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Tea - Code of Hygienic Practice for Processing and Packaging

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Foreword

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Tea- Code of Hygienic Practice for Processing and Packaging

1 Scope

This Code of Hygienic Practice specifies the guidelines for Processing and Packaging of Tea (*Camellia sinensis* (L.) O. Kuntze). It excludes planting and harvesting of Tea.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CAC/RCP 1-1969 Recommended Code of Practice-General Principle of Food Hygiene

ISO 3720 Black tea - Definition and Basic requirements

ISO 11287 Green Tea - Definition and Basic requirements

ISO 20715 Tea — Classification of tea types

ISO 20716 Oolong tea — Definition and basic requirements

ISO/TR 12591 White tea — Definition

ARS 56 Pre-packaged foods - labelling

3 Terms and definitions

For the purpose of this Standard, the following shall apply:

3.1.

foreign material

material other than tea comprising of "Inorganic matter" and/or "Organic matter"

3.2.

reception

designated point where plucked and transported tea leaves are received in the factory

3.3.

rolling

using the rolling tables to expose the surface area of tea and give the product shape

3.4.

tea

food product processed only from leaves, buds, tender and semi tender stalks of the Tea plant (*Camellia sinensis* (L.) O. Kuntze) by the industrial established methods

3.5.

withering

gradual reduction of moisture content of the received tea leaves

4 Hygiene requirements during processing

There are many different types of tea but the most common are black tea, green tea, white tea, oolong tea, dark tea and yellow tea as per ISO 20715.

The hygiene requirements in the International Standards for the preparation of tea are based on processing fresh tea leaves and aeration should be complied with.

These standards are black tea (ISO 3720), green tea (ISO 11287), white tea (ISO/TR 12591), oolong tea (ISO 20716), dark tea and yellow tea. These tea types can be reprocessed or further-processed to create products such as scented flavoured tea, compressed tea and instant tea.

5 Production facility

In addition to relevant provisions in the Recommended International Code of Practice General Principles of Food Hygiene, (CAC/RCP 1-1969, Rev.4, 2020), the following should apply:

5.1 Floors

Floors should be made of waterproof, non-absorbent, washable, non-slip and non-toxic material, without crevices, and should be easy to clean and disinfect. Adequate drainage should be provided.

5.2 Walls

Walls should be of washable and non-toxic materials, light colored and should be easy to clean and disinfect.

5.3 Windows

Windows and other openings should be constructed so as to enhance ventilation and to avoid accumulation of dirt; windows and other openings should be fitted with screens. Such screens should be easily moveable for cleaning.

5.4 Doors

Doors should have smooth surface and where appropriate, be self-closing and close fitted.

5.5 Overhead structures and fittings

All overhead structures and fittings should be installed in such a manner as to avoid contamination directly or indirectly of food and raw materials. The design of these structures should also be such as to prevent accumulation of dirt.

5.6 Designated Rooms

Some rooms like offices, cloakrooms, toilets, and areas where animals are kept should be completely separated from and should not open directly on to product handling areas.

5.7 Unsuitable equipment

Wooden equipment which cannot be easily cleaned and disinfected should be avoided, unless where its use would not be a source of contamination. Stainless equipment is highly recommended.

5.8 Cleaning procedures

Dry clean-up procedures should be utilized to avoid wet spots in which micro-organisms can propagate and contaminate contacted product. Even though water may not be used directly on equipment, spray and elevated humidity from continuous use can increase moisture in organic matter trapped in crevices in equipment, such as conveyors, to the point where micro-organisms can proliferate.

6 Sanitary Facilities

6.1 Water supply

- 6.1.1 As a general principle only potable water complying with relevant standards should be used in food handling area
- 6.1.2 There should be adequate supply of potable water
- 6.1.3 Water in direct contact with product contact surfaces should not contain substances, which may be hazardous to health or may contaminate the product
- 6.1.4 Non-potable water used for steam production, refrigeration, fire control and other similar purposes not connected with product should be carried in completely separate lines identifiable, preferably by colour, and with no cross-connection with or back-siphonage into system carrying potable water.

6.2 Waste disposal

- 6.2.1 Adequate, suitable and conveniently located changing facilities and toilets should be provided in the factory. There should be an efficient waste disposal system, which should always be maintained in good condition. Disposal of waste should be in such a way as to prevent contamination of food.
- 6.2.2 All unwanted substances should be thrown into the waste bin and disposed off at the end of each production. The use of bin liners is strongly recommended.

6.3 Toilets

Toilets should be so designed as to ensure hygienic removal of waste matter. These areas should be well lit, ventilated and where appropriate heated or cool and should not open directly on to product handling areas.

6.4 Hand – washing facilities

Hand-washing facilities with warm or hot and cold water, a suitable hand- cleaning preparation and with suitable hygienic means of drying hands should be provided adjacent to toilets and in such a position that the employee must pass them when returning to the processing area.

7 Cleaning of the Factory

7.1 General cleanliness

The factory should be swept and should be washed with a food grade liquid agent

7.2 Drains

All drains should be kept clean at all time

8 Maintenance of Equipment

8.1 Cut – Tear and Curl (CTC) Machine

The machine should be washed thoroughly after use with acceptable and food grade cleaning agent.

8.2 Continuous Fermenting(CF) Machine

The machine should also be washed thoroughly after use with acceptable and food grade cleaning agent

8.3 Dryer

The machine should also be cleaned thoroughly

8.4 Utensils

Trays, basins and other utensils should be of stainless material

9 Personnel Hygiene and Good Safety Practices

9.1 Personal Protective Equipment

Personal Protective Equipment (PPE) should be provided

9.2 Training

The management should periodically arrange for adequate training of all food handlers in hygienic handling of food and in personal hygiene.

9.3 Medical Examination

- 9.3.1 Persons who come into contact with food in the course of their work should have medical examination prior to their employment and should be examined periodically.
- 9.3.2 The management of the factory should ensure that no person known or suspected to be suffering from a disease or with infected wounds, skin infections, sores or with diarrhea, is permitted to work in any food handling area. Any person so affected should immediately report to the management for appropriate action and should be excused from production area.

9.4 Basic Hygiene Practices

- 9.4.1 Hands should always be washed before commencing work, immediately after using the toilet, after handling contaminated material and whenever else necessary.
- 9.4.2 Every person in a food handling area should maintain a high degree of personal cleanliness while on duty, and should at all times wear suitable protective clothing including head covering and footwear, all of which articles should be cleanable unless designed to be disposed of after each use. Personnel should not wear jewelries when in food handling area.
- 9.4.3 Any behavior which could result in contamination of food, such as eating or use of tobacco should be prohibited in food handling areas.

9.5 Compliance and monitoring

Responsibility for ensuring compliance by all personnel should be specifically allocated to competent supervisory personnel.

10 Lighting

Adequate natural or artificial lighting should be provided all over the factory. Light bulbs and fixtures suspended over food materials in any stage of production should be of a safety type and protected to prevent contamination of food in case of breakage.

11 Ventilation

Adequate cross-ventilation should be provided to prevent excessive heat, steam condensation and dust and to remove contaminated air. The direction of the air flow should never be from a dirty area to a clean area. Ventilation openings should be provided with a screen. Screens should be easily removable for cleaning.

12 Packaging

12.1 Packaging material

- 12.1.1 Tea should be packaged for sale in food grade containers which will safeguard the hygienic and nutritional qualities of the product.
- 12.1.2 Packaging material should be made of substances which are safe and suitable for their intended use.
- 12.1.3 All packaging material should be stored in a clean and hygienic condition.
- 12.1.4 Careless handling of containers should be avoided to prevent the possibility of contamination of Tea.

12.2 Labelling

In addition to the requirements of the Codex General Standard for Labeling of Pre- packaged Foods, (CODEX – STAN 1 – and ARS 56 each packaging shall be legibly and indelibly marked or labelled with the following:

- 12.2.1 Product name
- 12.2.2 Product description
- 12.2.3 Nutritional information
- 12.2.4 Net weight of content
- 12.2.5 Name, Location/address of factory and country of origin
- 12.2.6 Best before date, Production date and Batch number

12.3 Processing and production records

Processing batches should be uniquely identified. Traceability records should be well documented. These records should be retained for a period that exceeds the shelf life of the product.

12.4 Lot identification

Each container should be indelibly labelled to identify the producing factory and the lot.

12.5 Preservation of Product

Tea should be preserved at a safe moisture content so that the product can be held under normal storage conditions. In some cases, finished products can be packed in gas tight containers under nitrogen or vacuum to maintain quality and retard possible mould growth.

12.6 Storage

- 12.6.1 Tea should be stored in such a way as to preclude the contamination or proliferation of microorganisms and protect against deterioration of the product or damage to the packaging materials.
- 12.6.2 Tea as well as packaging materials including cartons should be stacked on pallets to prevent contamination.
- 12.6.3 Tea should be adequately cooled before they are packaged and stored to protect against the deterioration of the product by microorganisms.

13 Transport of end product

Means of transport of containers should comply with the following conditions:

13.1 Finishes

All internal finishes should be made of corrosion-resistant material, be smooth, impervious, easy to clean and disinfect. Joints and doors should be sealed so as to prevent the entry of pests and other sources of contamination.

13.2 Vehicles

- 13.2.1 for the transportation of tea should be equipped in such a manner that the tea does not come into contact with the floor.
- 13.2.2 Tea should be placed in a clean means of transport. If necessary, it should be cleaned and disinfected before loading.

14 End Product Criteria

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Should conform to the requirements of ISO Standard for Black Tea, ISO Standard for Green Tea and ISO Standard for Instant Tea) as appropriate.

Note: Application of the Hazard Analysis and Critical Control Point (HACCP) concept should be adopted in order to ensure that the requirement of this code is followed and its purpose achieved (CAC/RCP 1-1969, Rev 4.2020; refer specifically to pages 21-31).

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ISO 6078 - Standard on Black Tea - Vocabulary.