



Connect@CodexIndia

fssai

Dec 2016 — Feb 2017

Volume III, Issue I



CODEX SESSIONS DURING THE PERIOD

CCNFSDU 38 Hamburg, Germany, 5-9 December 2016

The thirty-eighth Session of the Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU) was held in Hamburg, Germany, from 5 to 9 December 2016. The session was attended by 56 Member countries, 1 Member organization, 38 Observer Organizations. The Indian delegation comprised of Dr Hemalatha R, Scientist-F, NIN, Ms. Sukhmani Singh and Ms. Navneet kaur, Technical

Officer, FSSAI. India made several interventions in the Committee meeting. The Committee had 12 agenda items, out of which two agenda items- one on NRV-R for vitamins D and E and the conversion factors for vitamin E equivalents was forwarded for adoption at Step 5/8 and Step 8 at the 40th Session of CAC and the other one on- Methods of analysis for provisions in the Standard for infant formula and formulas for

special medical purposes intended for infants was forwarded to CCMAS 38th session for endorsement and also to the 40th session of CAC for adoption. Also, editorial amendment to the Guidelines on Nutrition Labelling and various CCNFSDU Standards on the use of Flavourings were forwarded to CAC 40th session for adoption.



Indian delegation in CCNFSDU 38

CCSCH3 Chennai, India, 6th – 10th February, 2017

The Third Session of Codex Committee on Spices and Culinary Herbs (CCSCH) was held from 6th to 10th February 2017 at Hotel Gateway IT Expressway, Chennai, India. The session was attended by 36 Member countries, 1 Member organization, 4 observer organizations and FAO & WHO. The Indian

delegation comprised of 29 delegates from all various organisations led by Dr A Jayathilak IAS, Chairman, Spices Board.

Following texts were sent to the Commission for adoption at Step 8 and 5/8 respectively: Standard for Cumin, Standard for Thyme, Standard for black white

and green pepper (Proposed draft). The committee revived following new work proposals subject to approval for 40 CAC: - (dehydrated ginger (India), dried garlic, dried chili peppers and paprika(India), basil, saffron, coriander, nutmeg and cloves.



Indian delegation in CCSCH3



Indian delegation in CCSCH3

US-CCASIA COLLOQUIUM

20th to 24th FEBRUARY, 2017

Xiamen, China

The colloquium was held in Xiamen, China, February 22-24, 2017, which featured one day of discussion on topics of general interest to all Codex delegates and two days of in-depth discussions on topics on the agenda for the upcoming sessions for these three committees and the Expert Bodies and their contributions to the work of Codex. The colloquium was sponsored by the US. Codex Office and the Foreign Agricultural Service, US. Department of Agriculture (USDA) to prepare for the then upcoming Codex Committee on Contaminants in Food, Codex Committee on Pesticide Residues and Codex Committee on Food Additives. China was the co-host for this event and India, CCASIA regional coordinator.

India, being the Regional Coordinator participated in the Colloquium and the detailed discussions held therein. Officers who participated in the Colloquium were as follows:

1. Mr. Sunil Bakshi, Advisor-Codex & Regulations, FSSAI
2. Ms Sakshee Pipliyal, Technical Officer-Codex, FSSAI
3. Ms Jiji Mary Johnson, Technical Officer-Standards, FSSAI



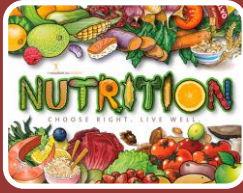
Participants in US-CCASIA Colloquium

13 Asian member countries viz, Bangladesh, Cambodia, China, India, Indonesia, Japan, Laos PDR, Pakistan, Philippines, South Korea, Sri Lanka, Thailand, Vietnam and USA participated in the colloquium.

The Colloquium aimed at increasing cooperation among CCASIA delegates, exchange views, collaborate on strategies for advancing shared regional positions and enable participants to identify areas where CCASIA and the United States can collaborate to prepare for the then upcoming Codex Committee meetings on Food Additives, Contaminants and Pesticide residues.

Detailed discussion took place amongst the members on various agenda items under CCFA, CCCF and CCPR particularly with respect to Agenda items on Provisions of Gold and Silver in the standards of Chocolate and Chocolate products, Use of benzoates in food category 14.1.4 (Water-based flavoured drinks, including “sport,” “energy,” or “electrolyte” drinks and particulated drinks), Food additive provisions in Wines, MLs for Lead in Selected Fruits and Vegetables, COP for Prevention and Reduction of Arsenic Contamination in Rice, MLs for Mycotoxins in Spices, MLs for Methyl mercury in Fish, Discussion paper on the possible revision of the IESTI equations and Information on national registrations of pesticides respectively. The discussion provided a clear viewpoint of various Asian members’ in the agenda items and mutual concerns were identified.

PARTICIPATION OF INDIA IN THE ELECTRONIC WORKING GROUP



CCNFSDU

- *Biofortification
- *Ready to Use Therapeutic food
- *Follow-up-formula
- *Additives framework



CCSCH

- *Black, White and Green Peper
- * Cumin
- * Dried Thyme

Antimicrobial Resistance in Food

NCCP, India

Introduction

Bacterial antimicrobial resistance in both the medical and agricultural fields has become a serious problem worldwide. Antibiotic resistant strains of bacteria are an increasing threat to animal and human health, with resistance mechanisms having been identified and described for all known antimicrobials currently available for clinical use. The increasing incidence of antimicrobial resistant bacterial pathogens has severe implications for the future treatment and prevention of infectious diseases in both animals and humans. Although much scientific information is available on this subject, many aspects of the development of antimicrobial resistance still remain uncertain. The emergence and dissemination of bacterial antimicrobial resistance is the result of numerous complex interactions among antimicrobials, microorganisms, and the surrounding environments. Although research has linked the use of antibiotics in agriculture to the emergence of antibiotic-resistant foodborne pathogens, debate still continues whether this role is significant enough to merit further regulation or restriction.

Modern food animal production depends on use of large amounts of antibiotics for disease control. This provides favourable conditions for the spread and persistence of antimicrobial-resistant zoonotic bacteria such as *Campylobacter* and *E. coli* O157. The occurrence of antimicrobial resistance to antimicrobials used in human therapy is increasing in human pathogenic *Campylobacter* and *E. coli* from animals. There is an urgent need to implement strategies for prudent use of antibiotics in food animal production to prevent further increases in the occurrence of antimicrobial resistance in food-borne human pathogenic bacteria such as *Campylobacter* and *E. coli*. *The selective pressure exerted by the use of antibiotics (primary production) and biocides (e.g., disinfectants, food and feed preservatives, or decontaminants) is the main driving force behind the selection and spread of antimicrobial resistance throughout the food chain.*

The widespread use of antibiotics in food animal production systems has resulted in the emergence of antibiotic resistant zoonotic bacteria that can be transmitted to humans through the food chain. Infection with antibiotic resistant bacteria negatively impacts on public health, due to an increased incidence of treatment failure and severity of disease. Development of resistant bacteria in food animals can result from chromosomal mutations but is more commonly associated with the horizontal transfer of resistance determinants borne on mobile genetic elements. Food may represent a dynamic environment for the continuing transfer of antibiotic resistance determinants between bacteria. Current food preservation systems that use a combination of environmental stresses to reduce growth of bacteria, may serve to escalate development and dissemination of antibiotic resistance among food related pathogens. The increasing reliance on biocides for pathogen control in food

production and processing, heightens the risk of selection of biocide-resistant strains. Of particular concern is the potential for sublethal exposure to biocides to select for bacteria with enhanced multi-drug efflux pump activity capable of providing both resistance to biocides and cross-resistance to multiple antibiotics. Although present evidence suggests that biocide resistance is associated with a physiological cost, the possibility of the development of adaptive mutations conferring increased fitness cannot be ruled-out. Strategies aimed at inhibiting efflux pumps and eliminating plasmids could help to restore therapeutic efficacy to antibiotics and reduce the spread of antibiotic resistant foodborne pathogens through the food chain.

It is an increasingly serious threat to global public health that requires action across all government sectors and society. There are high proportions of antimicrobial resistance (AMR) amongst bacteria that cause common infections (e.g. urinary tract infections, pneumonia, bloodstream infections) throughout the world. Resistant microorganisms (including bacteria, fungi, viruses and parasites) are able to survive attack by antimicrobial drugs, such as antibacterial drugs (e.g., antibiotics), antifungals, antivirals, and antimalarials, so that standard treatments become ineffective and infections persist, increasing the risk of spread to others. Antibiotics can be obtained easily from private retail pharmacies without prescription and pharmacists also advise and dispense antibiotics to patients. Therefore, developing a methodology, which is reproducible and sustainable, is needed to measure antimicrobial use in the community for developing country.

India scenario

Anti-microbial resistance in disease pathogens has become a matter of great public health concern globally including India. The factors responsible for this are wide spread use and availability of practically all the antimicrobials across the counter meant for human as well as animal consumption. Though, there are definite policies/guidelines for appropriate use of antimicrobials at national level in specific national health programmes being run in the country eg. National AIDS Programme, National Tuberculosis control programme etc., the same are not available for other diseases/pathogens of public health importance, like enteric fever, diarrhoeal disease, respiratory infection etc. The Ministry of Health and Family Welfare has launched "National Programme for Containment of AMR under 12th Five Year Plan (2012-2017), one of the key activities under the programme is to promote the rational use of antimicrobials. The evidence-based National Treatment Guidelines are aimed at enhancing appropriate usage of antimicrobials and recommends the antimicrobial treatment for common infectious disease. These guidelines will be reviewed and revised periodically based on changing pattern of AMR. Now, Ministry has proposed draft for discussion on National Action plan on Antimicrobial Resistance for 2017-2021. In India one of the most common clinical issues encountered in the dairy farms is mastitis. Commonly thought to be a disease of production, milk from mastitis cows and buffaloes have been shown to contain a wide range of bacteria, with a wide spectrum of resistance bacteria have been seen to co-infect animals suffering from mastitis. As with the dairy sector, there is limited evidence available on the exact

amount of antibiotic consumed within the poultry industry, and what are the various indications for which the medication was prescribed.

In India, the manufacturing of antibiotic drugs for human and veterinary purposes is regulated by Central Drug Standard Control Organization (CDSCO) under Drugs and Cosmetics Act of 1940 and the rules therein. However, there is as such no regulation particularly for use of antibiotics as animal growth promoter.

The Food Safety and Standards Act, 2006 specify the limits for use of food additives, crop contaminants, pesticide residues, residues of veterinary drugs, heavy metals, processing aids, myco-toxins, *antibiotics and pharmacological active substances* and irradiation of food.

International Activities on AMR

At the international level too, strong and sustained actions have been taken, and the momentum continues. In May 2015, the 68th World Health Assembly endorsed a resolution making it mandatory for member countries to align national action plans with the global standard by May 2017. WHO published the Global Action Plan on Antimicrobial Resistance to guide Member States in the development of their national action plans.. Most of the countries agreed to develop a national action plan on AMR that is consistent with the global action plan by May, 2017 and to implement relevant policies.

Codex Status

The new work on AMR is particularly relevant to Codex both in its mandate to protect the health of consumers and in its global strategy to address current and emerging food issues.

Animal nutrition is also a key element to be integrated in the CODEX Code of practice to minimize and contain antimicrobial resistance Codex Alimentarius Commission in its 39th session at Rome, Italy in 2016 presented codex work on antimicrobial resistance. Commission agreed to form a Task force to review and revise the following project documents:

- Proposal for new work on the revision of the Code of Practice to Minimise and contain Antimicrobial Resistance (CAC/RCP 61-2005);and
- Proposal for new work on the Guidance on Integrated Surveillance of Antimicrobial Resistance.

The scope of the task force is to review and revise the 2005 [Code of Practice to Minimize and Contain Antimicrobial Resistance](#), broadening its scope to address all uses of antimicrobials in agriculture, right across the food chain. It will also provide

Codex members with guidance on the design and implementation of a programme for integrated surveillance of AMR. If countries use the same methods for monitoring AMR then surveillance data and trends from different countries or regions, can be more easily compared in the fight against this global threat.

A physical working group, open to all Members and Observers, was held in London, United Kingdom, from 29 November to 2 December 2016 to undertake the tasks assigned to it at the 39th session of the Codex Alimentarius Commission. In this meeting it was discussed to address the key issues FAO and WHO, in collaboration with OIE, will provide scientific advice on AMR to support the revision of the 2005 Codex code of practice.

The Proposed Project documents submitted to codex for consideration are attached at Annex-I. The Code of Practice to Minimise and contain Antimicrobial Resistance (CAC/RCP 61-2005) is at Annex-II. These Documents may be considered while framing National policy on AMR.

REFERENCES

1. THE FOOD SAFETY PERSPECTIVE OF ANTIBIOTIC RESISTANCE

[P. F. McDermott](#), [S Zhao](#), [D. D. Wagner](#), [S Simjee](#), [R. D. Walker](#) & [D. G. White](#)

Pages 71-84 | Published online: 11 Dec 2006

2. Antibiotic-Resistant Bacteria: A Challenge for the Food Industry

[Rosa Capita](#) & [Carlos Alonso-Calleja](#)

Pages 11-48 | Received 09 May 2010, Accepted 26 Aug 2010, Accepted author version posted online: 03 Nov 2011, Published online: 03 Nov 2011

3. Antimicrobial resistance in foodborne pathogens--a cause for concern?

[Walsh C](#)¹, [Fanning S](#).

4. The effects of antibiotic usage in food animals on the development of antimicrobial resistance of importance for humans in *Campylobacter* and *Escherichia coli*

[Volume 1, Issue 8, July 1999, Pages 639-644](#)

UPCOMING EVENTS

- ❖ 25th Session of Codex Committee on Fats and Oils(CCF0)- 27th February to 03rd March, 2017 in Kuala Lumpur, Malaysia
- ❖ 49th Session of Codex Committee on Food Additives -20th March-24th March, 2017 in Macau-SR China
- ❖ 11th Session of Codex Committee on Contaminants in Food-3rd April-7th April, 2017 in Rio de Janeiro, Brazil
- ❖ 49th Session of Codex Committee on Food Additives -24th April-29th April, 2017 in Beijing, China

0-0-0-0-0



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