

**manual of food quality control**  
**15. imported food inspection**



FOOD AND AGRICULTURE ORGANIZATION  
OF THE UNITED NATIONS

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**15. imported food inspection**

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## PREFACE

This is the latest in an FAO series of publications on various aspects of food control. The purpose of this series is to provide guidance on international approaches to those whose mission it is to protect the consumer by ensuring the quality and safety of food. While discharging their duty to the consumer, these people also perform a vital role in stimulating the development of quality control programmes throughout the food chain and facilitating international trade in food.

While most of the previous publications in the series have dealt with particular technical issues, three have dealt with the wider aspects of consumer protection. These are No. 5, *Food Inspection*, No. 6, *Food for Export*, and No. 11, *Management of Food Control Programmes*. FAO has been aware for some time that the series was incomplete so long as the important subject of imported food inspection had not been covered. This publication will fill in this recognised gap.

Though this publication is pertinent to both developed and developing countries, it is of particular importance to the latter, especially those that rely heavily on imports to cover their food needs. Its great value is that by following the approach it sets out in establishing an imported food inspection service, or in strengthening an existing service, countries can be confident that they are adopting the recognised international approach.

Comments or suggestions regarding this publication are encouraged. Please send them to the Chief, Food Quality and Standards Service, Food Policy and Nutrition Division, FAO, Via delle Terme di Caracalla, 00100, Rome, Italy.

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## 1. GETTING STARTED

**SUMMARY:** Food safety as well as economic reasons provide strong rationale for implementing an imported food inspection programme. The most appropriate government portfolio should be given the responsibility and resources to effect point of entry inspection, but the requirements set for imported food should not be more stringent than requirements for domestically produced food.

### 1.1 INTRODUCTION

World trade in food is enormous both in value and tonnage. Exporting food provides foreign exchange eagerly sought by developing and developed nations alike. At the same time, there are profitable opportunities for individuals trading in food imported into a country. Unfortunately, the interests of the final customer (consumer in the importing country), are not always the prime consideration of those in the business. Indeed it is of concern that developing countries may be easy targets for marketing substandard food rejected elsewhere, or food which has not been subjected to appropriate controls during manufacture and transport. Hence the government role of ensuring a safe and wholesome food supply, includes control of imported food.

The requirements of food specified by control authorities of individual countries cover basic food hygiene and safety as well as compositional and identity criteria. While Codex publishes food standards and food safety guidelines, countries can choose to customize specification because of climate, culture and the ability to enforce the stated specifications. However the worth of the stated specifications depends on the implementation of an effective control programme.

This manual discusses the rationale for implementing a programme for point of entry inspection of imported food, and describes the essential elements of an effective programme. The manual describes a model system to ensure that imported food meets the stated requirements of a country. It suggests a staged approach to implementing the programme, giving increasing confidence in the safety of imported food.

This manual does not address other issues which may need to be considered when assessing the acceptability of imported food, such as animal and plant quarantine matters.

## **1.2 WHY INSPECT IMPORTED FOOD?**

### **1.2.1 Food safety**

Where there is no effective barrier control of imported food, an opportunity exists for exploitation. Food rejected from other markets or not permitted for sale in the country of origin can be dumped into markets where there is no effective control. Clearly this could compromise public health if the food is hazardous, and if the hazard is not recognised before the food is eaten.

There is evidence that this does happen. During the initial week of its first national imported food inspection system, one country found numerous shipments of a particular notorious product which has been refused entry to other countries. The existence of the new imported food inspection scheme quickly became known, particularly when profits were at stake as shipments were seized and destroyed. Thus the inspection programme has made importers aware of their responsibilities to source product from reliable suppliers.

Gradually, people the world over are becoming increasingly educated. A significant part of the education process includes raising awareness of basic food safety and food hygiene. It is not unreasonable that the expectations of the increasingly educated consumers are raised as well. This is evident in the more developed countries where consumers demand their rights to a safe food supply and because of real or imagined dubious food hygiene controls exerted in some countries, imported food is sometimes regarded with suspicion. To this end, consumers are concerned that imported food is adequately controlled.

As countries develop and awareness of food borne disease increases, it is likely that the population will become more concerned with the quality of the food supply. As imported food is a component of the total food consumed it is reasonable to expect increased scrutiny of controls applied to that proportion of the food supply.

### **1.2.2 Economic considerations**

Many countries provide incentives for manufacturers to find foreign markets for their products to increase foreign exchange. However, not all countries have comprehensive export certification programmes to ensure their food products comply with basic food hygiene requirements and are produced following good manufacturing practices. No export certification can guarantee that the food will arrive in the same condition as it left the country of origin.

If an importing country has no barrier control or does not insist upon certification, there will be little incentive for suppliers to provide quality products (i.e. products which consistently meet customer requirements) for that market. However, apart from food safety considerations, the cost of poor quality imported food goes beyond the cost of the product. By the time such food reaches the consumer, the cost of sample examination, recall and dealing with possible public health and safety problems (such as loss of productivity of affected individuals, and cost of health care), has shifted from the exporter or the exporting country, to the importing country.

The argument that market forces eventually prevail, when consumers stop purchasing a product which proves unsatisfactory, cannot always be sustained. Often a low price is sufficient incentive for repeat purchases, particularly in developing countries, where consumers may not be aware of food defects and their consequences. Also, it is rare that people trained in food technology make decisions about which food products to import and where to sell them. Unhappily, there are those in business who regard food as an inert commodity which represents no more than profit or loss. The fact that some food commodities are potentially dangerous is at times not a consideration, nor are the rights of the final customer - the consumer in the importing country.

### **1.3      EQUIVALENCE - IMPORTED VERSUS DOMESTIC FOOD             INSPECTION**

Regulatory control over food produced within a country can be exercised at all points of manufacture, and may include the condition of the buildings and equipment, and personnel practices. Such controls, together with process controls and hygiene and sanitation requirements, all play an important role in determining the extent of final product compliance with the relevant food standards or regulations.

Imported food inspection usually cannot take into account the quality assurance (or lack of it) exerted during the manufacture of food. Where products are accepted without certification, inspection upon arrival is the only means of regulation. Point of entry testing is the concentration of effort upon the consignment itself and is an attempt to compensate for the lack of knowledge about manufacturing controls. The number of such tests cannot therefore be used as a guide to the equivalence of domestic and imported food inspection programmes.

Product certification can provide some confidence that the conditions of manufacture meet specified requirements (i.e. the food standards and regulations of the importing country). However, the validation of such

certificates may require occasional point of entry checks which include sampling and analysis. For the importing country, these "audits" are a reasonable means to check that the exporting country "got it right" and no problems developed during transportation.

The standards and limits which are applied to domestic and imported food should be the codified national food regulations and standards. An imported food inspection programme has no role in protecting local industries from valid competition from other countries. This principle is a primary concern of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). The 1991 draft decisions on sanitary and phytosanitary measures defined these as:

"Any measure applied

- to protect animal or plant life or health within the territory of the contracting party from risks arising from the entry, establishment or spread of pests, diseases, disease carrying organisms or disease causing organisms;
- to protect human or animal life or health within the territory of the contracting party from risks arising from additives, contaminants, toxins or disease causing organisms in food, beverages or feedstuffs;
- to protect human life or health within the territory of the contracting party from risks arising from disease carried by animals, plants or products thereof, or from the entry, establishment or spread of pests; or
- to prevent or limit other damage within the territory of the contracting party from the entry, establishment or spread of pests".

The draft GATT definition, while confined to food safety matters, includes the testing, inspection, processing and production methods and extends to packaging and labelling requirements for food.

The Draft decision states that contracting parties have the right to take sanitary and phytosanitary measures, but ..... "Contracting parties shall ensure that sanitary and phytosanitary measures are applied only to the extent necessary to protect human, animal or plant life or health, are based on scientific principles and are not maintained against available scientific evidence."

## 1.4 ESTABLISHING AN IMPORTED FOOD INSPECTION PROGRAMME (IFIP)

### 1.4.1 Agency to conduct the programme

Around the world there are many government ministries and agencies involved in food inspection, each with a valid claim to the role. Listed below are some of the government portfolios which could possibly administer an imported food inspection programme, together with some issues which should be considered in allocating this responsibility.

#### (a) Customs

The advantages of a national Customs department controlling imported food inspection include:

- . one agency would be involved at the barrier, thus streamlining import requirements for the commercial sector;
- . information about imported shipments can remain within the Customs system and transfer of confidential commercial information is not required;
- . Customs will have existing national legislation and administrative controls over all incoming goods, including food;
- . Customs inspectors will be familiar with the importing environment; and
- . where domestic food inspection is not conducted uniformly nationwide, a national Customs department could be in a better position to implement a uniform national approach to imported food inspection.

Disadvantages include:

- . a laboratory service and expertise in food sampling may need to be developed;
- . food inspection must be maintained as a priority function. The possibility that other priorities of Customs could override food inspection and redirect allocation of resources should not be ignored; and
- . links with agencies responsible for domestic food inspection would need to be developed, to ensure broad equivalence in

approach and application of standards. If Customs does not have jurisdiction once goods have been cleared through the barrier, these links may need to extend to communicating details of particular consignments, to ensure high risk, perishable food or bulk food is appropriately dealt with after Customs clearance has been given.

In Finland for example, Customs is responsible for control of imported food. The Customs Laboratory is able to efficiently and effectively administer control, with the authority to make decisions on the status of imported food and apply a risk managed approach to targeting shipments for inspection. The system is complemented by a sophisticated laboratory facility in which the main function is the analysis of imported food against the standards in the Food Act of Finland.

**(b) Existing national food control agency**

The advantages of the existing food control agency assuming control of imported food include:

- . usually the government portfolio with responsibility for Health; or in some cases, the Environment or Agriculture portfolio, has an existing food inspection arm, with expertise and inspectors trained in food sampling and food standards; and
- . the food inspection agency generally has a laboratory service within or closely aligned to the organisation.

These factors make a strong case for the existing food control agency to assume responsibility for imported food safety. The agency should also have the knowledge to implement broadly equivalent domestic and imported food inspection programmes.

Disadvantages:

- . another layer of bureaucracy will be introduced at the point of entry;
- . obtaining information about imported food consignments either via Customs or independently (by requiring importers to make duplicate entries) will require considerable resources to set up systems; and

- . many point of entry procedures will have to be developed and communication channels developed between the food inspection agency and new "clients" associated with the importing industry.

#### **1.4.2 Stepwise implementation of IFIP**

Introduction of a complete IFIP is a huge task. Consideration should be given to staging implementation, so that successive stages increase confidence in the safety of imported food. Appropriate stages are discussed in Chapter 2. Progress towards the full system must consider resources and appropriate time frames, and the policy objective must remain consistent until the ultimate goal is reached (i.e. a comprehensive system is in place).



## 2. POLICY AND PLANNING

**SUMMARY:** The aims and priorities of an IFIP must be clear so that an effective scheme to implement those aims can be developed. Policy decisions on the business rules of the programme need to be determined. Ideally the policy and planning should integrate all food inspection functions undertaken in a country.

### 2.1 INTRODUCTION

This chapter covers considerations in making policy decisions on how the aims of the programme are to be achieved.

### 2.2 WHAT ARE THE MAIN PRIORITIES AND AIMS OF THE IFIP?

#### 2.2.1 Setting priorities

The extent to which compliance with the food regulations of the importing country will be enforced must be considered in determining the scope of an IFIP. Food standards (including Codex) contain public health and consumer protection matters. The IFIP priorities usually will be (in order): public health protection; consumer issues; and compliance with non-health related matters. In deciding policy, the available resources may pre-determine the scope of the IFIP.

Clearly if resources are limited, the scope of the programme may be limited to public health protection. Targeting potentially dangerous food, for example ready to eat seafood contaminated with *Salmonella*, will take a much greater priority than controlling entry of food that is short weight in terms of its net content statement.

Table 2.1 lists in order of risk to public health, issues covered in food regulations, while table 2.2 lists some examples of high priority food/contaminants combinations typically highlighted by existing IFIPs.

It is difficult to determine a hard and fast policy on precisely where to "draw the line" about what food/contaminant combinations constitute a risk to public health. In general, inadequate labelling in itself does not constitute a health risk, yet a food which contains sulphur dioxide which is not declared on the label could be a serious risk to asthmatics.

As noted above, the resources available for inspection may restrict the broad scope of an IFIP to matters of public health. However, the scheme must have the flexibility and authority to inspect food which had been considered low risk, in case new information emerges, implicating that

food as a public health threat. It is inevitable that such cases will arise, requiring attention and investigation. Examples include: tampering (e.g. wine adulterated with diethylene glycol); or accidental contamination of products normally considered above reproach (e.g. benzene in mineral water).

**Table 2.1: Examples of potential food-borne risks to public health**

RISK	EXAMPLES
Contamination with pathogenic microorganism.	<i>Salmonella.</i> Pathogenic <i>E. coli.</i> <i>Listeria monocytogenes.</i>
Presence of toxins either due to poor handling or naturally occurring toxins.	Staphylococcal enterotoxin. Aflatoxins and other mycotoxins. Marine biotoxins. Histamine in susceptible fish species.
Poor production methods which may allow growth of food poisoning microorganisms or development of toxic substances.	Suspicion of underprocessing of low acid canned food (which may be manifest in a number of possible ways).
Environmental contaminants.	Heavy metals such as mercury in fish.
Presence of excessive pesticide or veterinary drug residues.	Organochlorine and organophosphate residues.
Illegal or excessive food levels of additives.	Determined by food regulations - for example excessive levels of antioxidants or inclusion of unapproved colours
Labelling and packaging inadequacies.	Food irradiated but not labelled as such. Packaging incapable of hygienically containing product.
Consumer issues such as the ingredient list (some consumers have sensitivity to certain ingredients).	Sulphur dioxide implicated in asthma attacks.
Deliberate contamination with toxic substances or foreign objects	Diethylene glycol in wine.

Some countries embargo certain products because of religious or cultural practices. While not strictly a public health matter, it is feasible, appropriate and cost effective to use a point of entry inspection programme to address those concerns.

**Table 2.2: Examples of food/contaminant combinations covered by existing IFIPs**

FOOD TYPE	CONTAMINANTS
All food for babies and infants	Microbiological and chemical contaminants
Prepared seafood	Microbiological contamination
Meat and meat products	Pesticide residues, pathological lesions, slaughter floor soilage
Dairy food	Microbiological contamination

Other parameters regarded by some importing countries as important in determining acceptability of food, are radiation level, and the date marking or expiry date.

### 2.3 WHAT ARE THE OPTIONS TO ACHIEVE THE AIMS OF THE INSPECTION PROGRAMME?

Once the priorities have been determined, development of a scheme to meet those priorities can commence. Options available are discussed; however the programme's final form will almost certainly include elements of each option outlined.

#### 2.3.1 Certification

Certificates provided by authorities of exporting countries will give a certain level of confidence that stated requirements are met. In some cases, certification will be the only means of determining whether food actually meets requirements. Ensuring heat treatment of low acid canned food has achieved the desired penetration and temperature can only be determined at the time of processing (unless gross under processing results in easily detected faults). Similarly, meat from animals slaughtered in accordance with ritual practice may need to be certified as such to satisfy religious concerns.

Certification and the role that it can play in an imported food inspection programme is covered in detail in Chapter 9.

### **2.3.2 Point of entry inspection of food**

Chapter 3 describes setting up the essential elements of a programme, including: inspection staff; sound legislation; a national, uniform operating system; food safety and specifications; laboratory capability; and communication links. Properly implemented and operated, such a programme can ensure that imported food will meet requirements.

### **2.3.3 Quality assurance agreement directly with foreign manufacturers**

A quality assurance approach to control of imported food is theoretically possible, if individual companies and food processing establishments are willing to enter comprehensive quality assurance-based agreements with the IFIP of the importing country. Adopting an approach restricted to such agreements would be a premium approach to achieving the aims of the programme. However the resource implications are enormous as such a programme would require:

- . a team of inspectors trained as both desk and field auditors;
- . resources to conduct audits in foreign countries; and
- . administrative procedures to ensure that food from an unregistered establishment was not imported.

Much of the difficulty in setting up such a system could be removed by agreements between the IFIP and an appropriate quality management systems certification body operating in the exporting country.

It is unlikely that an imported food inspection programme can be based solely on quality assurance-based arrangements with suppliers. But there may be cases where individual factories with effective quality systems operate in countries where there is no scope or means to provide export certification.

For example, in some countries, exporting food and therefore implementing an export food certification programme is a low priority; yet this has no reflection on the ability of individual manufacturing plants to produce quality products. Such factories may be disadvantaged if their home government cannot provide certification.

Before entering or developing quality assurance-based agreements, the IFIP must be able to:

- . specify its requirements for the quality system operating in the plant, including documentation of the in-house process controls;
- . assess the documentation; and

ensure that the system can be effectively audited on site, using either its own inspectors, or auditors from an experienced and reliable quality management system certification body. These "third party accreditation" arrangements can be a cost effective alternative in providing assurance about the ability of a foreign food processing establishment to meet the importing country's requirements.

It is important to note that any quality assurance arrangement covering part (for example heat process control) or all of a food processors production system must have some means to verify that the system which appears on paper is in place and is working. There is no advantage in seeking or demanding information and details which cannot be substantiated. Indeed, this could create an large and unnecessary administrative burden.

Where quality assurance-based arrangements can be set up, the International Organization for Standardisation (ISO) 9000 series of standards provide internationally acceptable models for quality management systems.

## **2.4 STAGING IMPLEMENTATION**

Limited resources and facilities are a problem for most governments. However, protection of public health always remains a priority, and ensuring the safety of the food supply is an integral part of this responsibility. While implementing a point of entry inspection programme for imported food requires sophisticated facilities, including a laboratory, staff trained in sampling and inspection and a communication system, the development of those facilities can be staged.

An important but relatively low cost first step in taking some responsibility for safety of imported food is developing certification agreements with export food inspection agencies. Starting by obtaining information about the controls which exporting food control agencies apply in providing health, sanitary or other certificates, agreements may follow where the IFIP is confident that the controls are adequate. Chapter 9 covers acceptance of certificates and the verification procedures which the importing country may adopt.

Part of the verification and validation of certificates will involve sampling and analysis of certified shipments. In essence, these procedures are the basis of a point of entry inspection programme for food. As it develops, the programme should adopt a risk-managed approach, concentrating on food which is more likely to be a hazard to public health. Controls can be extended as resources allow.

## **2.5 WHAT CRITERIA SHOULD DETERMINE THE INSPECTION STATUS OF INDIVIDUAL SHIPMENTS?**

No inspectorate can examine all consignments of incoming food for compliance with the prescribed food regulations. The enormous number of food/contaminant combinations, and possible violations of food regulations for each food makes such a task neither practical nor sensible. As stated above, the main priorities and scope of the imported food inspection programme must be determined within the resource budget available.

### **2.5.1 Risk management**

Once the priorities of the inspection scheme are established, the problem of assessing whether a particular shipment should be subject to inspection or not remains. When a consignment of food arrives, the importer will (or should!), know the manufacturing establishment which produced the food. In the case of bulk crops, such as wheat or peanuts, the agent or exporter is sometimes as close to a "producer" as it is possible to get.

In operating a risk managed scheme and making best use of available resources, the exporting factory is an important key in targeting the food shipments most likely to be hazardous or to fail to meet requirements. An important point is that the "brand" of food does not always relate to the actual production factory. Care must be taken not to confuse "brand" with "producer".

An informed, risk-managed approach will see less effort directed towards inspection of product from suppliers with a good record of compliance. Ultimately, importers will be encouraged to source product from factories able to meet specifications, thus reducing the chances of having product inspected, seized and destroyed by the authorities.

Consequently a "new" IFIP will have a higher failure rate than an established system, as the initial effect of inspection will be to weed out suppliers of poor quality products.

### **2.5.2 Inspection and sampling frequency**

One of the most important of the elements necessary to effectively run a risk-managed system is a structured set of sampling frequencies or inspection intensities. Clearly the sampling frequency of products from unknown or new suppliers needs to be high, to develop a compliance history. Similarly, shipments of food from suppliers with a poor compliance history, or who are suspect for any reason must be sampled at high intensity. In these cases, every shipment may need to be inspected, until a defined number of consecutive shipments meet the standards. Most existing imported food inspection programmes which take a risk managed approach insist on either 3 or 5

consecutive satisfactory shipments from a supplier, before reducing inspection intensity. Another option is automatically detaining product from known poor suppliers and insisting that the importer proves the fitness of each consignment through use of an accredited laboratory until the compliance rate is satisfactory.

Inspection frequency can then be reduced, with some assurance that suppliers can provide food which complies with the importing country's requirements. Commonly, reduced inspection is conducted at the rate of 5 % of shipments, however some countries have an intermediate step where 25% or 10 % of a specified number of shipments are inspected before the minimum 5% inspection intensity is achieved.

The risk-managed approach must quickly respond to potential problems. Any reported failure should result in an immediate increase in inspection intensity, and each shipment of product from the offending supplier may again be subject to thorough testing until the minimum number of consecutive shipments meets requirements.

### **2.5.3 Data collection**

An information system is necessary. To successfully administer a risk-managed approach to inspection the minimum data which must be collected are:

- . date of inspection;
- . product type;
- . exporting establishment producer or supplier;
- . criteria for examination of food;
- . outcome of inspection;
- . date released; OR
- . date and action taken if food fails an inspection.

These data will enable a history to be compiled on each supplier. Each time a particular supplier imports product, the file should be updated so that the consignment is "counted", to determine the points where a change in the inspection intensity can occur, or when an inspection is due.

#### **2.5.4 Avoiding predictable inspection**

Consider a situation where 5 consecutive shipments must be declared satisfactory before inspection intensity can be reduced to 1 in 10 shipments. A supplier of frozen prawns has imported 5 shipments all of which are found to be satisfactory. The supplier has thus reached the point where the inspection intensity can be reduced, and only one of the next ten shipments will be inspected. It is important that importers or suppliers cannot predict which shipment will be due for inspection, and the policy should allow for the programme to randomly select which one of the next 10 shipments will be inspected.

#### **2.6 RETESTING OF FAILED SHIPMENTS**

Importers have a vested interest in questioning the validity of test results which indicate the goods have failed to meet specifications. In deciding policy on this issue, the IFIP must be aware of the difficulty in obtaining the same result from repeat analysis, particularly with microbiological tests. In protecting public health, the IFIP must insist that original results stand. Legislation should reflect this policy, but also allow for legitimate challenges, where it can be proven the samples were damaged or violated between the time they were drawn and analysed, or the laboratory method or reporting was suspect.

Policy must not allow the foundation of the inspection programme to be brought into question by allowing retesting. It must reflect confidence in the sampling, inspection and laboratory analysis and methods so that all results can be accepted with certainty.

#### **2.7 SHOULD RESULTS FROM PRIVATE LABORATORIES BE ACCEPTED?**

Chapter 8 covers the requirements for a laboratory charged with performing work for imported food inspection. However, there may be instances where government laboratories are not conveniently located or do not have the facilities to conduct a particular analysis. Before commissioning private laboratories to do work on its behalf, the IFIP must consider the obvious question of the capability of the laboratories to perform the work required, including the time to deliver results. The possibility of corruption, where the importer has "an arrangement" with the laboratory, may also need to be considered.

Laboratory accreditation systems such as the National Association of Testing Authorities in Australia, the National Accreditation Programme for Testing Organisations in Canada, and the Hong Kong Laboratory Accreditation Scheme,



can offer a good level of confidence that laboratories perform quality work to defined standards. Where the IFIP must look beyond government laboratories, the work should be performed by accredited facilities.

## **2.8 SHOULD A FEE FOR SERVICE BE CHARGED?**

This question can only be answered by the government administering the programme. That policy decision will be based on whether the government views the inspection programme as:

- . part of its community service function, which should be funded from the public purse; or
- . a service provided to the importers (inspecting and clearing goods and rejecting non-complying product; overseeing the destruction of failed goods) and therefore subject to cost recovery.

If the policy is to recover costs, the actions which incur charges and the point at which charges should be levied must be considered. Administrative procedures to recover costs (e.g. invoicing clients; accounting procedures) will have to be developed. Actually recovering costs may be particularly difficult in the situation where point of entry inspection is carried out on behalf of a second country. This situation can arise in Europe and parts of Asia where the major ports supply many countries, not only the country which controls the port operations.

Perhaps the simplest means to recover costs of the programme from the importing community is a fee collected upon entry, based upon the value of the food. The entire programme could be funded from this single fee collection, negating the need to issue accounts for inspection time, laboratory analysis, and any administrative overheads which an individual consignment may incur. While this approach has the benefit of administrative simplicity, the disadvantage is one of equity in that there are disproportionate costs related to particular importers and products.

Collection of bond money is an effective way of encouraging importers to comply with the requirements of the IFIP. Collection of a percentage of the value of the goods can be made a condition of entry, with this money being returned only when the IFIP is satisfied that the goods meet requirements. This system has the effect of making importers acutely aware of the food standards and regulations, and willing participants in efficient operation of the programme. Legislation must enable the IFIP to collect money, and refuse reimbursement if the importer or the goods do not comply with the programme specifications.

## **2.9 CONTROL OF FOOD PAST THE POINT OF ENTRY**

Clearly the IFIP will have jurisdiction at the point of entry. The point of entry is where the programme determines whether a consignment of imported food is suitable for consumption within the country, and the majority of resources should be directed to point of entry inspection. Beyond the point of entry, the extent of IFIP jurisdiction must be considered when determining the scope of the programme.

Handling abuse of perishable food, and fraudulent labelling of imported food packed or further processed in the importing country are reasons for an IFIP to maintain control from the point of entry through to final retail sale.

The administration of the IFIP may not have the resources to cover food beyond the point of entry. However, arrangements can be developed to notify area health boards or local food control agencies that highly perishable food, or bulk food which is to be treated or repacked, has been imported and released by the IFIP. Administrative burdens like this highlight the desirability of having a single national food inspection agency which can cover food inspection and handling whether the food is imported, produced domestically, or destined for export.

In some areas, the point of entry inspection may be undertaken on behalf of another country (as is sometimes the case in Europe); and here the inspecting country should be able to inform the food control agencies in the second country that potentially risky food has passed the barrier and is enroute to the second country.

## **2.10 SHOULD THE IFIP INSIST THAT INSPECTIONS ARE CONDUCTED AT THE POINT OF ENTRY?**

To adequately inspect and sample shipments of food transported in containers, it is necessary to have access to all parts of the container. This requires the container to be "destuffed". In making this decision, inconvenience to the commercial sector must be considered if those shipments which draw inspection have to be unloaded at the wharves or airports, and then repacked after inspection. Perishable, (chilled or frozen) food could be damaged if adequate facilities are not available to hold food during the unpacking and inspection process. The pressure to "get the job done" can encourage "tailgating" where samples are taken from the back of the container, instead of attempting true random sampling.

Some countries insist that shipments are taken to bond stores, where the unloaded goods are inspected. In this case, the level of control is very strict; however the importer must bear the cost in time and perhaps space rental,

while the goods remain under bond. Hence the IFIP must be able to ensure sufficient space is available and a quick service delivery, from both the inspector and the laboratory.

Other countries permit movement of goods to a warehouse or cold storage nominated by the importer, and acceptable to the IFIP. In this case, the IFIP must ensure that the importer is aware that the goods remain subject to the IFIP control and cannot be distributed. Consideration of closing containers with official seals may be an option particularly in cases where another border will be crossed before inspection is undertaken. Here the acceptable warehouse or bond store will be determined by the officials of the final destination country. Administrative procedures to transfer responsibility from the point of entry to the destination country must be developed.

If an authority to move goods from the wharves or airports is provided, it is a relatively simple matter for an inspector to check that the amount of food which is stated on invoice documents and bills of lading, reconciles with the amount of food presented for inspection. This system has the advantage that while the goods are under bond, the importer is responsible for storage, rather than the IFIP.

In both cases, the entire contents of containers will be accessible for random selection of samples; however, legislation must allow the IFIP to hold food under bond.

## **2.11 IS THE REGISTRATION OF ALL IMPORTERS DESIRABLE?**

Registering importers can be advantageous for the regulating agency as

- . the IFIP will have record of its main clients (the importers);
- . if a cost recovery policy is in place registration fees could be collected; and
- . mandatory registration should alert importers to the fact that food standards and regulations exist and will be applied to imported food. This can be extended to importers losing their importing licence if their goods are found consistently defective.

However, the administration and maintenance of a register is a cumbersome task:

- . a system of legally approving would-be importers must be developed and implemented; and

to enforce registration there must be a procedure to allow only registered importers to enter goods. Operational staff of the agency must have an up to date list of registered importers and legislative power to reject shipments bound for unregistered importers.

Registration of food importers cannot be relied upon to prevent the importation of substandard food and considering the added administrative burden the benefits are dubious.

## **2.12 DOES AN ADVISORY BODY HAVE A ROLE?**

Chapter 6 notes the various bodies which play a role in the IFIP function. It can be argued that all these interest groups should have the opportunity to comment and advise on IFIP policy proposals. This can be achieved simply by setting up a formal standing committee representing IFIP clients. The committee should consider issues including

- . findings of the IFIP;
- . food safety criteria and food standards and their application;
- . proposed changes to the programme such as altered barrier operations, focus on different food; and
- . international issues which affect the programme.

Operating as a consultative forum, an advisory committee can eliminate animosity which may otherwise grow between regulators and the regulated.

Another circumstance where an advisory body has an important role is where the point of entry inspection is done on behalf of another country or countries. Here, the committee should discuss procedures and communication strategies to ensure all parties have some input to the process and that it operates efficiently. Chapter 7 deals with the application of standards for this situation.

### 3. IMPORTED FOOD CONTROL - HOW IT WORKS

**SUMMARY:** Imported food inspection involves a series of steps which may commence before the food shipment arrives, and is not completed until the food has been officially released. "How it works" is a flow process with defined control points where the inspecting agency has a task to perform.

#### 3.1. INTRODUCTION

Uniformity of inspection and action is particularly important for imported food inspection. Rumours about inspectors at one port being tougher on importers will quickly see attempts by traders to import products at a reportedly less stringently controlled location. Credibility of the inspection programme may be challenged if there appear to be discrepancies from port to port or between inspection staff, in the operation and implementation of the programme. While inspectors will have different approaches to people and performing the job at hand, the programme must be designed so that decisions made by inspectors are consistent.

This chapter describes how a comprehensive IFIP works. Documenting the system to ensure a uniform approach is covered in Chapter 10.

#### 3.2 OVERVIEW OF THE SEQUENCE OF EVENTS

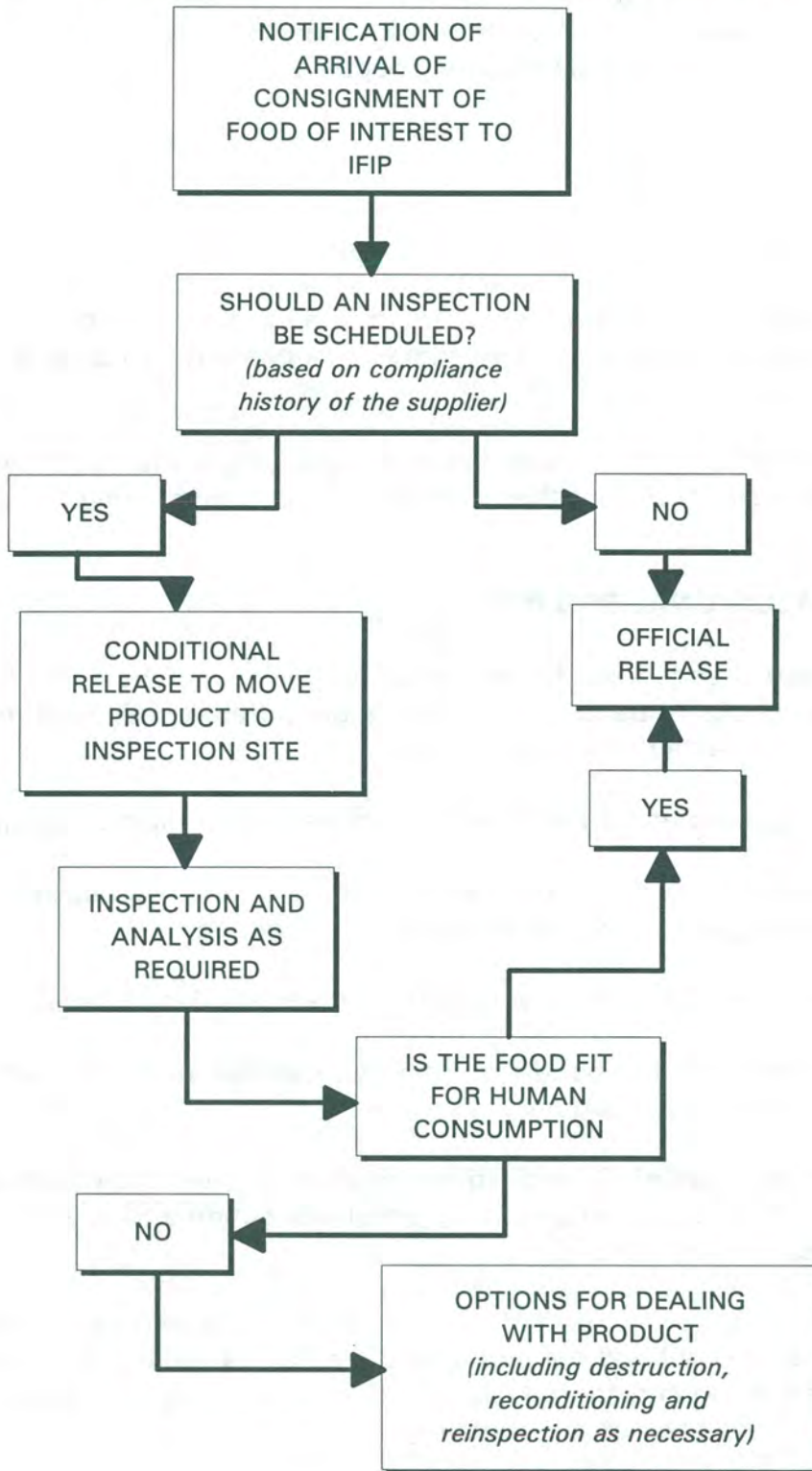
Figure 1 shows the sequence of events which comprise a comprehensive IFIP.

#### 3.3. NOTIFICATION OF CONSIGNMENTS

Consignments which contain imported food of concern to the IFIP must be formally notified on or before arrival. There are a number of ways this can be achieved; however it is usual for Customs to gather information about every import. The IFIP can (if not part of Customs) develop an agreement with Customs to obtain the relevant information, either manually or electronically. The relevant information which should be assessed by the IFIP is listed in Annex 2.

Legislation, covered in Chapter 4, can be drafted to make importers inform the IFIP of food shipments directly. This should be worded to bind importers to divulge the details required by the IFIP.

FIGURE 1: FLOW CHART OF IMPORTED FOOD INSPECTION PROCESS



### **3.4. DECISION TO INSPECT**

The decision to inspect or not will be determined by policy, priorities and the resources available. A structured risk assessment approach which can govern this decision is covered in Chapter 2.

### **3.5 OFFICIAL RELEASE**

If a consignment is not scheduled for an inspection then an official release must be provided. The release could be an official stamp or document, and must contain the signature of an authorised officer. Annex 1 provides an example of wording appropriate for an official release.

The release document in this case should make it clear that the goods were not inspected, but that their release has been sanctioned.

### **3.6 CONDITIONAL RELEASE**

If the shipment is scheduled for an inspection, there may be a need to authorise the goods to be moved. If this is permitted, conditional release documents and relevant legislation must:

- . ensure goods are under bond and cannot be sold or distributed; and
- . allow one specified destination for the consignment; it must be feasible to inspect the consignment at that location.

Moving goods from the port to a specified location is desirable as:

- . temperature control of bond store may be inadequate, particularly for frozen or refrigerated goods, ;
- . cost of keeping goods in bonded warehouses is often high and may be unduly onerous on the importer if prompt inspection and analysis cannot be arranged; and
- . most products are transported in sealed containers, and so allowing goods to be moved and the containers "destuffed" will permit true random sampling and circumvent stacking of carefully selected products at the back of the container.

Control at the point of entry should be sufficient to refuse the movement of any food of concern to the IFIP unless the owner of the goods has a valid conditional release issued by the IFIP.

Like the absolute release, a conditional release may be a stamp applied to the Customs documents or a separate form issued by the IFIP. As with any other official documents the release must be signed by an authorised officer. Annex 1 gives an example of the wording for a conditional release.

### **3.7 ARRANGE AN INSPECTION**

To obtain final clearance the importer must arrange with the IFIP inspector a mutually suitable time for the inspection to be undertaken. The IFIP should insist that inspections are conducted within a specified period of the goods arriving, to guard against the possibility of the goods being forgotten and slipping from the current list of goods due for inspection.

The inspection should be arranged at a time when the importer or a representative is present to sign inspection documents.

### **3.8 INSPECTION**

#### **3.8.1 Visual inspection**

A thorough visual inspection should precede any sampling. Ideally this should be conducted after the container or vehicle has been unloaded, to allow a full examination of the consignment. Visual inspection will cover documentation, labelling and general condition of the food.

##### **(a) Documentation**

Reconciling invoices and bills of lading against the amount and source of the food stated by the importer is a particularly important documentation check for certified food. Attention should be paid to the port of loading noted on the bill of lading. A port outside the country of origin may indicate that the goods may have been rejected from another country.

Temperature charts of cold transportation units must be examined and consideration given to extending inspection if the charts indicate unacceptable temperature rise during the journey.



For certified shipments, all relevant details must be reconciled with the goods which have arrived. Amounts, pack size and number, and lot codes should coincide with the statements on the certificate. Certification requirements are covered in detail in Chapter 9.

**(b) Labelling**

Visual checks of imported food should aim to ensure that labelling requirements of the country's food regulations are met. While these requirements will vary from country to country, the basic information which should be present is:

- . truthful product identity;
- . some means to identify lots (date coding, date marking etc.) sufficient to enable a food recall if necessary;
- . name and address of the importers or the exporting manufacturer;
- . country of origin; and
- . ingredient list;

all of which must be in a language acceptable to the importing country.

The label should be examined to ensure it will not easily fall off the pack or be deliberately removed, particularly any part of the label with origin and lot information.

**(c) Packaging**

Visual checks on packaging should include:

- . packaging is sound and suitable;
- . visual checks of seams and can integrity for canned products; and
- . consideration of the suitability of packaging with respect to migration and leaching of toxic substances, for example acid products in lead soldered cans.

**(d) Condition of goods**

The condition of goods can be determined to some extent by visual examination. The extent of damage and deterioration, and the amount and description of filth and extraneous matter can determine the acceptability of the food. If this examination shows the food to be unsuitable then there is no need to proceed with further (expensive) analyses.

If the necessary equipment is available and the priorities of the inspection programme demand it, preliminary screening for radioactivity can be carried out at this point. Clearly this should only be considered necessary if there is reason to suspect the food originated from an area where radioactive contamination is a problem.

**(e) Reconditioning**

In some cases, the problems found during a visual inspection are rectifiable. For example, labelling deficiencies can be overcome by relabelling. Products with excessive amounts of inoffensive extraneous matter, such as dried fruit with pieces of stem and sticks, but no rodent droppings, could be processed to remove the sticks and stems. In these cases the inspector must specify the problem and negotiate a fair and reasonable time for a second inspection to be undertaken.

During the period between inspections, the importer will be required to treat the product according to direction given by the inspector.

At the second inspection the inspector must be satisfied that the goods have been satisfactorily treated, and either examine the culled portion of the goods, or be satisfied that the culled portion has been appropriately dealt with.

**3.8.2 Sampling for further analysis**

If a particular consignment is due for further analysis, samples should be drawn only when the results of the visual inspection are satisfactory, to avoid unnecessary expense. The particular analysis should be prescribed in most cases by the central administration (see Chapter 6). However, if there are no prescribed criteria for examination of the particular food, the inspector must use his or her knowledge of food technology and assess the most likely cause of contamination, and request analysis for that (those) attribute(s).

As with visual inspection, it is best to conduct sampling after the container or vehicle has been unloaded or de-stuffed. This will circumvent attempts to "plug" containers with product which may not be truly representative of the consignment. Proper random samples can only be drawn when all parts of the consignment are accessible.

The inspector must ensure that he or she has the necessary equipment and documents to perform and record the job. Annex 2 lists the minimum information which must be recorded about a sample, the inspection and the laboratory results. The sample must also be tagged with the details necessary to ensure there will be no confusion of samples at the laboratory.

*Introduction to Sampling and Food Inspection*, numbers 9 and 5 respectively in the FAO Food and Nutrition Paper Series, provide details on sampling methods and basic equipment for specific products.

### **3.9 ANALYSIS**

Laboratory analysis, procedures and actions are covered in Chapter 8.

It is the responsibility of the inspector to ensure that samples arrive in good condition and are clearly and correctly identified. Any procedures required of the inspector by the laboratory must be followed. This may include signing samples into the laboratory register, or ensuring that a responsible laboratory officer is notified of the sample arrival.

### **3.10 DETERMINATION OF FITNESS**

The final determination of fitness should be a matter for the IFIP administration, and the legislation supporting the programme should provide for this responsibility.

Laboratory results will determine whether the food meets the stated requirements. While the national food regulations and standards or Codex standards (Chapter 7) will basically determine compliance (or otherwise) of the food, in any inspection programme there will be occasions when clear determination of fitness is not so simple.

For example, if the consignment was made up of distinct lots, and these were sampled individually, the laboratory analysis may show that some lots pass, while others fail. The IFIP in this case should condemn the failed goods, and consider the fate of the "passed" lots.

If the failure was a serious matter, and the "passed" lots are closely related to the contaminated lots, "failure by association" may be the most appropriate action. The "passed" lots could be permitted entry if the reason for the failure was less serious. This situation can be further complicated if, under the sampling plan applied, a number of lots were not tested. The best approach in this instance is to regard the untested lots as suspect - guilty until proven innocent!

The administration of the IFIP may have built up a compliance history of a supplier which can provide a broader picture than that provided by a single laboratory test result. This information may be used to assist in deciding the fate of product where results are borderline.

The IFIP may decide that further sampling should be conducted to clarify the situation. Consultation between the IFIP and the laboratory may be useful in determining whether further samples are necessary.

### **3.11 ACTION ON SATISFACTORY RESULTS**

If the food is declared fit, the inspector must inform the importer as quickly as possible and provide the necessary documentation to release the consignment. Importers must understand which goods are cleared, particularly in the situation where part of the consignment may have been declared unfit for consumption, or the disposition of the goods is not clear.

The report of the inspection must be forwarded to the central administration, for use in determining the inspection intensity for future consignments.

### **3.12 ACTION ON UNSATISFACTORY RESULTS**

Where food fails to comply with requirements, the IFIP has a number of responsibilities to ensure unsatisfactory food does not reach the marketplace. Initially the importer must be notified that the consignment has failed, and informed of options for dealing with the impounded goods. It is common to have such options as destruction, re-export, downgrading for uses other than human consumption, and reconditioning. The responsibilities of the IFIP vary according to the options available.

### **3.12.1 Destruction**

The IFIP should insist on destruction where there is a clear risk to public health. The destruction should be overseen by an inspector, or as a minimum, documentation attesting to the destruction must be checked by the inspector. For example, receipts and documentary evidence of the fate of goods at a recognised refuse centre or incinerator could be checked.

### **3.12.2 Re-export**

The IFIP has a moral responsibility to ensure, as far as possible, that food deemed to be unfit for human consumption and rejected for importation does not find its way to another market in another country. Indeed, where there is a clear risk to public health (for example peanuts heavily contaminated with aflatoxin, or ready to eat food contaminated with pathogenic bacteria) it is doubtful that re-export should be an option. If permitted, re-export should only be to the country of origin of the food and only with valid documents from the authorities of that country stating that the goods will be accepted and controlled upon arrival.

The IFIP must control the goods up to the time the shipment is re-exported, and gather information about consignees, dates of departures, container numbers and shipping vessel and forward this information to the receiving authorities.

There are a number of dilemmas associated with re-exporting. It is possible that the goods are diverted to a port other than the stated destination. To ensure the food does not find its way to another internal port or to a neighbouring country, a system to alert all internal ports and authorities of neighbouring countries should be developed.

### **3.12.3 Downgrading**

Food deemed unfit for human consumption may be considered for alternative uses. Incorporation into pet food, stock feed or fertiliser are examples of making use of otherwise waste product. The IFIP must have procedures to ensure that the full quantity of rejected food is received and utilised by the company undertaking the processing.

This option should not be permitted if the food contains a substance which will persist through the food chain and re-enter as part of the human diet, and the IFIP has a responsibility to ensure this option is not exercised in this case. For example, some mycotoxins in food for dairy cows can persist and be excreted in the milk.

### 3.12.4 Reconditioning

In some cases the incriminated food can be treated to remove the initial problem. Before this option is authorised, the importer should provide to the IFIP details of the proposed method, and where the treatment is to be conducted. When the details are provided, the IFIP administration should consider the technological feasibility, capacity, efficiency and legality of the proposed treatment.

For example, if a consignment of peanuts was found to have excessive levels of aflatoxin, the importer could propose reconditioning by a process of removing the affected kernels.

In this case the IFIP must consider:

- . the extent of contamination, based on the inspector's advice;
- . the availability of the technology required - in this case blanching equipment followed by the means to sort affected kernels from sound nuts; and
- . whether the available equipment can cope with the quantity of the consignment.

In this example, reconditioning involves sorting "good" from "bad". The IFIP control should extend to ensuring that the culled product is destroyed.

The legality of the proposal needs to be considered if treatments such as certain chemical applications (which may leave a residue) or irradiation are suggested by the importer.

The level of understanding about the problem exhibited by the importer is also relevant. For example, a consignment of desiccated coconut was found to be contaminated with *Salmonella*. The importer proposed taking the coconut to his bakery and "only using the contaminated material where the recipe required baking". From the point of view of the IFIP, the importer/baker was prepared to knowingly take *Salmonella* contaminated material into premises where food is being prepared. The company had no quality system, and no way of identifying the contaminated product. The proposal was refused on the reasonable assumption that the serious nature of the problem was not understood and issues such as cross contamination were not considered by the applicant. Thus the IFIP had no reason to assume that good control of the contaminated coconut would be exerted, and so refused the proposal.

Finally, the reconditioned product should be reinspected at least as intensively as the initially inspection. Consideration should be given to more intensive sampling, given that the product previously failed to comply.

The report of the inspection must be forwarded to the central administration, to be used to determine the inspection intensity for future consignments.

## 4. LEGISLATION

**SUMMARY:** Sound legislation is a basic foundation of any food control system. The statutory framework may differ from country to country but the essential heart of the legislation is to prevent the sale of food which does not comply with the food regulations and standards of the country. Ideally the control of all food within a country should be covered by a single law.

### 4.1 WHY A SOUND LEGISLATIVE BASE IS NECESSARY

A sound legislative base enables the government agency to regulate food, whether imported or otherwise, ensuring that food complies with the regulations and provisions of the food standards. Many regulatory procedures and actions are the same regardless of the source of the food, such as taking samples, seizing non-complying food and ordering destruction or treatment. However, there are actions and procedures specific to importation which may require some adjustment to legislation prepared for domestic food control. For example, without legal authority to oblige importers to notify the IFIP of impending shipments, to levy charges for barrier clearance of shipments, to hold high risk goods under bond or to exert control over re-exportation, the IFIP will be ineffectual.

### 4.2 SCOPE OF THE LEGISLATION

A single law, based on the Codex Model Food Law can provide a good legal basis for control of all food within a country. To control imported food under the same legislation as domestic food, the scope of the law must extend to:

- . requiring the control agency to be notified by importers of the entry or impending entry of consignments of food;
- . prohibiting importers distributing, selling or dealing in any way with a shipment of targeted food unless authorised to do so by the IFIP;
- . providing power for authorised officers to inspect, sample and detain shipments defined by import documents such as bills of lading;
- . empowering authorised officers to order destruction, reconditioning, downgrading or re export of shipments;
- . indemnifying officers against personal liability for official actions taken by them in good faith;



- . authorising the collection of levy fees and/or bond money;
- . the withholding of bond money until and unless the requirements of the programme are met;
- . allowing valid certificates provided by approved foreign governments or other accreditation agency to be accepted in lieu of inspection; and
- . allowing agreements between the IFIP and importers where a food is to be further processed and the IFIP is satisfied that processing controls are such that requirements of the IFIP will be met.

### **4.3 DEVELOPMENT OF THE LEGISLATION**

The legal format and structure of laws covering imported food is specific to individual countries. Some countries have developed separate legislation for meat products and other food. In the Netherlands food control is administered under the Food and Commodities Act, the Meat Inspection Act and the Pesticides Act. Australia, has specific acts of law to cover control of imported food, exported food and domestic food, while Finland controls all food under one piece of legislation, the Food Act and its subordinate legislation.

Development of legislation is generally a tedious and time consuming exercise. Simple clear laws should be the aim of the development of a legal basis for food control. To this end, a Food Law based on the Codex Model Food Law is recommended.

## 5. PROFILE OF AN INSPECTOR OF IMPORTED FOOD

**SUMMARY:** An inspection arm is one of the essential elements of any food inspection programme, including imported food inspection. Apart from conducting the basic function of the programme, i.e. inspecting food, inspectors are the "shopfront" and main contact for the clients of the programme. It is essential to have a group of professional, reliable, well trained and organised staff, with personal qualities and a supporting infrastructure which enable the practical and public relations functions to be successfully entwined.

### 5.1 INTRODUCTION

The inspector is the person who represents the food control agency, and is the first, and often the only, point of contact between the agency and the importing community. So the inspector should be able to present a professional and confident image to the clients of the food inspection agency, whether those clients be importers or their agents, or officials of Customs, Quarantine or other government agencies which have jurisdiction at the country's border.

Ideally an inspector of imported food will also be involved with inspection of domestic food as a member of staff of the country's single food inspection agency.

### 5.2 PERSONAL QUALITIES

Choosing inspection staff with personal integrity, the ability to effectively deal with people and a good technical background is essential in providing the inspection programme with a solid base. An inspector must be beyond corruptible influences. The most desirable personality is a strong character, prepared to remain firm where difficult and unpalatable decisions must be made, yet flexible enough to assist or advise importers where necessary without jeopardising the programme. An inflexible "got you" personality can be as damaging for the programme as a weak ineffective individual.

The demoralising effect of a single corrupt officer cannot be overstated. The credibility of the inspection programme will be open to question, and the pride which inspectors carry for their work will be destroyed and may take months or years to recover.

Recruitment of inspectors must take into account these considerations, together with a candidate's educational background; administration and liaison skills; and ability to conduct inspections and handle the broad

range of activities required of inspection staff. The utmost care must be exercised during staff selection.

### **5.3 SUPPORTING INFRASTRUCTURE FOR INSPECTORS**

Having selected suitably qualified staff, the programme should provide the inspectors with an adequate infrastructure and incentive to perform the job and maintain job satisfaction.

#### **5.3.1 Remuneration and hierarchy**

Salaries reflecting the importance of good inspectors, and commensurate with responsibilities of the job should be offered. Providing a hierarchy in the inspectorate will give the programme structure and determine responsibility levels expected of staff. The possibility of promotion within the system provides another dimension to job satisfaction and a reason for striving to do a better job. A senior inspector will carry more responsibility and should be paid accordingly. He or she will be the first point of contact for direction for a "junior" inspector, and will determine to a large extent the job programme of inspection staff.

#### **5.3.2 Communications and accommodation**

A communication system is a key element in operating a successful IFIP. Inspectors must be part of a national communication system which allows emergency situations as well as routine information to be broadcast as quickly as possible. While telephone and facsimile machines are desirable there may be situations where advanced technology is not available or reliable. Here, a system based on priority mail or courier services may be necessary. Although it may take longer for information to reach other regions it is important that communications are maintained. Without good communication systems the programme will be disjointed, unable to respond to emergencies, and incapable of providing the efficient service demanded by the importing community.

Depending on the system adopted for providing conditional or absolute releases of product at the point of entry, an office may need to be situated near the docks or airports, enabling importers to obtain releases "on the spot". Shiftwork may be required if the volume of imports is such that work in normal hours is not sufficient to clear all shipments.

### 5.3.3 Equipment

The nature of the work requires that inspectors are provided with reliable vehicles. Uniforms can assist in sustaining morale among inspection staff and presenting a professional image to outside bodies. However, if uniforms are not available or required, a minimum dress code should be set for inspectors. Sloppily dressed staff suggest a sloppy organisation.

A sampling kit should be provided which includes equipment for sampling, labelling and transporting samples. Special requirements may apply in some countries: for example, in hot climates it will be necessary to supply inspectors with insulated containers with ice bricks or dry ice to transport samples for microbiological analysis.

## 5.4 TECHNICAL TRAINING

The technical training which should be undertaken by an imported food inspector should cover food inspection and sampling, food technology, barrier operations and legal authority.

### 5.4.1 Food inspection and sampling

Inspection of imported food involves many food types which arrive in every conceivable package type, presenting innumerable reasons why the food may not meet the requirements of the country. An inspector must have sufficient training to correctly perform sampling procedures and be able to assess in advance, the equipment which may be required to do the job at hand. *Introduction to Food Sampling*, No. 9 in the FAO Food and Nutrition Paper Series, provides general principles and guidelines for food sampling.

Table 5.1 summarises general training requirements for food inspection and sampling which should be covered in a staff development programme, or specified as a prerequisite to working as an imported food inspector.

### 5.4.2 Food technology

The decision to routinely sample a particular product for a particular analysis is best done by a central administration, to ensure national uniformity and consistency. Beyond routine sampling, the programme can provide inspectors with limited power to take discretionary samples. The inspectors are the eyes and ears for the programme and it is desirable that they have sufficient knowledge of food manufacturing and food technology to assess products for the most likely possibilities of

contamination or illegal additives. Discretionary samples drawn by inspectors using this knowledge could provide valuable information for the programme on a national level.

As a minimum, training should cover:

- . food preservation techniques and procedures;
  - with low acid canned food as a special case;
- . food microbiology;
- . labelling requirements, additives and additive numbering systems; and
- . packaging.

Information on specific commodity inspection techniques, and good manufacturing practice is presented in *Food Inspection*, No 5 in the FAO Food and Nutrition Paper Series.

Table 5.1: food inspection and sampling training requirements

SUBJECT	TRAINING TO INCLUDE
Theory of sampling	Probability theory Attribute and variable sampling Sampling plans (single, double, sequential and multiple) Lots, batches and sample units
Purpose of sampling	Public health protection Consumer interest Audits, alerts, routine inspection
Risks in sampling	Accepting lots which do not comply Rejecting satisfactory consignments Contamination of samples Deliberate attempts to bias sampling (stacking containers)
Practical sampling	Equipment Destructive and non destructive sampling Random sampling and using random numbers Drawing samples Aseptic sampling Labelling, transport and storage of samples
Definitions	Clear understanding of terms used in sampling particularly: consignment, batch, lot, sample unit, sub-sample, sample identity numbers

## **5.5 ADMINISTRATIVE TRAINING**

### **5.5.1 Barrier operations**

There are many entry control procedures undertaken at the borders or points of entry to a country, by different groups and agencies. An inspector of imported food must be generally familiar with these systems, and be aware of when, how and who is responsible for events which occur before a consignment is released into the marketplace. Such knowledge will provide the context in which inspectors operate, as well as clarify their role.

If certification attesting to the safety or quality of a food shipment can be accepted in lieu of inspection by the food control agency, an imported food inspector must be able to assess its validity. Training in this aspect should include:

- . details of agencies in exporting countries with acceptable certification agreements;
- . the appearance of valid certificates including any official marks, crests and serial numbering systems;
- . awareness of the limitations of certificates; and
- . procedures to audit the validity of certificates, particularly with regard to quantities of food covered by the certificate.

### **5.5.2 Legal authority**

To carry out official duties with the confidence that he or she has the legal right to do so, the inspector must be authorised under the legislation which covers inspection of imported food. The powers that are provided under that legislation must be made clear to inspectors, and some training in legal requirements and limitations should be provided. Chapter 4 covers legislative requirements.

## **6. ADMINISTRATION**

**SUMMARY:** A central administration to co-ordinate the IFIP from a truly national perspective is an essential element of the programme. The administration cell is a focal point for gathering information from outside and within the country, and develops national programme priorities and procedures.

### **6.1 INTRODUCTION**

Usually there is more than one point of entry to a country. A key feature of a successful imported food inspection programme must be the ability to standardise the procedures and priorities at each port. Information flow is also a critical factor to ensure as far as possible that food from suppliers with a history of poor compliance is targeted for inspection. The fate of rejected shipments, (particularly those re-exported) must be rapidly broadcast to all points of entry to prevent "port-shopping". If a uniform national approach can be achieved, the IFIP will prove effective and should ultimately encourage importers to buy from more reputable suppliers.

A central administration is essential. The main functions of a central administration are covered below.

### **6.2 SETTING OF POLICY AND PRIORITIES FOR INSPECTION**

The scope and priorities of the IFIP which must be considered are covered in Chapter 2. The programme administration must have a major role in determining the policy.

### **6.3 DEVELOPMENT AND REVIEW OF INSPECTION PROCEDURES**

The details which should be covered in inspection procedures are outlined in Chapter 10. As a programme develops there will be the need to constantly upgrade procedures taking into account changes and additions made at any point in the inspection work. While this task will be the responsibility of a central administration the field staff should have input and be confident that their input will be acknowledged.

#### 6.4 DEVELOPMENT AND MAINTENANCE OF DATA SYSTEM.

Effective operation of an imported food inspection scheme will require collection and assessment of data. The central administration must develop a system which can file inspection data information so it can be retrieved quickly and efficiently. The data system need be no more complex than a card file system. The emphasis should be on a simple easily maintained and efficient system. The data will be used in day to day operations as well as providing general reports and statistical information.

For example, if the IFIP is based on risk management and aims to target shipments of food where the supplier has a history of non compliance, central administration must:

- . co-ordinate information and results from all inspection points and thus must have rapid access to results of inspections;
- . be able to retrieve results of previous inspections on the basis of foreign manufacturer;
- . assess the "inspection status" of the next shipment of food from the specific supplier and construct reports of status of each exporting supplier; and
- . disseminate the information to the field staff.

Trends, statistical information, reports for publishing, estimating efficiency or performance of the programme should be easily retrieved from the data store. Again, advanced technology is not always the best solution. In countries with small numbers of import entries a fortnightly or monthly "stocktake" compiling data from details on a routine card operated system can provide adequate reporting.

Details on consignments which have entered the country must be kept and retrieved should a problem with a particular food become apparent after it has entered the country.

Annex 2, lists the data fields which can be collected from an inspection and will be collected on separate forms. Annex 2 (a) is the information collected upon notification of arrival of a food shipment; Annex 2 (b) lists the data collected at the initial inspection; while Annex 2 (c) and (d) present the information gained for a food which fails an inspection. The data base should be constructed so that relevant data from each inspection is kept. For each import the relevant data can be classified as details about :



- . the food commodity, production coding (can codes, use-by dates etc.) type and size of package (e.g. the can size of canned food);
- . quantity and value of the shipment;
- . the foreign producer (name, address);
- . date of arrival, port of arrival, vessel and container number;
- . inspection results - visual and analytical; and
- . action after inspection - release date, or specified destruction, or permitted treatment.

While computer database systems may appear desirable, a streamlined manual system will be adequate and in some cases more suitable, particularly where there is a relatively small number of consignments entering the country.

## **6.5 LIAISON WITH OTHER GOVERNMENT DEPARTMENTS AND INDUSTRY**

There are many bodies and "client groups" specific to the IFIP functions of a food inspection agency. Other regulatory agencies, such as Customs and Quarantine, will have day to day contact with the IFIP staff. Daily contact with commercial groups including shipping and cargo handlers, customs agents and importers will also be a standard part of the programme implementation. Less frequently there will be a need to deal with importing industry associations, consumer groups and other government agencies (Trade, Foreign Relations) or foreign governments. All can be considered clients of the IFIP. It should be part of the central administration to consider the interaction and to work with groups to ensure smooth relations and efficient practices are adopted. Arranging formal agreements to streamline barrier operations will be a function of the central administration.

Table 6.1 lists some of the main clients specific to an IFIP and the issues which should be considered in ensuring an efficient programme.

## **6.6. LIAISON WITH CONTACTS IN OTHER COUNTRIES**

An IFIP is part of the world food trade situation, and to become an effective control system from an international point of view the senior

officials of the IFIP should develop contacts with officials from exporting countries.

#### **6.6.1 Notification of rejected shipments**

When a food consignment is rejected, the importer may be given a number of options for dealing with the problem food (see Chapter 3). Usually importers are permitted the option of re-exporting - either to the country from which the food originated, or another country where a willing buyer can be found. In either case, the new prospective client country should be notified of the impending shipment. The IFIP administration can ensure this by:

- . insisting that the person or group wishing to re-export the food, provide the IFIP with documents that attest to the fact that the authorities of the destination country are aware of, and will accept responsibility for the particular consignment
- . contacting foreign authorities on behalf of the would-be re-exporter, thereby ensuring that legitimate contact has been made.

In either case the validity and efficiency will depend on the reliability of the relationship between the IFIP and authorities in other countries.

**Table 6.1 Main clients specific to an IFIP**

CLIENT	CONSIDER
Customs	Existing procedures which Customs may have at the point of entry, priorities of Customs will be different to IFIP (if the IFIP is not part of Customs) and usually Customs will be the priority authority at the point of entry.
Quarantine	Some countries have very strict quarantine regulations. IFIP must be aware of these and ensure that Quarantine requirements are satisfied before food is released.
Cargo handlers and customs brokers	IFIP procedures must be known to all commercial groups which have business at the point of entry. Contacts should be developed to ensure any changes are notified and understood. These groups must be aware that the IFIP has legislative power to hold food shipments and fines apply if goods are taken without authorisation.
Laboratory	The quantity and types of tests will need to be negotiated with the laboratory, even if part of the same department as the IFIP. Forward planning should involve the laboratory. The relationship with laboratory services are detailed in Chapter 8.
Importer groups	Importers must be made aware that products must comply with national regulations and standards. Regulatory procedures and any charges for which they are liable must be made clear to importers.

### 6.6.2 Development of certification agreements with authorities in exporting countries

The system which underpins the provision of certificates which may accompany shipments of food and how an IFIP can validate those certificates is dealt with in Chapter 9. The central administration of an IFIP should determine whether certificates from a particular authority are accepted, and this must be conveyed to the inspection staff.

## 6.7 INFORMATION GATHERING

The incidents and results of other inspectorates in the world as well as media information on problems which may affect the quality of food should be gathered and assessed by central administration. With reliable data the IFIP can develop strategies to deal with the possible problems before the problem arrives. For example, alerts or warnings issued by inspectorates of other countries should be used to examine the imports from the same source and ensure that the problem is controlled.

Central administration should constantly be aware of possible implications which reported incidents or events may have on the safety of the food supply. The Chernobyl nuclear accident is an obvious example where the food supply was affected and for many countries the Chernobyl accident initiated routine radiation testing of food. Food poisoning outbreaks, or less typical events such as extortion or sabotage attempts where a food is allegedly deliberately contaminated, must be assessed in respect of the actions which an IFIP should take nationally to protect public health. For example, *Listeria monocytogenes* was first recognised as a virulent food-borne pathogen in 1985 when a listeriosis outbreak implicating cheese as the vector was reported. IFIP must have the capacity to assess the implications of matters like these and be able to deliver national strategies to adequately protect public health.

In assessing this information the IFIP cannot be isolated from the possible political or trade reasons for allegations of poor food quality; however the public health protection imperative must always remain as the primary focus of the programme.

Information will also come from within the country. Consumer complaints and possible food poisoning incidents implicating an imported food should always be followed up and assessed. Contacts must be developed to ensure that this information is forwarded to the IFIP for action.

## 6.8 INITIATE NATIONAL FOOD RECALL

Where an imported food is suspected of causing a food poisoning outbreak, or there is a concern or threat posed, the IFIP will have access to valuable information about who imported the goods, how much entered the country, when and where the products arrived. This information will enable rapid tracing of the goods through the system, and ensure that the quantity recalled reconciles with the quantity imported. In some cases the food poisoning incident will be reported from another country, in which case the IFIP should check if any of the

implicated product has recently entered the country, and initiate appropriate action. This may mean extra vigilance at the points of entry as well as initiation of a food recall.

The actual work in co-ordinating a recall will usually be done by the distributor of the product, hence the involvement of the IFIP may be restricted to supplying information, overseeing the recall action and destruction of the faulty product.

The strategies and procedures to conduct an efficient food recall are not within the scope of this manual. *Food Inspection*, No 5 in the FAO Food and Nutrition Paper Series, covers this important consideration of food control.

## **6.9 ADJUDICATE WHERE INSPECTION RESULTS ARE NOT CLEAR**

While field staff should have confidence in their ability and discretion, there may be instances where inspection results are not clear. A central administration should have the capacity to assist field staff and suggest means to clarify the situation. The central administration will have a view of the national situation not always available at the field level, which may provide clues about trends in the particular product or the supplier, and so clarify a situation.

## **6.10 PREPARE AND DISTRIBUTE PUBLIC RELATIONS MATERIAL**

In the initial stages of an IFIP it is desirable to inform new "clients" and the public about the activities of the programme. For a programme just starting, preparing and placing advertisements in the press is an effective way of alerting importers to the existence of the IFIP and their obligations. Preparing and distributing information pamphlets about the programme and its operation is useful to effectively advise the public and any other interested parties, such as foreign suppliers and foreign governments.

The central administration should be responsible for preparing public relations material while regional offices assist in the distribution.

## 7. STANDARDS AND REGULATIONS

**SUMMARY:** Food standards and regulations may cover health and safety aspects as well as quality and grading issues. They are necessary to objectively measure the acceptability of food. A codified set of national or community food standards should be adopted and used for measuring compliance of all food sold within a country. Imported food and locally produced food should be subjected to the same requirements.

### 7.1 INTRODUCTION

Food standards and regulations are the "specifications" which must be met by all food sold in a country and it is the job of the IFIP to enforce those standards and regulations at the point of entry. If documented and readily available, the food standards and regulations will make it easier for importer or traders to specify requirements to their suppliers. If a country's requirements are known and understood, the reliable importers will seek products from suppliers who can guarantee compliance with the specifications.

Codex standards, developed with considerable input and discussion by member countries and international organisations, can be adopted through a country's established legal and administrative procedures. Chapter 11 details the functions and operation of the Codex Alimentarius Commission.

### 7.2 GENERAL REQUIREMENTS AND SPECIFIC STANDARDS

There are general requirements for all food, including labelling, maximum residue limits for agricultural chemicals and veterinary drugs, maximum permitted levels of heavy metals, permitted limits of allowable food additives, and requirements for general hygiene and cleanliness. In short, the general food requirements should ensure that consumers receive a sound and wholesome product, which is correctly and adequately described.

Specific commodity standards go further than general requirements, detailing particular requirements for the commodity - for example microbiological specifications for cooked and ready to eat seafood, or rigorous standards for infant food. Particular specifications may apply to the processing method rather than the commodity - such as labelling requirements for irradiated food.

Codex has developed and published many general and specific standards, as well as codes of practice and guides. Up-to-date lists are available from the Codex Secretariat. Particularly relevant is the Code of Ethics for International Trade in Food.

Chapter 11 details the advantages developing countries can take in adopting Codex standards rather than setting up an expensive and time consuming process to develop their own standards.

### **7.3 APPLYING STANDARDS ON BEHALF OF ANOTHER COUNTRY**

Chapter 2 noted that point of entry inspection of food may be undertaken on behalf of another country. This is commonly the case in Europe, where a few very large ports are the primary entry and exit points for all of Europe.

An IFIP that acts on behalf of other countries, should use agreed or harmonised regulations and standards and sampling procedures as well as develop a reliable communication system between food control agencies. Communications are essential to notify the second or destination country of the "status" of food shipments as determined by the point of entry inspection. The "status" may be that the shipment was inspected and found in compliance, or, the shipment was not tested, or some comment about the shipment that may be of interest to the food control agency of the destination country. For example a highly perishable product may be found satisfactory at the point of entry but, poorly handled during transport, that food will no longer be safe.

The destination country may acquire information which is valuable to the agency performing the point of entry inspection. Routine inspection, consumer complaint or other sources of information may incriminate a particular imported food and it is only sensible that the point of entry inspection programme is advised. Developing good communications will enable better use of resources for both food inspection agencies.

An advisory body should be developed to discuss appropriate policy, practice and procedures of the inspection system and the "handshake" arrangements, where the inspecting country notifies the second country of action taken on their behalf.

### **7.4 STANDARD METHODS**

Standard methods of analysis are covered in Chapter 8.

## **8. LABORATORY**

**SUMMARY: ACCESS TO A RELIABLE LABORATORY SERVICE WITH THE CAPABILITY AND FACILITIES TO CONDUCT ANALYSES ON IMPORTED FOOD, IS ESSENTIAL TO THE EFFICIENT CONDUCT OF THE INSPECTION PROGRAMME.**

### **8.1 INTRODUCTION**

Throughout this manual laboratory analysis of food has been mentioned as an integral part of a complete inspection. This chapter outlines the laboratory services necessary to provide a total imported food inspection system. In many countries there are organisations which accredit laboratories which function to defined quality assurance procedures. While this manual does not detail accreditation requirements (which may differ according to the accreditation body) the fact that such organisations exist should be noted.

### **8.2 SERVICES**

In the broadest terms, the job of the laboratory is to determine the fitness for human consumption and the compliance of samples with the national (or community) food regulations and standards using analytical techniques which may or may not be specified. That will mean the laboratory service must be able to deliver to the IFIP reliable results, without delay, in an unambiguous format to operational staff of the inspection programme.

Where requirements include limits for microbiological and/or chemical criteria, expertise and capacity to perform the necessary analyses must be available. To deliver the service to the "client", (in this case the IFIP), support services will generally be part of the laboratory operation.

### **8.3 DEVELOPING A LABORATORY SERVICE**

While a sophisticated laboratory service is clearly desirable, it is not always possible where money and qualified personnel are limited.

To ensure the best possible service the nation can provide, compiling an inventory of existing facilities and capabilities is useful. For example, agencies or institutions involved with agriculture, education, medical and public health services as well as the private sector may have analytical capability applicable to food inspection. It may be possible to arrange use of some of these existing services for food inspection including IFIP work. If the policy is to develop new or additional services a list of existing services will identify where capability is lacking.



Construction of a new laboratory is a complex and challenging project which must consider the site, the building design and layout and, as much as possible, future technical developments.

Siting the building must take into account:

- . convenience - ideally near where the majority of sampling occurs, and;
- . suitability - must be isolated from insanitary areas or heavy industrial fumes and waste.

It is not within the scope of this manual to detail the many considerations needed to develop a first rate laboratory. However it must be noted that design, layout and the equipping of modern laboratories is an extremely skilled and intricate task and must involve people who have a great deal of experience in laboratory work, laboratory staff, builders, engineers and architects. The development of a laboratory facility is a task that should have by far the greatest proportion of time spent in careful and detailed planning.

#### **8.4 ANALYTICAL TECHNIQUES**

The Codex Alimentarius Commission has included in most of the elaborated standards either specifically or by reference the method of analysis to evaluate parameters of the standard. These methods are included only after endorsement by the Codex Committee on Methods of Analysis and Sampling. Codex has recognised that including prescribed methods in standards can be inhibiting, particularly for regulatory purposes, and is considering a simplification of the selection of methods of analysis.

Whatever method of analysis (either officially approved or a technique validated against official method) is used to determine the compliance of imported food samples the laboratory must be able to defend the analytical technique to disgruntled importers and hence provide confidence to the inspection programme.

For the future, the development of rapid methods may allow inspectors to perform preliminary screening analyses in the field. Such techniques would be subject to laboratory confirmation, particularly if a consignment is rejected at the border.

## 8.5 LABORATORY MANAGEMENT

The provision of accurate (and thus defensible) results is the end point of the entire laboratory management which should include:

- . recruitment of trained analysts;
- . acquiring (affordable) infrastructure and equipment;
- . development of documented laboratory procedures and practices, best achieved by a Laboratory Procedure Manual;
- . utilisation of available resources to achieve optimum service; and
- . staff training and development.

## 8.6 LIAISON WITH INSPECTION STAFF

Planning the tests to be conducted and the quantity of work must be negotiated between the IFIP and laboratory. Regular meetings to discuss items of mutual interest should be scheduled.

There may be day to day decisions about the disposition of samples which can be resolved between the IFIP and the laboratory - for example the analyst may become suspicious about a sample and want to do additional work. This may need to be discussed between the laboratory and IFIP and a decision about whether the suspicion is justified. If so, a second sample may need to be drawn.

Closer cooperation can be engendered by encouraging analysts to occasionally accompany inspectors, thereby gaining an insight into the sampling environment. Similarly, an inspector visiting the laboratory will gain an understanding of the fate of his or her samples and why certain sampling procedures are necessary. Interchanges such as this will allow both laboratory staff and inspectors to see their job as part of the whole system of imported food inspection.

## 9. CERTIFICATION

**SUMMARY:** The IFIP must be confident that the certifying agency is capable of performing the job to the required specifications - i.e. the standards of the importing country. Once an agreement is reached, validation and auditing of the certificate should become a routine part of an IFIP.

### 9.1 INTRODUCTION

This chapter is a guide to developing certification agreements and auditing or validating certificates issued under those agreements. Discussion is restricted to government to government agreements. Accepting certificates from private companies could cause the number and type of documents to proliferate, creating confusion and an unnecessary administrative burden at the point of entry, rather than confidence about the safety status of the food shipment.

### 9.2 DEVELOPING CERTIFICATION AGREEMENTS

The IFIP must have confidence in the system providing certification before accepting any certificates attesting to compliance with requirements. Confidence comes from understanding the food control system which operates in the exporting country, since that system underpins the certificates.

The IFIP must seek from the government of the exporting country specific details about the following elements of the food control system.

#### 9.2.1 Responsible agency

As competition for foreign exchange currency increases, countries are seeking ways to give themselves an advantage in securing a share of the food and agri-product market. In part, this endeavour has been responsible for existing national food control agencies implementing special export food control systems, or at least paying special attention to food for export.

Regardless of whether an exporting country has a specific arm to monitor food exports, if it issues certificates attesting to any parameter of the food, the IFIP must be provided with information on the structure of the responsible agency, including the roles of each level in the hierarchy. This is important in determining whether the organisation can deliver an appropriate level of control.

The names of contact officers must be supplied, for discussions on matters regarding the export certification system or requirements of the IFIP.

### 9.2.2 Operation of the export food control agency

The IFIP should seek details about how export food is monitored. Matters which are important in determining acceptability of certificates are as follows:

- . information on regulations and standards which food factories must meet to be eligible to export products. If factories are registered, the requirements necessary to obtain registration should be provided to the IFIP;
- . how the government controls and monitors the exporters, including the detail and type of inspection (e.g. random sampling of final product, routine sampling, full hygiene audits); how often inspections are conducted and how inspection and monitoring results are reported;
- . food inspection is gradually moving to a quality assurance based approach, where a quality system, often incorporating HACCP principles, is implemented by individual factories, and the system is then audited by the food control agency. Accepting certificates based on this system needs a good understanding of the principles and operation of the inspection scheme, but depending on the level of sophistication of the system, it can offer a solid base for certification;
- . currently, most inspection systems are based on end point sampling. The sampling intensity and method are important factors in deciding the acceptability of the system, as well as who obtains the samples;
- . list of laboratories involved. Details of the accreditation arrangements and proficiency testing procedures of laboratories are needed to ensure any reported results are based on valid methods, performed by reliable analysts;
- . legal power of the agency. Can it prevent factories with a poor record of compliance from exporting food? and
- . the level of education of the export food inspectors can be an important pointer in evaluating the commitment of the agency to ensuring high quality products.

### 9.2.3 Certificates which may be issued

There are two types of certificates which may accompany food products: general hygiene/sanitation/health certificates, or a specific endorsements on other certificates attesting to one or more parameters.

With acceptance of general health certificates, it is critical that the IFIP is confident that the arrangements described by the exporting government are capable of delivering standards required by the importing country.

Specific endorsements can be issued by an export food control agency as required. Usually these endorsements will be issued after the analysis of a sample of product, and the IFIP should ensure that samples are obtained by competent inspectors, then analysed in an accredited laboratory.

#### **9.2.4 Specimen certificates to be provided**

Where an agreement has been reached to accept certificates issued by an authority of an exporting country, specimen certificates must be forwarded to the IFIP. Inspectors must be provided with example certificates to ensure that there is no confusion at the barrier when shipments arrive accompanied by certificates. With a valid model form for comparison, inspectors can quickly check if an apparently fraudulent document is presented.

### **9.3 AUDITING CERTIFICATION AGREEMENTS**

#### **9.3.1 Document details**

Chapter 3 mentioned routine checks of documents presented on entry. Such checks are the first step in auditing certification agreements and will comprise:

- . a check that the certificate form is an original (copies should not be accepted) and the same as the specimen provided by the exporting authority;
- . reconciling the quantity against the actual amount of goods presented for inspection;
- . checking that details appear logical (e.g. was the consignment sampled within a reasonable time of shipping?) If the certifying agency has a list of approved signatories, that list must be validated as part of the document check; and
- . recording the serial number of the certificate and collecting the original document.

#### **9.3.2 Audit samples**

Regardless of whether the document has a specific endorsement or is a generic certificate, the product should meet the requirements of the importing country. From time to time the certificate should be validated by sampling and analysing the product upon arrival (e.g. 5% of shipments). The results of the analysis will indicate how well the export food control system is operating.

If adverse findings are reported, the IFIP should:

- . take the matter up with the contact provided by the certifying agency and seek a report which addresses possible reasons why the system (as well as the establishment) produced goods which did not meet specifications;
- . consider increasing the sampling frequency of goods certified by the offending agency, and/or imported from that factory; and
- . consider revoking the agreement if violations continue and there is no attempt by the certifying agency to address problems.

### **9.3.3 Auditing the system**

The right to "field audit" the certification system in the exporting country should be built in to a comprehensive agreement. If the certification agreement is based on knowledge of the system, the IFIP may have sufficient documentation to audit the operation of the system that is actually in place. Because of the cost of such an exercise, this may not happen often; to make the most of the opportunity, the auditors must be careful to remain "on course" and not be diverted to looking at only those parts of the system which the certifying agency wishes them to see.

There are alternatives to conducting expensive audit checks while still yet obtaining assurance that an export certification system is in place and operating as specified. For example, if costs are prohibitive or resources lacking, consider developing mutual recognition of audit principles, scope, reports and action with other countries importing from the same source. This would allow some sharing of responsibility as well as costs.

Also, many independent third party certification bodies are able to provide impartial assessment of systems and product, particularly where ISO 9000-type systems are concerned (see Chapter 2). It could be feasible to utilise the services of these organisations to verify foreign certification agreements, but note that third party certification bodies themselves should be able to produce evidence of accreditation with reputable accreditation councils.

## 10. DOCUMENTING THE INSPECTION SYSTEM

**SUMMARY:** The documentation of the inspection system helps every officer involved in the inspection programme to know how, what, when and where things should be done.

### 10.1 INTRODUCTION

Chapter 3 covered the operations and processes which constitute an IFIP. However, to ensure inspection and administration procedures are conducted with a uniform approach at every point of entry (necessary to provide credibility), the programme should be fully documented, including a description of its scope and operation, and responsibilities and actions for staff.

Careful documentation is a key factor in maintaining delivery of a quality service expected of a public health protection agency, regardless of changes in personnel or policy. Using an easily read format complements and guides the work of dedicated, professional staff, and provides confidence in the performance of the agency, internally as well as externally.

Some of the details which may be considered in documenting the IFIP system include:

- . organisation chart of the agency;
- . job descriptions of all personnel;
- . operating procedures;
- . important contacts; and
- . reference information about food contamination and food inspection.

These documents may be collated in a single reference manual, which fully describes the system. Such a manual should have an amendment sheet noting issue number, pages and dates of amendments.

## 10.2 OPERATING PROCEDURES

Written procedures which must be followed are the key to the system. Procedures outline who is responsible for each action, with specified time limits for those actions, and good cross referencing to other documents as necessary. In documenting procedures it is desirable that the staff concerned assist in the development and evolution of the procedures.

The procedures must be unambiguous, easily understood by responsible staff and printed in a systematic format, which can be simply updated. These procedures will be 'controlled documents', meaning that a central administration ensures that amendments to procedures required as the programme evolves, are distributed to all relevant officers, with instructions for inserting replacement pages.

## 10.3 DEVELOPING OPERATING PROCEDURES

Food inspection demands that certain functions are performed. These may be routine or specific to the commodity being inspected, and generic or specific operating procedures can be developed accordingly.

For example, regardless of the commodity, an incoming consignment will be handled the same way (notification that the food has arrived, decision about whether an inspection is required etc), up to the point that samples are drawn. Until that point, a general instruction document or procedure is most appropriate, detailing who is responsible and when a particular action must be undertaken. In short, an operating procedure details the "who, what, when and where".

Annex 3 is an example of how routine actions and responsibilities should be documented in procedural format. The detail contained will be unique to the system implemented by the agency with jurisdiction for imported food inspection, and must be devised to reflect the actual system in place, rather than what the ideal situation should be!

As some food requires special sampling and handling techniques, these should be spelt out in specific procedures, cross referenced to the general procedure. For example, the inspection of low-acid canned food requires sampling plans and particular inspections unique to that commodity. Sampling of products for aflatoxins also requires special considerations during sampling. Both of these need different treatment to sampling frozen prawns for microbiological contamination.



Practical matters of how sampling should be conducted and special considerations for certain commodities are detailed in *Introduction to Food Sampling*, No. 9 in the FAO Food and Nutrition Paper Series. However the administration of the IFIP needs to get that information to inspection staff in a recognisable, unambiguous format which includes responsibilities and time limits, and describes the necessary actions specified in the *Introduction to Food Sampling* (or specified in the food standards and regulations of the country). Staff should be able to quickly and easily focus on the information which they require to do the job at hand. Annex 4 is an example of a procedure developed to address the sampling of a specific imported food commodity, which includes FAO recommendations on sampling, presented in a format consistent with that in Annex 3.

It should be noted that where an imported food inspectorate is part of an overall food regulatory programme, sampling procedures with universal application could be developed for use in any food inspection activity which involves end point sampling.

## 11. UTILIZATION OF CODEX ALIMENTARIUS INTERNATIONAL STANDARDS AND RECOMMENDATIONS

**SUMMARY:** The Codex Alimentarius comprises a collection of internationally adopted food standards presented in a uniform manner. The standards aim at global protection of consumers' health and economic interests, and ensuring fair practices in the trade in food. The adoption of Codex standards is a sound basis for an IFIP.

### 11.1 INTRODUCTION

In the present day complex world food system it has been recognized that meeting the main requirements of a fully effective food control programme is a difficult task for any country. International cooperation and technical advice are needed to identify food hazards of universal concern, determine approaches to deal with food control problems, harmonize food safety and other requirements to promote trade and last but not least to exchange information and learn from each others experience in food control matters, for mutual benefit. As existing national food control programmes, including IFIPs, require strengthening and periodic reorientation to adapt to changing priorities and advances in knowledge and technology, food control managers must stay in touch with and carefully consider the international activities going on in this important subject area.

In the context of the above it would be useful to discuss in some detail the Joint FAO/WHO Food Standards Programme, which operates through the international inter-governmental *Codex Alimentarius Commission*, since this programme has the potential for having the maximum impact on national food control systems. There are several other activities particularly of FAO, and also of WHO, which are geared towards strengthening national food control infrastructures and providing technical assistance to developing countries in the various aspects of food control. To find out more about these activities and programmes and derive benefit therefrom, the managers would be well advised to write directly to the concerned agencies.

### 11.2 WHAT IS CODEX?

Without going into the historical or structural details here it would be sufficient to state that the Codex Alimentarius Commission is a subsidiary body of FAO and WHO, established in 1962 as a result of the joint efforts of the two international agencies. Its secretariat is located in FAO Headquarters within the Food Policy and Nutrition Division. The membership of the Commission is open to all the members and associate

members of FAO and WHO: 144 countries were Codex members at July 1993. There are no financial obligations from member countries except in terms of services from those who host a particular Codex Committee and for costs involved in preparing for and attending Codex meetings.

The *Codex Alimentarius* is a collection of internationally adopted food standards presented in a uniform manner. These food standards aim at protecting consumers' health and economic interests of a global scale and ensuring fair practices in the food trade through reduction of non-tariff trade barriers on account of food labelling, food additives, pesticide residues, veterinary drug residues in foods, food composition requirements and other safety provisions such as contaminants. The Codex Alimentarius also includes provisions of an advisory nature in the form of codes of practice, guidelines and other recommended measures to assist in achieving the purposes of the Codex Alimentarius.

The Codex Alimentarius includes standards of all the principal foods, whether processed, semi-processed or raw, for distribution to the consumer. Materials for further processing into food are included to the extent necessary to achieve the purposes of the Codex Alimentarius as defined. The Codex Alimentarius includes provisions in respect of hygiene and nutritional quality of food, including microbiological norms when considered necessary or feasible, provisions for food additives, pesticides residues, contaminants, labelling and presentation, and methods of analysis and sampling.

### 11.3 HOW DOES CODEX WORK?

The Codex Alimentarius Commission has its own Statutes and Rules of Procedure which are contained in the Procedural Manual of the Commission. The Commission functions through its various committees or subsidiary bodies - currently there are 25 subsidiary bodies plus 5 regional committees. All, like the Commission, are inter-governmental. Codex work is divided between:

committees dealing with specific foods or class of foods, called commodity committees, which work vertically in the commodities allotted to them;

committees dealing with a specific subject area of concern to all commodity committees such as food additives, pesticide residues, labelling, analysis and sampling, these so called general subject matter committees work horizontally with all commodity committees; and,

those dealing with regional matters, called regional committees i.e. for Asia, Africa, Latin America and the Caribbean, Europe, and North America and the South-West Pacific. An Executive Committee and the Commission itself coordinate the entire work. Annex 5 provides a guide to the various subsidiary bodies.

The Commission works through standing procedures which have been built up over a number of years on practical experience. At all times, the need for objectivity has influenced the development of the procedures which permit the business of the meetings to proceed efficiently while giving full opportunity for divergent views to be expressed. At the meetings, verbal argument can supplement the written comments. As the protection of consumer interests in a food in one place may effectively be damaging to another's national economy or an unfair trade practice in yet another, the practice of open discussion in the Codex forum with adequate data compels reassessment of positions. In this manner the Codex meetings are instrumental in harmonizing responses to issues relating to potential risk and foreseen benefits which get translated into Codex standards. Before a meeting adjourns the draft report is discussed, and as necessary amended and adopted.

The Codex Procedures for the elaboration of Worldwide and Regional Codex standards are as follows:

- Step 1        The Commission decides to elaborate a Standard and assigns work to a particular Committee. A decision to elaborate a standard may also be taken by a Committee.
- Step 2        The Secretariat arranges preparation of a Proposed Draft Standard.
- Step 3        The Proposed Draft Standard is sent to Governments and international organizations for comments.
- Step 4        The Secretariat forwards the comments to the nominated Committee.
- Step 5        The Proposed Draft Standard is sent to the Commission through the Secretariat for adoption as a Draft Standard.
- Step 6        The Draft Standard is sent to Governments and international organizations for comments.
- Step 7        The Secretariat forwards comments to the Committee.

- Step 8        The Draft Standard is returned to the Commission for adoption as a *Codex Standard* to be sent to Governments for acceptance.

If necessary, the Commission can use an accelerated procedure that by-passes some of the intermediate steps.

The next step is to get these Codex Standards accepted by governments so that they can become part of national food regulations and be implemented within the country's food control programme. It is only then that the country derives full benefit from this international effort. Codex procedures provide for the "acceptance" of the standard by a country as either:

Full Acceptance;

Acceptance with specified deviations; or,

A declaration that imported foods may be distributed freely within the territory of the importing country in so far as matters covered by the Codex standard are concerned.

#### 11.4        UTILIZATION OF CODEX

Problems of quality and safety of food can have a tremendous impact on the economy of a country and health and nutrition of its people, and call for most careful intersectorial assessment and follow-up action. With the Codex Alimentarius Commission dealing in these issues at a global level, many countries, both industrialized and developing, have found it necessary to establish "national Codex committees" which brief or prepare comments for the government during various steps of the development of Codex standards for presentation during the various meetings of Codex subsidiary bodies or of the Commission. Adopted Codex standards should reflect a consensus of all member countries of the Commission and timely national inputs are necessary to protect the country's interest or that of the national consumer. This coordinated effort has enabled countries with national Codex committees to examine their national food problems within a global perspective, collect technical and economic data on their food products, and carry out their own cost-benefit analysis when feasible and appropriate. No food control manager should forego the opportunity offered by such a mechanism and in fact every step should be taken to encourage the setting up of such mechanism where it does not exist.

Codex papers, reports, draft codes of practice and standards provide a wealth of technical and scientific data. These are usually organized in a

methodical manner and evaluated for consideration by the members and experts. Topical food issues are presented in terms of their significance. Sometimes they also present economic points of view offered by various member governments. Careful review of this information can be of immense value to national food control authorities in strengthening their programmes or reorienting their priorities. They also offer good training material for food control officials. Efforts should be made to keep track of this storehouse of information for the benefit of national programmes.

Besides Codex standards which are sent to the members for "acceptance" within the formally established procedures referred to earlier, it is important not to ignore the importance of various codes of practice issued by the Commission. They have fairly wide application, are based on good manufacturing practices, and deal with principles which are often universally applicable. In some respects this work on codes of hygienic and technological practices by the Codex Alimentarius commission is even more important than commodity standards to countries undertaking to form, or strengthen, food control programmes. They offer a lot of information on critical control points within the concerned food industry or product and discuss scientific and technical requirements at various steps of processing. As developmental tools within a food control system and advice to the food industry these codes provide invaluable assistance and background information. Special mention should be made of the two codes: *General Principles of Food Hygiene*, and *Code of Ethics for International Trade in Food*.

The safety of food is always of paramount importance to Codex work. Perception of safety and what is necessary to achieve it do however differ. It is well recognized that food safety is a worldwide issue both in the industrialized world and even more so in the developing countries. Codex deals with safety issues through several of its horizontal committees referred to earlier. To ensure further objectivity in the Codex Alimentarius, advice is sought and taken from FAO/WHO Joint Expert Committees (on food additives, pesticide residues, food irradiation, veterinary drug residues) which are both authoritative and independent. Those participating in these committees are experts who participate in a personal capacity rather than representing their governments or institutions. The reports of the various expert committees are sent to the governments and to Codex so that their recommendations can be considered while preparing Codex standards. The worldwide status of the expert committee reports is such that their recommendations are almost universally accepted by both industrialized and developing countries. Reference to these reports and those of the corresponding Codex committees offer an excellent resource material to food control managers in the development of their compliance policies and at the same time ensuring that the genuine concerns of the consumers and legitimate

interests of industry are protected. As most of the developing countries do not have enough resources to generate their own technical and toxicological data, particularly in matters of safety of chemicals in food, the ideal recourse open to them is to make full use of this international effort.

Consumers want information about the food they buy. For example, they want to know:

what it is?

how to prepare and use it?

what is in it and how much?

what nutrient it contains?

what is its calorie (energy) value?

They wish to have this information for a variety of reasons, but primarily in order to: be able to compare it with other products to assist in purchase decision; compare value for money; and, be able to avoid ingredients or foods they dislike or to which they have experienced unpleasant reactions.

In addition, food control authorities require identification of lots and date of manufacturing so as to be able to withdraw or recall the food if it has been found hazardous to health. To meet this latter requirement, it is almost always necessary for the industry to have its own food quality control system working. Then there are other demands, i.e. of warranty period of the food product and additional nutritional information. However, to attempt to satisfy all demands for such information would be self defeating. Apart from physical limitations imposed by package surface area, too much information does not inform, it confuses.

The work of the Codex in developing and issuing a general standard on the Labelling of Pre-Packaged Food must be regarded as a landmark, a major achievement in international recommendations for food legislation. Through the Codex Alimentarius Commission an optimal standard has been devised, that is to say that it caters to the points of interests of consumers, while the requirements of food control authorities are covered and are capable of being observed in practice. There is no prohibition on additional information being supplied voluntarily. This standard deserves careful consideration in developing national regulations and compliance policies not only for domestic food but even more so for food import and export control.

A very important aspect of Codex work which is of direct relevance to food control agencies concerns the deliberations of Regional Codex Coordinating Committees for Africa, Asia, Latin America, Europe, and North America and the South-West Pacific. These committees, particularly the first three, discuss regional issues and spend maximum time on specific food control problems. Food legislation, the need for strengthening food control infrastructures and for manpower development, technical cooperation amongst developing countries, regional priorities in terms of technical assistance, are the subjects which receive consideration. The discussions provide useful information and guidance to food control managers and international organizations such as FAO and WHO. National managers can raise various food control issues in terms of policies and seek the views of the committee concerned. Very often, such discussions help national food control officials to deal with some of the technical or managerial problems at home and assist in refining national strategies in the light of the experience of the countries in the region. As some of the national concerns in manpower development, technical assistance, food safety problems (e.g. pesticide residues) lead to determination of regional priorities, they find their way in the committees' recommendations. This in turn draws the attention of the concerned international organizations such as FAO for assistance in appropriate follow-up actions. Such an opportunity for prioritization of regional concerns is useful both for the national authorities and international organizations in order to optimize the utilization of limited resources at the two levels.

To sum up, the standards and other recommendations of the Codex Alimentarius Commission and the deliberations of the various Codex committees, particularly the Regional Coordinating Committees, offer a unique source of very useful information in various aspects of food control. Participation in the Codex work can provide the type of knowledge, experience and personal contacts that are invaluable for a national food control manager. How and to what extent all this is utilized for national benefit will depend upon the individual and the government. There is no doubt whatsoever that the technical content of any national food control system, and any IFIP, and some aspects of their management, can be strengthened by learning from the work of the Codex.



**ANNEX 1**

**MODEL OFFICIAL STAMPS**

1. Notification that inspection is required

*Imported Food Inspection Programme of .....*

**GOODS HELD FOR INSPECTION**

DATE...../...../.....

SIGNED.....

*not valid unless signed by an authorised officer*

2. Notification that goods do not require inspection and may be released

*Imported Food Inspection Programme of .....*

**GOODS RELEASED**

DATE...../...../.....

SIGNED.....

*not valid unless signed by an authorised officer*

## ANNEX 2

### DATA WHICH MUST BE COLLECTED FOR IFIP.

The data fields are listed rather than presented as a model form, as each country may have preferred form design.

#### A. DATA COLLECTED WHICH SHOULD BE PART OF THE "NOTIFICATION OF ARRIVAL OF FOOD CONSIGNMENT" OFFICIAL FORM

These details are used to:

- . notify the IFIP of the arrival of a shipment; and
  - . determine the inspection status of the consignment.
1. Date of arrival.
  2. Transport vessel (and if relevant the shipping container number).
  3. Port of arrival.
  4. Commodity.
  5. Country of origin.
  6. Port of loading.
  7. Bill of lading number.
  8. Name of the producing factory.
  9. Importer or consignee - name and address.
  10. Quantity of product.
  11. Identifying marks and lot coding information.
  12. Details about any certification accompanying the consignment.
  13. Value of consignment.

The forms should have a serial number for easy reference.

The "Notification of arrival" form may need space for an official stamp as appears in Annex 1 that either:

- . declares the consignment exempt from inspection; or
- . clearly specifies the requirement for inspection.

The necessary number of copies of the form should be considered. As a minimum the IFIP and the importer (or agent) will need a copy. Administration of charging arrangements may also require a copy if fees are levied for clearing imported food.

**B. DATA FIELDS FOR INCLUSION ON "INSPECTION REPORT OF IMPORTED FOOD" FORM**

1. Reference to the relevant "notification of arrival of imported food consignment" form
2. Date of inspection
3. Site of inspection
4. Visual inspection outcome
5. Sample details
  - 5.1 Amount of sample taken
  - 5.2 Details about lots sampled
  - 5.3 Temperature of sample (if relevant)
6. Analyses requested
7. Laboratory details
  - 7.1 Laboratory report reference number
  - 7.2 Date sample analysed
  - 7.3 Analyst (the form should include space for analysts signature)
  - 7.4 Results
  - 7.5 Comments
  - 7.6 Cost of analysis (if relevant)
8. A space for recording the final determination of fitness (or otherwise) must be included. This could be an official stamp applied by an authorised officer.

The Inspection Report Form should have a serial number for each form.

As a minimum the form should be in triplicate. One copy each for the importer and the laboratory and the original to be retained by the IFIP inspector.

### **C. IMPORTED FOOD ADVICE TO IMPORTER OF NON COMPLIANCE**

1. Date of issue
2. Reference to the relevant Inspection Report
3. Reason for non compliance
4. Options for dealing with the substandard product
5. Date by which action must be completed
6. Section for the importer to acknowledge receipt of advice

The Advice form should have a serial number for each form.

As a minimum the form should be in duplicate. One copy for the importer and the original to be retained by the IFIP inspector.

### **D. FAILED IMPORTED FOOD - FINAL ACTION REPORT**

1. Reference to the relevant "Advice to Importer of Non Compliance" form.
2. Date action was completed
3. Details of the action
  - 3.1 Destruction - method of destruction and reference to any relevant documentation.
  - 3.2 Re-export - destination port, container number and vessel to forward to authorities of the destination country.
  - 3.3 Reprocessing - details or reference to the details of the process undertaken. This may initiate a second inspection report if further samples to audit the effectiveness of the treatment is deemed necessary.
  - 3.4 Downgrading - enough detail to ensure that downgrading occurred such as receipt documents of stockfeed company.

As a minimum the form should be in duplicate. One copy for the importer and the original to be retained by the IFIP inspector. Where food is re-exported a copy should be sent to the food inspection authorities of the destination country.

The forms should have a serial number for easy reference.

## ANNEX 3

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### GENERAL PROCEDURE FOR INSPECTION OF IMPORTED FOOD

#### PURPOSE

This describes procedures for sampling, identifying samples, action on results and reporting tests carried out on imported food regardless of the particular commodity being inspected .

#### BACKGROUND

Inspection of imported food is the responsibility of (*the agency name*). A key to the success of the programme is uniform work procedures at each point of entry. This procedure outlines the framework for all administration and inspection work which allows the programme to be effective in protection of public health and aiming to ensure compliance with the (*name of the country*) food standards.

#### CIRCULATION

Imported food inspectors  
Administration staff  
Laboratory staff

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### DEFINITIONS

Batch	One or more lots, or parts of lots, of the same product from the same processing establishment, arriving in the same consignment, submitted together for inspection.
Consignment	Quantity of material covered by a particular consignment note or shipping document. May be composed of one or more batches.
Inspection by attribute	Inspection wherein the item or unit of product is either classified simply as defective or non-defective, or the number of defects in the item or unit of product is counted, with respect to a given requirement or set of requirements.
Lot	A quantity of a food prepared or packed under essentially the same conditions, ordinarily from a particular preparation or packing unit and during a particular time ordinarily, not exceeding 24 hours.
Lot code	Unique code which identifies a lot and can be used for recall purposes if necessary.
Normal sampling	Inspection level used when:  i) there is no evidence to suggest that the food is any better or worse than the required quality level, for example at the commencement of the programme;  OR  ii) the inspection system has graded the particular food at the normal level taking into account previous results.

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Exporting establishment	Source of manufacture of products, identified by name and country.
Producer	As "exporting establishment".
Reduced sampling	Inspection level used where less intensive testing, than that required for normal inspection, is sufficient;  i) based on the performance of the specific product under the inspection programme;  AND/OR  ii) a regularly audited quality assurance programme has been implemented at the production establishment;  AND/OR  iii) where goods are accompanied by acceptable certification from the government of the exporting country.
Risk level	
High	Food/contaminant combination which has severe direct implications for public health.
Medium	Food/contaminant combination which has moderate direct implications for public health.
Low	Food/contaminant combination which has low, indirect implications for public health.

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Sampled ID label	Label applied to a sample by the inspector before delivery to the testing laboratory.
Shipment	A quantity of goods entered into the country at one time for one consignee. A shipment may consist of more than one consignment, if different food from different exporting establishments are included.
Single sampling plan	A sampling plan under which inspection leads to a decision to accept or reject.
Test and hold	Batches which will not be released from bond until and unless satisfactory results are returned. Product may be given clearance for transfer between storage facilities remaining under the control of the importer.
Test and release	Batches which will be released from inspection control as soon as samples are taken. Movement authority issued by inspector.
Tightened sampling	Inspection level used where more intensive testing is required:  i) based on the performance of the specific product under the inspection programme;  OR  ii) reliable information suggests that more intensive testing is desirable or necessary.



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## RESPONSIBILITIES AND ACTIONS

### A. NOTIFICATION

1. Importers are obliged to notify (*the responsible agency*) that they wish to import a consignment of food, by presenting a completed (*official notification form*). The inspector or administrative staff shall liaise with Customs officials in the Region which receive notification of all imports to ensure that all importers are notifying (*the responsible agency*).
2. Upon receipt of information about a due food consignment, the inspector shall determine the inspection status of the consignment based on the compliance history of the exporting establishment.
3. The inspector shall inform the importer of the inspection status of the consignment by stamping the (*official notification form*) that the goods are to be inspected OR that the goods are released from bond. Official stamps must be used and signed by the authorised inspector in the space provided.
4. In the case where goods are to be inspected the importer shall arrange an inspection appointment with (*the responsible agency*). The inspector shall commence documenting the inspection details on an official *Inspection Report Form*.
5. In the case where a consignment of a product from one source is destined for a number of ports, the inspector at the first port of call shall co-ordinate the inspection in subsequent ports. The inspector shall ensure that inspectors in other ports where the consignment is to be

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unloaded are provided with identifying information on the lots which are to be sampled.

5. A copy of the (*official notification form*) shall be retained by the inspector and the details recorded using the system set up for the purpose.

## B. EXAMINATION OF CERTIFICATES

1. Inspectors shall refer to specific commodity procedures to determine certifying agencies in other countries recognised as acceptable by (*the responsible agency*).
2. Where certificates are presented the inspectors shall:
  - i) check that the certificate form is a clean original, and the same as the specimen provided by the exporting authority;
  - ii) check that details appear logical (e.g. was the consignment sampled within a reasonable time of shipping?) If the certifying agency has a list of approved signatories, that list must be validated as part of the document check; and
  - iii) check against shipping documents that the quantity of goods certified is the same as the quantity which arrived.
3. If documentation is in order, record the serial number and collect the original certificate.
4. If the inspector or documentation clerk finds any problem or anomaly with the certificate, the consignments shall be deemed uncertified and liable for inspection.

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### C. VISUAL INSPECTION

1. Inspectors shall examine products for compliance with labelling requirements as specified in the food regulations/standards.
2. Where labelling is deficient or the inspectors finds problems (eg. food which is close to expiry date or misleading information appears on the label) the inspector shall terminate the inspection and issue an official *Advice Form* to the importer.
3. Inspectors shall examine food and packaging for any obvious defects, including:
  - i) evidence of filth or damage caused by existing or previous infestation of insects and rodents;
  - ii) deterioration including obvious contamination by moulds;
  - iii) temperature abuse (particularly for refrigerated and frozen food); and
  - iv) soundness and suitability of packaging (eg. for leaks and possibility of migration of harmful substances such as lead from soldered cans).

### D. SAMPLING FOR FURTHER ANALYSIS

1. Non-commercial consignments shall not be sampled.
2. Analysis shall be requested for each lot sampled. Where separate lots are selected for sampling composites shall not be made across distinct lots.

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3. Where there is no distinct lots within batches of the consignment sampling rate shall be determined by the total quantity of product.
4. The inspector shall sample the consignment, label the sample(s) with reference to the *inspection report form* and deliver samples to the laboratory taking all precautions that conditions of transport maintain the integrity of the sample.
5. The laboratory analyses conducted shall be determined by specific commodity procedures, or the discretion of the inspector.

#### E. ACTION ON SATISFACTORY RESULTS

1. The inspector shall stamp on the form used for inspection the *official "goods released" form*. The inspector shall ensure that a copy of the form is sent to the importer.
2. A copy of the inspection report form shall be sent to the central administration within 5 days of completion to enable national determination of inspection status of exporting establishments.

#### F. ACTION ON UNSATISFACTORY RESULTS

1. Appendix A and Appendix B describes the action taken when unsatisfactory results for laboratory analysis or visual inspection occur.

### FORMS

1. Notification of arrival of food consignment

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2. **Inspection Report**
3. **Imported Food Advice of Non Compliance**
4. **Failed Imported Food - Final Action Report**

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## APPENDIX A

### ACTION ON RECEIPT OF UNSATISFACTORY RESULTS FOR FOOD HELD PENDING RESULTS

#### A. NOTIFICATION

1. The inspector shall notify by completing and distributing an *Imported Food Advice of Non Compliance Form* to:
  - i) the importer ;
  - ii) central administration; and
  - iii) any other agency which may also have jurisdiction over food within the country. (Although these agencies may have no interest in the particular consignment of product they may wish to examine product of the same origin for their own purposes).
2. The central administration shall notify with all relevant details:
  - i) the embassy of the country of origin of the product;
  - ii) authorities of the exporting country for information;
  - iii) authorities of the country of destination if the failed product is being re-exported (note - the importer must obtain written authority from officials in the destination country before re-exportation is permitted); and
  - iv) imported food inspectors in other districts.

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## B ACTION

1. If the contamination of the food is of a nature that destruction is the only reasonable alternative the importer shall not be offered other options for dealing with the consignment.
2. The inspector shall negotiate with the importer and determine the preferred option for dealing with the contaminated food providing 1 above is satisfied. *Failed Imported Food - Final Action Report Form*. Five options are available for importers and the inspector shall ensure the following points are covered for each option:
  - i) Goods Destroyed.  
An appropriate method of destruction is to be practiced.
  - ii) Re-export of Goods.  
Written authority from appropriate officials in the destination country is to be obtained. Full details of the consignment are to be recorded, and loading supervised by the inspector.
  - iii) Further processing within the country.  
If the importer chooses this option then all details about the intended process shall be provided to the inspector. If necessary the inspector shall consult with other inspection staff to determine if the proposed process is appropriate. The inspector shall be required to audit the processing performed

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ensuring that the treatment was carried out to the specification and that all the suspect product was treated. Copies of any documentation shall be taken by the inspector.

- iv) Conversion to animal feed or other approved purposes.

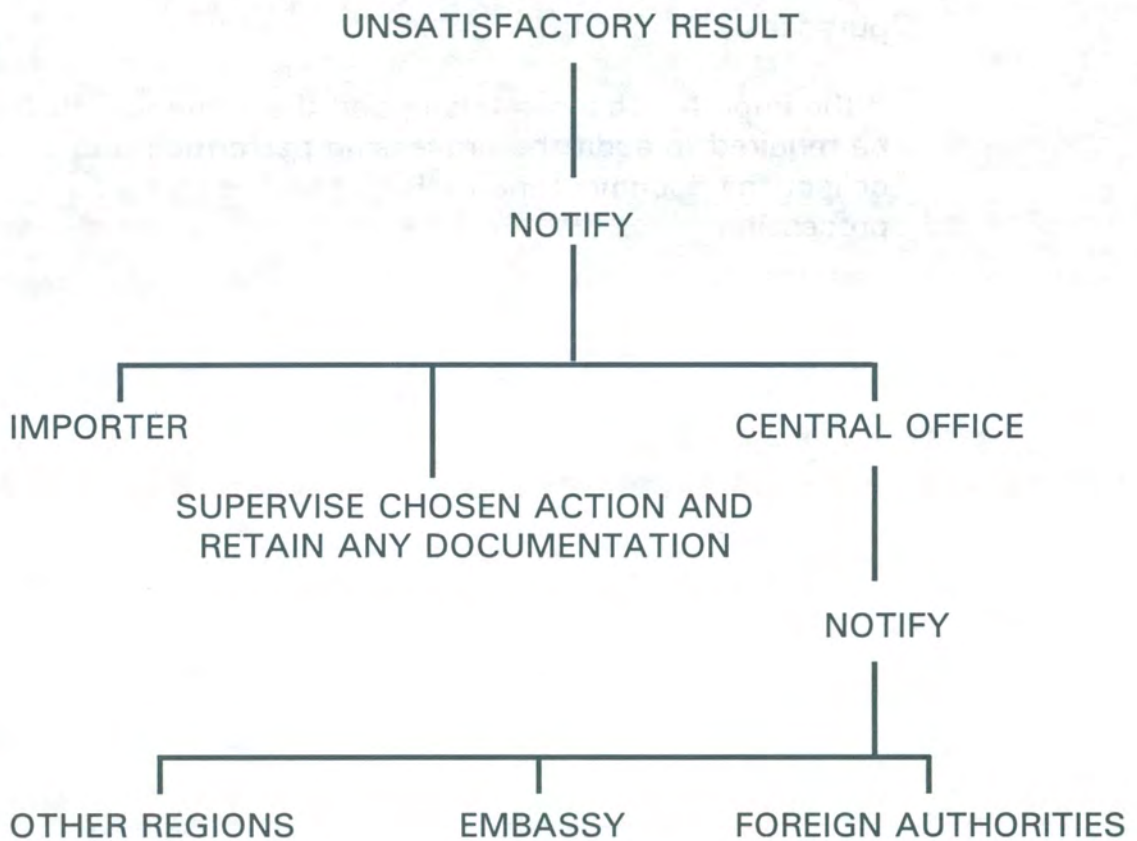
If the importer chooses this option the inspector shall be required to audit the processing performed and collect the documentation which pertains to that processing.



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Flow chart of action upon receipt of unsatisfactory results  
when goods were held pending analysis



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## APPENDIX B

### ACTION ON RECEIPT OF UNSATISFACTORY RESULTS AFTER FOOD RELEASED FROM THE INSPECTION PROGRAMME

#### A. NOTIFICATION

1. The inspector shall complete an *Imported Food Advice of Non Compliance Form* and notify:
  - i) the importer;
  - ii) central administration; and
  - iii) other relevant agencies for information and action.  
(If the matter is considered serious enough a food recall must be initiated).
2. Central administration shall notify with all relevant details:
  - i) the embassy of the country of origin of the product;
  - ii) authorities in other countries - for information; and
  - iii) other regional office imported food inspectors.

#### B. ACTION

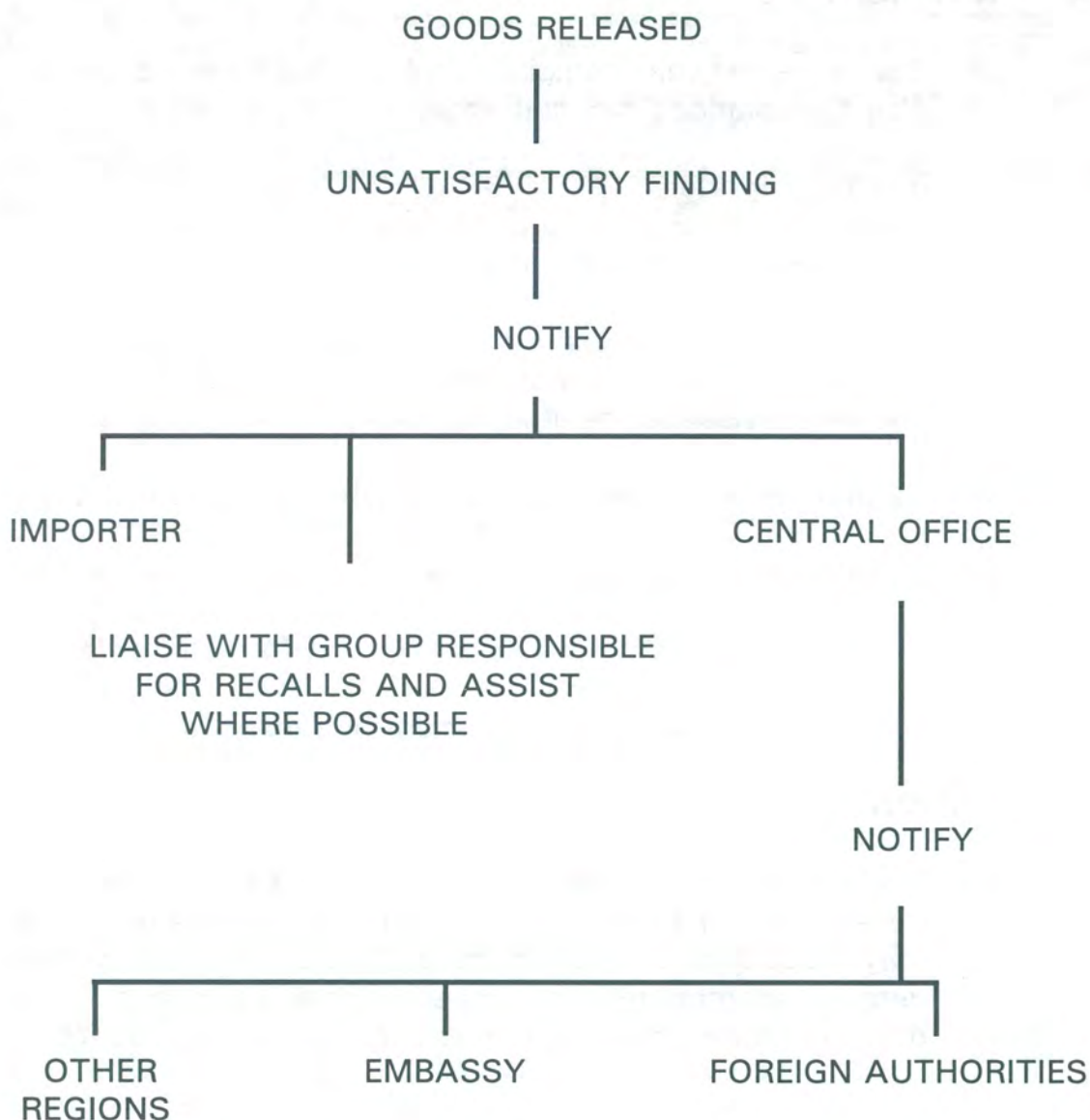
1. The inspector shall follow-up action taken by the body responsible for food recall, and assist where possible. This may include supervision of the destruction or other action deemed appropriate. The inspector shall retain any documentation which relates to the fate of the product.

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2. The inspector shall ensure that the relevant section of the *Failed Imported Food - Final Action Report Form* are completed.

Flow chart of action on receipt of unsatisfactory results after food has been released from the inspection programme



## ANNEX 4

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### PROCEDURE FOR SAMPLING OF PEANUTS FOR AFLATOXIN

#### PURPOSE

This procedure documents how sampling for aflatoxin in peanuts (ground nuts) shall be conducted and the rates of sampling to be used.

#### BACKGROUND

Aflatoxins are toxic substances produced under certain conditions by some species of *Aspergillus* fungi. Carcinogenic effects have been associated with consumption of very low levels of aflatoxins, hence aflatoxin contaminated peanuts are considered a serious health risk.

The growth and harvest conditions of peanuts can lead to growth of the mould species which produce aflatoxins. The infestation can be such that parts of a lot of peanuts have a high concentration of aflatoxin while other parts are less affected. Because of this, visual inspection should be thorough, and sampling for laboratory analysis should target areas within the batch which appear to contain mould affected peanuts.

The Codex limit for aflatoxin in peanuts is 20 g per kg.

#### CIRCULATION

Imported Food Inspectors  
Administration staff  
Laboratory staff

Imported Food  
Inspection Programme

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### **DEFINITIONS**

See general procedure

Peanut (or groundnuts) Shelled or unshelled kernels, roasted or raw.  
Usually transported in 20kg or 50kg bags.

### **RESPONSIBILITIES AND ACTION**

#### **A. PRE-SAMPLING**

1. The inspectors shall follow action specified in Section A. of Procedure No. 001. - General Procedure for Inspection of imported food.
2. If a shipment arrives accompanied by a recognised foreign government certificate the inspectors shall take action as specified in Section B of the General Procedure. Appendix 1 of this procedure lists the agencies and gives specimen certificates provided by foreign country governments which are recognised and accepted for certifying aflatoxin level in peanuts.

#### **B. SAMPLING**

1. Non commercial consignments (less than 10kg) shall not be sampled.
2. The inspector shall conduct a visual examination as described in Section C of the Procedure 001 (General Procedure for Inspection of Imported Food) and also shall examine the consignment looking for bags with obvious damage due to moisture or mould growth. Conditions which favour mould growth occur against walls or in the centre of a stack. Any

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damaged bags shall be opened and the peanuts inspected for mould infestation which usually makes the kernel dark and discoloured.

3. If visual inspection reveals damaged bags then the inspector shall select those bags for sampling, plus enough randomly selected sound bags to total the square root of the total number of bags.
4. If all bags are in good condition then randomly select the square root of the total number of bags for sampling.
5. Samples shall be drawn using a trier which is capable of reaching the centre of a bag.
6. For each bag selected for sampling and analysis the inspector shall draw a 500 gram sample and immediately transfer it to an appropriate sample container.
7. Each sample shall be individually labelled. Refer to the General Procedure for Inspection of Imported Food for label details required for laboratory samples.
8. Details of the consignment and the samples drawn shall be recorded on the *official inspection report form*, which shall be clearly marked that the goods are held until and unless results of analyses indicate that the consignment has less than 20 g per kg.
9. A copy of the *official inspection report form* shall be provided to the importer at the time the samples are drawn.

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### C. LABORATORY

1. The inspector shall request analysis for total aflatoxin.
2. The laboratory shall follow procedures outlined in the *laboratory manual* and report results within (x) working days.
3. Results shall be recorded on the *inspection report form* including the laboratory report reference number and forwarded to inspection staff on the day of completion or the following working day.

### D. ACTION ON SATISFACTORY RESULTS

1. The inspector shall take action specified in section E of the General Procedure.
2. Results of the inspection shall be forwarded to Central Administration within two working days of finalising the inspection.

### E. ACTION ON UNSATISFACTORY RESULTS

1. The inspector shall take action specified in section F of the General Procedure.
2. Results of the inspection shall be forwarded to central administration cell the same day as received from the laboratory.

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### **FORMS**

1. Notification of arrival of food consignment
2. Inspection Report
3. Imported Food Advice of Non Compliance
4. Failed Imported Food - Final Action Report

### **REFERENCE**

Introduction to food sampling - FAO Food and Nutrition Paper 14/9,  
Manuals of Food Quality Control, Rome, 1988



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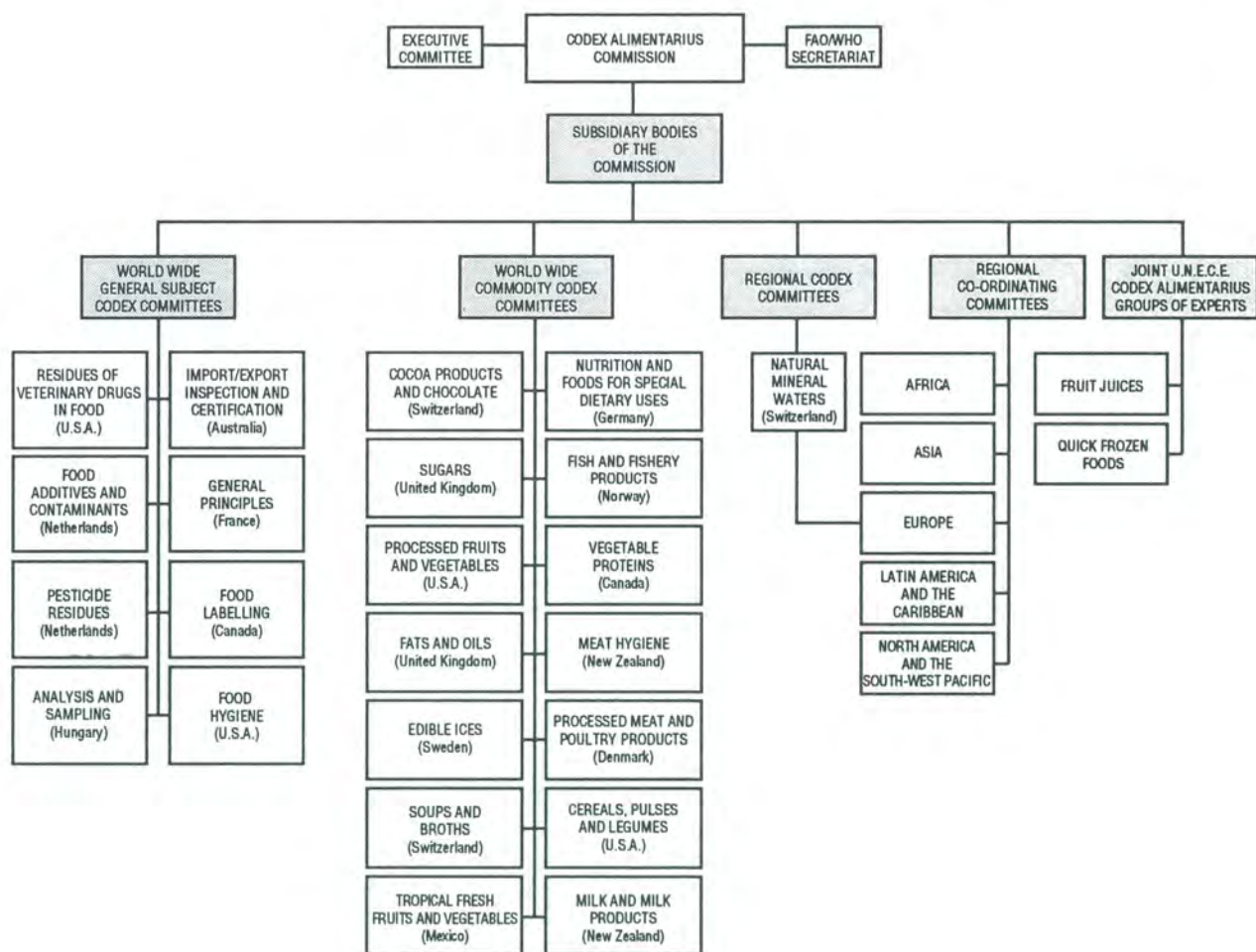
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## APPENDIX 1

### CERTIFICATES PROVIDED BY FOREIGN GOVERNMENT AGENCIES DEEMED ACCEPTABLE TO CERTIFY AFLATOXIN LEVEL IN PEANUTS.

(This Appendix should list in detail the name of the agencies which have negotiated agreements with the authorities of the importing country. Where agreements have been negotiated a validated specimen of the certificate which must accompany certified consignments should be provided as part of this Appendix).

## Subsidiary bodies of the Codex Alimentarius Commission



## FAO TECHNICAL PAPERS

### FAO FOOD AND NUTRITION PAPERS

1/1	Review of food consumption surveys 1977 - Vol. 1. Europe, North America, Oceania, 1977 (E)	19	JECFA specifications for identity and purity of carrier solvents, emulsifiers and stabilizers, enzyme preparations, flavouring agents, food colours, sweetening agents and other food additives, 1981 (E F)
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2	Report of the joint FAO/WHO/UNEP conference on mycotoxins, 1977 (E F S)	21	Mycotoxin surveillance - a guideline, 1982 (E)
3	Report of a joint FAO/WHO expert consultation on dietary fats and oils in human nutrition, 1977 (E F S)	22	Guidelines for agricultural training curricula in Africa, 1982 (E F)
4	JECFA specifications for identity and purity of thickening agents, anticaking agents, antimicrobials, antioxidants and emulsifiers, 1978 (E)	23	Management of group feeding programmes, 1982 (E F P S)
5	JECFA - guide to specifications, 1978 (E F)	23 Rev.	1. Food and nutrition in the management of group feeding programmes, 1993 (E)
5 Rev.	1. JECFA - guide to specifications, 1983 (E F)	24	Evaluation of nutrition interventions, 1982 (E)
5 Rev.	2. JECFA - guide to specifications, 1991 (E)	25	JECFA specifications for identity and purity of buffering agents, salts; emulsifiers, thickening agents, stabilizers; flavouring agents, food colours, sweetening agents and miscellaneous food additives, 1982 (E F)
6	The feeding of workers in developing countries, 1976 (E S)	26	Food composition tables for the Near East, 1983 (E)
7	JECFA specifications for identity and purity of food colours, enzyme preparations and other food additives, 1978 (E F)	27	Review of food consumption surveys 1981, 1983 (E)
8	Women in food production, food handling and nutrition, 1979 (E F S)	28	JECFA specifications for identity and purity of buffering agents, salts, emulsifiers, stabilizers, thickening agents, extraction solvents, flavouring agents, sweetening agents and miscellaneous food additives, 1983 (E F)
9	Arsenic and tin in foods: reviews of commonly used methods of analysis, 1979 (E)	29	Post-harvest losses in quality of food grains, 1983 (E F)
10	Prevention of mycotoxins, 1979 (E F S)	30	FAO/WHO food additives data system, 1984 (E)
11	The economic value of breast-feeding, 1979 (E F)	30 Rev.	1. FAO/WHO food additives data system, 1985 (E)
12	JECFA specifications for identity and purity of food colours, flavouring agents and other food additives, 1979 (E F)	31/1	JECFA specifications for identity and purity of food colours, 1984 (E F)
13	Perspective on mycotoxins, 1979 (E F S)	31/2	JECFA specifications for identity and purity of food additives, 1984 (E F)
14	<i>Manuals of food quality control:</i>	32	Residues of veterinary drugs in foods, 1985 (E/F/S)
14/1	Food control laboratory, 1979 (Ar E)	33	Nutritional implications of food aid: an annotated bibliography, 1985 (E)
14/1 Rev.	1. The food control laboratory, 1986 (E)	34	JECFA specifications for identity and purity of certain food additives, 1986 (E F**)
14/2	Additives, contaminants, techniques, 1980 (E)	35	Review of food consumption surveys 1985, 1986 (E)
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18	Bibliography of food consumption surveys, 1981 (E)		
18 Rev.	1. Bibliography of food consumption surveys, 1984 (E)		
18 Rev.	2. Bibliography of food consumption surveys, 1987 (E)		
18 Rev.	3. Bibliography of food consumption surveys, 1990 (E)		

- 43 Guidelines for agricultural training curricula in Arab countries, 1988 (Ar)
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- 47/2 Utilization of tropical foods: roots and tubers, 1989 (E F S)
- 47/3 Utilization of tropical foods: trees, 1989 (E F S)
- 47/4 Utilization of tropical foods: tropical beans, 1989 (E F S)
- 47/5 Utilization of tropical foods: tropical oil seeds, 1989 (E F S)
- 47/6 Utilization of tropical foods: sugars, spices and stimulants, 1989 (E F S)
- 47/7 Utilization of tropical foods: fruits and leaves, 1990 (E F S)
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- 48 Residues of some veterinary drugs in animals and foods, 1990 (E)
- 49 JECFA specifications for identity and purity of certain food additives, 1990 (E)
- 50 Traditional foods in the Near East, 1991 (E)
- 51 Protein quality evaluation. Report of the Joint FAO/WHO Expert Consultation, 1991 (E F)
- 52/1 Compendium of food additive specifications - Vol. 1, 1993 (E)
- 52/2 Compendium of food additive specifications - Vol. 2, 1993 (E)
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***Imported food inspection* contains guidance on internationally recognized approaches to the establishment and operation of an imported food inspection programme. Its target audience is those national food control authorities that are charged with protecting consumers' from unsafe food. It is also a valuable reference for those whose business includes trading internationally in food. Topics covered include the philosophical justification for imported food controls, the different approaches that can be taken, the legal underpinning of the system, the actual inspection procedures that need to be performed, essential support services, the basics of certification and the development and content of procedural manuals.**

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