

Keynote Address by Dr. V. Prakash, Former Director, CFTRI, President, Nutrition Society of India

- Food processing is not just making pulp out of a mango but it is 'Ingredient Chemistry'. 16000 ingredients are used in food processing.
- Technologies of processing has migrated from cooking to nanotechnology to address the high project technology. We need to look at the most modern technology.
- Vision and Mission, and not equipments must push the technology with appropriate adaptable, affordable and accessible technology. We must bid for 2024.
- GMP to clean and hygienic practice is important.
- Traditional foods and ethnic foods- We need to look at their processes that is making them better products. We are limited to the final product. But processes are very important.
- Lost nutrition in foods, lost by choice of the diet that we make. Therefore, lost nutrition in foods like dietetic, medical MDM, oliocetical, etc.
- Science can support tradition. We need involvement of science-
 - minimal energy in the process
 - minimal chemicals to be used
 - shift of chemicals to enzymes
 - low carbon food print
 - need for quality raw materials
- Market is very big. Industries are very conservative.
- Extension of Shelf life of the processed foods is important.
- Publication of ILSI are classic and they should reach schools, colleges and should be printed in different languages for a wider reach.

- Go beyond nutrition and interaction will happen with a clear mandate of implementation.
- Processed foods and beverages with and beyond basic nutrition. This is an issue emerging which requires a holistic approach in the entire food supply chain.
- Without food industry there is no question of products. Industry must be more proactive in carrying the innovation which is happening all around.
- Nutrition, health food and food safety are to be defined very clearly using chemical standards and not food based standards.
- Organized sector have a way to do but unorganized sector have a way to do but no means to do.
- We must empower the adaptable technologies into growing them into a global food industries with ethics, morals and social responsibility and not only profit motivating.
- Tremendous amount of food safety measures including hygiene not only for packet foods but even street foods and foods provided in the hospitality industry is to be guaranteed.
- Linking farmers and growers and micro industries to the market is critical.
- We must connect small cottage industries to the massive industries and make the chain from a farm to a folk.
- Need of the day is very clear and this clarity cannot be without consumer and cost.
- Public Private Intensive Partnership (PPIP) is very vital.
- Food safety is very important. Hazards have become mobile and TFA allergens have become very complicated today. TFA and the lobby is for health aspects, scientific rigor on that all have become different in terms of safety barriers.
- From a consumer point of view, food is different from the industry perspective.
- Increased international trade in food product is the order of the day.
- Accountability is there in India but there is no risk assessment.
- There should be separate discussion on risk assessment and risk analysis.

- A consumer today prefers herbal based products.
- Labeling is an important communicator within a short time.
- There must be a claims validity. We must understand the regulations and food safety, claiming especially combining nutrients for health benefits.
- Diet pattern is more important in the bioavailability of nutrition than just the nutrients itself. Bio-availability, bio-accessibility, bio-feasibility in terms of combination is more important.
- Reforming food safety model for future in the economy clearly taking training and re-training.
- GMP Good Manufacturing Practice, GAP Agriculture Practice, GTP Transport practice, GPS storage practice, GEP eating practice.
- Certification for food analysis should be there.
- Need for training policy and not just training should be introduced in the country.
- Clear foundation for a food safety audit must be there.
- We must look at crop biofortification and food safety aspects with a power of nutrigenomics.
- Industry has a time target. It cannot wait for years for a clearance of a product, proprietary or non-proprietary.
- It should be a holistic approach and not just a perfect packaging that will ensure food safety. End terminal delivery point should be as hygienic as the food itself. Safety chain from raw material to waste handling is a holistic approach.
- Water is a critical beverage. We need a Safe Drinking Water Act .
- Every food is functional. People are worried about food-based approach and not capsule-based approach.
- Pyramid of nutrition is transforming into the pyramid of nutraceutical today. Nanotechnology is camouflaging.
- We need to do risk assessment from large to small industry and they must be 100% right.
- New scientific thoughts and old mix of ADI. We need to look at the ADI, the Average daily intake.

- We need not copy CODEX. CODEX is a recommendatory body.
- We must take note of the level of our global trust. Because one contamination, one bad product from a country can destroy the industry of that country. There must be a guarantee.
- Building everyone's awareness is the ultimate goal of the corporate through self-regulation.
- Precautions or principles are exceptionally defined in terms of consistently science based outcomes. We must be ethical in our scientific output.
- CODEX is a regulatory guideline and not mandatory. Different food safety system that restructures dynamically in all the countries.
- We need to know how to modify the existing food safety norms to enhance ability to prevent, detect and respond unlawful acts.
- Culture, science and humans co-exist and all have a role in improving the quality of life. Like a global networking of Food Science and Technology.