

File No. 15023/02/2017-QA (pt-2)
Food Safety and Standards Authority of India
(A statutory Authority established under the Food Safety and Standards Act, 2006)
Regulatory Compliance Division
FDA Bhawan, Kotla Road, New Delhi-110002

Dated, the 15th October, 2019

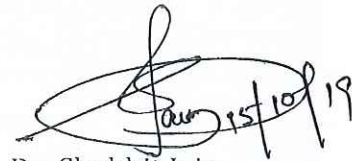
Subject: Scheme of Sampling and Testing to be adopted by dairy processing plants for the purpose of self-monitoring & strengthening of internal controls.

The National Milk Safety and Quality Survey (NMQS) conducted by FSSAI in 2018 showed high level of non-compliance in quality as well as safety parameters in standardised processed milk. This suggests that internal systems of monitoring safety and quality are deficient either due to faulty design or lax implementation which needs to be addressed.

2. It has been decided that the dairy processing plants should follow a standardized Scheme of Sampling, Testing and Inspection (Annexure 1) for monitoring of internal controls to ensure safe and good quality supply of milk and milk products to consumers. This scheme will be effective from 1st January 2020. All dairy processing plants shall maintain appropriate records in this context which would be verified during surveillance visits/inspections.

3. This issue with the approval of the competent Authority in exercise of the power vested with Food Authority under Section 16 (5) of the FSS Act, 2006.

Encls: As above



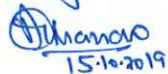
Dr. Shobhit Jain

Executive Director (Compliance strategy)

To,

- (i) Commissioner of food safety of all states/UTs
- (ii) All Food Business Operators
- (iii) All Central Licensing Authority
- (iv) CITO, FSSAI: For uploading this direction on website

For uploading -


15.10.2019

IT Associate (Sh. Kamaal)

SCHEME FOR SAMPLING, TESTING AND INSPECTION FOR DAIRY PROCESSING

PLANTS

To ensure the safety and quality of milk supplied to consumers, FSSAI has developed a Scheme for Sampling, Testing and Inspection to be implemented by dairy processing establishments to strengthen the internal controls through self-monitoring. The scheme has to be implemented at all the dairy processing establishments as per the frequency mentioned in the enclosed document. The establishments shall ensure that the samplers have adequate knowledge of sampling of raw and processed milk from different locations as per the scheme.

The scheme stipulates the sampling points, test methods, frequency of sampling and permissible limits as per FSSR. The establishment may consider to increase the sampling points and sampling frequency as per their requirement with respect to capacity and production process.

The dairy processing establishments shall have a well-equipped in-house laboratory for testing microbiological and other chemical parameters. The testing shall be done by qualified and trained laboratory personnel. In case of unavailability of in-house facilities for test parameters that require advanced analytical equipments, the tests may be carried out at FSSAI notified lab. The details of FSSAI notified labs are available at www.fssai.gov.in.

The establishments shall maintain all the test records at least for a period of one year in addition to the documents and records listed in Part 3 of Schedule 4 of Food Safety and Standards (Licensing and Registration) Regulations, 2011. The results of all such tests shall be made available to the official of Food Authority or Food Safety Commissioner for verification as and when required.

In case any non-compliance is reported and deviation can be corrected without affecting the safety and quality of milk, then it should be re-processed and again

tested to ensure that re-processed milk conforms to all the requirements. However, if there is a non compliance on parameters which can not be corrected even by re-processing like presence of residues, adulterants etc., the entire batch shall be rejected. In case it's already under process, then production shall be stopped immediately. The production shall be resumed only after carrying out root cause analysis for the non compliance, corrective and preventive action is taken and its effectiveness verified during subsequent testing. The records of all such investigation shall be maintained.

Any rejected material which is potentially re-saleable be destroyed or disposed off in such a manner that it can not be used for any other purpose. A separate record shall be maintained giving information on quality and batch no. as applicable, relating to all such rejections/defective/sub-standard material of the production not conforming to the requirements and the method of its disposal. Such material shall in no case be stored together with that conforming to the specification.

The scheme document, format of reporting and minimum lab facility/ equipments required to establish in- house testing facility at raw milk reception dock is annexed.

SCHEME OF TESTING AND INSPECTION FOR MILK

S.No	INSPECTION CHARACTERISTIC	INSPECTION/TEST METHOD *	SPECIFICATION / LIMITS	INSPECTION POINT				TESTING FREQUENCY	
				Raw milk reception / Release (Raw milk can/ Milk tanker)	Standardization / Pasteurization (Silo / Milk Storage tanks)	Filling (Filling Area)	Finished Goods / Products (Pouch / Despatch milk tanker)	Raw Milk	Processed Milk
1	Seal	Visual Inspection	Ok	✓				Every Tanker	-
2	Appearance	Visual Inspection	White to cream color, Odour typical of fresh milk.	✓	✓		✓	Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
3	Taste and Flavour (Organoleptic evaluation)	Sensory Evaluation	Satisfactory	✓	✓		✓	Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
4	Foreign matter	Visual inspection/Filteration	Absent	✓	✓			Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
5	Temperature	Thermometer	at max 6 deg	✓ (only raw chilled milk)	✓	✓	✓	Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
6	Fat	Chemical extraction, Gerber Method, electronic	Specified as per FSSR	✓	✓	✓	✓	Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
7	SNF	Density, Gravimetric, electronic	Specified as per FSSR	✓	✓	✓	✓	Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
8	SMP (for species identified milk and mixed milk)	Chemical	Negative	✓				Every Tanker/Container	-
9	Acidity	pH, Titration	Min. 0.10% Max 0.15 % (as lactic acid), pH 6.5-6.8	✓	✓	✓	✓	Every Tanker	Every Batch or Silo or hourly in case of continuous line
Adulterants									
10	Cellulose	Chemical	Negative	✓	✓	✓	✓	Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
11	Starch	Chemical	Negative	✓				Every Tanker	-
12	Formaline, H ₂ O ₂ Boric acid	Chemical (Henners Test) electronic	Negative	✓				Every Tanker	-
13	Detergents / Caustic Soda	Chemical, electronic	Negative	✓				Every Tanker	-
14	Vegetable oil / Fat	Chemical, electronic	Negative	✓				Every Tanker	-

S.No	INSPECTION CHARACTERISTIC	INSPECTION/TEST METHOD *	SPECIFICATION / LIMITS	INSPECTION POINT				TESTING FREQUENCY	
				Raw milk reception / Release (Raw milk can/ Milk tanker)	Standardization / Pasteurization (Silo / Milk Storage tanks)	Filling (Filling Area)	Finished Goods / Products (Pouch / Despatch milk tanker)	Raw Milk	Processed Milk
15	Maltodextrin	Chemical	Negative	√				Every Tanker	-
16	Dextrose (=glucose)	Chemical (Diastix), electronic	Negative	√				Every Tanker	-
17	Urea	Chemical, electronic	700 mg / Kg	√				Every Tanker	-
18	Sucrose(Cane sugar)	Chemical, electronic	Negative	√				Every Tanker	-
19	Salts (NaCl, KCl)	Chemical, electronic	Negative	√				Every Tanker	-
20	Neutralizer (Carbonate, bicarbonate, percarbonate)	Chemical, electronic	Negative	√	√	√	√	Every Tanker	Every Batch or Silo
21	Nitrates	Chemical, electronic	Negative	√				Every Tanker	-
22	Ammonium Sulphates	Chemical	Negative	√				Every Tanker	-
	Chemical Contaminants							Every Tanker	

S.No	INSPECTION CHARACTERISTIC	INSPECTION/TEST METHOD *	SPECIFICATION / LIMITS	INSPECTION POINT				TESTING FREQUENCY	
				Raw milk reception / Release (Raw milk can/ Milk tanker)	Standardization / Pasteurization (Silo / Milk Storage tanks)	Filling (Filling Area)	Finished Goods / Products (Pouch / Despatch milk tanker)	Raw Milk	Processed Milk
23	Pesticides residue (with isomers)	Chemical, chromatographic, electronic	Specified as per FSSR	✓				Every 3 months from each supply source	-
24	Antibiotic / Veterinary Drugs residues	Beta Lactam (Delvotest)	Specified as per FSSR	✓				Weekly from each supply source	-
25	Aflatoxin M1, max.	Chemical, chromatographic, electronic	0.5 µg / Kg	✓				Every 2 months from each supply source	-
26	Melamine	Chemical	Specified as per FSSR				✓	Every months from each supply source	-
	Microbiological Contaminants								
27	MBRT	Dye reduction	Min 30 Minutes for raw chilled milk & Min 5 Hrs 30 Mts for Pasteurised milk	✓				Every Tanker	Every Batch or Silo or hourly in case of continuous line
28	Phosphatase	Chemical, Dye reduction	NA		✓			-	Every Batch or Silo or hourly in case of continuous line
29	SPC/ml**	Pour plate method, electronic		✓			✓	Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
30	coliform/ml**	Pour plate method, electronic		✓			✓	Every Tanker/Container	Every Batch or Silo or hourly in case of continuous line
SCHEME OF TESTING AND INSPECTION FOR WATER SUPPLY FOR DAIRY PROCESSING UNIT (As per IS 4251)									
31	Taste & odour	sensory evaluation	free from objectionable taste and odour						
	pH	pH meter	6.5-9.2						
	TDS	TDS meter	1000 mg/l max						
	Hardness	Titration	600 mg/l						
	Chloride	Titration	250 mg/l max						
	coliform/100ml	Membrane filtration method, MPN method	Less than 1MPN						
SPC/ml	Pour plate method		50						

Note: *FSSAI Manual of Methods of Analysis for Milk and Milk Products and any other appropriate method which includes BIS test methods, AOAC test methods, FSSAI approved Rapid kit or test methods as applicable

**It is only a hygiene indicator