



सत्यमेव जयते

March 2015—June 2015

Volume II, Issue II

Connect@CodexIndia

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Food Safety and Standards Authority of India

CODEX 50

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NEWS LETTER OF CODEX-INDIA

Volume II. Issue II (March 2015 – June 2015)

From the desk of National Codex Contact Point (NCCP)

The period for which we are presenting you the E-Newsletter was eventful and exciting. India successfully co-hosted the 9th session of the Codex Committee on Contaminants in Food (CCCF) with the Government of The Netherlands. India was co-hosting a Codex Committee after a break of eight years as we had co-hosted the Codex Committee on Food Hygiene (CCFH) in 2007. Hard work, meticulous planning, unwavering enthusiasm of the FSSAI team and perfect coordination with the Netherlands CCCF Secretariat, were the ingredients for the successful co-hosting of this prestigious meeting. You will read in detail about the meeting in the next few pages.

We are very sure that the experience gained during this meeting will help us in planning for the 20th session of the FAO/WHO Regional Coordinating Committee for Asia (CCASIA), which India will chair as the Regional Coordinator in 2016.

India also participated in the CCGP, CCFA, CCPR and CCRVDF meetings held during this period. As you will read about these participations further on, you will notice that how effectively Indian delegations are participating in these meetings. As NCCP, it gives us a great amount of satisfaction that how successful our collaborations have been with the concerned stakeholders. However, never to rest on our laurels, we keep looking at ways and means to continuously improve our participation in Codex work and the de-briefing meetings are a way to do so. The de-briefing meeting for CCFO, CCMAS, CCGP, CCCF, CCFA, CCPR and CCRVDF was held on 26th May 2015 and the delegates who had participated in these meetings apprised us about their participation and the further steps to be taken post these meetings. These meetings provide an excellent platform for getting feedback and planning ahead.

Every ending sows the seeds for new beginnings. Same is the case with the Codex work. The Commission meetings are the culmination of the work done during the year gone by and also the beginning of the new work to be initiated in the coming year. This year, the Commission meeting in July may represent an important milestone in the history of Commission as the Commission deliberates on the subjects of Codex work management, role of regional codex committees and the part two of the Codex Trust Fund. Of particular interest would be the discussion on the work management as we are looking

at new structures within the Codex fold and re-visiting the 2002 recommendations. We will keep you updated about the Commission proceedings in our next issue.

We hope you enjoy reading this E-Newsletter as much as we enjoy bringing it you. It is very rewarding for us to look at the period gone by and the work accomplished. It also spurs us on as every Codex Committee Agenda items bring in new areas of interest that scientifically stimulate our thought process and looking at their implications to us as a country.

Happy reading and please send us your feedback at: codex-india@nic.in.

A. India's participation in the Codex Committee meetings during March- June 2015.

1. Participation in the 29th Session of the Codex Committee on General Principles (CCGP), (9th -13th March, 2015)

- 1.1 The 29th Session of CCGP was held in Paris from 9th to 13th March 2015 and was chaired by Professor Michel Thibier. The session was attended by delegates from 75 member countries, one Member Organization, 14 International Organizations and FAO and WHO. From India, Dr. M.R. Sudharshan, Ex-Director Research, Spices Board India participated in the meeting.
- 1.2 The meeting was held in less than a year's time as there was an important Agenda item that was discussed at the session. The Agenda item pertained to the "Codex Work Management and Functioning of the Executive Committee" and only open- ended discussion could be held on this item. It will be at the centre stage of discussion again at the 38th Session of Codex Alimentarius Commission (CAC) and the discussions may have a far reaching consequence on the structure and functioning of the Commission.
- 1.3 India had submitted a discussion paper on "Reviewing the effectiveness of the EWGs". The discussion paper had focussed on the electronic working groups (EWGs) that were constituted in the recent past and the participation of developed vs. developing countries in these EWGs. **There were 11 interventions and most of the members and the secretariat appreciated the research work done on this by India and general opinion was that there is need to look in to the working of the EWGs.**



Indian delegate Dr. M.R. Sudharshan at the 29th session of CCGP

2. *Co-hosting of the Codex Committee on Contaminants in Food (CCCF) by India-9th Session of Codex Committee on Contaminants in Food (CCCF), (16-19 March, 2015)*

2.1 *Journey undertaken for co-hosting the CCCF*

- ❖ India co-hosted the 9th session of the **Codex Committee on Contaminants in Food (CCCF)** from 16-19 March 2015 at New Delhi. However, the discussions for co-hosting CCCF meeting in New Delhi was initiated by officers from FSSAI with their counterparts from the Netherlands way back at the 36th session of the CAC in July 2013. The decision for co-hosting the 9th session of CCCF in India was announced in the 8th session of CCCF (2014) by the Indian delegation after firming up the modalities with the Netherland Secretariat. It was further informed that the exact venue and date would be determined by the Host Government in consultation with the Codex Secretariat. The Delegation of India extended its appreciation to the Government of the Netherlands for the opportunity to co-host the Committee.
- ❖ Subsequently, Ms. Tanja, CCCF Secretariat, Netherlands and Ms. Weike Tas, Chair CCCF visited Delhi, India from 17th February – 20th February, 2014 to visit various locations that FSSAI had shortlisted for the CCCF session in 2015 and other logistics arrangement. The hotel “The Lalit”, New Delhi was selected as the meeting venue. After their visit, LOA and MOA was signed by the Indian Authorities for co-hosting the 9th Session of CCCF in New Delhi, India. Ms. Tanja, CCCF Secretariat, and Ms Marie Ange Denle, Coordinator CAC, Netherlands again visited India on 2nd December, 2014 for finalizing the logistics arrangements.

2.2 *Participation in the 9th Session of Codex Committee on Contaminants in Food (CCCF), (16-19 March, 2015)*

Finally, the D-day arrived and the 9th session of the Codex Committee on Contaminants in Foods (CCCF) was inaugurated on 16th March 2015. H.E. Mr. Alphonsus Stoelinga, Netherlands Ambassador to India, Ms. Nata Menabde, WHO representative to India, Mr. Y.S. Malik, CEO, FSSAI and Dr Wieke Tas, Chair, CCCF were present on the dais during the inaugural ceremony. The 9th session of CCCF was inaugurated with the lighting of the inaugural lamp. It was also attended by the senior officers from other Ministries/Departments of Government of India.



Inaugural Session: Lighting of lamp



Inaugural Session- At the Dais: L-R: H.E. Mr. Alphonsus Stoelinga, Netherlands Ambassador to India, Shri. Y.S.Malik, C.E.O, FSSAI, Dr. Wieke Tas and Ms. Nata Menabde, WHO representative to India

2.3 India had also co-hosted the dinner on the 16th March 2015 with the Government of Netherlands, which was preceded by a colourful cultural programme showcasing the rich and vibrant cultural heritage of India. Guests were seen enjoying the programme, which was then followed by sumptuous dinner.



2.4 India had also arranged for a half day Delhi tour on 19th March 2015 with the Delhi Tourism Development Corporation to give the international guests a glimpse of the rich, historical past and the modern cityscape of the Capital city of India.





2.5 Proceedings of the 9th Session

- ❖ The 9th session was Chaired by Dr Wieke Tas, Department of Animal Health and Market Access, Ministry of Economic Affairs, The Netherlands. The Session was attended by 55 Member countries, 1 Member Organisation, and Observers from 13 international organisations. From India, 26 members participated in the meeting. The Indian delegation was led by Mr. Sunil Bakshi, DGM, NDDDB. Significant comments and interventions were made by the Indian Delegation during the meeting on Proposed Draft Maximum Level for Inorganic Arsenic in Husked Rice. The Indian Delegation informed the Committee that India would submit new/additional data with regard to Husked Rice to GEMS for the change of the ML of 0.35 mg/kg at its next session.
- ❖ With regard to Proposed Draft Maximum Level for Total Aflatoxins in Ready-to-eat Peanuts and Associate Sampling Plan, the Committee agreed to request JECFA to conduct an exposure assessment for health impact and calculate violation rates based on the hypothetical MLs of 4, 8, 10 and 15 µg/kg for total Aflatoxins in RTE peanuts. The Committee agreed that work on the ML for Aflatoxins in RTE would be undertaken when the results of the JECFA impact assessment become available. Further to this, the Committee agreed to hold the proposed draft ML and sampling plan at Step 4 pending the outcome of the JECFA exposure assessment for health impact.
- ❖ During the session, the delegation of India presented the discussion paper on Mycotoxin contamination in spices. The Committee agreed to re-establish the EWG, led by India and co-chaired by Indonesia and EU, to prepare a new discussion paper and project document for establishment of ML for spices. The discussion paper will include proposals for possible MLs to assist the next session of the Committee to take a decision on new work. The Delegation of India informed the Committee that it had already

started some work on MLs for the first four spices in the priority list and that this would be used to inform the EWG.

- ❖ There was another discussion paper on feasibility to develop the code of Practice for the prevention and reduction of Mycotoxin contamination in Spices. The Committee agreed to request the Commission to approve new work on the Code of Practice for the Prevention and Reduction of mycotoxin contamination in spices and to forward the project document to the Executive Committee for critical review. The Committee also agreed to establish the EWG, chaired by Spain and co-chaired by India and The Netherlands, to prepare, subject to approval by the Commission, a proposed draft of Code of Practice for circulation for comments at Step 3 and consideration at its next session. The EWG would also prepare a discussion paper to outline the development of possible annexes for mycotoxin/individual spices or groups of spices combinations.
- ❖ The delegates were extremely happy by the hospitality shown by India and felicitated India for successfully conducting an international event.



Some members of the Indian delegation: L-R: Ms. Deeksha Bhatt, Mr. Dinesh Bisht, Mr. Kaman Singh, Mr. Perumal Karthikeyan, Ms. Wieke Tas, Mr. Sunil Bakshi, Ms. Kanika Aggarwal and Ms. Shobhita Kalra.



FSSAI Team.

3. Participation in the 47th Session of Codex Committee on Food Additives (CCFA), (23-27 March, 2015)

3.1 The 47th Session of the Codex Committee on Food Additives (CCFA) was held in Xian, China from 23rd to 27th March, 2015. The Physical Working Group (PWG) on the General Standards for Food Additives (GSFA) was held on 20th and 21st March, 2015.

3.2 From India, the following officials were part of the Indian Delegation:

- Dr Rajesh Kapur, Advisor, Department of Biotechnology, Government of India
- Mr. Anil Mehta, Deputy Director, Food Safety and Standards Authority of India
- Dr Jasvir Singh, FICCI Codex Cell
- Dr Anirudh Chhonkar, FICCI Codex Cell
- Ms Shreya Pandey, FICCI Codex Cell
- Ms Sakshi Grover, Technical Officer, Food Safety and Standards Authority of India

3.3 Significant comments and interventions were made by the Indian Delegation during the meeting on Alignment of the Food Additive Provisions of Commodity Standards and Relevant Provisions of the GSFA, GSFA Provisions, Issue of Note 161, Discussion paper on use of additives in additives and Discussion Paper on the Inconsistent Terminology Related to Flavourings in Codex Texts. The comments were well accepted by the Committee. The Indian Delegation will continue to participate in the EWGs established for the next 48th Session of CCFA and the PWG.



Indian delegation at the CCFA : L-R: Mr. Jasvir Singh, Ms. Shreya Pandey, Mr. Anil Mehta, Mr. Rajesh Kapoor, Ms. Sakshi Grover, and Mr. Anirudh Chhonkar.

4. Participation in the 47th Session of Codex Committee on Pesticide Residues (CCPR), (13-18 May, 2015)

4.1 The 47th Session of CCPR was held during 13-18 May, 2015 in Beijing, China. The session was chaired by Professor Xiongwu QIAO, Vice Director of the Shanxi

Academy of Agriculture Science, Institute for Control of Agrochemicals, Ministry of Agriculture of the People's Republic of China. The Session was attended by representatives from 49 Member countries, one Member organisation, six international organisations including FAO and WHO.

4.2 From India, following officials attended the session:

- Dr. P. K. Chakraborty, Assistant Director General (Plant Protection & Biosafety), Indian Council of Agricultural Research (Head of the Delegation).
- Dr. K.K. Sharma, Project Coordinator, AINP on Pesticide Residues, I.A.R.I. Indian Council of Agricultural Research.
- Mr. Ranga Rao Ravindra, General Manager, APEDA.
- Mr. Zavier Varghese, Scientist A, Quality Evaluation Laboratory, Spices Board of India.

4.3 With regard to Agenda on Proposed Draft Guidance on Performance Criteria for Methods of Analysis for the determination of Pesticide Residues, the Indian Delegation informed the Committee that India will continue as co-chair the eWG performance criteria for method of analysis for the determination of pesticide residues for the year 2015-16.

4.4 India also informed the Committee for Inclusion of Tea in the priority list of JMPR evaluation. During the course of deliberations, India successfully pursued the Committee for inclusion of a list of the following 17 pesticides meant for use on tea (mentioned below) in the priority list for JMPR evaluation earmarked for 2016 and 2017:

Cyclaniliprole, Fenazaquin, Quinalphos, 2,4-D, Acetamiprid, Bifenthrin, Carbendazim, Dimethoate, Ethion, Hexaconazole, Imidacloprid, Lambda-cyhalothrin, Profenofos, Pyraclostrobin, Propiconazole and Spiromesifen.

4.5 The Indian Delegation also informed the Committee that India will submit the data of GAP trials on fresh vegetables (cabbage, cauliflower, okra, green chili, green pea, bitter gourd, cucumber, brinjal and capsicum) on the following pesticides:

- Quinalphos.
- Acephate.
- Acetamiprid.
- Bifenthrin.
- Carbendazim.
- Chlorpyrifos.

- Diazinon.
- Dimethoate.
- Ethion.
- Imidacloprid.
- Lambda-cyhalothrin.
- Methomyl.
- Profenofos.



Indian delegation at the 47th session of CCPR: L-R: Mr. Ranga Rao, Dr. K.K.Sharma, Dr. P. K. Chakraborty and Mr. Xavier Varghese

5. Participation in the 22nd Session of Codex Committee on Residues of veterinary Drugs in Foods (CCRVDF), (27th April-1st May, 2015)

5.1 The 22nd Session of CCRVDF was held during 27th April till 1st May, 2015. The meeting was chaired by Dr. Steven Vaughn, Director of the Office of New Animal Drug Evaluation, USFDA, Centre for Veterinary Medicine, USA. The Session was attended by 62 countries, one observer member, and 9 Non-Governmental Organization.

5.2 Two member Indian delegation comprising of the following officials attended the session:

- Mr. Rajbir Singh Rana, Joint Secretary, Department of Animal Husbandry, Dairying & Fisheries (Head of the Delegation)
- Ms. Ranum Dabas, Scientist IV-I, Food Safety Standards Authority of India (FSSAI)

5.3 During the meeting, the Agenda on Proposed Draft Risk Management Recommendation for Gentian Violet, India supported the Option 1 (In view of the JECFA conclusions on the available scientific information, there is no safe levels of residues of gentian violet or its metabolites in foods that represents an acceptable risk of consumers. For this reason, competent authorities should prevent residues of gentian violet in food producing animals) as drug Gentian Violet is structurally similar to drug malachite green which had already been disallowed to be used in food animals. Therefore, Gentian Violet should also not be used in food producing animals for which no safe ADI is available in animals.

5.4 The Agenda on Recombinant bovine somatotropins (rbSTs), the Committee informed that the draft MRLs are held at Step 8 in the CAC since 1999 and that the Committee had been requested to discuss the report of JECFA and provide recommendations on the outcome of the JECFA evaluation to CAC38. The Indian delegates gave their comments based on the findings of a recent study conducted by ICAR showing a marked increase in mastitis and infertility in dairy animals administered with Rbst, which in turn led to increased antibiotic use to avoid pus and bacteria in milk. The Committee took note of the report from JECFA. The Committee agreed that JECFA had addressed all of the questions posed to it by the Commission, but that there were different opinions regarding the JECFA replies. As no agreement had been reached the above discussion was being forwarded by the Committee for consideration by CAC38.

5.5 Further to this agenda, another agenda on draft provisions on establishment of MRLs for honey (for inclusion on the Risk Analysis Principles applied by the CCRVDF) was discussed by the Committee. The Indian delegates submitted their comments by supporting the inclusion of the provisions in the procedural manual for considering alternative ways such as using residue monitoring data to derive MRLs. However, India stated that specific commodity like honey should not be added under Evaluation of Risk Management Options.



Indian delegation at the 22nd session of CCRVDF: L-R: Mr. Rajbir Singh Rana and Ms. Ranum Dabas.

B. Participation in the various Electronic Working Groups (eWG)

India is participating in the following Working Groups:

| Sr. No. | Codex Committee | Name of the eWG |
|---------|-----------------|--|
| 1. | CCMAS | <ol style="list-style-type: none"> 1. Update and review of the endorsed methods of analysis. 2. Sum of Components. 3. EWG on criteria for endorsement of biological methods. 4. EWG on practical examples and uncertainty of measurement results. 5. Establishing Equivalency to Type I Methods. |
| 2. | CCFH | <ol style="list-style-type: none"> 1. Salmonella Guidelines for control of Nontyphoidal Salmonella spp. in Beef and Pork Meat. |
| 3. | CCCF | <ol style="list-style-type: none"> 1. Elaborate a Code of Practice for the Prevention and Reduction of Arsenic Contamination in Rice. 2. Elaborate Proposed Draft Maximum Level for Inorganic Arsenic in Rice. 3. The Establishment For Maximum Level (Mls) On Cadmium In Chocolate And Cocoa-Derived Products. 4. Discussion paper on mycotoxin contamination in spices for possible prioritization of work. 5. Feasibility to Develop A Code Of Practice For The Prevention And Reduction Of Mycotoxin Contamination in Spices. |

| Sr. No. | Codex Committee | Name of the eWG |
|---------|-----------------|--|
| | | 6. Discussion paper on Maximum Levels for methyl mercury in fish: call for data on the consumption data for fish. 7. Electronic Working Group on revision of the Code of Practice for the Prevention and Reduction of Mycotoxin Contamination in Cereals (CAC/RCP 51-2003). |
| 4. | CCRVDF | 1. Applicability and appropriateness of a scoring device on prioritization of emerging issues. |
| 5. | CCFA | 1. eWG on GSFA. 2. eWG on Flavourings in Codex Stan 107. 3. Use of additives in additives. 4. Use of specific food additives in production of Wine. 5. Alignment of Food Additives. 6. Revision of Food Category 01.1- “milk and dairy based drinks” and its subcategories in the GSFA. |
| 6. | CCPFV | 1. Certain Frozen Vegetables (Revision of Individual Standards for Quick Frozen Vegetables) Applying to all Quick Frozen Vegetables. 2. Evaluate Dry and Dried Products Standards. |

C. Informative Articles prepared by the Codex Division

Processing Aids

There is a wide variety of substances in the marketplace, intended for food application, that are currently being used as processing aids and/or food additives by the food processing industry particularly for the processing of the fresh produce. Some of these applications include the use of: organic acids as antimicrobial agents; inhibitors of enzymatic browning in fresh-cut produce; bleaching agents in fresh mushrooms; hyper-chlorinated washes for use on fresh produce; various chemical treatments to improve the shelf-life of fresh-cut produce (e.g., sliced mushrooms); waxes and coating on various fruits and vegetables; and other chemicals that come in contact with food products in the course of food processing.

Before we understand the technicalities of processing aids, we need to first understand:

1. What are Processing Aids?

“Processing aid” means any substance or material, not including apparatus or utensils, and not consumed as a food ingredient by itself, used in the processing of raw materials, foods or its ingredients to fulfil a certain technological purpose during treatment or processing and which may result in the non-intentional but unavoidable presence of residues or derivatives in the final product as per FSSAI and Codex Alimentarius Commission

According to the Food and Drug Administration's (FDA) regulations (21 CFR 101.100 (a) (3) (ii)), the definition of a processing aid is: a. Substances that are added to a food during the processing of such food but are removed in some manner from the food before it is packaged in its finished form. b. Substances that are added to a food during processing, are converted into constituents normally present in the food, and do not significantly increase the amount of the constituents naturally found in food. c. Substances that are added to a food for their technical or functional effect in the processing but are present in the finished food at insignificant levels and do not have any technical or functional effect in that food. An example of a processing aid is the use of organic acid(s) (e.g., lactic, acetic, or citric acid) as part of a livestock carcass wash applied pre-chill.

Whereas the EU has defined 'Processing aid' as any substance which a.) is not consumed as a food by itself, b.) intentionally used in the processing of raw materials, foods or their ingredients, to fulfil a certain technological purpose during treatment or processing; and may result in the unintentional but technically unavoidable presence in the final product of residues of the substance or its derivatives provided they do not present any health risk and do not have any technological effect on the final product.

Canadian regulators have typically used "processing aid" in an informal manner for substances used as adjuncts in food processing and manufacture. Most processing aids are not mentioned in the Regulations. And, unlike food additives, there is no regulatory requirement for preclearance of new processing aids by the Minister of Health. Like all substances used with food, the use of a processing aid is ultimately controlled by section 4(1) of the Act.

2. What are the Functions of Processing Aids?

- Catalyst
- pH Control Agent
- Clarifying agent
- Flow agent or to prevent the food product from crystallizing in the processing conditions
- Facilitating an easier removal of impurities (flocculent)
- Enhance food safety by reducing potential contamination in food during processing (antimicrobials)

Some processing aids approved by FDA that are commonly used in food production include: Fruit and vegetable washes (examples include organic acids and chlorine washes). Decolouring agents (examples include dimethylamine epichlorohydrin copolymer, which is used as a decolouring agent in the refinement of sugar). Strengthening agents in food (examples include sodium stearoyl lactylate, used to strengthen dough in frozen pancakes and waffles). Joining agents and enzymes (examples include rennet, which helps milk join together to make cheese). Xylanase is

used in bread to make the dough more flexible and phospholipase A₂ is added to increase volume and prolong the softness.

3. How do processing aids differ from food additives?

Many a time's processing aids are confused with the role of a food additive. But there is a very fine line between the two. Food additives remain in and affect the final product-- its taste, texture, colour, etc. They are consumed, so they must be listed on the package label. On the other hand, a processing aid has a function only in the production process and has no function in the finished food product.

Sometimes the distinction between a processing aid and an additive can be fuzzy. A particular product can be an additive in one product and a processing aid in another. For instance, Sodium silico aluminate provides a technical effect as an anti-caking agent in a dry seasoning mix, so it is classified as an additive. However, when this seasoning mix is used in making a meat sausage, the compound no longer provides a technical effect in the finished food, so it would be classified as a processing aid.

4. Labelling of Processing Aids

In general, Processing aids are not required to be declared in the ingredients list on the food label because, by definition, processing aids have no technical or functional effect in the finished food and because they are either not present or are present at only insignificant levels in the finished food. The USFDA CFR 21 exempts the labelling of processing aids. However, the Codex Stan 107 "General Standard for Food Additives when sold as such" regulates the labelling of processing aids also.

The Indian FSS Regulations as of now have not approved any list of processing aid to be used in food, however, some processing aids are allowed only in certain food commodities.

Codex has established a Codex Guideline GL 75 on Guidelines on substances used as processing aids. It provides information for the safe use of substances used as processing aids and the safety of their residues in the preparation of foods and food ingredients. It is clearly mentioned in that guideline that the use of a substance as a processing aid is justified when such use performs one or more technological functions during treatment or processing of raw materials, foods, or ingredients. Any residues of processing aids remaining in the food after processing should not perform a technological function in the final product. Further, Codex is also in the process of building a database of processing aids, collecting information on all the processing aids used in a Member Country and adding it to the database. Once the database is completed, Codex will initiate the evaluation of each processing aid by JECFA.

Control of viruses in Food

Viruses in Food have been identified as one of the causes of foodborne disease¹ in recent years. Viruses are microorganisms varying in size, structure and biological characteristics from bacteria and are host dependent for their replication. Foodborne viral outbreak occurs due to manually handling of the food in unhygienic conditions. Virus is transmitted to humans via GI tract and is excreted via stool and through vomiting also.

The human enteric virus mostly involved in foodborne outbreaks are Norovirus (NOV) & Hepatitis A (HAV)². NOV is mostly associated with foodborne viral gastroenteritis and HAV is also transmitted by foodborne routes, thus posing severe health effects. NOV and HAV, are very infectious and person-to-person spread is the most common transmission route. Secondary spread of these viruses after primary introduction by, for example, food-related contamination, is common and often results in larger, prolonged outbreaks¹.

During the FAO/WHO Expert meeting on “Viruses in Food”², NoV and HAV were determined to be the viruses of greatest concern from a food safety perspective based on the incidence of reported foodborne disease, the severity of disease, including mortality, and their potential for transmission via foods. Estimates of the proportion of viral illness attributed to food are in the range of around 5% for HAV and 12-47% for NoV. In the case of the NoV Virus, wherever the NoV carrier comes in contact with food, contamination might occur, and due to stability of these pathogens, they are likely to survive many food processes. One such example of viral outbreak reported in Netherlands in January, 2001. A baker who was sick had prepared the rolls for the buffet for the New Year reception. Within 50 hours, after the reception, 231 people were reported ill with gastrointestinal infections resulting in diarrhoea and vomiting. It was further noted that the baker was ill at the time of baking the rolls and had vomited in the sink while preparing the rolls³. Thus, the viral contamination occurred because of poor personal hygiene of the food handler.

The viral contamination can occur anywhere in the farm to fork process if appropriate guidelines or steps are not used or referred to. Good Agricultural Practices (GAP) and Good Manufacturing Practices (GMP) are essential to control or prevent viral contamination in Food. Having in depth knowledge of GAP and GMP will prevent viruses entering in to the raw material and also in the food processing environment along with HACCP playing the role of management of control over viruses.

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1. Viruses in Food: Scientific Advice to support Risk Management Activities, Meeting Report, Microbiological Risk Assessment Series-13, WHO- FAO 2008.
 2. Guidelines on the Application of General Principles of Food Hygiene to the Control of Viruses in Food-CAC/GL 79-2012.
 3. De Wit M. A, Hoogenboon Verdegaal, A.M.Goosen, et.al , (2000); A population based longitudinal study on the incidence and disease burden of gastroenteritis and campylobacter and salmonella infection in four regions of the Netherlands, Eur J Epidemiol, 16, 713-718.

To control the viruses in Food, Codex Alimentarius has outlined GUIDELINES ON THE APPLICATION OF GENERAL PRINCIPLES OF FOOD HYGIENE TO THE CONTROL OF VIRUSES IN FOOD (CAC/GL 79-2012²), to help countries in their efforts to protect public health from foodborne viral illness. The Guidelines consist of **stringent practices with regard to environmental hygiene, hygienic production of food sources, cleaning, maintenance and personnel hygiene at primary production, personnel hygiene facilities and toilets, personal hygiene.**

These guidelines also refer to the product information and consumer awareness. The product information consists of lot identification which includes traceability, lot identity and integrity to facilitate trace back. The guidelines are applicable to all foods, ready-to-eat food, from primary production through to consumption, for the control of human enteric viruses, in particular NoV and HAV, in foods.

These guidelines are designed to prevent viral contamination in food thus acting as a panacea for minimizing the risks of foodborne illness from new and emerging viruses in foods¹. They also act as a risk management by instructing how to prevent or minimize the presence of human enteric viruses in foods and more specifically for NOV and HAV in foods. Through the guidelines, the Government, food business operators and consumers will be able to comprehend about the foodborne viruses and how to control such human enteric viruses in food.

For the Control of Food borne viral infection, one must adhere to the following points:

- Meticulous attention to good food-handling practices is essential.
- Generating awareness about the presence and spread of these viruses by infected food Handler or personnel who is in direct contact with the food.
- Optimize and Standardise methods for the detection of Foodborne Viruses.
- Emphasise consideration of viruses in setting up food safety quality control and management systems (GAP, GHP, HACCP).
- Inform consumers of the risks presented by foodborne viruses and

Presence of foodborne viruses can be lethal and to prevent or control the viruses in Food, preventive measures are extremely important.

From farm to fork, one must be extra cautious while handling, preparing food. The consumers should be aware about the foodborne viral illnesses as better informed consumer is always at lower risk of viral infections. As an adage goes “prevention is better than cure”, it’s apt to know and to practice safe food preparation techniques, to develop quality control measures specifically for virus control and to be well acquainted with guidelines, global agricultural practices, including the use , implementation and effectiveness of GAP, GHP programme for the control of viruses in Food.

Upcoming events

- ❖ 2nd Session of Codex Committee on Spices and Culinary Herbs (CCSCH), 14th to 18th September, 2015 in Goa, India.
- ❖ 19th Session of Codex Committee on Fresh Fruits and Vegetables (CCFFV), 5th October to 9th October, 2015 in Mexico.
- ❖ 34th Session of Codex Committee on Fish and Fishery Products (CCFFP), 19th to 24th October, 2015 in Alesund, Norway.

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Address: National Codex Contact Point
Food Safety and Standards Authority of India,
FDA Bhawan, near Bal Bhawan,
Kotla Road,
New Delhi—110002
Website: fssai.gov.in

For any comments/suggestions/observations, or if you would like to contribute articles for future issues,
kindly contact: codex-india@nic.in