







CHIFSS: A Public Private Partnership - Strengthening Science Based Food Safety Capability Building in India

# **Key Focus Areas**

 Building awareness in the student community, academia and general population through public lectures

- Facilitating capacity building in micro, small and medium enterprises through development of FSMS guidance documents and training packages contributing to FSSAI's Food Safety Training and Certification (FoSTaC) for Pan India, sector specific dissemination
- Contributing to food safety assessments and food safety standards
- Developing a national blueprint to reduce the burden of foodborne illnesses



Shri Ashish Bahuguna Chairperson, FSSAI

Globalization of food trade has significantly increased the possibilities of food borne illnesses from food contaminated with microbial and chemical hazards. These illnesses could become life threatening due to antibiotic resistance resulting from misuse of antibiotics in humans and livestock. Strengthening self regulation, surveillance and the outbreak investigation system of food borne illnesses through capacity building is thus the need of the hour.



Shri Pawan Agarwal CEO, FSSAI

FSSAI is exploring a risk based inspection mechanism to improve food safety and reduce foodborne illnesses. In order to support such activities, CHIFSS in partnership with FSSAI has made an extensive effort towards improving food safety through facts and data based technical approaches, building sector specific FSMS guidance documents and training packages and build awareness and capacity through public lectures and technical workshops

# Voices of the Leaders



Shri Chandrajit Banerjee DG, CII

Aligned to national priorities, CII is committed to fostering growth of the Indian food industry while ensuring safe food for all. Innovative models strengthen growth patterns - one such collaborative initiative is CHIFSS which focuses on strengthening science based food safety programs with integration of best practices through its National and Global pool of experts in close partnership with FSSAI



Ms Geetu Verma Executive Director Foods, HUL

Food Safety is a huge challenge in a country like India and thus the government alone cannot be held responsible for it, all stakeholders should come together to address the issue.

CHIFSS

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# **Instituting the FSSAI-CHIFSS collaboration**

Launched by Shri Pawan Agarwal, CEO -FSSAI, Shri Sanjiv Mehta, MD-HUL and Shri Chandrajit Banerjee, DG-CII, on 24th June 2016 in New Delhi FSSAI signed an MOU with CHIFSS to drive focused food safety activities.

- Raise the food safety standard in India in all stakeholders including MSMEs
- Create a culture of food safety among the youth
- Leapfrog food safety capabilities in India
- Reduce burden of food borne illnesses in India.



Launch of CHIFSS and signing of MoU

# Stakeholder Engagement - Thought leaders driving the food safety sciences

- Scientific Advisory Committee- The members are representatives from FSSAI, HUL, EIC, CFTRI, ICAR-NCRG, ICAR-NDRI, ICMR, IITR, NIFTEM, NIN, E-FRAC, and CII-FACE.
- Steering Committee- The members are representatives from FSSAI, HUL, Delhi University, Dabur, Dtechnology, Dupont, and CII-FACE.
- FSSAI CHIFSS Interface Steering Committee- the members are representatives from FSSAI, HUL, CII-FACE

# **CHIFSS Theme for 2017 -18**

Risk Assessment & Risk Management- Microbiology (Food Borne Diseases)

Under these 2 critical pillars were identified-

Application of modeling, sensors and data in food safety decision making Food borne disease surveillance in the country .

Activities undertaken under the CHIFSS Theme (2017-18) – Public lectures, technical workshops, roundtables etc.

# **Public Lectures**

Highly engaging public lecture series for spreading awareness about different aspects of food safety, delivered by eminent national and international reputed scientist or domain experts.





Public Lecture 1: Food safety issues from farm to folk; Dr. Kalpagam Polasa, Ex. Director, National Institute of Nutrition, dated 19th October 2016



Public Lecture 3: Integrated predictive models and sensors in food supply chains to enhance food safety; Prof Mark Tamplin, Centre Leader, Food Safety Centre University of Tasmania, Australia, dated 23rd June 2017



Public Lecture 2 (Master Class): Sampling for determination of food safety elements thresholds in national and international regulations; Prof Dr. Arpád Ambrus (National Food Chain Safety Office, Hungary), Wee Siew Moi (Nestlé Quality Assurance Center, Asia Oceania Africa), Lalitha R Gowda Ph.D. (CFTRI, Mysore); dated 5th December 2016

**Public Lecture 4: Reducing burden of** food-borne illnesses: lessons from other countries; Dr. Henk Bekedam, WHO Representative to India, dated 22nd September 2017





# **CHIFSS** in the News

FnBnews.com



#### **Technical Workshops**

FSSAI-CHIFSS Technical Workshop on "Importance and Application of Quantitative Microbiology and Microbiological Risk Assessment for effective Food Safety Management. Microorganisms in foods remains one of the biggest food safety and quality challenges, leading to a high disease burden and immense food waste. Understanding of responses and behaviour of microorganisms in food systems can help develop strategies to control them. Quantitative Microbiology and Microbiological Risk Assessment, are very effective approaches that have been leveraged across the developed world to prevent food borne infections and food spoilage. In that context a technical workshop was organized on 6th December 2017 by Prof Mark Tamplin, University of Tasmania and faculty from HUL with objective of building capacity on the practical application of predictive microbiology and its associated tools and techniques.



Technical Workshop- Predictive Microbiology

**Technical Workshop on Development and Implementation of Food Safety Management System**. It was held on 21-22nd Feb and 27-28th Feb'2018 led by technical resource of CII FACE, Industry and FSSAI- with domain expertise in food safety and quality. The workshop was aimed at imparting knowledge on practical food safety management systems deployed in the food industry. This workshop helped enhancing the employability of students post completion of their course in college.



Technical Workshop- Food Safety Management System





2.

CHIFSS initiative on training of the budding food professionals is a crucial step for the development of robust food safety management system in our country. It was an enriching experience for the students as well as the faculty, as it helps to inculcate knowledge on practical application of food safety management system as deployed in the food industry that includes GMP, GHP, HACCP as well as the regulatory framework. I congratulate CHIFSS for this commendable capacity building initiative and wish them all the best in this journey in the field of food safety.

**Dr. Chindi Vasudevappa** Vice Chancellor, NIFTEM

# Capacity Building Initiative

#### FSMS Guidance Documents developed.

The categories include – Ice Cream; Edible Vegetable Oils and Fats; Jam, Jelly and Marmalade; Meat and Meat products (Poultry); Ghee; Fish and Fish Products; Fresh/Chilled/Frozen Meat (Cattle, Sheep, Goat and Pig); Alcoholic Beverages; Bakery.



Release of FSMS -Ice Creams and Frozen Desserts by Shri Pawan Agarwal, CEO,FSSAI on 24th June 2016



Release of FSMS- Jam, Jelly and Marmalade by Shri S Dave, Chairman, Surakshit Khadya Abhiyan on 6th December 2017



Release of FSMS- Edible Vegetable Oils and Fats by Shri Ashish Bahuguna, Chairperson, FSSAI, on 22nd September 2017



Release of FSMS- Meat and Meat Products (Poultry) by Dr Chindi Vasudevappa, Vice Chancellor, NIFTEM, on 28th February 2018 Training package developed for dissemination of the FSMS guidance documents among micro, small and medium enterprises (MSME) involved in food business. These are used for FSSAI's FoSTaC trainings.



Release of training package - Bakery by Shri Ashish Bahuguna, Chairperson, FSSAI on 23rd June 2017

# CHIFSS building partners and providing platform to various stakeholders in overall scientific development:

Established partnership with international experts interested in capability building in India:

Mark Tamplin – UTAS.

Leon Gorris & Judith Fernandez-Piquer – Unilever

Strategic Knowledge Platform: Predictive Microbiology and Risk Assessment: This digital collaboration platform comprises of members interested in the areas of predictive microbiology and risk assessment. The community actively exchanges ideas, engages in discussions, shares knowledge and insights to gain better appreciation of the topics, and aims to apply the concepts of predictive microbiology and microbiological risk assessment to food safety challenges in India.

- Platform to various stakeholders to pursue work in their interest areas.
  - CHIFSS intern Mr Dipon Sarkar selected for PhD at University of Tasmania.
  - Dr Shalini Sehgal (Bhaskar Acharya College of Applied Sciences)- member of CHIFSS steering committees submitted the proposal to FSSAI on 'food borne pathogens – disease surveillance and identification/ enumeration data and analysis'.



CHIFSS intern receiving a certificate from Shri Sunil Bakshi, Advisor (Regulations/Codex)

# **Contribution to Sector Specific Food Safety and Standards Regulations: Schedule 4 Updation through Technical panels:**

• All Food Business Operators (Part 2 revision) • Meat and Meat Products (Part 4 revision)- In progress • Fish and Fish Products- In progress

# Addressing Food Borne Illnesses

The rising burden of food borne illnesses is a major global concern. Through CHIFSS, we have expanded the network and successfully enabled regulators and experts to focus and prioritize the most critical food safety challenge - food borne illnesses.

Organized FSSAI - CHIFSS Roundtable on "Reducing Foodborne Illness: Strengthening Surveillance Capabilities and Epidemiological investigations" Supported By- American Society for Microbiology on 27th April 2018. The round table brought together all the stakeholders including regulators, research institutes, industries, academia, global health agencies, public messaging agencies and related stakeholders, on a common platform to address the food borne illness burden in India, and to develop a roadmap for monitoring and mitigating the disease burden in India.







**Roundtable- Food Borne Illnesses** 

# What our scientific leaders say about CHIFSS



Being at the stage of toddler, CHIFSS is bursting with energy, ideas, scientific capability and expertise, building in Food Safety Risk Assessment. One of the spectacular achievements is the progress in development of a knowledge-sharing platform on predictive microbiology and risk assessment, which ultimately shall reduce the food borne illnesses in the country.

My best wishes to CHIFSS for their future spectacular progress in the field of food safety.

Dr Debabrata Kanungo

**Dr Joseph Lewis** Chairman, Steering Committee, CHIFSS India is emerging as a significant food sourcing country in global trade and its food safety programs need to be institutionalized on a risk-based framework. CHIFSS (CII HUL Initiative on Food Safety Sciences) is one of the first tripartite partnerships between CII, HUL and FSSAI launched in 2016 to promote close technical engagements in science based safety programs. Through the past two years it has successfully mobilized experts in food safety sciences to contribute to food safety programs particularly the

Chairman, Scientific Advisory Committee, CHIFSS; Chairman, Scientific Panel for Pesticides and Antibiotic Residues, FSSAI

initiatives it has taken towards strengthening capabilities to reduce food borne illnesses.

# Way Forward- Theme 2018 and 2019

Scientific capability & expertise build in food safety risk assessment-

1. 2018-19 Theme: Safety assessment of novel ingredients and additives 2. 2019-20 Theme: Food Allergy

Contact us: CII-HUL Initiative on Food Safety Sciences (CHIFSS); CII-Jubilant Bhartia Food and Agriculture Centre of Excellence (FACE)

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