codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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Agenda Item 4(b)

CX/MMP 00/9
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON MILK AND MILK PRODUCTS
Fourth Session
Wellington, New Zealand, 28 February – 3 March 2000

PROPOSED DRAFT REVISED STANDARD FOR FERMENTED MILK PRODUCTS

REVIEW OF COMMENTS AND PROPOSED DRAFT STANDARD FOR FERMENTED MILKS
(Prepared by the International Dairy Federation)

Governments and interested international organizations are invited to comment on the attached proposed draft revised standard for Fermented Milks at Step 3. Comments should be sent to:

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with a copy to the Secretary, Codex Alimentarius Commission, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy **not later than 25 January 2000.**

The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

INTRODUCTION

At the 3rd session of the Codex Committee on Milk and Milk Products (CCMMP; May 1998) the Proposed Draft Standard for Fermented Milks was not discussed. The Committee agreed to establish an *Ad Hoc* working group on Creams, Dairy Spreads and Fermented Milks chaired by Argentina (in this document referred to as the CCMMP *Ad Hoc* Working Group on Dairy Products) to consider specified principal issues relating to fermented milks. The Committee further agreed that the IDF should redraft the standard on the basis of inputs from CCMMP *Ad Hoc* Working Group on Dairy Products for circulation and comment at Step 3 prior to the Committee's next session (ALINORM 99/11, paras 84-88).

The review has been carried out on the basis of the Proposed Draft Standard tabled at the 3rd session of the Committee.

The following principles have been applied:

1. The review has been done in light of written comments submitted[1] and with the inclusion of the recommendations of the CCMMP *Ad Hoc* Working Group on Dairy Products.
2. Each written comment submitted has been examined individually to the extent they do not fully fall under the issues considered by the CCMMP *Ad Hoc* Working Group on Dairy Products. It should be noted that the comments subject to the review were submitted prior to the 3rd Session of the CCMMP. This review does not consider those comments made to the Questionnaire issues by the Chair of the CCMMP *Ad Hoc* Working Group on Dairy Products.
3. Recommendations and conclusions of the Chair of the CCMMP *Ad Hoc* Working Group on Dairy Products have been inserted without any changes. However, they may have been subject to editorially amendments. Also additional amendments consequential from the recommendations of the CCMMP *Ad Hoc* Working Group on Dairy Products have been considered.
4. The review also includes recommendations for amendments, where appropriate, that are considered consequential from the decisions taken at the Session under Agenda item 4 (General Standard for the Use of Dairy Terms / GSUDT - as adopted by the Codex Alimentarius Commission)[2] , item 5 (Common Labelling Provisions of Milk Product Standards)[3] and item 6 (Draft and Draft Revised Standards at Step 7)[4].
5. The relevant decisions taken by the 23rd Session of the Codex Alimentarius Commission in accordance with the recommendations of the 27th Session of the Codex Committee on Food Labelling (CCFL) have been incorporated. Consequently, government comments related to these issues, which were submitted at an earlier stage, have not been reviewed in this document.
6. The general approach used has been that a government comment is accepted unless proper technological, scientific, editorial or similar arguments make it advisable not to follow it or to amend it.
7. Where different views have been expressed by governments, possible solutions are provided with the aim of facilitating a decision. They take into account technical justification and/or existing commercial trading practices.

Abbreviations used this document:

GSUDT: Draft General Standard for the Use of Dairy Terms (CODEX STAN 206-1999)

GSLPF: General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991)

TASKS AND CONCLUSIONS OF THE CCMMP *AD HOC* WORKING GROUP ON DAIRY PRODUCTS

According to ALINORM 99/11, para. 86, the CCMMP agreed to refer the following issues to a working group:

1. The consideration of the potential elaboration of a Standard and guidelines for products heat treated after fermentation including labelling provision;
2. The consideration of including „mild yoghurt“ in the Standard;
3. The consideration of guidelines to differentiate between heat treated and other products;
4. The consideration of composite products, including possible provisions or restrictions on the addition of flavourings.

The Chair of the CCMMP *Ad Hoc* working group has concluded as follows:

a) *The analysis of the answers sent by the twenty-nine countries, let us conclude that it is accepted the inclusion of composite products in the proposed Standard. There is a majority of Countries proposing to limit the presence of non-dairy product to 30%.*

b) *The replies to the question about a definition for "Mild Yoghurt" and the evaluation of the answers given to item 3.5.1 are less conclusive. There is no doubt we cannot propose to write a*

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1 CX/MMP 98/7 Add. 4, CX/MMP 98/7 Add. 6 (CRD 15), CRD´s 18, 19, 20, 23 and 26

2 CODEX STAN 206-1999

3 ALINORM 99/11, paras 21-29 and Appendix III.

4 ALINORM 99/11, paras 30-79 and Appendices IV-XI.

draft with an specific or particular definition of "mild yoghurt" because fourteen countries (with or without conditions) have already agreed to the definition proposed by the Codex Working Group, twelve have not accepted it, two of them have given an alternative definition (Canada and Slovakia) and one (Uruguay) has not given answer yet.

The Chairmans' analysis of the above information is the following:

(a) Seven countries have agreed with the mild yoghurt's definition proposed by the Codex Working Group. They have agreed, obviously, with the milder taste. The mentioned countries are Germany, Argentine, Belgium, UK, Thailand, Norway and Portugal.

(b) Other seven countries have agreed to the milder yoghurt, complying with table 3.3. They are agreeing in this way, with the existence of a yoghurt with a milder taste. (Brazil, Croatia, Spain, Greece, France, Israel and South Africa)

(c) Over the eleven countries that have not agreed to include a particular definition (Cuba, Denmark, USA, Finland, Italy, Japan, New Zealand, Swiss, Sweden, Australia and Netherlands) four of them (Cuba, Denmark, Netherlands and Sweden) would accept the mild yoghurt as a yoghurt with a milder taste.

With reference to item a), b) and c) we can see that over 26 computable answers, 18 admit, directly or indirectly, the milder taste as a characteristic property of the mild yoghurt.

As a consequence of this analysis the Chairman proposes to study the possibility of including a product containing the same specific micro-organisms needed for yoghurt, but with a milder taste, as "mild yoghurt" complying with the previsions of table 3.3 of the proposed standard, covering this situation by an adequate labelling provision in the item that deals with this subject (labelling).

In the Chairman's opinion, this might be an adequate position to lead an agreement on the next CCMMP Meeting.

c) With relation to the labelling of fermented milks, a large majority wants to replace "Products obtained from Fermented Milks Heat Treated After Fermentation shall be named in accordance with the legislation of the country of sale" by "Heat-Treated Fermented Milk" The current Section 7 needs to be brought in line with the proposed Standard on the Use of Dairy Terms.

The Chairman proposes the denomination of "Heat treated fermented milk" for fermented milks heat-treated after fermentation

d) It should also be taken into account that the compromise as a whole has not been accepted.

e) The point about the statement of one or two standards for "Fermented milks" and "Fermented milks heat treated after fermentation" resulted in an equal proportion of countries asking for each option.

As a result of the analysis of the opinions provided, referred to the former subject and the results of the latter , the Chairman suggests that it should be gone on with one standard including the provisions for the two types of products.

The above conclusions have been incorporated in the following review where appropriate. Further details of the individual replies and the analyses carried out by the Chair are provided in the report of the CCMMP *Ad Hoc* working group.

REVIEW OF THE STANDARD

NUMBER OF STANDARDS

Recommendation no 1: The recommendation of the Working Group is followed. (i.e. one standard)

TITLE

Comments submitted: France requested the modification of the term „fermented milk“ in the title in the case that only one Standard should be adopted. The suggestion was to include in the title „and heat-

treated products derived from them". For the same reason **Spain** suggested to add to the title „and fermented milk products pasteurised after fermentation".

Discussion: The CCMMP Ad Hoc Working Group on Dairy Products recommends that products heat treated after fermentation are denominated "Heat treated fermented milk". There is therefore no need to change the title, as "Heat Treated Fermented Milk" will become just one type of fermented milk (see also the discussion on the description of fermented milks).

Recommendation no 2: Retain the title "Standard for Fermented Milks (A-11)".

1. SCOPE

Comments submitted:

Composite products
According to **France** the wide range of fermented milk based drinks cannot be covered by including the composite products in the scope since they do not reach the minimum protein level of 2.8%.

Optional cultures
Japan suggested mentioning optional lactic acid bacteria and/or bifidobacteria in the scope.

Discussion:

Composite products
The French comment on protein content is based on a misinterpretation of 3.3 in the Standard since the table specifies the composition of the fermented milk part of the composite product, only.

The CCMMP *Ad Hoc* Working Group on Dairy Products recommends the inclusion of composite products with a maximum of 30% non-dairy product content. The inclusion has consequences for other parts of the standards. These consequences are addressed later in this review under the relevant sections of the Standard. It should also be noted that the CCMMP Ad Hoc Working Group on Dairy Products proposes to include fermented cream in the Standard for Creams.

Optional cultures
The addition of optional cultures is already covered in section 3.2 (permitted ingredients).

Recommendation no 3: Include composite fermented milks in the scope of the standard. No other changes are needed.

2. DESCRIPTION

2.1 Fermented Milk

a General

Comments submitted: Germany suggested that the limits for viable counts should not be valid until the date of minimum durability but rather at the time of production.
In **Japan** some fermented milks are manufactured by stopping the fermentation before coagulation and therefore the deletion of „coagulation" in the description of fermented milks was requested.

France requested to include that the fermented milks have to be kept at 4-8°C throughout distribution.

Discussion: The specification for viable counts should be valid at the time when the consumer consumes the product.

The characteristic of most fermented milks is the precipitation of milk proteins. Products without coagulation would still be covered because the description also mentions the reduction of pH.

Distribution temperature is not a safety related, so it is not required

As consequence of the recommendations 1 and 2 of CCMMP Ad Hoc Working Group on Dairy Products Section 2.1 in the Draft Standard should be revised.

Several comments to different sections of the Draft Standard relates to whether it is possible to use other cultures in addition to the specific ones. Although this is permitted by the present Draft, there is apparently a need to highlight this principle. This can be done by adding a sentence at the very end of section 2.1 (after the descriptions of the specific products).

Recommendation no 4: Amend the description of Fermented Milk as follows:

*"**2.1 FERMENTED MILK***

Fermented Milk is a milk product obtained by fermentation of milk which milk may have been manufactured from products obtained from milk with or without compositional modification as limited by the provision in Section 3.3, by the action of specific microorganisms and resulting in reduction of pH and coagulation. These specific microorganisms shall be viable, active and abundant in the product to the date of minimum durability if the product is not heat-treated after fermentation.

…(descriptions of the specific products)

Other cultures than those specified in the descriptions of the specific fermented milks above may be used in addition to the specific cultures characterizing the product."

b Specific microorganisms of Yoghurt

Comments submitted: Finland, France, **Italy**, **Japan, Morocco, Romania** and **Spain** stressed that *St. thermophilus* and *Lb. delbrueckii* subsp. *bulgaricus* are the two essential bacteria in yoghurt and must therefore always be present. In addition **Morocco** was against using the term „yoghurt" for products not containing these two microorganisms.

United Kingdom suggested the deletion of the term „protosymbiotic" in the definition of yoghurt because there is no definition of this term in the standard.

Argentina proposed to permit the use of other optional lactic acid bacteria in yoghurt and kefir and to specify them in addition to specific microorganisms.

Discussion: Optional microorganisms are included in the Standard under 3.2. Permitted ingredients. Yoghurt is obtained by fermentation of milk with the two specific microorganisms *Streptococcus thermophilus* and *Lactobacillus delbrueckii* subsp. *bulgaricus*. The associated growth of *Streptococcus thermophilus* and *Lactobacillus delbrueckii subsp. bulgaricus* is characterised by symbiotic relationship. In the first phase of fermentation *Lactobacillus delbrueckii subsp. bulgaricus* stimulates the growth of *Streptococcus thermophilus* by liberating the essential amino acids from the casein. In the second phase the growth of *Streptococcus thermophilus* is slowed down due to the adverse effect of lactic acid, and *Lactobacillus delbrueckii subsp. bulgaricus* increases its rate of growth through the stimulative action of *Streptococcus thermophilus*. (*Rasic and Kurmann: "Yoghurt – scientific grounds, technology, manufacture and preparations, Technical Dairy Publishing House, DK-Vanlose, 1978*).

Recommendation no 5: Change "proto-symbiotic" to "symbiotic".

c Mild Yoghurt

Discussion: According to recommendation 3 of the CCMMP *Ad Hoc* Working Group on Dairy Products the majority of the countries still insisted that the term yoghurt shall be reserved to products containing the microorganisms defined in the Draft Standard. A minority of countries was clearly in favour of including the new category of Mild Yoghurt having a different microbial composition.

Recommendation no 6: No specific recommendation at this stage. Subject to further discussion at the 4th CCMMP.

d Kefir

Comments submitted: Japan proposed to increase the count of yeasts in kefir to min. 10^7cfu/ml.
Japan suggested mentioning lactis acid bacteria as specific microorganisms for kefir.

Discussion: An increase of the minimum count of yeasts is in opposition to the defined minimum of 10^4cfu/g. Depending on the production conditions, i.e. ripening time for kefir, the count for yeasts is extremely variable. In some areas of the world consumers prefer a kefir with less pronounced yeast

flavour meaning that the suggested minimum count for yeasts of 10^7cfu/ml would be too high. Production of kefir with higher counts than 10^4cfu/ml is possible.

Lactic acid bacteria are mentioned under the description of kefir.

According to the new taxonomical designation *Lactobacillus kefir* should be changed to *Lactobacillus kefiri.*

Recommendation no 7: Update the taxonomical designation of *Lactobacillus kefir* to *Lactobacillus kefiri.*

e Kumys

Comment submitted: Argentina suggested defining a minimum value for ethanol.

Discussion: In the Draft Standard a value of min. 0.5% is defined.

IDF recommended an editorial change for Kumys.

Recommendation no 8: Delete "... species of ..." in the Draft Standard.

f Cultured milk

Comments submitted: Norway asked for justification for deleting „cultured milk" and **France** for deleting „cultured buttermilk" from the Standard.

Discussion: Although not specifically mentioned, cultured milk and cultured buttermilk are covered by the description of fermented milk in section 2.1 and the requirements are mentioned under 3.3 „composition of fermented milk". These products have been removed because they are not fermented with specific microorganisms.

Recommendation no 9: No adoption.

g Fermented milk drink

Comments submitted: Japan proposed the explicit mentioning of „fermented milk drink".

Discussion: There is no need for changing the existing description since the viscosity of the final products, which is determined by mechanical treatment after fermentation, is not regulated by the Draft Standard and the manufacture of, for instance, drink yoghurt is therefore possible.

Recommendation no 10: No adoption.

2.2. Concentrated products

Comments submitted: India suggested that concentrated fermented milk products, which are not internationally known, should be dropped from the list.

Japan suggested to delete the words "by thermophilic or mesophilic starter cultures" since these terms are not used in the description.

Argentina suggested to include compositional criteria for concentrated products in the table in section 3.3.

Discussion: Internationally trade may gain importance in the future. In addition, it is assumed that other countries agree with including concentrated products in the Standard.

The mentioned microorganisms are used for the fermentation in the production of concentrated fermented milks, however, the qualification is not essential

In spite of the fact that the concentration factors are different for various concentrated products it is recommended to define the concentration factor by setting a minimum of [5.6 %] protein in the final product.

Recommendation no 11: Delete the words "by thermophilic or mesophilic starter cultures" and endorse the description amended as follows:

***"Concentrated Fermented Milk** is a Fermented Milk the protein content of which has been increased prior to or after fermentation to min. [5.6%]. Concentrated Fermented Milks includes traditional products such as Stragisto (strained yaourti), Labneh, Ymer and Ylette."*

2.3. Products obtained from fermented milks heat-treated after fermentation

Recommendation no 12: This section should be deleted as heat-treated products are now covered by the definition of Fermented Milks.

2.4. Composite fermented milk products

Comments submitted: India proposed to mention nuts and raisins as permitted ingredient for composite products.

Discussion: Nuts and fruits are already included in 2.3.

Recommendation no 13: As consequence of the recommendations 5.2 of the CCMMP *Ad Hoc* Working Group on Dairy Products the majority of the countries supported to limit the presence of non-dairy products in composite fermented milks to 30%. Consequently, the description should be rephrased as follows:

***"Composite fermented milk products** are products which contain a maximum of 30% (w/w) of non-dairy ingredients (such as nutritive and non-nutritive carbohydrates, fruits and vegetables as well as juices, purees, pulps, preparations and preserves derived therefrom, cereals, honey, chocolate, nuts, coffee, spices and other harmless natural flavouring foods) and/or flavours. The non-dairy ingredients can be mixed in prior to or/after fermentation."*

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.2. Permitted Ingredients

Comments submitted: Argentina suggested specifying optional lactic acid bacteria, which can be added to fermented milk.

Canada suggested not to make distinction with respect to fermented milks and their composite varieties. The list of permitted ingredients should, therefore, apply the single category of fermented milks, which includes flavoured and unflavoured versions of the same food.

Argentina, Denmark and **France** suggested that a maximum for gelatine and starch should be specified, and in addition **France** emphasised that these additives should be permitted only for composite fermented milks.

Japan suggested replacing "In composite products only" to "In flavoured fermented milk and composite products".

Japan and **United Kingdom** suggested to add oligosaccharides to the list of permitted ingredients since they are used in an increasing number of fermented milks. **Argentina** proposed the same using however the term „non-nutritive sweeteners".

France suggested to replace in the French version of the Standard the expression "arômes pseudo-naturels" with "arômes identiques naturels" which is identical with the English version.

Discussion: It is not necessary to specify optional lactic acid bacteria since the wording in the Draft Standard already allows for it.

According to the GSUDT, composite fermented milks cannot be integrated in the definition of fermented milks (the plain product). Flavoured products are included in composite fermented milk products.

No additives are needed in plain products but only in composite products. The suggestion of Argentina, which also covers the request of the UK, should be followed.

The present draft permits the addition of starch and gelatine only to composite products. The declaration of these ingredients depends on the legislation of the country since in some countries starch and gelatine are considered as food whereas in others they are additives.

Recommendation no 14: Amend the appropriate Section in the Draft Standard as follows:

"Flavouring foods, safe and suitable nutritive and non-nutritive carbohydrates, natural flavours, nature identical and artificial flavours."

Correct the French version as requested by France

3.3. Composition

a Protein content

Comments submitted: Canada stated that protein in milk-solids-non-fat is not yet standardized for liquid milk.

Japan suggested reducing the minimum protein content from 2.8% to 2.7%.

Colombia suggested adding milk to the term of protein in 3.3.

Discussion: The required minimum of 2.8% of milk protein is in conformity with the minimum content in most countries. Removal of the criteria on minimum 34% milk protein in milk-solids-non-fat (snf) may satisfy Japan. For the sake of consistency, a footnote stating the way milk protein is calculated should be inserted.

Recommendation no 15: Delete the regulation of milk protein in milk-solids-non-fat and include a footnote as follows:

"Protein content is 6.38 multiplied by total Kjeldahl nitrogen determined."

b Lactic acid content

Comments submitted: Japan suggested reducing the minimum of lactic acid to 0.33%. **Italy** suggested to increase the minimum lactic acid content to 0.7%.

India suggested to express the titrable acidity as % lactic acid.

Discussion: In general, fermented milks reach at the end of fermentation the level of lactic acid as mentioned in the Standard. This minimum level should be retained. The Indian suggestion would be in conformity with the analytical method.

Recommendation no 16: The following change of titrable acidity in table 3.3 is recommended:

"Titrable acidity, expressed as % lactic acid (%w/w)"

c Specific microorganisms total number

Comments submitted: Colombia suggested the reduction of the count of specific microorganisms to 10^5 cfu/g because the initial higher counts can be reduced until the end of the „shelf-life of the product".

United Kingdom suggested setting no limit for minimum of viable count.

Italy suggested that labelled additional microorganisms in the product should be present in min. 10^6 cfu/ml.

See also comments of **Germany** under 2.1a.

Discussion: Under appropriate storage conditions the min. count mentioned in Standard can be achieved.

10^7cfu/g are the minimum required to ensure fermentation and coagulation.

The suggestion of Italy is already covered by the table.

Recommendation no 17: No changes required

d Footnote of table

Comments submitted Japan suggested to add a footnote „The Standards for composition apply to products after flavouring foods are added".

Italy suggested that the following sentence should be added as footnote to the table „Where more than one specific microorganism characterising the product (e.g. as in case of yoghurt) the criteria apply to the number of specific microorganisms in total (10^7cfu/g), provided that, complying with the definition, the microorganism which is present at lower levels it is not less than 10^6cfu/g."

See also comments of **Germany** under 2.1a.

Discussion: The Standard already regulates the composition of the fermented milk part of a composite fermented milk product.

The Italian request is already met by the current text, however, a more lear wording is recommended.

Recommendation no 18: The proposed conclusion of the CCMMP *Ad Hoc* Working Group is to have only one Standard for Fermented Milks and as a consequence the footnote should be changed as follows:

"In Composite Fermented Milk Products the above criteria apply to the fermented milk part in the products, however the microbiological criteria (based on the proportion of fermented milk product) are valid up to the date of minimum durability. This requirement does not apply to products heat-treated after fermentation."

3.4. Essential manufacturing characteristics

Comments submitted: France suggested to include „The products described in point 1. of the Standard must not be heat-treated after fermentation".

Discussion: The current text is in agreement with the proposed conclusion of the CCMMP *Ad Hoc* Working Group on Dairy Products.

Recommendation no 19: No adoption.

4. FOOD ADDITIVES

Comments submitted: Canada, India, Japan, Poland, Spain, United Kingdom, United States made comments regarding different additives.

Recommendation no 20: The additives list need to reflect the conclusion of the CCMMP with respect to the products covered by the standard. As the identification of the additives that are technologically justified is a rather comprehensive task, it is recommended that the CCMMP follows the following three-step approach:

Step a: At its 4th session, the CCMMP shall consider the draft "decision chart" below with the objective to conclude on which classes of additives should be permitted for each product group specified. The conclusion will then provide the basis for step b.

Step b: Governments and international organizations shall be afterwards invited to suggest which additives to be included under each of the classes agreed upon for each of the product categories.

Step c: At the 5th session of the CCMMP, the Committee shall finalize the additive list in light of the suggestions made and replace the present table in square brackets in the Draft Standard.

The following draft decision chart is provided for consideration. Once the decision chart has been agreed upon, the next step would be to identify which individual additives are to be included under each category, following the principles specified below:

- Only additives that have been subject to evaluation by JECFA should be requested;
- All requests for additives with no numerical ADI specified should be included, provided it falls under one of the functional classes listed in the chart;

- Request for insertion of additional functional classes shall be technologically justified (class by class);
- Additives with numerical ADI-values shall be justified individually as to whether they should be permitted and, if so, at which maximum level;
- The additives shall only be used when the use has an advantage, i.e. serves one or more technological functions and that these can not be achieved by other means which are economically and technologically practicable.

[Recommended decision chart to identify permitted additives - The entire table shall be put in brackets]

		Fermented milks		**Heat treated fermented milks**	
		Plain	**Composite**	**Plain**	**Composite**
GSFA Categorisation		01.2.1.1. 01.1.2 (except fl.) 01.1.1.2.	01.7 (partly) 01.1.2 (flavoured)	01.2.1.2 01.1.2	To be specified.
Category	**Technical function**				
Colours		-	×	-	×
Sweeteners		-	×	×	×
Preservatives		-	×	-	×
Other additives	Antioxidants	No additives are needed	×	-	×
	Acidifiers		×	×	×
	Acidity regulators		×	×	×
	Anticaking agents		×	-	×
	Emulsifiers		×	-	×
	Firming agents		×	×	×
	Flavour enhancers		×	-	×
	Gelling agents		×	×	×
	Modified starches		×	×	×
	Packaging gases		×	×	×
	Propellent gases		×	×	×
	Stabilisers		×	×	×
	Thickeners		×	×	×

× justified
- not justified

7. LABELLING

7.1. Name of the Food

Section 7.1.1.

Comments submitted: France suggested to include „Fermented Milk containing additional microorganisms, Acidophilus Fermented Milk“ in this paragraph.

Italy did not agree with using the term „yoghurt“ in products designated as „frozen yoghurt“ and „yoghurt powder“.

Denmark proposed rephrasing of this paragraph as follows: „The name of the food shall be Fermented Milk or Concentrated Fermented Milk, as appropriate. Alternatively, a specific variety name reserved by this Standard may be used when the product complies with the specifications in section 2 and 3. Other variety names may also alternatively be used, provided that they are specified in the national legislation of the country of sale and they do not create an erroneous impression regarding the character of the food.“

Spain proposed to add the Spanish writing of yoghurt „yogur“.

Uruguay is for the addition of the term “yoghurt” which is in current use in Uruguay.

Discussion: The para. needs to be redrafted as a consequence of the recommendation of the CCMMP *Ad Hoc* Working Group on Dairy Products and the GSUDT.

Products with additional microorganisms are included in table 3.3 Composition.

If the yoghurt part in frozen yoghurt or yoghurt powder is in agreement with the specifications in this Standard, the terms are acceptable.

Instead of listing the various ways of spelling the term "yoghurt", a more generic wording addressing the spelling should be inserted to simplify the provision.

Recommendation no 21:

"7.1.1 The name of the food shall be fermented milk or concentrated fermented milk as appropriate.

However, these names may be replaced by the designations Yoghurt, Acidophilus Milk, Kefir, Kumys, Stragisto, Labneh, Ymer and Ylette, provided that the product complies with the specific specifications of this Standard. Yoghurt may be spelled as appropriate in the country of retail sale.

Other fermented milks and concentrated fermented milks may be designated with other variety names specified in the national legislation of the country in which the product is manufactured and/or sold, or names existing by common usage, provided that such designations do not create an erroneous impression in the country of retail sale regarding the character and identity of the food.

Products obtained from fermented milk(s) by heat-treatment after fermentation shall be named "Heat-Treated Fermented Milk".

Section 7.1.2.

Comments submitted: Denmark considered the wording redundant.

Italy proposed to change the expression "various products" into "various fermented milks".

France proposed to replace "...various products..." with ".. blended fermented milk...".

Spain suggested that in case of mixing two separately fermented milks prior to packaging the designation must be "fermented milk" since the characterisation for their respective specific organisms has lost its effect with the mixing.

France suggested the rephrasing of this section as follows: "The presence of additional flora may only feature on the label if it complies with the provisions shown in 3.3. table."

Discussion: The para. was introduced according to the results of a survey some 10 years ago which showed that in some countries products exist which are prepared by mixing of two separately fermented milks. However, the composition of such fermented milks is covered in table 3.3. Composition, wherefore the para. can be deleted.

Recommendation no 22: Delete this section.

Section 7.1.4.

Comments submitted: Canada referred to its national legislation which requires an accurate description of the product such as "yoghurt with strawberries" or "strawberry-flavoured yoghurt" or "strawberry yoghurt".

Italy suggested adding the following: "The designation of composite (flavoured) fermented milks..."

For **Japan** this article is not clear. It should be permitted for composite products to use the designation "flavoured fermented milks".

Uruguay suggested that the term "yoghurt" should be not regulated in another food with the Draft Standard

Discussion: The requests of the above countries are already covered with the present phrasing of para. 7.1.4. The naming of a composite milk product is also covered by the GSUDT.

Recommendation no 23: No adoption.

Section 7.1.5.

Comments submitted: France suggested to specify the products as „plain products".

Discussion: This is covered by the description of Composite Fermented Milk products.

Recommendation no 24: No adoption.

8. METHODS OF SAMPLING AND ANALYSIS

Comments submitted: France proposed the following methods:

8.1. Sampling (reference method)

According to IDF Standard 50B:1985/ISO 707:1985/AOAC968.12[5]

8.2. Determination of fat content (reference method)[6]

According to IDF Standard 153:1991

8.3. Determination of total solids content (reference method)[7]

According to IDF Standard 151:1991

8.4. Determination of protein content (reference method)[8]

Protein content is 6.38 multiplied by total Kjeldahl nitrogen determined by IDF Standard 20B:1993/ISO:SC8968/AOAC991.20-23

8.5. Determination of lactic acid content (reference method)[9]

According to IDF Standard 150:1991

8.6. Determination of ethanol content (reference method)

(to be established)

8.7. Identification of lactic acid starters

According to IDF Standard 149:1991 (under revision)

8.8. Identification and enumeration of specific microorganisms (reference method)

According to the following methods:

- Yoghurt: IDF Standard 117A:1988[10] (new Standard to be published), IDF Standard 146:1991[10]
- Bifidobacteria: (under elaboration)

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5 Secretariat's Note: IDF Standard 50C:1995/ISO 707:1997/AOAC 968.12 was agreed for the sampling of fermented milks at the 3rd Session of the Committee (ALINORM 99/11, Appendix XII). This method is newer that the method proposed.

6 Secretariat's Note: The method proposed is for the enumeration of contaminating microorganisms. If a method is necessary to check the contamination by microorgainism, this method shall be sent to the Codex Committee on Food Hygiene for endorsement.

7 Secretariat's Note: This method can only be classified as a defining method (Type I) but **not** reference method (Type II) according to the Codex classification of methods of analysis.

8 Secretariat's Note: The method was already agreed for the determination of protein in fermented milks

9 Secretariat's Note: This method together with ISO 11869:1997 (identical method), and AOAC 937.05 (different method) were already agreed for lactic acid in fermented milks by the Committee at its 3rd Session. Only one method, either IDF Standard 150:1991/ISO 11869:1997 or AOAC 937.05 can be classified as a reference method and the other as alternative method.

10 Secretariat's Note: This method was already agreed for Streptococcus themophilus & Lactobacillus delbruckii subsp. bulgaricus in fermented milk by the Committee at its 3rd Session.

- Yeasts: IDF Standard 94B:1990

Recommendation no 25: Refer those methods not yet included in the list of methods (ALINORM 99/11, Appendix V; updated version available in CX/MMP 00/16) to the IDF/ISO/AOAC Working Group on Methods of Analysis and Sampling for consideration and discuss them at the 4th Session under Agenda Item 6.

Attachment

PROPOSED DRAFT STANDARD FOR FERMENTED MILKS (A-11)[11]

1. SCOPE

This standard applies to fermented milks, that is Fermented Milk including, Heat Treated Fermented Milks, Concentrated Fermented Milks and composite milk products based on these products, for direct consumption or further processing in conformity with the definitions in Section 2 of this Standard.

2. DESCRIPTION

2.1 FERMENTED MILK

Fermented Milk is a milk product obtained by fermentation of milk, which milk may have been manufactured from products obtained from milk with or without compositional modification as limited by the provision in Section 3.3, by the action of specific microorganisms and resulting in reduction of pH and coagulation. These specific microorganisms shall be viable, active and abundant in the product to the date of minimum durability if the product is not heat-treated after fermentation.

Certain Fermented Milks are characterised by the specific micro-organism(s) used for fermentation as follows:

Yoghurt: Symbiotic cultures of *Streptococcus thermophilus* and *Lactobacillus delbrueckii* subsp. *bulgaricus*

Acidophilus Milk: *Lactobacillus acidophilus*

Kefir: Starter culture prepared from kefir grains, *Lactobacillus kefiri,* species of the genera *Leuconostoc, Lactococcus* and *Acetobacter* growing in a strong specific relationship.

Kefir grains constitute both lactose fermenting yeasts (*Kluyveromyces marxianus*) and non-lactose-fermenting yeasts (*Saccharomyces omnisporus, Saccharomyces cerevisae* and *Saccharomyces exiguus*)

Kumys: *Lactobacillus delbrueckii* subsp. *bulgaricus* and *Kluyveromyces marxianus*.

Other cultures than those specified in the descriptions of the specific fermented milks above may be used in addition to the specific cultures characterising the product.

2.2 CONCENTRATED FERMENTED MILK

Concentrated Fermented Milk is a Fermented Milk the protein of which has been increased prior to or after fermentation to minimum [5.6%]. Concentrated Fermented Milks includes traditional products such as Stragisto (strained yaourti), Labneh, Ymer and Ylette.

2.3 COMPOSITE FERMENTED MILK PRODUCT

Composite Fermented Milk Products are products which contain a maximum of 30% (w/w) of non dairy ingredients (such as nutritive and non nutritive carbohydrates, fruits and vegetables as well as juices, purees, pulps, preparations and preserves derived therefrom, cereals, honey, chocolate, nuts, coffee, spices and other harmless natural flavouring foods) and/or flavours. The non-dairy ingredients can be mixed in prior to/or after fermentation.

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[11] Comments are being sought at Step 3. The Proposed Draft Standard will be considered by the Committee at its 4th Session at Step 4.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 RAW MATERIALS

Milk and/or products obtained from milk.

3.2 PERMITTED INGREDIENTS

- Starter cultures of harmless micro-organisms including those specified in section 2;
- Sodium chloride.
- In composite products only:
- Gelatine and starch, added either before or after adding the flavourings;
- Flavouring foods, safe and suitable nutritive and non-nutritive carbohydrates, natural flavours, nature identical and artificial flavours.

3.3 COMPOSITION

	Fermented Milk	Yoghurt and Acidophilus milk	Yoghurt, Acidophilus milks and Fermented Milk with additional microorganisms (optional)	Kefir	Kumys
Milk protein[a] (% w/w)	min 2.8%	min 2.8%	min 2.8%	min 2.8%	
Titrable acidity, expressed as % lactic acid (% w/w)	min 0.6%	min 0.6%	min 0.6%	min 0.6%	min 0.7%
Ethanol (% vol./w)					min 0.5%
Specific microorganisms defined in section 2.1 (cfu/g, in total)	min 10^7	min 10^7	min 10^7	min 10^7	min 10^7
Labelled additional microorganisms (optional) (cfu/g, total)			min 10^6		
Yeasts (cfu/g)				min 10^4	min 10^4

a) Protein content is 6.38 multiplied by the total Kjeldahl nitrogen determined.

In Composite Fermented Milk Products the above criteria apply to the fermented milk part in the products, however the microbiological criteria (based on the proportion of fermented milk product) are valid up to the date of minimum durability. This requirement does not apply to products heat-treated after fermentation.

3.4 ESSENTIAL MANUFACTURING CHARACTERISTICS

Whey removal after fermentation is not permitted in the manufacture of fermented milks, except for Concentrated Fermented Milk (section 2.2)

4 FOOD ADDITIVES

[Additives to be identified according to the decision chart[12] in square brackets below.]

[	Fermented milks		Heat treated fermented milks	
	Plain	Composite	Plain	Composite
GSFA Categorisation	01.2.1.1. 01.1.2 (except fl.) 01.1.1.2.	01.7 (partly) 01.1.2 (flavoured)	01.2.1.2 01.1.2	To be specified.

[12] The decision chart is only inserted at this stage to assist in identifying the necessary additives and will later be replaced by a list of individual additives.

Category	Technical function				
Colours		-	×	-	×
Sweeteners		-	×	×	×
Preservatives		-	×	-	×
Other additives	Antioxidants		×	-	×
	Acidifiers		×	×	×
	Acidity regulators		×	×	×
	Anticaking agents	No	×	-	×
	Emulsifiers	additives	×	-	×
	Firming agents	are	×	×	×
	Flavour enhancers	needed	×	-	×
	Gelling agents		×	×	×
	Modified starches		×	×	×
	Packaging gases		×	×	×
	Propellent gases		×	×	×
	Stabilisers		×	×	×
	Thickeners		×	×	×

× justified
- not justified **]**

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by this standard shall comply with the maximum limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by this standard shall comply with the maximum residues limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this Standard should be subject to a combination of control measures, which may include, for example, pasteurisation, and these should be shown to achieve the appropriate level of public health protection.

6.3 The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991, *Codex Alimentarius, Volume 1A*) and the General Standard for the Use of Dairy Terms (CODEX STAN 206-1999), the following specific provisions apply:

7.1 NAME OF THE FOOD

7.1.1 The name of the food shall be fermented milk or concentrated fermented milk as appropriate.

However, these names may be replaced by the designations Yoghurt, Acidophilus Milk, Kefir, Kumys, Stragisto, Labneh, Ymer and Ylette, provided that the product complies with the specific provisions of this Standard. Yoghurt may be spelled as appropriate in the country of retail sale.

Other fermented milks and concentrated fermented milks may be designated with other variety names specified in the national legislation of the country in which the product is manufactured and/or sold, or names existing by common usage, provided that such designations do not create an erroneous impression in the country of retail sale regarding the character and identity of the food.

Products obtained from fermented milk(s) heat treated after fermentation shall be named “Heat-Treated Fermented Milk”.

7.1.2 The designation of Composite Fermented Milk Products shall include the name of the principal flavouring substance(s) or flavour(s) added.

7.1.3 The designation of products, to which artificial sweeteners have been added, shall be accompanied by the term "sweetened with... ".

7.1.4 The names covered by this Standard may be used in the designation, on the label, in commercial documents and advertising of other foods, provided that it is used as an ingredient and that the characteristics of the ingredient are maintained to a relevant degree in order not to mislead the consumer.

7.2 DECLARATION OF FAT CONTENT

If the consumer would be mislead by the omission, the milkfat content shall be declared in a manner acceptable in the country of sale to the final consumer, either as (i) a percentage of mass or volume, or (ii) in grams per serving as qualified in the label, provided that the number of servings is stated.

7.3 LABELLING OF NON-RETAIL CONTAINERS

Information required in Section 7 of this Standard and Sections 4.1 to 4.8 of the General Standard for the Labelling of Pre-packaged Foods, and, if necessary, storage instructions, shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer or packer, shall appear on the container. However, lot identification and the name and address of the manufacturer or packager may be replaced by an identification mark, provided that such mark is clearly identifiable with the accompanying documents.

8. METHODS OF SAMPLING AND ANALYSIS

See *Codex Alimentarius*, Volume 13.