



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

FAO/WHO COORDINATING COMMITTEE FOR ASIA

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DISCUSSION PAPER ON PROPOSAL FOR THE DEVELOPMENT OF A REGIONAL STANDARD FOR MOONCAKE (ASIA)

(Prepared by China)

Introduction

1. Mooncake is a traditional delicacy widely consumed in China and other East and Southeast Asian countries and regions, with a centuries-old history of production and consumption. Recent advancements have significantly enhanced their quality and diversified varieties. Through variations in ingredients, preparation techniques, and shapes, mooncakes have developed distinct regional variations and styles. They are not only iconic festive treats with unique flavours, but have also evolved into exquisite pastries enjoyed year-round, gaining global acclaim.

2. Mooncake is a pastry prepared from dough made from wheat flour or other flours with or without adding edible oils or sugar, with fillings of one or more ingredients wrapped into the dough that should be molded in shape. The final product should be baked. The globalization of food markets and advancements in food technology have expanded mooncake production, distribution and consumption beyond traditional geographic boundaries. However, disparities in ingredients, production techniques and quality requirements for mooncake-related products across Asian markets, coupled with the absence of regional standards, may lead to inconsistent product quality, potentially compromising consumer health and impacting the healthy development of the industry.

3. In recent years, the mooncake market has shown sustained expansion with increasing product diversification, offering consumers more choices. Nevertheless, notable discrepancies exist in ingredient usage, production processes, and nutritional composition across regions. The proposed regional standard for mooncake seeks to ensure product quality, safeguard consumer health, and address relevant food safety concerns.

Necessities to develop the standard

4. To reduce trade frictions. Market data demonstrates a consistent upward trend in mooncake consumption. However, inconsistent classification of mooncake products across different countries has led to divergent requirements. The establishment of a regional standard for mooncake will significantly mitigate international trade barriers in this sector.

5. To ensure mooncake product quality. The regional standard for mooncake aims to address food safety issues concerning ingredients, food additives, processing techniques, quality control, testing methods, contaminants, and storage/transportation requirements. It will eliminate trade barriers related to raw material, testing, storage/transportation conditions, and labeling for mooncake product.

6. To drive technological progress in the mooncake processing sector. The industry has witnessed growing concentration and economies of scale in production, accompanied by sustained technological innovation. The development of regional standards for mooncakes is expected to catalyze industrial transformation and quality-oriented growth in this traditional food sector.

7. This proposed regional standard for mooncake represents a crucial initiative to adapt to market globalization while ensuring food safety and consumer health protection. By harmonizing regional processing differences, quality requirements, and technical requirements, it will reduce compliance costs of the mooncake product. Meanwhile, consumers expect safer and more transparent products - the standard effectively balances these diverse needs. Ultimately, this proposed standard will lay a foundation to the sustainable development in the mooncake industry.

Recommendation

8. CCASIA23 is invited to consider the new project on the development of the regional standard for mooncake. The project document is attached as Annex I.

ANNEX I**PROJECT DOCUMENT****Proposal for the development of a regional standard for mooncake (Asia)****1. The purposes and the scope of the standard**

The regional standard for mooncake aims to protect the consumer health, enhance product quality, and promote fair trade. The establishment of this proposed regional standard will help facilitate regional and international trade and address the food safety concerns.

2. Product definition

Mooncake is a pastry prepared from dough made from wheat flour or other flours with or without adding edible oils or sugar, with fillings of one or more ingredients wrapped into the dough that should be molded in shape. The final product should be baked.

The industrial processing flow is shown in Figure 1.

	
1. Making dough (manually)	1. Making dough (mechanically)
	
2. Making filling (manually)	2. Making filling (mechanically)
	
3. Wrapping (manually)	3. Wrapping (mechanically)
	
4. Molding (manually)	4. Molding (mechanically)



Figure 1-The industrial processing flow of mooncake

Various Chinese mooncakes are shown in Figure 2.



Figure 2-Variuos Chinese mooncakes

Many similar products are traded regionally, see Figure 3.

Image	Origin	Description
	Thailand	Khanom Pia is a type of pastry that has a thinner, flakier crust. It is round or square-shaped pastry that has a sweet or savory filling, often made from lotus seed paste, red bean paste, or salted egg yolk. The pastry is usually decorated with intricate patterns and symbols on the top.
	Japan	<i>Momoyama</i> is a baked <i>wagashi</i> (traditional Japanese sweet) uses white bean paste (<i>shiroan</i>), not only as a filling but also in the dough itself. Other ingredients used are egg yolk, sugar or mirin, and a type of glutinous rice flour called <i>mijinko</i> .
	Viet Nam	Bánh nướng is made from wheat flour, cooking oil, and simple syrup boiled with malt. After being filled with various combinations of salted egg yolk, dried sausage, mung bean paste, salt, sugar, cooking oil, sugared pig fat, lotus seed, it will be brushed with egg wash, then baked in the oven. Bánh dẻo is made from roasted glutinous rice flour, pomelo blossom water or vanilla and simple syrup. After malaxating rice flour, fillings similar to that of Bánh nướng is stuffed inside the crust.
	Indonesia	Bakpia Pathok is an Indonesian delicacy that consists of a round, slightly flattened pastry filled with a sweet mung bean mixture. The pastry is characterized by a soft and flaky texture, while its interior, containing the filling, has a pasty consistency that perfectly adheres to the dough. Apart from the traditional mung bean filling, Bakpia Pathok can also be made with chocolate, cheese, and exotic fruits such as pineapple or durian.

Figure 3-Similar products in Asia

3. Its relevance and timeliness

Mooncake exports face varying technical standards in Asia. The regional standard for mooncake will positively impact (a) the protection of Asian consumers' health, (b) the improvement of mooncake product quality, and (c) the promotion of fair trade. This regional standard will facilitate the international trade of the products. It is expected that mooncake will have greater consumer demand and trade potential in the international market in the future.

4. The main aspects to be covered

The regional standard for mooncake will be drafted according to the Format for Codex Commodity Standards in the Procedural Manual. The main aspects to be covered by proposed standard are:

- Scope;
- Description;
- Essential composition and quality factors;
- Food additives;
- Contaminants;
- Hygiene;
- Weights and Measures;
- Labeling;
- Methods of Analysis and Sampling.

5. Assessment against the Criteria for the establishment of work priorities

General criterion

The proposed standard should protect consumer from the point of view of health and food safety, ensure fair practices in the food trade and take into consideration the identified needs of the developing countries.

The proposed standard will cover the following aspects to meet the above requirements:

- Protect consumers and preventing fraud;
- Improve the quality of products, and solve the food safety concerns of consumers;
- Resolve trading barriers.

Criterion applicable to commodities

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

- According to data from relevant Chinese research institutions and industry associations, China's mooncake sales reached 3.778 billion USD in 2023, representing an 11.3% year-on-year growth. In 2024, sales hit 4.18 billion USD, 10.6% year-on-year increase, with the market expected to expand further to 4.496 billion USD in 2025, or 7.6% anticipated growth.
- China is the world's largest exporter of mooncake products, with over 90 registered export enterprises domestically. In recent years, Chinese mooncakes have been exported to more than 40 countries and regions, including Singapore, Malaysia, Indonesia, Thailand, South Korea, Australia, Canada, the United States, the EU, and etc.
- China also imports mooncake products, primarily from Japan, Vietnam, Thailand, and Malaysia. Beyond China, the main consumer markets include most Southeast Asian countries, North America, and European nations. Due to data availability, the import data of China listed in this document also demonstrates the active role of mooncake products in regional trade.

Table 1- China's export and import trade statistics (2020-2024)

Year	Export (tons)	Value (million USD)	Import (tons)	Value (million USD)
2024	30,954	102.86	9,192	72.33
2023	23,458	97.23	8,729	70.42
2022	20,758	87.49	7,975	68.51
2021	19,816	71.14	7,458	59.26
2020	17,386	65.61	6,901	52.16

Source: Estimated by General Administration of Customs of the People's Republic of China, and China's relevant industrial associations and chamber of commerce.

Table 2- China's export statistics to certain countries and regions (2024)

Countries/Regions	Export (tons)	Value (million USD)
Thailand	77.15	17.92
Singapore	58.62	13.52
Malaysia	86.2	21.20
Indonesia	27.8	7.16
Korea, the Republic of	59.6	11.75
Viet Nam	74.9	20.49
Canada	106.5	91.14
Australia	76.7	55.07
the U.S.	151.4	119.46

Source: Estimated by China's relevant industrial associations and chamber of commerce

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

Countries in the region have varying quality requirements for mooncake and its related products, with significant differences in applicable standards. For example, there are different requirements for crust, fillings, and food additives. The lack of a regionally accepted standard for mooncake products hinders trade. Therefore, establishing a regional standard for mooncake should help ensure improved product quality, protect consumer health, address food safety concerns, and reduce trade friction.

c) International or regional market potential

Based on recent statistical data, demand for mooncakes continues to grow steadily and is projected to maintain this upward trend. In recent years, global demand for mooncake products has been increasing rapidly. Supported by advancements in technology, internet infrastructure and international logistics, traditional specialty foods from various countries are circulating more widely in international markets.

d) Amenability of the commodity to standardization

The proposed standard will specify requirements for mooncake ingredients (including sugar, oils, and wheat flour), basic ingredients, processing techniques, production management, quality parameters (such as moisture, fat, and protein content), and labeling. For food additives usage and contaminant limits in mooncake products, existing CAC documents will be applied.

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

There are no existing standards specifically covering mooncake.

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

No additional standards need to be developed apart from this proposed standard, as it comprehensively covers raw materials and processed products.

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

None identified.

6. Relevance to the Codex strategic objectives

The proposed regional standard for mooncake aligns with the Codex Strategic Plan 2020-2025. The proposed standard is closely linked to 1.1 Identify needs and emerging issues, and 1.2 Prioritize needs and emerging issues. The proposed standard will contribute to enhancing food safety for Asian consumers and ensuring fair international trade practices for this specific food product.

7. 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 Codex documents such as:

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

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

None identified.

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

None identified.

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

Subject to consideration by CCASIA23 in 2025, the proposal will be submitted for review and approval by CAC in 2026. As per proposed time schedule the process will take approximately five years.

Procedures	Timeline
Consideration of the proposal by CCASIA23	2025
Critical review by Executive Committee and approval by CAC for new work	2026
Preparation of draft standard and circulation for comments	2026-2027
Consideration of draft standard by CCASIA24	2028
Adoption by the CAC as draft standard	2028
Critical review by Executive Committee and forwarded to CAC for adoption	2029
Adoption as regional standard by CAC	2030