Introduction to Codex and Codex standards relevant to fish and fishery products

22 October 2024

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- **A brief introduction to the *General Principles of Food Hygiene* (CXC 1-1969) and *Code of Practice for Fish and Fishery Products* (CXC 52-2003)**

What is the Codex?

The “Food Code” –

a **collection of standards, guidelines and codes of practice** adopted by the Codex Alimentarius Commission (CAC)

- Established in 1963
  - Joint FAO/WHO food standards programme
  - Secretariat hosted at FAO Headquarters, Rome

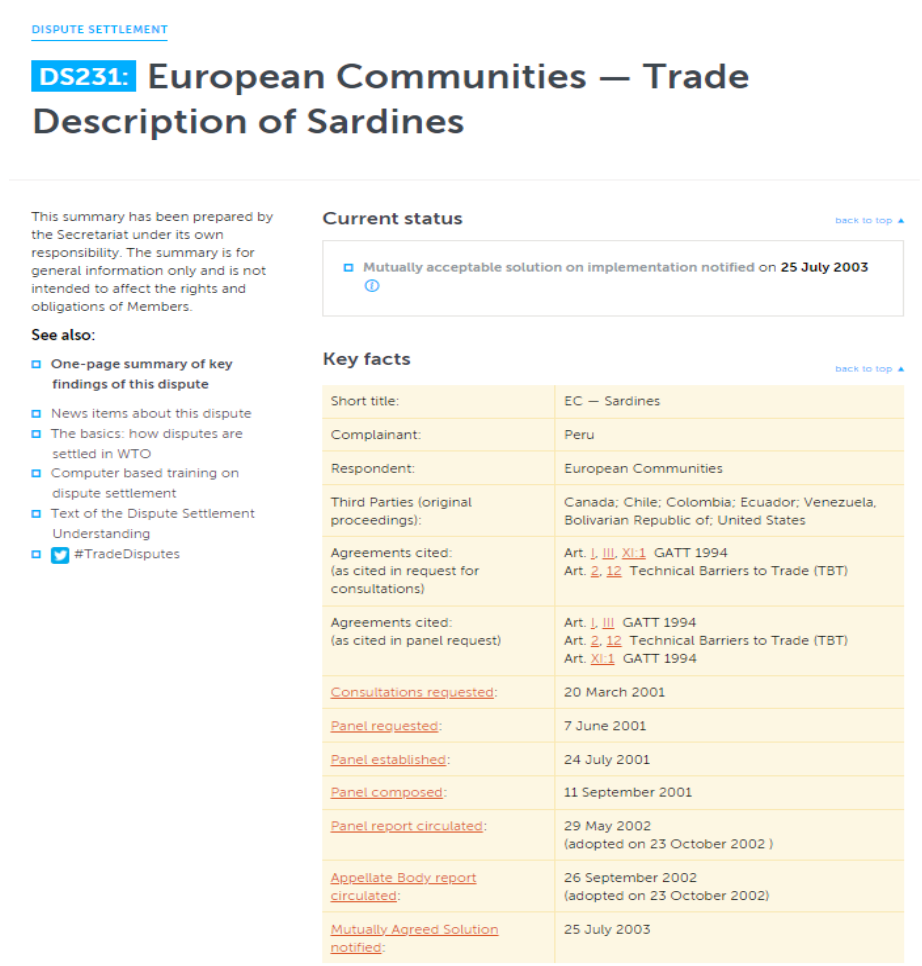
Codex texts

- a benchmark in international food trade

The SPS (Sanitary and Phytosanitary Measures) Agreement recognizes the **FAO/WHO Codex Alimentarius Commission** as the **landmark** for **food safety standards**.

Not a substitute for, or alternative to national legislation

Voluntary in nature



DISPUTE SETTLEMENT

DS231: European Communities — Trade Description of Sardines

This summary has been prepared by the Secretariat under its own responsibility. The summary is for general information only and is not intended to affect the rights and obligations of Members.

See also:

- **One-page summary of key findings of this dispute**
- News items about this dispute
- The basics: how disputes are settled in WTO
- Computer based training on dispute settlement
- Text of the Dispute Settlement Understanding
- #TradeDisputes

Current status

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- Mutually acceptable solution on implementation notified on **25 July 2003**

Key facts

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Short title:	EC — Sardines
Complainant:	Peru
Respondent:	European Communities
Third Parties (original proceedings):	Canada; Chile; Colombia; Ecuador; Venezuela, Bolivarian Republic of; United States
Agreements cited: (as cited in request for consultations)	Art. I, III, XI:1 GATT 1994 Art. 2, 12 Technical Barriers to Trade (TBT)
Agreements cited: (as cited in panel request)	Art. I, III GATT 1994 Art. 2, 12 Technical Barriers to Trade (TBT) Art. XI:1 GATT 1994
Consultations requested:	20 March 2001
Panel requested:	7 June 2001
Panel established:	24 July 2001
Panel composed:	11 September 2001
Panel report circulated:	29 May 2002 (adopted on 23 October 2002)
Appellate Body report circulated:	26 September 2002 (adopted on 23 October 2002)
Mutually Agreed Solution notified:	25 July 2003

Summary of the dispute to date

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The summary below was up-to-date at 3 December 2020 ⓘ
See also: One-page summary of key findings of this dispute

Consultations

Complaint by Peru.

On 20 March 2001, Peru requested consultations with the EC concerning Regulation (EEC) 2136/89 which, according to Peru, prevents Peruvian exporters to continue to use the trade description "sardines" for their products.

Peru submitted that, according to the relevant Codex Alimentarius standards (STAN 94-181 rev. 1995), the species "*sardinops sagax sagax*" are listed among those species which can be traded as "sardines". Peru, therefore, considered that the above Regulation constitutes an unjustifiable barrier to trade, and, hence, in breach of Articles 2 and 12 of the TBT Agreement and Article XI:1 of GATT 1994. In addition, Peru argues that the Regulation is inconsistent with the principle of non-discrimination, and, hence, in breach of Articles I and III of GATT 1994.

Panel and Appellate Body proceedings

Further to Peru's request, the DSB established a panel at its meeting on 24 July 2001. Canada, Chile, Colombia, Ecuador, Venezuela and the US reserved their third-party rights. On 31 August 2001, Peru requested the Director-General to determine the composition of the panel. On 11 September 2001, the panel was composed. On 11 March 2002, the panel informed the DSB that it would not be able to issue its report within 6 months, due to the complexity of the matter and scheduling constraints. The panel expected to complete its work by end of April 2002. On 6 May 2002, the Chair of the panel informed the DSB that it had agreed to a request by the parties of 3 May 2002, that the panel suspend its proceedings, pursuant to Article 12.12 of the DSU, until 21 May 2002.

The Panel Report was circulated to Members on 29 May 2002. The Panel concluded that the EC Regulation was inconsistent with Article 2.4 of the TBT Agreement.

On 28 June 2002, the EC notified its decision to appeal to the Appellate Body certain issues of law covered in the in the Panel report and certain legal interpretations developed by the Panel.

On 26 September 2002 the report of the Appellate Body was circulated. The Appellate Body:

- found that the condition attached to the withdrawal of the Notice of Appeal of 25 June 2002 was permissible, and that the appeal of the EC, commenced by the

- *US and Canada's complaints against the EC's prohibition of meat from animals treated with growth-promoting hormones (EC-Hormones)*
- *Peru's complaint against the EC's trade description of sardines (EC – Sardines)*

Use and impact of Codex texts: Report of the Codex Survey 2022

This survey was lunched on 20 September 2022 with a deadline of 4 November 2022

Codex texts are found to be extremely or mostly useful for Members. Codex Members commented that they found Codex texts to be most useful when new knowledge is gained in the country and the texts can be used as a standard baseline.

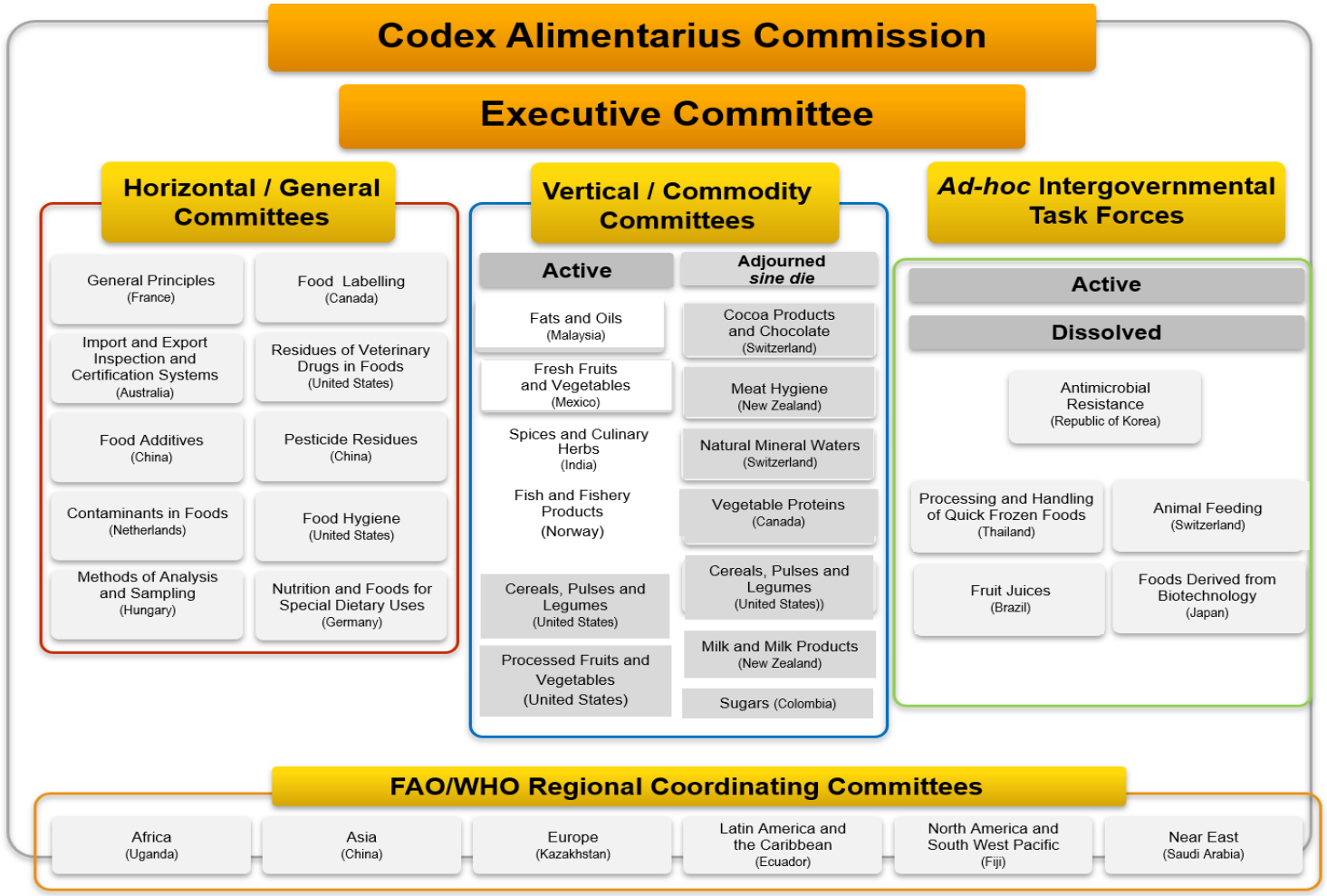
For details, please click the link: https://openknowledge.fao.org/server/api/core/bitstreams/c5f0d0b5-17a5-4bda-a990-f5e9feb696ac/content

Who can have a say in the Codex activities and Codex meetings?

- 189 Members
- 240 Observers

What is the structure of the Codex Alimentarius Commission?

8-Step procedure




CAC42
CODEX

What are the outcomes of Codex?

Standards: 237

Guidelines: 87

Codes of Practice: 57

Others

https://www.fao.org/fao-who-codexalimentarius/home/en/

What is the fundamental requirement for Codex Standards?

Shall be based on the principle of **sound scientific analysis** and **evidence**, involving a thorough review of all relevant information, in order that the standards assure the quality and safety of the food supply.
(*Excerpt from the Codex Procedural Manual*)

scientific analysis and evidence

Liaison & Separation

- **Codex – Risk management**
- **FAO/WHO Expert Bodies - Risk assessment**
  - **JECFA – food additives, veterinary drug residues, contaminants in food**
  - **JMPR – pesticide residues in food**
  - **JEMRA – microbiological hazards in food**
  - **JEMNU – nutrition in food**
  - **ad hoc Expert Consultations**

Codex texts related to fish and fishery products: texts related to the general requirements

Handling and Processing: Cover best practices for the proper handling, processing, and storage of fish to minimize contamination and spoilage, ensuring products are safe for consumers. For example,

- ***General Principles of Food Hygiene* (CXC 1-1969)**
- ***Code of Practice for Fish and Fishery Products* (CXC 52-2003)**
- *Code of Hygienic Practice for Low and Acidified Low Acid Canned Foods* (CXC 23-1979)
- *Code of Hygienic Practice for the Transport of Food in Bulk and Semi-Packed Food* (CXC 47-2001)
- Code of Practice to Minimize and Contain Foodborne Antimicrobial Resistance (CXC 60-2005)
- *Guidelines on the Application of General Principles of Food Hygiene to the Control of Viruses in Food* (CXG 79-2012)

Codex texts related to fish and fishery products: texts related to the general requirements

Food Additives: For example,

- *General Standard for Food Additives* (CXS 192-1995): food additives to be permitted for use under the Food Category 09.0 “Fish and fish products, including mollusks, crustaceans, and echinoderms”.

Fresh fish (09.1.1)

Description:
Includes fresh whale meat, cod, salmon, trout, etc.; and fresh fish roe.

This page provides information on the food additive provisions that are acceptable for use in foods conforming to the food category.

This food category is listed in the **Annex to Table 3**. Unless specifically indicated below, food additive provisions implied by **Table 3** do not automatically apply to this category.

GSFA Provisions for Food Category 09.1.1

INS No.	Food Additive or Group	Max Level	Notes	Defined In
133	Brilliant blue FCF	300 mg/kg	Note 50 Note 4 Note 16	09.1.1
150c	Caramel III - ammonia caramel	30,000 mg/kg	Note XS315 Note 4 Note XS312 Note XS292 Note 16	09.1
120	Carmines	300 mg/kg	Note 50 Note 4 Note 178 Note 16	09.1.1
132	Indigotine (Indigo carmine)	300 mg/kg	Note 50 Note 4 Note 16	09.1.1
110	Sunset yellow FCF	300 mg/kg	Note 50 Note 4 Note 16	09.1.1

- Food additive provisions in the specific commodity standards. *Standard for Live Abalone and for Raw Fresh Chilled or Frozen Abalone for Direct Consumption or for further Processing* (CXS 312-2013)

Codex texts related to fish and fishery products: Texts related to the general requirements

Contaminants: ***General Standard for Contaminants and Toxins in Food and Feed*** (CXS 193-1995): the limits for arsenic, cadmium, lead and methylmercury

Pesticide residues: the pesticide database available on the Codex website. For example, the Maximum Residue Limits (MRL) for lindane in diadromous fish is 0.01mg/kg.

Veterinary drug residues: Maximum Residue Limits (MRLs) and Risk Management Recommendations (RMRs) for Residues of Veterinary Drugs in Foods (CXM2). For example, the MRL for tetracycline in fish muscle is 200ug/kg

Codex texts related to fish and fishery products: texts related to the general requirements

Labelling:

General Standard for the Labelling of Prepackaged Foods (CXS 1-1985): This standard applies to the labelling of all prepackaged foods, including fish and fishery products. It covers general requirements such as the name of the food, list of ingredients, net contents, and the name and address of the manufacturer.

Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (CXG 32-1999):These guidelines apply to the labelling of organically produced fish and fishery products, ensuring that organic claims are accurate and comply with established standards.

Codex texts related to fish and fishery products: texts related to the general requirements

Laboratories:

- *Guidelines for the Sensory Evaluation of Fish and Shellfish in Laboratories* (CXG 31-1999)

Testing methods:

- *Recommended Methods of Analysis and Sampling* (CXS 234-1999)

Fish and fishery products				
Commodity	***Provision***	***Method***	***Principle***	***Type***
Fish and fishery products	Histamine	AOAC 977.13	Fluorimetry	II
Fish and fishery products	Mercury	AOAC 977.15	Flameless atomic absorption spectrophotometry	III
Fish and fishery products: canned products	Drained weight	Described in the standard	Weighing	I
Fish and fishery products: canned products	Net weight	Described in the standard	Weighing	I
Boiled dried salted anchovies	Sodium chloride (chloride expressed as sodium chloride)	AOAC 937.09	Titrimetry	II
Canned shrimps or prawns	Size, determination of	Described in the standard	Number per 100 g	I
Fish sauce	Total nitrogen	AOAC 940.25	Digestion	I
Fish sauce	Amino acid nitrogen	AOAC 920.04 and AOAC 920.03	Determining formaldehyde titration method Subtracting by ammoniacal nitrogen (magnesium oxide method)	I
Fish sauce	pH	AOAC 981.12 The pH shall be measured in a sample of fish sauce diluted with water to 1:10 using a pH metre. The dilution of fish sauce is necessary because of the high ionic strength in the undiluted sauce	Electrometry	III
Fish sauce	Sodium chloride	AOAC 976.18	Potentiometry	II
Fish sauce	Sodium chloride	AOAC 937.09	Titrimetry	IV
Fish sauce	Histamine	AOAC 977.13	Fluorimetry	II
Frozen abalone (covered by glaze)	Net weight	AOAC 963.18	Gravimetry	I
Frozen fish and fishery products	Thawing and cooking procedures	Described in the standards	Thawing and heating	I

Codex texts related to fish and fishery products: texts related to the specific requirements

24 Commodity standards

CXS 3-1981	Standard for Canned Salmon
CXS 36-1981	Standard for Quick Frozen Finfish, Uneviscerated and Eviscerated
CXS 37-1991	Standard for Canned Shrimps or Prawns
CXS 70-1981	Standard for Canned Tuna and Bonito
CXS 90-1981	Standard for Canned Crab Meat
CXS 92-1981	Standard for Quick Frozen Shrimps or Prawns
CXS 94-1981	Standard for Canned Sardines and Sardine-Type Products
CXS 95-1981	Standard for Quick Frozen Lobsters
CXS 119-1981	Standard for Canned Finfish
CXS 165-1989	Standard for Quick Frozen Blocks of Fish Fillets, Minced Fish Flesh and Mixtures of Fillets and Minced Fish Flesh
CXS 166-1989	Standard for Quick Frozen Fish Sticks (Fish Fingers), Fish Portions and Fish Fillets - Breaded or in Batter
CXS 167-1989	Standard for Salted Fish and Dried Salted Fish of the Gadidae Family of Fishes
CXS 189-1993	Standard for Dried Shark Fins
CXS 190-1995	Standard for Quick Frozen Fish Fillets
CXS 191-1995	Standard for Quick Frozen Raw Squid
CXS 222-2001	Standard for Crackers from Marine and Freshwater Fish, Crustaceans and Molluscan Shellfish
CXS 236-2003	Standard for Boiled Dried Salted Anchovies
CXS 244-2004	Standard for Salted Atlantic Herring and Salted Sprat
CXS 291-2010	Standard for Sturgeon Caviar
CXS 292-2008	Standard for Live and Raw Bivalve Molluscs
CXS 302-2011	Standard for Fish Sauce
CXS 311-2013	Standard for Smoked Fish, Smoke-Flavoured Fish and Smoke-Dried Fish
CXS 312-2013	Standard for Live Abalone and for Raw Fresh Chilled or Frozen Abalone for Direct Consumption or for further Processing
CXS 315-2014	Standard for Fresh and Quick Frozen Raw Scallop Products

Codex texts related to fish and fishery products: texts related to the specific requirements

Standard for Live and Raw Bivalve Molluscs (CXS 292-2008)

The requirements on shellfish toxins:

The following provisions apply to the edible parts of live bivalve mollusc (the whole part or any part intended to be eaten separately).

Name of biotoxin groups	Maximum level /kg of mollusc flesh
Saxitoxin (STX) group	≤0.8 milligrams (2HCL) of saxitoxin equivalent
Okadaic acid (OA) group	≤0.16 milligrams of okadaic equivalent
Domoic acid (DA) group	≤20 milligrams domoic acid
Brevetoxin (BTX) group	≤200 mouse units or equivalent
Azaspiracid (AZP) group	≤0.16 milligrams

A brief introduction to the *General Principles of Food Hygiene* (CXC 1-1969) and *Code of Practice for Fish and Fishery Products* (CXC 52-2003)

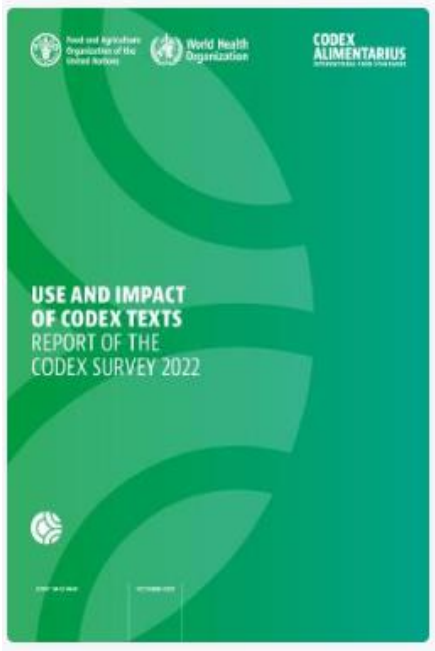
General Principles of Food Hygiene (CXC 1-1969)

- **Developed in 1969**
- **Has been revised multiple times to reflect advancements in food safety science and changes in global food production practices.**
- **Has established a solid foundation for safeguarding public health and facilitating international trade.**

Use and Impact of the General Principles of Food Hygiene (CXC 1-1969): the survey conducted in 2022

- **86 Members provided responses in relation to the use of CXC 1-1969**
- **A significant majority of respondents indicated that this general principle contributed to their national training and education programmes and tools.**

For details, please click the link: https://openknowledge.fao.org/server/api/core/bitstreams/c5f0d0b5-17a5-4bda-a990-f5e9feb696ac/content



General Principles of Food Hygiene (CXC 1-1969): Structure

General Part: Introduction, Objectives, Scope, Use, General Principle, Definitions

Part I: Good Hygiene Practice

Part II: HACCP system and guidelines for its application

Application of the General Principles of Food Hygiene (CXC 1-1969)

According to the Format for Codex commodity standards in the Procedural Manual, the following provision should be included in the Commodity standards:

"It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the General Principles of Food Hygiene (CXC 1-1969), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice."

Code of Practice for Fish and Fishery Products (CXC 52-2003): history and main structure

History

- Formally adopted by the Codex Alimentarius Commission in 2003
- undergone periodic revisions to reflect new scientific knowledge, technological advances, and emerging food safety challenges.

Main structure

- General Principles of Food Hygiene: Covering hygienic handling practices to minimize contamination.
- Specific Requirements for Different Types of Fish and Fishery Products: Including guidelines for fresh, frozen, canned, smoked, and dried fish.
- Temperature Control Measures: To prevent bacterial growth and ensure product quality.
- Monitoring and Testing Procedures: To verify compliance with safety standards.
- Guidelines for Aquaculture: Addressing water quality, feed management, and disease control.

A quick look at the Code of Practice for Fish and Fishery Products (CXC 52-2003)

CXC 52-2003 is a comprehensive set of guidelines developed by the Codex Alimentarius Commission to ensure the safety and quality of fish and fishery products.

CXC 52-2003 provides specific recommendations for handling, processing, and storage practices to minimize food safety hazards and maintain product quality throughout the fish and seafood supply chain.

CXC 52-2003 contains GMP and HACCP guidance intended for use by processors to produce safe and wholesome products.

https://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXC%2B52-2003%252FCXC_052e.pdf

Code of Practice for Fish and Fishery Products (CXC 52-2003): Latest revision

The 2019 version is the latest.

This updated version of the text introduces valuable information on minimizing the risk of histamine build-up in fish and fishery products through technical guidance for controlling histamine formation at key steps in the food chain from harvesting to processing.

Thank you

http://www.fao.org/fao-who-codexalimentarius/en/