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# From the desk of

# National Codex Contact Point (NCCP)

As you read the fifth issue of the Connect@CodexIndia, we embark upon the second year of our journey together. The one year old sapling has taken root and will continue to grow stronger by the day and your contributions for the Newsletter can help in enriching the content further.

In the quarter gone by (July- September 2014), the 37<sup>th</sup> session of the Codex Alimentarius Commission (CAC) was held from 14<sup>th</sup> to 18<sup>th</sup> July 2014 at Geneva, Switzerland. The meeting was attended by delegates from 170 countries, one member organization (European Union) and 28 international governmental and non-governmental organizations including UN agencies. Indian delegation led by Shri Chandramouli, Chairperson, FSSAI also par-

ticipated
in the
session.
There
was a
change
of leadership in
Codex
Alimentarius
Commis-



sion (CAC) this year when Shri Dave, the present Chair of CAC from India and Advisor (S), FSSAI demitted the office of the Chair along with the three Vice-Chairs of the CAC. The new team was elected at the CAC after hectic parleys by various countries who had fielded their candidates. For the Chair, CAC nominations had been filed by candidates from Switzerland and Canada. For the three posts of Vice-Chair, nominations had been received from Brazil, Mali,

Japan and Egypt. It was an interesting contest and thus the highlight of the CAC session was the election for the Chair CAC, which was held on 15<sup>th</sup> July 2014 and the three Vice-Chairs on 16<sup>th</sup> July 2014 through a secret ballot. Dr Awilo of Switzerland was elected as the Chair, CAC and following three candidates were elected as the Vice-Chairs:

- 1. Mr. Guillereme Da Costa from Brazil
- 2. Mr. Mahamodu Sako from Mali
- 3. Ms. Yayoyi Tsujiyama from Japan

Shri Dave then passed on the baton of Chair CAC to Dr. Awilo after having successfully helmed the three sessions of CAC. It was indeed a proud moment for India that Shri Dave was Chair of this August body for three years.

During the last quarter, we also had three important Codex Committee meetings: Codex Committee on Processed Fruits and Vegetables (CCPFV), Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS) and Codex Committee on Food Labelling (CCFL). Country comments were sent for all the meetings and the Indian delegation also participated in the CCFICS and CCFL meetings. It has been our endeavour to send the country comments for the Committees in time and also facilitate participation in important and relevant Committees.

FSSAI as the National Codex Contact Point conducted a workshop for the Western Region on the theme of **Codex Alimentarius: Principles and Procedures.** The workshop was held in Mumbai on 12<sup>th</sup> September 2014 at ICT, Mumbai. It was a resounding success with active participation

of the stakeholders and you will read about it in greater detail in the current issue.

Apart from the regular news on the meetings that we participated in and the forthcoming meetings, we bring to you two articles prepared by the team of Codex Division, FSSAI in this issue. One article focuses on the Aflatoxins in Foods- Work done in Codex on Maximum Levels and Code of Practice, the second one on the National Food Control System. We hope you will find these to be useful and interesting.

We hope you continue to enjoy reading this as much as we enjoy bringing it you.

We look forward to receiving your comments/suggestions and contributions for the Newsletter at:

codex-india@nic.in

Happy reading.

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# Workshop conducted by FSSAI on Sensitization of Codex Alimentarius: Principles and Procedures

Food Safety and Standards Authority of India (FSSAI) organized the third workshop in the series for the western region on "Codex Alimentarius: Principles and Procedures" in collaboration with Institute of Chemical Technology (ICT) on 12<sup>th</sup> September, 2014 at Institute of Chemical Technology (ICT), Mumbai. The workshop was inaugurated by Shri K. Chandramouli, Chairperson, FSSAI. Fol-

lowing officers were present at the inaugural session: Shri Purshotam Bhapkar, Food



Safety Commissioner, Maharashta, Shri Sanjay Dave, Advisor (FSSAI), Ms. Vinod Kotwal, Director, (FSSAI), Dr. Rekha S. Singhal Professor of Food Technology, Head, Food Engineering and Technology Department, Institute of Chemical Technology, Mumbai, Shri. Prabodh Halde, AFSTI.

The main purpose of conducting the workshop was to create awareness about Codex Alimentarius and the procedures among the stakeholders for their effective increased participation in Codex related activities in India. The role of

academia in Codex Alimentarius was highlighted. Inputs from Academia (Institutes, Colleges, Universities) can be extremely useful in finalizing the country position or proposing a new work in the Codex Committee. Thus, NCCP India felt the need to interact with all the stakeholders (Government officials, Industry and Academia) through this workshop.

Shri S Dave, Advisor: Ms Vinod Kotwal: Director (Codex). Shri P. Karthikeyan, Assistant Director and Ms. Sakshi Gambhir (Technical Officer, Codex Division) and Ms.Sukhmani Singh (Technical Officer, Codex Division) from FSSAI and representatives from other organizations



Dairy Development Board. FICCI Codex Cell made extensive presentations and

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provided all the relevant information to the participants. Since the idea behind conducting these workshops was to provide an overall general layout of Codex Alimentarius to the participants and the resource persons made presentations on various facets of Codex Alimentarius, inter-alia covering following aspects:

The structure of Codex Alimentarius

- Codex Procedural Manual
- Procedure of conducting Shadow Committee Meetings and preparing national responses
- Follow up Action after the Committee meeting
- Scientific basis of Codex
- Codex Matters at step 2/3.
- Submitting a new work proposal
- Participation in an electronic working group

At the end of the session, there was a guiz competition for the participants. The guiz was included at the end of the workshop to increase the involvement of the participants in the workshop and their understanding with regard to Codex Alimentarius. The questions asked were from the various presentations made during the workshop. There was enthusiastic response from all the participants to the quiz.

The participants felt that the workshop was quite useful in creating awareness about Codex Alimentarius and more such workshops should be conducted on a regular basis. NCCP India will endeavour to conduct similar such workshop in the eastern region of the country.

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### India's participation in the Codex Committee meetings during July 2014—October 2014

# Participation in the 37<sup>th</sup> session of Codex Alimentarius Commission (14<sup>th</sup> July-18<sup>th</sup> July, 2014):

A seven member delegation led by Shri Chandramouli, Chairperson, FSSAI attended the 37<sup>th</sup> Session of CAC in Geneva. The Commission Approved 16 items for new work. including priority lists of veterinary drugs and pesticides for evaluation or re-evaluation by JECFA and JMPR, respectively. In the session, the Commission agreed to establish a monitoring framework for the implementation of the Strategic Plan 2014-2019. Elections for the position of Chairman and three Vice- Chair of the Commission also took place in the session. The new elected Chairperson is Mrs Awilo Ochieng Pernet (Switzerland), and three Vice-Chairpersons were elected: Mr Guilherme Antonio da Costa Jr. (Brazil), Ms Yayoi Tsujiyama (Japan) and Mr Mahamadou Sako (Mali). The Commission appointed Thailand, as interim Coordinator for Asia until the end of 38 session of CAC. The Commission reactivated the Committee on Milk and Milk Products, hosted by New Zealand, to start new work on a standard for processed cheese. The Commission also endorsed the recommendations of the Executive Committee concerning the preparation of a paper identifying scope and processes to evaluate the work management of Codex, including the functioning and composition of the Executive Committee and endorsed the guidance to promote collaboration between Codex and OIE.

Participation in the 27<sup>th</sup> Session of Codex Committee on Processed Fruits and Vegetables (8<sup>th</sup> September- 12<sup>th</sup> September, 2014):

The comments were sent on the Agenda items and were considered by the Committee at the session.

Participation in the 21<sup>st</sup> Session of Codex Committee on Food Import and Export Inspection and Certification system (13<sup>th</sup> October-17<sup>th</sup> October, 2014):

Two delegates, Shri. Ajit Chavan , Director, Department of Commerce and Dr. Saxena, Director, EIC attended the 21st

Session
held in
Brisbane,
Australia.
Agenda
Items
which
were important to
India



were reviewed and comments were sent to the Codex Committee for consideration.

Participation in the 42<sup>nd</sup> Session of Codex Committee on Food Labelling (21<sup>st</sup> October- 24<sup>th</sup> October, 2014):

Three member delegation led by Shri Sanjay Gupta, AD, FSSAI, Shri Aditya Jan (NDDB) & Dr. PVSM Gouri (APEDA) attended the 42<sup>nd</sup> Session of CCFL held in Rome, Italy. India had prepared in the discussion paper on need for development of General Standard for the Labelling of Non- Retail Containers of Food which could not be discussed in the session due to lack of time. It will be discussed in the next session of the Committee. Similarly Proposal to revise the General Guidelines for the Use of the Term "Halal" (CAC/GL 24-1997) was also not discussed due to time constraints. However, India had sent the comments on the various Agenda items which were considered in the session

### **Informative Articles**

### Aflatoxins in Foods—Work done in Codex on Maximum levels and Code of Practice

## @ Prepared by Codex Division

#### 1. Introduction

Mycotoxins, in particular aflatoxins are secondary metabolites produced by filamentous fungus found in soil, air and all plant parts and can be toxic to human and animals through consumption of contaminated food and feed entering into food chain. Aflatoxins are produced by mould species that grow in warm, humid conditions. Aflatoxins are found mainly in commodities imported from tropical and subtropical countries with in particular peanuts (groundnuts) and other edible nuts and their products, dried fruit, spices and maize (CAC/RCP 65-2008)<sup>1</sup>.

Aflatoxins (AFs) are considered the most important group of mycotoxins in the world's food supply and are produced in nature primarily by Aspergillus Species e.g Aspergillus flavus, Aspergillus nomius, Aspergillus parasiticus and related species. AFs B1, B2, G1 and G2 are the four major naturally produced AFs (Pitt & Hocking, 2009)<sup>2</sup>.

Aspergillus Flavus is often found in most food produced in tropical countries having special affinity with maize, peanuts and cottonseed. Optimum conditions for AFs production by these species are 33 degree Celsius and 0.99 water activity (aw). AFs could be produced by fungi either before and/or after harvesting of cereals, and is influenced by several environmental factors such as temperature, humidity, insect damage, drought and stress condition of the plants (Miraglia et al., 2009)<sup>3</sup>.

#### 2. Codex Standards

The Codex Maximum Level (ML) for a contaminant in a food or feed commodity is the maximum concentration of that substance recommended by the Codex Alimentarius Commission (CAC) to be legally permitted in that commodity (CODEX STAN 193-1995)<sup>4</sup>.

The Codex Codex General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995)<sup>4</sup>

The standard gives MLs of aflatoxins (total) in following commodities:

- A) Peanuts intended for further processing 15µg/kg
- B) Almonds intended for further processing 15µg/kg
- C) Shelled ready-to-eat brazil nuts- 10µg/kg
- D) Shelled brazil nuts destined for further processing  $15\mu g/kg$
- E) Dried Figs- 10μg/kg
- F) Hazelnuts intended for further processing  $15\mu g/kg$
- G) Pistachios intended for further processing 15μg/kg
- H) Ready-To-Eat Almonds 10μg/kg
- I) Ready-To-Eat Hazelnuts 10μg/kg
- J) Ready-To-Eat Pistachios 10μg/kg
- K) Aflatoxin M1 in Milk- 0.5 μg/kg

#### 1. CAC/RCP 65-2008

- 2. Pitt, J.I., Hocking, A.D., 2009. Fungi and Food Spoilage. Springer Science + Business Media, New York.
- 3. Miraglia, M., Marvin, H.J.P., Kleter, G.A., Battilani, P., Brera, C., Coni, E., Cubadda, F., Croci, L., De Santis, B., Dekkers, S., Filippi, L., Hutjes, R.W.A., Noordam, M.Y., Pisante, M., Piva, G., Prandini, A., Toti, L., van den Born, G.J., Vespermann, A., 2009.Climate change and food safety: An emerging issue with special focus on Europe. Food and Chemical Toxicology 47, 10091021.
- 4. CODEX STAN 193-1995

#### 3. Proposals for Consideration

- A. Discussion Paper on Establishment of a Maximum Level for Total Aflatoxins in Ready-To-Eat Peanuts and Associated Sampling Plan (at step 3) (CX/CF 14/8/15) A New Work Proposal was presented by India on Establishment of a Maximum Level for Total Aflatoxins in Ready-To-Eat Peanuts and Associated Sampling Plan at the 7<sup>th</sup> session of CCCF which was held in April, 2013. The work in this direction is proceeding and India is chairing the EWG.
- B. Proposal for New Work on Establishment of Maximum Levels of Aflatoxins in Spices (CX/CF 14/8/20)<sup>5</sup> Proposal was presented by India in the 8<sup>th</sup> Session of CCCF that was held in March, 2014. The main purpose of the work is to ensure fair trade practices in international trade by harmonizing levels of aflatoxins in spices. The Committee agreed to establish an Electronic Working Group to prepare a discussion paper led by India and Co-Chaired by The European Union and Indonesia. The Discussion Paper prepared by the Electronic Working Group will be considered in the Next Session of Codex Committee on Contaminants in Food to be held in March, 2015.

### **Informative Articles**

### **Continued from Pre-Page**

### Aflatoxins in Foods—Work done in Codex on Maximum levels and Code of Practice. @ Prepared by Codex Division

#### 3. Proposals for Consideration

C. Discussion Paper on the Establishment of a Maximum Levels of Aflatoxins B1 and Total Aflatoxin in Nutmea and Associated Sampling Plan (CX/CF 14/8/21)<sup>6</sup>- The Delegation of India in the 8th Session of CCCF, held in March, 2014 introduced the proposal for MLs for aflatoxins in spices and explained that a harmonised ML for total aflatoxins and aflatoxin B1 should be established in spices to facilitate trade and protect consumer health. The Delegation proposed that the Committee consider establishing MLs for total aflatoxins and aflatoxin B1 for chilli and nutmeg as an initial step because these spices were most widely traded internationally. In the session, Indonesia proposed for MLs for aflatoxins in nutmeg and explained that nutmeg was one of the most widely traded spices internationally, and internationally harmonised MLs for total aflatoxin and aflatoxin B1. The 8th session of Committee decided that the review of mycotoxins in spices first be conducted to allow the Committee to understand which mycotoxins to address and in which spices. The Committee in this regard established the ewg with India being the chair and co-chaired by the European Union and Indonesia to prepare a discussion paper for consideration at the next session.

D. Discussion Paper On The Possible Revision Of The Code Of Practice For The Prevention And Reduction Of Mycotoxin Contamination In Cereals (CAC/RCP 51-2003)<sup>7</sup>-

The Delegation of Brazil introduced the Discussion Paper in the Session 8<sup>th</sup> Session of CCCF held in March. 2014. The Delegation highlighted the main points identified for revision of the COP, such as incorporation of the HACCP system: inclusion of an annex on aflatoxins, a new section on processing; use of biological control, such as those commercially available for control of Asperaillus flavus in maize and use of predictive models. The Committee agreed to initiate new work on the revision of the Code of Practice for the Prevention and Reduction of Mycotoxin Contamination in Cereals. The 37th Session of CAC approved this new work. The ewg has been established by the Committee chaired by Brazil and co-chaired by United States of America and Nigeria to prepare a proposed draft revision of the COP, including the integration of the annex on the prevention and reduction of aflatoxins and OTA in sorghum, for comments at Step 3 and consideration by the next session.

5. CX/CF 14/8/20

6. CX/CF 14/8/21

7. CX/CF 14/8/14

# D. Discussion Paper On The Possible Revision Of The Code Of Practice For The Prevention And Reduction Of Aflatoxins:

The elaboration and acceptance of a Code of Practice for various commodities by Codex will provides uniform guidance for all countries to consider in attempting to control and manage contamination by various mycotoxins, specifically aflatoxins (CAC/RCP 59-2005)<sup>8</sup>.

It is of high importance in order to ensure protection from aflatoxin contamination in both producer and importer countries. This General Code of Practice contains general principles for the reduction of various mycotoxins in cereals that should be sanctioned by national authorities. National authorities should educate producers regarding the environmental factors that promote infection, growth and toxin production in cereal crops at the farm level. Emphasis should be placed on the fact that the planting, preharvest and postharvest strategies for a particular crop will depend on the climatic conditions of that particular year, taking into account the local crops, and traditional production conditions for that particular country or region (CAC/RCP 51-2003)<sup>9</sup>.

- I. Code of Practice for the Prevention and Reduction of Aflatoxin contamination in Peanuts (CAC/RCP 55-2004)<sup>10</sup>- The document gives recommended practices for preharvesting, harvesting, segregation of aflatoxins contaminated lots, storage based on Good Agricultural Practices (GAP). It further gives recommended practices for receiving & shelling, sorting, blanching, packaging, storage of end product based on Good Manufacturing Practices (GMP). Standard also mentioned HACCP (Hazard Analysis Critical Control Point) as complementary management system to be considered in the future.
- II. Code of Practice for the Prevention and Reduction of Aflatoxin contamination in Dried Figs (CAC/RCP 65-2008)<sup>11</sup>- This code of practice indicates the measures that should be implemented by all persons that have the responsibility for assuring that food is safe and suitable for human consumption.

### **Informative Articles**

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### Aflatoxins in Foods—Work done in Codex on Maximum levels and Code of Practice. @ Prepared by Codex Division

It is important for producers to realize that Good Agricultural Practices (GAP) represent the primary line of defence against contamination of dried figs with aflatoxins, followed by the implementation of Good Manufacturing Practices (GMP) and Good Storage Practices (GSP) during the handling, processing, storage and distribution of dried figs for human consumption. Only by effective control at all stages of production and processing, from the ripening on the tree through harvest, drying, processing, packaging, storage, transportation and distribution can the safety and quality of the final product be ensured.

III. Code of practice for the reduction of aflatoxin B1 in raw materials and supplemental feeding stuffs for milk producing animal (CAC/RCP 45-1997)<sup>12</sup>- The standard gives recommended practices to be followed for crop production, harvest, storage and transport.

IV. Code of Practice for the Prevention and Reduction of Aflatoxin contamination in Tree Nuts (CAC/RCP 59-2005)<sup>13</sup>- This Code of Practice applies to all varieties of tree nuts of commercial and international concern, including almonds (Prunus amygdalus), Brazil nuts (Bertholletia excelsa), cashews (Anacardium occidentale), hazel nuts (Corylus spp.), macadamia nuts (Macadamia spp.), pecans (Carya spp.), pine nuts (Pinus spp.), chestnuts (Castanea spp.), pistachio nuts (Pistacia spp.) and walnuts (Juglans spp.).

It is important for producers to realize that Good Agricultural Practices (GAP) represent the primary line of defence against contamination of dried figs with aflatoxins, followed by the implementation of Good Manufacturing Practices (GMP) and Good Storage Practices (GSP) during the handling, processing, storage and distribution of dried figs for human consumption. Only by effective control at all stages of production and processing, from the ripening on the tree through harvest, drying, processing, packaging, storage, transportation and distribution can the safety and quality of the final product be ensured. Standard also mentioned HACCP (Hazard Analysis Critical Control Point) as complementary management system to be considered in the future.

V. Code of practice for the prevention and reduction of mycotoxin contamination in cereals, including annexes on ochratoxin a, zearalenone, fumonisins and tricothecenes (CAC/RCP 51-2003)<sup>14</sup>-

The recommendations for the reduction of mycotoxins in cereals are divided into two parts: recommended practices based on Good Agricultural Practice (GAP) and Good Manufacturing Practice (GMP); a complementary management system to consider in the future is Hazard Analysis Critical Control Point (HACCP) principles.

<sup>8.</sup> CAC/RCP 59-2005

<sup>9.</sup> CAC/RCP 51-2003

<sup>10.</sup> CAC/RCP 55-2004

<sup>11.</sup> CAC/RCP 65-2008

<sup>12.</sup> CAC/RCP 45-1997

<sup>13.</sup> CAC/RCP 59-2005

<sup>14.</sup> CAC/RCP 51-2003

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## **National Food Control System**

#### Introduction

An Increase in food trade through domestic and international distribution of food has led many countries to adopt a National Food Control System (NFCS). Many countries have established the food control as a single authority or multiple authorities to oversee the whole food chain thus improving the efficacy and potency of the Food control system.

Organizations like Food Agriculture Organization (FAO) and World health Organization (WHO) have taken initiative and a strong interest in promoting effective NFCS. In 1976, FAO/WHO had developed the guidelines for providing developing countries with advice on strategies to protect public health, prevent fraud and deception, avoid food adulteration and facilitate trade <sup>1.</sup>

The Codex Alimentarius Commission (CAC) has also established Principles and Guidelines for National Food Control System (CAC/GL 82-2013)<sup>2</sup>. The guidelines provide practical guidance to assist the national government and their competent authority in the design, development, operation, evaluation and improvement of the national food control system.

According to FAO/WHO, Food Control can be defined as a "mandatory regulatory activity of enforcement by national or local authorities to provide consumer protection and ensure that all foods during production, handling, storage, processing and distribution are safe, wholesome and fit for human consumption, conform to safety and quality requirements and are honestly and accurately labeled as prescribed by the Law1".

The Food Control system is essential for both developed and developing countries. The public health concerns' are of the chemical contaminants in the food, in particular: mycotoxins, including aflatoxins; industrial chemicals such as polychlorinated bi-phenols and toxic heavy metals; use of agricultural chemicals, such as pesticides and fertilizers; the presence of residues of drugs administered to animals and the safety of colors and various types of additives added to the food supply<sup>3</sup>. And to combat these concerns, an effective food control system is crucial to assure the safety and quality of the food supply to the consumers and to promote and facilitate domestic as well as international trade. 1. Objectives of National Food Control System (NFCS):

- \* Reducing numerous Food borne illnesses thus protecting Public Health by ensuring only safe and wholesome foods to be marketed.
- Protecting consumers from adulterated, contaminated and unhygienic food.
- Protecting Consumers from mislabeling, misleading claims and advertisements
- And contributing in Economic development by maintaining consumer confidence in the food system and ensuring a fair trade to food products internally and externally<sup>1</sup>.

Due to several food borne pathogens and hazards occurring from imported and domestically produced foods, the Government of various countries have established the NFCS for having safe, quality foods coming straight from farm to fork thus ensuring good health to the consumers.

Considering Western World, countries like USA, Europe, Canada, Australia etc. have established their own NFCS. In India, various Ministries have inter-linked systems to strengthen the Food Control System in the country.

## @Prepared by Codex Division

#### 2. The International Food Control System

Looking at the rapid globalization of food production and trade, there has been a need for the effective prevention strategies throughout the farm to plate continuum to produce safe food<sup>4</sup>. To acquire this, rapid access and exchange of food safety information at both national and international lever has been done by the International Organizations. International Organizations like World Health Organization (WHO including International Health Regulations), Food and Agriculture Organization of the United Nations (FAO) and International Food Safety Authorities Network (INFOSAN) have played a major role in the food control by exchanging food safety information worldwide<sup>4</sup>.

- 1. Joint FAO/WHO Publication-Assuring Food Safety and Quality: Guidelines for Strengthening National Food Control Systems.
- Principles and Guidelines for National Food Control Systems- CAC/GL 82-2013.
- 3. FAO CORPORATE Documentry Repository: Multi trade Negotiations on Agriculture:- Module VII- National Food Control System: Components and Operations.

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## **Cont.... National Food Control System**

#### 4. The National Food Control System in India

A) In India, the Domestic and Import food control is governed by the Food Safety and Standards Authority of India (FSSAI), a statutory regulatory authority set up under the Food Safety and Standards Act, 2006<sup>5</sup>. The administrative Ministry of the Authority is the Ministry of Health & Family Welfare. FSSAI is a single reference point for all matters relating to food safety and standards. FSSAI has been created for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption.

After the Food Safety and Standards Act, 2006 was passed, in 2011, Food Safety and Standards Rules and Regulations came into effect. Till now, Food Safety and Standards Authority has notified the following regulations:

Food Safety and Standards -Licensing and Registration of Food Businesses, 2011

Food Safety and Standards-Packaging and Labeling Regulations, 2011

Food Safety and Standards-Food Products Standards and Food Additives, 2011

Food Safety and Standards-Prohibition and Restrictions on Sales Regulations,2011

Food Safety and Standards-Contaminants, Toxins and Residues Regulations, 2011

Food Safety and Standards-Laboratory and Sample Analysis Regulations, 2011

These Food Safety and Standards Regulations, 2011, are beneficial for the consumers in all aspects of Food Safety. Through these various regulations, the Consumers along with different food industries have shown concern about the food quality, safety control and Food Trade system. These regulations have helped in protecting and enhancing the Public Health and safety across the food chain.

The FSSAI is aided by nine scientific panels and a Scientific Committee to lay down standards for food safety. The standards are made by the e-working groups, core working groups, technical committees and scientific panels after analysis of the available data, inputs from industry, experts, experience and keeping in line with the international standards. These standards include specifications for ingredients, contaminants, pesticide residues, biological hazards and labels.

The law is enforced through State Commissioners of Food Safety and local level officials. The Food Safety and Standards Act, 2006 provides the following policy directions pertaining to risk analysis:

- (a) **Section 16 (2) (i)** that Food Authority may by regulations specify the manner and procedure subject to which risk analysis, risk assessment, risk communication and risk management shall be undertaken.
- (b) **Section 18** of the Act lays emphasis that the Central Government, State Governments, Food Authority and the other agencies, as the case may be, while implementing the provisions of this Act shall be guided by the general principles of Food Safety such as risk analysis, risk assessment, risk management and risk communication.
- B). For the Imports, a two level Food Testing Laboratory network is an essential component for the food control system. There are the laboratories authorised at the local level at the primary level and the referral laboratory network at the secondary level. The referral labs authorized by FSSAI for analysis of samples of imported food items are: Central Food Laboratory, Kolkata, Central Food Laboratory, Ghaziabad, Central Food Laboratory CFTRI, Mysore, Central Food Laboratory, Pune, CFL, Raxaul (Extension Centre of CFL, Kolkata), CFL, Sanauli (Extension Centre of CFL, Ghaziabad) and some Central and State food laboratories.

# @Prepared by Codex Division

At **Domestic level**, Food Safety Commissioners of the State/UT Governments are responsible for implementation of the FSS Act, 2006 which inter-alia includes licensing and registration of the food business operators (FBOs).

**C).** The 9 scientific panels and the Scientific Committee constituted by the FSSAI are the bodies that help in Risk Assessment (RA) and panels like the ones **on pesticide residues and antibiotics, contaminants in food** do the RA before setting up Maximum Residue Limits (MRLs) for pesticides etc. The panel on the Nutraceuticals, Health supplements assesses the risk associated with the various products proposed to be launched in the domestic market.

The risk assessment is conducted for fish and fishery products, milk products, egg products, egg products, honey, basmati rice etc. The **risk assessment studies** related to agricultural Chemicals as potential food contaminants are carried out by research institutes under **Indian Council of Agricultural Research (ICAR) and State Agricultural Universities**.

The FSSAI carries out risk management which includes taking into account the results of risk assessment and other factors which in the opinion of the Food Authority are relevant to the matter under consideration and where the conditions are relevant, in order to achieve the general objectives of regulations.

<sup>4.</sup>The International Food Safety Authorities (INFOSAN) Users Guide-October 206, In cooperation with the Food and Agricultural Organization of the United Nations (FAO).

Food Safety and Standards, Act 2006. 6<sup>th</sup> Edition, 2011.

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# **National Food Control System**

FSSAI is also engaged for carrying out risk communication across the industry, govt. authorities, consumers and all other direct and indirect stakeholders by using a multi-pronged strategy. Print, electronic, Social Media including the website is extensively used to communicate the risk communication activities.

FSSAI is a focal point for International Food Safety Authorities Network (INFOSAN) and in collaboration with National Centre for Disease Control (NCDC) there has been an exchange in the information in regard to the food emergency situation and Rapid Food Alerts. Thus, an effective risk management has been adopted by FSSAI.

In cases where there are reasonable grounds to suspect that a food may present a risk for human health, then, depending on the nature of seriousness and extent of that risk, the Food Authority and the Commissioner of Food Safety shall take appropriate steps to inform the general public of the nature of the risk to health, identifying to the fullest extent possible the food or type of food, the risk it may present.

Communication of package of practices regarding safe use of agrochemicals to minimize residue accumulations at harvest.TV/Radio talks to promote safe use of agrochemicals. The use of jingles in the radio to disseminate the information about food safety, hygienically handling of food, cleaning, and preparation and licensing and registration for the Food Business operators have all being used for communicating the public . FSSAI also proposes to set up nationwide Food Safety Surveillance network for data collection on regular basis and shall function at three levels: -

- \* Central level at FSSAI
- \* State level
- \* At all ports of entry

Data from both active and passive surveillance would be exchanged with NAFSRAC (National Food Science and Risk Assessment Centre) and the Centre would process the data and issue specific advisories on risks to be mitigated. The risk assessment Centre would be the central repository of all such surveillance data. Such data could be used for furthering research & development activities of the FSSAI.

The quality control and inspection of export commodities is governed by Export Inspection Council of India, Ministry of Commerce and Industry. EIC works for the Quality Control and Certification of products for exports, both statutory and voluntary through various types of certification such as consignment wise or a system approach, issue the Preferential Certificates of Origin covering all products being exported out of India. There is also a product testing for certification samples as well as commercial samples and issue of Certificates of Health and Certificate of Authenticity to exporters under various schemes for various products<sup>6</sup>.

E). Department of Animal Husbandry, Ministry of Agriculture is responsible for matters relating to livestock production, prevention and protection from disease and improvement of stocks and dairy development<sup>7</sup>. It also looks after all matters pertaining to fishing and fisheries and marine products. For Livestock import sanitary import permit is issued by the Department of Animal Husbandry<sup>7</sup>.

# **@Prepared by Codex Division**

Plant protection and quarantine Organization of India also comes under Ministry of Agriculture. The mandate of Plant Quarantine Service within the Directorate of Plant Protection, Quarantine and Storage is to prevent the entry, establishment and spread of exotic pests in India as per the provisions of the Destructive Insects & Pests Act, 1914. The Organization provide assurance to importing countries that consignment exported from India are free from pests of quarantine significance through globally acceptable export certification as per International Plant Protection Convention (IPPC)<sup>8</sup>.

- G). For agriculture and processed food, Agriculture & Processed Food Products Export Development Authority (APEDA)<sup>9</sup> is under Ministry of Commerce and Industry. APEDA fixes the standards and specifications for the scheduled products for the purpose of exports; carrying out inspection of meat and meat products in slaughter houses, processing plants, storage premises, conveyances or other places where such products are kept or handled for the purpose of ensuring the quality of such products<sup>9</sup>.
- H). The Marine Products Export Development Authority (MPEDA) is with Ministry of Commerce and Industry. MPEDA covers fisheries of all kinds, increasing exports, specific standards, processing, marketing, extension<sup>10</sup>.

<sup>6.</sup> http://www.eicindia.gov.in/index.aspx

<sup>7.</sup> http://www.dahd.nic.in/dahd/default.aspx

<sup>8.</sup> http://www.plantquarantineindia.org/

<sup>9.</sup>http://www.apeda.gov.in/apedawebsite/index.asp

<sup>10.</sup> http://www.mpeda.com/

# **FSSAI Model for Food Control National Food Control system of INDIA FSSAI** Comprehensive & Consolidated Food Laws& **Regulations** EIC **Food Con**trol System **Animal Hus**bandry Surveillance Laboratories **Plant protection** and quarantine **Services Services Organization APEDA MPEDA**

Thus the National Food Control System (NFCS), with multiple authorities working for its efficiency is an effective tool in protecting the health and safety of the consumers The entire food chain from farm to fork approach in the NFCS is quite productive. The food control system in India has been distributed to the Ministry of Health, Agriculture and Commerce. Due to multiple authorities' working together, the NFCS in India has improved considerably and has contributed to the protection and advancement of the health of the consumers.

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### **UPCOMING EVENTS**

(November 2014 to February 2015)

- 1. 19<sup>th</sup> session of FAO / WHO Coordinating Committee of Asia (CCASIA), 3<sup>rd</sup> to 7<sup>th</sup> November 2014 in Tokyo, Japan.
- 2. 46<sup>th</sup> Session of Codex Committee on Food Hygiene (CCFH), 17<sup>th</sup> to 21<sup>st</sup> November 2014 in Lima, Peru.
- 3. 36<sup>th</sup> Session of Codex Committee on Nutrition and Foods for special Dietary uses (CCNFSDU), 24<sup>th</sup> to 28<sup>th</sup> November 2014 in Bali, Indonesia.
- 4. 24th Session of Codex Committee on Fats & Oils (CCFO), 09th to 13th February, 2015 in Malaysia.
- 5. 36<sup>th</sup> Session of Codex Committee on Methods of analysis & sampling (CCMAS), 23<sup>th</sup> to 27<sup>th</sup> February, 2015 in Budapest, Hungary.



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