Notice Calling for suggestions, views, comments etc from WTO- SPS Committee members on the draft Food Safety and Standards (Food Products Standards and Food Additives) Amendment Regulations, 2017 relating to meat and meat products, fish and fisheries products, microbiological requirement for meat and extension of scope of proprietary food.

File No. 1-116/Scientific Committee (Noti.)/2010-FSSAI.-

2. In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 (hereinafter referred to as the said regulations), -

(a) in regulation 2.5,-
(i) in sub-regulation 2.5.2, -

(A) for clause 7, the following clause shall be substituted, namely:-

"7. Fresh/Chilled/Frozen Pork (Pig meat):

(a). Scope.-

This standard applies to products designated as "Fresh/ Chilled/ Frozen Pork" which includes raw pork whole carcasses, pieces, cuts or edible offal that have been packed in any suitable packaging material.

(b). Description.-

(i) Product Definition

(1) Pork means the edible portion of domestic pigs.

(2) Fresh pork means pork that has not been treated in any way to ensure its preservation.

(3) Chilled pork means fresh pork subjected to chilling in such a way that the product is maintained at temperature of 0 -7 °C.

(4) Frozen pork means chilled pork subjected to freezing in appropriate equipment in such a way that the product is maintained at temperature of -18° C or colder.

(5) Pork edible offal means edible by products derived from slaughtered pig which includes brain, liver, gut, paunches, tripe, lungs, etc.

(c). Types.-

Pork shall be of the following three types:

(i) Fresh/Chilled/Frozen carcasses

(ii) Fresh/Chilled/Frozen cuts

(1) Ham

(2) Shoulder

(3) Loin

(4) Tender loin

(5) Spare-rib

(6) Butt

(iii) Fresh/Chilled/Frozen edible offals

(d). Composition and safety standards.-

(i) Composition.- final product shall have moisture, protein and fat content ranging from 70 % to 72 %, 20 % to 22 % and 5 % to 6 %, respectively.

(ii) Ante -mortem and Post-mortem Examination.- ante-mortem and post-mortem inspection shall be done in accordance with guidelines specified in Part IV of schedule 4 of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011.

(iii) Shelf life.- pork must be stored in refrigeration (4±1° C) for short time storage and deep freezer (-18±1° C) for long term storage or by any other suitable method to maintain quality. The chilled material should be consumed within 2 to 4 days under normal refrigeration conditions of storage. Frozen meat shall be consumed within 10 months.

(B) after clause 7, the following clauses shall be inserted, namely:-

8. Fresh/ Chilled/ Frozen Beef:

(a). Scope.-

This standard applies to products designated as "Fresh/ Chilled/ Frozen Beef" which includes raw beef whole carcasses, pieces, cuts or edible offal that have been packed in any suitable packaging material.

(b). Description.-

(i) Product Definition

(1) Beef means the edible portion of bovine animals including buffaloes.

(2) Fresh beef means bovine meat that has not been treated in any way to ensure its preservation.

(3) Chilled beef means fresh bovine meat subjected to chilling in such a way that the product attains a temperature of 0 to 7 °C.

(4) Frozen beef means chilled bovine meat subjected to freezing in an appropriate equipment in such a way that the product attains a temperature of -18° C or colder.

(5) Beef edible offal means edible by-products derived from slaughtered bovine animals which include brain, liver, gut, paunches, tripe, lungs, etc.

(c). Types.-

Beef shall be of following three types:

(i) Fresh/Chilled/Frozen carcasses

(ii) Fresh/Chilled/Frozen cuts

1) Round
2) Top Side
3) Silver Side
4) Knuckle
5) Rump
6) Sirloin
7) Short Loin
8) Tender Loin
9) Flank

10) Rib
11) Short Plate
12) Square-cut
13) Chuck
14) Chuck Tender
15) Brisket
16) Blade
17) Shin and Shank

(iii) Fresh/Chilled/Frozen Edible offals

(d). Composition and safety standards.-

(i) Composition

Final product shall have moisture, protein and fat content ranging from 68 to 77 %, 17.5 to 23.5 % and 8 to 12 %, respectively. For buffalo meat, the fat content shall be ranging from 1 to 3 %.

(ii) Ante-mortem and post-mortem inspection

Ante-mortem and post-mortem inspection shall be done in accordance with guidelines specified in Part IV of schedule 4 of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011.

(iii) Shelf life

Cattle meat must be stored in refrigeration (4±1º C) for short time storage and deep freezer (-18±1º C or below) for long term storage or by any other suitable methods to maintain quality. The chilled material should be consumed within 2 to 4 days under normal chilling conditions of storage. Frozen meat shall be consumed within 12 months.

9. Fresh/ Chilled/ Frozen Chevon (Goat Meat)

(a). Scope.-

This standard applies to products designated as "Fresh/ Chilled/ Frozen Chevon" which includes goat whole carcasses, pieces, cuts or edible offal that have been packed in any suitable packaging material.

(b). Description.-

(i) Product Definition.-

(1) Chevon means the edible portion of domestic goats.

(2) Fresh Chevon means goat meat that has not been treated in any way to ensure its preservation.

(3) Chilled Chevon means fresh goat meat subjected to chilling in such a way that the product attains a temperature of 0 to 7 °C.

(4) Frozen Chevon means chilled goat meat subjected to freezing in an appropriate equipment in such a way that the product attains a temperature of -18° C or colder.

(5) Chevon edible offal means edible by products derived from slaughtered goat which includes brain, liver, gut, paunches, tripe, lungs, etc.

(c). Types.-

Chevon shall be of following three types:

(i) Fresh/Chilled/Frozen carcasses

(ii) Fresh/Chilled/Frozen cuts

(1) Legs
(2) Loins
(3) Racks
(4) Breasts
(5) Shanks
(6) Shoulders

(iii) Fresh/Chilled/Frozen Edible offals

(d). Composition and safety standards.-

(i) Composition: final product shall have moisture, protein and fat content ranging from 74 to 76 %, 20 to 22 % and 2 to 4 %, respectively.

(ii) Ante-mortem and post-mortem inspection.-

Ante-mortem and post-mortem inspection shall be done in accordance with guidelines specified in Schedule 4, Part IV of Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011.

(iii) Shelf life.-

Goat meat must be stored in refrigeration (4±1º C) for short time storage and deep freezer (-18±1º C or below) for long term storage or by any other suitable methods to maintain quality. The chilled material should be consumed within 2 to 4 days under normal chilling conditions of storage. Frozen meat shall be consumed within 12 months.

10. Fresh/ Chilled/ Frozen Mutton (Sheep Meat):

(a). Scope.-

This standard applies to products designated as "Fresh/ Chilled/ Frozen Mutton" which includes sheep whole carcasses, pieces, cuts or edible offal that have been packed in any suitable packaging material.

(b). Description.-

(i) Product Definition

(1) Mutton means the edible portion of domestic sheep.

(2) Fresh mutton means sheep meat that has not been treated in any way to ensure its preservation.

(3) Chilled mutton means fresh sheep meat subjected to chilling in such a way that the product attains a temperature of 0 to 7 °C.

(4) Frozen mutton means chilled sheep meat subjected to freezing in an appropriate equipment in such a way that the product attains a temperature of -18° C or colder.

(5) Mutton edible offal means edible by products derived from slaughtered sheep which includes brain, liver, gut, paunches, tripe, lungs, etc.

(c). Types.-

Mutton shall be of following three types:

(i) Fresh/Chilled/Frozen carcasses

(ii) Fresh/Chilled/Frozen cuts

(1) Legs
(2) Loins

(3) Racks
(4) Breasts
(5) Shanks
(6) Shoulders

(iii) Fresh/Chilled/Frozen Edible offals.

(d). Composition and safety standards.-

(i)Composition: final product shall have moisture, protein and fat content ranging from 68 to 72 %, 20 to 22 % and 8 to 10 %, respectively.

(ii) Ante-mortem and post-mortem inspection

Ante-mortem and post-mortem inspection shall be done in accordance with guidelines specified in Schedule 4, Part IV of Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011.

(iii) Shelf life

Sheep meat must be stored in refrigeration (4±1º C) for short time storage and deep freezer (-18±1º C or below) for long term storage or by any other suitable methods to maintain quality. The chilled material should be consumed within 2 to 4 days under normal chilling conditions of storage. Frozen meat shall be consumed within 12 months.

11. Fresh/ Chilled/ Frozen Poultry Meat

(a). Scope.-

This standard applies to products designated as "Fresh/ Chilled/ Frozen Poultry Meat" which includes raw poultry meat whole carcasses, pieces, cuts or edible that have been packed in any suitable packaging material.

(b). Description.-

(i) Product Definition

(1) Poultry meat means the edible portion of poultry birds (chicken, duck, turkey, geese, guinea fowl, Japanese quail).

(2) Fresh poultry meat means poultry meat that has not been treated in any way to ensure its preservation.

(3) Chilled poultry meat means fresh poultry meat subjected to chilling in such a way that the product attains a temperature of 0 - 7 °C.

(4) Frozen poultry meat means chilled poultry meat subjected to freezing in appropriate equipment in such a way that the product attains a temperature of -18° C or colder.

(c) Types.-

Dressed chicken shall be of the following three types:

(i) Fresh/Chilled/Frozen carcasses

(ii) Fresh/chilled/Frozen cuts

(1) Leg (Thigh and Drumstick)
(2) Breast
(3) Drummettes
(4) Wings

(iii) Fresh/Chilled/Frozen edible offals

d. Composition and safety standards.-

(i) Composition: final product shall have moisture, protein and fat content ranging from 60 to 74.86 %, 19.50 to 23.20 % and 3.50 to 18 %, respectively.

(ii) Ante-mortem and post-mortem inspection

Ante-mortem and post-mortem inspection shall be done in accordance with guidelines specified in Part IV of schedule 4, of FSS (Licensing and Registration of Food Businesses) Regulations, 2011.

(iii) Shelf life

Chicken meat must be stored in refrigeration (4±1° C) for short time storage and deep freezer (-18±1° C or below) for long term storage or by any other suitable methods to maintain quality. The chilled material should be consumed within 2 to 4 days under normal chilling conditions of storage. Frozen meat shall be consumed within 12 months.

Note: All the products listed in regulation 2.5.2 under clause 7, 8, 9, 10, 11, 12 shall comply with following requirements:

(a) Notifications / advisories issued under the Drugs and Cosmetics Rules as well as by the Deptt. of Animal Husbandry, Dairying and Fisheries concerning use in or consumption of veterinary drugs (antibiotics and growth promoters) by food producing animals / poultry birds must be complied with by the producers / marketers of meat and poultry products.
(b) Use of genetically modified techniques are prohibited for production of meat of animals / poultry birds.
(c) Use of meat and/or bone meal, internal organs, blood meal and tissues of animals, in particular, cow or its progeny is prohibited.
(d) Production / slaughtering / processing of animals for production of meat of porcine origin in the same production facilities where animals of bovine/ ovine/ caprine origin are produced / slaughtered / processed is prohibited.
(e) Where eligible meat products are intended to be imported, there should be appropriate inspection and certification procedures in place to ensure all the above compliances before grant of market access.

b. after sub-regulation 2.5.2, the following sub-regulation shall be inserted, namely:-

"2.5.3 Egg and Egg Products:

1. Fresh Eggs:

(a). Scope.-

This standard applies to fresh eggs designated as "eggs in shell — other than broken, incubated or cooked eggs", — those are produced by poultry species/ birds and are fit for direct human consumption or for the preparation of egg products - The purpose of this standard is to define the quality requirements which the product must satisfy at all stages of processing, packaging, storage and marketing.

(b). Description.-

This includes fresh in-shell eggs as laid down by hen, duck, goose, turkey, guinea fowl, Japanese quail etc. The edible portion includes egg yolk and egg white after removal of the shell.

(i) Product Definition

(1) Fresh eggs means eggs which have not been washed or dry-cleaned and which are collected at least once weekly and which should be packed and graded not later than the first working day after arrival at the packing station.

(2) Slight soiling –means scattered superficial soilings not exceeding in all 1/8 of the total surface of the egg shell, or accumulations not exceeding 1/16 of the total surface of the egg-shell. In both cases the shell is to be free of blood rings and the contents must not be soiled.

(3) Cracked eggs means eggs with damaged shells visible to the naked eye, but with undamaged egg membranes.

(4) Foreign matter means organic or inorganic substances of internal or external origin within the contents.

(5) Commodity lot means eggs of one quality class and weight grade, packed in uniform containers, from one packing plant, loaded on to one means of transportation, and presented once for control purposes.

(6) Week number means the number referred to shall indicate the complete week beginning on Monday but it may be used from midnight on Wednesday of the previous week. Every year the numbering shall be continuous from 1 to 52 or 53. The week which includes 1 January shall bear the number 1.

(c). Composition and safety standards.-

Eggs should have clean and sound shell and free from cracks, leaks and fecal contamination.

(i) Composition: minimum requirements of major chemical constituents in the whole egg contents of various poultry species

Chemical Constituents	Chicken	Turkey	Guinea Fowl	Quail	Duck	Goose
Water (%)	72.8 -75.6	71.6-75.7	71.3-74.1	73.1-76.4	68.2-71.4	68.9-72.3
Proteins (%)	12.8 - 13.4	12.6-13.6	12.8-14.2	12.5-13.4	13.1-14.2	13.4-14.3
Fats (%)	10.5 - 11.8	10.8-12.6	11.2-12.8	10.6-11.7	13.8-15.0	12.4-13.6
Carbohydrates (%)	0.3 – 1.0	0.6-0.8	0.7-0.9	0.8-1.0	1.1-1.3	1.1-1.3
Ash (%)	0.8 – 1.0	0.7-0.9	0.7-0.1	1.0-1.2	0.9-1.0	1.0-1.4

(ii) Hygiene parameters

Hygienic practices during production, processing and handling shall be followed. Key aspects of hygiene control system are temperature and time issues. From receipt of eggs,

through handling, sorting and grading, washing, drying, treatment, packing, storage and distribution to point of consumption, consideration should be given to time and temperature and humidity conditions for eggs such that the growth of pathogenic microorganisms will be minimized and the safety and suitability of the eggs will not be adversely affected. Temperature fluctuations should be minimized as much as possible.

Storage and handling conditions, including those during cleaning, grading and packaging should be such that moisture on the shell surface is minimized. As eggs are perishable products, particular attention should be paid to temperature conditions throughout storage and distribution, noting that lower storage and distribution temperatures lend themselves to longer shelf life and minimize microbial growth, for example of *Salmonella enteritidis.* Storage conditions should be such that the potential for microbial contamination, the growth of microbial pathogens and the risk to human health is minimized.

(c) in regulation 2.6, in sub-regulation 2.6.1, after clause 17, the following clauses shall be inserted, namely:-

18. Live and Raw Bivalve Molluscs:

This standard applies to live bivalve molluscs and to raw bivalve molluscs that have been shucked and/or frozen, and/or processed to reduce or limit target organisms while essentially retaining the sensory characteristics of live bivalve molluscs. Raw bivalve molluscs are marketed either in a frozen or chilled state. Both live and raw bivalve molluscs may be intended for direct consumption or further processing. The standard does not apply to scallops when the final product is the adductor muscle only.

1. LIVE BIVALVE MOLLUSCS

(a) Product Definition.-
Live bivalve molluscs are products that are alive immediately prior to consumption. Presentation includes the shell.

(b) Process definition.-
Live bivalve molluscs are harvested alive from a harvesting area either approved for direct human consumption or classified to permit harvesting for an approved method of purification, e.g. relaying or depuration, prior to human consumption. Both relaying and depuration must be subject to appropriate controls implemented by the official agency having jurisdiction.

(c) Essential Composition and Quality Factors.-
Bivalve Molluscs
Live bivalve molluscs should possess organoleptic characteristics associated with freshness, as well as an adequate response to percussion (i.e. the shellfish will close by themselves when tapped) and freedom from extraneous matter, as determined by specialists familiar with the species concerned.

(d) Definition of Defectives.-
A sample unit shall be considered as defective when it exhibits any of the properties defined below.

(i) Foreign Matter
The presence in the sample unit of any matter which has not been derived from bivalve molluscs, does not pose a threat to human health and is readily recognized without magnification or is present at a level determined by any method including magnification, that indicates non-compliance with good manufacturing and sanitation practices.

(ii) Dead or Damaged Product
The presence of dead or damaged product. Dead product is characterized by no response to percussion (i.e. shellfish will close by themselves when tapped). Damaged product includes product that is damaged to the extent that it can no longer function biologically. A Sample unit shall be considered defective if dead or damaged bivalve molluscs exceed 5% by count.

(e) Food Additives.-food additives are not permitted in live bivalve molluscs.

Bivalve must be alive when sold.

2. RAW BIVALVE MOLLUSCS

(a). Product Definition.-
Raw bivalve molluscs processed for direct consumption or for further processing are products that were alive immediately prior to the commencement of processing.

Raw bivalve molluscs are harvested alive from a harvesting area either approved for direct human consumption or classified to permit harvesting for an approved method of purification, e.g. relaying or depuration, prior to human consumption. Both relaying and depuration must be subject to appropriate controls implemented by the official agency having jurisdiction

They have been shucked and/or frozen and/or processed to reduce or limit target organisms while essentially retaining the sensory characteristics of live bivalve molluscs. Raw bivalve molluscs are marketed in a frozen or chilled state.

(b). Process Definition.-
Bivalve molluscs that have been processed to reduce or limit target organisms while essentially retaining the sensory characteristics of live bivalve molluscs are ones that have been processed to assure reduction or limitation of the target organisms to the satisfaction of the official agency having jurisdiction.

(c). Essential Composition and Quality Factors.-

Raw bivalve molluscs shall be of a quality fit for human consumption.

All ingredients used shall be of food grade quality and conform to the Food Safety and Standards Regulations 2011.

(d). Definition of defectives.-
The sample unit shall be considered as defective when it exhibits any of the properties defined below.

(i) Deep Dehydration
Greater than 10% of the weight of the bivalve molluscs in the sample unit or greater than 10% of the surface area of the block exhibits excessive loss of moisture clearly shown as white or abnormal colour on the surface which masks the colour of the flesh and penetrates below the surface, and cannot be easily removed by scraping with a knife or other sharp instrument without unduly affecting the appearance of the bivalve molluscs.

(ii) Foreign Matter
The presence in the sample unit of any matter which has not been derived from bivalve molluscs, does not pose a threat to human health and is readily recognized without magnification or is present at a level determined by any method including magnification, that indicates non-compliance with good manufacturing and sanitation practices.

(iii) Odour/Flavour
Persistent and distinct objectionable odours or flavours indicative of decomposition or rancidity.

(iv) Texture
Textural breakdown of the flesh, indicative of decomposition, characterized by muscle structure that is mushy or paste-like.

(h). Packaging and Labelling .-

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling), Regulations, 2011, shall apply to the pre-packaged product. In addition to that live bivalve molluscs shall be labelled by weight, count, count per unit weight, or volume as appropriate to the product.

The label shall specify the conditions for storage and/or temperature that will maintain the product safety/viability during transportation, storage and distribution.

19. Sturgeon Caviar

(a) Product Definition.-

This standard applies to granular sturgeon caviar of the fish of the *Acipenseridae* family. The following definitions are used in this standard:

(i) Fish eggs: non-ovulated eggs separated from the connective tissue of ovaries. Ovulated eggs may be used from aquacultured sturgeons.

(ii) Caviar: the product made from fish eggs of the *Acipenseridae family* by treating with food grade salt.

The product is prepared from fish eggs of sturgeon fishes belonging to the *Acipenseridae* family (four genera *Acipenser, Huso, Pseudoscaphirhynchus* and *Scaphirhynchus* and hybrid species of these genera).

The eggs are of about one size and evenly and characteristically coloured according to the species used. Colour can vary from light grey to black or from light yellow to yellowish grey. Brownish and greenish shades are permissible.

The product is made with addition of salt and is intended for direct human consumption. The salt content of the product is equal or above 3g/100g and below or equal to 5g/100g in the end product.

(b) Process Definition.-

The product, after suitable preliminary preparation of the caviar, shall be subject to treatment or conditions sufficient to prevent the growth of spore and non-spore forming pathogenic microorganisms and shall comply with the conditions laid down hereafter.

Ovulated eggs are harvested after hormonal induction of ovulation of the female. The eggs are appropriately treated to remove adhesive layer and to harden the shell. If hormones are used to produce ovulated eggs, they should be approved for use by the competent authority having jurisdiction.

The product shall be prepared by salting fish eggs with food grade salt.

During packaging, storage and retail, the product temperature is between +2 and +4°C, whereas for wholesale business, including storage and transportation, the temperatures are between 0° and -4°C.

Freezing as well as frozen storage of caviar is not permitted unless the deterioration of quality is avoided.

The product shall be packed in:
- metal tins coated inside with stable food lacquer or enamel;
- glass jars;
- other suitable food-grade containers.

Re-packaging of the product from larger to smaller containers under controlled conditions which maintain the quality and safety of the product shall be permitted. No mixing of caviar from different sturgeon species or lots shall be permitted.

(c) Essential Composition and Quality Factors.-

(i)Raw material

Caviar shall be prepared from fish eggs extracted from sound and wholesome sturgeons of biological species of the genera which are of a quality fit to be sold fresh for human consumption.

(ii)Salt

Salt shall be of food grade quality and conform to all applicable Codex Standards.

(d) Definition of Defects.-

The sample unit shall be considered as defective when it exhibits any of the properties given below.

(i) Foreign Matter

The presence in the sample unit of any matter which has not been derived from sturgeon eggs, does not pose a threat to human health, and is readily recognized without magnification; or is present at a level determined by any method including magnification, that indicates non-compliance with good manufacturing practices and sanitation practices.

(ii) Odour and Flavour

The product affected by persistent and distinct objectionable odour and/or flavour indicative of decomposition, oxidation, or taste of feed (in fish reared in aquaculture), or contamination by foreign substances (such as fuel oil).

(iii) Consistency and Condition

The presence of hard cover of caviar grains that is not easily chewable or tenuous.
The breaking up of the outer membranes when attempting to separate the grains.
The Presence of broken eggs or fluid.

(iv) Objectionable Matter

The presence of remnants of membranes and/or secreted fat in finished caviar.

(e) Food Additives:

Only those food additives permitted under Food Safety and Standards (Food Products Standards and Food Additives), Regulations, 2011 shall be used. The use of colours and texturizing agents is not allowed.

20. Fish Sauce

This standard applies to fish sauce produced by means of fermentation by mixing fish and salt and may include other ingredients added to assist the fermentation process. The product is intended for direct consumption as a seasoning, or condiment or ingredient for food. This standard does not apply to fish sauce produced by acid hydrolysis.

(a) Product Definition.-

Fish sauce produced by means of fermentation by mixing fish and salt and may include other ingredients added to assist the fermentation process.

(b) Process Definition.-

The product is intended for direct consumption as a seasoning, or condiment or ingredient for food. This standard does not apply to fish sauce produced by acid hydrolysis.

Fish sauce is a translucent, not turbid liquid product with a salty taste and fish flavour obtained from fermentation of a mixture of fish and salt.

The product is prepared by mixing fish with salt and is fermented in covered containers or tanks. Succeeding extractions may follow by adding brine to further the fermentation process in order to extract the remaining protein, fish flavour and odour. Other ingredients may be added to assist the fermentation process.

(c) Essential Composition and Quality Factors.-

Fish sauce shall be prepared from sound and wholesome fish or parts of fish in a condition fit to be sold fresh for human consumption.

Salt used shall be of food grade quality and conform to the *Standard for Food Grade Salt* (As per Food Safety and Standards Regulations, 2011).

Water for preparing brine shall be potable.

All other ingredients used shall be of food grade quality and conform to as per Food Safety and Standards Regulations, 2011.

Organoleptic criteria shall be acceptable in terms of appearance, odour and taste as follows:

Appearance: Fish sauce must be translucent, not turbid and free from sediments except salt crystals.

Odour and taste: Fish sauce shall have an odour and taste characteristic of the product.
Foreign matter: This product shall be free from foreign matter.

Chemical Properties
Total nitrogen content: not less than 10 g/l. competent authorities may also specify a lower level of total nitrogen if it is the preference of that country.
Amino acid nitrogen content: not less than 40% of total nitrogen content.
pH: between 5.0 - 6.5 typical for a traditional product; but not lower than 4.5 if ingredients are used to assist fermentation.
Salt: not less than 200g/l, calculated as NaCl.

(d) Definition of Defectives.-
The sample unit shall be considered as defective when it exhibits any of the properties defined below.

(i) Foreign Matter
The presence in the sample unit of any matter which has not been derived from salt and fish, does not pose a threat to human health and is readily recognized without magnification or is present at a level determined by any method including magnification, that indicates non-compliance with good manufacturing and sanitation practices.

(ii) Appearance

The presence of any sediments (except NaCl crystals) and/or cloudiness.

(iii) Odour
A sample unit affected by distinct objectionable odour, e.g. rotten, putrid, rancid, gamey, pungent etc.

(iv) Taste
A sample unit affected by distinct objectionable taste, e.g. bitter, sour, metallic, taint, etc.

21. Quick Frozen Fish Sticks (fish fingers), Fish Portions and Fish Fillets - Breaded or Battered

This standard applies to quick frozen fish sticks (fish fingers) and fish portions cut from quick frozen fish flesh blocks, or formed from fish flesh, and to natural fish fillets, breaded or batter coatings, singly or in combination, raw or partially cooked and offered for direct human consumption without further industrial processing.

(a) Product Definition.-
A fish stick (fish finger) means the product which includes the average percent of fish flesh must not be less than 50% of total weight. Each stick shall be not less than 10 mm thick.

A fish portion including the coating may be of any shape, weight or size.

Fish sticks or portions may be prepared from a single species of fish or from a mixture of species with similar sensory properties.

Fillets are slices of fish of irregular size and shape which are removed from the carcass by cuts made parallel to the back bone and pieces of such fillets, with or without the skin.

(b) Process Definition.-
The product after any suitable preparation shall be subjected to a freezing process and shall comply with the conditions laid down hereafter.

The freezing process shall be carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly.

The quick freezing process shall not be regarded as complete unless and until the product temperature has reached -18^0C or colder at the thermal centre after thermal stabilization. The product shall be kept deep frozen so as to maintain the quality during transportation, storage and distribution.

Industrial repacking or further industrial processing of intermediate quick frozen material under controlled conditions which maintains the quality of the product, followed by the re-application of the quick freezing process, is permitted.

(c) Essential Composition and Quality Factors .-

Quick frozen breaded or battered fish sticks (fish fingers) breaded or battered fish portions and breaded or battered fillets shall be prepared from fish fillets or minced fish flesh, or mixtures thereof, of edible species which are of a quality such as to be sold fresh for human consumption.

The coating and all ingredients used therein shall be of food grade quality and conform to all applicable Codex standards.

A fat (oil) used in the cooking operation shall be suitable for human consumption.

The products shall not contain more than 10 mg/100 g of histamine based on the average of the sample unit tested. This shall apply all the species mentioned in list of histamine. to species of Clupeidae, Scombridae, Scombresocidae, Pomatomidae and Coryphaenedae families.

(d) Definition Of Defectives.-

The sample unit shall be considered defective when it exhibits any of the properties defined below:

(i) Foreign Matter (Cooked State)

The presence in the sample unit of any matter which has not been derived from fish (excluding packing material), does not pose a threat to human health, and is readily recognized without magnification or is present at a level determined by any method including magnification that indicates non-compliance with good manufacturing and sanitation practices.

(ii) Bones (Cooked State) (In packs designated boneless)

More than one bone per kg greater or equal to 10 mm in length, or greater or equal to 1 mm in diameter; a bone less than or equal to 5 mm in length, is not considered a defect if its diameter is not more than 2 mm. The foot of a bone (where it has been attached to the vertebra) shall be disregarded if its width is less than or equal to 2 mm, or if it can easily be stripped off with a fingernail.

(iii) Odour and Flavour (Cooked State) A sample unit affected by persistent and distinct objectionable odour and flavours indicative of decomposition, or rancidity or of feed.

(iv) Flesh abnormalities Objectionable textural characteristics such as gelatinous conditions of the fish core together with greater than 86% moisture found in any individual fillet or sample unit with pasty texture resulting from parasites affecting more than 5% of the sample unit by weight.

The product shall be stored at -18°C or lower and shall be declared on the label.

22. Fresh and Quick Frozen Raw Scallop Products

This standard applies to bivalve species of the *Pectinidae* family in the following product categories:

I. “Fresh or Quick Frozen Scallop Meat”, which is the scallop adductor muscle meat.
II. “Fresh or Quick Frozen Roe-on Scallop Meat”, which is the scallop adductor muscle meat and attached roe.
III. Quick Frozen Scallop Meat”, or “Quick Frozen Roe-on Scallop Meat”, with added water and/or solutions of water and phosphates.

Products covered by this Standard may be intended for direct human consumption or for further processing.

This Standard does not apply to:

I. Scallop meat that is formed, mixed with extenders, or bound by fibrinogen or other binders and;

II. Whole scallops (live, fresh or frozen in which the shell and all viscera are attached). These products are included in the *Standard for Live and Raw Bivalve Molluscs*

(a) Product Definition.-

Scallop Meat

Fresh or Quick Frozen "Scallop Meat" is prepared by completely removing the adductor muscle from the shell and completely detaching the viscera and roe from the adductor muscle of live scallops. Scallop meat contains no added water, phosphates or other ingredients. The adductor muscle is presented whole.

Roe-on Scallop Meat

Fresh or Quick Frozen "Roe-on Scallop Meat" are prepared by completely removing the adductor muscle and attached roe from the shell and detaching all other viscera to the extent practical. The roe should remain attached to the adductor muscle. "Roe-on scallop meat" contain no added water, phosphates, or other ingredients. The adductor muscle and roe are presented whole.

Quick Frozen Scallop Meat or Quick Frozen Roe-on Scallop Meat Processed with Added Water and/or with Solution of Water and Phosphates

"Quick frozen Scallop Meat", or "Quick Frozen Roe-on Scallop Meat", with added water and/or solutions of water and phosphates contain the products, and a solution of water and/or phosphates and optionally salt.

(b) Process Definition.-

Scallop Meat and Roe-on-Scallop Meat

After the preparation of "Scallop Meat" or "Roe on Scallop Meat" under good hygiene practices, the products are rinsed, drained and stored with a method that minimizes absorption of water to the extent that is technologically practicable. The fresh product shall be kept at 4°C or below. Product intended to be frozen shall be subjected to a freezing process carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly. The recognized practice of repacking quick frozen products under controlled conditions which will maintain the quality of the product, followed by the reapplication of the quick freezing process as defined, is permitted. These products shall be processed and packaged so as to minimize dehydration and oxidation.

Quick Frozen Scallop Meat or Quick Frozen Roe-on Scallop Meat Processed with Added Water and/or Solution of Water and Phosphates

After the preparation of "Scallop Meat" or "Roe-on Scallop Meat" under good hygiene practices, the product is rinsed, drained and stored with a method that minimizes absorption of water to the extent that is technologically practicable. The fresh product shall be kept at 4°C or below. The product is subject to the addition of

water and/or phosphate solution (e.g., soaked, sprayed). The amount of added solution shall be controlled and accurately measured for labelling purposes. The product is subjected to a freezing process carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly.
The recognized practice of repacking quick frozen products under controlled conditions which will maintain the quality of the product, followed by the reapplication of the quick freezing process as defined, is permitted. These products shall be processed and packaged so as to minimize dehydration and oxidation.

(c) Essential Composition and Quality Factors.-

The product shall be prepared from sound and wholesome scallops which are of a quality suitable to be sold fresh for direct human consumption.

The product shall be prepared from sound and wholesome scallops which are of a quality suitable to be sold quick frozen for direct human consumption. Added water and/or solution of water and phosphates and salt are permitted to the extent that the water uptake is accurately measured and labelled and their use is acceptable in accordance with the law or custom of the country in which the product is sold. Water shall be of potable quality, phosphates shall be food grade, and salt shall comply with the

If glazed, the water used for glazing or for preparing glazing solutions shall be potable water or clean water.

(d) Definition Of Defectives.-
The sample unit shall be considered as defective when it exhibits any of the properties defined below.

(i) Deep Dehydration
Greater than 10% of the weight of the scallop meat or greater than 10% of the surface area of the block exhibits excessive loss of moisture clearly shown as white or yellow abnormality on the surface which masks the colour of the flesh and penetrates below the surface, and cannot be easily removed by scraping with a knife or a sharp instrument without unduly affecting the appearance of the product.

(ii) Foreign matter
The presence in the sample unit of any matter which has not been derived from scallops, does not pose a threat to human health, and is readily recognized without magnification or is present at a level determined by any method including magnification that indicates non-compliance with good manufacturing and sanitation practices

(iii) Odour/Flavour/Texture/Colour
Scallop meat affected by persistent and distinct objectionable odours, flavours, texture or colours indicative of decomposition and/or rancidity; or other objectionable odours, flavours, textures and colours not characteristic of the product.

(iv) Parasites
The presence of parasites at an objectionable level.

(iv) Objectionable matter

The presence of sand, shell or other similar particles that is visible in the thawed state or detected by chewing during sensory examination at an objectionable level

(vi) Exceeding level of added water

Level of added water exceeding that declared in the label.

(e) Packaging and Labelling

The products shall comply with the packaging and labelling requirements as laid down under the Food Safety and Standards (Packaging and Labelling), Regulations, 2011, shall apply to the pre-packaged product.Live bivalve molluscs shall be labelled by weight, count, count per unit weight, or volume as appropriate to the product.

The label shall specify the conditions for storage and/or temperature that will maintain the product safety/viability during transportation, storage and distribution.

The product shall be stored at 4°C or below for fresh products and at a temperature of -18°C or below for frozen product processed.

(d) in regulation 2.12, in sub-regulations 2.12.1, for clause (2), the following clause shall be substituted, namely:-

"(2) Proprietary food shall contain only those ingredients other than additives which are either standardised or permitted for use in the preparation of other standardised food under these regulations and those food/ingredients mentioned in the Indian Food Composition Tables (IFCT), 2017, National Institute of Nutrition, except the ingredients which may be specified by the Authority from time to time and those specified under prohibition of hunting in the Indian Wildlife Protection Act, 1972:

Provided that a proprietary food may also contain vitamins and minerals in quantities not exceeding one RDA of the respective micronutrients."

e. in Appendix B, under table 5A, in s. no. (3), in product category "Raw marinated/minced/comminuted meat[2]" for the limits (cfu/g) occurring against yeast and mold count, for the entries "$1x10^{2}$" and "$1x10^{3}$" the entries "$1x10^{4}$" and "$5x10^{4}$" shall be substituted respectively.