



Part 3: General Quality Assurance and Quality Control of Commercial Monitoring

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Commercial inspection is the verification of legal compliance of 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 cooking oil. This monitoring allows for the detection in the market of brands that are not approved by the Ministry of Health or do not comply with local fortification regulations. It also helps to confirm whether brands that have previously been inspected in factories and importation sites are indeed fulfilling the requirements as claimed by inspectors during the external monitoring process. When non-compliance is observed in certain brands, this type of monitoring provides a warning signal to indicate that the quality control and quality assurance procedures are not adequate in the factories and that actions must be taken to ensure compliance by the food manufacturers, packagers and importers. In such a situation there is need for improvement of the enforcement system.

Furthermore, commercial monitoring serves as an education tool since 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.

Results of commercial monitoring activities should be consolidated in reports to be issued quarterly. The reports assist defining the degree of success in fulfilling the fortification goals and spells out obstacles that need to be overcome and actions to be taken.

Inspectors of the Ministry of Health and Social Welfare and the Ministry of Commerce and Industry will conduct commercial monitoring at the market level.

Frequency of Inspections

- Wholesalers and retailers should be inspected at least once per quarter.
- All inspections must be unannounced.



Scope of Inspections

- Inspectors should fill out the attached forms for each brand in the market. The forms must include brand name information as it is our means of tracking the importers that will be held responsible in cases of non-compliance.
- Qualitative tests using the BASF test kits should be done for at least 2 brands of cooking oil and sugar each quarter. At least one composite sample for each brand should be sent to the NSL for testing; therefore the brands tested must vary each quarter.

Number of samples to be tested quantitatively – number based on ensuring at least each brand is represented from each county

County	Population	% of population	Samples to test at NSL				Capital
			# OIL	# FLOUR	# SUGAR	# SALT	
			40	50	30	90	
Number of recognized brands			3 Brands	4 Brands	2 Brands	5 Brands	
Bomi	82,036	2%	3	4	2	5	Tubmanburg
Bong	328,919	9%	4	5	4	10	Gbarnga
Gbarpolu	83,758	2%	3	4	2	5	Bopolu
Grand Bassa	224,839	6%	3	4	2	5	Buchanan
Grand Cape Mount	129,055	4%	3	4	2	5	Robertsonport
Grand Gedeh	126,146	4%	3	3	2	5	Zwedru
Grand Kru	57,106	2%	3	4	2	5	Barclayville
Lofa	270,114	8%	3	4	2	10	Voinjama
Margibi	199,689	6%	3	4	2	5	Kakata
Maryland	136,404	4%	3	4	2	3	Harper
Montserrado	1,144,806	33%	10	12	8	20	Bensonville
Nimba	468,088	13%	6	8	4	10	Sanniquellie
Rivercess	65,862	2%	3	4	2	5	Cestos City
River Gee	67,318	2%	3	4	2	5	Fish Town
Sinoe	104,932	3%	3	4	2	5	Greenville
15 counties	3,489,072	100%	95	122	70	193	

Objectives and Accountability

The purpose of the inspection visits to retail, wholesale stores, and bakeries is to ensure that:



- Fortified foods comply with the requirements established in the national standard for general labeling of prepackaged foods and that they have been approved.
- Fortified food items sold on the market or used in bakeries comply with national criteria for micronutrient fortification.

Procedure

Visits by Inspectors

- Inspectors take samples as scheduled.
- When inspectors arrive in the villages, towns or cities, they should visit the most popular grocery stores, markets or supermarkets, bakeries and distribution **centers**, where people buy their supplies.
- Inspectors enter the store and show their credentials identifying them as inspectors. They follow on with a brief explanation about the purpose of the visit, for example:
“Hello, how are you? We’re inspectors from the Ministry of Commerce and Industry’s Standards Department. Among other things, we are here to make sure that wheat flour, cooking oil, salt, and sugar are being distributed according to Liberia’s standards. If this is not the case, we will have to take the product from the shelf.”
- They record the name and address of the store (town, village, district, others) and date of visit (in Table 1). A sealed packaged of about 1 kg of two brands of fortified food in the store is chosen. Stores may have more than two brands. If this is the case, select only two, and the next time the store is visited, select different brands.
- Inspectors must pay for the food commodities from the stores and save the receipt for instant reimbursement through the Standards Director at MoCI.
- For bakeries, take approximately 0.5 kg flour using the equipment received. For samples from 50 kg bags or from bakeries, package them in polyethylene bags and seal and label them with a permanent marker.
- After samples have been selected, take 500g or 500ml of each and put them in the right packaging. Salt, sugar, wheat flour must be put into the zip lock backs. These are sealed instantly, labeled, and themselves put into the black plastic bags to ensure that the samples aren’t contaminated. The 500mL oil sampling bottles are filled. All samples must be put into the cooler right away.
- The cooler containing all samples is taken to the Director of Standards of the MoCI along with all of the inspection forms.

Correct Labeling

- Fortified foods must be correctly identified with a label. A label should include at least the brand of the product, the address of the responsible entity, and the Legal Minimum Level of the nutrient and, if industry development allows, also the date of minimum durability, the batch number and the production date.



- Inspectors are able to identify the approved brands sold in the store and using Table 1 they should record name, the expiration date and lot number if specified. It is especially essential to know the brand name of the commodity, since this is how importers are traced.
- Inspectors must ensure that packaging contains the ENRICHED logo.

Labeling samples and sending them to the laboratory for analysis

- Label each sample including county/district/town/market of origin (as specific as possible), brand name, date of inspection, commodity (flour, salt, sugar or wheat oil).
- The sample ID consists of the county number¹ and sample number.
- Send samples to the Director of Standards of the MoCI, who will transport the samples straight to the NSL, after compiling all the forms.
- If anomalies are found, then a technical comprehensive auditing of the responsible factory or importation firm would be warranted through the NSL.

Analysis of the samples

- Upon receipt of the samples, the laboratory should first detect the presence of the key micronutrients in all samples using qualitative tests.
- If there are samples that come from the same brand, the laboratory may mix up to 5 single samples from the same composite sample. Quantitative determinations are then carried out for key micronutrients.
- The laboratory prepares reports that include the total number of single samples per brand, the number and percent of positive single samples per each micronutrient tested qualitatively, and the individual results of the quantitative tests of each micronutrient analyzed in the composite samples per brand. Results could be categorized in the following micronutrient levels: below the legal minimum, within the legal range, above the upper tolerable level.

Records and reporting

The **Standards Director** from MoCI receives the samples and the reports from the standards officers. **Standards Director** will send the sugar, salt, wheat flour and oil samples to the National Standards Laboratory for further testing within 24 hours.

¹ Please refer to Table 2 of this document for the county numbering.



Table 1: Inspection form for commercial inspections:

Name and Address of entity being inspected:						Date of Inspection:				
Inspector Name:						Store/Bakery/Market Representative Name:				
Inspector Phone Number:						Representative Number:				
Food Vehicle:		RESULT OF QUALITATIVE TEST: FORTICANT (Vitamin A, Iron)				EXPIRATION DATE	ENRICHED LOGO ON PACKAGING		NUTRIENT LABEL CLAIMS	IMPORTER NAME OF PRODUCT IF INDICATED ON PACKAGING AND COUNTRY OF ORIGIN
Sample I.D.	BRAND	County	DISTRICT, MARKET	Present	Not Present		PRESENT	NOT PRESENT		
			-		-	-	-	-		
			-		-	-	-	-		
			-		-	-	-	-		
			-		-	-	-	-		-
			-		-	-	-	-		-



Table 2: County Codes – NFA Code for samples

Bomi	1
Bong	2
Grand Bassa	3
Grand Cape Mount	4
Grand Gedeh	5
Grand Kru	6
Lofa	7
Margibi	8
Maryland	9
Montserrado	10
Nimba	11
Rivercess	12
Sinoe	13
Rivergee	14
Gbarpolu	15