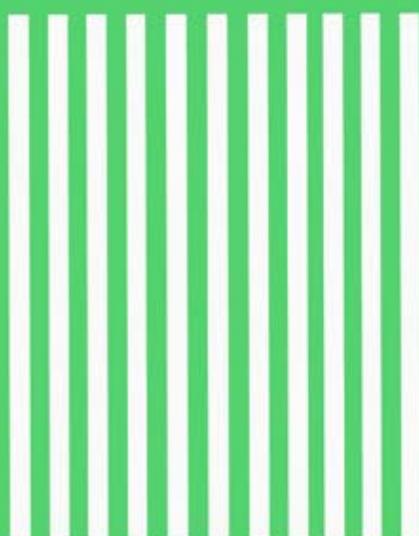


Joint FAO/WHO Food Standards Programme

**JOINT FAO/WHO COMMITTEE
OF GOVERNMENT EXPERTS
ON THE CODE OF PRINCIPLES
CONCERNING MILK AND MILK
PRODUCTS**

Report of the Eleventh Session

Held in Rome, Italy, 10-15 June 1968



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

Rome





FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
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Annex to CX 5/70-14th S.

November 1971

Draft International Standard for
ESROM

(At Step 5 of the Committee's Procedure)

1. Designation of cheese
Esrom
2. Depositing country
Denmark (country of origin)
3. Raw Materials
 - 3.1 Kind of milk: cow's milk
 - 3.2 Authorized additions:
 - 3.2.1 Necessary additions:
 - cultures of harmless lactic acid producing bacteria (starter) and cultures of bacterium linens
 - rennet or other suitable coagulating enzymes
 - sodium chloride
 - 3.2.2 Optional additions:
 - calcium chloride, max. 0.02% by weight of the milk used ¹
 - sodium and potassium, salts of nitric acid, max. 0.02% by weight of the milk used ³
 - annatto ² and carotene ¹, singly or in combination, max. 0.06% by-weight of the cheese
4. Principal characteristics of the cheese ready for consumption
 - 4.1 Type:
 - 4.1.1 Consistency: semi-hard
 - 4.1.2 Short description: sliceable semi-hard, surface ripened cheese with plentiful irregular holes.

¹ endorsed by the Codex Committee on Food Additives (CCFA)

² temporarily endorsed by the CCFA

³ not endorsed by the CCFA pending further consideration

4.2 Shape:

4.2.1 Shape: flat rectangular

4.3 Dimensions and weights:

Dimensions: Height: approx. 5 cm
max. 5.5 cm

Weights:

- (a) approx 1.3 kg
- (b) “ 0.5 kg
- (c) “ 0.25 kg
- (d) “ 2 kg

Lengths and widths:

Approx. in a proportion of 2 to 1
“ “ “ “ 2 to 1
“ “ “ “ 2 to 1
“ “ “ “ 4 to 1

4.4 Rind:

4.4.1 Consistency: firm but flexible

4.4.2 Appearance: dry to slightly greasy

4.4.3 Colour: reddish to yellowish brown

4.5 Body:

4.5.1 Texture: semi-hard

4.5.2 Colour: light yellow to ivory, uniform

4.6 Holes:

4.6.1 Distribution: plentiful

4.6.2 Shape: irregular

4.6.3 Size: various

4.6.4 Appearance: shiny

4.7

4.8 Minimum fat contents in dry matter and maximum moisture contents

	ESROM A	60% ESROM B
Minimum fat in dry matter %	45	60
Maximum moisture %	50	43

4.9 Other principal characteristics

After maturation the cheese is generally wrapped in coated alufoil and it may be coated with yellowish wax or plastic. The cheese is normally ready for consumption when it has ripened for 4 weeks. The cheese has a mild aromatic taste, which increases during the ripening.

5. Method of manufacture

5.1 Method of coagulation: with rennet or other suitable coagulating enzymes

5.2 Heat treatment:

- 5.2.1 Heat treatment of the milk: the milk is generally heat-treated to 72°C for 15 seconds and the renneting temperature is approximately 31°C.
- 5.2.2 Heat treatment of the coagulum: after cutting, the temperature of the coagulum is raised by approx. 4-5°C above the renneting temperature
- 5.3 Fermentation procedure: lactic acid fermentation and subsequent smear development.
- 5.4 Maturation procedure: the cheese is kept at +15°C approx. at a relative humidity adequate for development of a uniform thin red smear; the rind is frequently washed.
- 5.5 Other principal characteristics: the cheese is salted (in brine and/or dry salted).

6. Sampling and analysis

- 6.1 Sampling: according to FAO/WHO Standard B.1 "Sampling Methods for Milk and Milk Products", clause 7.2(b) "Sampling by means of a trier"; reference is made to clauses 7.2.2.3 and 7.2.2.5.
Esrom cheese weighing less than 1 kg is sampled according to clause 7.2(c), "Taking a complete cheese as a sample".
- 6.2 Determination of fat content: according to FAO/WHO Standard B.3 "Determination of the fat content of Cheese and Processed Cheese Products".

7. Marking and labelling

Only cheese conforming with this standard may be designated "ESROM". It shall be labelled in conformity with the appropriate sections of Art.4 of FAO/WHO Standard A.6, "General Standard for Cheese", except that "ESROM" not produced in the country of origin must be marked with the name of the producing country even when sold on the home market. The cheese mentioned under B, in 4.7/4.8 may be designated "ESROM" provided that the designation is accompanied by the prefix 60%.

Cx 5/70-11th

REPORT
of the
ELEVENTH SESSION
of the
JOINT FAO/WHO COMMITTEE OF GOVERNMENT EXPERTS ON THE CODE
OF PRINCIPLES CONCERNING MILK AND MILK PRODUCTS

Held at FAO Headquarters
10-15 June 1968
Rome, Italy

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SUMMARY OF POINTS FOR ACTION BY GOVERNMENTS

1. Governments are requested to make their comments available at the latest 15 January 1968. All communications should be sent, if possible, in duplicate and addressed either to the Chief, Joint FAO/WHO Food Standard 3 Program, or to the Technical Secretary, Committee on the Code of Principles concerning Milk and Milk Products, Dairy Branch, FAO, Rome.
2. Governments may send observations regarding any matter they would wish to raise.

Those specific points on which the Committee agreed that comments should be sought are the following:

<u>International Individual Cheese Standards</u>	
- Tilsiter, Limburger, Saint-Paulin, Svecia, Provolone, Cottage Cheese including Creamed Cottage Cheese	- submitted to Governments for acceptance. (See paragraphs 26 to 31 of this Report and Appendices II-A to II-F)
- Butterkäse, Coulommiers, Gudbrandsdalsost, Harzer Käse, Herrgårdsost, Hushållsost, Norvegia	- Governments to comment. (See paragraphs 32 to 35 of "this Report and Appendices III-A to III-G)
- Gorgonzola, Parmigiano Reggiano, Pecorino Romano	- The Government of the United States of America to consult with the Government of Italy on the applications for international individual standards for these cheeses and to report to the Committee at its next session. (See paragraph 44 of this Report)
- Cheshire, Gruyère, Edam, Gouda	- Governments to comment on the amendments proposed by the Governments of the United Kingdom, Switzerland and the 'Motherlands' respectively. (See paragraphs 51 and 52 of this Report and Appendix IV)
- General Standard for Cheese - A-6	- Governments to comment on the proposed introduction of a 'Scope' section and on the proposed amendments in the 'Definition'. (See paragraph 48 of this Report)
- Revised Standard A-2 - Butterfat, Butter-oil (Anhydrous)	- Submitted to Governments for acceptance. (See paragraph 50 of this Report and Appendix V)
- Revised Standard A-3 -Evaporated Milk - (from 1 January 1970)	- Governments to comment. (See paragraph 49 of this Report and Appendix VI)

- Drafts of:
 - General Standard A-8 (a) for Process(ed) Cheese
 - General Standard A-8 (b) for "Melted Cheese" and "Spreadable Melted Cheese"
 - General Standard A-8 (c) for Process(ed) Cheese food or Process(ed) Cheese Spread
 - Draft Standard A-9 for Cream
 - Draft Standard A-10 for High Pat Milk Powder, Half *) Cream Powder, Cream Powder
 - Edible Ices
 - Ghee
 - Cooking Butter
 - Determination of:
 - water, solids-not-fat, and fat contents of butter on one test portion
 - the fat content of whey cheese
 - dry matter in whey cheese
- Governments to comment. (See paragraphs 57, 58, and 82 to 90 of this Report, and Appendices VII-A to VII-C)
 - Governments to comment. (See paragraphs 54 and 77 of this Report and Appendix VIII-A)
 - Governments to comment. (See paragraphs 53, 55, 79 and 80 of this Report, and Appendix VIII-B)
 - Governments to comment. (See paragraphs 60 to 66 and 91 to 99 of this Report)
 - Governments to submit information regarding their national legislation and in particular on the definition of this product. (See paragraph 67 of this Report)
 - Governments to submit-information regarding their respective national legislation on this product and on trade figures. (See paragraph 68 of this Report)
 - Governments to comment. (See paragraphs 70 to 72 and 101 to 103 of this Report, and Appendices IX-A to IX-C)

*) for footnote, see paragraphs concerned of this Report.

REPORT
of the
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OF PRINCIPLES CONCERNING MILK AND MILK PRODUCTS
Rome, 10-15 June 1968

INTRODUCTION

1. The Eleventh Session of the Joint FAO/WHO Committee of Government Experts on the Code of Principles concerning Milk and Milk Products was held at FAO Headquarters in Rome, 10-15 June 1968. The session was attended by 89 participants including representatives and observers from 30 countries, and observers from 10 organizations (see Appendix I for the List of Participants).
2. The Eleventh Session of the Joint Committee was convened by the Directors-General of FAO and WHO. The meeting was opened by the Assistant Director-General of the Program and Budgetary Service of FAO, Mr. P. Terver.
3. The Committee was presided over by its Chairman, Mr. Th.C.J.M. Rijssenbeek (Netherlands) and its two Vice-Chairmen, Mr. J.L. Servais (Belgium) and Mr. P.E. Fenton (U.S.A).

Election of Officers

4. The Committee unanimously elected Mr. J.L. Servais (Belgium) Chairman of the Committee to serve from the end of the Eleventh Session until the end of the Twelfth Session., The Committee also unanimously elected Mr. F.E. Fenton (U.S.A.) to be first Vice-Chairman and Dr. H. Boysen (Federal Republic of Germany) to be second Vice-Chairman, both to serve for the same period.

ADOPTION OF AGENDA

5. The provisional agenda was adopted with a slight rearrangement in the order of items to be discussed and an alteration of the wording of item 4 to make it clear that this item related specifically to the relationship between the Committee and the Codex Alimentarius Commission.

SECTION I

ACCEPTANCES OF THE CODE OF PRINCIPLES AND ASSOCIATED STANDARDS

6. The Committee was informed of the latest position regarding government acceptances of the Code of Principles, Associated Standards and Methods of Analysis and Sampling. Seventy-one governments had now accepted the Code of Principles concerning Milk and Milk Products; 45 governments had accepted the compositional standards for butterfat and evaporated milk; 46 governments had accepted the compositional standards for butter and sweetened condensed milk; 65 governments had accepted the compositional standard for milk powder; 35 governments had accepted the general standard for cheese and 18 governments had accepted the standard for whey cheese. On average some 45 governments had accepted the Methods of Analysis and Sampling for Milk and Milk Products.
7. The Committee was informed of the current position regarding acceptances by governments of the international individual cheese standards for Cheddar, Danablu,

Danbo, Edam, Gouda, Havarti, Samsøe, Cheshire, Emmentaler and Gruyère. This was as follows:

8. International Individual Cheese Standards published in the Sixth Edition of the Code of Principles.

Acceptances not listed in the Sixth Edition:

- (a) Cheddar (France)
 - (b) Danablu (Belgium), (France), (Switzerland) (Norway)
 - (c) Danbo (Belgium), (France), (Norway)
 - (d) Edam (France)
 - (e) Gouda (France)
 - (f) Havarti (Belgium), (France), (Switzerland)
 - (g) Samsøe (Belgium), (France), (Norway)
9. International Individual Cheese Standards submitted to governments for acceptance after the Tenth Session of the Committee :
- (g) Cheshire - 14 countries - Canada, Belgium, Denmark, (Federal Republic of Germany), Finland, France, Malta, Netherlands, Norway, Spain, Sweden, Trinidad and Tobago, United Kingdom, (U.S.A.)
 - (e) Emmentaler - 13 countries - (Canada), (Denmark), (Finland), (France), Malta, Netherlands, Norway, Spain, Sweden, (Switzerland), Trinidad and Tobago, (United Kingdom), (U.S.A.)
 - (i) Gruyère - 12 countries - (Canada), Denmark, Finland, (France), Malta, Netherlands, Norway, Spain, (Switzerland), Trinidad and Tobago, United Kingdom, (U. S.A.)

10. The Committee was further informed of the current position regarding acceptance by governments of the following international standards for methods of analysis :

- (a) Determination of the Fat Content of Milk - 16 countries - Australia, Belgium, Canada, Denmark, (Federal Republic of Germany), Finland, (France), India, Netherlands, Poland, Spain, Sweden, (Switzerland), Trinidad and Tobago, (United Kingdom*), U.S.A.
- (b) Determination of the Fat Content of Evaporated Milk and Sweetened Condensed Milk - 16 countries - Australia, Belgium, Canada, Denmark, (Federal Republic of Germany), Finland, (France), India, (Netherlands), Norway, Poland, Spain, Sweden, Trinidad and Tobago, (United Kingdom*) U.S.A.

(c) Determination of the Salt (Sodium Chloride) Content of Butter	- 17 countries -	Australia, Belgium, Canada, Denmark, (Federal Republic of Germany), Finland, France, India, Netherlands, Norway, Poland, Spain, Sweden, (Switzerland), Trinidad and Tobago, United Kingdom, U.S.A*
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*) The reservation of the United Kingdom was withdrawn (see paragraph 70 of this Report).

The countries shown in brackets in paragraphs 7, 8 and 9 above accepted the standards concerned making certain reservations. As regards standards for methods of analysis the Committee agreed that these standards could not properly be accepted with reservations.

RELATIONSHIP BETWEEN THE COMMITTEE AND THE CODEX ALIMENTARIUS COMMISSION

11. The Committee had before it for consideration a redraft of paragraph 10 of the Report of the First Session of the Codex Alimentarius Commission on the relationship between the Committee and the Commission. The Committee noted that the redraft had "been proposed by the Executive Committee of the Codex Alimentarius Commission, and that the Commission had taken no final decision on the redraft pending the receipt of government comments and of advice from the Committee on the text.

12. The Committee considered the paper on its status in relationship to the Codex Alimentarius Commission and, while recognizing that cooperation in the field of international food standards was of the utmost importance, considered that its procedures had worked successfully and to the satisfaction of Member Governments since it was set up by the FAO Conference in 1957 and that these procedures should be altered as little as possible. They also emphasized that there were certain working procedures which were particularly useful in dealing with dairy products in view of the methods of manufacture and commercial traditions which are peculiar to them.

13. The Committee considered that the statement of the Executive Committee of the Codex Alimentarius Commission formed a reasonable basis on which the relationship of the Committee and the Commission could be permanently established, but considered that, in some respects, the paragraph was lacking in clarity and could be redrafted in a form which would put the position beyond dispute. The Committee therefore proposed the following redraft for the consideration of the Commission and recommended that government comments be obtained on this text and the previous text for the Commission at its next session.

"The Commission decided that the FAO/WHO Committee of Government Experts on the Code of Principles concerning Milk and Milk Products would be considered as a Committee under Rule IX.1(a) of the Rules of Procedure. The Committee would have full competence for all questions concerning milk and milk products. It would consider and elaborate all codes and standards concerning milk and milk products and pass them, as appropriate, through all the steps of the Procedure for the Elaboration of International Standards for Milk Products, and submit them to governments for acceptance under the general rule that all final decisions of the Committee, whether on standards or not, might be reviewed by the Commission at the request of a Member of the Commission. Those provisions of standards formulated by the Committee of Government Experts which relate to additives, labelling and hygiene would be subject to the procedure for endorsement by the appropriate Codex General Subject Committees as laid

down in paragraph 13 of the Guidelines for Codex Committees (pp. 47 and 48 of the Report of the Fourth Session of the Codex Alimentarius Commission). Methods of analysis and sampling formulated by the Committee of Government Experts would not, however, be subject to endorsement by the Codex Committee on Methods of Analysis and Sampling."

14. With a view to securing closer collaboration between the Committee and the Commission, the Committee agreed that it would be useful if the Chairman of the Committee, or, in his absence, one of the Vice-Chairmen, could be present at meetings of the Commission and Codex Committees of direct interest to the activities of the Committee. The Committee further agreed that it would be useful if the Chairman or one of the Vice-Chairmen attending meetings of the Commission and its subsidiary bodies could be recognized in this capacity and as an observer.

15. 'The Chairman reported on the outcome of discussions in the Codex Committee on General Principles and the Codex Alimentarius Commission on the meaning of acceptance of Codex standards. The Committee noted that there appeared to be no difference of substance between the nature of acceptances made by governments accepting the standards for milk and milk products and the type of acceptances envisaged by the Commission under "Full Acceptance", "Acceptance with a Declaration of More Stringent or Supplementary Requirements" and "Target Acceptance". The Committee further noted that a fourth "type of acceptance, "Acceptance with Minor Deviations", was to be examined at the next sessions of the Codex Committee on General Principles and the Codex Alimentarius Commission. In this connection the Committee wished to bring to the attention of the Codex Alimentarius Commission and the Codex Committee on General Principles a procedure which it had followed for a number of years, at least as far as the Code itself was concerned, which permitted the Committee to allow a particular country by means of a derogation to continue a deviation from the Code even when fully accepting it, and to confirm a particular country's interpretation in its own circumstances.

GENERAL ISSUES CONCERNING INTERNATIONAL INDIVIDUAL CHEESE
STANDARDS

"APPELLATION D'ORIGINE"

16. The Committee re-examined the question of "appellation d'origine" in the light of a paper on the subject which had been drawn up by a tripartite commission of experts from France, Italy and Switzerland, which met in Berne, Switzerland, on 7 and, 8 December 1967 • The paper which had been prepared at the request of the Committee at its Tenth Session, covered all aspects of the problem connected with the elaboration of international individual cheese standards for cheeses having an "appellation d'origine", as seen by the authors of the paper* The following extract from the paper sets out the conclusions reached by the authors :

"5.1 The spirit in which the Code of Principles was originally conceived reflected the concern with the establishment of general standards for milk and milk products as commodity groups. However, it was subsequently agreed that the general standard on cheeses would be supplemented by the establishment of international standards in respect of individual varieties of cheese.

The tripartite commission in no way contests the importance of this initiative for international trade and consumer public interests. Nevertheless, such efforts must in no instance run contrary to the fundamental purpose of the Code.

5.2 The technological points raised herein show that the establishment of an international standard for an individual cheese bearing an "appellation d'origine" would in any case be of no use when the cheese manufactured or ripened only in the geographic area specified by law has all the qualities consumers associate with this designation.

5.3 From the legal standpoint, the establishment of international standards for individual cheeses having "appellations d'origine" would call for revision of the laws of many countries and their international commitments, a possibility formally excluded.

5.4 Moreover, although the tripartite commission prefers not to deal with the social and economic implications of this problem, it nevertheless cannot fail to mention the fact that it would be contrary to all justice and equity to deprive the producers of cheeses covered by "appellations d'origine" of the rewards of long and painstaking efforts to maintain their intrinsic qualities and the reputation enjoyed as a result of the "appellation d'origine".

For all these de facto and de jure reasons, the tripartite commission finds it imperative, in the interests of constructive and effective collaboration toward acceptance of the principles of the Code, that the Joint FAO/WHO Committee forego consideration of any request aimed at establishing an international standard for any individual cheese identified by an "appellation d'origine".

17. The Committee was informed that the Permanent Council of the Stresa Convention had taken note of the paper referred to above and had agreed with its

conclusions as far as the cheeses in Annex A (Roquefort, Pecorino Romano, Gorgonzola, Parmigiano Reggiano) of the Stresa Convention Code were concerned, in view of the fact that the members of the Stresa Convention have to comply with the regulations therein concerning "appellation d'origine".

18. A number of countries did not accept the principle of "appellation d'origine" as "being applicable to international standards for individual varieties of cheese. The fact that a country applied an "appellation d'origine" to a certain cheese variety did not negate the fact that the cheese was manufactured in other countries and had become an important product of international trade. For this reason, it would appear to be to the best interest of the country of origin as well as all other interested countries to establish an acceptable international standard by which the cheese could be recognized. These countries took the view that the fact that a cheese had been accorded an "appellation d'origine" should not in itself automatically prevent the Committee from elaborating an international individual cheese standard for such a cheese.

19. The Committee concluded that it was not in a position at this stage to resolve the problem of "appellation d'origins". A majority of the Committee agreed that each application for an international individual cheese standard for a cheese having an "appellation d'origine" would have to be considered *on* its merits, and that those applications which had been postponed by virtue of the decision recorded in paragraph 12 of the Report of the Tenth Session of the Committee could now be proceeded with.

INTERNATIONAL INDIVIDUAL CHEESE STANDARDS

Blue Stilton

20. As requested by the Committee at its last session, the delegation of the United Kingdom reported on the latest position regarding an application which had been made by the producers of Blue Stilton in the United Kingdom for the registration of "Blue Stilton" as a certification trade mark. This matter was still under consideration "by the appropriate authorities in the United Kingdom, but it was likely that a proposal would be published shortly on which comments and objections would be invited within a period of 28 days.

21. In view of this information the Committee agreed to postpone further the sending of the standard for Blue Stilton to governments for acceptance pending the outcome of the proceedings in the United Kingdom and a consideration of any implications which would stem from the possible granting of a certification trade mark.

22. The delegation of the United Kingdom undertook to keep the Committee informed of developments.

General

23. The Committee considered the wording of Article 3.2 'Authorised Additions' of international individual cheese standards and comments from the Governments of Australia and France on the wording of Article 4, 'Essential characteristics of the cheese ready for consumption' and Article 7, 'Marking and Labelling' respectively.

24. It was agreed :

- to use the terminology

"cultures of harmless lactic producing bacteria (starter)"

for lactic acid starters, and to add

"and of propionic acid producing bacteria" or "and of Bacterium linens", etc.

when appropriate in international individual cheese standards;

- to list :

annatto and carotene	in the standards for Cheddar, Danbo, Havarti and Samsøe
----------------------	---

calcium chloride sodium and potassium nitrate water	in the standards for Danablu, Danbo, Havarti and Samsøe
---	---

as 'optional additions';

- to change the text of Article 7 to read as follows:

(Example 'Tilsiter')

"Only cheese conforming with this standard may be designated Tilsiter. It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A-6, 'General Standard for Cheese'. The cheese mentioned under B and C in 4.7 and 4.8 may be designated Tilsiter provided that the designation is accompanied by a prefix corresponding to the fat percentage, e.g. '30 % Tilsiter'."

- to change the headline of Article 4 to read ;

'Principal characteristics of the cheese ready for consumption'

in line with the French text.

25. The Committee emphasized that the amendments to the Labelling Section were editorial and instructed the Secretariat that all the international individual cheese standards to be published in the Seventh Edition of the Code of Principles be amended accordingly.

International Individual Cheese Standards at Step 6 of the Committee's Procedure for the Elaboration of Standards

Tilsiter

26. The Committee briefly discussed whether Havarti and Tilsiter should be covered by one standard. As the standard for Havarti had already been accepted by a number of countries, it was agreed that the text of the draft standard for Tilsiter as revised with the following amendments should be sent to governments for acceptance (at a later stage the Committee would be able to examine the possibility of combining standards for certain cheeses):

4.6.2	'Shape' should read : " <u>slit-shaped, round or both</u> "
4.6.3	'Size' should read : " <u>majority having a diameter of 2 to 4 mm</u> "
4.7	<u>Block C (40 %) and Block D (50 %) should be deleted</u>
4.8	
5.2.1	'Heat treatment of the milk' should be <u>deleted</u>

The standard is contained in Appendix II-A to this Report.

Limburger

27. The Committee approved the standard for Limburger at Step 6 of the above Procedure and decided that the text as revised with the following amendments should be sent to governments for acceptance:

- 4.7 | in Block A, maximum moisture % and minimum dry matter %
4.8 | should read : 50
a Block E should be added reading as follows :

(minimum fat in dry matter %)
(maximum moisture %)
(minimum dry matter %)

45 % Limburger E
45
53
47

The standard is contained in Appendix II-B to this Report.

Saint-Paulin

28. The Committee approved the standard for Saint-Paulin at Step 6 of the above Procedure and decided that the text as revised with the following amendments should be sent to governments for acceptance :

- 3.2.2 "vegetable colouring matters" should read : "annatto and carotene"
4.9 'Other essential characteristics' should be deleted
7. Reference to size of letters should "be omitted to bring all standards in conformity with each other.

The standard is contained in Appendix II-C to this Report.

Svecia

29. The Committee approved the standard for Svecia at Step 6 of the above Procedure and decided that the text as revised with the following amendments should be sent to government for acceptance:

- 4.7 | Block 'B Svecia 45%' should become Block 'A Svecia'
4.8 | (without prefix) and the other Blocks should be amended accordingly.
7. A provision should be included under 'Labelling' requiring the spiced variant to be designated "Spiced Svecia"

The standard is contained in Appendix II-1) to this Report.

Provolone

30. The Committee discussed the standard for Provolone and agreed that the standard as revised with the following amendments should be sent to governments for acceptance:

- 4.4.1 'Consistency' should be deleted
- 4.8 should be amended to read as follows :
"maximum moisture content : 45 % (for smoked cheese)
47 % (for unsmoked cheese)
- 5.2.1 'Heat treatment of the milk' should be deleted

The standard is contained in Appendix II-E to this Report.

Cottage Cheese, including Creamed Cottage Cheese

31. The Committee agreed that the standard for this product as revised with the following amendments should be sent to governments for acceptance :

- 3.2 The phrase "rennet or other suitable coagulating enzymes" should be amended to read "rennet or other suitable coagulating agents" to provide for continuous cheese processing methods using acid.
- 3.3.2 The footnote relating to stabilising ingredients (**) should be amended by adding the word "possibly" after the word "including" in the first line.
- 7. The Committee agreed to include the footnote as an optional labelling requirement.

The standard is contained in Appendix II-F to this Report.

Note : The attention of Governments is drawn to the revised definition of cheese in the General Standard for Cheese, A-6 (see paragraph 48 of this Report).

International Individual Cheese Standards at Step 3 of the above Procedure

32 The Committee examined the draft standards for Butterkäse, Coulommiers, Gudbrandsdalsost, Harzer Käse, Herrgårdsost, Hushållsost and Norvegia and agreed that these standards as revised with the amendments listed below should be sent to governments for comments:

Butterkäse

- 4.7 | "maximum moisture content" should be replaced by
- 4.8 | "minimum dry matter", and 45.% should be deleted in the first column, which represents the main variety.
- 5.2.1 | 'Heat treatment of the milk*' should be deleted.
- 7. | The words "e.g. 45 % Butterkäse" should be deleted and replaced by "e.g. 50% Butterkäse".

Coulommiers

- 3.2 The words "cultures of penicillium candidum" should be replaced by "moulds characteristic of the variety"
- 4.1.2 should be editorially redrafted to indicate that the orange and red spots were not from moulds of the type penicillium candidum.
- 4.7 The brackets after 40 % should be eliminated.
- 4.8 'Minimum dry matter content: 140 g per piece'
The delegation of France explained that the provision for minimum dry matter content was necessary for cheeses sold by the piece in view of the special sampling techniques used for such products (Standard B-I, paragraph 7.2.3). The Committee agreed that it would be necessary to specify the maximum moisture content of this product. The delegation of France undertook to complete the standard for Coulommiers by submitting a proposal for the next session for the maximum moisture content in terms of percentage by weight of the final product.
7. Reference to size of letters should be omitted, as decided in the case of Saint-Paulin, to bring all standards in conformity with each other.

Gudbrandsdalsost

- Title and text to be amended to read "Draft International Individual Whey Cheese Standard for Gudbrandsdalsost" the word "whey" should be inserted in front of the word "cheese" wherever it occurs.
- 3.1 'Kind of milk' should be amended to read: "a mixture of cow's milk whey, cow's milk and goat's milk equivalent to a minimum of one litre goat's milk per kg of Gudbrandsdalsost"
- 3.2.1 'Necessary additions' should be deleted.
- 3.2.2 The words "in the final product" should be added after "1,000 p.p.m." in the second line.
- 5.1 'Method of coagulation' should be deleted.
- 5.3 'Fermentation procedure' should be deleted.
- 5.4 'Maturation procedure' should be deleted.

Harzer Käse

- 5.4 should be editorially redrafted to indicate that the substances sodium carbonate, calcium carbonate and sodium chloride are the ones listed under 3.2.1.
7. The words "or Mainzer Käse" should be added after "Harzer Käse".

Herrgårdssost

- 3.2.1 "Sodium nitrate" should "be amended to read "sodium and potassium nitrates" and be transferred to 3.2.2, 'Optional additions'
- 4.7 | 45 %- should be deleted in the first column representing
4.8 | the main variety, and the maximum moisture contents of
"Herrgårdssost 30 %" and "Herrgårdssost 40 %" should be
changed into 46 % and 42% respectively.
- 5.2.2 The words "medium to high scald" and the brackets
around the figures should be eliminated.
7. The words "e.g. Herrgårdssost 45.% should be replaced
by "e.g. Herrgårdssost 30 %" in the last line.

Hushållssost

- 4.7 | 45 % in the first column should be deleted as this refers
4.8 | to the main variety.
- 5.2.2 The words "medium scald" and the brackets around the
figures should be deleted.
7. The words "e.g. Hushållssost 45%" should be replaced by
"e.g.. Hushållssost 60 %", and a. provision should also be
included under 'Labelling' requiring the spiced variant to
be designated "Spiced Hushallsost"

Norvegia

- 3.2.2 "Disodium phosphate" should' be replaced by "sodium
dihydrogen phosphate".
- 4.2.1 should be amended to read 31 "cylindrical with convex
sides".

All international individual cheese standards

33. The Committee agreed to omit the letters HTST wherever reference is made to pasteurization and that the labelling sections be brought into conformity with the Committee's decisions as contained in paragraph 25 of this Report.

FOOD ADDITIVES IN INTERNATIONAL INDIVIDUAL CHEESE STANDARDS

34. The Committee noted that some provisions for food additives in the standards discussed had been endorsed but that the majority of the provisions would have to be examined in detail by the Codex Committee on Food Additives at its next session. The Committee agreed that food additives not endorsed or only temporarily endorsed should be footnoted to indicate this. It . was also noted that the specifications for food additives were being elaborated by the Codex Alimentarius Commission and would apply to the additives in the standards for milk and milk products and associated standards.

35. The Committee confirmed the technological need for the additives appearing in the standards discussed. The following matters were raised :

- (a) It was pointed out that sodium dihydrogen phosphate was used to restore the ionic balance.

- (b) It was pointed out that the Codex Committee on Food Additives had requested information on the smoking process referred to in the standard for Provolone. The delegation of Italy undertook to provide information on this.
- (c) In respect of hexamethylenetetramine. in the standard for Provolone it was pointed out that the Joint FAO/WHO Expert Committee on Food Additives had previously considered this substance but had not been able to clear it from a toxicological point of view. The Committee noted that this additive was used in the heating water and was not added to the milk.
- (d) The Committee agreed to include in the standard for Provolone the colours Past Green FCF (Color Index 42053), Brilliant Blue POP (Color Index 42090), and Indigotine FCF (Color Index 73015). It was noted that these colours were used in very small amounts to make the cheese appear whiter. The Committee also noted that these colours appeared only in a tentative list drawn up by the Codex Committee on Food Additives.
- (e) The Committee noted that benzoyl peroxide was used to bleach the cheese in order to offset the yellow colour.
- (f) The Committee agreed that in the standard for Cottage Cheese, including Creamed Cottage Cheese, only the following vegetable gums had been shown to be technologically suitable : carob bean, guar, karaya and tragacanth.
- (g) It was agreed that in the above standard "propylene/glycol" referred to the 1,2 isomer.
- (h) The Committee noted that the additives in paragraph 3.3.2 of the above standard were added to the creaming mixture which goes into cheese making.
- (i) The Committee agreed that wherever "sodium and potassium nitrate" or "sodium nitrate" appeared in standards considered at the Session, this should be changed to read "sodium and potassium salts of nitric acid".

Emmentaler

36. The delegate of Finland drew the Committee's attention to the fact that in his country it was considered necessary to add cupric sulphate up to 15 ppm, expressed as copper in Emmentaler cheese. This was required because the industry had changed to the use of stainless steel vats and because of the fact that *even* with traditional methods of production when using copper vats there is a copper content of up to 15 rag/kg in the cheese. It was agreed that this matter should be referred to the Codex Committee on Food Additives for consideration.

Food additives in the standards appearing in the Sixth Edition of the Code of Principles concerning Milk and Milk Products and Associated Standards

37 The Secretariat advised the Committee that those food additives which had been recommended as technologically necessary by the Committee were now either endorsed, or temporarily endorsed or were still pending endorsement. The Committee agreed that the section on permitted additions of the standards for milk products be amended to clearly show the status of the various food additives and be published in the Seventh Edition of the Code.

Food additives in whipped butter

38. The Committee agreed to ask the Codex Committee on Food Additives to consider and approve the optional use of inert gases, e.g. nitrogen, in whipped butter. The Committee noted that the use of these gases was very desirable in order to exclude oxygen and to enhance the keeping quality of the product.

PRIORITIES FOR THE ESTABLISHMENT OF INTERNATIONAL INDIVIDUAL CHEESE STANDARDS

39. The Committee had before it a paper indicating the status of work concerning the establishment of international individual cheese standards as at 15 January 1968 to which was appended a list of applications for cheese varieties to which no. priority had been assigned.

40. The Committee noted that the applications for Camembert, Esrom, Taleggio and Fontina (the application for the last named variety had been withdrawn by the Italian Government), which appeared in the priority lists 1 and 2 recommended at the Ninth Session of the Committee for consideration by the IDF, could not as yet be considered by the IDF as a joint application for Camembert was still under negotiation by France and the Federal Republic of Germany, and as no revised applications had been submitted by Denmark for Esrom and by Italy for Taleggio, The delegation of Denmark indicated that a revised application for a standard for Esrom would be submitted.

41. The Italian delegation informed the Committee that its Government still had under consideration the acceptance of the General Standard for Cheese, A-6.

42. Having noted that it would not be possible for the IDF to examine more than 10 draft international individual cheese standards in any one year, the Committee set up the following order of priorities and requested the IDF to consider the applications for the following cheeses :

Esrom	
Adelost	
Blue Cheese	
Edelpilakäse	
Mycella	
Normanna	
Maribo	
Elbo	
Fynbo	
Cream Cheese	(the United States of America is to submit a revised application, following consultation with Australia, Canada, Denmark and the Federal Republic of Germany)

43. In addition, the IDF was requested by the Committee to examine the entire question of blue-veined cheeses on the basis of the draft standards; which it was being requested to prepare for a number of these cheeses, as well as on information on the subject which Member Countries were requested to make available to the IDF. The Committee requested that the IDF in its study should consider the possibility of group standards for blue-veined cheeses, taking into account the standard for Danablu.

44. As regards Gorgonzola, Parmigiano Reggiano and Pecorino Romano, the Committee agreed that the United States of America should consult with the Italian Government with a view to reaching agreement on an application for international

individual cheese standards for these cheeses, and report to the Committee at its next session.

PROCEDURE FOR THE REVISION OF STANDARDS

45. The Committee considered that there would in general be two principal types of amendments proposed to standards, editorial and amendments of substance. It was agreed that amendments of a purely editorial nature", if considered as such by all Members of the Committee without any exception, would be made to standards during sessions of the Committee and sent to governments for acceptance. In the case of amendments of substance, Steps 1 and 2 of the Procedure for the Elaboration of Standards would be replaced by a simple decision to consider the amendment and to deal with it immediately at Step 3. It would of course be open to the Committee to omit Steps 5 and 6 in accordance with the provisions contained in the Procedure itself.

46. The Committee instructed the Secretariat to prepare an appropriate text to form an introduction to the Procedure for the Elaboration of Standards explaining the above procedure for the revision of standards. The Committee further considered that, in order to have acceptances of revised standards confirmed, the Secretariat should communicate directly by means of individual letters to governments to obtain their acceptance of any revision made to the standard.

47. The Committee was advised that the Codex Committee on General Principles would be considering the question of withdrawal of acceptance by a government of an established standard as well as the effect of revision of standards upon existing government acceptances. The Committee would be kept informed of the conclusions of the Codex Committee on General Principles and any decisions taken by the Codex Alimentarius Commission.

PROPOSED AMENDMENTS TO THE GENERAL STANDARD FOR CHEESE, A-6

48. The Committee examined a number of observations made by the International Dairy Federation concerning the *need* for some clarification of the extent of application of the General Standard for Cheese in relation to international individual cheese standards and other international general standards for cheeses. The Committee decided that it would be desirable to introduce a 'Scope' section in the General Standard and to modify the definition for cheese so as to take account of changing methods of manufacture. The Committee agreed to send to governments for comments the following proposed amendments to the General Standard for Cheese, A-6.

1. Scope

This standard applies to all cheese which is in conformity with the definition for cheese. Within the framework of this standard more specific requirements can be made in international individual cheese standards and in such cases the more specific requirements of these standards shall apply in respect of the particular variety.

2. Definition

Cheese is the fresh or matured product obtained from milk, cream, skimmed or partly skimmed milk, "buttermilk or a combination of some or all of these products, either by draining after coagulation or by any other method which would give the same result.

PROPOSED REVISION OF THE STANDARD FOR EVAPORATED MILK, A-3

49. The Committee examined the information supplied by governments concerning their national legislation and production of evaporated milk. The Committee agreed by a majority to amend Standard A-3 on Evaporated Milk from 1 January 1970 to provide for a minimum of 7.8 % of fat by weight and a minimum of 25.9 % of milk solids by weight and to send it to governments for comments at Step 3 of the Procedure.

REVISION OF THE STANDARD FOR MILK FAT, BUTTERFAT, BUTTER-OIL (ANHYDROUS), A-2

50. The Committee examined government comments on whether Standard A-2 should be revised to distinguish between:

- a) products containing less than 0.2 % of water
and not less than 99.6 % of milk fat, and
- b) other products covered by the standard containing
not more than 0.5 % of water
and not less than 99.3 % of milk fat

The Committee agreed that the designation 'anhydrous' should be restricted to products containing less than 0.2 % of water and not less than 99.6 % of milk fat. The Secretariat was instructed to prepare a new text of the standard, making this distinction between the products as agreed by the Committee, and in particular ensuring that the section on marking and labelling restricted the use of the term 'anhydrous' solely to products complying with the lower moisture and higher milk fat contents. The Committee further agreed, in accordance with its decision at the Ninth Session (paragraph 55 of the Report), that in the redrafting of Standard A-2 the Secretariat should incorporate the following antioxidants when endorsed by the Codex Committee on Food Additives in the 'Permitted Additions' section :

BHA, BHT	200 mg/kg, maximum, singly or in combination, may be used provided the product is not for direct consumption nor for use in making reconstituted milk or milk products.
Gallates	
Propyl	
Octyl	
Dodecyl	

The Committee agreed that the standard should be sent to governments for acceptance.

PROPOSED AMENDMENTS TO ADOPTED INTERNATIONAL INDIVIDUAL CHEESE STANDARDS

51. The Committee agreed that the following proposed amendments to the standards for Cheshire and Gruyère should be sent to governments for their comments :

Cheshire

- 4.4.2 it is proposed to insert the words "or plastic" between "wax" and "coated"

Gruyère

- 4.2 it is proposed to add the words "or blocks" after "round loaf"

52. The Committee noted that a number of proposed amendments to other adopted standards had been sent in writing to the Secretariat and agreed that they should be

sent to governments for comments in order to save time, but noted that they would need to be agreed to by the Committee itself as had already been done for the amendments proposed for the standards for Cheshire and Gruyère. The proposals are given in Annex IV to this Report*

STANDARDS FOR CREAM AND CREAM POWDER

53. The Drafting Group set up by the Committee in order to consider the draft standard for cream, and the suitability of the use of the terms "high fat milk powder" and "cream powder" together with the desirability of revising the standard for Milk Powder, A-5, met on 12 and 13 June 1968 under the chairmanship of Dr. C. Schiere (Netherlands). The Chairman of the Drafting Group outlined the main features of the Report which is contained in Section II of this Report.

Cream

54. The question was raised whether ultra-high temperature treated cream and high-fat cream should not be included in the standard for cream, In addition, the Committee requested the IDF to consider the use of additives for high-fat creams to be used for whipping. The delegate of New Zealand stated that his Government would object to the inclusion of reconstituted and recombined creams and considered that a separate standard should be elaborated for these products. In the opinion of the delegate of France, the definition of cream was too restrictive. The Committee agreed that the standard for cream should be submitted to governments, for final comment and that the Committee would discuss the standard at its next session plenary session in the light of these comments, in an attempt to finalize work on this product. The draft standard is contained in Appendix VIII-A of this Report.

Milk Powder and Cream Powder

55. The Committee noted the proposals of the Drafting Group concerning the revision of the standard for Milk Powder, A-5, and agreed that a separate standard should be elaborated covering high-fat milk powder, half*)- cream powder, and cream powder, as set out in the Report of the Drafting Group mentioned above. The Committee agreed that it would be necessary either to add a scope section to Standard A-5, Milk Powder, to exclude the products covered in the new standard, or to amend the definition for the same purpose. The Committee agreed that the Secretariat should draft the standard for dried milk products containing not less than 40 % fat on the basis of standard A-5 for Milk Powder, and that this draft standard be sent to governments for comments at Step 3 of the Procedure for consideration in plenary by the Committee at its next session. The draft standard is contained in Appendix VIII-B to this Report.

*) The Committee agreed, in accordance with the Drafting Group's recommendation, that the W appropriate qualifying term.

Standard A-5 - Whole Milk Powder, Partly Skimmed Milk Powder and Skimmed Milk Powder

56. The Committee agreed that the following explanatory note to Paragraph 2.1 should be inserted:

"It should be Understood that the fat content of whole milk powder, when declared, shall be expressed as a percentage by weight of the final product."

REPORT OF THE DRAFTING GROUP ON PROCESS (ED) CHEESE PRODUCTS

57. The Drafting Group set up by the Committee in order to consider the draft standards for :

- a) process(ed) cheese and spreadable process(ed) cheese
- b) process(ed) cheese food
- c) pasteurised plended cheese,

in the light of government comments received thereon, met on 11 and 12 June 1968, under the chairmanship of Dr. J.B. Stine (U.S.A.). The Chairman of the Drafting Group outlined the main features of the Report, which is contained in Section III of this Report. The Chairman of the Drafting Group indicated that the three drafts which had been elaborated by the Drafting Group did not represent the unanimous opinion of the members of the Group but represented the best compromise which could be obtained.

58. The Committee, re-emphasising that the proposed standards represented a compromise of the views of the members of the Committee, agreed that the three drafts should be sent to governments for a final round of comments at Step 5 of the Procedure and that the texts would be examined by the Committee in plenary at its next session, in the light of the comments received. The draft standards are contained in Appendices VII-A, VII-B and VII-C to this Report.

COMPOSITIONAL STANDARD FOR FERMENTEDED MILK

59. The Committee had before it a proposal submitted by the International Dairy Federation for a standard for fermented milk* After full discussion the Committee decided to refer the standard back to the IDF with the request, that the IDF draft a general standard for fermented milks, and individual standards for cultured milk, cultured buttermilk, yoghurt, acidophilus milk, kefir, koumiss, and any other type of fermented milk which seemed appropriate taking into account the decisions reached in the Committee and points raised by delegations as set out below :

1. Definition

The Committee agreed that the IDF be invited to redraft the definition of fermented milk in the general standard, to allow cream to be used with the milks prior to fermentation. It also agreed that milk reconstituted from partially or fully skimmed dried milk would still be considered as milk and that no reference need be made to such, milk; furthermore, that unfermented buttermilk also appear in the definition as a product from which fermented milks may be prepared. The delegation of the Federal Republic of Germany stressed the need for making a clear distinction in the redraft of the standard for fermented milks between :

- a) real buttermilk, obtained by churning sour cream,
- b) cultured buttermilk, to be understood as the product manufactured by fermentation of skim milk obtained by churning sweet cream , and
- c) cultured (skim) milk.

2. Authorized additions

- 2.1 This sub-paragraph should be amended to be brought in line with the agreed text under 'Definition' .
- 2.2 should read "sugars".
- 2.3 This sub-paragraph should be redrafted in order to list colourings and flavourings more specifically. The delegation of the Federal Republic of Germany proposed that the addition of citric acid, tartaric acid and vegetable gums be permitted for some products covered by the standard. The delegation of Australia proposed the inclusion of alginates and carrageenan as permitted additives. The Committee agreed that paragraph 2. should be subdivided into 'necessary' and 'optional additions' as in the case of other standards.
- 2.4 The words "in nature" should be deleted.
- 2.5 This sub-paragraph should be redrafted to indicate that no preservatives shall be permitted except for carryover traces of preservatives permitted in the authorised additions.
- 2.6 This sub-paragraph should be redrafted to distinguish between additives and ingredients since obviously 30 % by weight would not apply to substances listed under 2.3

3. Designation and cultures

- 3.1 The Committee agreed to amend the text as follows :

"For the fermentation appropriate, non-pathogenic, non-toxic micro-organisms should be used in order to obtain pure lactic acid fermentation or mixed lactic acid and alcohol fermentation.

3.2 1

3.2.2

Cultured buttermilk and yoghurt

Some delegations were of the opinion that it might be more appropriate to set a value for the pH of the final product rather than a limit on titrable acidity. The delegate of Poland pointed out that there existed no direct relationship between pH and titrable acidity,. He further pointed out that the expression of "0,6 g of lactic acid per 100 g" might be misleading and that it would be preferable to refer to titrable acidity in terms of ml of N base used in the titration per 100 g of product. *The* delegation of Poland suggested that a limit of 0.8 g acid per 100 g product expressed an lactic acid would be more appropriate for cultured buttermilk.

4. Labelling

The Committee agreed that the labelling provisions would require further careful consideration.

EDIBLE ICES

60. The Committee had before it a paper prepared by the Secretariat which had been submitted to the Fifth Session of the Codex Alimentarius Commission on the subject of Codex standards for edible ices, as well as a paper containing the relevant extract from the Report of the Commission's Fifth Session setting out the Commission's views on the matter.

61. The Committee noted the general view of the Commission that, on the basis of the information available to it, international trade in edible ices did not appear to be such as to warrant the elaboration of a Codex standard or standards for the products, and that in consequence the elaboration of Codex standards *for* edible ices would have to be justified by considerations relating to the protection of the health of the consumer. The Committee took the view that even if international trade in edible ices did not appear to be very substantial and extensive, there was a very substantial domestic production of these products, and a clear need to arrive at an international understanding as to the proper identification and labelling of those products, as well as a need for international harmonization of varying national legislations relating to the products. The Committee also considered that, in view of the nature of these products and the fact that they sometimes had to be transported over considerable distances, internationally agreed requirements aimed at protecting the health of consumers *were* also necessary.

62. The Committee further noted the general view of the Commission that *one* body should be responsible for the development of international standards for both types of ices, namely those based on milk fat and those based on non-milk fat. In this connection, the Committee noted that the Government of Sweden would still be willing to undertake responsibility for chairing a Codex Committee on Edible Ices, covering both types, should the Commission decide to set up such a Committee. On the other hand, the Committee noted that a modification of its own terms of reference would enable it to deal with both types of ices.

63. Some delegations considered that the problem was essentially one of deciding what was the most efficacious way of dealing with the subject. The two types of products were very similar, the main distinction between the two being the fact that the fat basis was different. In the interest of consumers, international agreement should be reached on labelling, hygiene and food additive requirements. In the interest of fair competition, it was desirable that international standards for edible ices based on non-milk fat should also be established, and it seemed desirable to entrust the task of establishing standards for both types to one body. Other delegations took exception to the idea of establishing common standards for edible ices covering both ices based *on* milk fat and other edible ices, recommending that the Committee should continue to elaborate a standard for edible ices based on milk fat.

64. The Committee considered that it was not in a position to take a decision on the above matter at this stage, and agreed that it should be brought to the attention of governments for their comments, with a view to enabling the Commission to reach a conclusion on the subject at its next session. The Committee agreed that the working paper on the subject of edible ices to be prepared for the next session of the Commission should contain the relevant extracts from the Report of its present session. The Committee noted that there appeared to be a need for closer coordination of points of view on the subject of edible ices at the national level as well as between delegations attending sessions of the Committee and the Commission.

65. The delegation of France was of the opinion that it would be advisable for specific working arrangements to be established by the Committee to consider not only products based on milk fat but also other edible ices containing non-milk fat, and proposed that the following might be considered as an appropriate procedure for consideration by the Codex Alimentarius Commission:

"The Committee

- noting that the Codex Alimentarius Commission expressed the wish that one body should be charged with the task of elaborating all the standards for edible ices but was not in a position so far to decide which body should be given this task;
- underlining the basic importance of establishing such a standard for ices based on milk and milk products;
- noting the great similarity between these products and those similar in appearance but not containing milk fat;
- declares its willingness to deal with the entire problem, should this task be required of it by the Codex Alimentarius Commission, and to develop and finalize standards for edible ices including ices based on milk fat;
- indicates that in this case it would consider ices other than those containing milk fat not as imitation products but as different products entitled to the same rights regarding access to markets. With a view to carrying out the work in a useful and coherent manner, the Committee would also be agreeable to setting up an ad hoc sub-group, and experts in edible ices based on non-milk fat would be invited to participate in the work of the sub-group"

This proposal was put before the Committee too late to enable the Committee to consider it.

66. The Committee decided to proceed in the meantime with work on standards for edible ices based on milk fat' and agreed that the report of the Drafting Group contained in Section IV of this Report should be sent to governments for their comments.

GHEE

67. The Committee requested the IDF to draw up a draft standard for ghee for consideration by the Committee in the light of information to be obtained by the Secretariat from Member Countries regarding national legislation on this product, in particular the definition of the product.

COOKING BUTTER

68. The Committee decided that further information would be necessary regarding the nature of this product. It was agreed that the Secretariat should request from Member Countries, for transmission to the IDF, information regarding national legislation on this product, together with trade figures, on the basis of which the IDF would give its views to the next session of the Committee on the question of an international standard for this commodity.

TONED MILK

69. The Committee considered the problem of finding suitable terms in French and Spanish for 'toned milk'. After a full exchange of views, from which it emerged that it was not possible to find terms in French and Spanish which would be entirely acceptable to all the French and Spanish speaking delegations present, it was agreed to leave the matter of finding suitable terms for 'toned milk' in other languages to the countries concerned, on the basis of what was meant by the expression. 'Toned milk' was defined in the Report of the Second Meeting of the Joint FAO/WHO Expert Committee on Milk Hygiene (Rome, 1960, page 49) as follows:

"Toned Milk

Toning can be defined as the addition of reconstituted skim milk to locally-produced milk in order to reduce its fat content to a pre-determined standard while maintaining or increasing the contents of solids-not-fat."

IDF/ISO/AOAC COOPERATION IN THE FIELD OF METHODS OF ANALYSIS AND SAMPLING FOR MILK AND MILK PRODUCTS

70. The Committee approved the Report of the meeting of representatives of ISO and AOAC which had "been held immediately prior to the Eleventh Session of the Committee and noted that the Report had "been later agreed to by the IDF, the representatives of which had "been unable to attend the meeting owing to unforeseen circumstances. The Committee's attention was specifically drawn to the definition of the dry matter of whey cheese contained in the draft standard "Determination of dry matter in whey cheese" which includes the water of crystallisation of lactose into the dry matter, and to the fact that the General Standard for Whey Cheese, A-7, did not provide for a definition of the dry matter. The Committee noted that the percentages given in the standards for whey cheese were based on the use of the drying-oven method (88 C) and agreed that this method should be used. The Committee further agreed that a note be inserted in the General Standard for Whey Cheese, A-7, to the effect that the reference to dry matter includes the lactose as lactose hydrate.

71. With regard to the methods for the determination of the fat content of milk and milk products, the Committee agreed to extend clause 7.3.16.2 in standards B-2, B-3 and B-7, which had already been accepted by several governments, as suggested by the IDF/ISO/AOAC representatives. The United Kingdom delegation informed the Committee that, because of the incorporation of this amendment they could withdraw their reservation concerning their acceptance of these standards. The delegation of the Federal Republic of Germany informed the Committee that they could withdraw their reservation concerning their acceptance of standards B-2, B-3 and B-7 as far as 7.3.16.2 was concerned.

72. The Committee agreed that the three organizations deal with methods of analysis for the determination of the nitrate content of cheese, and that the following draft standards should, be sent to governments for comments at Step (d) of the Procedure for Elaborating and Publishing Methods of Sampling and Analysis:

- Determination of water, solids-not-fat and fat contents of butter on one test portion;
- Determination of the fat content of whey cheese;
- Determination of dry matter in whey cheese.

The report of the Working Group is contained in Section V of this Report, and the draft standards are contained in Appendices IX-A to IX-C.

Methods of analysis and sampling at Step (e)

73. The Committee took note of the government comments received on the following three methods which had been considered by the Committee at its Tenth Session:

- Determination of the phosphorous content of cheese and processed, cheese
- Determination of the citric acid content of processed cheese products
- Polarimetric determination of the sucrose content of sweetened condensed milk

74. The Committee decided to refer the government comments to IDP/ISO/AOAC for revision of the methods and preparation of final texts for approval by the" Committee at its next session.

Significance of reference, methods of analysis

75. The Committee emphasised that the methods of sampling and analysis under the Code of Principles were reference methods intended for use in cases of dispute. These methods would not preclude the continued use of existing methods for routine control purposes.

SECTION II
Report of the Drafting Group
on
Cream and Cream Powder

76. The Drafting Group, which met on 12 and 13 June 1968, was composed as follows :

<u>Name</u>		<u>Country</u>
Dr. C. Schiere	(Chairman)	Netherlands
Dr. K.P. Andersen		Denmark
Dr. Pedro Ballester		Spain
Dr. Hans Boysen		Federal Republic of Germany
Dr. Jacob Ekman		Sweden
Dr. Luigi Ferrari		Italy-
Dr. Edward Green		United Kingdom
Mr. Heinz D. Keller		Switzerland
Dr. Robert W. Weik		United States of America
Dr. F. Winkelmann		FAO

Cream

77. The Chairman made a brief review of the comments received from governments on the draft standard for cream. The Group considered the amendments proposed for Article 1, 'Definition' of the draft standard and agreed to suggest the following text :

1. Definition

"Cream is the liquid milk product rich in fat separated from milk which takes the form of an emulsion of the fat-in-water type."

As regards Article 2, 'Composition', the Group deemed it desirable to clarify the text by inserting the following sentence between the first and second sentences :

"The word 'cream shall not be used for a product, conforming to the definition, with a fat content of less than 10 %."

and to amend the headline to read : 'Composition and Designations'.

The Group further suggested that, in order to clarify that the labelling of the fat percentage could not be regarded as an appropriate qualification for low fat creams, Article 3.1 be amended to read as follows:

3.1 "The name of the product (e.g. CREAM), including, in the case of products containing less than 18% and not less than 10% fat, appropriate qualifying words (e.g. HALF CREAM)."

It was also proposed to add, an Article 4 concerning sampling.

78. The Group proposed that the IDF be asked to consider Ultra-High Temperature (UHT) treated cream in addition to 'Sterilized Cream', and that no recommendation regarding additives be made until IDF had submitted a definition. It was also proposed that IDF consider additives for high fat creams to be used for whipping.

High fat milk powder and Cream powder

79. The Group considered the comments received from governments on the suitability of the use of the terms :

'high fat milk powder' (minimum fat content 40 %)
and 'cream powder' (minimum fat content 65 %)

and noted that only three governments (Denmark, the Federal Republic of Germany and Sweden) were in favour of using the term 'cream powder' for a product with a minimum fat content of 40 %. After thorough discussion the majority of the Group was of the opinion that it would be desirable to bring the fat content of the dried products into relation with the fat contents proposed for the corresponding liquid products and to use similar designations for the corresponding products. The proposals are shown in the following table:

liquid products	fat content (%)	6 up to but not including 10	10 up to but not including 18	18 and above
	designation	(not applicable to cream)	half*) cream (example)	cream
dried products	fat content (%)	40 up to but not including 50	50 up to but not including 65	65 and above
	designation	high fat milk powder	half*) cream powder (example)	cream powder

*) The term 'half' serves as an example for any other appropriate qualifying term.

The Group felt that it would be useful to get information from governments on the volume of trade of these products.

Revision of the standard for milk powder, A-5

80. The Group noted that mainly the following views were put forward by governments concerning the desirability of revising Standard A-5 by including provisions for 'high-fat milk powder' and 'cream powder':

- to include provisions for products containing fat contents in excess of 40 % and 65 %;
- to include provision for high fat milk powder (40 %) only;
- to insert a provision into Standard A-5 limiting the fat content of whole milk powder to less than 40 %;
- to develop a new standard for dried high fat products leaving Standard A-5 unchanged.

After an extended discussion the Group recommended:

- that one separate standard be developed for the three groups of dried high fat milk products mentioned in the above table;
- that the definition for this standard read as follows :

"High fat milk powder, half cream powder (the term 'half' can be replaced by an appropriate qualifying term) and cream powder

are, the milk products obtained by the removal of only water from high fat milk or cream."

- that the question of the use of food additives in dried high fat products should be brought to the attention of governments and of the IDF, and that the proposals on this subject made by the IDF be sent to governments for comments.

SECTION III
Report of the Drafting Group
on
Process(ed) Cheese Products

81. The Drafting Group, which met on 11 and 12 June 1968, was composed as follows :

<u>Name</u>		<u>Country</u>
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Mr. K. Adamik		Poland
Dr. P. Ballester		Spain
Prof. V. Bottazzi		Italy
Mr. A. Eck		France
Dr. L. Ferrari		Italy
Mr. P. Jamotte		Belgium
Dr. H.W. Kay		Federal Republic of Germany
Mr. C.A. Landolt		Switzerland
Mr. A. Lehto		Finland
Dr. R.J. MacWalter		United Kingdom
Dr. L.E. Nichols		Australia
Dr. C. Schiere		Netherlands
Mr. A.W. Marsden		FAO

82. At its last meeting, the Group was asked to prepare three draft standards for process(ed) cheese products. These draft standards were prepared and sent out to governments for comments. As a result of these comments it seemed that there should be some changes in these three standards, and the three types of process(ed) cheese products appeared to the Group to fall into three slightly different categories, namely :

- a) process(ed) cheese as commonly made in North America, the United Kingdom, Australia and New Zealand;
- b) a softer and more spreadable product (referred to as melted cheese and spreadable melted cheese), as commonly made on the continent of Europe, which may contain a limited amount of milk solids;
- c) process(ed) cheese foods which must contain added milk solids.

83. The working papers used by the Group consisted of :

- a) the three draft standards which appeared in the Report of the Tenth Session of the Joint FAO/WHO Committee of Government Experts on the Code of Principles concerning Milk and Milk Products;
- b) the comments received from governments as printed in document MDS 68/5.

84. The draft standard for process(ed) cheese, A-8(a), was generally agreed upon by all representatives attending the meeting of the Group, with the exception of the representative of Australia who felt strongly that the milk fat in the dry matter and the dry matter content should each be 45 %.

85. An attempt was made to prepare a draft standard for melted cheese and spreadable melted cheese containing no additional milk solids, but after lengthy

discussions it became evident that sufficient agreement could not "be reached in the Group on the make-up of such a standard. Hence it was necessary to allow the addition of milk solids in specified limited amounts (and require the declaration of their presence on the label), resulting in draft standard A-8(b). Additional reservations were requested and included for certain Swiss and Dutch cheeses. Some of the difficulties encountered in the preparation of this standard were due in part to the unavailability of adequate translations of the product names between the English, French, German, Spanish and Italian languages.

86. A draft standard for process(ed) cheese food, A-8(c), was drawn up by the Group with particular reference to requirements in English and German speaking countries for products currently being produced in those countries. It was recognized that no products currently being produced in Spain, France, or Italy would fall in this product group; consequently, no effort was made to apply names in those languages to process(ed) cheese food. If these countries should determine at some future date to produce products meeting this standard it will be necessary for them to create a suitable name in their individual languages.

87. A list in English, French, Spanish and German of the suggested names for the various process(ed) cheese products mentioned in the draft standards is given in paragraph 90.

88. As stated last year, it should be understood that the above draft standards, contained in Appendices VII-A, VII-B and VII-C respectively, do not represent the unanimous opinion of the members of the Group but are the best compromise which could be obtained. Each member participated as an individual expert on process(ed) cheese manufacture but was not committed to recommend his government's acceptance of these draft standards.

89. The Swiss representative asked to request the opinion of governments as to the advisability of using phrases such as "full fat", "three quarter fat", etc., in addition to or in place of the actual declaration of the minimum fat content in dry matter. The Swiss delegation suggested the following terminology:

<u>Minimum fat in dry matter</u>	
65 %	- double cream
60 %	- " "
55 %	- Cream
50 %	- "
45 %	- full fat
40 %	- fat
35 %	- three quarter fat
30 %	- " " "
25 %	- half fat
20 %	- " "
15 %	- one quarter fat
10 %	- " " "
less than	
10 %	- low fat

Governments using such designations for the various fat levels in accordance With their national legislation were requested to mention these designations in their comments.

List of suggested names for the various process(ed) cheese products mentioned in the draft standards

	<u>English</u>	<u>French</u>	<u>German</u>	<u>Spanish</u>
90.				
1)	Process(ed) cheese	("Process(ed) cheese")	("Process(ed) cheese")	("Process(ed) cheese")
2)	("Melted cheese") cheese"	Fromage fondu	Schmelzkäse	Queso fundido
	("Spreadable melted cheese")	Fromage fondu pour tartine	Streichschmelzkäse or streichfähiger Schmelzkäse	Queso fundido para untar o extender
3)	Process(ed) cheese food or Process(ed) cheese spread	-	Schmelzkäsezubereitun g	-

SECTION IV
Report of the Drafting Group
on
Ice-cream and Milk Ices

91. The Drafting Group, which met on 13 June 1968, was composed as follows:

<u>Name</u>		<u>Country</u>
Dr. J.B. Stine	(Chairman)	United States of America
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Dr. H. Hakans		Finland
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Dr. H.W. Kay		Federal Republic of Germany
Mr. H.D. Keller		Switzerland
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Dr. L. Tuomainen		Finland
Dr. G.F. Wilmink		The Netherlands
Dr. Z. Matyas		WHO
Dr. F. Winkelmann		FAO

92. The Group in considering the IDF draft standard for Ice-cream and Milk Ices contained in Annex III of ALINORM 68/32 (December 1967) wished to point out to the Committee that the general definition would be applicable to all edible ices. The Group suggested that the texts of the Articles mentioned below should read as follows:

93. 1. General Definition

"Edible ices are preparations, the solid or pasty state of which has been obtained by freezing and which are intended to be consumed in that state.

Ice-cream and milk ices are edible ices produced from milk and milk products which contain as fat only milk fat."

94. 2. Ice-creams

2.1 Ice-cream

"Edible ice containing at least 8 %*) of milk fat and at least 30 % total solids."

*) All percentages are expressed by weight of the finished product.

Remarks

Some delegates felt that 10 % fat content would "be preferable. On the other hand, a delegate pointed out that his government would be unable to accept this proposal as in his country the minimum fat content was 5 % With regard to a suggestion to state the milk solids-not-fat content, the Group felt that it was desirable to give the

figure of 7 % milk SNF on which government comments should be sought.

2.2 Fruit ice-cream

"Ice-cream which contains enough fruity fruit juice or fruit pulp to impart the characteristic flavour."

2.3 Ice-cream with eggs

"Ice-cream complying with the general requirements as Under 2.1 and containing at least 7 % liquid egg yolk or*its equivalent as dehydrated yolks."

95. 3. Milk ices

3.1 Milk ice

"Edible ice containing at least 3 % milk fat and at least 28 % total solids."

Remark

A delegate was in favour of 25 % total solids content. With regard to a suggestion to state the milk SNF content the Group felt that it was desirable to give the figure of 7 % milk SNF, on which government comments should be sought.

3.2 Fruit milk ice

"Milk ice which contains enough fruit, fruit juice or fruit pulp to impart the characteristic flavour."

3.3 Milk ice with eggs

"Milk ice complying with the general requirements as under 3.1 and containing at least 7 % liquid egg yolk or its equivalent as dehydrated yolks."

96. 4. Raw materials

4.1 Cow' s milk and its constituents

For international trade, if the milk or its constituents are not derived from cow's milk, their origin should be indicated (for instance: "made from buffalo's milk").

4.2 Water of drinking quality

4.3 Hens' eggs, whole, yolks, whites, fresh, frozen or dried

4.4 Sugars

4.5 Natural flavouring substances

4.6 FOOD additives (including artificial, flavouring substances)

Remarks

The Group considered it desirable that the Committee seek information from the IDF and governments as to the food additives used in their respective countries in the manufacture of edible ices, indicating whether their use would be necessary or optional.

97. 5. Overrun (ratio volume /mass)

the ratio: $\frac{\text{volume of finished product in litres}}{\text{mass of finished product in kg}}$ should not exceed 2

98. 6. Bacteriological standards

Remarks

The Group agreed that government comments should be sought as to "bacteriological standards for edible ices, both with regard to bacteriological counts and methods of analysis. The IDF has recommended the following:

"Maximum per gram of finished product:

- total aerobic count : 100,000 colonies
- coliforms : 100 colonies

No pathogenic organisms which an appropriate pasteurisation process should normally destroy should be present.

All test results performed by control authorities should be reported to the responsible sources for immediate investigations where appropriate."

99. 7. Labelling

7.1 Name of the product

"Only products complying with specifications given in 2. and 3. shall be designated ice-creams and milk ices respectively."

7.2 Name and address of manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared (see General Standard for Labelling of Prepackaged Foods)

Remarks

The Group considered it desirable that the Committee ask for recommendations from governments as to how to differentiate on the label between products containing natural flavouring substances and those containing artificial flavouring substances.

SECTION V

IDF/ISO/AOAC Cooperation in the Field of Methods of Sampling and Analysis

100. Representatives of ISO and AOAC met in Rome on 7 and 8 June 1968 to discuss analytical standards required in connection with the Code of Principles concerning Milk and Milk Products. It was regretted that due to unforeseen circumstances IDF could not be represented.

Present:

Dr. J.G. van Ginkel	(Chairman)	ISO
Mr. S. Boelsma		ISO
Dr. R.W. Weik		AOAC
Mr. Th.C.J.M. Rijssenbeek		Chairman of the Committee of Government Experts
Mr. Floyd E. Fenton		Vice-Chairman of the Committee of Government Experts
Dr. F. Winkelmann		FAO

The results of the discussions are given below.

Determination of water, solids-not-fat and fat contents of butter on one test portion

101. The representatives of ISO and AOAC were aware of the fact that, in line with the procedure for elaborating and publishing methods of sampling and analysis, it was the responsibility of IDF to submit the preliminary standard to FAO. However, taking into account that an agreement in principle on this standard had already been reached at last year's session of the Group, and that it had in principle been agreed to by the IDF Commission concerned, ISO and AOAC considered it justifiable that the preliminary standard be submitted to Governments for comments (Step (c) of the Procedure for Elaborating and Publishing Methods of Sampling and Analysis).

Determination of the fat content of whey cheese

102. ISO and AOAC agreed on a version of the standard which is based on the procedure accepted for Standards Nos. B-2 (Determination of the fat content of dried milk), B-6 (Determination of the fat content of milk) and B-7 (Determination of the fat content of evaporated milk and of sweetened condensed milk). This was consistent with the preparation of one general Rose-Gottlieb standard for milk and milk products. A copy was presented by ISO and AOAC to the Secretariat to be submitted to Governments for comments (Step (c) of the above Procedure),

Determination of dry matter in whey cheese

103. The representatives of ISO and AOAC considered the drying-oven method (83 C) submitted by IDF. They agreed that it should be submitted to governments for comments (Step (c) of the above Procedure) and that the attention of governments should be specifically drawn to the following : one must be aware that by accepting this standard the hydrate water would be included in the dry matter; if the hydrate water should not be included in the dry matter, a different method, e.g. the Karl Fischer method or the vacuum oven method, would be required.

Determination of iodine value

104. Comparative investigations will be carried out by 'the three Organisations on several variations of the Wijs procedure to reach final agreement on a method that can be submitted to the Secretariat.

Food additives

105. ISO and AOAC suggested that the determination of the nitrate content of cheese be dealt with by the three Organisations as a first priority of analytical methodology for additives in milk products.

Determination of fat in sweetened condensed milk

106. In the report of the Tenth Session it was said that:

"As far as sweetened condensed milk is concerned, further investigations will be carried out to determine whether under certain special conditions the fat is completely extracted by the method submitted*¹¹

These investigations have not yet been completed so as to enable the three Organizations to make a final recommendation to the Committee.

Methods for microbiological analysis

107. In the report of the Tenth Session (paragraph 39(h)) it was stated that the texts of methods for microbiological analysis, as far as available, would be sent to the Secretariat by IDF, after due consultation with ISO and AOAC, in line with the procedure followed by the three Organisations for the elaboration of standards: on sampling and analysis. ISO and AOAC were prepared to undertake the development of such standards.

Government comments on standards at Step (g) or (h)

108. The Committee has previously concurred with the IDF/ISO/AOAC proposal that methods of analysis be periodically reviewed. ISO and AOAC considered and decided to hold for future revision comments received from governments in accepting the following methods:

Determination of the salt content of butter

Determination of the fat content of milk

Determination of the fat content of evaporated milk and sweetened condensed milk.

In revising the standards B-2 and B-3 in order to conform to the layout recommended by ISO, it was realised that the analytical procedures of these standards were satisfactory and would not require any change in substance. However, it was the opinion of the IDP/ISO/AOAC Group that all methods for determining fat content should, where possible, relate back to the method for determining the fat content in fluid milk. The modifications in Standards B-2 and B-3 were made after the three Organizations had agreed upon the text of the method for determining the fat content in milk. During the discussion on the desirability of redissolving three points of view were noted:

- Redissolving unnecessarily prolongs the determination. Any faulty - decantation will betray itself by poor duplicates.
- Redissolving is an unambiguous test on an accurate performance of the determination. The extracted matter normally dissolves completely or

practically completely, in the latter case the remainder in the flask normally weighing less than 0.2 mg. When the extracted matter does not; completely dissolve, the determination is to be considered less accurate, even with the redissolving procedure, and should be rejected.

- The visual examination as to whether the extracted matter is wholly soluble is subjective and not permissible in a standard reference method.

Recognising that all three procedures will produce the same results when the quantity of insoluble matter is not too high, it was felt that these differing approaches could be reconciled by the alternative operations given in the texts of the three Organizations (clause 7.3.16). However, since these are all reference methods, the IDF/ISO/AOAC recommends extending clause 7.3.16.2 as follows :

"If not, or in case of doubt and always in case of a dispute, completely extract the fat"

109. During the Eleventh Session of the Joint FAO/WHO Committee of Government Experts on the Code of Principles concerning Milk and Milk Products the President of the IDF Commission of Studies has, on behalf of the International Dairy Federation, approved the report prepared by the delegates of ISO and AOAC.

Date and place of next meeting

110. It was agreed that the next meeting of IDF, ISO and AOAC should be held in Rome, immediately prior to the Twelfth Session of the Committee.

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INTERNATIONAL INDIVIDUAL
CHEESE STANDARDS
SUBMITTED
TO
GOVERNMENTS
FOR
ACCEPTANCE

- | | | | |
|----|--------------|----|--|
| A. | TILSITER | D. | SVECIA |
| B. | LIMBURGER | E. | PROVOLONE |
| C. | SAINT-PAULIN | F. | COTTAGE CHEESE
INCLUDING. CREAMED
COTTAGE CHEESE |

- 4.4 Rind
 - 4.4.1 Consistency: firm, but not hard
 - 4.4.2 Appearance: well-dried smear developed by red and yellow smear producing bacteria or as a substitute for the smear removed after the ripening process coated with yellowish wax or plastics
 - 4.4.3 Colour: reddish brown to straw-coloured
- 4.5 Body
 - 4.5.1 Texture: semi-hard, suitable for cutting
 - 4.5.2 Colour: ivory-coloured to yellow
- 4.6 Holes
 - 4.6.1 Distribution: preferably regular
 - 4.6.2 Shape: slit-shaped, round or both
 - 4.6.3 Size: majority having a diameter of 2 to 4 mm.
 - 4.6.4 Appearance: shiny
- 4.7/4.8 Minimum fat contents in dry matter and maximum moisture contents

	A TILSITER	B TILSITER 30%	C TILSITER 60%
Minimum fat in dry matter %	45	30	60
Maximum moisture content %	47	53	39
Minimum dry matter content %	53	47	61

- 4.9 Other principal characteristics
 - 4.9.1 Flavour: typical flavour developed by red and yellow smear producing bacteria during ripening for at least four weeks
 - 4.9.2 Ready for consumption: after at least five weeks

5. Method of manufacture

- 5.1 Method of coagulation: rennet, lactic acid starter or any other suitable coagulating enzymes
- 5.2 Heat treatment of the coagulum: scalding after cutting the coagulum
- 5.3 Fermentation procedure: lactic acid fermentation
- 5.4 Maturation procedure: ripening at 12°C - 16°C
- 5.5 Other principal characteristics: salted in brine

6. Sampling and analysis

- 6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", paragraph 7, "Sampling of cheese"
- 6.2 Determination of fat content : according to FAO/WHO Standard B.3, "Determination, of the Fat Content of Cheese and of Processed Cheese Products"

7. Marking and labelling

Only cheese conforming with this standard may be designated "Tilsiter". It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A. 6, "General Standard for Cheese"

The cheese mentioned under B and C in 4.7/4.8 may be designated "Tilsiter" provided that the designation is accompanied by a prefix corresponding to the fat percentage, e.g. 30 % Tilsiter

International Individual Standard for
LIMBURGER

1. Designation of cheese

Limburger *)

*) or such other synonyms derived from this name as will clearly indicate this variety

2. Depositing countries

Federal Republic of Germany, United States of America
(Country of origin: Belgium)

3. Raw materials

3.1 Kind of milk: cow's milk

3.2 Authorized additions

3.2.1 Necessary additions

- cultures of harmless lactic acid producing bacteria (starter) and cultures of Bacterium linens
- rennet or other suitable coagulating enzymes
- sodium chloride

3.2.2 Optional additions

- calcium chloride, max. 0.02 % by weight of the milk used 1)
- sodium and potassium salts of nitric acid, max. 0.02 % by weight of the milk used 3)
- carotene 1), max. 0.06 % by weight of the cheese
- lactoflavin (riboflavin)
- safe and suitable enzymes to assist in flavour development

1) endorsed by the Codex Committee on Food Additives (CCFA)

3) not endorsed by the CCFA pending further consideration

4. Principal characteristics of the cheese ready for consumption

4.1 Type

4.1.1 Consistency : soft

4.1.2 Short description: a soft surface ripened cheese carrying a rather intensive aromatic flavour. Usually consumed at 3-6 weeks

4.2 Shape (usual): cubical or rectangular

4.3 Dimensions and weights

4.3.1 Dimensions (usual) : approximately 6 x 6 cm. and varying in height

4.3.2 Weight (usual) : maximum 1 kg.

4.4 Rind

4.4.1 Consistency: elastic

- 4.4.2 Appearance: smear developed by red and yellow smear organisms
- 4.4.3 Colour:reddish-brown
- 4.5 Body
 - 4.5.1 Texture: soft but still sliceable
 - 4.5.2 Colour:ivory to yellow
- 4.6 Holes
 - 4.6.1 Distribution: few, irregularly distributed
 - 4.6.2 Shape : irregular
 - 4.6.3 Size: up to the size of a barley grain
 - 4.6.4 Appearance: shiny
- 4.7/4.8 Minimum fat contents in dry matter and maximum moisture contents

	A Limburger	B Limburger 20%	C Limburger 30%	D Limburger 40%	E Limburger 45%
Minimum fat in dry matter %	50	20	30	40	45
Maximum moisture content %	50	65	62	58	53
Minimum dry matter content %	50	35	38	42	47

- 4.9 Other principal characteristics: typical flavour developed by red and yellow smear producing bacteria during the ripening period of at least two weeks
- 5. Method of manufacture
 - 5.1 Method of coagulation: rennet or other suitable coagulating enzymes
 - 5.2 Heat treatment: little or no heat applied during the manufacturing procedure
 - 5.3 Fermentation procedure: lactic acid fermentation with subsequent smear development
 - 5.4 Maturation procedure: ripened at 12-16°C for approximately 2 weeks
 - 5.5 Other principal characteristics: cheese is salted from the surface before curing or salted in brine; the rind is regularly rubbed with brine during curing

6. Sampling and analysis

- 6.1 Sampling: according to FAO/WHO Standard B.1 "Sampling Methods for Milk and Milk Products", clauses 7.2 (a), "Sampling by cutting" or 7.2 (c), "Taking a complete cheese as a sample"
- 6.2 Determination of fat content: according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products"

7. Marking and labelling

Only cheese conforming with this standard may be designated "Limburger"; It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A. 6, "General Standard for Cheese"

The cheese mentioned under B, C, D, and E in 4.7 and 4.3 may be designated "Limburger" provided that the designation is accompanied by a prefix corresponding to the fat percentage, e.g. 30 % Limburger

International Individual Standard for
SAINT-PAULIN

1. Designation of cheese
Saint-Paulin
2. Depositing country
France (country of origin)
3. Raw materials
 - 3.1 Kind of milk: cow's milk
 - 3.2 Authorized additions
 - 3.2.1 Necessary additions
 - cultures of harmless lactic acid producing bacteria (starter)
 - rennet or other suitable coagulating enzymes
 - sodium chloride
 - 3.2.2 Optional additions
 - calcium chloride, max. 0.02 % by weight of the milk used ¹⁾
 - sodium and potassium salts of nitric acid, Max. 0.02 % by weight of the milk used ³⁾
 - annatto ²⁾ and carotene ¹⁾, max. 0.06 % by weight of the cheese
 - water
- 1) endorsed by the Codex Committee on Food Additives (CCPA)
- 2) temporarily endorsed by the CCFA
- 3) not endorsed by the CCFA pending further consideration
4. Principal characteristics of the cheese ready for consumption
 - 4.1 Type
 - 4.1.1 Consistency: firm, semi-hard
 - 4.1.2 Short descriptions: Saint-Paulin is a cheese with a dry or slightly humid rind sometimes wrapped in a plastic film or covered with wax. When cut, the cheese is of uniform colour
 - 4.2 Shape
 - 4.2.1 Usual shape: small round loaf with ©lightly protruding sides (flat cylinder), whole or out in sectors
 - 4.2.2 Permitted variations : none

- 4.3 Dimensions and weights
 - 4.3.1 Dimensions
 - 4.3.1.1 Usual dimensions :
 - diameter: approx. 20 cm
 - height: 4-6 cm
 - 4.3.1.2 Permitted variation ("Petit Saint-Paulin")
 - diameter: 8-13 cm.
 - height: 3-4.5 cm.
 - 4.3.2 Weights
 - 4.3.2.1 Usual weight: 1.3-2 kg.
 - 4.3.2.2 Permitted variation: 0.25 kg. approx.
(for "Petit Saint-Paulin")
- 4.4 Rind
 - 4.4.1 Consistency: hard but elastic under thumb's pressure
 - 4.4.2 Appearance: washed rind slightly humid or dry
 - 4.4.3 Colour: beige, yellow or ochre (rind can be coated with plastic film or with wax)
- 4.5 Body
 - 4.5.1 Texture: firm but flexible
 - 4.5.2 Colour: yellow to white, uniform
- 4.6 Holes
 - 4.6.1 Distribution: generally absent, but a few permitted
 - 4.6.2 Shape: spherical or stretched (slits)
 - 4.6.3 Size : pin-head
 - 4.6.4 Appearance : smooth
- 4.7 Minimum fat content in dry matter: 40%
- 4.8 Minimum dry matter content: 44 %
- 5. Method of manufacture
 - 5.1 Method of coagulation: chiefly with rennet or other suitable enzymes but also with lactic acid
 - 5.2 Boast treatment
 - 5.2.1 Heat treatment of the milk: the milk is generally pasteurized
 - 5.2.2 Heat treatment of the coagulum: the temperature of the coagulum is sometimes raised by 1 or 2°C.
 - 5.3 Fermentation procedure: lactic acid fermentation
 - 5.4 Maturation procedure: the cheese is kept for 4 weeks at + 12°C approx.; the rind is frequently washed

5.5 Other principal characteristics

- quick clotting
- curd is cut
- curd particles are washed in pure or salted water
- curd is moulded under pressure
- cheese is salted in brine

6. Sampling and analysis

6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", paragraph 7, "Sampling of cheese"

6.2 Determination of fat content: according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products"

7. Marking and labelling

Only cheese conforming with this standard may be designated "Saint-Paulin"; It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A. 6, "General Standard for Cheese", except that Saint-Paulin not produced in the country of origin must be marked with the name of the producing country even when sold on the home market

The cheese mentioned in 4.3.1.2 and 4.3.2.2 may be designated "Saint-Paulin" provided that the designation is accompanied by the prefix "Petit"

International Individual Standard for
SVECIA

1. Designation of cheese

Svecia

2. Depositing country

Sweden (country of origin)

3. Raw materials

3.1 Kind of milk: pasteurised cow's milk

3.2 Authorised additions

3.2.1 Necessary additions

- cultures of harmless lactic acid producing bacteria (starter)
- rennet or other suitable coagulating enzymes
- sodium chloride

3.2.2 Optional additions

- calcium chloride, max. 0.02 % by weight of the milk used ¹⁾
- sodium and potassium salts, of nitric acid, max. 0.02 % by weight of the milk used ³⁾
- sodium dihydrogen phosphate ⁴⁾
- annatto ²⁾ and carotene ¹⁾, max. 0.06 % by weight of the cheese
- water
- caraway seeds and cloves (for a spiced variant)

1) endorsed by the Codex Committee on Food Additives (CCPA)

2) temporarily endorsed by the CCFA

3) not endorsed by the CCFA pending further consideration

4) to be considered by the CCFA

4. Principal characteristics of the cheese ready for consumption

4.1 Type

4.1.1 Consistency: Hard to semi-hard

4.1.2 Short description : Svecia is a 12-15 kg. cheese, when cylindrical covered with paraffin, when in block form wrapped in a plastic film} it has irregular numerous holes, depending on age: taste varies from mildly acid to strongly aromatic or pungent

4.2 Shape : a) flat cylinder with convex sides
b) block with square base

4.3 Dimensions and weights

4.3.1 Dimensions: a) cylindrical: diameter 35 cm.
height 11-15 cm.
b) block: 36 x 36 x 9-12 cm.

4.3.2 Weights: a) cylindrical: 12-15 kg.
b) block: 12-15 kg.

- 4.4 Rind
 - 4.4.1 Consistency: hard, resilient, dry (paraffin); (rindless in film)
 - 4.4.2 Appearance; smooth
 - 4.4.3 Colour: yellow
- 4.5 Body
 - 4.5.1 Texture: firm (for cutting), uniform
 - 4.5.2 Colour : uniform light yellow to straw
- 4.6 Holes
 - 4.6.1 Distribution: uniform and numerous
 - 4.6.2 Shape : irregular
 - 4.6.3 Sizes: small (pin's head to rice)
 - 4.6.4 Appearance: mostly mechanical openings between the original curd grains

4.7/4.8 Minimum fat contents in dry matter and maximum moisture contents

	A Svecia	B Svecia 30 %	C Svecia 50 %	D Svecia 60 %
Minimum fat in dry matter %	45	30	50	60
Maximum moisture content %	41	47	40	39
Minimum dry matter content %	59	53	60	61

- 4.9 Other principal characteristics: taste slightly lactic, and also mild and mellow or pungent (depending on age)

5. Method of manufacture

- 5.1 Method of coagulations: rennet or other suitable coagulating enzymes
- 5.2 Heat treatment: the curd is heated to 38-42°C.
- 5.3 Fermentation procedure: lactic acid fermentation
- 5.4 Maturation procedures: in dry store for more than 3 months at temperatures between 18 and 12°C.
- 5.5 Other principal characteristics: the curd is put into the moulds with inclusion of air between the curd particles and (partly) salted; final salting in brine

6. Sampling and analysis

- 6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", paragraph 7, "Sampling of cheese"
- 6.2 Determination of fat contents according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products"

7. Marking and labelling

Only cheese conforming with this standard may be designated "Svecia". It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A.6, "General Standard for Cheese"

The cheese mentioned under B, C and D in 4.7 / 4.8 may be designated "Svecia" provided that the designation is accompanied by a prefix corresponding to the fat percentage, e.g. Svecia 30 %

The spiced cheese may be designated "Svecia" provided that the designation is accompanied by the prefix "Spiced"

International Individual Standard for
PROVOLONE

1. Designation of cheese

Provolone

2. Depositing countries

Italy (country of origin), United States of America

3. Raw materials

3.1 Kind of milk: cow' s milk

3.2 Authorised additions

3.2.1 Necessary additions

- cultures of harmless lactic acid producing bacteria (starter)
- rennet (calf, lamb or kid, liquid or paste) or other suitable coagulating enzymes
- sodium chloride

3.2.2 Optional additions

- smoke ³⁾
- hexamethylenetetramine, max. 0.06 % of the liquid used to work the curd ⁴⁾
- calcium chloride, max. 0.02 % by weight of the milk used ¹⁾
- fast green FCF (Colour Index 42053)
- brilliant blue FCF (Colour Index 42090)
- indigotine FCF (Colour Index 73015)
- cafe and suitable enzymes to assist in flavour development
- benzoyl peroxide as a bleach ⁴⁾

1) endorsed by the Codex Committee on Food Additives (CCFA)

3) not endorsed by the CCFA pending further consideration

4) to be considered by the CCFA

4. Principal characteristics of the cheese ready for consumption

4.1 Type

Provolone is a "pasta filata" cheese which is used as a table or grating cheese and may be consumed either fresh or aged.

4.2 Shape: various

4.3 Dimensions and weights : various

4.4 Rind

4.4.1 Appearances: commonly covered with vegetable fat and/or oil, paraffin and/or plastic film

4.4.2 Colour: natural colour rind yellow to brown

- 4.5 Body
 - 4.5.1 Texture: fibrous or smooth
 - 4.5.2 Colours white to yellow straw
 - 4.6 Holes: a few holes and splits permitted
 - 4.7 Minimum fat content in the dry matter: 45 %
 - 4.8 Maximum moisture contents: 47 % for unsmoked cheese
45 % for smoked cheese
 - 4.9 Other principal characteristics: sweetish, buttery taste after ripening 2 to 3 months, strong or piquant taste after ageing when rennet from kid is used
5. Method of manufacture
- 5.1 Method of coagulations calf's rennet for "sweet curd" and lamb or kid's rennet for "strong cheese", or other suitable coagulating enzymes
 - 5.2 Heat treatment of the coagulum: curd is placed in hot water or hot whey and kneaded and stretched until smooth and free from lumps
 - 5.3 Fermentation procedures the milk is subjected to the action of lactic acid produced by bacteria present in the milk or added as a starter thereto. After the proper ripening period is reached, rennet or another suitable enzyme is added to coagulate the milk
 - 5.4 Maturation procedure: the coagulated curd is cut, stirred and heated to promote and regulate the separation of whey from the curd. The whey is drained off, the curd is matted and cut, immersed in hot water and kneaded and stretched until it is smooth and free from lumps. The curd is then cut and placed in moulds. During moulding the surface is kept warm to properly seal the surface. The moulded curd is then firmed by immersion in cold water before salting
 - 5.5 Other principal characteristics: cheese is salted by immersion in brine. Some shapes may be encased in ropes or twine before drying. The surface may be paraffined or waxed. The cheese may be smoked
6. Sampling and analysis
- 6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", paragraph 7, "Sampling of cheese"
 - 6.2 Determination of fat content: according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products"
7. Marking and labelling
- Only cheese conforming with this standard may be designated "Provolone". It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A.6, "General Standard for Cheese"

International Individual Standard for
COTTAGE CHEESE, INCLUDING CREAMED COTTAGE CHEESE

1. Designation of cheese

Cottage Cheese, or in the case of a cheese conforming to the additional requirements there for, Creamed Cottage Cheese

2. Depositing country

United States of America

3. Raw materials

3.1 Kind of milk: pasteurized skimmed cow's milk

3.2 Authorised additions

- cultures of harmless lactic acid and aroma producing bacteria (starter)
- rennet or other suitable coagulating agents
- sodium chloride
- calcium chloride, max. 0.02 % by weight of the milk used ¹⁾
- water

3.3 Creaming mixture for creamed cottage cheese which must be pasteurized and may contain:

3.3.1 Dairy ingredients

- cream
- skimmed milk
- condensed milk *)
- non fat dry milk *)
- dry milk protein *)

3.3.2 Other permitted additions

- cultures of harmless lactic acid and aroma producing bacteria (starter)
- rennet or other suitable coagulating enzymes
- sodium chloride
- lactic acid 4)
- citric acid 4)
- phosphoric acid 4)
- sodium caseinate *)
- ammonium caseinate *)
- calcium caseinate *)
- potassium caseinate *)
- stabilizing ingredients as follows: **)
 - carob been gum 1)
 - guar gum 1)
 - gum karaya 1)
 - gum tragacanth 1)
 - calcium sulphate 4)
 - carrageenan or its salts 4)

- furcelleran or its salts 4)
- gelatin
- lecithin 1)
- alginic acid or its salts 1)
- propylene glycol ester of alginic acid (alginderivative) 4)
- cellulose gum (CMC) 4)
- carrier for stabiliser as follows: **)
 - sugar
 - dextrose
 - corn syrup solids
 - dextrine
 - glycerine 4)
 - 1,2 propylene glycol 4)

*) Weight of solids of these ingredients added singly or in any combination, not to exceed 3 % by weight of the creaming mixture

**) The solids added by the stabilizing ingredients, possibly including the carrier, shall not exceed 0.5 % by weight of the creaming mixture.

1) endorsed by the Codex Committee on Food Additives (CCFA)

4) to be considered by the CCFA

4. Principal characteristics of the cheese ready for consumption

- 4.1 Type: a soft unripened, acid-coagulated curd having discrete curd particles of relatively uniform size and in the case of creamed cottage cheese covered with a creaming mixture
- 4.2 Shape (size of curd): individual granules, comparatively uniform, from approximately 3-2 mm. depending on whether small or large type curd is desired
- 4.3 Dimensions and weights : sold in containers of varying capacity
- 4.4 Hindi: none
- 4.5 Body
- 4.5.1 Texture: soft granules or, in the case of creamed cottage cheese, soft
- 4.5.2 Colour: natural white without added colour or, in the case of creamed cottage cheese, natural white to light cream without added colour
- 4.6 Holes: none
- 4.7 Minimum fat content of the products:
- a) cottage cheese : none
 - b) creamed cottage cheeses: 4 %
- 4.8 Maximum moisture content: 80 %
- 4.9 Other principal characteristics: the flavour is bland to mild, typical of a milk product cultured with lactic acid and aroma producing bacteria; the cheese is sold as fresh uncured cheese.

5. Method of manufacture

- 5.1 Method of coagulation: the coagulation is produced by the action of lactic acid bacteria with or without the addition of a small amount of a coagulating enzyme
- 5.2 Other principal characteristics
 - 5.2.1 Curd is cut into cubes approximately 7-15 mm. depending on whether small or large type of curd is desired
 - 5.2.2 During cooking, the curd is stirred slowly and gently to avoid damage to the cubes and to produce the desired body and texture
 - 5.2.3 After cooking the curd is washed with water to remove excess acid. The curd is then drained
 - 5.2.4 Salt may be added to the finished curd or, in the case of creamed cottage cheese, to the creaming mixture
 - 5.2.5 In the case of creamed cottage cheese, sufficient creaming mixture is added and mixed with the curd particles to meet the minimum fat requirements and not exceed the maximum moisture content of the finished product

6. Sampling and analysis

- 6.1 Sampling: sample bulk containers (minimum 2 kg.) by stirring entire contents thoroughly so that all portions of the cheese are reached and uniformly mixed. Remove portions with a spoon to fill a container approximately 500 grams; close tightly, place under refrigeration immediately. For consumer size packages one or more units of one litre or less may be used to obtain a 500 gram sample

7. Marking and labelling

Only cheese conforming with this standard may be designated "Cottage Cheese" or "Creamed Cottage Cheese" as appropriate. It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A.6, "General Standard for Cheese"

The label may include a statement as to the desirability of keeping the product under refrigeration

DRAFT
INTERNATIONAL INDIVIDUAL
CHEESE STANDARDS
SUBMITTED
TO
GOVERNMENTS
FOR
COMMENT

- | | | | |
|----|-----------------|----|--------------|
| A. | BUTTERKÄSE | E. | HERRGÅRDSOST |
| B. | COULOMMIERS | F. | HUSHÅLLSOST |
| C. | GUDBRADSDALSOST | G. | NORVEGIA |
| D. | HARZER KASE | | |

Draft International Individual Standard for
BUTTERKÄSE

1. Designation of cheese

Butterkäse

2. Depositing country

Federal Republic of Germany

3. Raw materials

3.1 Kind of milk: cow's milk

3.2 Authorized additions:

3.2.1 Necessary additions:

- rennet or other suitable coagulating enzymes
- cultures of harmless lactic acid producing bacteria (starter)
- sodium chloride

3.2.2 Optional additions

- calcium chloride, max. 0.02 % by weight of the milk used ¹⁾
- sodium and potassium salts of nitric acid, max. 0.02 % by weight of the milk used ³⁾, provided that the cheese is not marketed before it is at least 4 weeks old
- lactoflavin (riboflavin)
- annatto ²⁾ and carotene ¹⁾, max. 0.06 % by weight of the cheese

1) endorsed by the Codex Committee on Food Additives (CCFA)

2) temporarily endorsed by the CCFA

3) not endorsed by the CCFA pending further consideration

4. Principal characteristics of the cheese ready for consumption

4.1 Type

4.1.1 Consistency: soft to semi-soft but still sliceable

4.1.2 Short description: sliceable, soft to semi-soft cheese which has ripened for at least 4 weeks; surface covered with smear; mild taste; consistency which is butter-like on the tongue: cold ripened cheese

4.2 Shape: various

4.3 Dimensions and weights

4.3.1 Dimensions: various

4.3.2 Weights: 0,250 kg. to 6 kg.

4.4 Rind

4.4.1 Consistency: firm but flexible

4.4.2 Appearance: dry

4.4.3 Colour: reddish to yellowish brown

the cheese may
also be rindless

4.5 Body

4.5.1 Texture: flexible, markedly elastic

4.5.2 Colour : ivory to golden yellow

4.6 Holes

4.6.1 Distribution: no holes or a few occasional holes

4.6.2 Shape: round to slit shaped

4.6.3 Size: up to approx. 10 mm.

4.6.4 Appearance: mat

4.7/4.8 Minimum fat contents in dry matter and maximum moisture contents

	A Butterkäse	B Butterkäse 50 %	C Butterkäse 60 %
Minimum fat in dry matter %	45	50	60
Maximum moisture content %	52	50	45
Minimum dry matter content %	48	50	55

4.9 Other principal characteristics: the cheese has a mild flavour

5. Method of manufacture

5.1 Method of coagulation: rennet or other suitable enzymes

5.2 Heat treatment of the coagulum: temperature for treating the curd: 40-46 °C

5.3 Fermentation procedure : after the curd has been put in moulds, it is kept warm at a temperature of 35°C to 40° C. The cheeses are turned several times during the draining period

5.4 Maturation procedure: after salting in brine, ripening in a cold room at a temperature of + 2°C to + 6°C and a high relative humidity

Minimum ripening period : 4 weeks

The cheeses are washed several times

5.5 Other principal characteristics: packing: in most cases, the cheeses are wrapped in aluminium foil or plastic film

6. Sampling and analysis

- 6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", clauses 7.2 (a), "Sampling by cutting" or 7.2 (b) "Sampling by means of a trier".
- 6.2 Determination of fat content: according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products".

7. Marking and labelling.

Only cheese conforming with this standard may be designated "Butterkäse". It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A. 6.

The cheese mentioned under B and C in 4.7 / 4.8 may be designated "Butterkäse" provided that the designation is accompanied by a prefix or suffix corresponding to the fat percentage, e.g. 50 % Butterkäse.

Draft International. Individual Standard for
COULOMMIERS

1. Designation of cheese

Coulommiers

2. Depositing country

France (country of origin)

3. Raw materials

3.1 Kind of milk: cow's milk

3.2 Authorised additions

- cultures of harmless lactic acid producing bacteria (starter)
- moulds characteristic of the variety
- sodium chloride
- rennet or other suitable coagulating enzymes
- calcium chloride, max. 0.02% by weight of the milk used ¹⁾
- annatto ²⁾ and carotene ¹⁾ max. 0.06% by weight of the cheese

1) endorsed by the Codex Committee on Food Additives (CCFA)

2) temporarily endorsed by the CCFA

4. Principal characteristics of the cheese ready for consumption

4.1 Type

4.1.1 Consistency: soft cheese

4.1.2 Short description: the cheese has the shape of a flat cylinder, the surface of which is covered with microbial flora including orange or red spots. Maturing occurs from the periphery to the centre. The coagulation is a combined action of rennet and of lactic acid

4.2 Shape: flat cylinder

4.3 Dimensions: diameter: 12.5 to 15 cm.
height: about 2.5 cm.

4.4 Rind

4.4.1 Consistency: flexible

4.4.2 Appearance : surface moulds

4.4.3 Colour: white moulds sometimes with red or orange spots

4.5 Body

4.5.1 Texture: soft

4.5.2 Colour: cream yellow to white

4.6 Holes: no holes or very few holes

4.7 Minimum fat content in dry matter: 40% but higher fat contents should be indicated on the label as minimum fat contents guaranteed by the manufacturer to the consumer

4.8 Minimum dry matter content : 140 g. per piece *)

*) a proposal for the maximum moisture content in terms of percentage by weight will be submitted by the delegation of France

5. Method of manufacture

5.1 Method of coagulation: lactic acid and rennet or other suitable coagulating enzymes

5.2 Heat treatment

5.2.1 Heat treatment of the milk: the temperature of the milk is raised to the renneting temperature

5.2.2 Heat treatment of the coagulum: none

5.3 Fermentation procedure: predominantly lactic fermentation, surface development of moulds followed by proteolysis from the surface

5.4 Maturation procedure: the cheese is stored for 2 weeks in the ripening room at a temperature close to 14°C possibly followed by storage in a cold collar

5.5 Other principal characteristics: spontaneous draining - dry salting or salting in brine

6. Sampling and analysis

6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", clause 7.2 (c), "Taking a complete cheese as a sample". For controlling compositional requirements, particularly the total solids in each piece, a sample of at least 7 pieces chosen at random should be taken

6.2 Determination of fat content: according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products"

7. Marking and labelling

Only cheese conforming with this standard may be designated "Coulommiers". It shall "be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A.6, except that Coulommiers not produced in the country of origin must be marked with the name of the producing country even when sold on the home market

Draft International Individual Whey Cheese Standard for
GUDBRANDSDALSOST

(whey cheese)

1. Designation of whey cheese
Gudbrandsdalsost
2. Depositing country
Norway (country of origin)
3. Raw materials
 - 3.1 Kind of milk: a mixture of cow's milk whey, cow's milk and goat's milk equivalent to a minimum of 1 litre goat's milk per kg. of Gudbrandsdalsost
 - 3.2 Authorised additions: sorbic acid or its sodium or potassium salts up to 1,000 p.p.m, in the final product ⁴⁾
- 4) to be considered by the CCFA
4. Principal characteristics of the whey cheese ready for consumption
 - 4.1 Type
 - 4.1.1 Consistency: semi-hard
 - 4.1.2 Short description: Gudbrandsdalsost is a cream whey cheese which is ready for consumption as soon as it is manufactured. The taste is mild and sweet with a flavour of goat's milk
 - 4.2 Shape: rectangular block
 - 4.3 Dimensions and weights
 - 4.3.1 Dimensions: various
 - 4.3.2 Weights: 0,225 kg. to 4 kg.
Usual weight: 1 kg.
 - 4.4 Rind
 - 4.4.1 Consistency: semi-hard (like inside)
 - 4.4.2 Appearance: dry, with or without wax or plastic film
 - 4.4.3 Colour: light brown to brown
 - 4.5 Body
 - 4.5.1 Texture: semi-hard, suitable for cutting
 - 4.5.2 Colour: light brown to brown
 - 4.6 Holes: none
 - 4.7 Minimum fat content in dry matter: 35%
 - 4.8 Minimum dry matter content: 80 % (the dry matter content includes the lactose as lactose hydrate)
 - 4.9 Other principal characteristics: no fermentation or ripening takes place

5. Method of manufacture

5.1 Heat treatment

5.1.1 Heat treatment of the milk: pasteurized, rennetting temperature 30-32°C.

5.1.2 Heat treatment of coagulum: the curd is normally heated to 38°C. The whey, not the coagulum, is used for manufacture of Gudbrandsdalsost

5.2 Other principal characteristics: a mixture of whey, milk and cream from cow's milk and goat's milk is concentrated and the concentrate formed in rectangular blocks

6. Sampling and analysis

6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", paragraph 7, "Sampling of cheese".

7. Marking and labelling

Only cheese conforming with this standard may be designated "Gudbrandsdalsost". It shall be labelled in conformity with the FAO/WHO Standard A. 7 for Whey Cheeses. Gudbrandsdalsost not produced in the country of origin must be marked with the name of the producing country even when sold on the home market

Draft International Individual Standard for
HARZER KÄSE

1. Designation of cheese
Harzer Käse (Synonym: Mainzer Käse)
2. Depositing country
Federal Republic of Germany
3. Raw material
 - 3.1 Kind of milk: cow's milk, skimmed, pasteurized
 - 3.2 Authorised additions
 - 3.2.1 Necessary additions:
 - cultures of harmless lactic acid producing bacteria (starter) and cultures of Bacterium linens
 - sodium carbonate and calcium carbonate to be added to the drained acid curd (quarg): max. 3 % by weight of acid curd 4)
 - sodium chloride
 - 3.2.2 Optional additions: cumin seeds
- 4) to be considered by the CCFA
4. Principal characteristics of the cheese ready for consumption
 - 4.1 Type
 - 4.1.1 Consistency: soft
 - 4.1.2 Short description: ripened acid curd cheese that has a piquant flavour and a surface covered with smear
 - 4.2 Shape : various
 - 4.3 Dimensions and weights
 - 4.3.1 Dimensions : various
 - 4.3.2 Weights: 25-125 g.
 - 4.4 Rind
 - 4.4.1 Consistency: soft
 - 4.4.2 Appearance : smooth) with smear
 - 4.4.3 Colour: yellowish to reddish yellow
 - 4.5 Body
 - 4.5.1 Texture: flexible, firm
 - 4.5.2 Colour: whitish to slightly yellowish
 - 4.6 Holes : none
 - 4.7 Minimum fat content in dry matters: between nil and 10 % maximum

- 4.8 Maximum moisture content : 68.0 %
- 4.9 Other principal characteristics: flavour: development of the typical flavour brought about "by ripening with bacteria producing red and yellow smear
5. Method of manufacture
- 5.1 Method of coagulation: lactic acid
- 5.2 Heat treatment
- 5.2.1 Heat treatment of the milk: see 3.1
- 5.2.2 Heat treatment of the coagulum: scalding until drained acid curd is obtained
- 5.3 Fermentation procedure: the drained acid curd is put in bags or cloths and pressed in order to remove the whey. Special draining drums are also used for this purpose
- 5.4 Maturation procedure: the drained acid curd is mixed with sodium carbonate, calcium carbonate and sodium chloride (as mentioned under 3.2.1), moulded, inoculated with bacteria producing red and yellow smear and ripened for approx. 3 days, at temperatures between 16 and 22°C and at a very high relative humidity. The ripening lasts for 5-15 days, depending on local storage conditions
- 5.5 Other principal characteristics
- Packing: parchment paper, cellulose hydrate or similar packing materials. A number of single cheeses of 125 g. - 250 g units are put in boxes or cartons holding 1.5 - 3 kg.
6. Sampling and analysis
- 6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", clause 7.2 (c), "Taking a complete cheese as a sample".
- 6.2 Determination of fat content: according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products".
7. Marking and labelling
- Only cheese conforming with this standard may be designated "Harzer Käse" or "Mainzer Käse". It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A. 6.

Draft International Individual Standard for
HERRGÅRDSOST

1. Designation of cheese

Herrgårdssost

2. Depositing country

Sweden (country of origin)

3. Raw Materials

3.1 Kind of milk: cow's milk

3.2 Authorized' additions

3.2.1 Necessary additions

- sodium chloride
- cultures of harmless lactic acid producing bacteria (starter)
- rennet or other suitable coagulating enzymes

3.2.2 Optional additions

- annatto ²⁾ and carotene ¹⁾, max. 0.06% by weight of the cheese
- calcium chloride, max. 0.02 % by weight of the milk used ¹⁾
- sodium dihydrogen phosphate ⁴⁾
- sodium and potassium salts of nitric acid, max. 0.02 % by weight of the milk: used ³⁾
- water

1) endorsed by the Codex Committee on Food Additives (CCFA)

2) temporarily endorsed by the CCFA

3) not endorsed by the CCFA pending further consideration

4) to be considered by the CCFA

4. Principal characteristics of the cheese ready for consumption

4.1 Type

4.1.1 Consistency: hard

4.1.2 Short description: 10-15 kg. cheese with round holes evenly distributed

Tastes: when fresh - mild

when aged - aromatic, slightly nut-like

4.2 Shape

4.2.1 Usual shape: flat cylinder with slightly convex sides

4.2.2 Authorized variation: block

4.3 Dimensions and weights

4.3.1 Usual dimensions: cylinder: diameter: 35 cm.
height: 10-14 cm.
block: 36 x 36 x 10 cm

4.3.2 Usual weights: cylinder: 10-12 kg.
block : 12-15 kg.

4.4 Rind

4.4.1 Consistency: hard, resilient, dry (paraffin); rindless (in film)

4.4.2 Appearance: smooth

4.4.3 Colour: light yellow to yellow

4.5 Body

4.5.1 Texture: firm (for cutting), uniform

4.5.2 Colour: uniform, light yellow - straw

4.6 Holes

4.6.1 Distribution: even

4.6.2 Shape: round, regular

4.6.3 Size: 10-20 mm.

4.7/4.8 Minimum fat contents in dry matter and maximum moisture contents

	A Herrgårdssost	B Herrgårdssost 30 %	C Herrgårdssost 40 %
Minimum fat in dry matter %	45	30	40
Maximum moisture content %	39	46	42
Minimum dry matter content %	61	54	58

4.9 Other principal characteristics: mild, mellow, nutty

5. Method of manufacture

5.1 Method of coagulation: rennet or other suitable coagulating enzymes

5.2 Boast treatment

5.2.1 Heat treatment of the milk: pasteurized - rennetting is done at 30-32°C.

5.2.2 Heat treatment of the coagulum: 42-45°C

5.3 Fermentation procedure: lactic acid

5.4 Maturation procedure: in store for more than 3 months at temperatures between 18°C and 10°C and with a relative humidity not exceeding 80%

5.5 Other principal characteristics: the curd is pressed in the vat under the surface of the whey; the cheese is salted in brine

6. Sampling and analysis

6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", paragraph 7, "Sampling of cheese"

6.2 Determination of fat content : according to FAO/WHO Standard B.3, "Determination of the Fat Content of Choose and of Processed Cheese Products"

7. Marking and labelling

Only cheese conforming with this standard may be designated "Herrgårdsost". It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A.6, "General Standard for Cheese"

The cheese listed under B and C in 4.7 / 4.8 may be designated "Herrgårdsost" provided that the designation is accompanied by a suffix corresponding to the minimum fat percentage in the dry matter, e.g. Herrgårdsost 30 %

Draft International Individual Standard for
HUSHÅLLSOST

1. Designation of cheese

Hushållsost

2. Depositing country

Sweden (country of origin)

3. Raw materials

3.1 Kind of milk: cow's milk

3.2 Authorised additions

3.2.1 Necessary additions

- sodium chloride
- cultures of harmless lactic acid producing bacteria (starter)
- rennet or other suitable coagulating enzymes

3.2.2 Optional additions

- calcium chloride, max. 0.02% by weight of the milk used 1)
- sodium dihydrogen phosphate 4)
- sodium and potassium salts of nitric acid, max. 0.02 % by weight of the milk used 3)
- annatto 2) and carotene 1), max. 0.06 % by weight of the cheese
- water
- caraway seeds and cloves (for a spiced variant)

1) endorsed by the Codex Committee on Food Additives (CCFA)

2) temporarily endorsed by the CCFA

3) not endorsed by the CCFA pending further consideration

4) to be considered by the CFA

4. Principal characteristics of the cheese ready for consumption

4.1 Type

4.1.1 Consistency: semi-hard

4.1.2 Short description: a small cylindrical cheese with evenly distributed round or irregular holes, smooth consistency, mild slightly acid flavour, ready for consumption at young, age

4.2 Shape

4.2.1 Usual shape: cylinder

4.3 Dimensions and weights

4.3.1 Usual dimensions: diameter: 15 cm. - height: 10-17 cm.

4.3.2 Usual weights: 1, 2 or 3 kg,

- 4.4 Rind
 - 4.4.1 Consistency: hard, resilient
 - 4.4.2 Appearance: dry (paraffin)
 - 4.4.3 Colour: straw yellow to yellow
- 4.5 Body
 - 4.5.1 Texture: firm (for cutting), uniform, slightly pliable
 - 4.5.2 Colour: uniform, light yellow – straw
- 4.6 Holes
 - 4.6.1 Distribution: even
 - 4.6.2 Shape: round or irregular
 - 4.6.3 Size: round holes: 3 - 10 mm.; irregular holes: pin head to rice

4.7/4.8 Minimum fat contents in dry matter and maximum moisture contents

	A Hushållsost	B Hushållsost 60 %	C Hushållsost 50 %
Minimum fat in dry matter %	45	60	50
Maximum moisture Content %	43	40	42
Minimum dry matter Content %	57	60	58

- 4.9 Other principal characteristics: mild, slightly lactic flavour
- 5. Method of manufacture
 - 5.1 Method of coagulation: rennet or other suitable coagulating enzymes
 - 5.2 Heat treatment
 - 5.2.1 Heat treatment of the milk: pasteurized - rennetting is done at 30-32°C.
 - 5.2.2 Heat treatment of the coagulum: 35-40°C.
- 6. Sampling and analysis
 - 6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", paragraph 7, "Sampling of cheese"
 - 6.2 Determination of fat content: according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products"

7. Marking and labelling

Only cheese conforming with this standard may be designated "Hushållsost". It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A,6, "General Standard for Cheese"

The cheese listed under B and C in 4.7 / 4.8 may be designated "Hushållsost" provided that the designation is accompanied by a suffix corresponding to the minimum fat percentage in the dry matter, e.g. Hushållsost 60 %

The spiced cheese may be designated "Hushållsost" provided that the designation is accompanied by the prefix "Spiced"

Draft International Individual Standard for
NORVEGIA

1. Designation of the cheese

Norvegia

2. Depositing country

Norway (country of origin)

3. Raw materials

3.1 Kind of milk: cow's milk

3.2 Authorized additions

3.2.1 Necessary additions

- rennet or other suitable coagulating enzymes
- cultures of harmless lactic acid producing bacteria (starter)
- sodium chloride

3.2.2 Optional additions

- calcium chloride, max. 0.02 % by weight of the milk used ¹⁾
- sodium and potassium salts of nitric acid, max. 0.02 % by weight of the milk used ³⁾
- annatto ²⁾ and carotene ¹⁾, max. 0.06 % by weight of the cheese
- sodium dihydrogen phosphate ⁴⁾
- water

1) endorsed by the Codex Committee on Food Additives (CCPA)

2) temporarily endorsed by the CCFA

3) not endorsed by the CCFA pending further consideration

4) to be considered by the CCFA

4. Principal characteristics of the cheese ready for consumption

4.1 Type

4.1.1 Consistency: semi-hard

4.1.2 Short description: mild taste; Norvegia cheese is normally not marketed before it is 6 weeks old

4.2 Shape

4.2.1 Cylindrical with convex sides

4.2.2 Rectangular block (rindless)

4.3 Dimensions and weights

4.3.1 Dimensions

- a) Flat cylinder: diameter: 25-37 cm.
height: 6-12 cm.
- b) Flat, small cylinder: diameter: 10-14 cm.
Height: 4-6 cm. ("Baby
Norvegia")
- c) Rectangular block: various ("Rindless Norvegia")

4.3.2 Weights

- a) Flat cylinder: 4-12 kg.
- b) Flat, small cylinder: 0,5 kg. approx. ("Baby
Norvegia")
- c) Rectangular block: various ("Rindless Norvegia")

4.4 Rind

4.4.1 Consistency: hard. Rindless Norvegia cheese: semi-hard, like inside

4.4.2 Appearance: dry, with or without wax or plastic coating. Rindless Norvegia cheese: like inside, with or without plastic film

4.4.3 Colour: light yellow. Rindless Norvegia cheese: with or without plastic film

4.5 Body

4.5.1 Texture: semi-hard, suitable for cutting

4.5.2 Colour: light yellow

4.6 Holes

4.6.1 Distribution: from few to many, evenly distributed

4.6.2 Shape: round

4.6.3 Size: mainly from 5 to 10 mm.

4.6.4 Appearance: mat, smooth

4.7 Minimum fat content in dry matter: 45 %

4.8 Minimum dry matter content: a) 56 %
b) 53 % for cheese with the prefix "Baby"

4.9 Other principal characteristics: none

5. Method of manufacture

- 5.1 Method of coagulation : rennet or other suitable coagulating enzymes
- 5.2 Heat treatment:
 - 5.2.1 Heat treatment of milk: pasteurised Temperature of rennetting: 30 - 32°C
 - 5.2.2 Heat treatment of the coagulum: the curd is heated with or without the aid of hot water to approx. 38°C
- 5.3 Fermentation procedure: lactic acid fermentation
- 5.4 Maturation procedure: preferably between 8 and 2.2°C
- 5.5 Other principal characteristics: salted in brine

6. Sampling and analysis

- 6.1 Sampling: according to FAO/WHO Standard B.1, "Sampling Methods for Milk and Milk Products", paragraph 7, "Sampling of cheese"
- 6.2 Determination of fat content: according to FAO/WHO Standard B.3, "Determination of the Fat Content of Cheese and of Processed Cheese Products"

7. Marking and labelling

Only cheese conforming with this standard may be designated "Norvegia". It shall be labelled in conformity with the appropriate sections of Article 4 of FAO/WHO Standard A.6, "General Standard for Cheese", except that Norvegia not produced in the country of origin must be marked with the name of the producing country even when sold on the home market.

The cheese mentioned under 4.3.1 (b), 4.3.2 (b) and 4.8 (b) may be designated "Norvegia" provided that the designation is accompanied by the prefix "Baby", The cheese mentioned under 4.2.2, 4.3.1 (c) and 4.3.2 (c) may be designated "Norvegia" provided that the designation is accompanied by the prefix "Rindless".

Submitted to governments for comments

PROPOSED AMENDMENTS

TO

ADOPTED INTERNATIONAL INDIVIDUAL CHEESE STANDARDS

CHESHIRE

The Committee agreed to the following amendment of the standard proposed by the Government of the United Kingdom:

4.4.2 should be amended to read :

"Appearance: smooth, sometimes cloth wrapped, and may be wax or plastic coated

GRUYERE

The Committee agreed to the following amendment of the standard proposed by the Government of Switzerland:

4.2 should be amended to read:

"Shape : round loaf or blocks"

EDAM

The Government of the Netherlands has proposed to insert provisions into the standard for :

a flat block, and

a rindless variety

GOUDA

The Government of the Netherlands has proposed to insert provisions into the standard for :

a rindless variety

Submitted to governments for acceptance

STANDARD A-2 (1968)

STANDARD
FOR
BUTTERFAT, BUTTER-OIL
(ANHYDROUS)

1. DESCRIPTION

Butterfat, anhydrous butterfat, butter-oil and anhydrous butter-oil are products exclusively obtained from butter or cream and resulting from the removal of practically the entire water and solids-not-fat content.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Butterfat or Butter-oil

- a) milk fat content : not less than 99.3 %
- b) water content : not more than 0.5 %

2.2 Anhydrous Butterfat or Anhydrous Butter-oil

when labelled as such :

- a) milk fat content : not less than 99.6 %
- b) water content : less than 0.2 %

3. FOOD ADDITIVES

The following provisions in respect of food additives are subject to endorsement by the Codex Committee on Food Additives *)

*) While the Codex Committee on Food Additives at its Fourth Session postponed a decision regarding the endorsement of these additives, it recommended that the maximum level of use for gallates should be restricted to 100 mg/kg total.

Antioxydants

Propyl, octyl and dodecyl gallates,
BHT, BHA,
individually or in combination.

The use of these antioxydants is restricted to products which are not for direct consumption nor for use in making reconstituted milk or milk products.

maximum level of use

200 mg/kg

4. LABELLING

4.1 The provisions of paragraphs 2.1 to 2.9, 2.11 and 2.12 of the General Standard for Labelling of Pre-packaged Foods apply.

4.2 The following specific provisions in respect of the labelling of products complying with paragraph 2.2 of this Standard are subject to endorsement by the Codex Committee on Food Labelling:

The use of the designation "anhydrous" shall be restricted to products as specified under 2.2.

5. METHODS OF SAMPLING AND ANALYSIS

- 5.1 Sampling: according to FAO/WHO Standard B-1, "Sampling Methods for Milk and Milk Products".
- 5.2 Determination of acid value: according to FAO/WHO Standard B-4, "Determination of the Acid Value of Fat from Butter".
- 5.3 Determination of refractive index: according to FAO/WHO Stand- and B-5, "Determination of the Refractive Index of Fat from Butter".

Submitted to governments for comments

STANDARD A-3 (1968)

DRAFT STANDARD
FOR
EVAPORATED MILK
AND
EVAPORATED SKIMMED MILK

1. DESCRIPTION

Evaporated milk is a liquid product, obtained by the partial removal of water only from milk.

Evaporated skimmed milk is a liquid product, obtained by the partial removal of water only from skimmed milk.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Evaporated milk

- | | | |
|--------------------------|---|---------------------|
| a) milk fat content | : | not less than 7.8% |
| b) milk solids content | : | not less than 25.9% |
| Evaporated skimmed milk. | | |
| - milk solids content | : | not less than 200% |

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as referred to "below have been endorsed by the Codex Committee on Food Additives:

Stabilizers

Maximum level of use

The sodium and calcium salts of:

hydrochloric acid		0.5 %
citric acid		
carbonic acid		
orthophosphoric acid		
polyphosphoric acid		
(as linear phosphate with a degree of polymerisation up to 6 units)		
as a whole in the final product (as anhydrous substances)		

4. LABELLING

- 4.1 The provisions of paragraphs 2.1 to 2.9, 2.11 and 2.12 of the General Standard for Labelling of Pre-packaged Foods apply.
- 4.2 With regard to the name of the food (paragraph 2.1 of the General Standard for Labelling of Pre-packaged Foods) the following synonymous designations may be used:

	Evaporated -whole milk
	Evaporated full cream milk
for : Evaporated milk	Unsweetened condensed whole milk
	Unsweetened full cream condensed milk
for : Evaporated skimmed milk	Unsweetened condensed skimmed milk

5. METHODS OF SAMPLING AND ANALYSIS

- 5.1 Sampling: according to FAO/WHO Standard B-1, "Sampling Methods for Milk and Milk Products", paragraph 4, "Sampling of condensed milk and evaporated milk" •
- 5.2 Determination of fat content: according to FAO/WHO Standard E-7, "Determination of the Fat Content of Evaporated Milks and of Sweetened Condensed Milks".

DRAFT GENERAL STANDARDS
FOR
PROCESS (ED) CHEESE PRODUCTS
SUBMITTED
TO
GOVERNMENTS
FOR
COMMENTS

- A. DRAFT GENERAL STANDARD FOR PROCESS (ED) CHEESE - A-8(a)
- B. DRAFT GENERAL STANDARD FOR 'MELTED CHEESE' AND 'SPREADABLE MELTED CHEESE' - A-8(b)
- C. DRAFT GENERAL STANDARD FOR PROCESS (ED) CHEESE FOOD OR PROCESS (ED) CHEESE SPREAD - A-8(c)

APPENDIX VII-A

DRAFT STANDARD A-8(a) (1968)

DRAFT GENERAL STANDARD
FOR
PROCESS (ED) CHEESE

1. Definition

Process (ed) cheese 'is made by grinding, mixing, melting and emulsifying with the aid of heat and emulsifying agents one or more varieties of cheese, with or without the addition of foodstuffs.

2. Emulsifying Agents

2.1 Not more than a total of 3 percent may be used.

2.1.1 The sodium, sodium-aluminium, potassium and calcium salts of the mono-, di- and polyphosphoric acids.

2.1.2 The sodium, potassium and calcium salts of citric acid.

2.1.3 Citric acid and/or phosphoric acid with sodium bicarbonate and/or calcium carbonate so that the resulting salts are within the limits specified in 2.1,

2.2 Percentages refer to anhydrous emulsifying agents by weight of the finished products.

3. Optional Ingredients

3.1 Cream, butter and butter-oil may be added in quantities to ensure compliance with the minimum fat requirements.

3.2 Salt (sodium chloride).

3.3 Spices and other vegetable seasonings in sufficient quantity to characterise the product.

3.4 Natural foodstuffs other than milk products, properly cooked or otherwise prepared, including permissible additives, for flavouring purposes, in sufficient quantity to characterise the product; the dry matter not to exceed 1/6 of the weight of the total solids of the finished product.

4. Optional Food Additives

4.1 The following natural colouring matters may be used :

annatto, carotene, chlorophyll, riboflavin, oleoresin of paprika, curcumine.

4.2 Sodium bicarbonate, calcium carbonate, calcium chloride.

4.3 Citric acid, phosphoric acid, acetic acid, vinegar and lactic acid used as acidifying agents within the limits of 2., "Emulsifying Agents" above.

4.4 Sorbic acid and its sodium and potassium salts up to a maximum of 2,000 p.p.m. in the finished product, or propionic acid and its sodium and calcium salts up to a maximum of 3,000 p.p.m. in the finished product, or a mixture up to a maximum of 2,000 p.p.m. in the finished product.

4.5 Nisin up to a maximum of 100 p.p.m. in the finished product.

5. Heat Treatment

During its manufacture process (ed) cheese shall be heated to a temperature of 70° C for 30 seconds, or any other equivalent or greater time/temperature combination.

6. Composition and Designation

6.1 Process (ed) cheese, the designation of which includes a single variety name:

6.1.1 shall contain only the variety mentioned in the name, with the exception of Gruyère and Emmental which are interchangeable;

6.1.2 shall have a milk fat content in the total dry matter not less than that prescribed in the international individual standard for that variety;

6.1.3 shall have a minimum total dry matter content of not less than 4 % below that prescribed in the international individual standard for that variety, except in the cases of Gruyère, Emmental or Appenzeller, where the dry matter content shall be at least 52 %.

6.2 Process (ed) cheese, the designation of which includes two or more variety names:

6.2.1 shall contain cheese only of the varieties named;

6.2.2 shall have a milk fat content in the total dry matter not less than the arithmetical average of the minimum milk fat requirements prescribed in the international individual standards for the varieties used;

6.2.3 shall have a minimum total dry matter content of not less than the arithmetical average minimum content prescribed in the international individual standard for the varieties used.

6.2.4 when two or more varieties of cheese are used in process (ed) cheese, each variety present shall be used in sufficient quantity to impart the flavour or characteristics of that variety.

6.3 Process (ed) cheese, the designation of which includes the name of a variety for which there is no international individual standard, or which is not designated by a variety name:

6.3.1 shall have a minimum dry matter content related to the declared minimum milk fat in dry matter, as follows:

<u>Milk fat in dry matter (FDB) %</u>	<u>Dry matter %</u>
65	 53 or above 51 49
60	
55	
50	
45	
40	
35	

30	47
25	45
20	43
15	42
10	41
less than 10	39

7. Marking and Labelling

The original pack of products shall carry the following declarations in clearly visible characters:

7.1 Designation of the product

- 7.1.1 The name of a product made from a single variety and designated by a variety name shall be "Process (ed) ----- Cheese", the blank being filled with the name of the variety of cheese used.
- 7.1.2 The name of a product made from two or more varieties of cheese and designated by variety names shall be "Process (ed) ----- and ----- Cheese", the blanks being filled with the names of the varieties of cheese used, in order of predominance by weight.
- 7.1.3 The name of a product which does not bear the variety name of a cheese shall be "Processed) Cheese".
- 7.1.4 In case the process (ed) cheese above includes spices or natural foodstuffs, the name of the product shall be one applicable above followed by the term "with -----", the blank being filled with the common or usual name or names of the spices or natural foodstuffs used, in order of predominance by weight.

7.2. Other labelling requirements

- 7.2.1 The milk fat content shall be declared, except in those cases where processed) cheese carries the name of a variety covered by an international individual cheese standard.
- 7.2.2 When the food additives permitted according to 4.4 are used they shall be listed on the package.
- 7.2.3 The net weight, except on individual portions not intended for separate sale, shall be declared.
- 7.2.4 The name and address of the manufacturer, packer, distributor, importer, exporter or vendor or the product shall be mentioned, except on individual portions not intended for separate sale, in which case the mention may be replaced by a trademark or other indication of the manufacturer, or importer, or seller.
- 7.2.5 The name of the producing country shall be mentioned (for export only).

APPENDIX VII-B

DRAFT STANDARD A-8(b) (1968)

DRAFT GENERAL STANDARD
FOR
"MELTED CHEESE" AND "SPREADABLE MELTED CHEESE"

1. Definition

"Melted cheese" and "Spreadable melted cheese" are made by grinding, mixing, melting and emulsifying with the aid of heat and emulsifying agents one or more varieties of cheese, with or without the addition of milk solids and/or other foodstuffs.

2. Emulsifying Agents

2.1 Not more than a total of 4 percent may be used. Not more than 3 percent can be mono-, di- and polyphosphates,

2.1.1 The sodium, sodium-aluminium, potassium and calcium salts of the mono-, di- and polyphosphoric acids,

2.1.2 The sodium, potassium and calcium salts of citric acid.

2.1.3 Citric acid and/or phosphoric acid with sodium bicarbonate and/or calcium carbonate, so that the resulting salts are within the limits specified in 2.1.

2.2 Percentages refer to anhydrous emulsifying agents by weight of the finished products.

3. Optional Ingredients

3.1 Cream, butter and butter-oil may be added in quantities to ensure compliance with the minimum fat requirements.

3.2 Milk solids may be added to a maximum total lactose content in the final product of 2 1/2% if a variety name is used, or of 5 % if no variety name is used.

3.3 Salt (sodium chloride).

3.4 Spices and other vegetable seasonings in sufficient quantity to characterize the product.

3.5 Natural foodstuffs other than milk products properly cooked or otherwise prepared, including permissible additives, for flavouring purposes, in sufficient quantity to characterise the product; the dry matter not to exceed 1/6 of the weight of the total solids of the finished product.

4. Optional Food Additives

4.1 The following natural colouring matters may be used :

annatto, carotene, chlorophyll, riboflavin, oleoresin of paprika, curcumine.

4.2 Sodium bicarbonate, calcium carbonate, calcium chloride.

- 4.3 Citric acid, phosphoric acid, acetic acid, vinegar and lactic acid used as acidifying agents within the limits of 2. , "Emulsifying Agents" above.
 - 4.4 Sorbic acid and its sodium and potassium salts up to a maximum of 2,000 p.p.m. in the finished product, or propionic acid and its sodium and calcium salts up to a maximum of 3,000 p.p.m. in the finished product, or a mixture up to a maximum of. 2,000 p.p.m. in the finished product.
 - 4.5 Nisin up to a maximum of 100 p.p.m. in the finished product.
5. Heat Treatment
- During its manufacture melted cheese and spreadable melted cheese shall be heated to a temperature of 70° C for 30 seconds, or any other equivalent or greater time/temperature combination.
6. Composition and Designation
- 6.1 "Melted cheese" and "Spreadable melted cheese", the designation of which includes a single variety name:
 - 6.1.1 shall contain not less than 75 % by weight of that variety and the remainder must be cheese of a similar variety, provided that this does not it change the characteristics of the product made from the main cheese; for the purposes of this paragraph Gruyère and Emmental may be used interchangeably.
 - 6.1.2 shall have a milk fat content in the total dry matter of not less than that prescribed for that variety;
 - 6.1.3 shall have a minimum total dry matter content as given under 6.3; for malted cheese bearing the name Emmental, Gruyère and/or Appenzeller cheese, the minimum dry matter content shall be not leas than 52 %; for melted cheese bearing the- name of Edam or Gouda, the dry matter content shall be at least 51 % and 53 % respectively.
 - 6.2 "Melted cheese" and "Spreadable melted cheese", the designation of Which includes two or more variety names of cheeses covered by international individual standards:
 - 6.2.1 shall contain cheese only of the varieties named;
 - 6.2.2 shall have a milk fat content in the total dry matter not less than the arithmetical average of the minimum milk fat requirements of the varieties used;
 - 6.2.3 shall have a total dry matter content not less than the arithmetical average minimum content as prescribed under 6.3.
 - 6.2.4 When two or more varieties of cheese are used, each variety shall be used in sufficient quantity to impart the flavour or characteristics of that variety.
 - 6.3 "Melted cheese" and "Spreadable melted cheese", the designation of which includes the name of a variety for which there is no international individual standard, or which is not designated by a variety name:

shall have a minimum dry matter content related to the declared minimum milk fat in dry matter content, as follows :

<u>Milk fat in dry matter</u> (FDB) %	<u>Dry matter %</u> <u>Melted cheese</u>	<u>Dry matter %</u> <u>Spreadable</u> <u>melted cheese</u>
65	53	45
60	52	44
55	51	44
50	50	43
45	48	41
40	46	39
35	44	36
30	42	33
25	40	31
20	38	29
15	37	29
10	36	29
less than 10	34	29

7. Marking and Labelling

The original pack of products shall carry the following declarations in clearly visible characters:

7.1 Designation of the product

7.1.1 The name of a product made from a single variety and designated by a variety name shall be "Melted ----- Cheese" or "Spreadable Melted -----Cheese" as applicable, the blanks being filled with the name of the variety of cheese used.

7.1.2 The name of a product made, from two or more varieties of cheese and designated by a variety name, shall be "Melted ----- and ----- Cheese", or "Spreadable Melted ----- and ----- Cheese" as applicable, the blanks being filled with the names of the varieties of cheese used, in order of predominance by weight.

7.1.3 The name of a product which does not bear the variety name of a cheese shall be "Melted Cheese" or "Spreadable Melted Cheese" as applicable.

7.1.4 In case the "Melted Choose" or "Spreadable Melted Cheese" above includes spices or natural foodstuffs," the name of the product shall be one applicable above followed by the term "with -- -----", the blank being filled with the common or usual name or names of the spices or natural foodstuffs used, in order of predominance by weight.

7.2 Other labelling requirements

7.2.1 The milk fat content shall be declared, except in those cases where "Melted Cheese" or "Spreadable Melted Cheese" carries the name of a variety covered by "an international individual cheese standard.

- 7.2.2 Milk solids added in accordance with 3.2 shall be declared.
- 7.2.3 When the food additives permitted according to 4.4 are used, they shall be listed on the package.
- 7.2.4 The net weight, except on individual portions not intended for separate sale, shall be declared.
- 7.2.5 The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the product shall be mentioned, except on individual portions not intended for separate sale, in which case the mention may be replaced by a trademark or other indication of the manufacturer, or importer, or seller.
- 7.2.6 The name of the producing country shall be mentioned (for export only).

APPENDIX VII-C

DRAFT STANDARD A-8(c) (1968)

DRAFT GENERAL STANDARD
FOR
PROCESS (ED) CHEESE FOOD
OR
PROCESS (ED) CHEESE SPREAD

1. Definition

Process (ed) cheese food or process (ed) cheese spread is made by-grinding, mixing, melting, and emulsifying with the aid of heat and emulsifying agents one or more varieties of cheese, including one or more milk products in liquid, dry, condensed or fermented form, with or without the addition of foodstuffs.

2. Emulsifying Agents

2.1 Not more than a total of 4 percent may be used- Not more than 3 percent can be mono-, di- and polyphosphates.

2.1.1 The sodium, sodium-aluminium, potassium and calcium salts of mono-, di- and polyphosphoric acids.

2.1.2 The sodium, potassium and calcium salts of citric acid.

2.1.3 Citric acid, and/or phosphoric acid with sodium bicarbonate and/or calcium carbonate so that the resulting salts are within the limits specified in 2.1.

2.2 Percentages refer to anhydrous emulsifying agents by weight of the finished product.

3. Optional Ingredients

3.1 Salt (sodium chloride).

3.2 Spices and other vegetable seasonings in sufficient quantity to characterize the product.

3.3 Natural foodstuffs properly cooked or otherwise prepared, including permissible additives, for flavouring purposes, in sufficient quantity to characterize the product.

4. Optional Food Additives

4.1 The following natural colouring matters may be used :

annatto, carotene, chlorophyll, riboflavin, oleoresin of paprika, curcumine.

4.2 Sodium bicarbonate, calcium carbonate, calcium chloride.

4.3 Citric acid, phosphoric acid, acetic acid, vinegar and lactic acid used as acidifying agents within the limits of 2., "Emulsifying Agents" above.

4.4 Sorbic acid and its sodium and potassium salts up to a maximum of 2,000 p.p.m in the finished product, or propionic acid and its sodium and calcium salts up to a maximum of 3,000 p.p.m in the finished product, [or a mixture up to a maximum of 2,000 p.p.m. in the finished product.]

- 4.5 Nisin up to a maximum of 100 p.p.m, in the finished product.
- 4.6 One or more of the following vegetable gums and related water binding substances may be used, but not in excess of a total of 0.8% by weight of the finished product :

locust bean gum, carob bean gum, gum karaya, guar gum, oat gum, gum tragacanth, agar-agar, algin (sodium alginate), carrageenan, carboxymethyl-cellulose (cellulose gum), algin derivative (propylene glycol ester of alginic acid), pectin and gelatin.

5. Heat Treatment

During its preparation the process (ed) cheese food or process (ed) cheese spread shall be heated to 70° C for 30 seconds, or any other equivalent or greater time/temperature combination.

6. Composition and Designation

6.1 "Process (ed) cheese food" or "Process (ed) cheese spread" shall not be designated by a variety name. However, the variety name (s) may be given in the ingredients list.

6.1.1 The minimum dry matter content shall be related to the declared minimum milk fat in dry matter, as follows :

<u>Milk fat in dry matter (FDB) %</u>	<u>Dry matter %</u>
65	45
60	44
55	44
50	43
45	41
40	39
35	36
30	33
25	31
20	29
15	29
10	29
less than 10	29

6.1.2 At least 51% of the dry matter of the finished product shall be derived from cheese.

7. Marking and Labelling

The original pack of products shall carry the following declarations in clearly visible characters:

7.1 Designation of the product

7.1.1 "Process (ed) Cheese Food" or "Process (ed) Cheese Spread".

7.1.2 In case the products include spices and natural foodstuffs, the name of the product shall be the one applicable above followed by the term "with -----", the blank being filled with the common or

usual name or names of the spices or foodstuffs used, in order of predominance by weight.

7.2 Other labelling requirements

7.2.1 All cheese varieties [and milk products] used shall be listed in descending order of predominance by weight.

7.2.2 The minimum milk fat content shall be declared on the label in multiples of 5 % the figure used to be that of the 5% multiple below the actual composition.

*)

7.2.3 The net weight, except on individual portions not intended for separate sale, shall be declared.

7.2.4 The name and address of the manufacturer, packer, distributor, importer, exporter or vendor Of the product shall be mentioned, except on individual portions not intended for separate sale, in which case the mention may be replaced "by a trademark or other indication of the manufacturer, or importer, or seller.

7.2.5 The name of the producing country shall be mentioned (for export only).

*)

.... [When the food additives permitted according to 4.4 are used they shall be listed on the package.]

Submitted to governments for comments

DRAFT STANDARD A-9 (1968)

DRAFT STANDARD
FOR
CREAM

1. Definition

Cream is the liquid milk product rich in fat separated from milk, which takes the form of an emulsion of the fat-in-water type.

2. Composition and Designations

A product conforming to the definition shall not be designated "cream" unqualified unless it has a fat content of not less than 18 %. The word "cream" shall not be used for a product, conforming to the definition, with a fat content of less than 10 %. A product conforming to the definition with a fat content which is less than 18 % but not less than 10 % shall not be designated "cream" unless the word "cream" is appropriately qualified.

3. Labelling

The product shall be marked clearly, legibly and prominently displayed, with :

- 3.1 The name of the product (e.g. CREAM), including, in the case of products containing less than 18 % and not less than 10 % fat, appropriate qualifying words (e.g. HALF CREAM)
- 3.2 The net contents of the container
- 3.3 The percentage of milk fat by weight in the product.

4. Methods of Sampling; and Analysis

- 4.1 Sampling : according to FAO/WHO Standard B-1, "Sampling Methods for Milk and Milk Products", paragraph 3, "Sampling of milk and liquid milk products".

Submitted to governments for comments

DRAFT STANDARD A-10 (1968)

DRAFT STANDARD
FOR
HIGH FAT MILK POWDER
HALF^{*)} CREAM POWDER
AND
CREAM POWDER

1. DESCRIPTION

High fat milk powder, half^{*)} cream powder and cream powder are the milk products obtained by the removal of only water from high fat milk or cream and containing not less than 40%, 50% or 65 % by weight of milk fat respectively in the product.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 High fat milk powder

- a) milk fat content : not less than 40 % up to, but not including, 50 %
- b) water content : not more than 5 %

2.2 Half^{*)} cream powder

- a) milk fat content : not less than 50 % up to, but not including, 65 %
- b) water content : not more than 5 %

2.3 Cream powder

- a) milk fat content : not less than 65 %
- b) water content : not more than 5 %

*) The term "half" serves as an example for any other appropriate qualifying term.

3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as referred to below have been endorsed by the Codex Committee on Food Additives:

<u>Stabilizers</u>	<u>maximum level of use</u>
the sodium and calcium salts of :	
hydrochloric acid	
citric acid	
carbonic acid	
orthophosphoric acid	
polyphosphoric acid	0,5 %
(as linear phosphate with a degree of polymerisation up to 6 units)	
as a whole in the final product (as. anhydrous substances)	

4. LABELLING

The provisions of paragraphs 2.1 to 2.9, 2.11 and 2.12 of the General Standard for Labelling of Pre-packaged Foods apply.

5. METHODS OF SAMPLING AND ANALYSIS

5.1 Sampling: according to FAO/WHO Standard B-I, "Sampling Methods for Milk and Milk Products", paragraph 5, "Sampling of dried milk and dried milk products".

DRAFT STANDARDS
FOR
METHODS OF ANALYSIS
SUBMITTED
TO
GOVERNMENTS
FOR
COMMENTS

- A. DETERMINATION OF WATER, SOLIDS-NOT-FAT AND FAT CONTENTS OF BUTTER ON ONE TEST PORTION - STANDARD B-9
- B. DETERMINATION OF THE FAT CONTENT OF WHEY CHEESE - STANDARD B-10
- C. DETERMINATION OF DRY MATTER IN WHEY CHEESE - STANDARD B-11

APPENDIX IX-A

DRAFT STANDARD B-9 (1968)

DETERMINATION OF WATER, SOLIDS-NOT-FAT
AND FAT CONTENTS OF BUTTER
ON ONE TEST PORTION
REFERENCE METHOD

1. Scope

This reference method specifies the determination of the water, solids-not-fat and fat contents of butter.

2. Definition

2.1 Definition of water content

The water content of "butter is defined as the loss of mass, expressed as percentage by mass, as determined by the procedure described under 7.2 and 8.1,

2.2 Definition of solids-not-fat content

The solids-not-fat content of butter is defined as the percentage by mass of substances as determined by the procedure described under 7.3 and 8.2.

2.3 Definition of fat content

The fat content of butter is defined as the percentage by mass obtained by subtracting the water content and the solids-not-fat content from 100.

3. Principle of methods

3.1 For the determination of the water content

The water content is gravimetrically determined by drying a known quantity of butter at $102^{\circ} \pm 2^{\circ}$ C.

3.2 For the determination of the solids-not-fat content

The solids-not-fat content is gravimetrically determined after extracting the fat from the dried butter with light petroleum.

4. Reagents

4.1 Light petroleum (petroleum ether) with any boiling range between 30° and 60° C. This reagent should not leave any residue after evaporation.

5. Apparatus

5.1 Analytical balance.

5.2 Drying oven, well ventilated and thermostatically controlled (adjusted to operate at $102^{\circ} \pm 2^{\circ}$ c).

5.3 Corrosion-proof, glass, porcelain or metal dishes, at least 25 mm high and 50 mm in diameter.

5.4 Sintered-glass filter crucibles (no. 3 porosity) with suction flask.

5.5 Stirrer with end-piece of suitable material.

6. Sampling

See FAO/WHO Standard B-1, "Sampling Methods for Milk and Milk Products".

7. Procedure

7.1 Preparation of the sample *)

*) Both ISO and AOAC are in favour of substituting the present clause by clause 7.1 of the method for the Determination of the salt content of butter (Appendix IV-D of the Report of the Tenth Session).

Except when mixing is not considered necessary, the sample should be mixed by a stirrer or by a mechanical shaker as quickly as possible, not to exceed one minute. Temperature of mixing should normally range from 23° to 28° C but, under no circumstances, exceed 35° C. In any case, the sample should be brought to ambient temperature before weighing.

7.2 Determination of water

7.2.1 Dry the dish (5.3) in the oven (5.2) until constant mass.

7.2.2 Allow the dish to cool to the temperature of the balance room (30 - 35 min) and weigh to the nearest 0.1 mg.

7.2.3 Weigh into the dish, to the nearest 1 mg per gram, between 5 and 10 g of the butter sample.

7.2.4 Place the dish in the oven for at least one hour.

7.2.5 Allow the dish to cool to the temperature of the balance room (30-35 min) and weigh to the nearest 0.1 mg.

7.2.6 Repeat the drying process at half-hour intervals until constant mass (within 0.5 mg). In the event of an increase in mass, the lowest mass is taken for the calculation.

7.3 Determination of solids-not-fat

7.3.1 Dry the glass filter crucible in the oven (5.2) until constant mass.

7.3.2 Allow the crucible to cool to the temperature of the balance room (30 - 35 min.) and weigh to the nearest 0.1 mg.

7.3.3 Add 10 to 15 ml warm light petroleum to the dish containing the dry matter left from the water determination (7.2) so as to dissolve the fat.

7.3.4 Detach as much as possible of the sediment adhering to the dish by using stirrer (5.5), and quantitatively transfer the solution over the stirrer tip into the crucible (5.4).

7.3.5 Repeat operations 7.3.3 and 7.3.4 five times.

7.3.6 Wash the sediment in the crucible with 25 ml of warm light petroleum.

7.3.7 Dry both dish and crucible in the oven (5.2) for two hours.

7.3.8 Allow both dish and crucible to cool to the temperature of the balance room (30 - 35 min.) and weigh to the nearest 0.1 mg.

7.3.9 Repeat operations 7.3.7 and 7.3.8 for periods of 30-min. at drying temperature until the mass no longer decreases.

8. Expression of results

8.1 Method of calculation of the water content

Use the formula:

$$\text{Water \%} = \frac{M - m}{M} \times 100$$

where :

M = Mass, in grammes, of test portion (according to 7.2.3)

m = mass, in grammes, of test portion after drying (according to 7.2.6)

8.2 Method of calculation of the solids-not-fat content

Use the formula:

$$\text{Solids - not - fat \%} = \frac{(A_2 - A_1) + (B_2 - B_1)}{M} \times 100$$

where:

A₁ = mass, in grammes, of empty crucible (according to 7.3.2)

A₂ = mass, in grammes, of crucible containing sediment (according to 7.3.9)

B₁ = mass, in grammes, of empty dish (according to 7.2.2)

B₂ = mass, in grammes, of dish (according to 7.3.9)

M = mass, in grammes, of test portion (according to 7.2.3)

8.3 Method of calculation of the fat content

$$\text{Fat \%} = 100 - (E + S)$$

where :

E = percentage by mass of water (calculated in 8.1)

S = percentage by mass of solids-not-fat (calculated in 8.2)

8.4 Repeatability of results

8.4.1 For the determination of the water content :

The difference between results of duplicate determinations (results obtained simultaneously or in rapid succession by the same analyst) should not exceed 0.1 g water for 100 g of butter.

8.4.2 For the determination of the solids-not-fat content :

The difference between the results of duplicate determinations (results obtained simultaneously or in rapid succession by the same analyst) should not exceed 0.05 g solids-not-fat for 100 g of butter.

DETERMINATION OF THE FAT CONTENT
OF WHEY CHEESE
REFERENCE METHOD

1. Scope

This reference method specifies the determination of the fat content of whey cheese.

2. Definition

The fat content of whey cheese is defined as the percentage by mass of substances as determined by the procedure described.

3. Principle of method

The fat content is gravimetrically determined by extraction of the fat from an ammoniacal alcoholic solution of whey cheese with diethyl ether and light petroleum, evaporation of the solvents and weighing of the residue, according to the principle of Röse-Gottlieb.

4. Reagents

All reagents should be of analytical reagent Quality and leave no residue greater than that permitted for the blank test (7.2). If necessary, reagents may be redistilled in the presence of about 1 g of butterfat for 100 ml of solvent. Water used should be distilled water or water of at least equal purity.

- 4.1 Ammonia solution, approx. 25 % (m/v) NH_3 (P 20° C approx. 0.91 g/ml), or a stronger solution of known concentration.
- 4.2 Ethanol, 96 ± 2 % (v/v) or, if not available, ethanol denatured with methanol, ethyl methyl ketone, benzene or light petroleum.
- 4.3 Diethyl ether, peroxide-free.

Note 1

To test for peroxides, add to 10 ml of the ether in a glass stoppered cylinder, previously rinsed with the ether, 1 ml freshly prepared 10 % potassium iodide solution. Shake and let stand for 1 minute. No yellow colour should be observed in either layer.

Note 2

Diethyl ether may be maintained free from peroxides by adding wet zinc foil that has been completely immersed in dilute acidified copper sulphate solution for 1 minute and subsequently washed with water. Use per liter approximately 80 cm² zinc foil; cut in strips long enough to reach at least halfway up the container.

- 4.4 Light petroleum (petroleum ether) with any boiling range between 30° and 60° C.

- 4.5 Mixed solvent prepared shortly before use by mixing equal volumes of diethyl ether (4.3) and light petroleum (4.4) (where mixed solvent is specified, the diethyl ether or the light petroleum may be used instead).

5. Apparatus

- 5.1 Analytical balance.
- 5.2 Suitable extraction tubes or flasks, provided with ground glass stoppers, bark corks, or other closures unaffected by solvents used. Treat good quality bark corks by extracting successively with diethyl ether and light petroleum. Then keep for at least 20 minutes in water at 60 C or above and cool in the water so that they are saturated when used.
- 5.3 Thin-walled, flat-bottomed flasks of 150-2,5.0 ml capacity.
- 5.4 Drying oven, well ventilated and thermostatically controlled (adjusted to operate at $102 \pm 2^\circ \text{C}$) or vacuum drying oven (temperature $70^\circ - 75^\circ \text{C}$, pressure less than 50 mm Hg),
- 5.5 Material to facilitate boiling, fat-free, non porous, non friable in use, e.g. glass beads or pieces of silicon carbide (the use of this material is optional; see clause 7.3.1).
- 5.6 Water-bath, approximately 100 c.
- 5.7 Food-chopper or other appropriate device for grinding cheese sample which should be easy to clean.

6. Sampling

See FAO/WHO Standard B-I, "Sampling Methods for Milk and Milk Products", Section 7, "Sampling of cheese".

7. Procedure

7.1 Preparation of the sample

Grind the sample by means of an appropriate device (5.7); mix the ground mass quickly, grind if possible a second time and mix again thoroughly. Clean the grinding device, after each sample. If the sample does not allow to be ground, mix it thoroughly by intensive kneading.

Transfer the prepared sample to an air-tight container until the analysis, which should be carried out on the same day. If delay is inevitable, take all precautions to ensure proper conservation of the sample and to prevent condensation of moisture on the inside surface of the container.

7.2 Blank test

At the same time as the determination of the fat content of the sample, perform a blank determination on 10 ml of distilled water using the same type of extraction apparatus, the same reagents in the same amounts and the same procedure as described hereafter, excluding clause 7.3.2. If blank exceeds 0,5 mg, the reagents should be checked, and the impure reagent or reagents should be purified or replaced.

7.3 Determination

- 7.3.1 Dry the flask (5.3) (if desired, with a small quantity of material (5.5) to promote gentle boiling during the subsequent removal of the solvents,) in the oven, for 0.5 to 1 hour. Allow the flask to cool to the temperature of the balance room and weigh the cooled flask to the nearest 0.1 mg.
- 7.3.2 Weigh to the nearest 1 mg. directly in, or by difference into, the extraction apparatus (5.2) about 3 g of the prepared cheese sample. Add 10 ml of water and heat by placing the extraction apparatus in a water-bath (5.6) agitating gently until the cheese is completely dispersed. Let the vessel stand for 20 minutes in the boiling water-bath.
- 7.3.3 Add 2 ml ammonia (25 %) or an equivalent volume of a stronger solution, mix well and cool, for example, in running water.
- 7.3.4 Add 10 ml ethanol and mix the liquids gently but thoroughly in the unclosed apparatus.
- 7.3.5 Add 25 ml diethyl ether, close the apparatus, and shake vigorously and invert repeatedly for one minute.
- 7.3.6 Remove the stopper carefully and add 25 ml light petroleum using the first few millilitres to rinse the stopper and inside of the neck of the apparatus, allowing the rinsings to run into the apparatus. Close by replacing the stopper and shake and invert repeatedly for 30 seconds. Do not shake too vigorously if centrifuging is not to be used in 7.3.7.
- 7.3.7 Allow the apparatus to stand until the upper liquid layer has "become clear and is distinctly separated from the aqueous layer. Alternatively perform the separation by the use of a suitable centrifuge.

Note

When using a centrifuge not provided with a three-phase motor, sparks may occur, and care is therefore necessary to avoid explosion or fire due to the occurrence of ether vapours, e.g. by a broken tube.

- 7.3.8 Remove the stopper, rinsing it and the inside of the neck of the apparatus with a few millilitres mixed solvent and allow the rinsings to run into the apparatus. Carefully transfer as much as possible of the supernatant layer by decantation or by means of a siphon into the flask (7.3.1)

Note

If the transfer is not made by means of a siphon, it may be necessary to add a little water to raise the interface between the two layers in order to facilitate the decantation.

- 7.3.9 Rinse the outside and the inside of the neck of the apparatus or the tip and the lower part of the siphon with a few millilitres mixed

solvent. Allow the rinsings from the outside of the apparatus to run into the flask and the rinsings from the inside of the neck and from the siphon to run into the extraction apparatus.

- 7.3.10 Make a second extraction by repeating the procedure of 7.3.5 to 7.3.9 inclusive but using only 15 ml diethyl ether and 15 ml light petroleum.
- 7.3.11 Make a third extraction by repeating the procedure of 7.3.10 but omitting the final rinsing (7.3.9).
- 7.3.12 Carefully evaporate or distil off as much solvent, including the ethanol, as possible. If the flask is of small capacity, some of the solvent will need to be removed in the above manner after each extraction.
- 7.3.13 When there is no longer any solvent odour, heat the flask, placed on its side, for one hour in the oven.
- 7.3.14 Allow the flask to cool to the temperature of the balance room as before (7.3.1), and weigh to the nearest 0.1 mg.
- 7.3.15 Repeat 7.3.13 and 7.3.14 for heating periods of 30-60 minutes until the mass no longer decreases.
- 7.3.16 Add 15-25 ml light petroleum in order to verify that the extracted matter is wholly soluble. Warm gently and swirl the solvent until all the fat is dissolved.
 - 7.3.16.1 When the extracted matter is wholly soluble in the light petroleum, the mass of fat is the difference between the weighings under 7.3.1 and 7.3.15.
 - 7.3.16.2 If not, or in case of doubt and always in case of a dispute, completely extract the fat from the flask by repeated washing with warm light petroleum, allowing the undissolved material to settle before each decantation. Rinse the outside of the neck of the flask three times. Heat the flask, placed on its side, for one hour in the oven, allow to cool to the temperature of the balance room as before (7.3.1) and weigh to the nearest 0.1 mg. The mass of fat is the difference between the mass under 7.3.15 and this final mass.

8. Expression of results

8.1 Calculation

The mass, in grammes, of fat extracted is :

$$(M_1 - M_2) - (B_1 - B_2)$$

and the fat content of the sample, in percentage by mass, is :

$$\frac{(M_1 - M_2) - (B_1 - B_2)}{S} \times 100$$

where :

M_1 = mass, in grammes, of flask M with fat after stage 7.3.15

M_2 = mass, in grammes, of flask M after stage 7.3.1 or, in the case of undissolved material, stage 7.3.16.2

B_1 = mass, in grammes, of flask B of the blank after stage 7.3.15

B_2 = mass, in grammes, of flask B after stage 7.3.1 or, in the case of undissolved material, stage 7.3.16.2

S = mass, in grammes of test portion

8.2 Repeatability of results

The difference between results of duplicate determinations (results obtained simultaneously or in rapid succession by the same analyst) should not exceed 0,2 g fat for 100 g of the product.

APPENDIX IX-C

DRAFT STANDARD B-11 (1968)

DETERMINATION OF DRY MATTER
IN WHEY CHEESE
REFERENCE METHOD

1. Scope

This reference method specifies the determination of the dry matter content in whey cheese.

2. Definition

The dry matter of whey cheese is defined as the percentage "by mass of substances which remains after completion of the drying process described below. The dry matter includes the water of crystallization of lactose.

3. Principle of method

The dry matter as defined under paragraph 2 is obtained by evaporating the water from the whey cheese sample at a temperature of $88^{\circ} \pm 2^{\circ} \text{C}$, in an air oven,

4. Apparatus

4.1 Grinding-mill or other appropriate device,

4.2 Analytical balance.

4.3 Desiccator provided with efficient drying agent (silica gel with hygrometric indicator or calcium chloride).

4.4 Drying oven, well ventilated and thermostatically controlled, adjusted to operate at $88 \pm 2 \text{C}$,

4.5 Stainless steel, nickel or aluminium dishes, height about 2 cm, diameter 6 to 8 cm.

4.6 Quartz sand or sea sand which passes through a sieve with 10 openings per cm^2 but not through a sieve with 40 openings per cm^2 if necessary washed with hot concentrated hydrochloric acid and water, dried and ignited.

4.7 Flat ended glass stirrers.

5. Sampling

See FAO/WHO Standard B-1, "Sampling Methods for Milk and Milk Products", Section 7, "Sampling-of cheese".

6. Procedure

6.1 Preparation of the sample

The representative sample of the cheese shall be ground by means of the grinding-mill. When a soft consistency of the cheese makes the use of the grinding-mill impossible, the sample shall be thoroughly mixed by means of another appropriate device (e.g. glass stirrer.).

The prepared sample shall be kept in a suitable airtight container until analyzed, which shall be on the same day.

6.2 Determination

- 6.2.1 Place about 20 g of sand and a glass stirrer into the, dish *)
- 6.2.2 Moisten the sand with water and dry the dish (4.5) in the oven (4.4) until constant mass
- 6.2.3 Allow the dish to cool in the desiccator, and weigh.
- 6.2.4 Quickly place about 3 g of the prepared cheese sample in the dish, and weigh again,
- 6.2.5 Thoroughly mix the cheese with the sand by means of the stirrer.
- 6.2.6 Dry the dish in the oven for 4 hours
- 6.2.7 Allow to cool in the desiccator and weigh.
- 6.2.8 Dry in the oven again for 1 hour as before. Cool and weigh.
- 6.2.9 Repeat the drying until the difference in mass between two successive weighings is not more than 1 mg.

*) With hard and semi-hard whey cheese, which can be adequately ground by means of the grinding mill, the use of sand can be omitted.

7. Expression of results

7.1 Calculation

$$\text{Drymatter content \%} = \frac{(M_2 - m)}{(M_1 - m)} \times 100$$

where :

m = mass, in grammes, of dish containing sand and stirrer
(according to 6.2.3)

M₁ = mass, in grammes, of dish and contents
(according to 6.2.4)

M₂ = mass, in grammes, of dish and contents after drying
(according to 6.2.9)

7.2 Repeatability of results

The difference between results of duplicate determinations (results obtained simultaneously or in rapid succession by the same analyst) should not exceed 0.2 g dry matter for 100 g of the whey cheese.

PROCEDURE FOR THE ELABORATION OF INTERNATIONAL STANDARDS
FOR MILK PRODUCTS *)

- *) This Procedure also serves as "Procedure for the Revision of Standards" with the following amendments,
- Steps 1 and 2 are replaced by a decision of the Committee to consider an amendment of substance and to deal with it at Step 3.
 - It is understood that Steps 5 and 6 Can be omitted in accordance with the provision contained in Footnote **).
- (See Report of this Session, paragraphs 44 and 45)

Step 1

The Committee of Government Experts concerning Milk and Milk Products decides on the elaboration of an international standard, collects information from the Governments concerned on their national standards and other relative data and forwards copies of this information to the International Dairy Federation for the development of the first draft of an international standard.

Step 2

The IDF prepares a provisional standard taking into account any information supplied by Member Governments or otherwise available. A report, accompanied by the provisional standard, is sent to the Committee's Secretariat by IDF for distribution to Member States of FAO and WHO as a working paper for the next session of the Committee.

Step 3

The Committee's conclusions on the provisional standard together with the provisional standard as may be amended by the Committee are published in the report of the session and are sent by the Secretariat to Member States of FAO and WHO for comment.

Step 4

The Committee considers the provisional standard in the light of Government comments and amends or revises the provisional standard, if appropriate*

Step 5 **)

The provisional standard as amended is sent out to Governments for further comments.

Step 6 **)

The Committee further considers the provisional standard in the light of Government comments and adopts the final text of the provisional standard.

- **) It shall be open to the Committee to authorise the omission of Steps 5 and 6 of the Procedure if it considers, without dissent, that the completion of the standard is a matter of exceptional urgency or if it notes that the standard is entirely uncontroversial and that the standard has already proved to be generally agreeable to the Committee.

Step 7

The final text of the provisional standard is submitted "by the Secretariat to Governments for acceptance.

Step 8

The standard is printed in the Code of Principles or the Codex Alimentarius as appropriate when the Committee determines that a sufficient number of Members have formally accepted it.

The following reports of earlier sessions in this series have been issued:

First session, Rome, Italy, 8-12 September 1958 (Meeting Report No. 1958/15).
Second session, Rome, Italy, 13-17 April 1959 (Meeting Report No. 1959/AN-2).
Third session, Rome, Italy, 22-26 February 1960 (Meeting Report No. AN 1960/2).
Fourth session, Rome, Italy, 6-10 March 1961 (Meeting Report No. AN 1961/3).
Fifth session, Rome, Italy, 2-6 April 1962 (Meeting Report No. AN 1962/3).
Sixth session, Rome, Italy, 17-21 June 1963 (Meeting Report No. AN 1963/5).
Seventh session, Rome, Italy, 4-8 May 1964 (Meeting Report No. AN 1964/4).
Eighth session, Rome, Italy, 24-29 May 1965 (Meeting Report No. AN 1965/3).
Ninth session, Rome, Italy, 20-25 June 1966 (SP-10/105- 9th).
Tenth session, Rome, Italy, 25-31 August 1967 (SP-10/105- 10th).

CODE OF PRINCIPLES CONCERNING MILK AND MILK PRODUCTS:

First Edition 1960

Second Edition 1961

Third Edition 1962

Fourth Edition 1963

Fifth Edition 1966

Sixth Edition 1968

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