



Food Safety and Standards Authority of India

NEWSLETTER Vol-1 Issue-2
January 2015



Building **healthy** INDIA with **safe** food

सुरक्षित आहार, स्वास्थ्य का आधार



After a successful dissemination of our first newsletter in November, we are now before you with our second issue. This is the first newsletter of this New Year and we wish you all a very happy and prosperous year ahead.

To make the year happy and prosperous, we need to be far more diligent about our responsibility of keeping our society safe from the unhealthy food and eating habits.

We would like to share with you some of our achievements like the Regulation on the standards for Limit of Antibiotics in Honey; use of Ferrous Fumarate in Double fortified salt is being drafted. The notification of Referral Food Laboratories and NABL accredited recognized laboratories under FSSAI have been finally notified in Gazette of India. Harmonization of food additive with Codex standards (11,500 standards) has also been approved by the Food Authority.

Our presence on the social media platform has gained its pace and the response thereon is always welcome. I take this opportunity to urge upon all of you to take a little time and read our newsletter, as this is packed with information regarding the activities on food safety, standards.

FSSAI not only looks after the measures for safety and standards of food & food business but also act to bridge between the communication gap between science and the public's decision-making processes on food safety.

We believe that our initiatives are still in their infancy stage and there is huge agenda before us for improvement. We will be happy to know what the reader is thinking about this initiative and we will be excited to get their valuable comments.

Hope this issue will help the reader in getting the information to some extent that they are waiting for.

Shri Y. S. Malik

Chief Executive Officer

Food Safety and Standards Authority of India

Shri Bhanu Pratap Sharma, IAS (BH : 81), Secretary, Department of Health & Family Welfare has been assigned the additional charge of the post of Chairperson, Food Safety and Standards Authority of India.

ENFORCEMENT

- 5,45,555 License and 23,55,028 registration have been issued/done by the State Governments till 30.12.2014.
- Extension has been granted upto 31.12.2015, for complying with the notification P 15014/1/2011-PFA/FSSAI dated 27.06.2013 published in the Official Gazette of India (Extraordinary) amending the FSS (Packaging and Labelling) Regulations, 2011 regarding the declaration of trans fat and saturated fat on the label.

INTERNATIONAL CO-OPERATION (IC)

- International Conference on Infrastructure Needs for a Food Control System: Road Map for Regional Harmonization
- ILSI – India in collaboration with FSSAI and EIC organized a 2- days conference for SAARC region for developing Roadmap for Regional Harmonization for Food Control during December 9-10, 2014. The aim of the workshop was to share information and to build capacity in the food safety control systems among the countries and further to identify the needs for the future.
- Shri K. Chandramouli, Chairperson, FSSAI inaugurated the conference and Shri Yudhvir Singh Malik, Chief Executive Officer, FSSAI addressed the Conference on 10th December 2014.
- One speaker each from the SAARC countries Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Srilanka were invited to give the presentations on food control system. Mrs. Vinod Kotwal, Director, FSSAI has given the presentation from the Indian side. In addition, Shri S. Dave, Advisor, FSSAI gave a presentation on Case Studies from Codex and Chaired the session on “Codex and International Standards For Protecting Public Health And Ensuring Fair Trade Practices in Food Trade”.
- One speaker each from the SAARC countries Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Srilanka were invited to give the presentations on food control system. Mrs. Vinod Kotwal, Director, FSSAI has given the presentation from the Indian side.



FROM L TO R: Ms. Rekha Sinha, Executive Director, International Life Sciences Institute-India, Mr. N M Kejriwal, President, International Life Sciences Institute-India, Mr. K. Chandramouli, Chairman, Food Safety and Standards Authority of India, Ministry of Health and Family Welfare, GOI, Mr. D. H. Pai Panandiker, Chairman, International Life Sciences Institute-India, Dr. A M Gondane, Joint Secretary (SAARC & BC), Ministry of External Affairs, Government of India, and Mr. Hiroaki Hamano, Advisor, International Life Sciences Institute (ILSI) Japan.

TRAINING

- Training of Trainers (ToT) programme through Centralised training at FSSAI. In the matter of training of trainer as per agenda item 8 of 12th CAC meeting held on 01.08.2014, FSSAI proposed to the states/UTs to identify the trainers, who would undergo a ToT program through a centralized training at FSSAI, FDA Bhawan, New Delhi in different batches in a phase manner comprising of 40 to 50 officers of different states for three days training. Trainers are identified, in accordance with the density of DOs, FSOs and FBOs in respective states. Around 7-9 trainers/faculties are to be identified by the states, who would attend the ToT programme. In this regard, the first phase of this ToT programme has been organized at FSSAI, FDA Bhawan, New Delhi from 12th to 14th Nov, 2014 (3 days). The participants from State/UTs of Tamil Nadu, West Bengal, Uttarakhand, Jharkhand, Himachal Pradesh, Goa, Meghalaya, Rajasthan, Uttar Pradesh, Assam, Jammu & Kashmir and Chandigarh participated in this training programme.



STANDARDS

- The following issues are under consideration of the Food Authority:
 - ➔ Inclusion of new Atomic Energy (Radiation Processing of Food and Allied Products), Rules, 2012 in Food Safety and Standards (Food Products Standards and Food Additive) Regulations, 2011
 - ➔ Fortification of rice and edible vegetable oil
 - ➔ Alcoholic Beverages Regulations
 - ➔ Microbial Standards for Fruits and Vegetable Products
 - ➔ Microbiological Standards for Fish and Fisheries Products
 - ➔ Draft FSSAI Manual on water analysis

SCIENTIFIC COMMITTEE /SCIENTIFIC PANEL	SR. NO. Of MEETING	DATE
Scientific Committee	14 th & 15 th	28 th October, 2014 & 10 th December, 2014
Scientific Panel for Food Additives, Flavourings, Processing aids and materials in contact with food	19 th	11 th –13 th November, 2014
Scientific Panel for Pesticides and Antibiotic Residues	33 rd	13 th November, 2014
Scientific Panel for labelling and claims/Advertisements	17 th	28 th November, 2014
Scientific Panel for Biological Hazards	12 th	14 th November, 2014
Scientific Panel for Functional foods, Nutraceuticals, Dietetic Products and Other Similar Products	23 rd	28 th November, 2014

IMPORTS

- Food Import Clearance System (FICS) is being implemented at five locations namely at Mumbai, Chennai, Delhi, Kolkata and Cochin.
- During the period from 15th October, 2014 to 15th December, 2014, a total of 10234 consignments weighing 5633.43 MTS worth 11713.35 Crores were cleared by FSSAI. During this period, the top categories of food Imports in terms of quantity are Pulses, Edible Oil, Fresh Fruit, Confectionary, Cereals and Spices in descending order whereas the top countries in descending order from where India imported food in terms of value are Canada, Ukraine, Indonesia, Argentina, Malaysia, Myanmar, Russia, USA, Australia, Tanzania.
- 24 x7 import clearance have been introduced at Nhava Sheva port, Mumbai on 20.10.2014. FSSAI is actively participating in Single Window Clearance System for which Project Monitoring Unit (PMU) has been constituted at Authority level.

REGULATIONS

- Standards for levels of trans fatty acids upto 5% in Partially Hydrogenated Vegetable oils; Carboxymethyl cellulose (CMC) as Stabilizer; Glucose Oxidase, Xylanase & lipase in Bread; use of Aspartame & Acesulfame K; Establishment of Central Advisory Committee; standards of Isomaltulose; Pullulan as Food Additives in various Foods; use of synthetic color in thermally processed bell pepper, okra & spinach; standards for lecithin in biscuits; Naturally occurring toxins in foods have been draft notified.
- Standards for Limit of Antibiotics in Honey; use of Ferrous Fumarate in Double fortified salt; Notification of Referral food Laboratory and NABL accredited recognized laboratory under FSSAI have been finally notified in Gazette of India.
- Harmonization of food additive (11,500 standards) with codex standards has been approved by the scientific committee.
- Adoption of 14 FSSAI manual on method of sampling and analysis by Food Authority.

- Codex Committee on Food Hygiene (CCFH):- The 46th Session of CCFH was held during 17-21 November, 2014 in Lima, Peru. Two member Indian Delegates led by Dr. Meenakshi Singh (head of the delegation), Scientist- IV, FSSAI and Dr. Bhoopendra Kumar, Technical Officer, EIC attended the session. The Committee discussed number of agenda items during the session.

The Agenda Items which were of concern to India and discussed during the meeting are as under:

- ➔ Proposed Draft Code of Practice for Low-Moisture Foods
- ➔ Proposed Draft Guidelines On The Application Of General Principles Of Food Hygiene To The Control Of Foodborne Parasites
- ➔ Development of a Standard for Frozen and Chilled Meat
- ➔ Revision of the General Principles of Food Hygiene (CAC/RCP 1–1969) and its HACCP Annex

- Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU):- The 36th Session of the Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU) was held in Bali, Indonesia from 24th to 28th November 2014. Indian delegates from FSSAI, Dr. Sandhya Kabra, Director (QA/ PA), FSSAI (Head of the delegation) and Ms. Sukhmani Singh, Technical Officer, Codex Division, FSSAI attended the session. The Agenda Items which were of interest to India and discussed during the meeting are as under:



- ➔ Proposed Draft Amendment of the Standard for processed Cereal- Based Foods for Infants and Young Children (Codex Stan 74- 1981) to include a New Part B for Underweight Children at Step 4. Review of the Codex Standard for Follow-Up Formula (Codex Stan 156-1987) at Step 4. Discussion paper on a standard for ready-to-use foods (RUF)



- The second National Codex Committee was held under the Chairmanship of Shri K. Chadramouli, Chairperson, FSSAI on 12th December, 2014. The meeting was attended by 33 stakeholders from across the sector. Important policy decisions were taken in the meeting related to the draft Strategic Plan of the NCC and data collection. The draft strategic plan of the NCC has been approved by the NCC. A core Committee of experts will be established to develop a Standard Operating Procedure for India as the Regional Coordinator of Asia and to collect and validate the data from different sources on Codex Issues.

- India is co-hosting the 9th Session of CCCF in Hotel TheLalit, New Delhi from 16th to 20th March, 2015 with The Netherlands.

INFORMATION, EDUCATION AND COMMUNICATION (IEC)

- A radio jingle on labelling of food has been aired PAN India for a period of 15 days from 13th to 27th November, 2014.
- FSSAI has started a joint awareness campaign with Department of Consumer Affairs under the aegis of “Jago Grahak Jago” and first creative under this campaign focusing on food safety was released vide print media in November, 2014.



Chairperson, FSSAI (fourth from left) and Director (Codex/IEC), FSSAI (fifth from left) at FSSAI's Stall at the Exhibition on Good Governance Day

- FSSAI participated in the 34th India International Trade Fair, 2014 (IITF-2014) during 14-27 November, 2014 at Pragati Maidan, New Delhi by putting up a stall under “Health Pavilion” of the Ministry of Health and Family Welfare. The posters related to several aspects of food safety were displayed in the stall and the informative booklets / Pamphlets / Leaflets related to food safety, Food Safety and Standards Act and Regulations thereunder were distributed to the stakeholders as well as quiz test on food safety was also organised.



FSSAI's Stall at IITF-2014



Queries of Visitors being addressed



Crowded Stall during Quiz Test

- FSSAI has participated in the Exhibition on Good Governance Day on 25th December, 2014 at Manekshaw Centre, Dhaulakuan, New Delhi organised by the Department of Electronics and Information Technology wherein the posters on online applications of FSSAI were showcased along with live demo of applications. The informative booklets / Pamphlets / Leaflets related to the online applications were distributed also.
- On behalf of FSSAI, a one day training programme was organised by the National Association of Street Vendors of India (NASVI) during the National Street Food Festival held during 25-28 December, 2014 at J. L. N. Stadium, New Delhi for mainstreaming street food vendors through Safe and Hygienic food handling practices. Around 1000 street food vendors from different States participated in the training.

LABORATORY

- The National report related to the baseline assessment of the State/Public Laboratories submitted by the 3 member expert committee to FSSAI.
- Keeping in view the constraints of food testing laboratories in the country, the FSSAI has notified 64 private laboratories which are NABL accredited and 12 Referral Laboratories for food testing. The list of the notified and referral laboratories is available on the FSSAI's website i.e. www.fssai.gov.in

PRODUCT APPROVAL

- A Task Force under Chair of Dr. V. Prakash, Former Director, CFTRI, Mysore and Chair, Scientific Panel on Nutraceuticals for FSSAI has been constituted in September, 2014. The Terms of References (ToR) of the Task Force are as under;

- ➔ To look into the present process of product approval; and
- ➔ Draft the Regulations on the Food Product Approval System

The first meeting of the Task Force held on 07th November, 2014.

Status of Manual Applications in Product Approval (as on 31.12.2014)

S. No	Received	Processed and clarifications sought	No Objection Certificates/ Product Approvals granted	Closed	Rejected	Applications yet to be processed
1	4308	2678	732	551	180	156

Status of Online Applications Food Product Approval System (FPAS) (as on 31.12.2014)

S. No	Received	Processed and clarifications sought	No Objection Certificates/ Product Approvals granted	Application yet to be processed	Applications under consideration of PA & SC	Applications pending Approval
1	210	130	2	53	18	7

MISCELLANEOUS

A Regional Colloquium on “Pure Food – A Fundamental Rights”

- In collaboration with the Government of Punjab and the State Food Safety Appellate Tribunal for Punjab and Chandigarh, a Regional Colloquium with the theme “Pure Food- A Fundamental Right” was organized on 18.10.14 at Chandigarh Judicial Academy, Sector-43, Chandigarh. Hon’ble Justice Sh. A.K. Sikri, Supreme Court of India delivered the keynote address. In addition, Hon’ble judges from the High Courts of Punjab, Haryana, Allahabad, Delhi, Rajasthan, Uttrakhand and Jammu & Kashmir participated in the colloquium. Food Safety Commissioners from several states were also presented. The colloquium was organized with a view to creating awareness in the public and sensitize the officers responsible for implementation of the Act
- Food Safety Commissioners from several states were also presented. The colloquium was organized with a view to creating awareness in the public and sensitize the officers responsible for implementation of the Act. The following was the focus of the colloquium:-
 - (a) Food Business Operators’ responsibilities
 - (b) New Horizons & Emerging issues in Food Safety
 - (c) Pure Food: Consumer’s Rights & awareness
- Shri K. Chandramouli, Chairperson Food Safety and Standards Authority of India was invited as the Guest of Honour. From FSSAI side Mr. S. Dave, Advisor, Mr. Sanjay Gupta, Asst. Director (Enf) and Mr. P. Karthikeyan, Asst. Director (Regulations) gave the presentations. Representatives from Legal Axis and Amarchand& Mangaldas also participated in the colloquium.

FDA finalizes menu and vending machine calorie labeling rules

The U.S. Food and Drug Administration finalized two rules requiring that calorie information be listed on menus and menu boards in chain restaurants, similarly retail food establishments and vending machines with 20 or more locations to provide consumers with more nutritional information about the foods they eat outside of the home. The rules are required by the 2010 Patient Protection and Affordable Care Act.

The menu labeling final rule applies to restaurants and similar retail food establishments if they are part of a chain of 20 or more locations, doing business under the same name and offering for sale substantially the same menu items. Covered food establishments will be required to clearly and conspicuously display calorie information for standard items on menus and menu boards, next to the name or price of the item. Seasonal menu items offered for sale as temporary menu items, daily specials and condiments for general use typically available on a counter or table are exempt from the labeling requirements.

Some states, localities and various large restaurant chains are already doing their own forms of menu labeling. The 1990 Nutrition Labeling and Education Act, the law establishing nutrition labeling on most foods, did not cover nutrition labeling for restaurants and other ready-to-eat foods. In the years that followed, states and cities created their own labeling requirements for such foods. These federal standards will help avoid situations in which a chain restaurant subject to the federal requirements has to meet different requirements in different states.

Restaurants and similar retail food establishments will have one year to comply with the menu labeling requirements. Vending machine operators will have two years to comply with the requirements.

[Link: http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm423952.htm](http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm423952.htm)

FDA Issues Final Guidance on Labelling of Certain Beers

The U.S. Food and Drug Administration is issuing final guidance to help manufacturers in labelling bottled or otherwise packaged beers that are subject to FDA's labelling laws and regulations. The final guidance, which was issued in draft form in August 2009, follows a 2008 ruling by the Tobacco Tax and Trade Bureau (TTB) clarifying that certain beers that do not meet the definition of "malt beverages" are not subject to the labelling provisions of the Federal Alcohol Administration Act. Specifically, this refers to beers that are not made from both malted barley and hops but are instead made from substitutes for malted barley (such as sorghum, rice or wheat) or are made without hops. These beers are subject to the food labelling provisions of FDA laws and regulations.

The guidance explains the requirements for such beers. As with other FDA regulated foods, mandatory information required on the labels of these non-malt beers include, among other things, a listing of ingredients in the product, a Nutrition Facts label, and the name of the source of any major food allergen present in the product. The guidance also clarifies that other requirements, such as the Government Health Warning Statement under the Alcoholic Beverage Labelling Act, continue to apply to these products.

As described in the 2009 draft guidance, FDA recognized that manufacturers of the beers covered by the TTB Ruling may need time to change their labels to comply with FDA's applicable laws and regulations. FDA exercised enforcement discretion and allowed manufacturers until January 1, 2012 to revise the labels on their non-malt beverage beers. FDA expects that all labels for these products now comply with all applicable laws and regulations.

[Link: http://www.fda.gov/Food/NewsEvents/ConstituentUpdates/ucm427359.htm](http://www.fda.gov/Food/NewsEvents/ConstituentUpdates/ucm427359.htm)

FDA Investigates *Listeria monocytogenes* Illnesses Linked to Caramel Apples

The U.S. Food and Drug Administration (FDA) along with the Centers for Disease Control and Prevention (CDC) and state and local authorities are investigating a listeriosis outbreak linked to commercially-produced, prepackaged whole caramel apples. Listeriosis is caused by the bacterium *Listeria monocytogenes*.

According to the CDC, as of December 30, 2014, 32 people infected with the outbreak strains of *Listeria monocytogenes* have been reported from 11 states. The CDC reports that 31 ill people have been hospitalized.

Listeriosis is a rare but serious illness caused by eating food contaminated with the bacterium called *Listeria monocytogenes*. Anyone who experiences fever and muscle aches, sometimes preceded by diarrhea or other gastrointestinal symptoms, or develops fever and chills after eating commercially-produced, prepackaged caramel apples should seek medical care and tell the health care provider about any history of eating those caramel apples. Symptoms can appear from a few days up to a few weeks after consumption of the contaminated food.

Listeriosis can be fatal, especially in certain high-risk groups. These groups include the elderly, and people with weakened immune systems and certain chronic medical conditions (such as cancer). In pregnant women, listeriosis can cause miscarriage, stillbirth, premature labor, and serious illness or death in newborn babies.

Listeria monocytogenes can grow at refrigerator temperatures, as low as 40 degrees Fahrenheit (4 degrees Celsius). The longer ready-to-eat refrigerated foods are stored in the refrigerator, the more opportunity *Listeria* has to grow.

[Link: http://www.fda.gov/Food/RecallsOutbreaksEmergencies/Outbreaks/ucm427573.htm](http://www.fda.gov/Food/RecallsOutbreaksEmergencies/Outbreaks/ucm427573.htm)

World Health Day 2015: Food safety

Unsafe food is linked to the deaths of an estimated 2 million people annually – including many children. Food containing harmful bacteria, viruses, parasites or chemical substances is responsible for more than 200 diseases, ranging from diarrhoea to cancers.

New threats to food safety are constantly emerging. Changes in food production, distribution and consumption; change of environment; new and emerging pathogens; 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 globalized, 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, 7 April 2015.

WHO helps countries prevent, detect and respond to foodborne disease outbreaks - in line with the Codex Alimentarius, a collection of international food standards, guidelines and codes of practice covering all the main foods and processes. Together with the UN Food and Agriculture Organization (FAO), WHO alerts countries to food safety emergencies through an international information network.

Five keys to safer food

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.

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 and 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 that everyone can feel confident that the food on their plate is safe to eat.

[Link: http://www.who.int/campaigns/world-health-day/2015/event/en/](http://www.who.int/campaigns/world-health-day/2015/event/en/)

Access to sufficient amounts of safe and nutritious food is key to sustaining life and promoting good health.

Unsafe food containing harmful bacteria, viruses, parasites or chemical substances, causes more than 200 diseases - ranging from diarrhoea to cancers. Food-borne and waterborne diarrhoeal diseases kill an estimated 2 million people annually, including many children.

Food safety, nutrition and food security are inextricably linked. Unsafe food creates a vicious cycle of disease and malnutrition, particularly affecting infants, young children, elderly and the sick.

Food-borne diseases impede socioeconomic development by straining health care systems, and harming national economies, tourism and trade. Food supply chains now cross multiple national borders. Good collaboration between governments, producers and consumers helps ensure food safety.

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. Food-borne pathogens can cause severe diarrhoea or debilitating infections including meningitis.

Chemical contamination can lead to acute poisoning or long-term diseases, such as cancer. Food-borne diseases may lead to long-lasting disability and death. Examples of unsafe food include uncooked foods of animal origin, fruits and vegetables contaminated with faeces, and raw shellfish containing marine biotoxins.

Of most concern for health are naturally occurring toxins and environmental pollutants. Naturally occurring toxins include mycotoxins, marine biotoxins, cyanogenic glycosides and toxins occurring in poisonous mushrooms.

Food safety: a public health priority

Unsafe food poses global health threats, endangering everyone. Infants, young children, pregnant women, the elderly and those with an underlying illness are particularly vulnerable.

Foodborne and waterborne diarrhoeal disease kill an estimated 2 million people annually, mostly children and particularly in developing countries. Unsafe food creates a vicious cycle of diarrhoea and malnutrition, threatening the nutritional status of the most vulnerable. Where food supplies are insecure, people tend to shift to less healthy diets and consume more “unsafe foods” – in which chemical, microbiological and other hazards pose health risks.

Food can become contaminated at any point of production and distribution, and the primary responsibility lies with food producers. Yet a large proportion of foodborne disease incidents are caused by foods improperly prepared or mishandled at home, in food service establishments or markets. Not all food handlers and consumers understand the roles they must play, such as adopting basic hygienic practices when buying, selling and preparing food to protect their health and that of the wider community.

The evolving world and food safety

Safe food supplies support national economies, trade and tourism, contributes to food and nutrition security, and underpins sustainable development. Urbanization and changes in consumer habits, including travel, have increased the number of people buying and eating food prepared in public places. Globalization has triggered growing consumer demand for a wider variety of foods, resulting in an increasingly complex and longer global food chain.

As the world's population grows, the intensification and industrialization 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 distribution.

Link: <http://www.who.int/mediacentre/factsheets/fs399/en/>

- Food Safety starts from the manufacturer and the responsibility continues until the product reaches the end customer. The FSSAI functions as a regulatory towards maintaining this safety and standards of the consumable foods across the Country.
- To make the vigilance stronger and smoother, FSSAI has taken the initiative to digitalize the registration and licensing procedure. In Dadra and Nagar Haveli, 90% of the procedure is successfully digitalized. Using the Gender Resource Centre (GRC), online submission of application and generation of online cash challans was also made possible in Delhi and Karnataka. It also made possible of online submission of Forms, supporting Documents and Fees for the FBOs.
- Pamphlets in local languages are distributed using trade bodies, associations and fair committees to make the awareness program stronger and more effective. Special helpdesks were also setup at the Goa Headquarters for accepting the applications from FBOs and helping them to get connected with the FLRS (Food Licensing and Registration System).
- Uttar Pradesh showed a quick rise in the graph where 1 lakh applications for registration were filed within 47 days from going live. In Maharashtra, Food Safety Officers were mapped as per the population of Food Business Operators to ensure uniform coverage. Full time Dos and FSOs are being appointed for better implementation of Act in Andhra Pradesh. Syndicate Bank in Karnataka and Bank of Baroda in Kerala is integrated as Payment Gateways.



THE BUZZWORD 'SUPERFOOD' IS NOT A NEW FOOD

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In the developed and developing countries, there is a growing and burgeoning public interest in the health benefits of food. Consequently the mélange of health food stores with foods available over the counter claiming to be disease fighters, weight managers, immune, energy and brain power boosters, to get on the fast track to a super-healthy body. 'Superfood' is now a popular buzzword in the marketing strategy for food and health products companies, not in common use by professional dietitians and nutrition scientists. Superfoods are key to an urbanite's grocery shopping list and more so if available online through the social media. There is neither an official nor legal definition of a superfood. The Oxford English dictionary, defines it as "a nutrient-rich food considered to be especially beneficial for health and well-being". The Macmillan Dictionary describes 'superfood' as a food that is considered to be very good for your health and that may even help some medical conditions while the Merriam-Webster dictionary omits any reference to health and defines it as "a super nutrient-dense food, loaded with vitamins, minerals, fibre, antioxidants, and/or phytonutrients" [1]. Generally speaking, superfoods refer to foods whose nutrient content confers a health benefit above that of other foods but cannot be substituted for a generally healthy and balanced diet. Superfoods with scientifically proven health benefits should therefore be included or increased in your diet. Among the growing list of superfoods 'fruits and vegetables' whose nutritional value has been long recognized as exceptional, occupy centre stage. Fruits and vegetables, which have received superfood status are berries (acai, blueberry, cranberry, strawberry), pomegranate, avocado, papaya, citrus fruits (lime, orange, grapefruit,) dark green vegetables (such as spinach, Brussels sprouts, and broccoli), vegetables with bright, dark, or intense colors (carrot, beetroot). Fatty fish (salmon, mackerel, and sardines), many legumes (soybean, peanuts, beans, raw cocoa), and nuts (almond, walnut) are considered superfoods.

Vegetables and fruits in the 'Superfoods' list are not new to India. The cover page of "Dietary guidelines for Indians-A Manual" published by the National Institute of Nutrition, Hyderabad [2] pictorially represents the growing pantheon of so-called superfoods (Fig. 1). Historically fruits and vegetables are important in dietary guidance because they are powerhouses packed with antioxidants, fiber, vitamins and minerals, and other nutrients. Best of all a large number of fruits and vegetables in the superfood category are widely available across the length and breadth of India and consumed whole, not processed.

Most countries have dietary recommendations that include fruits and vegetables. The recommendations for vegetables and fruit for some countries are summarized in Table 1. Dietary recommendations between countries have similarities yet differ when classifying fruits and vegetables into different groups [3]. Most guidelines recommend plenty of fruit and vegetables (more than 300g)

Table 1: A comparison of country dietary guidelines for Fruits and vegetables

Country	Guideline	Key message	Recommendation
India	Dietary guidelines for Indians, 2011	Eat plenty of vegetables and fruit Eat vegetables/ fruits in all your meals in various forms Let different varieties of vegetables and fruits add color to your plate and vitality to your life.	300 g of vegetables in a day (Green leafy vegetables : 50 g; Other vegetables : 200 g; Roots & Tubers : 50 g Fresh fruits (100 g), should be consumed regularly.
USA	My Plate	Increase vegetable and fruit intake. Eat a variety of vegetables, especially dark-green, red, and orange vegetables and beans and peas	Vegetable: 3 cups/d, Fruit: 2 cups/d 1 cup = 84 g
United Kingdom	Eat Well Plate	Try to eat plenty of fruits and vegetables	5 portions/d (400 g/d) 1 portion=80 g
China	Balanced Diet Pagoda	Dark-colored (red, green, yellow) vegetables and deep yellow fruits are more abundant in nutrients. They should be chosen for consumption more often.	Vegetables 400-500g/day depending on energy expended. Fruits 100-200g/day
Canada	Canada Food Guide	Eat at least one dark green and one orange vegetable each day	7-8 servings/d (Adult) 4-6 servings/d (child) One serving is:1) 1 cup (250 mL) of raw green leafy vegetables One serving is:1) 1 piece of fruit (e.g., apple, pear, banana);2) ½ cup cut fruit.
Mexico	The Plate of Good Eating	Vegetables and fruits illustrated to form one third of a large dinner to emphasize their importance in the diet.	-
Australia\	Australian Dietary Guidelines (2013)	Enjoy plenty of vegetables, including different types and colours,and legumes/beans, and enjoy fruit	Vegetables and legumes 6 servings/d (adult male) 5 servings/ day (adult female Standard serve is 50g Fruit 2 servings/d (adult male) 2 servings/ day (adult female Standard serve is 150 g
World Health Organisation	The 3 Fives	Eat plenty of vegetables and fruit	Consume a wide variety of vegetables and fruits More than 400 g per day)
Switzerland	Swiss Food Pyramid	Fruits and vegetables should be eaten in greater quantities	Daily 5 servings of different colors, 3 servings of vegetables and 2 servings of fruit. 1 serving is 120 g..
S.Korea	Bicylce Food Guide		5-7 servings of vegetables (approximately equal to 2-3 cups of spinach), 1-3 servings of fruits (approximately equal to half to one and a half of an apple)

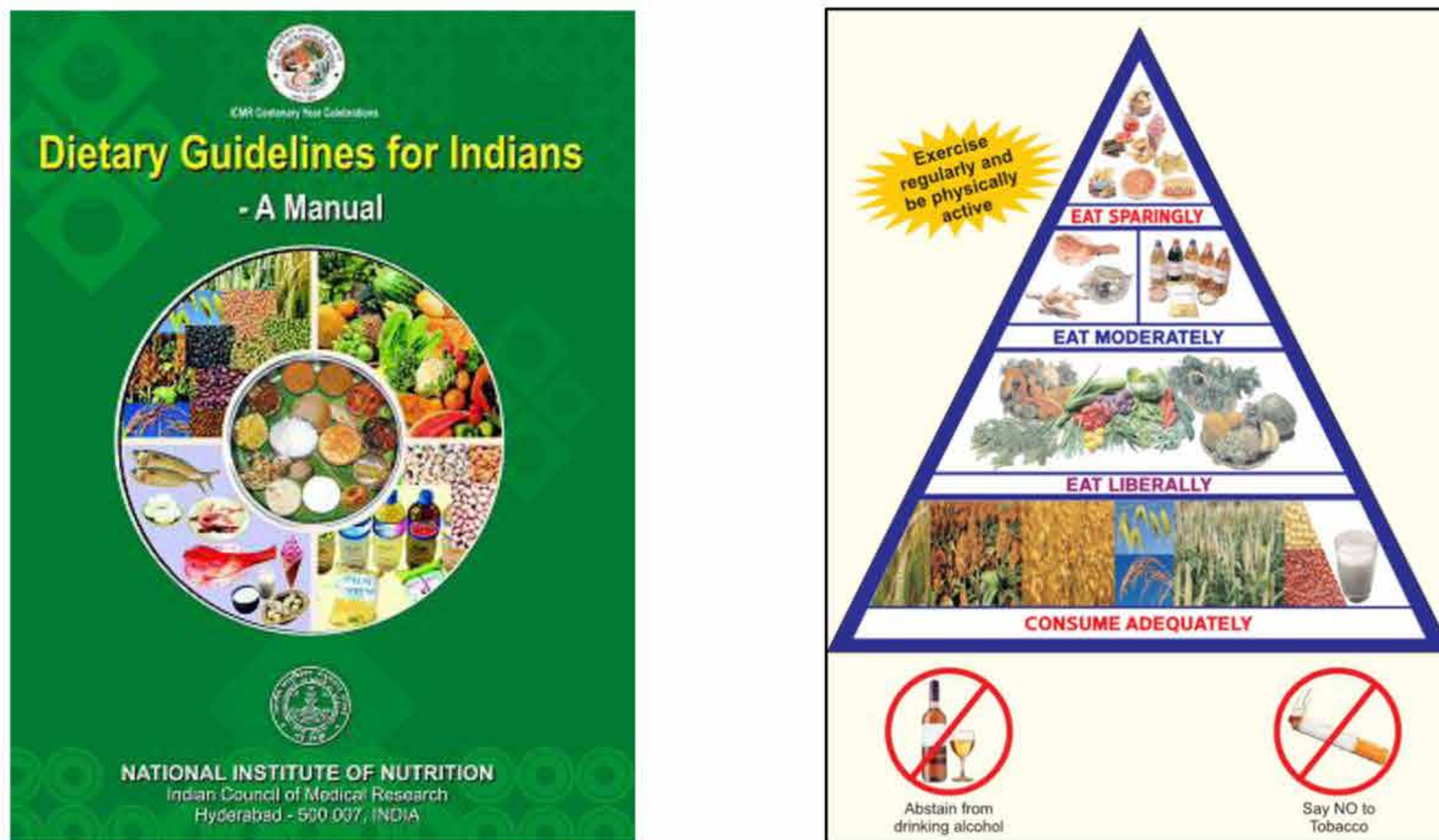


Figure 1: Cover page of ‘Dietary Guidelines for Indians’ (2011) published by National Institute of Nutrition, Hyderabad (<http://ninindia.org>) and the Food pyramid

The food pyramid for Indians (Figure 1) indicates that fruits and vegetables be eaten liberally. Indian dietary guideline 6 –eat plenty of vegetables and fruit- the rationale is that green leafy and other vegetables, and fruits are a gold mine of vitamins and minerals and therefore protect from disease, synonymous with the definition of super foods. According to this guideline every individual should consume at least 300 g of vegetables in a day. In addition, fresh fruits (100 g), should be consumed regularly. The guidelines emphasise that no single fruit or vegetable provides all the nutrients and therefore consuming a variety with different colors- leafy greens, tomatoes and other vegetables, apart from those which are yellow, orange, red, deep red, purple colored and citrus fruits being vitamin C-rich enrich the diets significantly. The inclusion of a variety of vegetables, and fruit in the plate as recommended in various other country guidelines provides a diversity of colours, textures and flavours, adding to the enjoyment of eating.

A wide range of bioactive compounds in fruits and vegetables have been linked to the protective health outcomes. Some of them are: vitamin C, vitamin E, carotenoids, flavonoids, folic acid, selenium, polyphenols, phenolic acids, glucosinolates, protease inhibitors, plant sterols, isoflavones, lignans, saponins, limonene and many more [3]. A health/medical claim made on any food is to be based on accepted and peer reviewed scientific data and should be well understood by the average consumer. Human studies in this field are still limited and need more attention towards understanding the preventive and protective roles of these bioactives. Therefore, whether the health promoting benefits of some fruits backed by scientific data using human intervention

studies/clinical were available or not were analysed using PubMed a database that comprises of more than 24 million citations for biomedical literature from MEDLINE, life science journals and online books. The results show that there are only a handful of studies that have looked at the health promoting properties of the whole fruit (Table 2). A large number scientific publications are available when the keyword used is only the fruit name e.g. banana/pomegranate. With the added phrase of either human studies or clinical intervention the number reduces drastically. Analysing the abstracts show that individual nutrients, present in these fruits have been shown to have several health-promoting properties. Studies using the whole fruit are relatively few.

Table 2: Pubmed search for scientific data on health benefits of whole fruits with humans#

Common name	Number of hits using Keywords		No of studies using whole fruit
	Fruit name only	Fruit name and human Studies	
Banana	2874	80	1
Grapefruit	1588	132	1
Blueberries	852	39	11
Pomegranate	1050	69	10
Grapes	7730	36	11
Avocado	2003	1	0
Tomatoes	10316	60	14
Papaya	1612	8	0
Acai berries	141	11	1

#Pubmed accessed on 14 th January, 2015

The conclusions of a few human intervention studies using whole fruits are summarized. The conclusions reflect the limitations of the studies. The effects of exercise with or without blueberries containing natural antioxidants in the diet on cardio-metabolic risk factors were evaluated in healthy women and men. Ingestion of blueberries induced differential effects on cardio-metabolic risk factors, including increased levels of both fasting glucose and HDL-cholesterol. The authors conclude that indirect effects on food intake were induced, other than consumption of blueberries and therefore further studies were needed to confirm the findings [4]. The effect of one portion (300 g) of blueberries on selected markers of oxidative stress and antioxidant protection (endogenous and oxidatively induced DNA damage) and of vascular function (changes in peripheral arterial tone and plasma nitric oxide levels) in male subjects were studied. In this study, the authors observe that there were no significant differences in endogenous DNA damage, peripheral arterial function and nitric oxide levels after blueberry intake. Although one portion of blueberries seemed sufficient to improve cell

antioxidant defense against DNA damage, further studies were needed to understand their role in vascular function [5].

The consumption of pomegranate juice a rich source of antioxidant polyphenols, has grown tremendously due to its reported health benefits. Jaganthan et al., [6] in a recent review support the need for more preclinical tests with crude juices of pomegranate and citrus and their constituents and some epidemiological studies in order to have a better understanding to promote 'pomegranate' and citrus juices as crusaders against colon cancer. Flavanone-rich fruits, such as oranges and grapefruits, are reported to have hypocholesterolemic effects, with little impact on other risk factors of CVD-platelet function, blood pressure, vascular function and blood lipids [7]. The evidence they say was limited, inconsistent and often inconclusive attributing this to the heterogeneity in the design of studies, the lack of controls, the relatively short intervention periods and low power in several studies. Resveratrol has been suggested to have cardioprotective effects and to improve metabolic health by mimicking the effects of calorie restriction. Compelling preclinical evidence, human epidemiology, and human intervention studies support the role of resveratrol in vascular and metabolic health [8]. These studies led to its emergence as a promising health ingredient. The effects of a low-carotenoid diet supplemented with either tomato (providing high amounts of lycopene) or carrot juice (providing high amounts of alpha- and beta-carotene) on immune functions in healthy men showed increased plasma carotenoid concentrations accompanied by a time-delayed modulation of immune functions [9]

In most of the human intervention studies on the fruits listed (Table 2) the Pubmed results, the authors indicate that additional studies are essential to confirm the observed effects and to elucidate the specific mechanisms [10-12]. Although epidemiological evidence suggests that fruits impart health promoting benefits and offer protective roles large, well-powered, long-term human dietary intervention studies are required to claim any health/medical claim of a whole fruit or vegetable.

The health claims on many of the so-called 'superfoods' are psychological claims to market them and do not have solid science-based evidence to show that these are superfoods. The Food Safety and Standards Authority of India (FSSAI) does not permit any health claim lacking scientific evidence, so you might not find them on supermarket shelves in India Marketing of products as "superfoods" is prohibited by European Food Safety Authority (EFSA) unless accompanied by a specific health claim supported by credible scientific research that explains to consumers why consuming the product is good for their health. [1]. However, these amazing health claims about superfoods are available in books and on websites. Therefore, consuming large quantities of specific, 'superfoods' based on such sources of information would lead to an "impaired, one-sided diet".

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Upcoming Events

S. No.	Event	Venue	Organizer	Date	Link
1	Codex Committee on Fats and Oils	Melaka Malaysia	CODEX	09 th to 13 th February 2015	http://www.codexalimentarius.org/meetings-reports/en/
2	Codex Committee on Methods of Analysis and Sampling	Budapest Hungary	CODEX	23 rd to 27 th February 2015	http://www.codexalimentarius.org/meetings
3	Codex Committee on Contaminants in Foods	New Delhi India	CODEX	16 th to 20 th March 2015	http://www.codexalimentarius.org/meetings
4	Codex Committee on Food Additives	Xi'an, China	CODEX	23 rd to 27 th March 2015	http://www.codexalimentarius.org/meetings

- Facebook has been utilized by FSSAI as an effective tool of communication for its various stakeholders. Not only have we shared information about various events where FSSAI has been participating but also have been running successful online campaigns. Connecting with our audience by wishing them on important Indian festivals is another way to build a connect between the competent authority and its stakeholders. #StandAgainst Food Adulteration
- After the overwhelming response and feedback to FSSAI's Facebook campaign Safe Food for Healthy India and Healthy Tiffin an online campaign called #StandAgainstFoodAdulteration was initiated on 20th October and continued till 21st November, 2014. The objective of this long running campaign was to inform and educate the audience about common adulteration in food, its ill effects and common methods to detect the adulteration.



FOOD ARTICLE खाद्य पदार्थ	ADULTERANT मिलावटी पदार्थ	METHOD FOR DETECTION पहचान का तरीका
Sweet Potato	Rhodamine B colour	Take a cotton piece soaked in liquid paraffin, and the outer surface of the sweet potato. If the cotton absorb colour, it indicates the use of Rhodamine B colours on the outer surface of the sweet potato.
शकरकंद	रोडामिन बी रंग	द्रव पैराफिन (मोम) में भीगा हुआ एक रुई का टुकड़ा लें और शकरकंद के बाहरी सतह को रुई से रगड़ें। अगर रुई रंग अवशोषित करता है तो यह दर्शाता है कि शकरकंद की बाहरी सतह पर रोडामिन बी रंग का प्रयोग हुआ है।

FOOD ARTICLE खाद्य पदार्थ	ADULTERANT मिलावटी पदार्थ	METHOD FOR DETECTION पहचान का तरीका
Common Salt	White Powder/ Chalk	Stir a spoonful of sample of salt in a glass of water. The presence of chalk will make solution white and other insoluble impurities will settle down.
साधारण नमक	सफेद पाऊंडर/ चॉक	एक चम्मच नमक को एक गिलास पानी में मिलाएं। चॉक की उपस्थिति घोल को सफेद बना देगी और दूसरी अघुलनशील अशुद्धियाँ नीचे बैठ जाएंगी।

#Food Labels for Safety

- A campaign was initiated on the Facebook page in the month of December to encourage end consumers to read food labels, to make informed choices about the food products that they wish to buy. Necessary details which must be marked on the labels and must be considered by a customer were highlighted as part of the campaign.

Every prepackaged food must carry a label containing (पैकेज खाद्य पदार्थ पर लगे लेबल में होना चाहिए)

1. Name of the food (खाद्य का नाम)
2. List of ingredients (संघटकों की सूची)
3. Nutritional Information (पोषणकारी जानकारी)
4. Declaration regarding Vegetarian and Non Vegetarian (शाकाहारी व मांसाहारी संबंधी घोषणा)
5. Declaration regarding food additives (खाद्य योज्यों संबंधी घोषणा)
6. Net weight/quantity (शुद्ध परिमाण)
7. Lot/code/batch identification number (लॉट/कोड/बैच नं. पहचान)
8. Date of manufacture (विनिर्माण की तिथि)
9. Best before/Use by date (से पूर्व उत्तम/तारीख तक प्रयोग)
10. Instructions of use (प्रयोग करने के लिए अनुदेश)
11. Name and complete address of the manufacturer (विनिर्माता का नाम व पूरा पता)



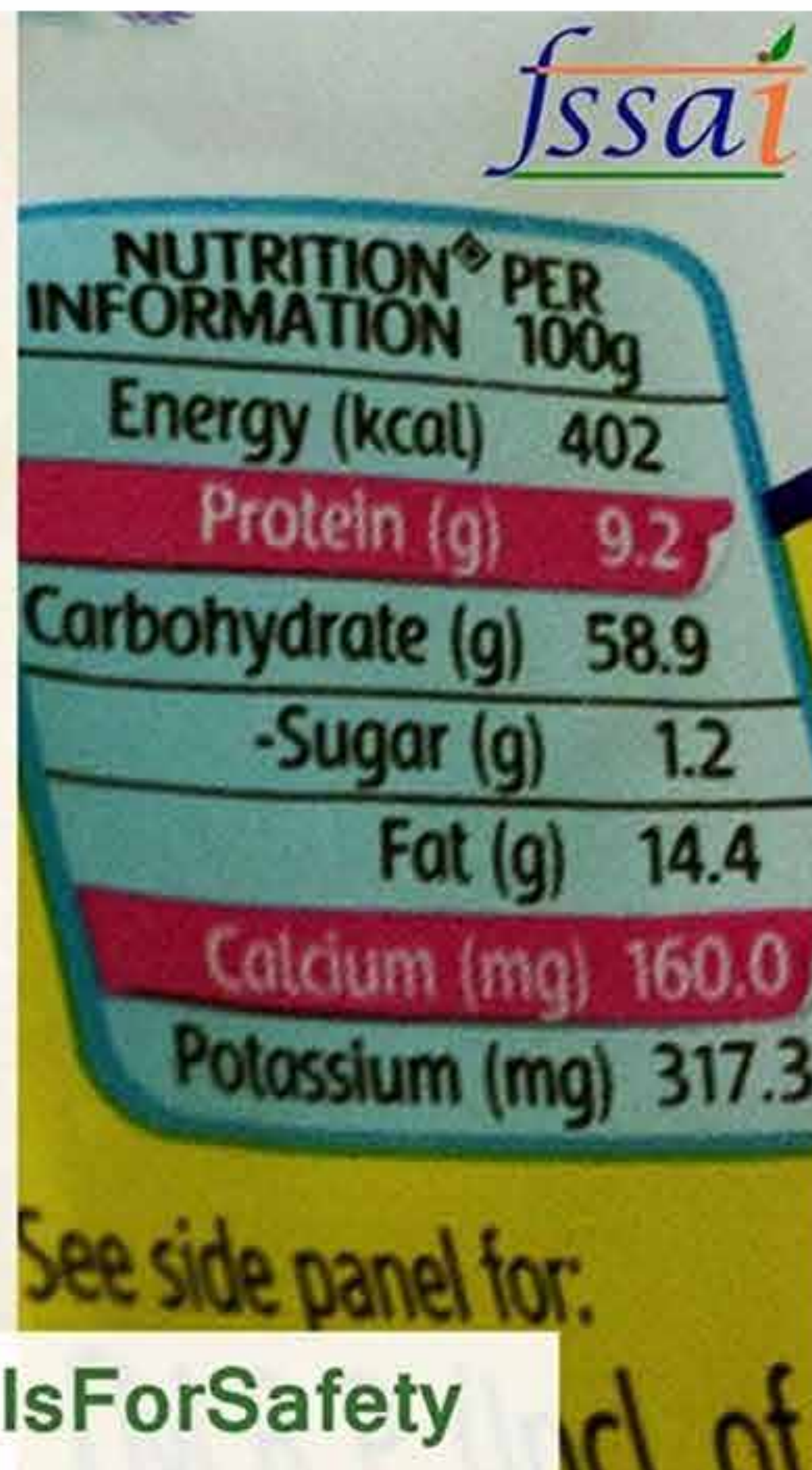
#FoodLabelsForSafety

Nutritional information or nutritional facts per 100gm or 100ml or per serving of the product is given on the label containing the following:

1. Energy Value in KCAL
2. The amount of proteins, carbohydrates & fat
3. The amount of any other nutrient

उत्पाद की प्रति 100 ग्राम या प्रति 100 मि. ली. या प्रति सर्विंग पोषणकारी जानकारी या पोषणकारी तथ्य निम्नलिखित को अंतर्विष्ट करते हुये लेबल पर दी जाती है:

1. ऊर्जा मान, कि. कैलोरी में
2. प्रोटीन, कार्बोहाइड्रेट और वसा की मात्रा
3. किसी ऐसे अन्य पोषक तत्व की मात्रा



#FoodLabelsForSafety

#FoodLabelsForSafety fssai



Symbol of Vegetarian Food Articles

शाकाहारी खाद्य पदार्थ का प्रतीक-चिन्ह

Symbol of Non-Vegetarian Food Articles

मांसाहारी खाद्य पदार्थ का प्रतीक-चिन्ह

Must look at the declaration regarding Vegetarian and Non Vegetarian on every packaged food product.

खाद्य उत्पाद के प्रत्येक पैकेट पर शाकाहार व मांसाहार की उद्घोषणा अवश्य देखें।

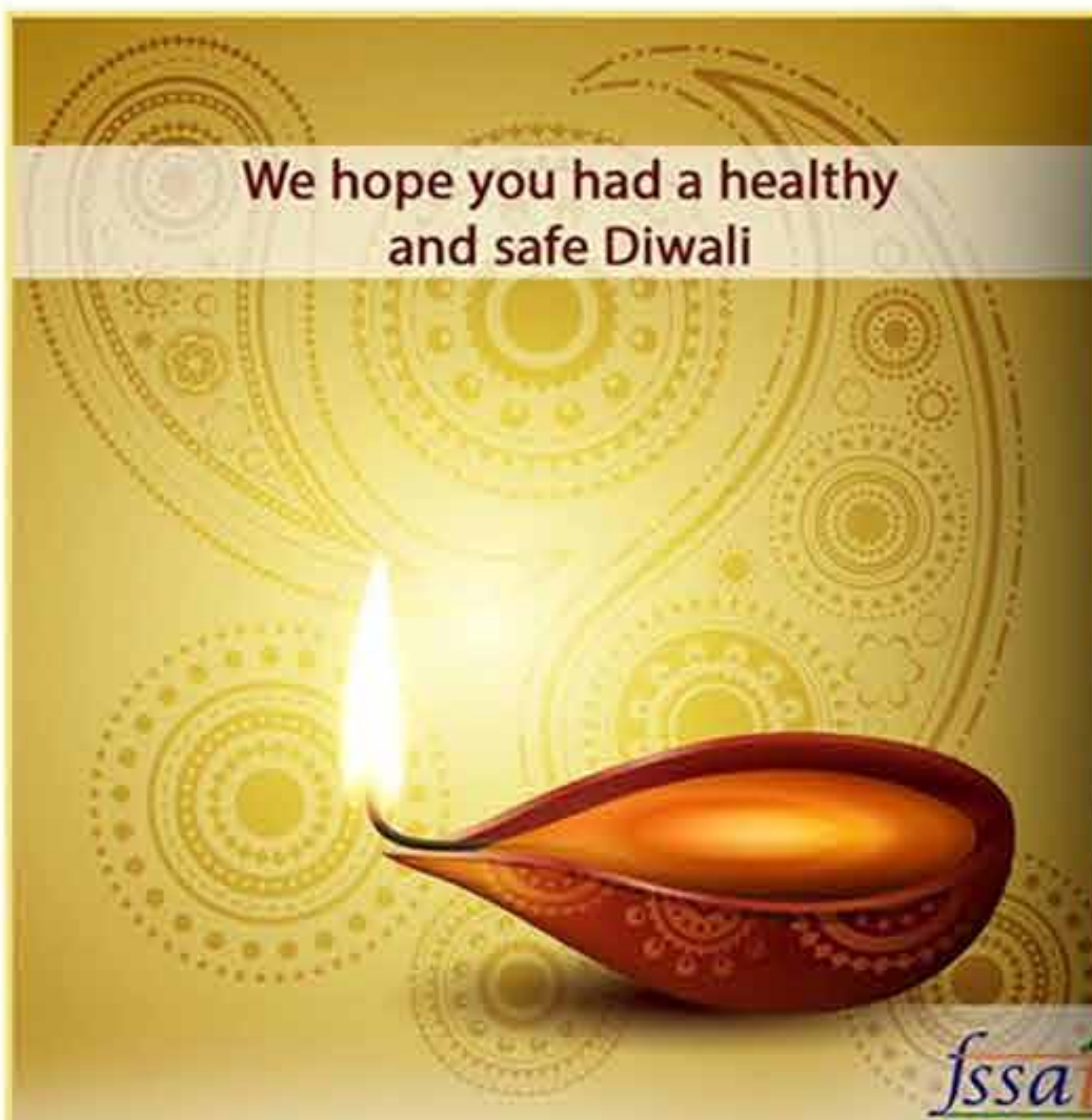
Best Wishes on Festivals/Important Days

CHILDREN'S DAY



This Children's Day let us pledge to make our children healthy with safe, nutritious & wholesome food and hygienic habits

We hope you had a healthy and safe Diwali



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Food Safety and Standards Authority of India (FSSAI) wishes

A Very Happy, Healthy & Safe New Year 2015

Let's resolve to stay HEALTHY with WHOLEsome, HYGIENIC & SAFE food
सुरक्षित आहार, स्वास्थ्य का आधार

Food Safety and Standards Authority of India (FSSAI) wishes you a *Merry Christmas*



Celebrate the festivity with **SAFE, HYGIENIC & WHOLESOME** food
सुरक्षित आहार, स्वास्थ्य का आधार

- Apart from the campaigns, Facebook was also used as a platform to update the activities of FSSAI. The participation and organizing a Quick Quiz Competition in IITF 2014 was updated. FSSAI also participated in the Exhibition on Good Governance Day at Manekshaw Centre on 25th December 2014 .

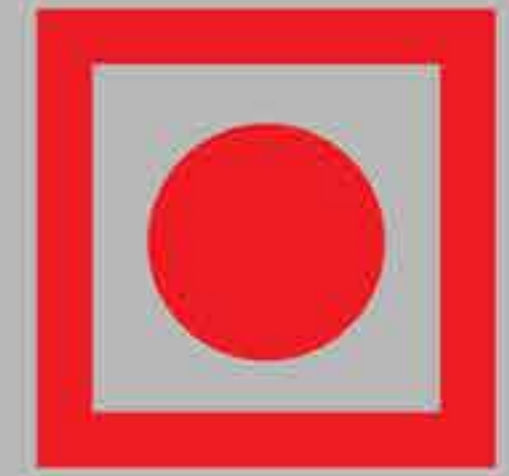
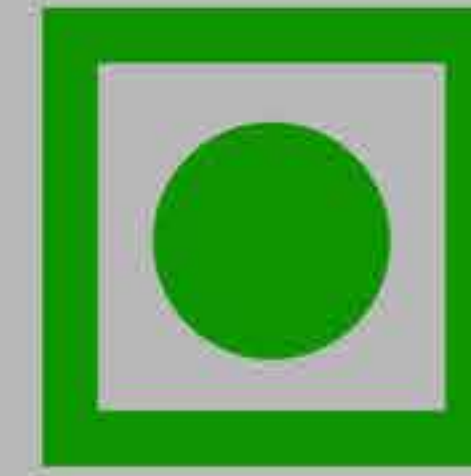
CHILDREN SECTION

Tick the right choice

How black pepper is adulterated?

- Papaya Seeds
- Marbles
- Dust particles

What is the colour of declaration of the non-veg food?



Pre-packaged food must be used after the date of "Best Before"

- True
- False

What must be mentioned for the food products which are being imported?

- Name of the country of its origin
- Name of the country it is exported
- Name of the country of its choice

Match the following

List of food ingredients

Lot number/Batch Number

Net quantity

Nutritional information

NUTRITION [®] PER INFORMATION 100g	
Energy (kcal)	402
Protein (g)	9.2
Carbohydrate (g)	58.9
-Sugar (g)	1.2
Fat (g)	14.4
Calcium (mg)	160.0
Potassium (mg)	317.3

Max. Retail Price : ₹
(Inclusive of all taxes)
NET QUANTITY : 1kg

Total Carbohydrate	25g	30g
Dietary Fiber		
Calories per gram:		
Fat 9	Carbohydrate 4	Protein 4
INGREDIENTS: WHEAT NOODLES, WATER, ONIONS, CARROTS, ROASTED PEANUTS, BABY CORN, RAW SUGAR, TOMATOES, SUNFLOWER OIL, GARLIC, SCALLIONS, WATER, CHESTNUTS, NATURAL FLAVORS, CELERY, GINGER, THAI BASIL, CHILIES, VINEGAR, WHEAT, SOY AND PEANUTS		

1kg + 8g FREE = 66g	10.00
MRP ₹ (incl. of all taxes)	30/10/14
PKD.	8101495
LOT No.	11A02
BEFORE 6 MONTHS FROM PACKAGING	

Image Gallery of FSSAI Activities



A Statue of mother with her baby at the Health Pavilion during IITF-2014



Crowded stall of FSSAI during Quiz Test organised in the IITF-2014



Visitor at the Stall of FSSAI during IITF-2014



Chairperson, FSSAI observes the Stall of FSSAI during the Exhibition on Good Governance Day on 25.12.2014



Training of Street Food Vendors during National Food Festival, 2015 at New Delhi



Officers from FSSAI reply to the queries of the visitors



Participants in the Training during National Food Festival, 2015 at New Delhi



सुरक्षित आहार, स्वास्थ्य का आधार

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FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA

(Ministry of Health and Family Welfare)

FDA Bhawan, Kotla Road, New Delhi - 110002

PORTAL: fssai.gov.in FSSAI HELPLINE: 1800-11-2100

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