



Laws and Regulations  
Relating to Foods in  
Sri Lanka, Bangladesh &  
Nepal

***BY***

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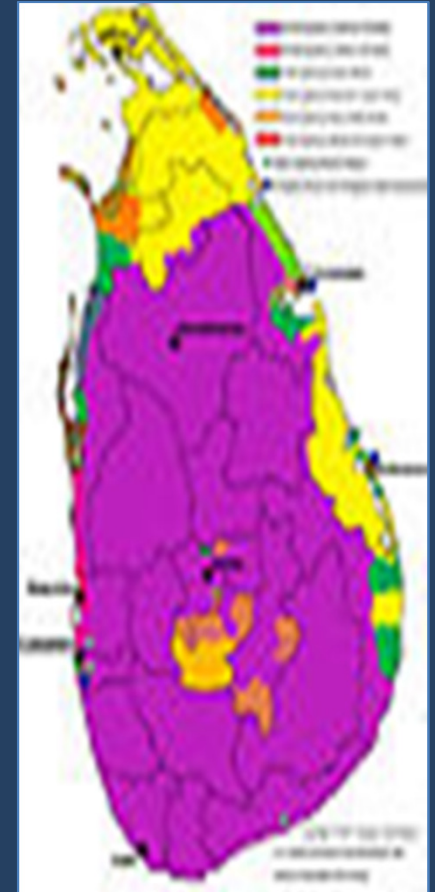
**SRI LANKA**

# Country Fact Sheet



## SRI LANKA

- Sri Lanka is an Island in the Indian Ocean, off the south-eastern coast of India. It is about the size of Ireland. It is about 28 kilometers (18 mi.) .
- Population is about 20 million. The Sinhalese, make up 74.9% of the population . Tamils are 15.4% . Most Sinhalese are Buddhist; most Tamils are Hindu.
- Official Languages: Sinhala and Tamil.



# Administrative Authorities

**Administrative Authorities in Sri Lanka as shown in the following Table are responsible for Food Administration of food categories and related stage of production.**

| Sector   | Products  | Imported   | Domestic            |
|--|---|--|---------------------|
| <b>Ministry Of Health/<br/>Directorate General of<br/>Health Services</b>  | <b>Food Products</b>  | <b>Food Control<br/>Administration of *MoH<br/>(FCA)</b> | <b>FCA</b>          |
| Ministry/Department of<br>Agriculture (MOA)  | Primary products of agriculture   | Food Control Administration<br>of *MoH (FCA)             | MOA and FCA         |
| Department of Animal<br>Production & Health<br>(DAP &H)  | Animal Husbandry<br>Milk Products   | DAP&H and FCA  | DAP&H and FCA       |
| Coconut Development<br>Authority (CDA)   | Coconuts & Their Products   | FCA and CDA  | FCA and CDA         |
| Tea Board (TB)   | Manufactured Tea  | FCA and TB   | FCA and TB          |
| Ministry/Department of<br>Fisheries (MDF)  | Fish and Fish Related Products  | FCA  | MDF and FCA         |
| Excise Department (ED)   | Alcoholic Beverages   | ED/Customs   | ED                  |
| Ministry of Local Government<br>(MoLG)   | General Food Safety and<br>Standards (implementation)   |  |                     |
| <b>Sri Lanka Standards<br/>Institution (SLSI) Established<br/>Under Sri Lanka Standards<br/>Institution Act No. 6 of 1984.</b> | <b>Formulation Of Voluntary &amp;<br/>Mandatory Standards General<br/>National Standards Of Consumer<br/>And Industrial Products<br/>Including Food</b> | <b>SLSI</b>  | <b>FCA and SLSI</b> |
| Consumer Affairs Authority<br>(CAA) Established Under the<br>Consumer Affairs Authority Act<br>No. 9 of 2003                   | Promotion of Effective Completion<br>and Protection of Consumers:<br>Regulation Of Internal Trade   | FCA  | CAA                 |

## **Director General of Health Services**

The Chief Food Authority is Director General of Health Services under Ministry of Health. It is the apex body responsible for the country's Food Control Administration (FCA). The Food Advisory Committee recommends the standards and regulations to be adopted by the Government.

## **Sri Lanka Standards Institute**

Sri Lanka Standards institute (SLSI) plays an integral role with the FCA and in formulation of National Standards under the Food Act. The Standards of the SLSI are mostly voluntary. Some of them are declared mandatory for verification of standard parameters at the point of import.

The SLSI has mutual agreements with standards setting bodies of the exporting countries that certify the products exported from selected countries. Based on the certification of those bodies and verification checks carried out at national level the SLSI releases those products for further inspection and verification of FCA as far as food products are concerned

# MAIN LEGISLATION

## i) The Food Act No. 26 of 1980

- The Food Act No. 26 of 1980 amended by Food (Amendment) Act No. 20 of 1991 is the most important regulation and is administered by FCA of Ministry of Health.

Part I of the Food Act provides for prohibition in respect of food related to:

- a) Additives.
- b) Fitness for Human Consumption.
- c) Cleanliness.
- d) Adulteration.
- e) Sanitary conditions.

**Part II of the Food Act includes provisions for establishment of Administration :**



- a) Establishment of a Food Advisory Committee (FAC).**
- b) Designating Director General of Health Services as the Chief Food Authority (CFA).**
- e) Providing for Food Authorities under the Food Act; viz. Director General of Customs for imported foods; Chief Medical Officer of Health (CMOH) for the Colombo Municipal area; and Local Authorities (Urban Councils and Pradheshiya Sabhas etc.).**

**Part III of the Food Act provides for nature of offences under the Food Act and punishment.**

**Part IV of the Food Act provides protection for action taken in good faith; fines etc.**



## ii) Regulations have been made Under Section 32 Of The Food Act

- 1) Miscellaneous Regulation
- 2) Hygiene
- 3) Food Standards
- 4) Non-nutritive sweeteners
- 5) Milk Standards
- 6) Additional Approved Analyst Regulations
- 7) Iodization of Salt
- 8) Microbiological Analyst
- 9) Labeling & Miscellaneous
- 10) Preservatives
- 11) Genetically Modified Foods
- 12) Bread Standards
- 13) Food (Labeling & Advertising) Regulation – 2005
- 14) Irradiation
- 15) Coloring Substances
- 16) Bottled or Package Water
- 17) Adoption of SL Standards
- 18) Antioxidants

# Summary of Food Standards

- About 70 Commodities are covered under the Food Standards as per Regulations of 1991.
- These composite regulations are being gradually divided into separate categories such as 'oils and fats', Cereals, Pulses and Legumes, Spices and condiments etc., keeping in line with the Codex Guidelines and Standards.
- Most of these Regulations are in formulation stages and they will be published in Sinhala, Tamil and English languages once they are finalized by the Department of Legal Draftsman.

# Laws and Regulations Related to Food Additives

## OVERVIEW

- According to Food Additives (General) Regulations yet to be published (currently in draft form) "Food additive" means any safe substance that is intentionally introduced into a food in small quantities.
- Food Additives can be used to affect the food's keeping quality, texture, consistency, appearance, odour, taste, alkalinity or acidity or to serve any other technological function.

They include :

- Preservative,
- Coloring Substance,
- Flavouring Substance,
- Flavour Enhancer
- Antioxidant,
- Emulsifying And Stabilizing Agent,
- Sweetener And Food Conditioner,

**But do not include nutrient supplement, incidental constituent or common salt.**

# Food Additives: Highlights Of Provisions

- Functional classes of Food Additives as per the Table provided by the Codex are considered in the Sri Lankan standards with the relevant INS numbers.
- **Permitted Food Additives are prescribed with their Maximum Limits under the Food Additives Regulations in Sri Lanka. They are invariably based on the Codex Limits prescribed.**
- The recommended list of the Codex and evaluations carried out by Joint Expert Committee on Food Additives (JECFA) is consulted before approval of any Food Additive in Sri Lanka.
- **The labelling of food additives is governed by the Food (Labelling & Advertising) Regulation – 2005 in Sri Lanka.**
- Assessment of food additives as such is not carried in Sri Lanka and there has been no need for such assessments.

# FLAVORS



## As Per Draft Flavor Regulations

### CATEGORIES

- i. “Natural Aromatic Raw Material’
- ii. “Natural Flavouring Concentrate”
- iii. “Natural Flavouring Substance”
- iv. “Nature-Identical Flavouring Substance”
- v. “Artificial Flavouring Substance”

### Negative List of Flavors

- i. Aloin.
- ii. Beberine.
- iii. Beta- Azarone.
- iv. Cade oil.
- v. Calamus oil.
- vi. Coumarin and dihydrocoumarin.
- vii. Diethylene glycol.
- viii. Monoethyl ether.
- ix. Ethyl Methyl Ketone.
- x. Ethyl-3-Phenyglycidate.
- xi. Eugeny methyl ether.
- xii. Methyl Napthyl ketone.
- xiii. Saffrole and Isosaffrole.
- xiv. Santonin.
- xv. Sassafras oil.
- xvi. Thujone, Isothujone, alpha and betathujone.
- xvii. Tonka bean.

**There are a number of food products in which flavour enhancers are prohibited as per the draft regulations Schedule III.**

## **List Of Plant Or Animal Sources For Flavoring Agents.**

**No such classification has been made in any of the regulations of Sri Lanka although the following provision has been made in the Food (Additives – Flavoring and Flavor enhancers) Regulations (Draft):**

**“The label on or attached to a package of a natural flavoring shall include the statement “NATURAL (here insert description of flavor) FLAVORING” or a similar statement.”**

# Processing Aids

**Currently NO Regulation is in place.**

**The Inventory of Processing Aids compiled and adopted by the Codex Alimentarius Commission is consulted.**

- **The inventory contains the following:**
- **Category – functional effect classification.**
- **Processing Aid – the chemical name and description of the substance used.**
- **Area of Utilization.**
- **Level of Residues.**
- **Interaction with food.**
- **JECFA evaluation.**

# Carry Over

- “Carry Over” is defined as the presence of food additives in food as a result of the use of raw material or other ingredients in which these additives were used.



# PRESERVATIVES



- The present regulation for Food Preservatives is under revision.
- Schedule 1 of “Food Preservative Regulation” provides list of Permitted Food Preservatives along with INS number. 11 Food preservatives are permitted.

| <b>Column 1</b>               |                | <b>Column II</b>   |  |
|-------------------------------|----------------|--|--|
| <b>Permitted Preservative</b> | <b>INS No.</b> | <b>Alternative form in which the permitted preservative may be used (to be calculated as the permitted preservative shown in Column I)</b>   | <b>INS No.</b>                                       |
| 1. Sorbic acid                | 200            | Sodium sorbate<br>Potassium sorbate  | 201<br>202   |
| 2 . Benzoic acid              | 210            | Calcium sorbate<br>Sodium benzoate<br>Potassium benzoate<br>Calcium benzoate   | 203<br>211<br>212<br>213                             |
| 3. Sulphur dioxide            | 220            | Sodium sulphite<br>Sodium hydrogen sulphite<br>Sodium metabisulphite<br>Potassium metabisulphite<br>Potassium sulphite<br>Potassium hydrogen sulphite<br>Calcium sulphite<br>Calcium hydrogen sulphite | 221<br>222<br>223<br>224<br>225<br>228<br>226<br>227 |
| 4. Biphenyl, Diphenyl         | 230            |  |  |
| 5. Orthophenylphenol          | 231            | Sodium orthophenylphenate  | 232  |
| 6. Nisin                      | 234            |  |  |
| 7. Potassium nitrite          | 249            |  |  |
| 8. Sodium nitrite             | 250            |  |  |
| 9. Sodium nitrate             | 251            |  |  |
| 10.Potassium nitrate          | 252            |  |  |
| 11Propionic acid              | 280            | Sodium propionate<br>Calcium propionate<br>Potassium propionate  | 281<br>282<br>283                                    |

**Schedule II provides list of articles of Food which may contain Permitted Preservative and the Nature and Quantity of the Permitted Preservative in each case.**

# Permitted COLORS



## A. Synthetic Colors As Per Coloring Substances Regulations

| <i>Color</i> | <i>Common Name</i> | <i>Color Index</i> | <i>INS Number</i> |
|--------------|--------------------|--------------------|-------------------|
| Red          | Carmosine          | 14720              | 122               |
|              | Ponceau 4R         | 16255              | 124               |
|              | Erythrosine        | 45430              | 127               |
| Yellow       | Sunset Yellow FCF  | 15985              | 110               |
|              | Tartrazine         | 19140              | 102               |
| Blue         | Indigo Carmine     | 73015              | 132               |
|              | Brilliant Blue FCF | 42090              | 133               |
| Green        | Green S            | 44090              | 142               |

**Synthetic dyes specified in Table 1 shall conform to the following standard-**

|                                  |       |
|----------------------------------|-------|
| Pure dye minimum                 | 85.0% |
| Water insoluble matter maximum   | 0.1%  |
| Subsidiary dye maximum           | 4.0%  |
| Ether extractable matter maximum | 0.2%  |
| Intermediates maximum            | 0.5%  |

## B. Other Permitted Coloring Substances As Per Coloring Substances Regulations

| <i>INS Number</i> | <i>Natural coloring substance</i>     | <i>Color index</i> |
|-------------------|---------------------------------------|--------------------|
| 100               | Curcumin                              | 75300              |
| 120               | Cochineal (Carminic Acid)             | 75470              |
| 140               | Chlorophyll                           | 75810              |
| 150b              | Caramel                               |                    |
| 160a              | Carotenes (alpha, beta or gamma)      | 75130              |
| 160b              | Annato                                | 75120              |
| 160c              | Capsanthin or capsorubin              |                    |
| 160d              | Lycopene                              | 75125              |
| 160e              | Beta-apo-8' – cartenal carteonic acid |                    |
| 161a              | Flavoxanthin                          | 75135              |
| 162               | Beetroot red (betanin)                |                    |
| 163               | Anthocyanins                          |                    |
| 171               | Titanium dioxide                      | 77891              |

# **Commodity Standards**

## **Case Studies**

# 1. Instant Noodles

- There is no standard for Instant noodles under the Food Act – this is not even considered as a possibility in the near future. SLSI is preparing draft standards. The texts are not yet available.
- Reference can only be given to CODEX STAN 249-2006 which would be taken into consideration as a benchmark standard if and when such a standards framed.

## 2. Carbonated Soft Drinks

- There is standard for Carbonated Soft Drinks. However SLSI is revising it and it will become the de facto standard under the Food Act once the standard is published under Food Act.



## SLS 183

The draft SLS 183 prescribes the requirements and methods of sampling and testing for carbonated beverages and formulated caffeinated beverages. There are detailed requirements for ingredients to be used, flavors, preservatives, labeling, packaging, sampling and maintaining requirements for hygiene.

It allow:

➤ **Non-nutritive sweeteners:**

|                     |                       |
|---------------------|-----------------------|
| <b>Aspartame</b>    | <b>-600 mg/l(max)</b> |
| <b>Acesulfame-I</b> | <b>-350 mg/l(max)</b> |
| <b>Sucralose</b>    | <b>-300 mg/l(max)</b> |
| <b>Neotame</b>      | <b>- 20 mg/l(max)</b> |

- **Caffeine in Carbonated Beverages:** 150 mg/l when tested in accordance with the method prescribed in AOA 979.08.
- **Caffeine in Formulated Caffeinated Beverage:** Not less than 100 mg/l when tested in accordance with the method prescribed in AOA 979.08.

## The formulated caffeinated beverages can contain:

- **Thiamine**
- **Riboflavin**
- **Niacin**
- **Vitamin B<sub>6</sub>**
- **Vitamin B<sub>12</sub>**
- **Pantothenic acid**
- **Taurine**
- **Glucurcuronolactone**
- **Inositol**

## 3. Prepared Frozen Foods

No standards relating to prepared frozen foods either under the Food Act or under the SLSI has been prepared and published so far.

# 4. Cow's Milk

There are definition and standards for Cow's Milk under the Food Act . These are being revised as per Draft Food (Milk and Milk Products) Regulations with Legal Departments. The requirements for additives and labeling are included in the regulations. Following categories of Cow's Milk are included:

|   |                                       |
|---|---------------------------------------|
| <b>1. Milk/Liquid Milk</b>                      | <b>8. Ultra Heat Treated Milk</b>     |
| <b>2. Raw Or Fresh Liquid Milk</b>              | <b>9. Flavored Milk</b>               |
| <b>3. Standardized Milk</b>                     | <b>10. Recombined Milk</b>            |
| <b>4. Semi-skimmed Milk Or<br/>Low Fat Milk</b> | <b>11. Reconstituted Milk</b>         |
| <b>5. Skimmed Milk Or Non Fat<br/>Milk</b>      | <b>12. Reconstituted Skimmed Milk</b> |
| <b>6. Pasteurized Milk</b>                      | <b>13. Toned Milk</b>                 |
| <b>7. Sterilized Milk</b>                       | <b>14. Lactose Hydrolyzed Milk</b>    |
|   |                                       |

# Shelf Life of Imported Food Items Under Food Act



- The Regulation specifies that all items of food imported into Sri Lanka shall at the point of entry into Sri Lanka, possess a minimum period of sixty per centum (60%) of unexpired shelf life.
- **Provided that the shelf life period specified above, shall not be enforced in respect of imported fresh fruits and vegetables and potatoes which have not been peeled or cut.**
- The period of shelf life of an item of imported food shall be determined on the basis of the date of manufacture and the date of expiry as declared by the manufacturer of the product and which is depicted on the label attached thereto
- For the purposes of these regulations, the expression “end of shelf life” shall be identified by the use of the words “date of expiry”, “best before”, “use by” or “use before” or other similar words which convey this meaning and which are used by a manufacturer of any food item being imported into Sri Lanka.
- For the purpose of these regulations “shelf life” means the period of time between the date of manufacture and its usability by the consumer, during which time the product is safe for human consumption and is of satisfactory quality in terms of nutritional value, flavor, texture and appearance.

# ***BANGLADESH***

# Bangladesh

## Officially The People's Republic of Bangladesh ( \_\_\_\_\_ )



- Bangladesh is a country in **South Asia** . It faces the **Bay of Bengal** to its south, and is bordered by **India** on the north, west and east, as well as **Burma (Myanmar)** on the southeast.
- Bangladesh has the highest population density among large countries, 1,237.51 persons per square kilometer, and 12th overall, when small countries and city-states are included.<sup>1</sup>
- Bangladesh has 7th largest population in the world - About 164.4 million.
- About 90% of Bangladeshis are **Muslims** and the remainder are mostly **Hindus**.
- Official language: **Bengali** (also known as Bangla).



# Introduction To Regulatory Framework For Foods

- Bangladesh is yet to develop a unified Food Safety Administration System and to formulate a Food Safety Policy. But it has a National Food and Nutrition Policy where attention has been given on food safety.
- Significant activities in Food Safety and Quality Control are going on in the country. A number of Ministries, Departments and Agencies are involved in these activities with a major responsibility of the Ministry of Health and Family Welfare (MOHFW) which has a unique infrastructure to deliver its services throughout the country.



# Major Stakeholder Ministries And Departments For Food Control

**Food control in Bangladesh is a multi-sectorial responsibility.**

| <u>Sl. No</u> | <u>Ministry</u>   | <u>Department/Organization</u>  | <u>Major activities</u>  |
|---------------|---|---|--|
| 1.            | Ministry of Agriculture                                       | Plant Protection Wing, DAE  | <ul style="list-style-type: none"> <li>Phyto Sanitary certificate for Import/Exported plants/plant products</li> <li>Pesticide Use Control</li> <li>Fertilizer Use Control</li> </ul>            |
| 2.            | Ministry of Food  | Directorate General of Food (DGF)   | <ul style="list-style-type: none"> <li>Quality Control of PFDS, Stock, Procured Food grains/Food Stuff, Imported food etc.</li> <li>Food Control in the Market (not doing at present)</li> </ul> |
| 3.            | Ministry of Health & Family Welfare                           | Directorate General of Health; District & Upazila Health Administration and Institute of Public Health. | <ul style="list-style-type: none"> <li>Food Quality and Sanitation Control in Upazila/District level</li> <li>Testing</li> </ul>   |
| 4.            | Ministry of LGRD  | City Corporation & Pourashava Health Units  | Have Sanitary Inspector, Labs and Public Analyst for food quality control in their command areas.  |
| 5.            | Ministry of Fisheries & Livestock                             | A) Department of Fisheries (FIQC Wing)  | <ul style="list-style-type: none"> <li>Fish Quality Control &amp; Certification for export</li> <li>Same for the domestic market</li> </ul>  |
|               |   | B) Department of Livestock  | <ul style="list-style-type: none"> <li>Animal Health</li> <li>Animal Product</li> <li>Imported Animal</li> </ul>   |
| 6.            | Ministry of Industries  | BSTI  | <ul style="list-style-type: none"> <li>Frame Standards of Food Products</li> <li>Testing &amp; Certification Marks and Surveillance.</li> </ul>  |
| 7.            | Ministry of Science, Information and Communication Technology | BAEC  | Test Radiation level of Imported Food items; Pesticides Residues   |
|               |   | IFST, BCSIR   | Testing of Food Items; Research and Development  |
| 8.            | <b>Ministry of Education</b>                                  | <b>DG, Primary, DG, Secondary, Text Book Board, Universities</b>  | <b>Food safety, Nutrition &amp; Environmental issues in the text book of all level of education</b>  |
| 9.            | Ministry of Information                                       | PIB<br>BTV<br>Radio Bangladesh  | Broad cast issues for awareness building   |
| 10.           | Ministry of Home  | Bangladesh Police   | Assist the Inspection Agencies   |
| 11.           | Ministry of Law, Justice & Parliamentary Affairs              | -   | Formulation, Vetting, Parliamentary Approval etc.  |

# Major Laws & Regulations

There are several laws in Bangladesh for maintaining health and safety standards but there are 2 major regulations as follows:

## **1) The Bangladesh Pure Food Ordinance, 1959 Under Ministry of Health And Family Welfare**

This is an ordinance to provide better control of the manufacture and sale of food for human consumption. Now, this Ordinance is under revision as 'The Bangladesh Pure Food (Amendment) Act'. Under this Act, it has been proposed to constitute a National Food Safety Council, headed by the Ministry of Health and Family Welfare as well as to establish Food Courts.

AND

## **The Bangladesh Pure Food Rules, 1967**

The Pure Food Rules contain standards for 107 mandatory generic food standards. Now, these are under revision.

## **(2) The Bangladesh Standards And Testing Institution Ordinance, 1985 Amended By The Bangladesh Standards And Testing Institution (Amendment) Act, 2003 Under Ministry Of Industry**

Under the Ordinance, the government has established the Bangladesh Standards and Testing Institution (BSTI). It certifies the quality of commodities, materials, whether for local consumption or for export and import.

### **POINTS TO NOTE**

- All standards issued under Pure Food Rules are mandatory in nature and are enforced by BSTI.
- Carbonated water standards have been formulated and enforced under BSTI. These standards are based on Indian as well as CODEX guidelines.
- BSTI has adopted 153 Codex standards for food testing.

- **190 food standards developed by BSTI of which 52 should have compulsory certification marks.**
- **28 Codex standards have been adopted as Bangladesh standards.**
- **The BSTI conducts Surveillance including Surprise Inspections and tests Samples At The BSTI Laboratory**
- **BSTI is the legal entity for certification of products and services under its Marks certification scheme.**
- **The legal metrological testing facility is under the BSTI management.**
- **Most of the imports and exports requirements are covered under BSTI mandate. For specific inquiries BSTI need to be consulted.**  
**BSTI has provided regional testing facilities in the ports as well main business centers.**

# Related Laws And Regulations

- Bangladesh - New food safety laws 17 Jan 2010
- The Cantonments Pure Food Act - 19/07/1966
- The Pure Food Ordinance - 14/10/1959
- The Animal Slaughter (Restriction) and Meat Control Act - 23/04/1957
- The Food (Special Courts) Act - 13/11/1956
- The Seed Rules - 08/03/1998
- Protection and Conservation of Fish Rules / Act - 17/10/1985
- The Breast-Milk Substitutes (Regulation of Marketing) Ordinance - 24/05/1984

The Ordinance aims at protection and encouragement of breastfeeding, banning advertising, import, distribution and sale of breast-milk substitutes.

- The Marine Fisheries Rules - 05/09/1983
- The Marine Fisheries Ordinance - 19/07/1983
- The Fish & Fish Products (Inspection & Quality Control) Ordinance - 17/05/1983
- The Importers, Exporters and Indenters (Registration) Order - 22/10/1981
- The East Pakistan Fisheries (Protection) Ordinance - 24/03/1959

# Laws And Regulations On Food Additives

## Overview

- ❑ No definite description exists under Bangladesh Pure Food Rules 1967 on Food Additives.
- ❑ There are provisions for use of Colors, Flavors, Preservatives and Sweeteners.
- ❑ Functional Classes have been prescribed.
- ❑ Stabilizers or emulsifying agents are permitted.
- ❑ Antioxidants are permitted.

# Flavors Under Pure Food Rules

- There is definition for Flavoring Compounds in food .
- Foods containing Flavors have to be labeled.
- Food containing added natural flavouring compounds shall be labelled in the legend with 'NATURAL FLAVOUR' or 'CONTAIN NATURAL FLAVOURING' provided that only those flavouring compounds which have been obtained from fruits or plants by extraction with suitable harmless solvents or by distillation or by expression, or by any other suitable process are used.
- Food containing artificial flavouring compound shall be labelled with the legend 'ARTIFICIAL FLAVOUR' or 'IMITATION FLAVOUR' provided that where a food contains a mixture of both natural and artificial flavouring compounds it shall be labelled as 'ARTIFICIAL FLAVOUR' provided further that those flavoring compounds which have been obtained by Chemical synthesis shall be considered as artificial.



## Processing Aids

**No description available under the Bangladesh Pure Food Laws 1967.**

## Carry Over

**No description available under the Bangladesh Pure Food Laws 1967.**

# Functional Classes



Under Bangladesh Pure Food Laws, 1967, following functional classes of foods Additives have been listed:

## List Of Food Categories

- Milk and Milk Products.
- Edible Oils and Oil Products.
- Tea, Coffee, Roasted Coffee and Grounded Coffee.
- Sugars and Sugary Products  
Honey.
- Food Grains, Cereals and Their Products.
- Starchy Products.
- Non Alcoholic Beverages.
- Spices.
- Fruits, Vegetables and Miscellaneous Products.
- Edible Fats.
- Biscuits, Bread and Confectionery Product.
- Dried Fish.
- Ice.

## Additives

- Flavoring Agents.
- Coloring Matters.
- Class I And Class II Preservatives.
- Antioxidants.
- Stabilizers.
- Non Nutritive Constituents.
- Common Salt.
- Baking Powder.
- Edible Gelatin

# Colouring Matter In Food



## Coal-tar Dyes

| <u>Colour Index No.</u> | <u>Colour Index Name</u> | <u>Common Name</u>      | <u>Chemical Class</u> |
|-------------------------|--------------------------|-------------------------|-----------------------|
| • 73015                 | Food Blue 1              | Indigo Carmine          | Indigoid              |
| • 42090                 | Food Blue 2              | Brilliant Blue F.C.F    | Triarylmethane        |
| • 69800                 | Food Blue 4              | Indanthrone             | Anthraquinone         |
| • 42051                 | Food Blue 5              | Patent Blue V           | Triarylmethane        |
| • 42640                 | Food Violent 2           | Violet 6b               | Triarylmethane        |
| • 42580                 | Food Violent 3           | Violets B.N.P.          | Do.                   |
| • 42085                 | Food Green 1             | Sulpho Green 2 B.A.     | Do.                   |
| • 42095                 | Food Green 2             | Acid Brilliant Green    | Do.                   |
| • 42053                 | Food Green 3             | A.F. Green No. 3        | Do.                   |
| • 15985                 | Food Yellow 3            | Sunset Yellow F.C.F     | Monoazo               |
| • 19140                 | Food Yellow 4            | Tartrazine              | Do.                   |
| • .....                 | Food Brown 1             | Brown F.K.              | Disazo                |
| • .....                 | Food Brown 2             | Chocolate Brown<br>F.B. | Monoazo               |
| • 20285                 | Food Brown 3             | Chocolate Brown<br>H.T. | Disazo                |
| • 14700                 | Food Red 1               | Ponceau S.X.            | Monoazo               |
| • 16185                 | Food Red 9               | Amaranth                | Do.                   |
| • 45430                 | Food Red 14              | Brythrosine B.S.        | Xanthene              |
| • 28440                 | Food Black 1             | Black P.N.              | Disazo                |

\*The colour index, second edition, 1956, Society of Dyers and Colorists, England.

- The maximum limit of permissible colour which may be added to any food shall be one grain per pound of food.
- The following natural colouring matters may be used in or, upon any article of food-
  - cochineal, carmine, caramel, Carotenes, chlorophyll, curcumin, lactoflavin, annatto, ratanjot, saffron.
- Inorganic colouring matters or pigments shall not be added to any article of food.
- ✓ The use of artificial or synthetic colouring matters in raw foodstuffs which are consumed after cooking in the usual way is prohibited.
- No person shall sell a coal-tar colour or a mixture of coal-tar colors unless the label on the package carries-
  - The common name (s) of the coal-tar colour (s).
  - The lot number of coal-tar colour; and
  - The words “Food Colour”.

## ➤ Negative List

Use of permitted coal-tar dyes in or upon any food other than those shown below is prohibited-

- **Ice-cream**
- **Dairy products except milk, dahi, butter, ghee, chhana, condensed milk, cream, and baby food**
- **Smoked fish**
- **Egg preparation**
- **Sweets including pastry and Other confectionaries**
- **Fruit Products**
- **Non-alcoholic beverages except tea, cocoa and coffee**
- **Custard powder**
- **Jelly crystals**
- **Soup powder and**
- **Luncheon meat**
- **Processed or preserved vegetables**
- **Flavoring agents**

# Preservatives Under Food Rules, 1967

## Class I Preservative shall be-

Common salt

Sugar

Dextrose

Glucose

Wood smoke

Spices

Vinegar or acetic acid

Honey

Hops

Commercial salt petre; and

Alcohol or potable spirit, and

## Class II preservative shall be –

Benzoic acid including salts thereof,

Sulphurous acid including salts thereof,

Nitrites of sodium or potassium in respect of

food like ham, pickle, meat, and

Sorbic acid including salts thereof.

**The use of Class II preservatives is restricted to 26 specified group of foods and proportions in which they can be used has also been specified.**

**Use of more than one class II in any food is prohibited.**

# Antioxidants In Food

**Antioxidants shall not be added to any food other than :**

- **Edible oils and fats from animal, vegetable and fish, vitamin oils or concentrates,**
- and**
- **Products consisting essentially of fat such as margarine or the like.**



# Stabilisers In Food

The use of stabilizers or emulsifying agents, singly or in combination is permitted:

- Agar Agar.
- Carob bean.
- Irish moss or carrageen or chondrus.
- Guar gum.
- Sodium alginate.
- Monoglycerides or diglycerides of fatty acids.
- Brominated vegetable oils.
- Gum Acacia.
- Provided that where a standard for the nature, substance and quality of a----- prescribes a limit, that shall not be exceed by the stabilizer.

## Non-Nutritive Constituents

- The following non-nutritive sweeteners or their salts-may be used:

- ❖ Calcium cyclobexyl-sulphate; and

- ❖ Sodium cyclohexyl-sulphate.

Non-nutritive sweeteners and sugar shall not be used in combination in any food.

# Negative List For Food Additives

Negative List is Not clearly specified Under Bangladesh Food Laws, 1967. However, products are considered injurious to health if they contain the following metal or metalloids in excess of the tolerance limit showing against each-

|                |         |     |       |     |         |
|----------------|---------|-----|-------|-----|---------|
| Aluminum       | Maximum | 250 | parts | per | million |
| Antimony       | “       | 2.0 | “     | “   | “       |
| Arsenic Liquid | “       | 0.1 | “     | “   | “       |
| Arsenic Solid  | “       | 2   | “     | “   | “       |
| Boron          | “       | 80  | “     | “   | “       |
| Cadmium        | “       | 6   | “     | “   | “       |
| Zinc           | “       | 100 | “     | “   | “       |
| Copper         | “       | 10  | “     | “   | “       |
| Tin            | “       | 100 | “     | “   | “       |
| Fluorine       | “       | 1.5 | “     | “   | “       |
| Silver         | “       | 1   | “     | “   | “       |
| Lead Liquid    | “       | 2   | “     | “   | “       |
| Lead Solid     | “       | 20  | “     | “   | “       |

# Labeling Of Food Additives

- **Most of the labelling requirements are in conformity to regional requirements and are guided by general principles of Codex Labeling norms. The labels are in Bangla and English dialects with general information on Brand Name, Manufacture details, weight/ volume, price and date of manufacture. Labeling of additives is as per generic guidelines. Currently BSTI is developing the labelling policy.**

## Labelling Under Bangladesh Pure Food Rules, 1967

Container of food which contains preservative shall not be marked “pure”- the word “Pure” shall not be used on the label of the container of any food which contains preservative.

No preservative shall be sold for use in food unless the label carries-

- The common name.
- The chemical name.
- The net weight.
- Adequate directions for use in accordance with the limits prescribed for such preservatives; and
- The name and address of the manufacturer.

# *Commodity Standards* *Case Studies*

# 1. Instant Noodles

- Under Bangladesh Pure Food Rules, 1967, NO specific standard for Instant Noodles are prescribed. However, standards for cereal products, local products and vermicelli are provided.

## 2. Carbonated Soft Drinks

- Under The Bangladesh Pure Food Rules 1967 Standards for Non alcoholic Beverages, which include Aerated water and Soda water, are prescribed. These are mandatory and enforced by government agencies.



### **3. Prepared Frozen Foods**

**There are NO standards Under the Bangladesh Pure Food Rules, 1967, for Frozen Foods including fish, meat and poultry products.**

## 4. Cow's Milk

- Under The Bangladesh Pure Food Rules 1967, Milk and Products standardization have been prescribed. These standards include cow's milk along with other local processed milk products manufactured and traded in the country. All these standards are mandatory and enforced by government agencies.

# *Nepal*

# Nepal

- The Federal Democratic Republic of Nepal, is located in South Asia in the Himalayas and bordered to the north by the People's Republic of China, and to the south, east, and west by the Republic of India.
- Population of approximately 27 million .
- Nepal is the world's 93rd largest country by land mass and the 41st most populous country.
- Hinduism is practiced by about 81% of Nepalese, Buddhism is linked historically with Nepal and is practiced by 9%,
- Official Language: Nepali



# Introduction

- In the course of formulating food regulatory framework in Nepal in 1960s, many of the technical aspects were referred from Prevention of Food Adulteration Act of India or PFA. These days, the trend of updating of regulation is mainly guided by the Codex guidelines.

# Legislations And Agencies

## Food Safety



| <b>Act/Rules and implementing Departments</b>   | <b>Related Ministries</b>   |
|---|---|
| <b>Food Act 1966 DFTQC</b>  | <b>Ministry of Agriculture Development</b>  |
| <b>Food Regulation 1970 DFTQC</b>   | <b>Ministry of Agriculture Development</b>  |
| <b>Consumer protection Act 1998 DoC</b>   | <b>Ministry of Commerce and Supplies</b>  |
| <b>Consumer protection Rules 2000 DoC</b>   | <b>Ministry of Commerce and Supplies</b>  |
| <b>Slaughterhouse and Meat Inspection Act 1998 DLS</b>  | <b>Ministry of Agriculture Development</b>  |
| <b>Slaughterhouse and Meat Inspection Rules 2000 DLS</b>  | <b>Ministry of Agriculture Development</b>  |
| <b>Local self-governance Act 1999 Local Govts</b>   | <b>Ministry of Local Development</b>  |
| <b>Local self-government Rules 2000 Local Govts</b>   | <b>Ministry of Local Development</b>  |
| <b>Nepal Standards (Certification mark) Act 1980 NBSM</b>   | <b>Ministry of Industries</b>   |
| <b>Nepal Standards (Certification mark) Rules 1983 NBSM</b>   | <b>Ministry of Industries</b>   |
| <b>Standard weights and Measures Act 1968 NBSM</b>  | <b>Ministry of Industries</b>   |
| <b>Standard weights and Measure Rules 1978 NBSM</b>   | <b>Ministry of Industries</b>   |
| <b>Animal health and livestock service act 1998 DLS</b>   | <b>Ministry of Agriculture Development</b>  |
| <b>Animal health and Livestock service Rules 2000 DLS</b>   | <b>Ministry of Agriculture Development</b>  |
| <b>Breast feeding substances (Sales &amp; Distribution control) Act 1992 DH/DFTQC</b>   | <b>Ministry of Health &amp; Population.<br/>/ Ministry of Agriculture Development</b> |
| <b>Breast feeding substances (Sales &amp; Distribution control) Rules 1994 Department of Health /: Department of Food Technology &amp; Quality Control.</b> | <b>Ministry of Health &amp; Population.<br/>/Ministry of Agriculture Development</b>  |
| <b>Iodized Salt (Production Sale and Distribution) Act 1999 Department of Health/ Department of Food Technology &amp; Quality Control.</b>                  | <b>Ministry of Health &amp; Population/<br/>/Ministry of Agriculture Development</b>  |
| <b>Feed Act 1976: Department of Food Technology &amp; Quality Control.</b>  | <b>Ministry of Agriculture Development</b>  |

# Main Legislation

- **Food Act 2023 (1966) & Food Rules 2027 (1970).**
- **The Administrative Authority for Food Act and Rules is Ministry of Agriculture Development.**
- **Note: Nepal follows Hindu calendar (Bikram Sambat) which is approximately 57 years ahead of international calendar. Year 2027 in Nepali calendar would be 1970 in International calendar.**

- **The Food Act provides for definitions of food and food adulteration, administrative infrastructure, offences and penalties and establishment of Department of Food Technology and Quality Control and setting up of Food Standardization Committee.**
- **The Food Rules provide for Food Additives, Contaminants, Inspections, Method of Sampling , Food Labelling, Use of Color and Preservatives etc.**



# Department Food Technology And Quality Control (DFTQC) Website: [www.dftqc.gov.np/](http://www.dftqc.gov.np/)

- The Department of Food Technology and Quality Control (DFTQC) functioning under Ministry of Agriculture Development (MoAD), Government of Nepal is the agency responsible for administering the food control programme in Nepal.
- DFTQC delivers its activities through three Divisions and two sections as given below:
  - ✓ Quality Control Division.
  - ✓ Central Food Laboratory.
  - ✓ Food Technology and Training Division.
  - ✓ National Nutrition Programme.
  - ✓ SPS Enquiry Point.

## The Functions Of DFTQC, As Specified In Food Act, Are As Follows:

- To analyse appeal (requested) samples.**
- To assist the Food Standardisation Board in generating scientific data to set Standards for food.**
- To conduct food inspector training program and issue licenses for food inspectors.**
- To regulate imports of food products from the perspective of quality control.**
- To facilitate export of food products from the perspective of food safety and quality.**
- To provide laboratory services to food quality control programmes including industries and import export trades as requested.**

# Quality Control Division



**This is the division responsible to execute the functions and activities specifically focused to food quality control (implementation of Food Act & Regulation). The activities include:**

- **Food Inspection.**
- **Industry Licencing.**
- **Consumer Awareness.**
- **Food Standardization And Compliance.**

# Food Standard Fixation Committee



**There is a Food Standardization Fixation Committee. The major function of the Food Standardisation Committee is to make recommendations to the Government on the development of, or amendment to standards taking account of Codex practices, scientific justification and production practices. The Board is chaired by the Secretary of the Ministry of Agriculture Development and consists of representatives from several ministries, industry and consumer association.**

# Mandatory Food Standards In Nepal

- *Generic Standards*
- The standards of food commodities either common staple or their products, are included in the generic standards.
- Eleven groups of food commodities are included in mandatory standards in Nepal – Table 1.

## Table 1. Mandatory Standards For Food Commodities Of Nepal

| S. N.        | Food Group                            | No. Of Food commodity |
|--------------|---------------------------------------|-----------------------|
| 1            | Milk & Milk Products                  | 18                    |
| 2            | Fats & Oils                           | 16                    |
| 3            | Fruits & Vegetable Products           | 17                    |
| 4            | Spices & Condiments                   | 22                    |
| 5            | Tea, Coffee, Cocoa and their Products | 3                     |
| 6            | Salt                                  | 2                     |
| 7            | Cereal, Pulses & their Products       | 23                    |
| 8            | Processed Drinking Water              | 1                     |
| 9            | Non-Alcoholic Beverage                | 1                     |
| 10           | Sweetening Agent                      | 3                     |
| 11           | Sweets and Confectionaries            | 3                     |
| <b>Total</b> |                                       | <b>109</b>            |

- **The standards so far prepared and executed up to now are published in Nepali Language. For specific compositional and technical parameters the English version is also given in the brackets.**
- **The need is felt by the concerned stakeholders to have an authentically translated version of standards in English. Food safety and quality document being a regulatory document needs to be translated by authorized institutions. Some efforts could be expected towards this direction in near future.**

# Laws And Regulations Related To Food Additives

- **Standard published by Indian PFA (now FSSAI) and CODEX are frequently referred standard for additives in Nepal.**



# Flavors

- **NO details on qualitative and quantitative terms are given in Nepalese food standard.**
- **Natural and artificial flavors in processed foods are referred in Codex and PFA publication.**

# Processing Aids

- **NO specific definitions and quantitative limits are available in the existing Food Act and Regulation regarding processing aids.**

# Carry Over

**No specific requirements available but generally guided by Codex requirements.**

# Functional Classes

- Only few classes such as Food Colors (natural and artificial), Preservatives(class I and Class II) and few Vitamins and Minerals are given with quantitative limits in Food Regulation and Standards in Nepal.

# Color

- **“Color” means any natural or artificial colour to be mixed in a food.**
- **Coal Tar Colours (Synthetic Dyes) Are Allowed To Be Used In Food as per food specified in schedule 10 only.**

# Table 2. List Of Coal Tar Colours Permitted To Be Used In Food

| Type   | Colour Index No. 1956 | Common name            | Other name    |
|--------|-----------------------|------------------------|---------------|
| Red    | 16185                 | Amaranth               | Food Red 9    |
| Red    | 16255                 | Ponceau 4R             |               |
| Red    | 45430                 | Erythrosine            | Food red 14   |
| Red    | 14720                 | Carmoisine (Azo Rubin) |               |
| Red    | 16045                 | Fast red E             |               |
| Yellow | 19140                 | Tartrazine             | Food yellow 4 |
| Yellow | 15985                 | Sunset yellow FCF      |               |
| Blue   | 73015                 | Indigo carmine         | Food blue 1   |
| Blue   | 42090                 | Brilliant blue FCF     |               |
| Green  | 44090                 | Wool green B.S.        |               |
| Green  | 42053                 | Fast green FCF         |               |

**Maximum Limit of Permitted Colour:** The above-mentioned Coal Tar Colours may be added to any food that is ready for consumption not in excess of 200 milligram per kilogram.

**Restriction on the Use of Coal Tar Colours:** The Coal Tar Colours can be used only in the following food:

- (1) All kinds of ice-cream.
- (2) Cheese.
- (3) Different preparations from egg.
- (4) Biscuit, cake, pastry, and other sweets.
- (5) Non-alcoholic beverages except tea, coffee, coca cola.
- (6) Custard powder.
- (7) Jelly powder.
- (8) Processed or preserved fruits and green vegetables.
- (9) Soup powder.
- (10) Flavouring agents.

**Prohibition of the use of Coal Tar Colours:** Even the specified Coal Tar Colours are not allowed to be used in any food to be eaten after cooking.

# Natural Colours Allowed To Be Used In Food

| Type   | Colour Index | Common Name                        |
|--------|--------------|------------------------------------|
| Yellow | 75.120       | Annato                             |
| -do-   | 75.130       | Carotene or $\beta$ -carotene      |
| -do-   | 75.100       | Saffron                            |
| -do-   | -            | Riboflavin or lactoflavin          |
| -do-   | 75.150       | Turmeric or curcumin               |
| -do-   | -            | Lentophil                          |
| Gray   | -            | Caramel                            |
| Red    | 75.470       | Cochineal, carmine or carmine acid |
| -do-   | -            | Ratanjot, hamatoxin                |
| -do-   | -            | Arrayal (atsin)                    |
| -do-   | 75.520       | Alkanet, alkaline                  |
| Green  | 75.810       | Chlorophyll                        |



**There are restriction on use of Inorganic Colors and Pigments**

**No inorganic colors or pigments are permitted to be used in food preparations.**

# *Use Of Preservative In Food*

## First Class Preservatives

- **Common salt.**
- **Sugar/sugar candy.**
- **Dextrose.**
- **Glucose.**
- **Wood smoke.**
- **Spices.**
- **Vinegar or acetic acid.**
- **Honey.**
- **Hops, and**
- **Alcohol.**

## Second Class Preservatives

- **Sodium or potassium nitrites.**
- **Benzoic acid and salts thereof.**
- **Sulphurous acid and sulphur dioxide.**

**The quantities of preservatives and the food in which they can be used have been mentioned in the Rules.**

**The use of more than one Second Class Preservative in any food is prohibited.**

# Vitamins And Minerals

- **Vitamins and Minerals are allowed to be added in foods and the limits have been prescribed.**

# Labelling Requirements

- **Where a color or a preservative is added to a food, any statement or any kind of symbol or sign indicating such addition has be mentioned on the label.**
- **The label of a food claimed to contain vitamins, minerals or other nutritional substances have to specify it on the label.**

**There are following provisions:**

- (a) One shall not claim that a food sold by him/her contains such vitamins and/or other nutritional substances without specifying the same on the label of that food.**
- (b) An advertisement or publicity statement shall not mention that a food contains such vitamins and/or other nutritional substances without specifying the quantity of such vitamins and/or other nutritional substances.**

# Revision

- **The original Food Act does not cover the mandatory requirements and regulation mechanisms for functional foods, nutraceuticals, GM foods and many other dimensions of newer food processing technologies. To address these issues, the existing Food Act has to be replaced with newer version, which has already been drafted and is under the process of promulgation by legislature.**

## Nepal Bureau Of Standards And Metrology (NBSM) Under Ministry of Industry

- **Besides Department of Food Technology and Quality Control, Nepal Bureau of Standards and Metrology has been also working in the field of food quality assurance. It provides voluntary quality certification mark called NS.**
- **There are 106 standards for food products and 13 for food packaging Materials.**

# *Case Studies*



# 1. Instant Noodles

- **There are standards for Instant noodle .**
- **It means the product prepared from refined wheat flour which is cooked in the shape of curled or twisted thread or in any other shape. The product may contains vegetable oil, seasonings, eggs, mushrooms, vegetables, chicken or its extract, shrimp etc. and may be added with permitted flavor. The product shall not contain any mold and insect infestations, parts or whole, and shall meet the specified requirements:-**

## 2. Processed Milk

- **There are standards for Processed milk.**
- **Processed milk means the liquid milk containing not less than 3.0 percent milk fat and 8.0 percent milk-solid-not-fat (SNF) by adjusting either or not by the partial removal of milk fat and either or not by the solubilization of skimmed milk powder and processed by pasteurization or sterilization. The milk processed by pasteurization process can be labeled as "pasteurized milk" and that processed by sterilization can be labeled as "sterilized milk".**

## 3. Carbonated Water

- **There are standards for Carbonated Water (nonalcoholic beverage).**
- **Carbonated Water (nonalcoholic beverage) means the beverage prepared by mixing one or more ingredients which is packed and sealed in bottle or can impregnated with carbon dioxide under pressure.**

## 4. Frozen Foods

- **There are no provisions for Frozen Foods.**

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