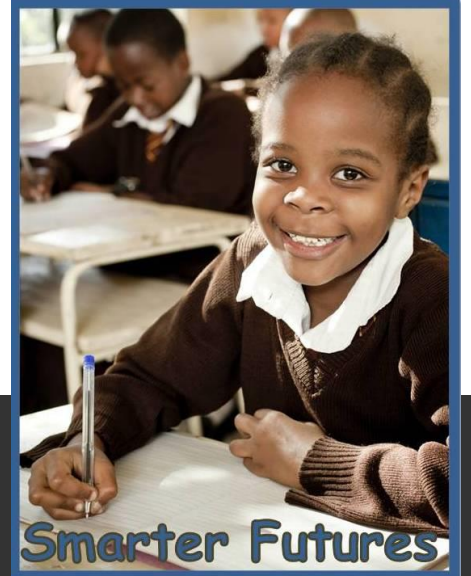# Smarter Futures

National Food Control Systems - Opportunities and Constraints that affect National Food Control systems effectiveness

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Zimbabwe May 2015

Look Familiar?

- Ministry of Health identify fortification required

- Ministry of Health identify they do not have capacity to analyse samples but another government laboratory does

- Ministry of Health sign MOU with other Ministry to monitor fortification – so mandate transferred for management, inspection and laboratory

- Other laboratory becomes aware they do not have the necessary capacity either PLUS do not have the monitoring resources
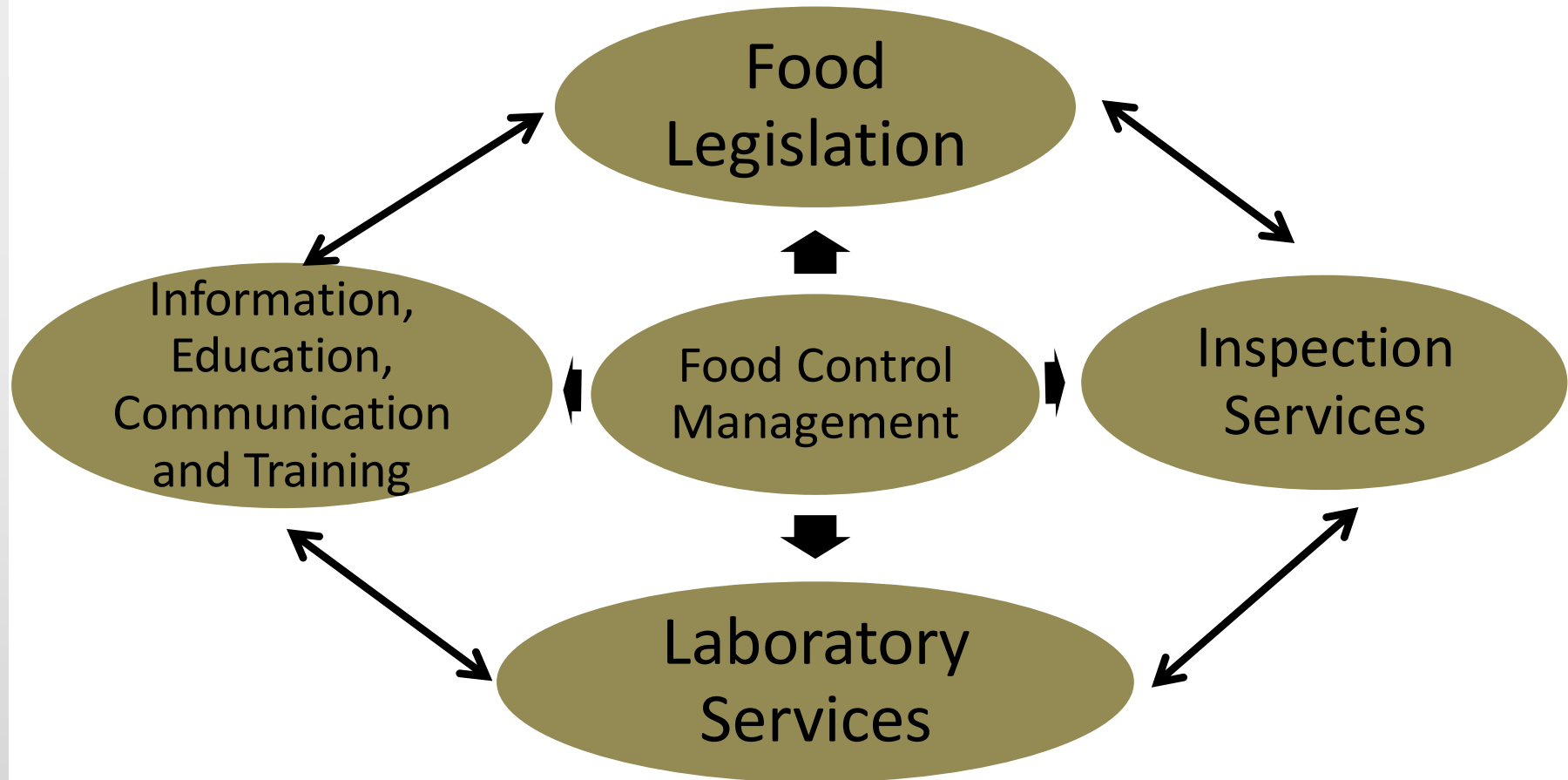
The 5 Pillars of Food Control

ftp://ftp.fao.org/docrep/fao/010/a1142e/a1142e00.pdf abbreviated and
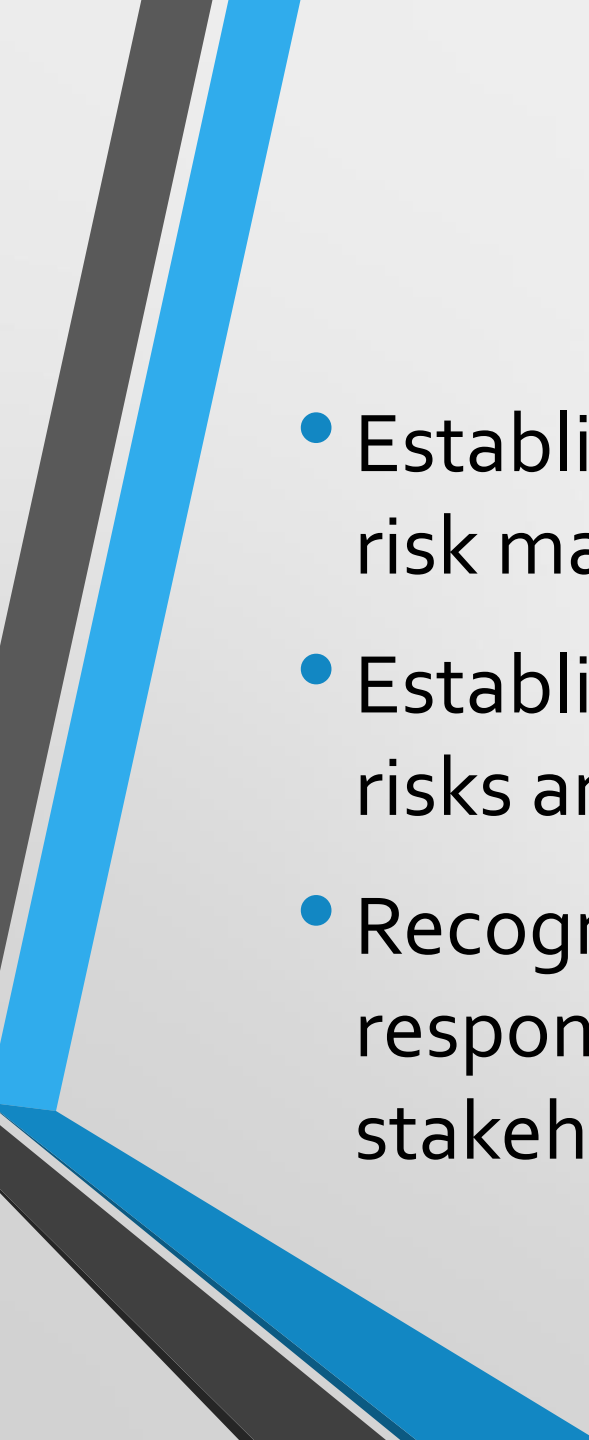
http://www.fao.org/3/a-a0601e.pdf the full version

- Food Control Management

- Food Legislation

- Food Inspection

- Food Control Laboratories

- Information, Education and Communication

FAO/WHO Key Components of National Food Control Systems

Strategy

- Maximizing risk reduction by applying the principle of prevention as fully as possible throughout the food chain;

- Addressing the farm-to-table continuum;

- Establishing emergency procedures for dealing with particular hazards (e.g. recall of products);

- Developing science-based food control strategies;

- Establishing priorities based on risk analysis and efficacy in risk management;

- Establishing holistic, integrated initiatives which target risks and impact on economic well-being; and

- Recognizing that food control is a widely shared responsibility that requires positive interaction between all stakeholders
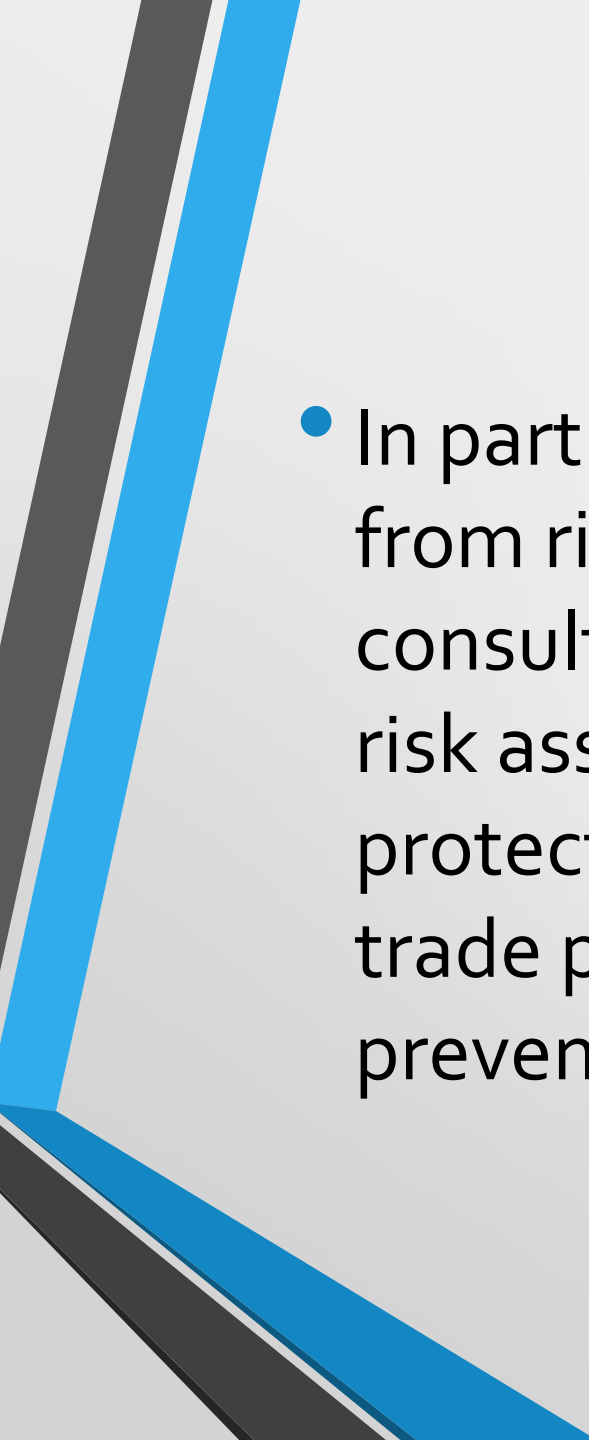
Food Control Management

- **Food control management** is the continuous process of planning, organizing, monitoring, coordinating and communicating, in an integrated way, a broad range of risk-based decisions and actions to ensure the safety and quality of domestically produced, imported and exported food for national consumers and export markets as appropriate.

- Food control management covers the various policy and operational responsibilities of competent government authorities responsible for food control. These include the development and implementation of food control policies, strategies and plans that reflect the government's commitment to food safety and quality and provide a sound framework for food control activities
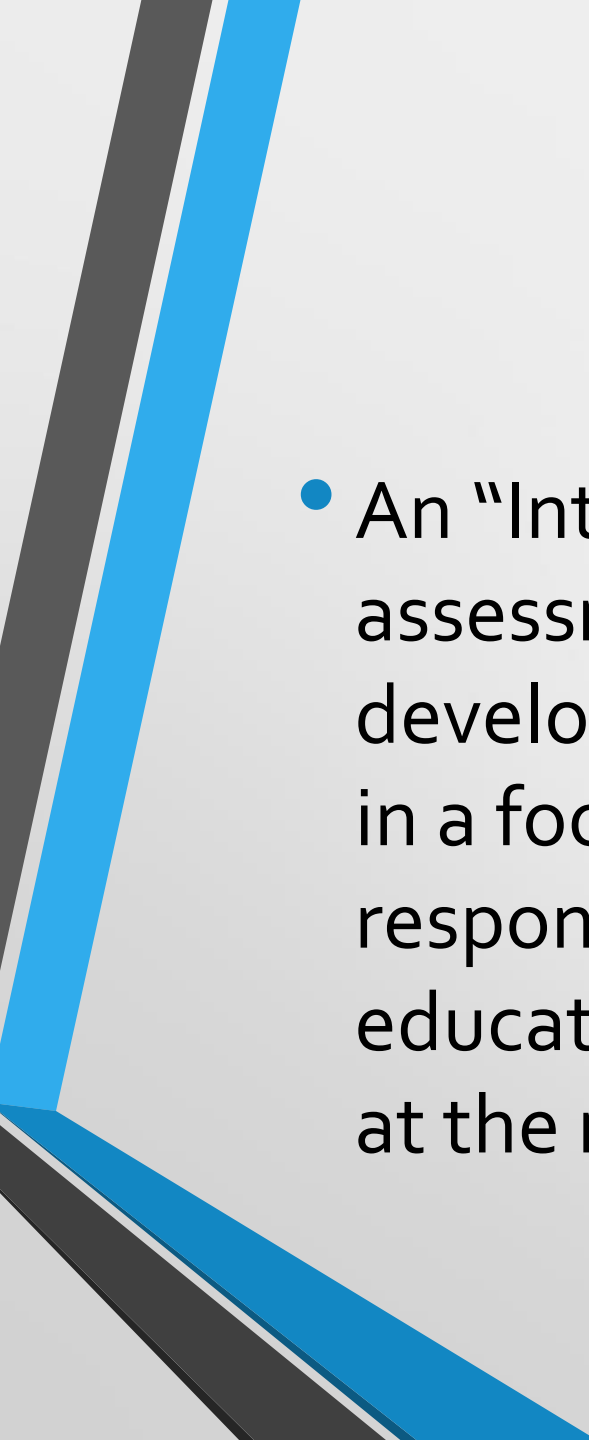
- Food control management should be based on risk analysis and an integrated farm-to table approach. Definitions and working principles for risk analysis have been developed for use by the Codex Alimentarius Commission.

- These principles highlight the need for a structured approach for risk analysis comprised of three separate but closely linked and integral components:

  - i) risk assessment;

  - ii) risk management; and

  - iii) risk communication.

- In particular, risk management provides a process (distinct from risk assessment) for weighing policy alternatives in consultation with all the interested parties, considering risk assessment and other factors relevant for the health protection of consumers and for the promotion of fair trade practices, and, if needed, selecting appropriate prevention and control options.

There are three common formats for food control management:

- A "Multiple Agency" approach in which responsibilities for food control are shared between various government ministries (e.g.. Health, Agriculture, Commerce, Trade and Industry etc.) or across government agencies at different levels (central, regional, local)

- A "Single Agency" approach in which all responsibility for protecting public health and food safety is consolidated into a single food control agency with clearly defined terms of reference

- An "Integrated Agency" approach in which policy, risk assessment and management, standards and regulations development, and coordinating functions are consolidated in a food control agency at the national level, while responsibilities for food inspection and enforcement, education and training etc. remain with existing agencies at the national, regional and local levels.

Food legislation normally involves a multi level legal framework:

- Food legislation (or food law) is the complete body of legal texts (laws, regulations and standards) that establish the broad principles for food control

- Food regulations are subsidiary legal instruments (usually issued by a minister rather than parliament) which prescribe mandatory requirements that apply to various aspects of food production, handling, marketing and trade, and provide supplementary details that are left open in the main parliamentary-level legislation

- Food standards are nationally or internationally-accepted procedures and guidelines (voluntary or mandatory) that apply to various aspects of food production, handling, marketing and trade to enhance and/or guarantee safety and quality of food
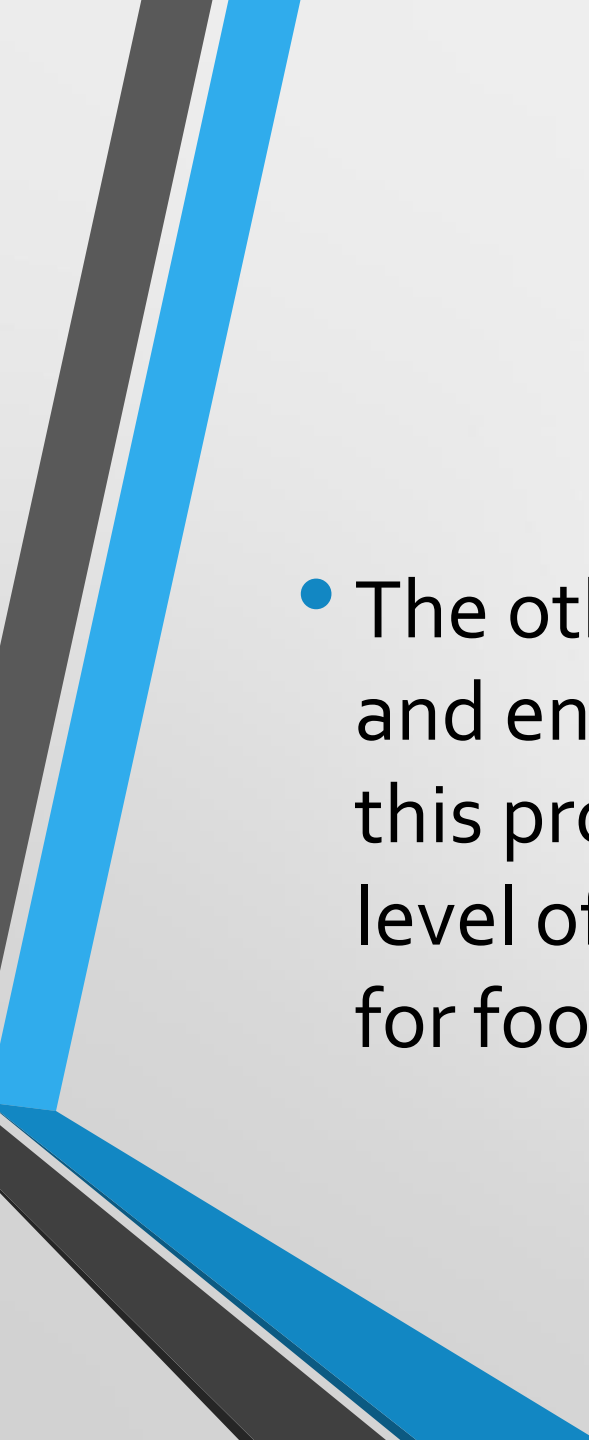
- A good example of such a multi level legal framework is found in Canada in which the over-arching legislation is the "Food Law" called the Food and Drugs Act (R.S.C., 1985, c. F-27 latest November 2014) which amounts to a mere 37 pages (plus 7 of changes made) in two languages (English and French), with the food component amounting to four paragraphs. The Food and Drugs Act is very simple but is under continuous review.

- http://laws.justice.gc.ca/eng/acts/F-27/

- http://www.hc-sc.gc.ca/fn-an/legislation/acts-lois/_blueprint_food-plan_aliments/reg_modernization-modernisation_reg-eng.php

- Any changes require an Act of Parliament. Under the Food and Drug Act are multiple Food and Drug Regulations which provide details on food regulations and standards.

- These Regulations are also under constant review but they can be changed by an Order of Council. The Food Regulations are currently 1,215 pages long.

- http://laws.justice.gc.ca/PDF/C.R.C.,_c._870.pdf (latest 31 March 2015)

Work in Progress - Options

- Food legislation has a tendency to be "work in progress". As gaps in the legislation are found, new requirements are created and small pieces are added to the legal framework. Over time this convolution of the legal framework often makes life very difficult, and unduly complex, for food control.

- The easiest option is to totally re-write food legislation but this requires high level government participation which may not be forthcoming due to other priorities and would be very time consuming.
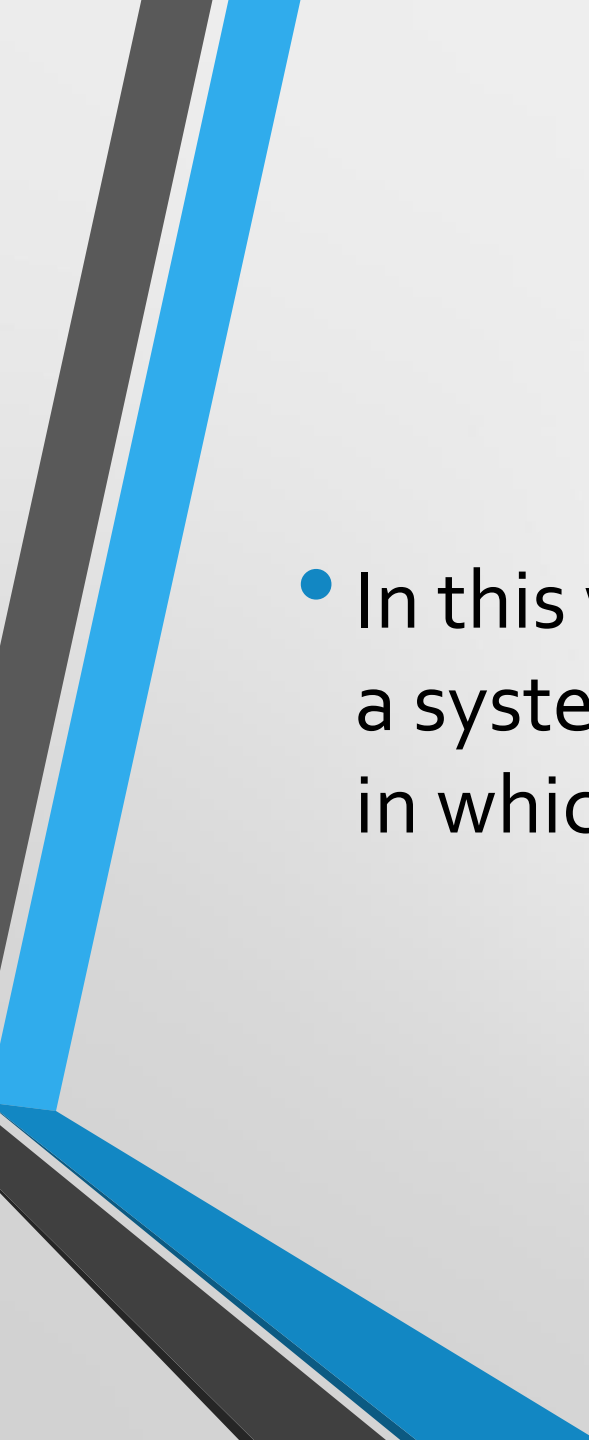
- The other option is to totally review existing legislation etc and ensure they are compatible with one another. Whilst this process can be implemented quicker, as it uses lower level officials, it is only a temporary measure and the basis for food law still remains convoluted.

PRINCIPLES FOR FOOD IMPORT AND EXPORT INSPECTION AND CERTIFICATION
CAC/GL 20-1995

- This is the examination of food or systems for control of food, raw materials, processing and distribution, including in-process and finished product testing, in order to verify that they conform to requirements.

- It is important to note that the above does not restrict food inspection solely to testing but rather includes an assessment of the whole system, in the case of food fortification in particular, reliance on finished product testing alone is problematic.
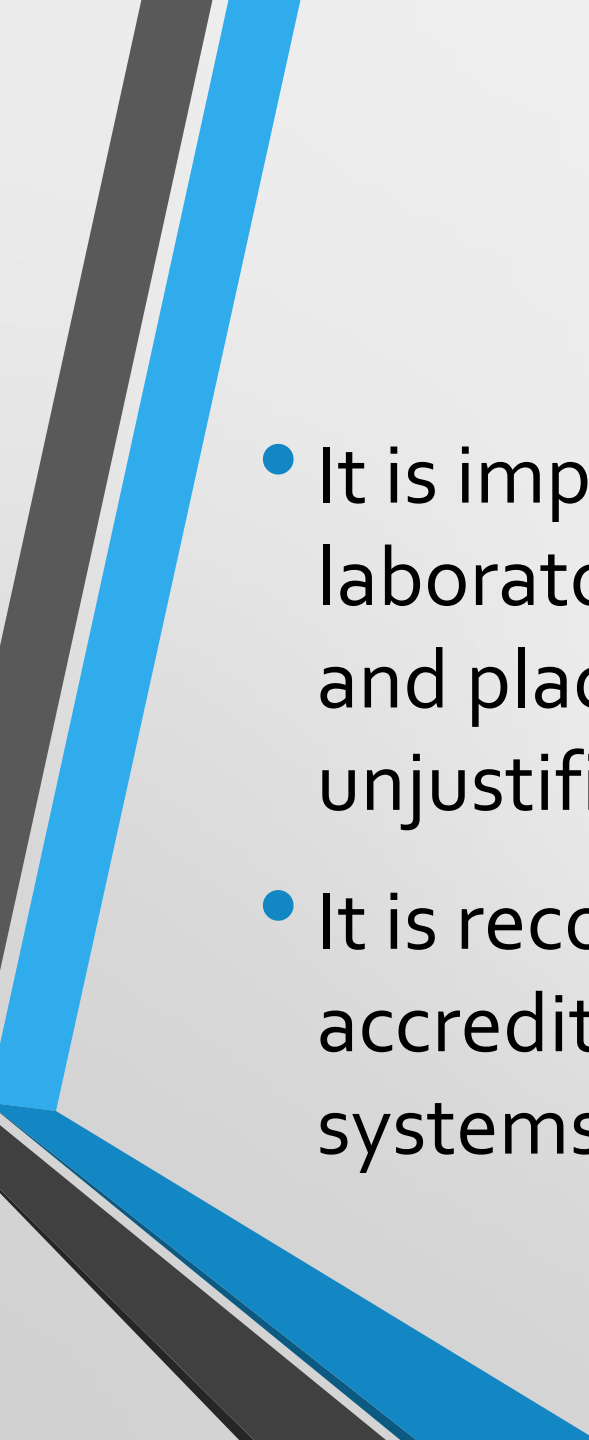
- **Food inspection**, based on risk analysis, is a vital component of a modern food control system. Food inspection protects consumers by ensuring that domestically-produced or imported food is handled, stored, manufactured, processed, transported, prepared, served and sold in accordance with the requirements of national laws and regulations.

- An optimal model for food inspection is to:
  - (i) verify that the raw materials are right,
  - (ii) monitor the critical parts of the process and,
  - (iii) if implemented correctly, the finished product looks after itself.
- An example of this for food inspections concerned with fortification is to:
  - (i) check that the premix has the correct composition,
  - (ii) check that it is "fit for purpose" (i.e. ensure that the fortificants will remain stable under the conditions in which they will be used),
  - (iii) check that it is being added and mixed correctly and that
  - (iv) premix consumption records reflect correct addition rates against production output from the processor.

- In this way compliance can be quickly established and such a system is low cost, low technology and provides results in which the inspector can have a high level of confidence

Laboratories

- Laboratories are essential for the analysis of food samples to assess physical and chemical characteristics; and microbiological contamination and to verify the safety and quality of food that is produced domestically, imported and/or exported, and to enable appropriate actions to be taken to protect consumers whenever necessary.

- It is important to note, however, as is discussed later, that laboratory analysis of finished product can be questioned and placing too high a reliance on such data is potentially unjustified.

- It is recommended that the testing should be in an accredited laboratory or one with quality assurance systems in place based on ISO 17025:2005
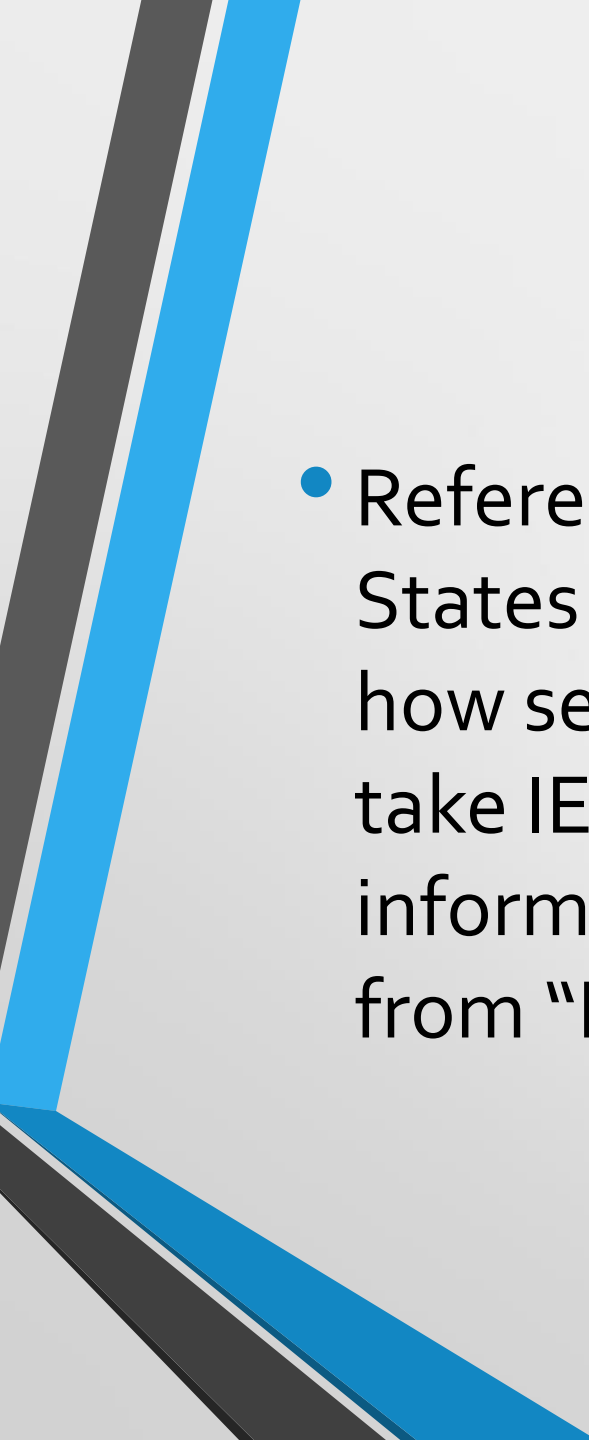
IEC

- This critical area is frequently overlooked or considered not the mandate of food control systems. Information, education and communication (IEC) is the process of developing, packaging and disseminating appropriate messages to specific audiences to increase their knowledge, skills and motivation to make decisions that enhance food safety and quality. Importantly it provides a means for food control systems to engage in dialogue along the food chain about food safety and quality issues.

- Typically IEC messages do the following:

- Increase awareness and knowledge among industry/retailers/consumers etc

- Promote adoption of Good Manufacturing Practices (GMP) and Food Safety Systems (i.e. HACCP) etc.

- Enable the collection of information to support decision-making processes, planning and implementation of official food control management activities

- IEC is also critical internally as it is important that food control inspectors are fully conversant with the following:

- Sampling plan, sample size, storage and transportation requirements so that inspectors and the laboratories can plan accordingly.

- Analysis time, sample tracking and interpretation of results against legislation so that inspectors are aware of the time constraints of laboratory analysis and have guidance on interpreting the analytical results taking into account sources of error before making a decision on whether the sample is complaint or not.

- Possible reasons for non-compliance so they can advise industry on how to avoid future problems

- Media response – "what if" scenarios need to debated and strong immediate responses from authorised knowledgeable spokespersons (plural deliberate) need to be developed so that the media is properly and scientifically informed.

- FAQ section for consumers – especially during/after media blitz – such messages should be at varying levels of complexity depending on the consumer's features and requirements.

- Reference to the Canadian, United Kingdom, United States and the Australia/New Zealand web sites indicates how seriously the food control systems of these countries take IEC as part of their duties and provide a wealth of information for all sectors of the food industry – literally from "Farm to Fork."