Reasons (SOR), the Bill, proposes to: include the Chief Executive Officer in the composition of the Food Safety and Standards Authority of India; amend sub-section (1) of section 5 of

FSS Act so as to provide that the provision regarding one-third members being women, shall be applicable to the members referred to in clauses (b), (c), (d), (f) and (g) of sub-section (1) of section 5 of the said Act; insert section 7A in the said Act to address the need for continuity of policies, enabling the Chairperson to guide the affairs of the Authority; amend Section 92 empowering the Authority



Brajesh Pathak
Chairman
Parliamentary Committee

to make regulations by notification with the previous approval of the central government and after previous publication by empowering the central government to dispense with the condition of previous publication in certain cases, in the public interest.

However, the said Bill could not be taken up for examination due to preoccupation of the Members of the previous Committee in the General Elections for the Sixteenth Lok Sabha and subsequent dissolution of the Committee. After the reconstitution of the Committee, the Hon'ble Chairman, Rajya Sabha had granted extension for a period of two months, i.e., upto October 31, 2014 and another extension upto December 5, 2014 for examination and report on the Bill.

In the meeting of Committee held on September 18, 2014, the Secretary, Department of Health and Family Welfare while giving presentation on the Bill informed that subsequent to introduction of the Amendment Bill, the Lucknow Bench of Allahabad High Court in the W.P. (C) No. 1717 (MB) of 2013 and the Supreme Court of India in Petition (C) No. 159/2012 directed the government to bring appropriate amendments in the Act to deal with the food adulteration sternly. Accordingly, a note was being placed before the Cabinet for pursuing the Bill in its present form or otherwise. Thereafter, Members raised issues of reported incidents of rampant adulteration in food items highlighting the issues of unregulated sale of packaged water; adulterated milk and milk products; contents of fertilisers/pesticides/insecticides in food grains/vegetables/fruits and impressed upon the Department to take measures to check and curb such rampant food adulteration.

Subsequently, the Department vide its communication dated September 25, 2014 informed that the Minister had approved the proposal for withdrawal of the Bill and it would be placed before the Cabinet for consideration/approval. The Committee in its meeting held on September 25, 2014 considered the proposal of the Ministry and felt that no useful purpose would be served pursuing the Bill if the Bill was to be withdrawn. The Committee, therefore, decided not to pursue the Bill till a final decision is taken by the Cabinet as to whether the government would pursue the Bill or not. The Department of Health and Family Welfare vide its communication dated

COMPOSITION OF THE COMMITTEE (2013-14)

RAJYA SABHA

1. ShriBrajeshPathak- Chairman
2. ShriRajkumarDhoot
3. Shrimati B. Jayashree
4. ShriMohd. Ali Khan
5. Dr. PrabhakarKore
6. Dr. R. Lakshmanan
7. ShriRasheedMasood*
8. ShriJagatPrakashNadda
9. Dr. VijaylaxmiSadho
10. ShriArvind Kumar Singh

LOK SABHA

11. ShriKirti Azad
12. ShriMohd. Azharuddin
13. ShrimatiSarikaDevendra Singh

- Baghel
14. ShriKuvajibhai M. Bavalia
15. ShrimatiPriyaDutt
16. Dr. SucharuRanjanHaldar
17. Mohd. AsrarulHaque
18. Dr. Monazir Hassan
19. Dr. Sanjay Jaiswal
20. ShriChowdhury Mohan Jatua
21. Dr. TarunMandal
22. ShriMahabal Mishra
23. ShriZafar Ali Naqvi
24. Shrimati Jayshreeben Patel
25. ShriHarinPathak
26. ShriRamkishun
27. Dr. Anup Kumar Saha
28. Dr. Arvind Kumar Sharma

29. Dr. Raghuvansh Prasad Singh
30. Shri P.T. Thomas
31. Vacant

SECRETARIAT

Shri P.P.K. Ramacharyulu - Joint Secretary
Shri R. B. Gupta - Director
ShrimatiArpanaMendiratta - Joint Director
Shri Dinesh Singh - Deputy Director
ShriPratapShenoy - Committee Officer

* vacant vide disqualification as a member of the Council of States (Rajya Sabha) w.e.f. 19th September, 2013.

COMPOSITION OF THE COMMITTEE (2014-15)

ShriSatish Chandra Misra - Chairman

RAJYA SABHA

1. ShriRanjibBiswal
2. ShriRajkumarDhoot
3. Shri Vijay Goel
4. Shrimati B. Jayashree
5. Dr. R. Lakshmanan
6. Shrimati KhakhshanPerween
7. Dr. VijaylaxmiSadho
8. ChaudharyMunwarSaleem
9. Dr. T.N. Seema

LOK SABHA

11. ShriThangsoBaite
12. Dr. SubhashBhamre

13. ShriNandkumar Singh Chouhan (NanduBhaiya)
14. Dr. Ratna De (Nag)
15. Dr. HeenaVijaykumarGavit
16. Dr. Sanjay Jaiswal
17. Dr. K. Kamaraj
18. ShriArjunlalMeena
19. Shri J. J.T. Natterjee
20. ShriChiragPaswan
21. Shri M.K. Raghavan
22. Dr. ManojRajoriya
23. ShriAlokSanjar
- #24. Dr. Mahesh Sharma
25. Dr. ShrikantEknathShinde
26. Shri Raj Kumar Singh
27. ShriKanwar Singh Tanwar

28. Shrimati Rita Tarai
29. ShriManoharUntwal
30. ShriAkshayYadav
31. Vacant

SECRETARIAT

Shri P.P.K. Ramacharyulu - Joint Secretary
Shri R. B. Gupta - Director
ShrimatiArpanaMendiratta - Joint Director
Shri Dinesh Singh - Deputy Director
Shri PratapShenoy - Committee Officer
ceased to be member of the Committee w.e.f. 9th November, 2014.

13th November, 2014 submitted before the Committee as follows:

"The Cabinet in its meeting held on 05.11.2014 approved the proposal of the Department of Health and Family Welfare for withdrawing the Food Safety and Standards (Amendment) Bill, 2014 and a formal communication for withdrawal of the Bill will be sent in due course of time."

The Chairman of the Committee conveyed the contents of the communication to Members of the Committee in its meeting held on November 19, 2014. In view of the Cabinet's decision for withdrawal of the Bill, the Com-

mittee decided not to pursue the Bill. The Committee observes that no useful purpose will be served in examining the Bill. The Committee, has therefore, decided not to pursue the Bill. The Committee also observes that immediate measures are required to be taken to deal with incidents of rampant adulteration in food items in the country and impresses upon the Government to give more teeth to the Food Safety and Standards Act, 2006 and the Food Authority to tackle these incidents. The Committee therefore recommends that government may re-look into all aspects and bring a comprehensive Bill at the earliest. 🚫

Be Food Safe

Tweaking regulations governing what goes into the mouth of Indians will help keep the nation's food supply safe and flowing. BY CHARU BAHRI

Food safety is a pressing issue in India what with frequent episodes of adulteration and food poisoning. Providing safe food for a population of 1.3 billion and counting is challenging—all the more so in a world of fast changing consumer tastes and demand.

Steps Forward

In 2006, the government took a major step forward to lay down standards for different food products, to regulate their manufacture, distribution, sale and import. It enacted the Food Safety & Standards Act, an umbrella Act which consolidated several existing pieces of legislation, namely, the Prevention of Food Adulteration Act, 1954; the Fruit Products Order, 1955; the Meat Food Products Order, 1973; the Vegetable Oil Products (Control) Order, 1947; the Edible Oils Packaging (Regulation) Order, 1998; the Solvent Extracted Oil, De oiled Meal, and Edible Flour (Control) Order, 1967; the Milk and Milk Products Order, 1992; and any other order under Essential Commodities Act, 1955 relating to food. In 2011, the government established a new body, the Food Safety and Standards Authority of India (FSSAI), to implement this Act. Under the the FSS Act, 2006, some of the important functions that the

FSSAI has been mandated to perform are as follows:

- Frame regulations for standards and guidelines regarding food and specify appropriate system of enforcing various standards thus notified.
- Lay down mechanisms and guidelines for accreditation of certification bodies.
- Lay down procedure and guidelines for accreditation of laboratories and notification of the accredited laboratories.
- Provide scientific advice and technical support to central and state governments for framing of policy and rules on food safety and nutrition.
- Collect and collate data on food consump-

tion, incidence and prevalence of biological risk, contaminants in food, emerging risks and introduce a rapid alert system.

- Create an information network across the country so that consumers receive rapid, reliable and objective information about food safety and issues of concern.
- Provide training programmes.
- Contribute to the development of inter-



“...no standards are available for items such as herbal food products and nutraceuticals... found no mention by FSSAI.”

Dr Saurabh Arora
Founder, foodsafetyhelpline.com
(Auriga Research Initiative)



PHOTO: THINKSTOCKPHOTOS.IN

national technical standards for food, sanitary and phyto-sanitary standards.

Stakeholders of the industry have hailed the move as a much needed reform. A major positive of the new Act is that it has widened the definition of adulteration from being just of inferior quality or tainted to substandard, misbranded and containing any sort of contaminant. So food containing inferior raw materials, or made with less than optimum processing methods, or inaccurately stored or packaged, or containing purposefully added substances are all adulterated. “Consumers are better protected under the new Act,” observes Dr Saurabh Arora, Founder of foodsafetyhelpline.com, an Auriga Research initiative.

Another heartening factor is that bigger food players are both aware of and adhering to food legislation in India as well as international food standards. Cargill India is a subsidiary of Cargill Inc., a global manufacturer of vegetable oils and fats. “We are an active member of the Global Food Safety Initiative and committed to

the highest levels of food safety standards across our manufacturing facilities in India,” says Srinivas VC Angara, BU Quality Assurance and Food Safety Manager, Cargill India. To this end, the company has got all its refineries (at Kandla, Kurkumbh and Paradeep) certified for FSSC 22000, the highest level food safety certificate. It also adheres to other food safety systems like the Hazard Analysis and Critical Control Points, Good Manufacturing Practices and Good Hygienic Practices.

All of Nestlé India’s manufacturing sites are FSSC 22000 certified and conform to Hazard Analysis and Critical Control Points, Good Manufacturing Practices and Good Hygienic Practices. Additionally, its quality system is completely aligned to ISO 9000 requirements. Safe food practices followed by giants trickle down to the food ecosystem. According to Himanshu Manglik, Spokesperson, Nestlé India, “High manufacturing and quality standards positively impacts the vendor ecosystem. We work closely with local suppliers, transferring technology and best practices to help them improve the quality of raw materials to global standards. We train them and help them set up and enhance their processes. It’s a win-win initiative, as they enjoy higher productivity and profitability as a result.”



“As things stand, FSSAI guidelines for eateries...may present challenges for small eateries and street vendors to adhere to these specifications.”

Suman Dabas

Principia Consultant, Food Services & Agriculture, Technopak

Regulatory Loopholes

As the implementation of the new Act has gotten underway, concern has emerged about regulatory loopholes. All the existing pieces of food legislation, even the dated ones, were incorporated in the Food Safety & Standards Act as it is. The Prevention of Food Adulteration Act dates back to 1954. Lifestyles in India have changed tremendously since then. Today, there’s a huge market for packaged and ready-to-eat products, and since awareness about world foods is at an all time high, demand exists for a wide range of foodstuffs—most of which were unheard of six decade ago. To fully address consumer and industry needs, food safety laws must adapt to the changing situation, which the Act hasn’t.

“Consider the example of cheese,” says Amit Lohani, Founder Director of the Forum of Indian Food Importers. “The Act recognises 16 varieties of cheese, of which five have not been imported in recent years. Whereas, the Act says nothing about other types of cheeses, say feta cheese, which has come on the radar of food consumers because of greater awareness of global cuisines. As long as a product is not recognised, the rules governing it remain ambiguous and cause operational delays and uncalled for expenses for importers.”

Essentially, a lot of work remains to com-

prehensively cover the entire food sector. India is a signatory to the international Codex Alimentarius standards, a collection of over 4000 foods, food production and food safety standards. Most of India's standards are drawn from Codex but differences still remain between international and national standards. "Standards must be harmonised; only then will Indian consumers be assured of safe food supply and food exporters be able to reach new markets," says Pankaj Mahajan, Director, Corporate Affairs, Cargill India. According to Lohani, "India has recognised only 377 categories of food whereas there exist more than 10000 the world over."

"Currently no standards are available for items such as herbal food products, nutraceuticals, health supplements, dietary supplements etc., though these products have been included in the definition of food under Section 22 of the Act. Standards are urgently needed for these emerging product segments that have found no mention by FSSAI," observes Dr Arora. Also, standards have not been defined for traditional/ethnic food products because of their safe history and using traditional methods/techniques for preparation. However, Dr Arora feels technology transformations demand that some guidelines be issued for such food items.

According to FSSAI spokesperson, "To enhance the number of available standards for food items, the FSSAI has initiated the process of harmonisation of the standards with Codex Alimentarius and other international standards. Around 11,000 horizontal standards are proposed to be finalised as a result of this exercise."

Misplaced Locus

Another regulatory lacuna is the Act's inordinate focus on labelling. Certainly, labelling in the wider context provides consumers the information they need to make informed choices. But, the Act stipulates that the labelling of all imported food products must mention its ingredients, nutritional value, the producer's name, address and country of origin—in English. This presents challenges for food importers



"We are an active member of the Global Food Safety Initiative and committed to the highest levels of food safety standards..."

SVC Angara

BU Quality Assurance & Food Safety Manager, Cargill India


because some producers in non English speaking countries do not see the need to adhere to Indian rules. Lohani sees this as paying more attention to packaging instead of substance—"Most consumers of imported foodstuffs know what the product is. They are concerned about it being sourced from a reputed company. Insisting on English labelling limits importers to deal with sources complying with the rules—and such sources may be lying on the labels. This defeats the very purpose of food safety." Nor does the current Act accept product trade names. Low erucic acid rapeseed is marketed globally as canola oil. But this isn't allowed in India. "Insisting on using the scientific names of foodstuffs doesn't help consumers nor is it logical. And why is the law partial to some products? Rice is sold as rice in India, but its scientific name is *oryza sativa*," observes Lohani.

Grassroots Action

Across India, streets come alive with the colours and odours of food vendors. Street food is immensely popular and provides livelihoods to thousands. It also provides a retail outlet for the produce of small local food manufacturers. Bad hygienic practices, however, can make street food and food produced in small outlets unsafe. National Association of Street Vendors of India (NASVI), backed by the FSSAI, is very

active in the Delhi-NCR region for vendor registration and training. Still the NASVI needs to expand its operations to every corner of the country so that the socio-cultural diversity of different regions and their local cuisines is not lost for the sake of less than optimum hygiene standards. "As things stand, FSSAI guidelines for eateries include installing chimneys, following systematic cleaning schedules, following procedures in sourcing raw material, installing specific temperature control measures and enforcing traceability and recall procedures. It may present challenges for small eateries and street vendors to adhere to these specifications," observes Suman Dabas, Principal Consultant, Food Services & Agriculture, Technopak.

"Forget guidelines, most small food producers and distributors aren't even aware that they need to register under the Act," says Dr Arora. Mass awareness campaigns, strengthening the food authority at the regional level and drawing up an implementation plan at the local level could help improve implementation. "Efforts should be directed towards making guidelines more operator-friendly," adds Dabas.

Concerted efforts by the government, the industry and the civil society would do a lot to build consumer confidence in the food industry and ensure Indians put safe food in their mouths . 

“

**Consumer
Rights Are Our
Fundamental
Rights, It is our
duty to ensure
we are not
shortchanged”**



Food Safety: Need to Revisit Strategies

Food safety is as much in the hands of consumers as the sellers and the enforcing authority. We take a strategic look at consumption side of food security. **BY DR SUBBARAO M GAVARAVARAPU**

Food safety is determined not only by how food is produced and delivered, but also by issues on the “demand side”—how consumers acquire, cook, store, and consume foods. It is time to update our strategies with aspects related to safety of foods at the household level, where most consumption occurs. Taking the case of India for illustrative purposes, we put forth a perspective that seeks to prioritise not only the production and distribution, but also the consumption side of food safety, one that considers cultural and behavioural factors.

Need for a New Perspective

The usual approach to ensure food safety usually focusses on three principal lines of action: advocating and supporting the development of risk-based, sustainable, integrated food safety systems; devising science-based measures along the entire food production chain; and assessing and managing food-

borne risks and communicating information. The foundation for these approaches is that most cases of food-borne illness are preventable if food protection principles are followed right from production stage until the food reaches the consumer. But, this does not fully address consumers' behaviours that could also introduce risks. For instance, the 'five keys for safer food' campaign initiated by WHO, which is often used to spread the food hygiene message among the food manufacturers and handlers throughout the world, promotes personal hygiene, adequate cooking, avoiding cross contamination, keeping foods at safe temperatures, and avoiding foods from unsafe sources. Such campaigns may, however, result in limited protection unless food safety is also understood and promoted at the household level. Cultural, behavioural and contextual forces shape specific practices along the continuum—from food purchase to preparation and consumption to storage of leftovers for subsequent consumption. In India, as in many countries, diverse food habits, hygiene practices and centuries-old traditions co-exist alongside the changes introduced by globalisation. Given such conditions, and the scarcity of resources at the household level, food safety promotion becomes a daunting public health task.

Beyond Food Laws and Regulation

India set up the Food Safety Standards Authority of India (FSSAI) in 2006. Since then, FSSAI has been spearheading efforts to tighten domestic food laws and harmonise them with international standards and modern food quality management systems. This regulatory and administrative framework is critically important for food safety. Eradication of food-borne diseases will, however, also require effective interventions focussed on practices in home kitchens. Food borne illnesses continue to be prevalent; in a 2006 nation-wide study by the National Institute of Nutrition, as many as 13 per cent of households reported food-borne illnesses in the previous fortnight (14 days) of the survey. Such routine food borne illnesses may relate to a host of practices at individual and household levels, including behaviours pertaining to how food is procured (what quantity/quality and from whom), stored (for example,

without refrigeration), prepared (household processing, extent of cooking, fuel used, etc), and consumed (without washing hands, freshly cooked or reheated). These are, in turn, influenced not only by cultural factors (like cooking practices) but also by structural factors (like availability of safe fuel, clean water, etc.).

Individual and Social Determinants

Many food-related behaviours are shaped by



“About 11 per cent of all foods sold in India are adulterated. Most consumers have come across food adulteration...”

Dr SubbaRao M Gavaravarapu
Scientist D – Assistant Director
Extension and Training Division
National Institute of Nutrition
Hyderabad

factors at both the individual and structural levels. For example, unlike in many western countries, in India, semi-processed primary agricultural produce and raw materials are procured from the market before they are further processed and made suitable for cooking at home. In many rural homes, these are often bought in small amounts, usually from local vendors and not in packed forms. When food is sold loose by retailers, adulteration is a major food safety concern. Adulteration may be intentional or unintentional. Intentional adulteration is the result of retailer behaviour to increase profits. In

contrast, unintentional adulteration is the result of incidental contamination. In both forms, the quality or the nature of the food is altered and could even become harmful. Estimates are that about 11 per cent of all foods sold in India are adulterated. Most consumers in India have encountered food adulteration at some point in their lives. This problem is sufficiently normalised that most people do not consider it to be a health hazard, and there is little perceived efficacy on the part of the public to resist deliberate adulteration. Moreover, a relative lack of public awareness of existing food quality control regulations, have further accentuated problems. Thus, there is a need to raise awareness about the issue and to empower individuals to hold regulators accountable for enforcing rules against adulteration.

Hand washing, a behaviour closely linked with food safety, is relatively routine in India, and it is often customary to wash hands before handling food. Studies reported that a large proportion (as many as 90%) of household food preparers washed hands before cooking, handling or eating food. Other activities that involve exposure to dirt, like mopping or dusting and handling cattle, are also usually followed by hand washing. Normative hand washing does not, however, guarantee that foods are not contaminated during food handling, as a great deal of hand washing is largely symbolic and done without using soap. Our studies show that approximately 75 per cent of individuals wash hands only with water and often do not use soap. A 2006 study says, even after defecation only 50 per cent use soap when washing hands. Some research studies say that soap can reduce the risk of diarrhoeal diseases by 42–47 per cent. The customary practice of hand washing in this case can be strengthened by encouraging routine and universal use of soap as well as ensuring universal access to soap where hand washing occurs.

Cultural Sensitivity Needed

One of the common threats to food safety is inadequate cooking and cross contamination. This may not, however, pose as large a threat to food safety in India as in other countries. Foods in India generally fall into two main classes: *Kuccha* foods are freshly

cooked using water (like rice, *roti*, or cooked legumes) and are served hot; *Pucca* foods are made with fat and can be taken out of the kitchen for consumption (like fried/deep fried snacks and savouries). This classification is likely based on the vulnerability of cooked foods to spoilage and contamination. Studies show that food cooked thoroughly, not stored for too long or thoroughly reheated is safe for consumption. In addition to this longstanding classification system that may reduce likely exposure to 'spoiled' foods, studies in India have revealed that as many as 80 per cent of households cook food twice a day, and more than half prefer to serve food hot. Other Indian practices further reduce risk. For instance, foods tend to be stored in covered containers and consumed within a day of preparation. It is also typical to reheat leftover foods before consumption. An area of potential intervention to fortify existing cultural practices is education on the importance of reheating.

In many Indian homes, the domestic hearth is an area of purity and sanctity. It tends to be located next to the area of worship. However, with an estimated 37 per cent of Indians living in poverty, most homes do not have a separate designated kitchen, such that living, cooking and eating occur in a common place or a *verandah*. Many households cook using solid fuels like firewood, coal or cow dung cakes. These fuels release smoke, which leads to lacrimation and nasal discharge while cooking, which can be hazardous to food safety. In addition, studies in other low-income countries have shown that cooking fuel has a bearing on cooking practices and food hygiene. In situations where fuel for cooking is difficult to use, households may, in a bid to save energy, prepare large quantities of food in advance, then store it until needed and may not thoroughly reheat before consumption. What stands in the way of migration towards cleaner fuels are factors of affordability, availability and accessibility.

Availability of safe drinking water is an important factor that is essentially beyond the control of the common consumer but affects food safety. Many households in India do not have access to piped water. For many episodes of diarrhoeal diseases among adults and the estimated 5,00,000 deaths




PHOTO: THINKSTOCKPHOTOS.IN

“In many Indian homes, the domestic hearth is a place of sanctity. It tends to be located next to the area of worship...with an estimated 37 per cent of Indians living in poverty, most homes do not have a separate designated kitchen...living, cooking and eating occur in a common place or a *verandah*.”

among children (< 5 years), lack of protected water supply is an important reason apart from other factors such as sanitation and environmental conditions.

The Way Forward

The many challenges faced by countries like ours in addressing food safety concerns are multi-dimensional. Low consumer awareness and perceptions of despair could be important hindrances in ensuring safety of food at the individual and household levels. In order to motivate self-directed changes in individual or household level practices, people need to be given not only reasons to alter established practices that may contribute to food safety concerns, but also the means and resources to do so. This article advocates broadening of our understanding of food safety issues. Stricter regulation, compliance with global standards of manufacturing, distribution and competitiveness are necessary but not sufficient to address food risks. Food safety needs to consider practices and resources available in home kitchens. Unless systemic changes are brought about and enabling environments are created, the perceptions of helplessness or lack of self-efficacy may cause consumers to think that food safety measures are meant for others rather than themselves. 

**“Time to take
a leap of faith,
a digital India
awakes”**

“The key challenge is to collaborate to create sustainable solutions at scale and speed...”

Dr (Col) Rajan Sankar, Country Manager, India and Senior Adviser, South Asia, GAIN

Author



Public Private Partnership for Improving Nutrition in India

Malnutrition in India presents a vital challenge.



PHOTO: THINKSTOCKPHOTOS.IN

MALNUTRITION CONTINUES to threaten the lives of millions in India and remains one of the greatest development challenges for the country. The prevalence of underweight children in India is among the highest in the world. High rates of child under-nutrition, combined with the large population base, has made India the country with the largest number of stunted, wasted and underweight children in the world. Progress in reducing undernutrition over the past decades has been modest and much slower than what has been achieved in other countries with comparable socio-economic indicators. It calls for a thorough assessment of the existing strategies and working onward from the learnings gleaned so far.

Complex Problems Need Smart Solutions

Malnutrition is a largely hidden public health problem. The underlying causes are manifold, and include poverty, social exclusion, poor maternal health and nutrition, inadequate feeding practices and poor water quality and sanitation. Therefore, the range of responses

required is beyond the capacity of either the public or private sector working independently. The situation makes collaboration between sectors essential for elimination of malnutrition.

India was an early starter and launched the Integrated Child Development Services (ICDS) in 1975 and this programme has since grown to a universal programme with 1.4 million *anganwadi* centres across the country. There are several other programmes being implemented by the government that have a bearing on the nutritional status of its population. However, the situation of Indian children has not shown an improvement commensurate with the investments that have been made.

Government programmes are not adequately addressing the needs of malnourished population. The only way forward to tackle the gigantic problem of under nourishment and malnutrition is partnership with all relevant sectors and stakeholders. In such a partnership each partner will do what they are best placed and qualified to do within the agreed

ABOUT THE AUTHOR

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parameters of the framework to reach a common targeted goal.

Public Private Partnership

Partnership between public and private sectors is not a new concept in India. There is increasing recognition for the need and efficacy of such partnerships in the international development sector. Public sector has the mandate of delivering public goods. Public sector refers to national, provincial/state and district governments, municipal administration, local government institutions, all other government and inter-governmental agencies with the mandate of delivering public goods. Private sector denotes two sets of structures—the for-profit private sector encompassing commercial enterprises of any size and the non-profit private organisations referring to non-governmental organisations (NGOs) in the country. In this article private sector denotes only the for-profit enterprises who can be engaged in the governments fight against malnutrition.

Role of Government in PPP

Every sovereign government has the

mandate to protect and promote the health and wellness of its population. Health is a Merit Good. When benefits of any intervention accrue, they are not only to individuals but to the society as a whole. The governments have an obligation to lead and take such benefits to the whole population. Optimum nutrition is one of the fundamental and foundational blocks for human development. The government therefore must strongly and visibly reaffirm its commitment to lead the fight against malnutrition.

Role of NGOs in PPP

India has a long history of civil society organisations. The non-governmental organisations (NGOs) play a highly important role in India's fight against malnutrition. The Indian government recognises NGOs formally as development partners of the state. Over the years many NGOs have built capacity for grassroots interventions, advocacy at various levels and mobilisation of the marginalised. It is believed that NGOs generally support many programmes through their ability to fill the last-mile gap. The NGO sector is inimical to the for profit sector. The not for profit civil society sector opposes vociferously the participation of for-profit private sector in the area of nutrition. There is total mistrust of private sector from NGOs working in the area of nutrition. Is it that they are completely territorial? Or do they have valid reasons for such strong opposition. It requires an evaluation of their inputs in the field of nutrition and an analysis of their reasons to evaluate the merit of debarring the for profit private sector in the field of nutrition.

Role of Private Sector in PPP

India has a large and vibrant private sector. The role of the private sector is increasing in every domain of public life and nutrition is no exception. Organised big private sector

companies that procure and process food and make it available to the population in processed and semi-processed forms are increasing their market share and their reach. With targetted rural strategies and riding on the back of new channels of distribution like e-commerce and direct selling, the private sector operators in the food and nutrition space are widening their consumer base in India. They are, therefore, key players in our fight against malnutrition and should be part of the team in our fight against malnutrition.

Food fortification is one most successful examples that highlights how the food industry has contributed to the improvement of nutrition of populations. Food industry, in many countries including the developing world, is making available several products that enhance health of the population.

The private sector uses markets, their efficiency and their own innovations to reach those higher up the income scale, and those who are consumers with funds to make choices. Unfortunately, their commercial models don't adequately address the needs of the most vulnerable. Since, the private sector has the capacity and knowhow to play a bigger role in nutrition, health, water and sanitation, we must make all attempts to harness their capabilities for public good. This is to be done in true spirit of a partnership. In such a partnership, the governments seek improved nutrition for its population and the private sector could look for opportunities to expand their business through low-price, health enhancing tradable goods. Deeper pockets outside the government sectors may thus be open to realising our developmental goals. It is our obligation to harness the best of both the public and private sectors in our fight against malnutrition and achieve elimination of malnutrition in a given time frame.



“Food fortification is one of the most successful examples that highlights how the food industry has contributed to... nutrition”

—Dr (Col) Rajan Sankar

It is not about any one sectors prerogative. It is a national priority and should be explicit in our call for public and private sectors to find new ways of working together to provide optimum nutrition to women and children of our country. There are already many existing examples of successful solutions, but working on a small scale or slowly. The key challenge is to collaborate to create sustainable solutions at scale and at speed. 🇮🇳

VOICES



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We have laws in India to regulate advertisements but still a plethora of messages making false claims about supplementary foods' ability to tackle malnutrition are pushed to consumers. As a consumer what should be your role or how can you play a positive role to tackle malnutrition and HIDDEN HUNGER?



Yashvendra Singh, Noida

As in most sectors, Indian laws lack teeth in the area of food safety and standards too. While the onus of banishing the scourge lies on the government, we, as educated consumers, have to play a critical part. One efficient strategy of curbing hidden hunger is by encouraging dietary diversity. People need to be made aware of better feeding practices for infants, preserving food to minimise nutrient loss and the right preparation of food (for instance, adding iodized salt to counter iodine deficiency). Charity begins at home. Nothing, therefore, stops us from making our helps (cooks, maids, driver, etc) aware of such life-saving practices. On the lines of the once-popular slogan of 'Each One Teach One', we need another catchphrase of 'Each One Feed One.'

Smita Polite, Gurgaon

Yes, I am aware of the "Hidden Hunger" issue in India and other developing countries. I know that despite better access to food, the poor are still malnourished because they still don't get enough to eat and what they eat is usually not nutritious enough. However, I had no idea that India had only 2 million suffering from Hidden Hunger. With over 410 million people below the poverty line in India, I thought the number would be much higher.



Are you aware of the existence of HIDDEN HUNGER in India? Do you know that more than 2 million citizens in India suffer from mineral and vitamin deficiencies?

Siddhartha Majumdar, Pune

It is true that junk food has almost become the norm for the day in most urban and semi-urban cities in India. People have a tendency to gravitate towards junk food because it is easily and readily available and also costs less than the usual meals. But what they do not realise are its ill-effects on one's health and which could be very serious sometimes. The need of the hour is to have a regulation in place to control the standards of food in India. An elaborate plan to make high quality nutrient food at controlled prices readily available should be laid out immediately. The citizens have every right to demand easy access to healthy food and the government has all that is needed to fulfill such demand.



Atanu Kumar Das, Delhi

Hidden Hunger has always been a concern for India with many underprivileged women and children suffering from the deficiencies of vitamin and mineral. Although there has been a marked improvement in the last decade in reducing this but still a lot needs to be done by the government to eradicate it completely from the country. I feel that we as individuals should all contribute in whatever way we can to fight 'Hidden Hunger'.



Aman Shukla, Noida

Junk food has much to do with today's lifestyle. However, eating healthy is the most important question. The government is not promoting healthy food because of the privatisation taking place and companies expanding their businesses. Very soon, we will be right next to America in terms of obese population. Today, India has the maximum number of diabetic patients.

It is a consumer right to access healthy food but instead JUNK FOOD has become the lifestyle for all the youths today in India. What is your view and what should be the responsibility of the government to tackle HIDDEN HUNGER?

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