CSAFF Workshops on the Safety Assessment of Foods Derived from Genetically Engineered Plants

OUR PURPOSE: The Center for Safety Assessment of Food and Feed (CSAFF) promotes science-based approaches to the safety assessment of foods and feeds, with a strong emphasis on improved knowledge dissemination and capacity building.

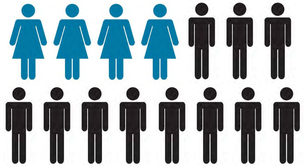
RECOGNIZING THE NEED: Although all countries indicate that their risk assessments of genetically engineered (GE) foods are founded on Codex Alimentarius principles and other international guidance, there remain significant differences in data requirements among countries. These differences contribute added complexity, time, and cost for all developers, further exacerbate asynchronous reviews and authorizations, and stand in the way of achieving regional or sub-regional regulatory cooperation.

PLANNING THE WORKSHOPS: Embracing the ILSI tripartite model, CSAFF collaborated with DuPont Pioneer, Biotech Consortium India Limited and Estel Consult Ltd. to create a two phased workshop focused on the safety assessment of foods derived from genetically engineered plants. Phase I was held in New Delhi, India from May 19-23. Phase II was held at DuPont's Stine Haskell Research Center in Newark, Delaware, USA from September 15-19.

IDENTIFYING PARTICIPANTS: 15 participants traveled from 7 different countries to attend each of the 5 day workshops. The workshops focused on the technical training of three critical stakeholder groups:

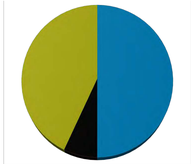
1. Regulators and scientists from the public sector who are called upon to conduct safety assessments of foods derived from genetically engineered (GE) plants on behalf of national biosafety committees
2. Public sector scientists engaged in product development
3. Scientists from public institutions that are functioning as contract research organizations to provide testing services for public sector product developers

15 Participants Attended the Workshops



Attendees Traveled from 7 Different Countries

50% of Participants are Regulators and 43% are Research Scientists



FOCUSING ON THE GOALS: The phased approach of these workshops was designed to give participants time to process the learnings from Phase I and apply them in practice in their own organizations before reuniting for Phase II. Trainees came back for Phase II with a strong foundation for the more advanced technical discussions on toxicity testing that took place. This approach sought to increase knowledge, enhance technical competence and develop a network of scientists and regulators around the world.

Goal I
Establish a baseline understanding of the concepts and principles of food safety assessment

Goal II
Observe and understand the processes of acute and subchronic toxicity testing

Goal III
Build a community of practice

MEASURING THE OUTCOMES: Participants were surveyed after the completion of the workshops in order to evaluate the impact of the events. Through this feedback, the workshops were shown to be impactful and all of the goals were achieved.

Goal I: Achieved

- Participants shared that their knowledge and understanding of safety assessments of foods derived from GE plants increased from a rating of "fair" prior to the workshop to a rating of "very good" after attending the workshop.
- "The tools acquired in Phases I and II have allowed me to understand and apply the safety assessment process in a much more dynamic and efficient way."
- "The workshop was well organized with the right mix of lectures and practical exposures of various aspects of food safety analysis. Both phases of the workshop were valuable to me as it improved my knowledge and understanding of safety assessment."

Goal II: Achieved

- 89% of participants who responded to the survey have been able to apply what they learned during the workshop to their work.
- "The section on conducting toxicity studies and the parameters to be studied was very useful. All this will help me in developing a road map for our transgenic event."
- "This workshop completely changed the way I look at the biosafety data. It immensely improved my analytical ability as well as confidence."
- "I was able to learn about the practical aspect of protein toxicity studies which I have never been exposed to before."

Goal III: Achieved

- 78% of participants have shared the workshop materials with colleagues.
- 45% have used the information presented in the workshop to prepare guidelines, regulations and policies.
- "The experiences I gained from the workshop will be very practical for me as I work on developing GE microorganisms, teaching students on biosafety and as a member in different national committees."
- "I look forward to sharing what I have learnt with my colleagues."
- "The best part of the workshop is that most of the faculty were present throughout the program which enabled us to engage in one on one discussions and exchange views even after their lectures were over."