

**Notice Calling for suggestions, views, comments etc from WTO- SPS Committee members within a period of 60 days on the draft notification related to Standards for list of Histamine Forming Fish Species and limits of Histamine level for Fish and Fishery Products.**

1. In the Food Safety and Standards (Contaminants, toxins and Residues) Regulations, 2011, in regulation 2.5, relating to “Other Contaminants”, after sub-regulation 2.5.1 the following sub-regulation shall be inserted, namely:-

**“2.5.2 Histamine in Fish and Fishery Products contaminants, Toxins and Residues**

**1. Fish species having potential to cause histamine poisoning**

Sl.No.	Family	Scientific Name	Common Name
1.	Carangidae	<i>Alectis indica</i>	Indian Threadfish
		<i>Alepes</i> spp.	Scad
		<i>Atropus atropos</i>	Cleftbelly trevally
		<i>Carangoides bartholomaei</i>	Yellow Jack
		<i>Carangoides</i> spp.	Trevally
		<i>Caranx crysos</i>	Blue runner
		<i>Caranx</i> spp.	Jack/Trevally
		<i>Decapterus koheru</i>	Koheru
		<i>Decapterus russelli</i>	Indian scad
		<i>Decapterus</i> spp.	Scad
		<i>Elagatis bipinnulata</i>	Rainbow Runner
		<i>Megalaspis cordyla</i>	Horse Mackerel/Torpedo Scad
		<i>Nematistius pectoralis</i>	Roosterfish
		<i>Oligoplites saurus</i>	Leather Jacket
<i>Pseudocaranx dentex</i>	White trevally		

Sl.No.	Family	Scientific Name	Common Name
		<i>Scomberoides commersonnianus</i>	Talang queenfish
		<i>Scomberoides</i> spp.	Leather Jacket/Queen Fish
		<i>Selene</i> spp.	Moonfish
		<i>Seriola dumerili</i>	Greater/Japanese Amberjack or Rudder Fish
		<i>Seriola lalandi</i>	Yellowtail Amberjack
		<i>Seriola quinqueradiata</i>	Japanese Amberjack
		<i>Seriola rivoliana</i>	Longfin Yellowtail
		<i>Seriola</i> spp.	Amberjack or Yellowtail
		<i>Trachurus capensis</i>	Cape Horse Mackerel
		<i>Trachurus japonicas</i>	Japanese Jack Mackerel
		<i>Trachurus murphyi</i>	Chilean Jack Mackerel
		<i>Trachurus novaezelandiae</i>	Yellowtail Horse Mackerel
		<i>Trachurus</i> spp.	Jack Mackerel/Horse Mackerel
		<i>Trachurus trachurus</i>	Atlantic Horse Mackerel
		<i>Uraspis secunda</i>	Cottonmouth jack
2.	Chanidae	<i>Chanos chanos</i>	Milkfish
3.	Clupeidae	<i>Alosa pseudoharengus</i>	Alewife
		<i>Alosa</i> spp.	Herring
		<i>Amblygaster sirm</i>	Spotted Sardinella
		<i>Anodontostoma chacunda</i>	Chacunda gizzard shad
		<i>Brevoortia patronus</i>	Gulf Menhaden
		<i>Brevoortia</i> spp.	Menhaden
		<i>Brevoortia tyrannus</i>	Atlantic Menhaden

Sl.No.	Family	Scientific Name	Common Name
		<i>Clupea bentincki</i>	Araucanian herring
		<i>Clupea harengus</i>	Atlantic herring
		<i>Clupea pallasii pallasii</i>	Pacific herring
		<i>Clupea</i> spp.	Pichard/Shad/Herring
		<i>Dorosoma</i> spp.	Gizaard Shad
		<i>Ethmalosa fimbriata</i>	Bonga Shad
		<i>Ethmidium maculatum</i>	Pacific Menhaden
		<i>Etrumeus sadina</i>	Red-eye round herring
		<i>Harengula</i> spp.	Sprat/Herring
		<i>Harengula thrissina</i>	Pacific flatiron herring
		<i>Hilsa</i> spp.	Shad
		<i>Nematolosa</i> spp.	Gizzard Shad
		<i>Opisthonema libertate</i>	Pacific thread herring
		<i>Opisthonema</i> spp	Thread Herring
		<i>Opisthopterus tardoore</i>	Tardoore
		<i>Sardina pilchardus</i>	European Pilchard
		<i>Sardinella aurita</i>	Round Sardinella
		<i>Sardinella gibbosa</i>	Gold stripe Sardinella
		<i>Sardinella longiceps</i>	Indian Oil Sardine
		<i>Sardinella maderensis</i>	Madeiran Sardinella
		<i>Sardinella</i> spp.	Sardine
		<i>Sardinops sagax</i>	South American Pilchard
		<i>Sardinops</i> spp.	South American Pilchard
		<i>Spratelloides gracilis</i>	Silver-stripe round herring

Sl.No.	Family	Scientific Name	Common Name
		<i>Tenualosa ilisha</i>	Hilsa shad
		<i>Tenualosa</i> spp.	Shad
4	Coryphaenidae	<i>Coryphaena hippurus</i>	Mahi-Mahi /Dolphin fish
5	Engraulidae	<i>Anchoa</i> spp.	Anchovy
		<i>Anchoviella</i> spp.	Anchovy
		<i>Cetengraulis mysticetus</i>	Pacific anchoveta
		<i>Engraulis capensis</i>	Southern African anchovy
		<i>Engraulis encrasicolus</i>	European anchovy
		<i>Engraulis japonicus</i>	Japanese anchovy
		<i>Engraulis ringens</i>	Peruvian anchovy
		<i>Engraulis</i> spp.	Anchovy
		<i>Stolephorus</i> spp.	Anchovy
6	Istiophoridae	<i>Istiompax indica</i>	Black Marlin
		<i>Istiophorus albicans</i>	Atlantic sailfish
		<i>Istiophorus platypterus</i>	Indo-Pacific sailfish
		<i>Kajikia albida</i>	Atlantic white marlin
		<i>Kajikia audax</i>	Striped Marlin
		<i>Makaira mazara</i>	Indo-Pacific blue marlin
		<i>Makaira</i> spp.	Marlin/Sailfish
		<i>Tetrapturus</i> spp.	Marlin/Spearfish
		<i>Tetrapturus</i> spp.	Spearfish
7	Mugilidae	<i>Mugil cephalus</i>	Flathead Grey Mullet
8	Pristigasteridae	<i>Ilisha</i> spp.	Ilisha/Pellona
		<i>Pellona ditchella</i>	Indian pellona

Sl.No.	Family	Scientific Name	Common Name
9	Scombridae	<i>Acanthocybium solandri</i>	Wahoo
		<i>Auxis</i> spp.	Bullet Tuna/Frigate Tuna
		<i>Cybiosarda elegans</i>	Leaping Bonito
		<i>Euthynnus affinis</i>	Little tuna or Kawakawa
		<i>Euthynnus</i> spp.	Bonito
		<i>Gasterochisma melampus</i>	Butterfly kingfish
		<i>Grammatorcynus</i> spp.	Short Mackerel
		<i>Gymnosarda unicolor</i>	Dogtooth tuna
		<i>Katsuwonus pelamis</i>	Skipjack Tuna
		<i>Orcynopsis unicolor</i>	Plain Bonito
		<i>Rastrelliger brachysoma</i>	Short Mackerel
		<i>Rastrelliger kanagurta</i>	Indian Mackerel
		<i>Sarda</i> spp	Bonito
		<i>Scomber australasicus</i>	Blue mackerel
		<i>Scomber japonicas</i>	Chub mackerel
		<i>Scomber scombrus</i>	Atlantic mackerel
		<i>Scomber</i> spp.	Mackerel
		<i>Scomberomorus cavalla</i>	King Mackerel
		<i>Scomberomorus commerson</i>	Narrow-barred Spanish mackerel
		<i>Scomberomorus guttatus</i>	Indo-Pacific king mackerel/Spotted Spanish Mackerel
		<i>Scomberomorus niphonius</i>	Japanese Spanish mackerel
<i>Scomberomorus</i> spp.	Spanish Mackerel		
<i>Scomeromorus lineolatus</i>	Streaked seerfish		

Sl.No.	Family	Scientific Name	Common Name
		<i>Thunnus alalunga</i>	Albacore Tuna
		<i>Thunnus albacares</i>	Yellowfin Tuna
		<i>Thunnus atlanticus</i>	Blackfin Tuna
		<i>Thunnus maccoyi</i>	Southern bluefin tuna
		<i>Thunnus obesus</i>	Bigeye Tuna
		<i>Thunnus orientalis</i>	Pacific bluefin tuna
		<i>Thunnus</i> spp.	Tuna
		<i>Thunnus thynnus</i>	Atlantic bluefin tuna
		<i>Thunnus tonggol</i>	Longtail Tuna
10	Xiphiidae	<i>Xiphias gladius</i>	Swordfish

## 2. Limits of histamine level in fish and fishery products

Product Category	Applicable to	Histamine Level
1. Raw/Chilled/Frozen Finfish	Species with high amount of free histidine (Listed fish species with potential to cause histamine poisoning) fish	n=9, c=2; m=100 mg/kg, M=200 mg/kg
2. Dried/ Salted and Dried fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
3. Thermally Processed Fishery Products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
4. Smoked fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
5. Fish Mince/Surimi and analogues		n=9, c=2; m=100 mg/kg, M=200 mg/kg
6. Battered and breaded fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
7. Other Ready to Eat fishery		n=9, c=2; m=100 mg/kg, M=200 mg/kg

Product Category	Applicable to	Histamine Level
products		
8. Other value added fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
9. Other fish based products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
10. Fermented Fishery products		n=9, c=2; m=200 mg/kg, M=400 mg/kg
11. Fish Pickle		n=9, c=2; m=200 mg/kg, M=400 mg/kg

Where,

n : Number of units comprising the sample

c : Maximum allowable number of defective sample units

m : Acceptable level in a sample

M : Specified level when exceeded in one or more samples would cause the lot to be rejected

• **Satisfactory, if the following requirements are fulfilled:**

1. the mean value observed is  $\leq m$
2. a maximum of c/n values observed are between m and M
3. no values observed exceed the limit of M,

• **Unsatisfactory**, if the mean value observed exceeds m or more than c/n values are between m and M or one or more of the values observed are  $>M$ .”