



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

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DISCUSSION PAPER ON DEVELOPMENT OF A REGIONAL STANDARD FOR ZONGZI

(Presented by China)

Introduction

1. *Zongzi* is a traditional Chinese food, made of glutinous rice stuffed with different fillings and wrapped in bamboo, reed, or other large flat leaves. They are cooked by steaming or boiling. In the Western world, they are also known as sticky rice dumplings.

2. The regional standard for *Zongzi* will be elaborated to determine the specifications of the product and processes in order to ensure food safety, essential quality, hygiene and labeling requirements for the purposes of protecting the health of the consumers and ensuring fair practices in food trade. Proposed standard applies to a type of cooked food wrapped in bamboo, reed, or other large flat leaves and consisting of glutinous rice and/or other cereal as main materials with or without adding other ingredients, such as beans, nuts, aquatic products, pork/poultry/egg and its products, fruit/vegetable and its products, etc. Composition of *Zongzi* per 100g edible portion is presented in table 1.

Table 1 Nutritional composition of *Zongzi* (per 100g)

	with meat filling	with red bean paste filling	Unit
Energy	1,114	1,122	kJ
Protein	8.2	4.3	g
Fat	7.9	6.2	g
Carbohydrates	40.4	48.2	g
Sodium	522	32	mg

Source: from industrial associations of China.

Necessity to develop the standard

3. *Zongzi* is a festival food for the Dragon Boat Festival. Eating *Zongzi* is a traditional custom in China, which has produced and consumed for hundreds of years across China and been spread into Korea, Japan and Southeast Asian countries.

4. China is the world's main exporter of *Zongzi*, which has 173 recorded export enterprises for *Zongzi*. In recent years, *Zongzi* is exported from China to more than 20 countries and regions, such as USA, Canada, Australia, New Zealand, Japan, Saudi Arabia, Korea, Thailand, Hong Kong, Macao, etc. *Zongzi* production in China has been continuously risen these years, presented in Table 2.

Table 2 *Zongzi* production and total sales volume in China

Year	Production volume (Kg)	Total value (US dollars)
2013	253,197,000	1,484,918,195
2014	299,458,000	1,686,673,533
2015	334,000,000	1,842,706,165

Source: estimated by industrial associations of China.

5. China is also an importer of *Zongzi*, the main import sources of which include Japan, South Korea, Malaysia, Australia, Italy, Thailand, Netherland, Denmark, etc.

6. In recent years, health *Zongzi*, such as green tea *Zongzi*, *Zongzi* for children, nutrient-enriched *Zongzi* etc, have been produced, and HACCP controlling techniques has been applied in *Zongzi* production. *Zongzi* production enterprises are increasingly concentrated in large scale with industrial upgrade and much stricter standards in production techniques and product quality.

7. Due to the growing trend of consumption of *Zongzi*, its production by improved production techniques, and its potential for international food trade, it is necessary to establish a standard to protect the health of the consumers and to ensure fair practices in food trade. It should be noted that Codex Alimentarius does not include standard for *Zongzi*.

8. The elaboration of the food standard for *Zongzi* would be to the benefit of developing countries in particular, because these countries are the major producers, consumers and exporters of *Zongzi*. China is also anticipating the potential and growing demand of *Zongzi* in global food consumption and trade in the future.

Recommendation

9. China invites the Asian member countries to support the proposal for the development of a Codex regional standard for *Zongzi* and to consider the attached project document (Annex).

PROJECT DOCUMENT

A Regional Standard for *Zongzi*

1. The purposes and the scope of the standard

Zongzi is a traditional Chinese food, made of glutinous rice stuffed with different fillings and wrapped in bamboo, reed, or other large flat leaves. They are cooked by steaming or boiling. In the Western world, they are also known as sticky rice dumplings.

The regional standard for *Zongzi* will be elaborated to determine the specifications of the product and processes in order to ensure food safety, essential quality, hygiene and labeling requirements for the purposes of protecting the health of the consumers and ensuring fair practices in food trade. Proposed standard applies to a type of cooked food wrapped in bamboo, reed, or other large flat leaves and consisting of glutinous rice and/or other cereal as main materials with or without adding other ingredients, such as beans, nuts, aquatic products, pork/poultry/egg and its products, fruit/vegetable and its products, etc.

There are various types of *Zongzi* circulated in international food market which are wrapped in different leaves, see different types of *Zongzi* in Figure 1.



Figure 1 Various *Zongzi* in Different Countries

Source: <http://www.google.com>

2. Its relevance and timeliness

Due to the growing trend of consumption of *Zongzi*, its production by improved production techniques, and its potential for international food trade, it is necessary to establish a standard to protect the health of the consumers and to ensure fair practices in food trade. It should be noted that Codex Alimentarius does not include standard for *Zongzi*.

The elaboration of the food standard for *Zongzi* would be to the benefit of developing countries in particular, because these countries are the major producers, consumers and exporters of *Zongzi*. China is also anticipating the potential and growing demand of *Zongzi* in global food consumption and trade in the future.

Zongzi is a festival food for the Dragon Boat Festival. Eating *Zongzi* is a traditional custom in China, which has prevailed for hundreds of years across China and been spread into Korea, Japan and Southeast Asian countries. In recent years, health *Zongzi*, such as green tea *Zongzi*, *Zongzi* for children, nutrient-enriched *Zongzi* etc, have been produced, and HACCP controlling techniques has been applied in *Zongzi* production. *Zongzi* production enterprises are increasingly concentrated in large scale with industrial upgrade and much stricter standards in production techniques and product quality.

3. The main aspects to be covered

The standard covers essential quality and safety aspects:

- Specifications of the product, such as identification, description of products and processes;
- Essential hygiene and quality factors;
- Packaging, preservation and storage methods;
- Labeling requirements;
- Methods of sampling and analysis.

4. An assessment against the *Criteria for the establishment of work priorities*

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

- In 2015, production volume of *Zongzi* in China is 334,000,000 Kg.
- China is the world's main exporter of *Zongzi*, which has 173 recorded export enterprises for *Zongzi*. In recent years, *Zongzi* is exported from China to more than 20 countries and regions, such as USA, Canada, Australia, New Zealand, Japan, Saudi Arabia, Korea, Thailand, Hong Kong, Macao, etc. Statistically, the total exporting volume is 3,583,760 Kg with the total amount of 41,930,000 US \$ in 2013, 3,664,960 Kg with 41,047,500 US \$ in 2014 and 3503,540 Kg with 37,487,900 US \$ from Jan. to Nov. in 2015.
- China is also an importer of *Zongzi*, the main import sources of which include Japan, South Korea, Malaysia, Australia, Italy, Thailand, Netherland, Denmark, etc. The total import volume is 165,700 Kg with the total amount of 2,469,000 US \$ in 2013, 329,670 Kg with 4,846,100 US \$ in 2014 and 351,820 Kg with 5,031,000 US \$ from Jan. to Nov. 2015.
- In the international trade market, trade value of *Zongzi* is 71,933,100 US \$ per year, which is expected to grow rapidly along with increasing production capacity. China, Japan and South Korea are the major producers as well as the major exporters of *Zongzi*. In the global market, trade amount of *Zongzi* increases by the rate of over 10%. In 2015, the international trade volume of *Zongzi* amounts to 5,491,080 Kg with the value of 71,933,100 US \$. Besides China, Southeast Asian countries, North America and European countries are also the major consumer markets.

Table 1 Export data of *Zongzi* from China to other countries/regions from Jan. to Nov. in 2015

Volume: kilograms, Value: US dollars

Country / Region	Export volume	Export value
Hong Kong	1,276,695	13,915,975
U.S.A	845,178	8,620,815
Saudi Arabia	174,681	1,869,089
South Korea	182,228	1,840,501
Japan	164,371	1,758,773
Canada	41,329	417,419
Singapore	18,029	191,103
Macao	33,696	374,026
Australia	85,665	959,448
Thailand	18,712	202,090
Total	2,840,584	30,149,239

Source: estimated by industrial associations of China.

Table 2 Import data of *Zongzi* from other countries/regions to China from Jan. to Nov. in 2015

Volume: kilograms, Value: US dollars

Country / Region	Import volume	Import value
Taiwan Region	51,634	634,527
Malaysia	52,446	639,849
China	24,279	293,767
South Korea	35,472	407,938
Chile	3,694	43,957
Australia	11,343	119,979
Japan	10,069	125,153
Thailand	6,778	72,155
Canada	6,989	96,583
Total	202,704	2,433,908

Source: estimated by industrial associations of China.

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

There is no existing national legislation covering any *Zongzi*.

c) International or regional market potential

Owing to more and more consuming popularity in the global market, the consumption volume of *Zongzi* rises rapidly in the near future with the greater production capacity, export volume as well as international trade volume.

d) Amenability of the commodity to standardization

Parameters amenable for standardization include specification and identification of product, raw materials, process, contaminant limits, essential quality (drying loss, protein, and fat) and hygiene factors of the product, including packaging and transportation applying existing Codex Alimentarius documents.

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

There are no existing standards specifically covering *Zongzi*. The proposed standard will cover requirements concerning raw materials, production process, essential hygiene and quality factors of *Zongzi* to ensure safety of consumers and fair practice in international trade.

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

Currently there is no need of any other separate standard other than the proposed, since the proposed standard will cover both raw and processed products of *Zongzi* and the hygienic conditions of production.

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

None identified.

5. Relevance to the Codex strategic objectives

The proposal for new standard development meet the objective 1.1 - Establish new and review existing Codex standards, based on priorities of the CAC as well as 1.2 - Proactively identify emerging issues and Member needs and, where appropriate, develop relevant food standards of the Codex Alimentarius Commission Strategic Plan 2014-2019. Wider emphasis will be focused on food safety aspects of

proposed standard.

6. Information on the relation between the proposal and other existing Codex documents as well as other ongoing work

The proposed standard will take into account existing applicable Codex guideline documents such as:

- Code of Practice General Principles of Food Hygiene (CAC/RCP 1-1969),
- Code of Practice for the Processing and Handling of Quick Frozen Foods (CAC/RCP 8-1976),
- Code of Practice Concerning Source Directed Measures to Reduce Contamination of Food with Chemicals (CAC/RCP 49-2001),
- General Standard for the Labeling of Prepackaged Foods (CODEX STAN 1-1985),
- General Standard for Food Additives (CODEX STAN 192-1995),
- Recommended methods of Analysis and Sampling (CODEX STAN 234-1999).

7. Identification of any requirement for and availability of expert scientific advice

Currently there is no identified need for expert scientific advice.

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

Currently there is no identified need for technical input from external bodies.

9. The proposed time-line for completion of the new work

Subject to consideration by 20th session of FAO/WHO Coordinating Committee for Asia in 2016, proposal for standard development will be submitted for review by Codex Executive Committee in 2017. As per proposed time schedule the process will take approximately five years.

Procedures	Time
Consideration of the proposal by the 20 th CCASIA	2016
Critical review by Executive Committee and approval by CAC for new work	2017
Preparation of draft standard and circulation for comments	2017-2018
Consideration of draft standard by the 21 st CCASIA	2018
Adoption by the CAC as draft standard	2019
Consideration of draft standard by the 22 nd CCASIA	2020
Adoption as regional standard by CAC	2020-2021