



East, Central and Southern Africa Health Community
Fostering Regional Cooperation for Better Health

**MANUAL FOR INSPECTION OF FORTIFIED FOODS AT THE POINTS
OF ENTRY AND MARKET SURVEILLANCE IN THE
EAST, CENTRAL, AND SOUTHERN AFRICA (ECSA) REGION**

SECOND EDITION - 2020

I. Foreword

ECSA-HC has been working with partners in direct response to resolutions of the Conference of Health Ministers to scale up Food Fortification initiatives as a critical strategy in managing micronutrient malnutrition among populations of the member states.

Part of the outcome of the intensified collaborative initiatives, was the development of ECSA food control manuals to enhance monitoring and inspection of the fortified food vehicles and smooth implementation of the national food fortification programs.

During the Food Fortification workshop held in Arusha, Tanzania in September 2015, three working groups, co-implemented by ECSA-HC and GAIN and supported by USAID, were formed:

- i). Production, Food Safety and Quality Assurance/Quality Control.
- ii). Inspection and Enforcement; and
- iii). Consumption Monitoring and Program Impact. The groups were tasked with identifying capacity and resource gaps and proposing ways of filling these gaps in each of the technical areas. Subsequently, they identified priority activities and targets and developed road maps on how the activities would be implemented to achieve the set targets. Target 2 of the Inspection and Enforcement working group was to review the Regulatory Monitoring Frameworks used by countries in the region. To inform this review, a workshop was organized for this group at the Imperial Resort Beach Hotel in Entebbe, Uganda from the 7th to 10th November 2016. Its aim was to review the existing guidelines (that countries are using) for gaps and weaknesses and use recommendations from this review to develop a harmonized and practical guideline that all countries can adopt and apply in the inspection and enforcement of fortified foods and specialized nutritional products. A key recommendation of the Entebbe workshop was that

the inspection manuals be merged and developed into two guidelines namely internal and external monitoring of fortified foods and that of commercial and points of entry inspection guidelines.

This guideline on inspection of fortified food at the points of entry and markets is one of the guidelines on food fortification monitoring and is meant to directly contribute to the overall effort to strengthen food fortification in the region.

It is our hope that the use of this guideline will help strengthen food control activities in our countries to deliver safe and quality fortified foods to the ECSA population.

Director General

East, Central and Southern Africa-Health Community

II. Acknowledgement

This guideline has been developed by the ECSA Health Community Secretariat with technical support from GAIN and financial assistance from USAID and The Bill and Melinda Gates Foundation.

ECSA-HC is sincerely grateful to all officials from various government institutions in particular the food control departments and National Standards Bodies of the following ECSA countries: Burundi, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Rwanda, Swaziland, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. Your contributions towards development, review and finalization is highly acknowledged.

ECSA-HC appreciates the Dormus Food Safety System Consultants who contributed to the development of this manual.

Disclaimer

The content of this manual can be adapted to suit country specific contexts. In such a case, the content of the resulting document will be the sole responsibility of the organization adapting the manual and will not represent the views of the authors and that of the ECSA-HC. The Use of the content of this manual should be duly acknowledged.

III. Table of Content

I. Foreword.....	ii
II. Acknowledgement	iv
III. Table of Content	vi
IV. Acronyms and Abbreviation	viii
V. Operational Terms and Definitions.....	1
SECTION 1	3
1.1 Introduction.....	3
1.2 Scope of the manual	6
1.2.1 Scope.....	6
1.2.2 Application	6
1.2.3 Normative references – ECSA Standards	6
1.3 Requirements	7
1.3.1 General Requirements for Inspections at POE and at Commercial/ Market Level.....	7
(A) Planning Inspections	7
(B) Inspections.....	8
(C) Coordination.....	8
a. Inspection at the Points of Entry (POE)	9
i. Purpose.....	9
ii. Procedures for Inspection and sampling at the Points of Entry (POE).....	9
3.1 Market Level Surveillance.....	14
3.1.1 Purpose	14
3.1.2 Planning for market Surveillance.....	14

3.1.3	Procedures for market/commercial inspection.....	15
4.1	Laboratory Analysis of Samples and Reporting	18
	ANNEXES.....	22
	Annex 1: ECSA 2007 GUIDELINES FOR FORTIFICATION LEVELS OF OILS & FATS, EDIBLE SALT, SUGAR, WHEAT FLOUR AND MAIZE FLOUR.....	22
	Annex 2: Table A – 1 INPECTION AT IMPORTATION SITES.....	23
	Annex 3: Table A – 2 REPORT OF INSPECTION AT IMPORTATION SITES.....	24
	Annex 4: Table B – 1 COMMERCIAL MONITORING	25
	Annex 5: Table B – 2 COMMERCIAL MONITORING	26
	Bibliography.....	27

IV. Acronyms and Abbreviation

CoA	Certificate of Analysis
ECSA - HC	East, Central and Southern Africa Health Community
FFI	Food Fortification Initiative
FIFO	First-In-First-Out
GAIN	Global Alliance for Improved Nutrition
HACCP	Hazard Analysis of Critical Control Points
NI	Nutrition International
NFFA	National Food Fortification Alliance
POE	Points of Entry
PHC	Project Healthy Children
QA/QC	Quality Assurance/Quality Control
SOP	Standard Operating Procedures
TWG	Technical Working Group
WFP	World Food Programme

V. Operational Terms and Definitions

Certificate of Analysis

Document issued by a competent laboratory containing the actual results obtained from testing performed as a part of quality control o an individual batch of a product that confirms that the product meets set specifications.

Certificate of Conformity

Document issued by an authorized party (sometimes the supplier) indicating that a specific batch of a product meets technical and safety. May not include actual test results.

Commercial Inspection

Is the verification of legal compliance of premixes and fortified foods sold in retail supermarkets, markets, grocery stores, and wholesale stores. It also includes inspection at bakeries as a convenient sampling site for fortified foods namely salt, sugar, flour and oil.

Commercial Monitoring

Is the activity of reviewing and analyzing the performance how well the foods are fortified at the production level and thus may serve to identify sites that require an additional audit and inspection visit.

Inspection at POE or Import Monitoring

The inspection of raw materials and food from other countries at border points to determine the quality and safety before distribution.

Market Place

Area or arena in which people buy or sell provisions, livestock and other commodities

Points of Entry (POE)

“Point of entry” means a passage for international entry or exit of travellers, baggage, cargo, containers, conveyances, goods and postal parcels as well as agencies and areas providing services to them on entry or exit;

Premix

A homogenous combination of vitamins and minerals added to staple foods which does not affect the taste, smell, texture and or cooking properties of the food.

Sampling

Selection of a subset of a product or material from a specific batch or lot to estimate the characteristics of the whole batch or lot.

SECTION 1

1.1 Introduction

Since the mid-1990s with financial and technical support from USAID and other international development partners, countries of the ECSA Region have established food fortification programs to complement the nutritional value of common diets. From 2003 to 2011, the ECSA Health Community (ECSA-HC) worked with partners on a regional effort to coordinate the implementation of food fortification programs among countries within the region, including support on harmonization of standards, development of manuals for food quality control and inspection, and monitoring and evaluation at the ports of entry and market place.

ECSA-HC has had review workshops for ECSA member states on the use of these manuals. Two of the manuals, *“Manual for inspection of fortified foods at importation sites”* and *“Manual for commercial inspection of fortified foods”* were recommended to be merged into one document entitled *“Manual for inspection of fortified foods at the point of entry and market”*.

The purpose of this manual, *Manual for inspection of fortified foods at the port of entry and market*, is to provide government officers with a simple tool for assessing the extent to which importers of fortified foods comply with local regulations related to food fortification and that the foods placed in the market comply with fortification requirements. The process mainly involves reviewing documentation and declarations on accompanying COA/COC, food labels and collecting food samples. This is achieved by reviewing the Certificate of Conformity or Analysis (COA) accompanying imported food batches as well as collecting samples at ports of entry and testing them qualitatively on site.

When deemed necessary and appropriate, composite samples of each brand or batch are prepared on a timetable that can realistically be accommodated by the program given human and financial resource constraints and sent out for quantitative tests to accredited or authorized/certified laboratories to confirm information of the COA. The purpose of the quantitative tests is to review and validate the decision taken at the importation site based on positive qualitative tests. If anomalies are identified through the quantitative testing, the results provide a basis for alerting border officials on which failing brands need more scrutiny.

Commercial monitoring occurs in the marketplace where consumers purchase or otherwise obtain fortified foods and emphasizes a review of product labels and packaging. When resources are available, government food inspectors may also collect product samples for qualitative and quantitative testing. The analysis results are indicative of how well the foods are fortified at the production level and postproduction handling (transportation and storage) and thus may serve to identify sites that require an additional audit and inspection visit. They also reveal the number of micronutrients that are generally delivered to consumers who consistently eat the fortified food. However, commercial monitoring should never take the place of external and import monitoring since fortification standards specify the micronutrient levels that must be present in fortified products at the production level, not the commercial level. For this reason, commercial level findings are not valid for compliance determination or legal enforcement of fortification regulations and standards. Instead, commercial monitoring provides an indication of how well the program is being implemented.

This is because during transportation and storage, fortified foods may be subjected to natural elements, such as water, heat, and sunlight, which have the potential to negatively impact product quality. Given that food producers do not have control over the entire food distribution system, they cannot be automatically penalized

for issues noted at the commercial level. This therefore calls for quality monitoring of standards at the POE to ensure marketplace do not receive products of poor quality.

Furthermore, commercial monitoring serves as an education tool since food inspectors are able to inform the retailers about the existence of the fortification program, the benefits of fortification, their role as retailers and their rights as consumers.

Commercial monitoring is the responsibility of the food control authorities, in cooperation with other governmental bodies in charge of enforcing these regulations where they are different. Food control authorities together with other relevant agencies are responsible for preparing the sampling plan and providing the technical training to carry out the inspections.

This manual describes the procedures for carrying out the inspection visits at any retail store selling fortified foods. It also describes responsibilities at every stage of commercial monitoring/market monitoring.

Results of both inspection at POE and commercial monitoring activities should be consolidated in reports to be issued periodically as per the monitoring plan. The reports will assist in defining the degree of success in fulfilling the fortification goals and spell out obstacles that need to be overcome and actions to be taken. It is further recommended that an annual report be prepared and published where data is presented graphically to describe the status of the fortification program in the country, along with information from external monitoring, other general food control or surveillance activities and household/specialized nutrition surveys.

The procedures described in this manual are applicable to fortified foods including oils, sugar, salt, wheat flour and maize flour, and are divided in two categories namely;

- i). Inspection of fortified foods at Points of Entry (POE)
- ii). Commercial inspection of fortified foods at the market level

1.2 Scope of the manual

1.2.1 Scope

This manual provides the guidelines and requirements for inspection of fortified foods, including premix at the ports of entry and at the market level. It is also intended to provide guidelines on the minimum documentation requirements and guidance for inspection, sampling and submission of samples for testing.

1.2.2 Application

These guidelines are primarily applicable to premixes, fortified flours, edible salt, sugar, edible fats and oils at the Points of Entry (POE) and at the market level. They may also be used for other fortified food products. The guidelines are for use by official food inspectors, customs officers and other relevant regulatory agency officers as described by each member state regulations.

1.2.3 Normative references – ECSA Standards

In application of these guidelines, ECSA 2007 guidelines for fortification level of edible oils & fats, edible salt, sugar, wheat flour and maize flour (as annexed to these guidelines as **Annex 1**) are indispensable. Where the guidelines have been adopted or adapted by countries, the relevant national standards and/or technical regulations should be used as the normative references. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

1.3 Requirements

1.3.1 General Requirements for Inspections at POE and at Commercial/ Market Level

(A) Planning Inspections

The purpose of planning for inspections at the POE and commercial inspection visits is to ensure that resources to conduct the visits are allocated and that inspectors receive appropriate training on how to assess the compliance of fortified foods at both levels. Therefore, planning should identify:

- i). The POE and commercial markets where inspection and sampling will be conducted
- ii). The type of food vehicles to be inspected and sampled
- iii). Number of inspectors to be involved
- iv). Duration of the exercise
- v). Training needs of inspectors
- vi). Equipment to be used
- vii). Sampling procedure
- viii). Number of samples to be collected, sample coding and preparation of composite samples
- ix). Transportation of samples to the laboratory for analysis, as relevant
- x). Laboratory tests to be conducted and format of laboratory report, as relevant

B. Budgeting for Inspections

Estimate the financial resources that will be needed as per the plan in 1.3.1 (A) considering the personnel, transportation and fuel, approximate number of samples to be analyzed and the cost of purchase of samples and analysis, and any other materials that are necessary) to be used.

(B) Inspections

Zone the entire country markets according to population density, amount of food sold, and risk factors such as proximity to borders with other countries where the food is not fortified. Zones with high population and high risk shall be assigned high priority and inform the scheduling of the inspections at market level.

(C) Coordination

Designate a leader for the visits who should ensure cooperation and coordination amongst all relevant regulatory agencies involved in the enforcement of the regulations as this is important in order to perform the exercise effectively and make efficient use of resources.

SECTION 2

a. Inspection at the Points of Entry (POE)

i. Purpose

The purpose for assessing the minimum requirements prior to authorizing entry is:

- i). To ensure that the imported products are accompanied by adequate documentation to certify that national standards and regulations are being fulfilled.
- ii). To confirm that the food complies with fortification conditions based on the national regulation and standards presence of one or more key micronutrients in the imported fortified food depending on the standards of the importing country.

ii. Procedures for Inspection and sampling at the Points of Entry (POE)

The inspection checklist or relevant documents should contain the following steps:

(A) Step 1: Reviewing of documents and labelling

- i)** Designated authorities should assess imported fortified products at points of entry points using an audit checklist that is developed specifically to ensure the imported products meet national requirements for imported fortified foods. Similar to the checklist used to evaluate surveillance of products, this checklist should address food quality, safety, and fortification adequacy to verify that the compliance evidence presented by importers is acceptable. This is done by reviewing the documents that usually certify the safety (and sometimes quality) of the imported product and examining the Certificate of Conformity or Analysis, issued by a government authority or an officially

recognized body from the country of origin, which is supported by laboratory analysis and that declares that the food fulfils the regulations established in the importer country.

- ii)** Examine the packaging and the labeling to make sure that it indicates the brand name, batch number, country of origin and manufacturer address and expiry date/ Best before date. The food must comply with the food labeling standards, as well as the labeling requirements established in the regulations for fortified foods such as micronutrient levels and language on packaging. Inspectors should also look out for false health claims that may be contrary to set guidelines in the country. Inspection data shall be recorded in the Inspection Form, Table A-1 (**Annex 2**).
- iii)** In case of bulk import there should be adequate labelling and accompanied with the relevant documents
- iv)** It is the sole responsibility of the importer to confirm the accuracy of claims and documentation.
- v)** A total score may be tallied and compared against the predetermined pass/fail parameters for the checklist.

(B) Confirm the presence of key micronutrients to authorize entry

Step 2: Qualitative Testing

“Passing” Audit Checklist Results:

- i)** A country’s import sampling plan is critical since it may not be possible to test every import consignment. If the result of the review of import documents is satisfactory then the inspectors may or may not take samples.

ii) Form Table A-1 (**Annex 2**).

iii) Depending on the result of the qualitative analysis of the samples taken, the authorities can make a decision to accept or hold the consignment pending further quantitative analysis.

It is important to have continuous linkage and cooperation between points of entries inspection and market surveillance to ensure safety and quality of food products in the market. Continuous market surveillance will trigger intensive inspections including sampling and testing at the POE thus assisting in profiling of importers based on their compliance to the national requirements for the products.

2.1.3 Records and Reporting samples to the lab

In all cases, the food inspector shall duly complete Inspection Form Table A-2 (**Annex 3**) relating to import inspection and forward samples for testing at the designated or official Laboratory. Results of both qualitative and quantitative analysis should be kept by the food control agency at the importation sites. Border inspectors should submit a report to the national/central offices, as well as the food fortification committee, every 6 months indicating the dates, brands, amounts, and actions taken.

(A) Objectives and Accountability

The purpose of documenting compliance in terms of micronutrient content is:

- i) To provide documented evidence that imported brands comply with national regulations and standards based on laboratory reports of quantitative tests performed on samples of imported foods.

- ii) To provide a basis for issuing specific quality improvement recommendations to importers.
- iii) To warn the officials at importation sites of failing brands that deserve more stringent examination.

(B) Records at the POE

The Head of the Food Laboratory shall submit a report to the POE Control Office and the supervisor of inspectors at the corresponding importation site.

- i) Whenever a sample fails the quantitative test, the Boarder Control Office/Port Health Officials/Food Control Authority shall immediately send to the importer a letter informing them of the failure and the action being taken by the authority. The letter should also state that new consignments arriving after the date of the warning letter will be subjected to immediate quantitative testing even if it passes the qualitative test before the consignment can be released.
- ii) When the brand fails, the quantitative test described in 2.1.2.7.2 (2), a letter shall be sent to all importation sites advising them to quarantine all new consignments until the laboratory results confirm that technical requirements are complied. This special treatment shall end on instruction from the laboratory confirming compliance.
- iii) The Head of the Food Control Unit in charge of inspection of the imported foods shall prepare a consolidated report **every 6 month** with all the results based on the type of food, and indicating brands,

country of origin, amount imported, micronutrient tested and the corresponding analytical results, and actions taken as provided in Table A -2 (**Annex**

SECTION 3

3.1 Market Level Surveillance

3.1.1 Purpose

The purpose of the inspection guidelines is to ensure that:

- i). Fortified foods comply with the requirements established in the national standard for general labeling of prepackaged foods and that they have been approved by relevant regulatory authority.
- ii). Fortified food items sold on the market or used in bakeries comply with national criteria for micronutrient fortification or the recommended levels as specified in **Annex 1**.

3.1.2 Planning for market Surveillance

(A) The purpose of planning for commercial monitoring visits is to ensure resources including competent human resource to conduct the visits at retail stores around the country throughout the year are allocated.

(B) Covering the planning for market inspection shall be conducted.

- Budgeting
- Scheduling
- Resource allocation and approval/authorization
- Capacity building of inspectors and testing laboratory personnel

- i) List of approved brands per food. This list should be updated every 3 months or more frequent if needed.

3.1.3 Procedures for market/commercial inspection

The regulatory agency/authority inspectors are responsible for checking compliance of packaging and labeling, and storage conditions, handling and reporting of non-conforming product and including handling condition for taking samples of the foods for analysis. They should report on the results of their visits to their supervisor. The supervisor is then responsible of sending samples to the central office, and for consolidating the reports on the findings and reporting every quarter to the Head of the Food Control Authority. In turn, the Food Control Authority should prepare consolidated reports every 6 months and send to other government agencies and auxiliary bodies, such as the Nutrition departments and National Food Fortification Alliance, involved in the supervision of the food fortification programs. This process can be adjusted according to national structures

Surveillance can be done at least once a year based on the risk factors of the product.

3.1.4 Conducting Inspection Visits to Retail, Wholesale Stores and Bakeries

- A) Inspectors shall conduct inspections to markets or supermarkets, bakeries and distribution centers in the villages, including every premise the product is being sold towns and cities, where most people buy their supplies.

- B) Inspectors should enter the store and show their credentials identifying them as inspectors of the food control authorities. They should follow on with a brief explanation about the purpose of the visit.
- C) They should record the name and address of the store (town, village, district, others, date of visit, name and address), in Table B-1 (**Annex 4**).
- D) Inspectors should be able to identify the approved brands sold in the store and using Table B-1 (**Annex 4**) they should record the name of the product, presence of the fortification logo, the expiration date and lot/batch number if specified.
- E) Select a sealed package of about the smallest possible sample which is more than one and adequate for the intended of each brand of each fortified food in the store. If the food is not available in such quantities, take the nearest larger retail-size presentation. If packages are much smaller, collect sufficient packages to make up the specified weight; (e.g. 2 packages of 250 g). The inspector shall purchase the samples or acquire them as specified by local arrangement for acquisition of samples.
- F) If the food is sold by weight or volume from large sacks or a barrel, sample using the specified sampling method or if lacking, take approximately 0.5 kg or 0.1 L sample from this food product. Ensure that the sack or the barrel is new; otherwise there is no guarantee that the product inside corresponds to the factory name in the container. Prior to sending the samples to the laboratory, the lab must be notified on the samples to be sent.

G) Sample handling should be as specified by the member state standard. If there is no standard then each sample shall be labelled using an appropriate code for each brand, and consecutive numbers for each sample of each brand. Code of each brand can be modified during the year.

Pack the samples inside a box and transport them to the local Food Control office, for analysis.

H) Upon arrival at the Food Control headquarters, the responsible authority shall split the samples into two.

Send one duplicate sample to the designate laboratory. Keep the other as reference until the results from the laboratory are received and acceptable or incase the results are disputed, then the reference sample can be tested.

3.2 Records and Reporting

The supervisor of the food control inspectors should keep records of the plan, schedule and estimated budget. The information is to be reported to the Head of the Food Control Authority.

SECTION 4

4.1 Laboratory Analysis of Samples and Reporting

A laboratory can receive samples from the market and POE. However, the laboratory needs to be notified in advance to make the necessary arrangement for the analysis of the same.

4.1.1 Sample collection, preparation and handling:

Samples are collected and prepared in accordance with national standards. For bulk products such as oil and flour, composite samples based on brand are then prepared by mixing equal amounts (approximately 500 g or 100 mL) of the single positive samples. Up to 5 single samples may be mixed in the same composite sample.

4.1.2 Sample labelling and transportation:

The samples are clearly labelled with the following as prescribed and packaged to protect the integrity and then transported to the designated testing laboratory

4.1.3 Qualitative analysis:

Upon receipt of the samples, the laboratory should first detect the presence of the marker micronutrients in all individual samples using qualitative tests. Qualitative analysis can also be done at the POE/inspection site.

4.1.4 Quantitative analysis:

Can be done to conform qualitative testing, especially when a legal action is required.

4.1.5 Summary Reports:

The laboratory prepares both qualitative and quantitative analysis reports of all the samples and submitted to the relevant authority. The information generated will be used to inform decisions. It is important that information sharing between authorities and industry is key in improving the fortification program across the region. Table B-2 (Annex 5).

4.1.6 Actions for on compliance/fail tests:

Define the actions to be taken when non-compliance is found during a visit. These actions might include warning letters and legal actions, which should be considered within the legal framework of the food control work. Actions taken need to align with legal frameworks.

The following actions are suggested:

Retailer, wholesaler or bakery:

- i). At the retail and wholesale level, when a brand is not on the approved list or registered with the relevant regulatory agency/authority to be marketed in the country, the product shall be quarantined, and investigation started. When it is confirmed that the brand or producer is not registered, then the product should be confiscated.
- ii). In the case of bakeries, they shall prepare bread and other foods derived from wheat flour, oil, salt and sugar, using only products that have been approved. If unauthorized product is found in a bakery, the case should be treated as in (i) above.

- iii). If a brand is registered for commercialization, but it is expired or shows signs of spoiling or non-hygienic conditions, the product should be quarantined, and the case reported to the relevant regulatory agency/authority to take the proper action.
- iv). Micronutrient testing is not carried out at this level; the food samples would be sent by the supervisor of the local food inspection to the central Food Control Authority office together with the report forms.

(A) When a brand does not meet the minimum legal requirements (micronutrient content, labeling and packaging) depicted in the fortification regulations, a warning letter shall be sent to the factory, packaging plant or importer responsible for the brand. Sampling priority should be given to these brands in future visits. Extra visits to the factories might be considered within the external monitoring activities.

(B) If the brands belonging to a specific factory consistently fail to comply with the legal minimum, the food control authorities should consider organizing a comprehensive audit visit and if there is proof that noncompliance is intentional, they should apply the prescribed legal actions, which may include the banning of the brand.

4.1.7 Laboratory Records and Reports

(A) Laboratory reports are sent to the individual responsible for the food fortification program in the Food Control headquarters, and the supervisor of food control in the corresponding local office.

(B) Every 6 months, the Food Control Authority should prepare a consolidated report from the commercial monitoring, broken down by brand and geographical area, presenting the percentage of samples showing the presence of the nutrient, below the legal minimum, within the legal range, and above the upper tolerable level, as well as any action taken when failures were detected. These reports should also be forwarded to the National Coordinating Committee of the Fortification Programs, as well as the supervisors of food inspectors in all the local offices.

ANNEXES

Annex 1: ECSA 2007 GUIDELINES FOR FORTIFICATION LEVELS OF OILS & FATS, EDIBLE SALT, SUGAR, WHEAT FLOUR AND MAIZE FLOUR

Fortified Food	Presence (All single samples tested must show presence of indicator micronutrient)	Levels (80% of composite samples of each brand comply with the minimum and maximum levels of micronutrient)
Edible Oil	Vitamin A (Retinol)	Retinol: 10 – 45 mg/L
Sugar	Vitamin A (Retinol)	Retinol: 2 – 15 mg/kg
Refined Wheat Flour	Vitamin A (Retinol) and Iron	Retinol: 0.5 – 3 mg/kg Iron: > 40 mg/kg
Whole Wheat Flour	Vitamin A (Retinol) and Iron	Retinol: 0.5 – 3 mg/kg Iron: > 40 mg/kg
Refined Maize Flour/maize meal	Vitamin A (Retinol) and Iron	Retinol: 0.2 – 1.0 mg/kg Iron: > 15 mg/kg
Whole Maize Flour/maize meal	Vitamin A (Retinol) and Iron	Retinol: 0.2 – 1.0 mg/kg Iron: > 30 mg/kg
Salt	Iodine	Iodine: 20 – 60 mg/kg

Annex 2: Table A – 1 INPECTION AT IMPORTATION SITES

Date **POE** **District/County/Sub-county**

Name of Inspector:		Supplier Address:	Batch Numbers and Size (MT):
Product:	Brand:	Variety of Food (refined, whole, others):
Country of Origin:		Certificate of Conformity:	
Shipping Record ID:		Importer:	
		Name and Address:	
Product Examination, Labeling information ¹			
	Adequate	Inadequate	Comments
Brand Name			
Manufacturer			
Nutrient Claims			Specify nutrients
Expiry/Best Before Date			
Batch Number			
Presence of Indicator Nutrient			Based on qualitative test on three samples per brand and per truck (consignment)
Action:			Signature:

¹ Mark with a tick (✓) in the adequate or inadequate boxes where applicable

Annex 3: Table A – 2 REPORT OF INSPECTION AT IMPORTATION SITES

REPORT OF IMPORT INSPECTION

Date	Product (Food Type)	Brand	Country of Origin	Amount (MT)	Tested Micronutrient	Qualitative Test (+ or -)	Action Taken

Annex 4: Table B – 1 COMMERCIAL MONITORING

LABELING OF BRANDS AND COLLECTION OF SAMPLES IN RETAIL STORES AND BAKERS

Page No.

Date: Place (Village/Town/Neighborhood/City:

Name of Inspector: District/County/Province/Sub-county:

Name of Store: Store Owner: Address:

Sample No.	Food	Brand	Labeling Information					Observations
			Fortification logo	Responsible	Lot No.	Expiry date	Health/Nutritional Claims	

Annex 5: Table B – 2 COMMERCIAL MONITORING

LABORATORY REPORT OF MICRONUTRIENT ANALYSIS IN RETAIL STORE SAMPLES

Date:	District/County/Province/Sub-county:
Name of Inspector:	Type of Food:

Brand	Nutrient Tested	Number of Samples Tested	Single Positive Samples		Composite Samples (mg/kg) ²			
			Number	%	Number	< Min	Min – T. Max	> Tol. Max

Report Date:

Name:

Signature:

² Ensure composite sample is taken from same brand or different batches for bulk deliveries meant for repackaging.

Bibliography

- ECSA. (2007). Manual for external monitoring of fortified maize flour, (1st Ed.). Arusha. ECSA.
- ECSA. (2007). *Manual for external monitoring of oil fortified with Vitamin. A*, (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for external monitoring of fortified salt.*(1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for external monitoring of iodized salt in small scale operations*, (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for external monitoring of sugar with vitamin A at fortification sites*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for external monitoring of fortified wheat flour*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for internal monitoring of fortified maize flour*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for internal monitoring of fortified maize flour in small scale operations*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for internal monitoring of oil fortified with vitamin A*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for internal monitoring of salt fortified with iodine*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for internal monitoring of iodized salt in small scale operations*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for internal monitoring of fortified sugar fortified with Vitamin A*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for internal monitoring of sugar premix containing vitamin A*. (1st. Ed). Arusha, ECSA.
- ECSA. (2007). *Manual for internal monitoring of fortified wheat flour*. (1st. Ed). Arusha, ECSA.