



هيئة أبوظبي للزراعة والسلامة الغذائية
ABU DHABI AGRICULTURE AND FOOD
SAFETY AUTHORITY

Pasteurized Liquid Camel Milk Standard under the framework of Codex Committee Milk and Milk Products (CCMMP11)

September 2026

CAC 48 Conclusions concerning the proposal for the development of a Pasteurized Liquid Camel Milk Standard

DECISION AND MANDATE

CAC48 conclusions

CAC48 approved new work

The 48th session of the Codex Alimentarius Commission approved development of a commodity standard for pasteurized liquid camel milk.

The work will follow Section 2.6, “Format for Codex commodity standards”, and cross-reference relevant Codex texts, including future food-fraud guidance under CCFICS.

01 Reactivate CCMMP

Work by correspondence, with flexibility to convene an EWG.

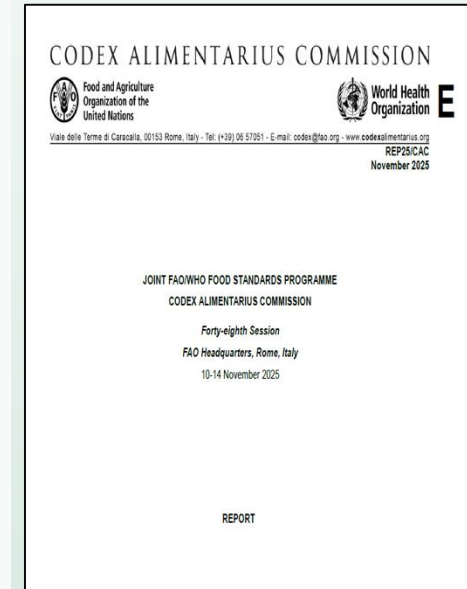
02 Develop the standard

Elaborate the commodity standard for pasteurized liquid camel milk.

03 Consult CCMAS

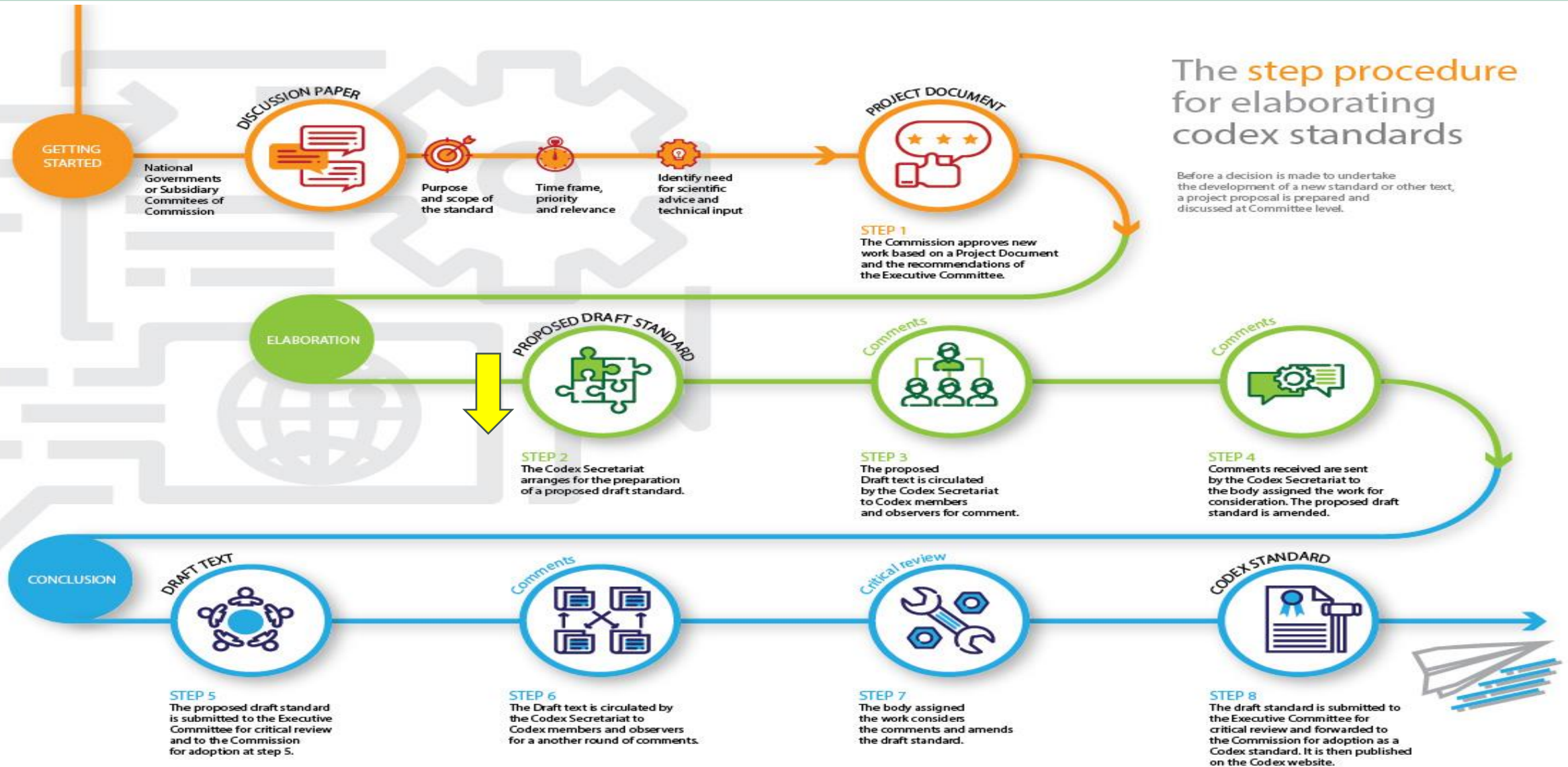
Identify or develop methods of analysis for quality provisions.

Complete within no more than three CCMMP sessions



CAC48 REPORT

Codex Step Procedure: Start Point



Step 5/8:

Increasingly subsidiary bodies are utilizing a Step 5/8 procedure. This entails texts being submitted for adoption at Step 5 having a recommendation that Steps 6 and 7 be omitted and that the text also be adopted at Step 8. This practice substantially speeds up the adoption process.

Informal Working Group

6 MEETINGS

**UAE
CCMMP
IDF Experts
Codex Scretariat**

Drafting

CCMMP Meeting

Codex Members and Observers Consultations

CL 2026-60-MMP

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org
CL 2026/66-MMP
July 2026

TO: Codex Contact Points
Contact Points of international organizations having observer status with Codex

FROM: Secretariat, Joint FAO/WHO Food Standards Programme,
Codex Alimentarius Commission
Viale delle Terme di Caracalla,
00153 Rome, Italy

SUBJECT: Request for comments at Step 3 on the proposed draft standard for pasteurized liquid camel milk

DEADLINE: 31 August 2026

BACKGROUND

1. The 48th Session of the Codex Alimentarius Commission (CAC48, 2025) approved¹ a proposal to develop a commodity standard for pasteurized liquid camel milk (submitted by the United Arab Emirates) as new work under the Codex Committee on Milk and Milk Products (CCMMP), which was therefore reactivated to work by correspondence. The Codex Secretariat has arranged for the development of a draft standard. The proposed draft standard and the factors taken into consideration in its preparation have been published as CX/MMP 26/11/2.

REQUEST FOR INFORMATION AND COMMENTS

2. Codex Members and Observers are invited to consider and provide comments at Step 3 on the draft standard for pasteurized liquid camel milk, which is uploaded to the Codex Online Commenting System (OCS): <https://ocs.codexalimentarius.org/>, as per the guidance below.
3. Comments in reply to the CL will be considered at CCMMP11.
4. In reviewing the draft standard, Members and Observers are requested in particular to provide inputs on the following, together with supporting data to the extent possible:
 - essential composition and quality factors to ensure that the standard is representative of pasteurized liquid camel milk produced in different parts of the world;
 - the food additive provisions;
 - the labelling provisions; and
 - the methods of analysis.

GUIDANCE ON THE PROVISION OF COMMENTS

5. Comments should be submitted through the Codex Contact Points of Members and Observers using the OCS.
6. Contact Points of Codex Members and Observers may login to the OCS and access the document open for comments by selecting "Enter" in the "My reviews" page, available after login to the system.
7. Contact Points of Codex Members and Observers are requested to provide proposed changes and relevant comments/justifications on a specific paragraph (under the categories: editorial, substantive, technical and translation) and/or at the document level (general comments or summary comments). Additional guidance on the OCS comment categories and types can be found in the [OCS Frequently Asked Questions \(FAQs\)](#).
8. Other OCS resources, including the user manual and short guide, can be found at the following link: <http://www.fao.org/fao-who-codexalimentarius/resources/ocs/en/>.
9. For questions on the OCS, please contact Codex-OCS@fao.org.

¹ REP25/CAC, para 89

CX/MMP 26/11/2

CODEX ALIMENTARIUS COMMISSION



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Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org
Agenda item 2
CX/MMP 26/11/2
June 2026

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON MILK AND MILK PRODUCTS

Eleventh Session

Working by correspondence

29 September - 29 October 2026

PROPOSED DRAFT STANDARD FOR PASTEURIZED LIQUID CAMEL MILK

(Prepared by an informal working group led by New Zealand and the United Arab Emirates with the International Dairy Federation and the Codex Secretariat)

1. INTRODUCTION

1. The 48th Session of the Codex Alimentarius Commission (CAC48) approved new work to develop a commodity standard for pasteurized liquid camel milk, noting that this work would follow Section 2.6: "Format for Codex commodity standards" of the *Codex Alimentarius Commission Procedural Manual*, and cross-reference the relevant Codex texts including, in due course, the guidelines on prevention and control of food fraud currently under development in the Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS); and reactivated the Codex Committee on Milk and Milk Products (CCMMP), to work by correspondence, with the flexibility to convene an electronic working group (EWG) as appropriate to:

- a. elaborate a commodity standard for pasteurized liquid camel milk;
- b. consult the Codex Committee on Methods of Analysis and Sampling (CCMAS) on the identification and/or development of methods of analysis to support implementation of quality parameter provisions; and
- c. complete the work within no more than three sessions of CCMMP.

2. Due to the schedule of Codex meetings in the first half of 2026 and the return of CAC to July, it was not feasible to schedule a meeting of CCMMP before September 2026. In order to minimize delays to the work, and in line with Step 2 of the uniform procedure for the elaboration of Codex standards and related texts, the Codex Secretariat arranged for the preparation of a proposed draft standard through an informal drafting group, led by New Zealand and the United Arab Emirates with the International Dairy Federation (IDF).

3. The development of the draft standard took into consideration national standards where available, as well as existing relevant Codex standards. The following provides a section-by-section overview of the key considerations taken into account when developing the draft standard.

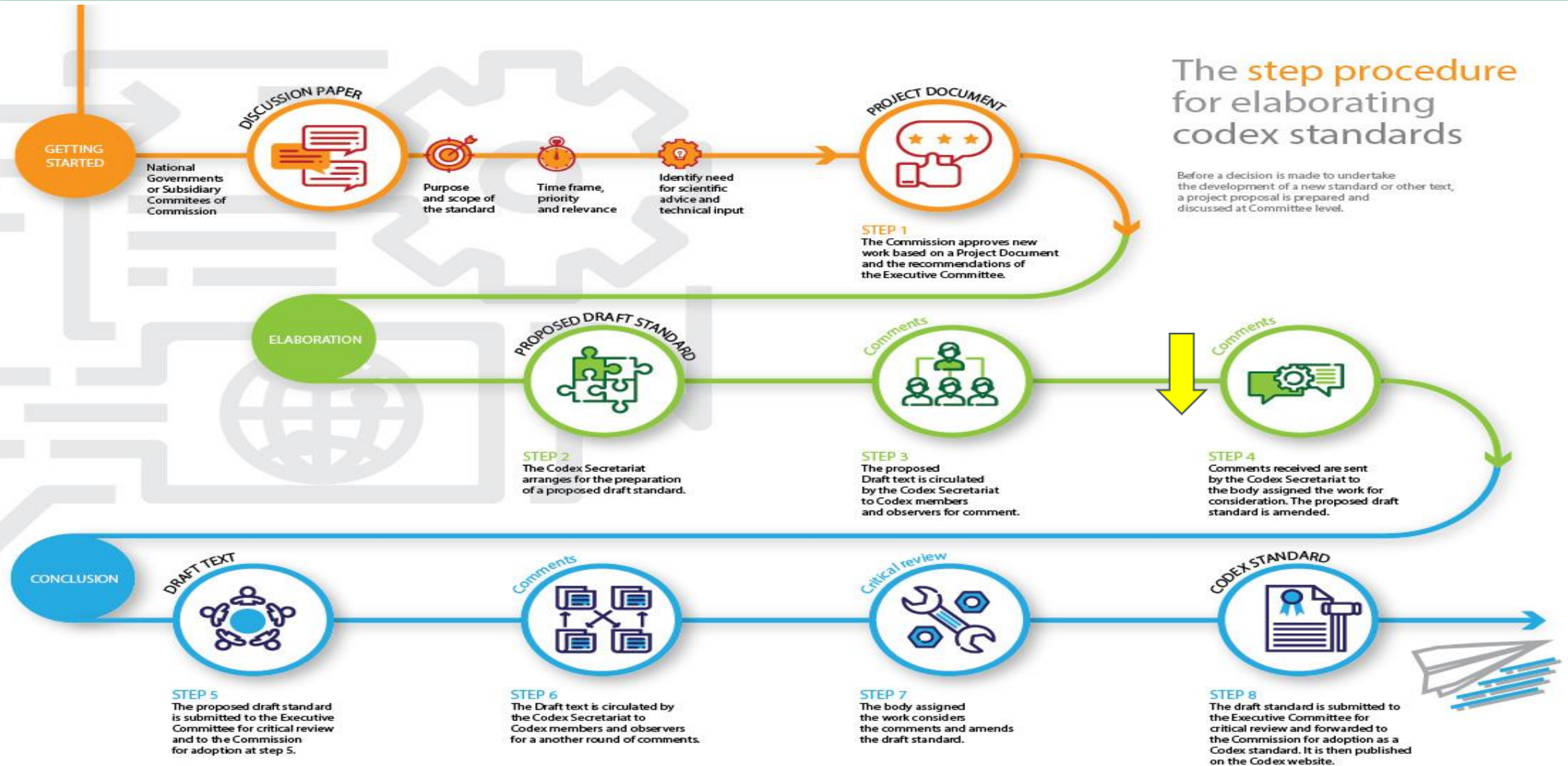
2. SCOPE AND DESCRIPTION

4. The scope was drafted to capture the intention that the standard is for liquid camel milk that has not been modified or added to beyond pasteurization and standardization of fat content. It does not cover products that are flavoured or sweetened, or subject to ultra heat treatment and the term "plain" was introduced to reflect that characteristic.

5. Consideration of and consistency with the definitions in the Codex *General standard for the use of dairy terms* (CXS 206:1999) was part of the process of drafting of the standard. Consistency with CXS 206:1999 was also the reasoning behind a decision not to specify the breeds of camels (*Camelus dromedarius* and *Camelus bactrianus*) that were covered by the standard but to refer to the more generic term of "milk camels".

6. The inclusion of reference to "without addition to it or extraction from it" is intended to address the removal of key constituents rather than to restrict the legitimate standardization of camel milk, such as fat adjustment where appropriate. The provision is intended to help minimize the risk of adulteration and to remain consistent with the existing Codex definition for milk.

Codex Step Procedure: Step 4



Step 5/8:
Increasingly subsidiary bodies are utilizing a Step 5/8 procedure. This entails texts being submitted for adoption at Step 5 having a recommendation that Steps 6 and 7 be omitted and that the text also be adopted at Step 8. This practice substantially speeds up the adoption process.

Members and Observers Comments

CX/MMP 26/11/2 Add.1

CODEX ALIMENTARIUS COMMISSION	
 Food and Agriculture Organization of the United Nations	 World Health Organization
Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org	
Agenda Item 2	CX/MMP 26/11/2 Add.1 September 2026 ORIGINAL LANGUAGE ONLY
 JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON MILK AND MILK PRODUCTS Eleventh Session Working by correspondence 29 September - 29 October 2026 PROPOSED DRAFT STANDARD FOR PASTEURIZED LIQUID CAMEL MILK Comments in reply to CL 2026/66-MMP <i>Submitted by:</i> <i>Australia, Brazil, Costa Rica, Egypt, European Union, Gambia, India, Indonesia, Iran (Islamic Republic of), Mongolia, Morocco, New Zealand, Paraguay, Peru, Sudan, Thailand, and the United States of America (USA), Food Industry Asia (FIA), International Commission for Uniform Methods of Sugar Analysis (ICUMSA), and International Dairy Federation (IDF/FIL)</i>	
Background	
1. This document compiles comments received through the Codex Online Commenting System (OCS) in response to CL 2026/66-MMP ¹ issued in July 2026. Under the OCS, comments are compiled in the following order: general comments are listed first, followed by comments on specific sections.	
Explanatory notes on the Annex	
2. The comments submitted through the OCS are hereby annexed and presented in tabulated format.	

Members and Observers Comments

CODEX ALIMENTARIUS

Responses to CL 2026/66-MMP by Codex region

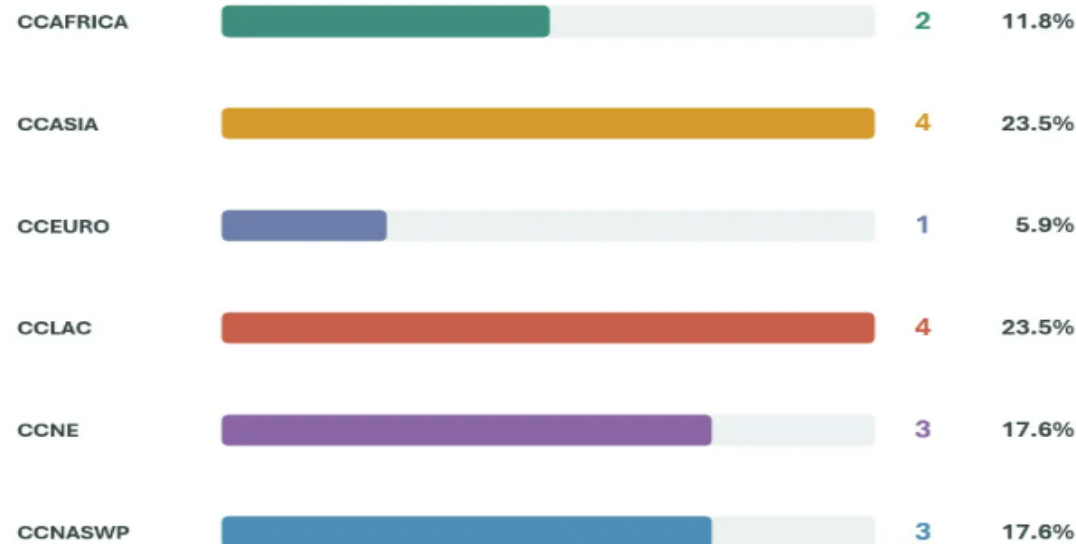
Respondents, regional membership and regional response rates • 3 observers shown separately

17

MEMBER
RESPONDENTS

Regional share of Member responses

Response count and share of the 17 Member respondents



Highest shares
Highest regional response rate: CCNASWP • 3 of 14 Members • 21.4%

Responding Members

Africa

2/49 | 4.1%

Gambia • Morocco

Asia

4/24 | 16.7%

India • Indonesia • Mongolia • Thailand

Europe

1/52 | 1.9%

European Union

Latin America & Caribbean

4/33 | 12.1%

Brazil • Costa Rica • Paraguay • Peru

Near East

3/17 | 17.6%

Egypt • Iran • Sudan

North America & Southwest Pacific

3/14 | 21.4%

Australia • New Zealand • USA

Observers (excluded from regional percentages): FIA • ICUMSA • IDF/FIL

Source: CX/MMP 26/11/2 Add.1, responses to CL 2026/66-MMP

Prepared 20 September 2026 1

DRAFT PASTEURIZED LIQUID CAMEL MILK STANDARD

TITTLE : Pasteurized Liquid Camel Milk

India, Thailand: delete "liquid" as CXS 206-1999 already defines milk as a liquid product; risk of precedent for other Codex texts referring to "milk".

USA: retain; agreed by CAC48 and useful to delimit the scope.

SCOPE: This standard applies to plain pasteurized liquid camel milk intended for human consumption, in conformity with the description in section 2 of this Standard.

Thailand: delete "plain" as section (2) describes clearly the product.

DRAFT PASTEURIZED LIQUID CAMEL STANDARD

DESCRIPTION

Raw Camel Milk is the normal mammary secretion of milking camels obtained from one or more milkings without either addition to it or extraction from it, intended for further processing in accordance with the General Standard for the Use of Dairy Terms (CXS 206-1999).

Thailand: delete the reference to CXS 206-1999 as it does not define raw camel milk.

Sudan: verify terminological consistency with CXS 206-1999.

Indonesia, Mongolia, Gambia: reflect both *Camelus dromedarius* and *Camelus bactrianus*.

DRAFT PASTEURIZED LIQUID CAMEL MILK STANDARD

DESCRIPTION

Pasteurized liquid camel milk is raw camel milk subjected to **pasteurization** by appropriate heat treatment, in accordance with the Code of Hygienic Practice for Milk and Milk Products (CXC 57-2004), and further processing limited to homogenization, and fat adjustment.

Sudan: "appropriate heat treatment" is undefined; requests time/temperature, systems and verification; clarify whether homogenization is optional.

Costa Rica: restrict fat adjustment to the addition/removal of cream or skimmed milk from camel milk without altering the protein/SNF ratio.

DRAFT PASTEURIZED LIQUID CAMEL STANDARD

ESSENTIAL COMPOSITION AND QUALITY FACTORS:

1*Raw material

Milk obtained from camels.

Gambia: footnote naming both camel species.

Morocco: require herd health status (brucellosis, tuberculosis, mastitis) and absence of colostrum.

Thailand: add raw-material quality requirements per para. 90 of Section 2.6 of the Procedural Manual.

DRAFT PASTEURIZED LIQUID CAMEL STANDARD

ESSENTIAL COMPOSITION AND QUALITY FACTORS: 2*Composition

	Whole milk	Partly Skimmed milk	Skimmed milk
Milk fat	≥2.0 %	0.5 - 2.0 %	<0.5 %
Milk protein	≥2.0 %	≥2.0 %	
Lactose	≥2.8 %	≥2.8 %	
Total non-fat solids	≥6.0 %	6.0 %	
Titrateable acidity, (expressed as lactic acid)	≤0.18 %		

Costa Rica: 2.0 % protein is too low against published means (~3.0 %) and the 2.5–4.0 % range in the Codex background document; review 5.5 % MSNF.

Indonesia: lactose and MSNF minima too low to deter dilution with water.

Sudan, Thailand, Gambia, Paraguay: request the underlying data (sources, sample size, regional/seasonal coverage) and invite producing countries to supply them.

Thailand: rename "Total non-fat solids" as "Milk solids-not-fat".

DRAFT pasteurized liquid CAMEL MILK STANDARD

ESSENTIAL COMPOSITION AND QUALITY FACTORS

*3 Quality factors — β -lactoglobulin

β -lactoglobulin shall not be detectable in pasteurized liquid camel milk. The presence of β -lactoglobulin may indicate the addition of milk from other species and shall not be permitted.

- ❑ The non-detection of β -lactoglobulin represents a critical defining characteristic of camel milk AND it was considered an essential determinant of quality factors provisions.
- ❑ A key consideration relating to the inclusion of a provision on the absence of β -lactoglobulin relates to the methods of analysis.

Broad support for the principle (Gambia, India, Indonesia, Costa Rica, Paraguay, Sudan).

Costa Rica: frame it as an authenticity/integrity criterion; detection = adulteration.

Paraguay: merge the two sentences.

Sudan, USA, India, Indonesia: not enforceable until a validated method exists (LOD, reference materials); Sudan proposes deferring mandatory status.

Thailand: add positive authenticity markers and organoleptic criteria.

Egypt, Iran: consider species-specific ELISA/PCR and fatty-acid profiling.

METHODS OF ANALYSIS

For checking the compliance with this standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CXS 234-1999) relevant to the provisions in this standard, shall be used.

Provision	Method	Principle	Type
Milk fat	ISO 23318 IDF 249	Gravimetry (Röse-Gottlieb)	IV
Milk protein	ISO 8968-1 IDF 20-1	Titrimetry (Kjeldahl)	IV
Lactose	ISO 22662 IDF 198	High performance liquid chromatography	II
Total non-fat solids	ISO 6731 IDF 21 ISO 2446 IDF 226	Calculation Gravimetry, drying at 102 °C	I or IV*
Titrateable acidity	ISO 6091 IDF 86	Titrimetry, titration to pH 8.4	I or IV*
β-lactoglobulin	Method to be developed, possibly based on ISO 13875 IDF 178	High Performance Liquid Chromatography (HPLC)	TBD

DRAFT PASTEURIZED LIQUID CAMEL MILK STANDARD

Costa Rica: keep a general reference to CXS 234-1999 only, to avoid revising the standard when methods change.

New Zealand, USA, Indonesia: consult CCMAS before the standard advances.

Peru: ISO 23318 and ISO 8968-1 scopes do not include camel milk — validation needed; ISO 22662 scope covers heat-treated milks — acceptable.

Iran: nitrogen-to-protein conversion factor must be verified for camel milk.

Thailand: principle should read "Titrimetry (Kjeldahl Digestion)" and "High-Performance Liquid Chromatography (HPLC)" per CXS 234.

IDF: Type I where validated for dispute settlement, otherwise Type IV — for CCMAS to decide.

CONSULTATIONS -METHODS OF ANALYSIS

Three Technical Consultations Supporting CCMMP11

A progressive 2026 consultation pathway from scientific scoping to international stakeholder alignment

01

21 MAY 2026

Brainstorming Session

UAE + GForSS, with AOAC International, Agilent Technologies and R-Biopharm experts [1]

- Explored protein-, DNA- and emerging technology-based approaches for authenticity testing.
- Defined priorities for β -lactoglobulin: analytical target, purpose, detection limits and validation.
- Highlighted sensitivity, specificity, practicality, cost and future IDF/ISO collaboration.

02

JUNE 2026

Consultations with IDF Experts

Review of ISO/IDF methods and standardization pathways

- Reviewed methods for fat, protein, lactose, non-fat solids and titratable acidity.
- Considered applicability to camel milk matrices and the role of collaborative validation.
- Reinforced the CCMAS fitness-for-purpose principle and identified future work on authenticity.

03

15 SEPTEMBER 2026

International Technical Workshop

More than 40 experts, including Codex, IDF, R-Biopharm, regulators, laboratories, academia and industry [2]

- Covered routine testing, freeze point, ELISA for β -lactoglobulin and IDF/ISO pathways.
- Engaged experts from camel milk-producing Members and international organizations.
- Built broad alignment on practical, robust methods and continued collaborative studies.

COMMON OUTCOME

Fit-for-purpose methods

β -lactoglobulin as the priority gap

Performance criteria and validation

Continued CCMMP-CCMAS-IDF-ISO collaboration

Together, the consultations established a scientific and technical foundation for future analytical standardization of pasteurized liquid camel milk.

[1] CRD Section 4.1: GForSS session participants included AOAC International, Agilent Technologies and R-Biopharm. [2] CRD Section 4.3: Workshop participants included R-Biopharm.

RECOMMENDED ACTIONS

Four actions can help CCMMP11 advance a robust and implementable text

01

PARTICIPATE

Engage actively in CCMMP11 discussions and informal consultations.

02

SUBSTANTIATE

Provide evidence-based comments supported by references and representative data.

03

ADVANCE

Support progression of the standard through the Codex adoption steps.

04

VALIDATE

Participate in collaborative validation studies for priority analytical methods.

THANK YOU!

