



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON SPICES AND CULINARY HERBS**

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PROPOSAL FOR NEW WORK ON A CODEX STANDARD FOR DRIED OR DEHYDRATED GINGER

(Revised proposal submitted by Nigeria)

Introduction

Ginger (*Zingiber officinale* Roscoe) is a flowering plant widely used as a spice in most part of the world. It is grown in West Africa, Asia and the Caribbean. Ginger is widely cultivated in the tropical regions as a commercial crop, with world production estimate of 1.6 million tonnes.

1. Purpose and the scope of the standard

The scope of the work is to establish a worldwide quality standard for whole dried or dehydrated ginger, split dried ginger, and (ground) powdered ginger obtained from the rhizome of *Zingiber officinale* to facilitate international trade and consumer protection.

The objective of the standard is to consider the essential quality characteristics of dried ginger for industrial food production and for direct human consumption, including for catering purposes and other essential uses as required, to aid international trade in this product.

2. Relevance and timeliness

Due to the growing trend of worldwide dried ginger production and trade, it is necessary to establish a commodity standard covering the safety, quality, hygiene and labelling in order to have a reference that has been internationally agreed by consensus between the producing, consuming and trading countries across the world. More significantly, the present status of dried or dehydrated ginger is not limited to any particular region and hence justifies the elaboration of an international standard commensurate with the dried or dehydrated ginger's true standing as an increasingly valuable worldwide commodity. In addition, the drafting of a Codex standard for dried ginger will help to protect consumers' health and to promote fair trade in accordance with the international agreements in particular the WTO SPS and TBT Agreements.

Traditionally, dried ginger is used for culinary purposes as well as in confectionery industry. It is also used as a spice in many culinary products ranging from bakery products (ginger bread, ginger cake, ginger biscuits), to ginger tea, ginger ale, ginger beer all of which are of importance in the world food industries.

3. Main aspects to be covered

The standard entails main aspects related to the definition of the produce, essential quality factors e.g. moisture and labelling requirements in order to provide certainty to the consumer on the nature and characteristics. The standard will supply high quality and safe products to protect consumer's health and against misleading practices by including all the necessary parameters such as moisture, proper labelling, and other permissible limits among others.

The most relevant items which may be considered are related to:

- Establish the minimum requirements of dried or dehydrated ginger which shall be complied with, independently from the quality parameters and other requirements regardless of class.
- Define the categories to classify dried or dehydrated ginger in accordance with its characteristics.
- Establish the tolerance as regards quality and size that may be permitted of dried or dehydrated ginger contained in a package.
- Include the provisions to be considered relating to the uniformity of the packaged product and the packaging used.
- Include provisions for the labelling and marking of the product in accordance with the General Standard for the labelling of Pre-packaged Foods.

- Include provisions for pesticides and contaminants with the reference to the General Standard for Contaminants and toxins in food.
- Include provisions for hygiene with the reference to the general principles of food hygiene and other relevant codes of hygiene practices.
- References to methods of analysis and sampling

4. Assessment against the Criteria for the Establishment of Work Priorities

General Criteria

Codex standard for dried or dehydrated ginger would be beneficial for developing countries because they are the major producers, exporters and consumers. Establishing a standard for the commodity as a spice is necessary to meet minimum requirements for food quality and safety to ensure consumer protection.

(a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

Dried Ginger is an important export product that plays significant role as source of income and employment for its producing countries. China, India, Netherlands, Thailand, Ethiopia, Nigeria are currently among the countries most involved in ginger production globally, detailed statistics of its world production import and export are shown in Table 1-5.

Table 1: World-wide Production Data

Year	Production (in Tonnes)
2008	1,596,625.00
2009	1,643,678.25
2010	1,692,234.62
2011	2,034,429.00
2012	2,095,056.00

(Source: FAOSTAT)

(b) Diversification of national legislations and apparent resultant or potential impediments to international trade

There exist various national and international standards for dried ginger. Some of them are given below:

- ISO 1003:2008, Spices -- Ginger (*Zingiber officinale* Roscoe.) – Specification
- ESA quality minima document Rev 4.
- Nigerian standard, NIS 409:2007 “Standard for Ginger (Whole and Ground)”
- Indian Standard, IS 1908 (2008), “Spices and Condiments, ginger, Whole and ground, Specification”,
- Malaysian standard, MS 718: 1981 “Specification for ginger, whole and in pieces”

The lack of harmonized and internationally accepted standards is detrimental to the trade and it leads to fraudulent practices and rejections of exports. Therefore, development of a Codex standard will allow the different stakeholders to harmonize their different requirements to facilitate international trade.

(c) International or regional market potential

The import of dried or dehydrated ginger by most countries is increasing. Japan is currently the largest importer of dried ginger with 65459 tonnes according to the current statistic of FAOSTAT. China is the largest exporter globally with 408848 tonnes, Nigeria ranks 6th exporting 6653 tonnes of dried ginger according to FAOSTAT.

Pattern of International Trade

Table 2: World-wide Export Data			
Year	Export Quantity (in Tonnes)	Value (in US \$1000)	Growth rate in export quantity * (%)
2009	494,044	411,999	
2010	458,514	661,043	-4.2
2011	555,248	668,334	21.7
2012	104,089	166,268	-71.9 #
2013	569,604	647,265	23.3

Note. * % Variation against quantity in 2009, # exceptional value (Source: ITC Geneva)

Year	Import Quantity (in Tonnes)	Value (in US \$1000)
2009	459,217	391,627
2010	440,068	601,282
2011	559,053	669,620
2012	128,917	540,502
2013	566,357	714,183

(Source: ITC Geneva)

Table 4. Import Statistics of Dried ginger

Rank	Area	Quantity (tonnes)	Flag	Value (1000 \$)	Flag	Unit value (\$/tonne)
1	Japan	65459	67	123483	66	1886
2	United States of America	52521	125	68076	141	1296
3	Pakistan	60112	15	51033	17	849
4	Netherlands	30189	151	45529	160	1508
5	Bangladesh	47939	17	38061	21	794
6	Germany	10841	223	38036	195	3509
7	United Arab Emirates	26587	57	30884	72	1162

Source FAOSTAT

Table 5. Export Statistics of Dried ginger

Rank	Area	Quantity (tonnes)	Flag	Value (1000 \$)	Flag	Unit value (\$/tonne)
1	China, mainland	408848	18	409484	20	1002
2	India	29747	61	55356	42	1861
3	Netherlands	20322	160	38610	163	1900
4	Thailand	24391	49	26591	60	1090
5	Ethiopia	7220	15	23586	8	3267
6	Nigeria	6652	14	18463	10	2776
7	Brazil	6668	85	7369	96	1105
8	Germany	1455	245	7146	229	4911
9	China, Province	2103	56	5373	48	2555
10	Nepal	17215	4	4839	8	281
11	Peru	2214	53	4363	52	1971
12	Lithuania	2526	111	4344	108	1720

Source FAOSTAT

(d) Amenability of commodity to standardization

The characteristics of Dried or dehydrated ginger from its cultivation to retail sale e.g. cultivar varieties, composition, quality characteristics, packaging, etc. all lead to adequate parameters for the standardization of the product

(e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no commodity standard covering dried ginger as spices in international trade considering that globally, dried ginger represents 15-16% of the tonnage of spices imported from 1996 to 2000 according to FAO. The proposed standard will heighten consumer protection and facilitate dried ginger trade by establishing an internationally agreed quality standard.

(f) Number of commodities which would need separate standards including whether raw, semi-processed or processed

A single standard for dried ginger will cover forms of dried ginger traded worldwide. The varieties of dried ginger like, split dried ginger, and (ground) powder of dried ginger and its products will be examined under this individually.

(g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies)

The existing standards which may be considered while developing a codex standard for dried ginger are:

- ISO international standard ISO 1003:2008 specifies requirements for dried ginger (*Zingiber officinale* Roscoe)

5. Relevance to the Codex strategic objectives

The proposal is in line with the Strategic Vision Statement of the Strategic Plan 2014 - 2019, in particular, Objectives 1.1, 1.3, 2.3 and 3.1 and aims at setting up internationally accepted minimum quality requirements of dried ginger for human consumption with the purpose of protecting the consumer's health and achieving fair practices in food trade. It also contributes to fair practices in trade wherein the farmers will be able to assess their produce with reference to the quality standards thereby empowering them to realize more monetary values.

6. Information on the relation between the proposal and other existing Codex documents.

This proposal is for a new Codex Standard on Dried Ginger has a relationship with *Standard for Ginger* (CODEX STAN 218-1999) which deals with fresh ginger.

7. Identification of any need for any requirements for and availability of expert scientific advice:

Scientific advice from external global bodies like FAO/WHO; JECFA and others are welcomed, but no expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

8. Identification of any need for technical input to the standard from external bodies so that this can be planned for.

The technical inputs from ISO, American Spice Trade Association, European Spice Association and World Spice Organization shall be welcomed as they have already done work related to the subject. Also ISO standards can be used as a step process to frame the codex standards for dried ginger.

9. Proposed timeline for completion of the new work

DATE	ADVANCE AND PROCEDURES
2 nd CCSCH	Consideration of new work by the 2 nd session of CCSCH
July 2016	Critical review of proposal by CCEXEC; Approval of new work proposals by the Commission
3 rd CCSCH	Consideration at Step 3 by the 3 rd CCSCH Approval at Step 3.
July 2017	Adoption at Step 5 by CAC
4 th CCSCH	Consideration at Step 6 by the 4 th session of CCSCH
July 2019	Adoption at Step 8 by the CAC