

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE

ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION

00100 Rome, Via dalle Terme di Caracalla. Cables: FOODAGRI, Rome. Tel. 5797



WORLD HEALTH ORGANIZATION ORGANISATION MONDIALE DE LA SANTÉ 1211 Genève, 27 Avenue Appia. Câbles: UNISANTÉ, Genève. Tél. 34 60 61

CX 5/1-3

ALINORM 71/10 July 1970

# JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX ALIMENTARIUS COMMISSION

Eighth Session, Geneva, 1971

REPORT OF THE EIGHTH SESSION

OF THE

CODEX COMMITTEE ON COCOA PRODUCTS AND CHOCOLATE

Lucerne, Switzerland 29 June - 3 July 1970

# REPORT OF THE EIGHTH SESSION OF THE CODEX COMMITTEE ON COCOA PRODUCTS AND CHOCOLATE

Lucerne, Switzerland, 29 June - 3 July 1970

 The Eighth Session of the Codex Committee on Cocoa Products and Chocolate, under the chairmanship of the Government of Switzerland, was held in Lucerne, from 29 June - 3 July 1970. Mr. J. Ruffy was Chairman for the session. The Secretariat consisted of representatives of FAO and the office of Mr. Ruffy. Representatives from 16 countries were present:

Austria Federal Republic of Germany Nigeria
Brazil Ghana Philippines
Canada Ireland Sweden
Finland Ivory Coast Switzerland
France Netherlands United Kingdom

Observers were present from the following international organizations:

- the Cocoa Producers Alliance (COPAL)
- the International Federation of Glucose Industries
- the International Organization of Consumers Unions (IOCU)
- the Office International du Cacao et du Chocolat (OICC)

(See Appendix I for the List of Participants) Adoption of Provisional Agenda

2. After rearranging the sequence of some of the items of the agenda, the Committee adopted the Provisional Agenda.

<u>Matters arising from the Report of the Seventh Session of the Codex</u> Alimentarius Commission

- 3. The Secretariat gave a brief report of the last Commission Meeting and informed the Committee of the Commission's decision:
  - (i) to return the Proposed Draft Standard for Cocoa Products and Chocolate to Step 4 of the Procedure in view of the number of fundamental matters still to be resolved;
  - (ii) the Standard, or the new presentation re-presenting the Standard in five parts, to be held at Step 4 until such time as the Committee would be in a position to make firm recommendations to the Commission.

# STANDARD I - RAW AND SEMI-PROCESSED MATERIALS (Appendix II)

#### FAO Model Ordinance on Cocoa Beans

4. The Committee considered that it was necessary after a full examination of the FAO Model Ordinance on Cocoa Beans to determine what would be the minimum acceptable quality of beans for the manufacture of cocoa butter, finished cocoa products and chocolate. The Committee agreed that specific limits for defective beans would need to be prescribed as indicated under Grade II of the Ordinance for the use of these beans in the manufacture of cocoa products, chocolate, press cocoa butter and expeller cocoa butter. However, in the case of refined cocoa butter the Committee agreed that beans of merchantable quality as

defined in paragraph 2 of the Model Ordinance which did not meet the requirements of Grade II could be used.

#### 1. DESCRIPTIONS

- 5. The Committee agreed to incorporate the appropriate sections of the FAO Ordinance into the Standard I in full and to refer to these by appropriate cross references in the Standard II for Cocoa Butters (Appendix III). The definitions and minimum quality requirements for cocoa beans are set out in Section 1.1 of Standard I. Section 1.1 and 1.1.1 would apply to Press Cocoa Butter, Expeller Cocoa Butter, Cocoa Products and Chocolate. Section 1.1 would apply to Refined Cocoa Butter. (Please see Appendix III for Definition and Quality Requirements for Cocoa Butter.)
- 6. The Committee recognized that the detailed wording of Sections 1.1 and 1.1.1 which were based on paragraphs 2 and 3 of the Model Ordinance would need to be carefully considered and requests Governments to make special comments on these Sections before the next meeting of the Committee.
  - 2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 2.1 Composition

7. The Committee was of the opinion that in cocoa nib, cocoa mass and cocoa press cake the minimum compositional factors in the fat free dry matter should be at the same level, assuming that the cocoa nib used for the manufacture of cocoa mass and cocoa press cake complied with the minimum provisions.

#### FOOD ADDITIVES

- 8. The Committee decided to delete magnesium hydrogen carbonate from the list of alkalizing agents. The Committee agreed to add calcium carbonate to this list and to propose this salt for endorsement by the Codex Committee on Food Additives.
- 9. After some discussion, the Committee decided not to change the list of neutralizing agents, until further advice from the Expert Committee on Food Additives was available about the acceptable daily intake of phosphoric acid.
- 10. Regarding emulsifiers and flavouring agents, the Committee agreed that the addition of these was limited to Cocoa Mass (I.1.3) and Cocoa Press Cake (I.1.4) only.

#### 4. CONTAMINANTS

# 11. (ex 4.l) Pesticide residues

The Committee agreed to delete this paragraph, in accordance with the relevant general decision taken by the Commission.

12. The Committee decided on some changes in the following paragraph (ex 4.2 Other Contaminants); it should now read:

Contaminant	Maximum Level	Food
Copper	[20] mg/kg	cocoa beans, nib and mass
	[60] mg/kg	press cake
Arsenic	[1] mg/kg	all products described under
Lead	[2] mg/kg .	I.1

The reference to iron was deleted as it was not considered essential.

#### HYGIENE

- 13. Some discussion ensued regarding the phrasing of paragraph 3 of the Hygiene Sections of all Standards which read: "The products shall not contain any pathogenic micro-organisms or any toxic substance originating from microorganisms." It was pointed out that it was impracticable to guarantee the absence of all pathogene organisms and that the danger from toxic substances was related to the amount in which they were present.
- 14. The following revised wording based on a provision included in the 1970 version of draft standards elaborated by the Codex Committee on Processed Fruits and Vegetables was proposed:

"The products shall not contain any substances originating from microorganisms in amounts which are toxic."

It was decided to ask the Codex Committee on Food Hygiene to consider this revised wording.

#### 6. LABELLING

- 15. The Committee reviewed the labelling section of the standard and in view of the fact that the products were primarily semi-finished products for further use by manufacturers, agreed to make it optional to indicate the label declaration either on the container or in the accompanying documents.
- 16. The Committee agreed that it would be inappropriate to require a declaration of the list of ingredients but that it would be necessary to indicate the processes to which these products had been subjected and indicate the additives which had been used.
- 17. The Committee further decided to request the Codex Committee on Labelling to consider the addition of alkalizing agents (solubilizers) as a class name in the General Standard for the Labelling of Prepackaged Foods, it being understood that this class name would also cover the neutralizing agents.
- 18. As regards the declaration of the country of origin, the Committee agreed to retain the present wording as it was considered to be more appropriate for such semi-processed products not for sale to the consumer and to add the provisions contained in Section 3.5 (b) of the General Standard for the Labelling of Prepackaged Foods to the Standard.

# 7. METHODS OP ANALYSIS AND SAMPLING

19. Please see the general paragraphs nos. 56 and 57 on this issue covering all standards.

# STANDARD II - COCOA BUTTERS (Appendix III)

- 20. The Committee discussed the Cocoa Butters Standards at great length and decided on a number of additions and alterations of the document as contained in CX/CPC 70/4. The revised text of the Standard as agreed to by the Committee is contained in Appendix III of this Report.
  - 1. SCOPE
- 21. It emerged from the discussions that as the Draft Standard stood, it might be read to refer also to cocoa butter intended for non food purposes, e.g.

pharmaceutical and cosmetic purposes. The Committee therefore decided to include a scope section in the Draft:

"This Standard applies exclusively to cocoa butter for sale or intended for sale, for use as an ingredient in the manufacture of chocolate and chocolate products."

# 2. (ex 1.) DESCRIPTIONS

- 22. Several delegations were of the opinion that it was sufficient for the description section of the Standard merely to have the one general definition of cocoa butter as contained in Section 2.1 (ex I.I). Other delegations held the contrary view that it would be necessary to retain the definitions for press, expeller and refined cocoa butter if separate identity characteristics and quality values were to be laid down and labelling provisions were to be established for the designation of the different categories of cocoa butter.
- 23. The Committee decided that the labelling provisions contained in the descriptions should be deleted. It included in the descriptions of cocoa butters the appropriate references to the various categories of cocoa beans which might be used for the manufacture of the different types of cocoa butters. The descriptions of expeller cocoa butter and refined cocoa butter were changed editorially to read as definitions.
  - 2.2 (ex 1.2) Press Cocoa Butter is the fat which is obtained by pressure from cocoa nib or cocoa mass (cocoa liquor). It may only be treated as stated under (a) and (b) of Section 2.1 of the general definition of cocoa butter.
  - 2.3 (ex 1.3) Expeller Cocoa Butter

"Expeller Cocoa Butter" is the fat which has been prepared from cocoa beans as described in Sections 1.1 and 1.1.1 of Standard I by the expeller process. It may only be treated as stated under (a) and (b) of Section 2.1 of the general definition of cocoa butter.

# 2.4 (ex 1.4) Refined Cocoa Butter

"Refined Cocoa Butter" is the refined fat obtained from cocoa beans as described in Section 1.1 of Standard I, which, in addition to having been treated as indicated under (a) and (b), has also been treated as indicated under (c) and/or (d) of Section 2.1, the general definition of cocoa butter.

- 24. The Committee agreed that the description of refined cocoa butter included cocoa fat obtained with the aid of permissible solvents as specified under 2.1 (ex I.I) cocoa butter.
- 25. Concerning the footnote to the definitions of cocoa butter for use in chocolate, the Committee considered that it would be more appropriate to relate the footnote to the standards for chocolate.
  - 3. (ex 2.) ESSENTIAL COMPOSITION AND QUALITY FACTORS

# 26. 3.1 (ex 2.1) Press Cocoa Butter

The Committee examined the values for the various identity characteristics for press cocoa butter and agreed to make the following amendments or additions to the Standard:

(i) Concerning the organoleptic characteristics, the Committee agreed to revise all the standards for cocoa butters to read as follows:

Colour characteristic of the designated

product

Odour and taste characteristic of the designated

product and free from foreign odour

and foreign taste.

(ii) The Committee agreed to insert in square brackets the following values:

Melting behaviour (Fincke)

slip point [32 - 33.5° C]

clear melting point [33 - 35° C]

# 27. 3.2 (ex 2.2) <u>Expeller Cocoa Butter</u>

The Committee in considering what values might be established for the characteristics for Expeller Cocoa Butter had regard to certain of the values which had been included in the Report of the 6th Session of the Committee. These values had been drawn up by the FAO Secretariat on the basis of the literature available and were indicative of the extreme ranges of values which could be found for cocoa butters. After a full discussion, the Committee decided to include in square brackets the following values on the understanding that these values would be subject to verification and information to be supplied by governments. The delegations of the Federal Republic of Germany and the Netherlands informed the Committee that analytical studies were already on hand and that they would be able to supply precise information to the Committee at its next Session.

#### 28. Identification and Quality Values for Expeller Cocoa Butter

Characteristics Values

Organoleptic characteristics:

Colour characteristic of the designated

product

characteristic of the designated Odour and taste

product and free from foreign odour

and foreign taste

Refractive index [1.453 - 1.459]

Melting behaviour (Fincke)

/32 - 33,5° c1 slip point /33 - 35°c/ clear melting point

Free fatty acids (expressed as % m/m

oleic acid)

[0.5 - 2.0 % m/m]

Saponification value [188 - 198] mg KOH/g fat

Iodine value (Wijs) [32 - 43]

Unsaponifiable matter not more than [X] % m/m

(petroleum ether)

#### 3.3 (ex 2.3) Refined Cocoa Butter

29. The Committee decided to propose for refined cocoa butter the following identification and quality values as for expeller cocoa butter.

#### Identification and Quality Values for Refined Cocoa Butter

Characteristics Values

Organoleptic characteristics:

Colour characteristic of the designated

product

Odour and taste characteristic of the designated

product and free from foreign odour

and foreign taste

[1.453 - 1.459] Refractive index

Melting behaviour (Fincke)

slip point [32 - 33.5° C] clear melting point [33 - 35°C] [0 - 2.0 % m/m]

Free fatty acids (expressed as % m/m

oleic acid)

Saponification value / 188 - 198/ mg KOH/g fat

Iodine value (Wijs) [32 - 43]Unsaponifiable matter not more than (petroleum ether) [X] % m/m

#### Unsaponifiable Matter in Cocoa Butters

30. Concerning the maximum limit for unsaponifiable matter in cocoa butters, the Committee was informed that the limits given in the document were based on the IUPAC method of analysis using petroleum ether as a solvent of unsaponifiable matter. It was suggested that some of the higher limits proposed might be explained by the use of another IUPAC method employing diethyl oxide as a solvent.

# Press Cocoa Butter

31. The delegation of the United Kingdom considered that until such time as values have been agreed for all cocoa butters, it was not in agreement to include in the standard for press cocoa butter a maximum value of 0.35% m/m for unsaponifiable matter.

#### **Expeller and Refined Cocoa Butters**

32. Regarding unsaponifiable matter in these cocoa butters, the delegation of the United Kingdom supported by the delegations of Ghana and Ireland favoured a maximum limit of 1.0% m/m. These delegations and the delegation of Nigeria thought however that it was unnecessary to establish a separate standard for expeller cocoa butter as this category of cocoa butter could be covered by requirements to be determined for refined cocoa butter. The delegations of Austria, Federal Republic of Germany, Prance, the Netherlands and Switzerland favoured retention of the provisionl figure for unsaponifiable matter of not more than [0.50] % m/m pending further scientific studies. The Committee finally agreed not to indicate for the time being any permissible level for unsaponifiable matter at all in the Standards.

#### International Study

33. In view of the need to obtain a proper scientific basis on which to establish the limits for unsaponifiable matter in cocoa butters, the Committee considered various ways to obtain relevant figures in one or at the most two years. In consultation with the President of OICC, the Committee agreed to request governments to carry out a series of analyses on cocoa butters regarding unsponifiable matter in accordance with the following procedure:

#### INTERNATIONAL STUDY

#### Cocoa Butter; Unsaponifiable Matter

#### SCOPE:

Determination of the range of the unsaponifiable matter content of cocoa butter.

# **ANALYTICAL METHOD:**

with petroleum ether, according to IUPAC II.D.5.2.

#### PROCEDURE FOR SAMPLING:

There are two points to be clarified:

a) What is the natural range of the unsaponifiable content of the fats extracted from cocoa beans (fat from nibs and fat from whole beans), whereby nibs may contain cocoa shell up to 4% m/m, calculated on the fat free dry matter. (Appendix II, paragraph 2.1)

- b) What is the possible effect of the processing operations upon the unsaponifiable content, whereby the following processes have to be taken into consideration:
  - use of press
  - use of expeller
  - extraction with hexane 62/68
  - extraction with trichloroethylene.

The samples are therefore to be collected in such a way that conclusions about the two points above may properly be drawn.

#### ORGANIZATION OF THE STUDY:

Each delegation or group of delegations will collect the samples and proceed to the analytical determination through the channels it will consider as most convenient.

The experimental data obtained as well as already existing valuable information will be forwarded to:

Mr. E.W. Meyers - Director Research Hershey Foods Corporation P.O. Box 54 Hershey, Pennsylvania 17033 - USA

who has been designated by the OICC to collect and classify all material to be presented to the Codex Alimentarius Secretariat.

#### CONTAMINANTS

- 34. The Committee decided to insert revised provisions for contaminants, including a provision for iron as this was considered to be necessary for cocoa butter.
  - HYGIENE
- 35. Please see paragraphs 13 and 14 of this Report.
  - 7. LABELLING
- 36. Please see paragraphs 15 to 18 of this Report and the Labelling Section of Standard No. II in Appendix III.
  - 8. METHODS OF ANALYSIS AND SAMPLING
- 37. Please see the general paragraphs 54 and 55 on this issue covering all standards.

#### STANDARD III - FINISHED COCOA PRODUCTS (Appendix IV)

38. The Committee made a number of consequential amendments arising from the changes agreed to in the case of Standard I. It was agreed to include mono- and di-glycerides of edible fatty acids in the Emulsifier Section of the Standard. The Contaminant Section was revised in the light of the changes made in Standard I. Concerning the labelling of these products it was agreed to require a complete declaration of ingredients in accordance with the General Standards for Labelling of Prepackaged Foods.

39. The Committee discussed whether or not to introduce a maximum limit for fat in fat-reduced cocoa so as clearly to distinguish the product from cocoa powder and also whether to require a declaration of fat content. It was, however, decided not to make any change in the standard. The revised text of the Standard III is contained in Appendix IV.

# STANDARD IV - CHOCOLATE (Appendix V)

- 1. DESCRIPTIONS
- 40. The Committee examined the standard and agreed to make no changes in this section.
  - ESSENTIAL COMPOSITION AND QUALITY FACTORS
  - 2.1 Composition \*
  - 2.1.1 Chocolate, Unsweetened Chocolate, Couverture Chocolate and
  - 2.1.2 Sweet (Plain) Chocolate
- \* In order to facilitate easier comprehension of the compositional elements, the Secretariat has compiled a table of the data which is contained in the Annex to Appendix V.
- 41. Concerning dry matter and total cocoa solids in Sweet (Plain) Chocolate, the Committee decided to seek the views of governments as to whether it would be necessary to elaborate a separate standard for Sweet (Plain) Chocolate. The delegations of the United Kingdom and Ireland considered that the minimum total cocoa solids should be 30 % m/m in order to provide for products which were on sale in their countries. The delegation of the U.S.A. thought that if the minimum fat free cocoa solids of 6 % m/m instead of 7.5 % m/m, which it preferred, was to be maintained, then it would not object to a minimum of 30 % m/m total cocoa solids. The delegations of Finland and Sweden also favoured a figure of 30 % m/m. The Committee however decided to leave the figure of 35% m/m for total cocoa solids in square brackets. The Committee agreed to separate the requirements for Chocolate and Sweet (Plain) Chocolate into 2.1.1 and 2.1.2 respectively and to consider the appropriate values at its next Session in the light of government comments.
  - 2.1.3 (ex 2.1.2) Milk Chocolate and Milk Couverture Chocolate
- 42. After a full discussion, the Committee agreed to delete the square brackets around the minimum total cocoa solids of 25 % m/m.
- 43. The delegation of the United Kingdom asked for its opposition to the decision not to reduce the minimum total cocoa solids in milk and cream chocolate and in milk couverture chocolate to be recorded because considerable quantities of these products with a lower cocoa solids content were consumed in the United Kingdom and elsewhere as the consumer preferred a milk chocolate to have more milk than was required by the minimum provisions. The UK would, if necessary, be prepared to agree that the reduction in cocoa solids should be related to a higher milk constituent provision. Attention was drawn to the written comments by New Zealand and to the points included on page 7 of the Report of the 7th Session, and to the fact that other standards (e.g. Chocolate Vermicelli) contained lower figures for total cocoa solids than 25 % m/m.
- 44. The UK delegation also pointed out that the addition of skimmed milk to the product was necessary if the minimum provisions for 3.5 % milk fat and 10.5 %

fat-free milk solids were complied with, since, as pointed out in the written comments of the U.S.A. these proportions were not those found in milk.

45. The UK suggested that it would be appropriate that the provisions for minimum milk constituents should be increased to a level which would justify the use of the word 'milk' in milk chocolate and that products with a higher proportion of milk constituents should be allowed to have a correspondingly lower content of cocoa solids. The delegations of Finland, Ireland and Sweden associated themselves with these views.

The delegations of Austria, Brasil, Federal Republic of Germany, France, Ghana, Ivory Coast, Netherlands, Nigeria, Switzerland and U.S.A. held the view however that milk chocolate was chocolate first and foremost and should therefore contain at least 25 % m/m total cocoa solids.

- 2.1.7 (ex 2.1.6) Milk Chocolate Vermicelli and Milk Chocolate Flakes
- 46. The Committee agreed that the minimum of fat-free milk solids should be not less than 10.5 % m/m in their natural proportions calculated on the dry matter.
  - 2.2 Optional Ingredients
- 47. The Committee agreed to seek the views of governments as to whether other optional ingredients than those listed, e.g. butter (milk fat) might be permitted and to what extent.
  - FOOD ADDITIVES
- 48. The United Kingdom delegation informed the Committee that the emulsifiers which the UK considered to have specific technological advantages referred to in paragraph 6 of ALINORM 70/10 were the following:

Polyglycerol polyricinoleate Sorbitan mono-stearate

Sorbitan tri-stearate

Polyoxyethylene sorbitan mono-stearate.

49. The delegation of France made reservations regarding the use of monoglycerides, ammonium salts of phosphatidic acids and of phosphoric acids in all cocoa products and chocolate.

The Committee agreed to request government comments on the technological need and justification of the use of these emulsifiers.

- 4. CONTAMINANTS
- 50. The Committee agreed to the following provisions:

 Copper
 [20 mg/kg]

 Arsenic
 [1 mg/kg]

 Lead
 [2 mg/kg]

- 5. HYGIENE
- 51. Please see paragraphs 13 and 14 of this Report.
  - 6. LABELLING
- 52. The Committee considered whether to require a complete list of ingredients to be declared in accordance with the General Standard for the Labelling of

Prepackaged Foods. All members of the Committee agreed that it would be necessary to declare food additives at least by class names including alkalizing agents.

The delegations of Canada, Ghana and Nigeria and the representatives of IOCU stated that consumers should be fully informed as to the composition of the product as a matter of principle.

The delegations of Austria, Federal Republic of Germany, France and the Netherlands did not agree with this point of view because in their opinion chocolate was a product of well known composition, for which there was a standard.

The Committee decided to require a complete list of ingredients in accordance with the General Standard for the Labelling of Prepackaged Foods.

- 53. Concerning the declaration of net contents the Committee concluded that it would probably be necessary to exempt very small containers from the requirement to declare net contents. It was agreed to request governments to supply information on this matter and to give reasons for any exemption currently permitted under their national legislation.
  - 7. METHODS OF ANALYSIS AND SAMPLING (applying to all Standards)
- 54. The Committee had before it a preliminary draft list of methods of analysis and sampling, prepared by the Secretariat on the basis of government comments. The Committee amended this list after having considered that
  - a) the Karl Fischer method for determination of moisture content was still to be elaborated for its application to cocoa products and chocolate:
  - b) the methods proposed for milk-fat content were still under discussion in AOAC and OICC;
  - c) a method for the determination of total fat content had been prepared in collaboration by OICC and AOAC.
- 55. The Committee therefore decided to propose the following methods for endorsement by the Codex Committee on Methods of Analysis and Sampling:

#### METHODS OF ANALYSIS

Criteria	Food Item	Proposed method of analysis	Comments
Preparation of the sample	Cocoa butter	IUPAC II.A.I	
Refractive index	Cocoa butter	IUPAC II.B.2	
Free fatty acids	Cocoa butter	IUPAC II.D.I	
Saponification value	Cocoa butter	IUPAC II.D.2	
lodine value (Wijs)	Cocoa butter	IUPAC II.D.7.3	
Unsaponifiable matter	Cocoa butter	IUPAC II.D.5.2	
Iron	Cocoa butter	BS 684: 1958 p.92 )	
Copper	all cocoa prod.	AOAC (1965) 24.023 )	Atomic absorption
Arsenic	all cocoa prod.	AOAC (1965) 24.011 (24.016, 24.017)	spectropho- tometry to be considered for
Lead	all cocoa prod.	AOAC (1965) 24.053	Fe, Cu, Pb.
Moisture content (loss on drying)	Cocoa powder, cocoa fat-reduced cocoa powder, fat reduced cocoa	OICC 3-E/1952 AOAC (1965) 12.001 12.002	
	cocoa beans	ISO 414/511 (for cocoa be	eans)
Total Fat	Milk chocolate, milk couverture choc., skimmed milk choc., cream chocolate, skimmed milk couverture choc., milk choc, vermicelli, milk choc, flakes	Reconciled text prepared by OICC/AOAC	

# Methods of sampling

<u>Sampling of cocoa beans</u>: as in the International Cocoa Standards Model Ordinance and Code of Practice (ALINORM 70/10, Appendix III, page 3, B. <u>Sampling</u>)

# **General Conclusions**

56. The Committee agreed to hold the standards at Step 4 to enable governments to supply information concerning cocoa butters and the other matters contained in the standards in square brackets. This would also have the advantage of keeping all the standards under consideration by the Committee together at the same step in the Procedures for the Elaboration of Standards.

# **Future Work**

- 57. The Committee was informed that the Netherlands paper on Instant Cocoa would be available for the next Session of the Committee. Similarly the delegations of the U.S.A. and the Netherlands in collaboration with OICC indicated that their paper on hygiene requirements would also be available for the next Session. Please see paragraphs 8 and 18 of ALINORM 70/10.
- 58. The Committee planned to deal at its next Session with those issues which due to lack of time were not studied at the present meeting, e.g. (a) filled chocolate, (b) coated bars or blocks and (c) white chocolate, as contained in document CX/CPC 70/5.

# Date and Place of Next Session

- 59. It was agreed that the date of the next Session would depend upon the replies of governments to the matters raised by the Committee, particularly concerning cocoa butter analyses and also the date of the 8th Session of the Codex Alimentarius Commission. Thus the next Session would not be before the second half of 1971.
- 60. Several delegations requested that as much advance notice be given as possible of the date of the next Session and that working documents be distributed as early as possible.

# <u>LIST OF PARTICIPANTS</u> \* <u>LISTE DES PARTICIPANTS</u> LISTA DE PARTICIPANTS

\* The Heads of Delegations are listed first; Alternates, Advisers and Consultants are listed in alphabetical order.

Les chefs de délégations figurent en tâte et les suppléants conseillers et consultants sont énumérés par ordre alphabétique.

Figuran en primer lugar los Jefes de las delegaciones; los Suplentes, Asesores y Consultores aparecen por orden alfabético.

AUSTRIA Dipl. Ing. O. Riedl

AUTRICHE Obmann des Verbandes der

Süsswarenindustrie Oesterreichs

Felix Mottlstrasse 50

A-1190 Vienna

BRAZIL Dipl. E. Hermanny

BRESIL Délégation permanente du Brésil

BRASIL 33, Rue Carteret CH-1200 Genève

Dr. P.R. Barbosa de Oliveira

Bahia Association of Cocoa Industries

Miguel Calmon 19.4°

Salvador-Ba

CANADA Dr. D.M. Smith

Office for International Standards

Food Advisory Bureau Food and Drug Directorate

Department of National Health and Welfare

Tunney's Pasture Ottawa 3 Ontario

FINLAND A. Ahlbäck

FINLANDE Director of Production
FINLANDIA Oy Karl Fazer Ab

P.O. Box 94 004

Helsinki 94

FRANCE A. Gourvez

FRANCIA Ministère de l'Agriculture

Inspecteur du Service de la Répression des

Fraudes

42 bis., Rue de Bourgogne

F-75 Paris 7<sup>e</sup>

Dipl. Ing. A. Dupont Cacao Barry S.A.

B.P. No 8 F-78 Meulan A. Renault

Directeur de la Chambre syndicale des chocolatiers de France

194. Rue de Rivoli

F-75 Paris Ier

GERMANY, FED. REP. ALLEMAGNE, REP. FED. ALEMANIA, REP. FED. Dr. W. Fedde-Woywode

Ministerialrat

Bundesministerium für Jugend, Familie und

Gesundheit

Deutschherrenstrasse 87 D-53 Bonn - Bad Godesberg 1

O. Boose

Bundesministerium für Ernährung, Landwirtschaft und Forsten

Euskirchner Strasse D-53 Bonn - Duisdorf

Dr. A. Fincke

Bundesverband der Deutschen

Süsswarenindustrie Adamsstrasse 52 – 54

D-5 Köln 80

W. Liebig

Bundesverband der Deutschen

Süsswarenindustrie Schumannstrasse 4-6

**D-53 Bonn 1** 

A.A. Laryea

Ministry of Agriculture

P.O. Box M 37

Accra

M.Y. Asomaning

Ghana Permanent Mission 56 Rue de Moillebeau CH-1200 Geneva

I. Van-der-Puije

Cocoa Products Factory (CMC)

P.O. Box 218 Takoradi

Ch. Cregan

Department of Agriculture and Fisheries

**Upper Merrion Street** 

Dublin 2

J.S. Lawton

Fry-Cadbury (Ireland) Ltd.

Coolock Dublin 5

**GHANA** 

IRELAND IRLANDE IRLANDA IVORY COAST COTE D'IVOIRE COSTA DE MARFIL

NETHERLANDS PAYS-BAS PAISES BAJOS A. Thiémélé

Repr. permanent de Côte-d'Ivoire à Genève

19 Avenue du Lignon CH-1211 Genève

Ir. J. Roberts

Ministry of Agriculture and Fisheries

le v.d. Boschstraat 4

The Hague

Ir. J.A.P. Smit

Ministerie sociale Zaken en Volksgezondheid

Hoofdinspectie-Levensmiddelen

Dokter Reyersstraat 10

**Leidschendam** 

R.J. Ohlson

Mars Chocoladefabriek N.V.

Veghel N.B.

Dr. L.J. Schippers

Hoofdproductschap voor Akkerbouwproducten Stadhouderslaan 12

The Hague

Dr. W.A. Seeder

Koninklijke Verkadefabrieken N.V.

Zaandam

Dr. Th. van der Waerden

Netherlands Cocoa and Cocoa Products

Organization Koningslaan 44 Amsterdam

NIGERIA G.O. Niyi

Commercial Secretary

Permanent Mission of Nigeria

44 rue de Lausanne

1201 Genève

PHILIPPINES Miss Estela B. Lozada

FILIPINAS Cultural Attache of the Embassy of the

Philippines Kornhausplatz 7 CH-3000 Berne

SWEDEN Dr. M. Malm SUEDE AB Marabou

SUECIA S-172 36 Sundbyberg

SWITZERLAND SUISSE SUIZA Dr. E. Matthey

Chef du contrôle des denrées alimentaires

Service fédéral de l'hygiène publique

Haslerstrasse 16 CH-3008 Berne

Dr. H.W. Buser Chocolat Tobler SA Länggassstrasse 51

CH-3000 Berne

Dr. C. Del Boca

Vice-Président Chocosuisse

Case postale 353 CH-1800 Vevey

Dr. H. Hadorn

VSK, Coop-Schweiz

Thiersteinerallee 14

CH-4000 Basel

Prof. Dr. O. Högl

Grüneckweg 12

CH-3000 Berne

Dr. J. Kleinert

Lindt & Sprüngli SA

Seestrasse 204

CH-8802 Kilchberg

M. Messerli

Chocolat Frey AG

CH-5033 Buchs

Ing. Chim. J. Ruffy \*

Comité national suisse du Codex

Alimentarius

Haslerstrasse 16

CH-3008 Berne

CHAIRMAN PRESIDENT PRESIDENTE

> Dr. O. Schetty Interfood SA

CH-2003 Neuchâtel-Serrières

Dr. G.F. Schubiger

Soc. Ass. Techn. Produits Nestlé

CH-1814 La Tour-de-Peilz

UNITED KINGDOM ROYAUME-UNI REINO UNIDO L.G. Hanson

Chief Executive Officer

Ministry of Agriculture, Fisheries and Food

**Great Westminster House** 

Horseferry Road London S.W.I

H.F. Bamford

Rowntree-Mackintosh Ltd.

Chapelfield Works Norwich NOR 43A

K.J. Gardner Mars Ltd. Dundee Road Trading Estate

Slough

D.M. Lacy

**Deputy Director** 

The Cocoa, Chocolate and Confectionery

Alliance

11 Green Street

London W.I

UNITED STATES OF AMERICA ETATS-UNIS D'AMERIQUE ESTADOS UNIDOS DE AMERICA L.M. Beacham

Director

Division of Food Chemistry and Technology

Food and Drug Administration

Department of Health, Education and

Welfare

Washington, D.C. 20204

E.W. Meyers

Chairman of Chocolate Manufacturers Ass.

Technical Committee Director Research

**Hershey Foods Corporation** 

PO Box 54

Hershey, Pennsylvania 17033

B. Mintener

**Executive Director** 

**Chocolate Manufacturers Association** 

1812 K Street, N.W. Washington, D.C. 20006

Dr. A. Thomas Vice President

Research and Product Development

M & M/Mars Corporation

High Street

Hackettstown, New Jersey 07840

# INTERNATIONAL ORGANIZATIONS ORGANISATIONS INTERNATIONALES ORGANIZACIONES INTERNACIONALES

COCOA PRODUCERS ALLIANCE

(COPAL)

D.S. Kamga

Deputy Secretary-General Cocoa Producers Alliance

PO Box 1718

<u>Lagos</u> Nigeria

INTERNATIONAL FEDERATION OP

**GLUCOSE INDUSTRIES** 

Dr. E.A. Kropp CPC Europe

149 Avenue Louise

Bruxelles-5 Belgium

INTERNATIONAL ORGANIZATION OF

**CONSUMERS UNIONS (IOCU)** 

D. Richardson Consumer Council 3 Cornwall Terrace London, N.W.I

United Kingdom Mrs. Laura Schmidt

Fédération romande des consommatrices

Rue Etienne-Dumont 22

CH-1211 Genève Switzerland

OFFICE INTERNATIONAL DU CACAO ET Dr. C. del Boca

DU CHOCOLAT (OICC)

Président de l'OICC Case postale 353 <u>CH-1800 Vevey</u> Dr. G.F. Schubiger

Président de la Commission des Experts de

I'OICC

Case postale 88

CH-1814 La Tour-de-Peilz

R.L. Schoemaker Postbus 87 <u>Zaandam</u> Netherlands G.O. Kermode

FAO SECRETARIAT

SECRETARIAT FAO Chief, FAO/WHO Food Standards

SECRETARIA FAO Programme

FAO

Via delle Terme di Caracalla

I-00100 Rome

Italy

W.L. de Haas

Food Standards Officer

FAO/WHO Food Standards Officer

FAO/WHO Food Standards Programme

FAO

Via delle Terme di Caracalla

<u>I-00100 Rome</u>

Italy

Dr. C. Jardin

Food Standards Officer

FAO/WHO Food Standards Programme

FAO

Via delle Terme di Caracalla

<u>I-00100 Rome</u>

Italy

# PROPOSED DRAFT STANDARD FOR RAW AND SEMI-PROCESSED MATERIALS (at Step 4)

- 1. DESCRIPTIONS
- 1.1 <u>Cocoa (Cacao) Beams</u> are the seeds of the Cocoa tree (<u>Theobroma Cacao</u> L.) which have been fermented, thoroughly dried and are free from smoky beans, abnormal or foreign odours, reasonably uniform in size, reasonably free from living insects, insect-damaged beans, germinated beans, flat beans, broken beans, fragments, pieces of shell, slaty beans and mouldy beans and virtually free from foreign matter.
- 1.1.1 Minimum Quality of Cocoa Beans for the manufacture of semi-processed and finished cocoa products, press cocoa butter and expeller cocoa butter, and chocolate shall not exceed the following limits of defective beans:

a) mouldy beansb) slaty beans4% by count8% by count

 insect damaged beans, germinated beans or flat beans

6% by total count

- 1.1.2 Broken Bean: A cocoa bean of which a fragment is missing, the missing part being equivalent to less than half the bean.
- 1.1.3 Flat Bean: A cocoa bean of which the cotyledons are too thin to be cut to give a Surface of cotyledon.
- 1.1.4 Fragment: A piece of cocoa bean equal to or less than half the original bean.
- 1.1.5 Foreign Matter: Any substance other than cocoa beans, broken beans, fragments, and pieces of shell.
- 1.1.6 Germinated Bean: A cocoa bean the shell of which has been pierced, slit or broken by the growth of the seed germ.
- 1.1.7 Insect-damaged Bean: A cocoa bean, the internal parts of which are found to contain insects at any stage of development, or to show signs of damage caused thereby, which are visible to the naked eye.
- 1.1.8 Mouldy Bean: A cocoa bean on the internal parts of which mould is visible to the naked eye.
- 1.1.9 Slaty Bean: A cocoa bean which shows a slaty colour on half or more of the surface exposed by a cut made lengthwise through the centre.
- 1.1.10 Smoky Bean: A cocoa bean which has a smoky smell or taste or which shows signs of contamination by smoke.
- 1.1.11 Piece of Shell: Part of the shell without any of the kernel.
- 1.1.12 Thoroughly Dried Cocoa: Cocoa which has been evenly dried throughout. The moisture content must not exceed 7.5 percent. This maximum moisture content applies to cocoa in trade outside the producing country, as determined at first port of destination or subsequent points of delivery.
- 1.2 <u>Cocoa (Cacao) Nib</u> is the product obtained from beans which have been cleaned and freed from shells as thoroughly as it is technically possible.

- 1.3 <u>Cocoa (Cacao) Mass</u> is the product obtained by the mechanical disintegration of cocoa nib without abstraction or addition of any of its constituents.
- 1.4 <u>Cocoa Press Cake</u> is the product obtained by partial removal of fat from cocoa nib or cocoa mass by mechanical means.
- 1.5 <u>Expeller Press Cake</u> is press cake prepared by the expeller process from cocoa beans with or without the addition of cocoa nib, cocoa press cake and cocoa dust or fines.
- 1.6 Cocoa Dust or Fines is a fraction of the cocoa bean which is produced as a by-product during winnowing and de-germing. It consists of a mixture of finely divided nib, shell and germ.
- 2. ESSENTIAL COMPOSITION AND QUALITY FACTORS
- 2.1 Composition: Cocoa Nib, Cocoa Mass, Cocoa Press Cake

Cocoa shell: Not more than 4% m/m calculated on the fat-

free dry matter

Total ash: Not more than 10% m/m calculated on the fat-

free dry matter or 14% m/m when treated with

permitted alkalizing agents

Ash insoluble in Not more than 0.3% m/m calculated on the fat-

hydrochloric acid: free dry matter.

#### FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section ... of the Codex Alimentarius <u>have been endorsed</u> by the Codex Committee on Food Additives.

<u>Additive</u>	Maximum level	<u>Food</u>
Alkalizing Agents  Ammonium carbonate Ammonium hydroxide Ammonium hydrogen carbonate Calcium carbonate (a) Magnesium carbonate Magnesium hydroxide Potassium carbonate Potassium hydroxide Potassium hydroxide Sodium carbonate Sodium carbonate Sodium carbonate Sodium hydroxide Sodium hydroxide Sodium hydroxide	5% m/m singly or in combination, expressed as anhydrous K₂CO₃ on a fat free Basis	all products described under 1.
Neutralizing Agents [Phosphoric acid (b) (expressed as P <sub>2</sub> O <sub>5</sub> )] Citric acid, L-tartaric acid	0.5% m/m singly or in combination	all products described

<sup>(</sup>a) To be endorsed.

<sup>(</sup>b) Not endorsed, decision postponed. Referred back to the Committee for confirmation of tentative proposal.

<u>Additive</u>	Maximum level	<u>Food</u>
<u>Emulsifiers</u>		
All emulsifiers listed below:	_ ·	Cocoa Mass,
Lecithin	combination, except as provided below:  1% m/m of the acetone insoluble component of lecithin.	Cocoa Press
Mono- and di-glycerides of edible fatty acid;	1.5% m/m	
Ammonium salts of phosphatidic acids	0.7% m/m	
Flavouring Agents		
Natural flavours, as defined in the Codex Alimentarius and their synthetic equivalents and synthetic flavours appearing in the Codex list, other than those which would imitate natural chocolate or milk flavours (a)	, , ,	Cocoa Mass, Cocoa Press
Vanillin ) Ethyl vanillin )	in small amounts for flavour adjustments	

(a) Temporarily endorsed.

# 4. <u>CONTAMINANTS</u>

The following provisions in respect of contaminants <u>are subject to endorsement</u> by the Codex Committee on Food Additives:

<u>Contaminant</u>	Maximum level	<u>Food</u>
Copper	[20 mg/kg] [60 mg/kg]	Cocoa beans, nib and mass press cake
Arceric	[1 mg/kg])	all products described under 1.
Lead	<i>[</i> 2 mg/kg <i>])</i>	

# 5. HYGIENE

- 5.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the appropriate sections of the Recommended International Code of Hygienic Practice entitled "General Principles of Food Hygiene" as approved by the Codex Alimentarius Commission (Reference No. CAC/RCP 1-1969).
- To the extent possible in good manufacturing practice, the products shall be free from objectionable matter.

7.3 [The products shall not contain any pathogenic micro-organisms or any toxic substance originating from micro-organisms.]
The products shall not contain any substances originating from microorganisms in amounts which are toxic.

6. LABELLING (Subject to endorsement by the Codex Committee on Food Labelling)

The following declarations shall be made either on the container or in the accompanying documents.

# 6.1 Designation of the Product

Only products conforming with the appropriate description in Section 1 of this Standard and the essential composition and quality factors in Section 2 may be designated cocoa nib, cocoa mass and cocoa press cake respectively.

#### 6.2 List of Ingredients

Ingredients such as alkalizing and neutralizing agents, emulsifiers and flavouring agents shall be declared under generic or specific names.

# 6.3 Net Contents

The net contents shall be declared by weight in either the metric system ("Système international" units) or avoirdupois or both systems of measurement as required by the country in which the food is sold.

# 6.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

# 6.5 Country of Origin

- 6.5.1 The country of origin of the products covered by the Standard shall be declared, unless they are sold within the country of origin, in which case the country of origin need not be declared.
- 6.5.2 When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling.

#### 7. METHODS OP ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which <u>are to be endorsed</u> by the Codex Committee on Methods of Analysis and Sampling.

# 7.1 Analysis

# Criterion

Moisture content of cocoa beans

Total ash, (Ash, water soluble, water insoluble and HCl insoluble)

Shell in the final product

# Method

ISO 414/511

Text being prepared by OICC in collaboration with AOAC

Spiral vessel count <sup>a</sup> JAOAC 51:-457-460 (1968) JAOAC ref. 51, 725 (1968)

Stone and/or cells count according to Jackson (ref. not available)

# 7.2 <u>Sampling</u>

[to be completed later]

<sup>a</sup> Method still under study.

# STANDARD No. II PROPOSED DRAFT STANDARD FOR COCOA BUTTERS (at Step 4)

#### 1. SCOPE

This Standard applies exclusively to cocoa butter used as ingredient in the manufacture of chocolate and chocolate products.

#### DESCRIPTIONS

2.1 <u>Cocoa Butter</u> is the fat produced from one or more of the following: Cocoa beans (as defined in Sections 1.1 and 1.1.1 of Standard I), cocoa nib, cocoa mass, cocoa press cake, expeller press cake or cocoa fines, by a mechanical process and/or with the aid of permissible solvents. Cocoa butter shall not contain shell fat or germ fat in excess of the proportion in which they occur in the whole bean.

Cocoa butter may be treated as follows:

- (a) filtered, centrifuged;
- (b) degummed, deodorized by steam under vacuum and all other normal methods of deodorization;
- (c) treated with lye or a similar substance normally used for neutralizing;
- (d) treated with bentonite, active carbon and other compounds normally used for bleaching.
- 2.2 Press Cocoa Butter a is the fat which is obtained by pressure from cocoa nib or cocoa mass (cocoa liquor) obtained from cocoa beans as described in Sections 1.1 and 1.1.1 of Standard I. It may only be treated as stated under (a) and (b) of Section 2.1 of the general definition of cocoa butter.
- 2.3 Expeller Cocoa Butter a

"Expeller Cocoa Butter" is the fat which has been prepared from cocoa beans as described in Sections 1.1 and 1.1.1 of Standard I, by the expeller process. It may only be treated as stated under (a) and (b) of Section 2.1 of the general definition of cocoa butter.

#### 2.4 Refined Cocoa Butter <sup>a</sup>

"Refined Cocoa Butter" is the refined fat obtained from cocoa beans as described in Section 1.1 of Standard I, which, in addition to having been treated as indicated under (a) and (b), has also been treated as indicated under (c) and/or (d) of Section 2.1, the general definition of cocoa butter.

<sup>a</sup> "Footnote to the Definitions of Cocoa Butter for Use in Chocolate"

<u>Fat</u> which has been prepared from the raw materials permitted for the manufacture of cocoa butter and by one of the methods of preparation authorized for cocoa butter and with or without one of the treatments authorized for cocoa butter, but which does not comply with all the analytical values laid down for cocoa butter, may only be added to cocoa butter and only in such an amount that the resulting mixture is in compliance with the analytical values for refined cocoa butter.

#### ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 Identification and quality values for Press Cocoa Butter

<u>Characteristic</u> <u>Values</u>

Organoleptic characteristics:

Colour characteristic of the designated

product

Odour and taste characteristic of the designated

product and free from foreign

odour and foreign taste

Refractive index 1.456 - 1.458

Melting behaviour (Fincke)

slip point ) [32 - 33,5°c] clear melting point ) [33 - 35°C]

Free fatty acids (expressed 0.5 - 1.75% m/m

as % m/m oleic acid)

Saponification value 192 - 197 lodine value (Wijs) 33 - 42

Unsaponifiable matter not more than 0.35% m/m

(petroleum ether)

tryptamide content)

Extinction value at 270 nm to be specified later <sup>a</sup>

(after rinsing with NaOH)

Fatty acid composition (by to be specified later)<sup>a</sup>

gas liquid chromatography)]

#### 3.2 Identification and quality values for Expeller Cocoa Butter

Characteristic Values <sup>a</sup>

Organoleptic characteristics:

Colour Characteristic of the designated

product

Odour and taste Characteristic of the designated

product and free from foreign

odour and foreign taste

Refractive index [1.453 - 1.459]

Melting behaviour (Fincke)

slip point [32 - 33.5°C] clear melting point [33 - 35°]

Free fatty acids (expressed [0.5 - 2.0 % m/m]

as % m/m oleic acid)

Saponification value [188 - 1987 mg KOH/g fat

lodine value (Wijs) [32 - 43]

Unsaponifiable matter not more than [X] % m/m

(petroleum ether)

/Blue value (behenic acid //to be specified later a

tryptamide content)

Extinction value at 270 nm to be specified later <sup>a</sup>

(after rinsing with NaOH)

Fatty acid composition (by to be specified later) a

gas liquid chromatography)]

# 3.3 <u>Identification and quality values for Refined Cocoa Butter</u>

#### Characteristic Values <sup>a</sup>

Organoleptic characteristics:

Colour Characteristic of the designated

product

Odour and taste Characteristic of the designated

product and free from foreign

odour and foreign taste

Refractive index [1.453 - 1.4597]

Melting behaviour (Fincke)

slip point [32 - 33.5°C] clear melting point [33 - 35°C]
Free fatty acids (expressed as [0 - 2.0 % m/m]

% m/m oleic acid)

Saponification value [188 - 198] mg KOH/g fat

Iodine value (Wijs) [32 - 43]

Unsaponifiable matter not more than [X] % m/m

(petroleum ether)

/Blue value (behenic acid //to be specified later

tryptamide content)

Extinction value at 270 nm to be specified later

(after rinsing with NaOH)

Fatty acid composition (by to be specified later)

gas liquid chromatography) 7

#### 4. FOOD ADDITIVES

None permitted

Note by the Secretariat: Governments are invited to propose appropriate values for consideration by the Committee.

#### CONTAMINANTS

The following provisions in respect of contaminants <u>are subject to endorsement</u> by the Codex Committee on Food Additives:

<u>Contaminant</u>	Maximum level
Copper	0.4 mg/kg
Arsenic	0.5 mg/kg
Lead	0.5 mg/kg
Iron	2.0 mg/kg

#### 6. HYGIENE

- 6.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the appropriate sections of the Recommended International Code of Hygienic Practice entitled "General Principles of Food Hygiene" as approved by the Codex Alimentarius Commission (Ref. No. CAC/RCP 1-1969).
- To the extent possible in good manufacturing practice, the products shall be free from objectionable matter.
- 6.3 [The products shall not contain any pathogenic micro-organisms or any toxic substance originating from micro-organisms.]
  - The product(s) shall not contain any substances originating from microorganisms in amounts which are toxic.
- 7. LABELLING (Subject to endorsement by the Codex Committee on Food Labelling)
  - In addition to sections 1, 2, 4 and 6 of the General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969) the following specific declarations shall be made either on the container or on the accompanying documents.

#### 7.1 Designation of the Product

- 7.1.1 Press Cocoa Butter: Only products described under section II.2.2 and complying with the requirements of section II.3.1 of the standard may be designated 'cocoa butter' or 'press cocoa butter'. If the product has been deodorized by steam and/or vacuum and all other normal methods of deodorization (as mentioned in II.2.1 (b)), the designation may include the term 'deodorized'.
- 7.1.2 Expeller Cocoa Butter: Products described under section II.2.3 and complying with the requirements of section II.3.2 of the standard shall be designated 'expeller cocoa butter'. If the product has been deodorized by steam and/or vacuum and all other normal methods of deodorization (as mentioned in II.2.1 (b)), the designation may include the term 'deodorized'.
- 7.1.3 Refined Cocoa Butter: Products described under section II.2.4 and complying with the requirements of section II.3.3 of the standard shall be designated 'refined cocoa butter'.

# 7.2 Net Contents

The net contents shall be declared by weight in either the metric system ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the food is sold.

#### 7.3 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

#### 7.4 Country of Origin

- 7.4.1 The country of origin of the products covered by the standard shall be declared, unless they are sold within the country of origin, in which case the country of origin need not be declared.
- 7.4.2 When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.
- 8. METHODS OP ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

# 8.1 Analysis

<u>Criterion</u> <u>Method</u>

Preparation of sample a IUPAC II.A.I

Organoleptic characteristics:

Colour - Odour and taste -

Refractive index IUPAC II.B.2

Melting behaviour (Fincke)

slip point ) Fincke (common AOAC/OICC text)

Free fatty acids (expressed as % IUPAC II.D.1

oleic acid)

Saponification value IUPAC II.D.2
Iodine value (Wijs) IUPAC II.D.7.3
Unsaponifiable matter IUPAC II.D.5.2

(petroleum ether)

Blue value (behenic acid International collaborative test under way

tryptaraide content)

Extinction value at 270 nm (after International collaborative test under way rinsing with NaOH)

Fatty acid composition (by gas

International collaborative test under way

liquid chromatography)

Iron B.S. 684: 1958 p. 92) atomic absorption

spectrophotometry

Copper AOAC (1965) 24.023 ) to be considered as an alternative

method

Lead AOAC (1965) 24.053 )

Arsenic AOAC (1965) 23.011 (24.016, 24.017)

(Note: IUPAC indicates Methods of the International Union of Pure and Applied Chemistry, OICC indicates Methods of the Office International du Cacao et Chocolat, and B.S. indicates Methods of the British Standards, AOAC indicates Methods of the Association of Agricultural Chemists.)

N.B. In addition to the methods proposed and agreed for further studies it is anticipated that other techniques can profitably be developed.

a Not applicable to melting behaviour.

# 8.2 Sampling

The Statistical Sampling Scheme and Physical Methods for Taking Samples from Analytical Methods of the Office International du Cacao et Chocolat (OICC) Sampling III, Cocoa Butter, page 1 - E/1952 or its equivalent should be used.

#### STANDARD No. III

# PROPOSED DRAFT STANDARD FOR FINISHED COCOA PRODUCTS (at Step 4)

- 1. DESCRIPTION
- 1.1 Cocoa Products
- 1.1.1 Cocoa Powder or Cocoa is the product obtained by mechanical transformation of cocoa press cake into powder.
- 1.1.2 Sweetened Cocoa Powder or Sweetened Cocoa is a mixture of cocoa powder and sugars only.
- 1.2 <u>Sugars</u>, for the purposes of this standard, include sucrose, dextrose (anhydrous and monohydrate) dried glucose syrup, lactose and any other suitable carbohydrate sweetener.
- 2. ESSENTIAL COMPOSITION AND QUALITY FACTORS 2.1 Composition
- 2.1.1 Cocoa Powder or Cocoa

Cocoa butter: not less than 20% m/m calculated on the dry matter

Moisture content: not more than 9% m/m

2.1.2 Fat-reduced Cocoa Powder or Fat-reduced Cocoa

Cocoa powder or cocoa containing less than 20% m/m but not less than 8% m/m of cocoa butter and with a moisture content of not more than 9% m/m.

2.1.3 Sweetened Cocoa Powder or Sweetened Cocoa

Cocoa powder: not less than 32% m/m [calculated on the dry matter]

2.1.4 Sweetened fat-reduced Cocoa Powder or Sweetened fat-reduced Cocoa

Fat-reduced cocoa powder: not less than 32% m/m /calculated on the dry matter/

2.2 Optional Ingredients

	Maximum level	<u>Food</u>
Spices Salt (sodium chloride)	limited by good manufacturing practices	Cocoa Powder or Cocoa, Sweetened Cocoa Powder or Sweetened Cocoa

# 3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in Section ... of the Codex Alimentarius <a href="https://example.com/have-been endorsed">have been endorsed</a> by the Codex Committee on Food Additives:

<u>Additive</u>	Maximum level	<u>Food</u>
Alkalizing Agents Ammonium carbonate Ammonium hydroxide Ammonium hydrogen carbonate Calcium Carbonate (a) Magnesium carbonate Magnesium hydroxide Potassium carbonate Potassium hydroxide Potassium hydroxide Potassium hydroxide Sodium carbonate Sodium carbonate Sodium hydroxide Sodium hydroxide	5% m/m singly or in combination, expressed as anhydrous K₂CO₃ on a fat-free oasis.	Cocoa Powder or Cocoa, Sweetened Cocoa Powder or Sweetened Cocoa
Neutralizing Agents [Phosphoric acid (expressed <sup>(b)</sup> as P <sub>2</sub> O <sub>5</sub> )] Citric acid L-tartaric acid	0.5% m/m singly or in combination	ditto
Emulsifiers: All substances listed below: Lecithin  Mono- and di-glycerides of edible fatty acids Ammonium salts of phosphatidic acids	1.5% m/m singly or in combination except as provided below: 1% m/m of the acetone insoluble component of lecithin 1.5% m/m	ditto
Aminomum saits of phosphaticic acids	U. 1 /0 111/111	I

- (a) To be endorsed.
- (b) Not endorsed, decision postponed. Referred back to the Committee for confirmation of tentative proposal.

Flavouring Agents		
Natural flavours as defined in the	limited by good	Cocoa Powder or
Codex Alimentarius, and their	manufacturing	Cocoa, Sweetened
synthetic equivalents, and synthetic		Cocoa Powder or
flavours appearing in the Codex list,		Sweetened Cocoa
other than those which would imitate	е	
natural chocolate or milk flavours (a	)	
Vanillin	in small amounts for	
Ethyl vanillin	flavour adjustment	

(a) Temporarily endorsed.

#### CONTAMINANTS

The following provisions in respect of contaminants <u>are subject to endorsement</u> by the Codex Committee on Food Additives:

ContaminantMaximum level(b)FoodCopper[60 mg/kg]Cocoa Powder, orArsenic[1 mg/kg]Cocoa, SweetenedLead[2 mg/kg]Cocoa Powder or<br/>Sweetened Cocoa

- (b) Not endorsed. Decision postponed. Limits for lead, in particular, to be reconsidered (ALINORM 70/12 para 18).
- HYGIENE
- 5.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the appropriate sections of the Recommended International Code of Hygienic Practice entitled "General Principles of Food Hygiene" as approved by the Codex Alimentarius Commission (Reference No. CAC/RCP 1-1969).
- To the extent possible in good manufacturing practice, the products shall be free from objectionable matter.
- 5.3 [The products shall not contain any pathogenic micro-organisms or any toxic substance originating from micro-organisms.]
  - The product(s) shall not contain any substances originating from microorganisms in amounts which are toxic.
- 6. LABELLING (Subject to endorsement by the Codex Committee on Food Labelling)
  - In addition to sections 1, 2, 4 and 6 of the General Standard for the Labelling of Pre-packaged Foods (Ref. No. CAC/RS 1-1969) the following specific declarations shall be made.
- 6.1 Designation of the Product
- 6.1.1 Cocoa Powder or Cocoa: Only products described under section III.1.1.1 and complying with section III.2.1.1 of the Standard may be designated as <u>"Cocoa powder"</u> or "cocoa".
- 6.1.2 Fat-reduced Cocoa Powder or Pat-reduced Cocoa: Products not complying with section III.2.1.1 but complying with section III.2.1.2 of the Standard shall be designated "fat-reduced cocoa powder" or "fat-reduced cocoa".
- 6.1.3 Sweetened Cocoa Powder or Sweetened Cocoa: Only products described under section III.1.1.2 and complying with section III.2.1.3 of the Standard may be designated <u>"sweetened cocoa powder"</u> or <u>"sweetened cocoa"</u>.
- 6.1.4 Sweetened Pat-reduced Cocoa Powder or Sweetened Pat-reduced Cocoa: Products not complying with section III.2.1.3 but complying with section III.2.1.4 of the Standard shall be designated <u>"sweetened fat-reduced cocoa powder"</u> or "sweetened fat-reduced cocoa".

The term <u>"chocolate"</u> shall not be used as part of the designation of products covered by this section of the Standard except in those countries where national legislation already permits-such use.

# 6.2 <u>List of Ingredients</u>

Ingredients such as alkalizing and neutralizing agents, emulsifiers and flavouring agents shall be declared under generic or specific names.

#### 6.3 Net Contents

The net contents shall be declared by weight in either the metric system ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the food is sold.

#### 6.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

#### 6.5 Country of Origin

- 6.5.1 The country of origin of the products covered by the Standard shall be declared, unless they are sold within the country of origin, in which case the country of origin need not be declared.
- 6.5.2 When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.

#### METHODS OP ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are <u>to be endorsed</u> by the Codex Committee on Methods of Analysis and Sampling.

# 7.1 Analysis

<u>Criterion</u> <u>Method</u>

Moisture content OICC 3-E/1952 or

/loss on drying/ AOAC (1965) 12.001, 12.002 JAOAC

ref. 14,529 (1931)

Total fat (HCl digested) OICC - 8a/1963 or AOAC <sup>(a)</sup> (1965) -

12.023; JAOAC ref. 8,705 (1925), 9.469 (1926) 28,482 (1945), 33,342 (1950),

34,442 (1951)

[To be completed later]

#### 7.2 Sampling

[To be completed later]

(a) Regarded as alternative referee methods (see para 44 of ALINORM 69/10)

# PROPOSED DRAFT STANDARD FOR CHOCOLATE (at Step 4)

#### 1. DESCRIPTIONS

#### 1.1 Chocolate

- 1.1.1 Chocolate (including Sweet Chocolate or Plain Chocolate) is the homogeneous product obtained by an adequate process of manufacture from a mixture of one or more of the following: cocoa nib, cocoa mass, cocoa press cake, cocoa powder including fat-reduced cocoa powder, with sugars, with or without the addition of cocoa butter.
- 1.1.2 Unsweetened chocolate is chocolate as described under IV.1.1.1 without the addition of sugars.
- 1.1.3 Milk chocolate is the homogeneous product obtained by an adequate process of manufacture from a mixture of one or more of the following: cocoa nib, cocoa mass, cocoa press cake, cocoa powder, including fat-reduced cocoa powder, with sugars and milk solids, with or without the addition of cocoa butter.
- 1.1.4 Cream chocolate is the homogeneous product obtained by an adequate process of manufacture from a mixture of one or more of the following: cocoa nib, cocoa mass, cocoa press cake, cocoa powder, including fat-reduced cocoa powder, with sugars and cream solids, with or without the addition of cocoa butter and of other milk solids.
- 1.1.5 Couverture chocolate is chocolate as defined in the standard and is suitable for covering purposes.
- 1.1.6 Milk couverture chocolate is milk chocolate as defined in the standard and is suitable for covering purposes.
- 1.1.7 Chocolate Vermicelli and Chocolate Flakes are chocolate in the form of grains and flakes.
- 1.1.8 Milk Chocolate Vermicelli and Milk Chocolate Flakes are milk chocolate in the form of grains and flakes.
- 1.2 <u>Sugars</u>, for the purposes of this standard, include sucrose, dextrose (anhydrous and monohydrate) dried glucose syrup, lactose and any other suitable carbohydrate sweetener.
- ESSENTIAL COMPOSITION AND QUALITY FACTORS
- 2.1 <u>Composition</u> (\*)
- (\*) In order to facilitate easier comprehension of the compositional elements, the Secretariat has compiled a table of the data which is contained in the Annex to Appendix V.

#### 2.1.1 Chocolate, Unsweetened Chocolate and Couverture Chocolate

Cocoa butter: not less than 18% m/m calculated on the

dry matter in chocolate and couverture

chocolate.

not less than 50% m/m and not more than 58% m/m calculated on the dry matter in

unsweetened chocolate.

Fat-free cocoa solids: not less than 14% m/m calculated on the

dry matter in chocolate.

not less than 2.5% m/m calculated on the

dry matter in couverture chocolate.

Total cocoa solids: not less than 35% m/m calculated on the

dry matter in chocolate and couverture

chocolate.

2.1.2 Sweet (plain) Chocolate

Cocoa butter: not less than 18% m/m calculated on the

dry matter.

Pat-free cocoa solids: not less than /35/% m/m calculated on the

dry matter.

2.1.3 Milk Chocolate and Milk Couverture Chocolate

Pat-free cocoa solids: not less than 2.5% m/m calculated on the

dry matter.

Total cocoa solids: not less than 25% m/m calculated on the

dry matter.

Milk fat: not less than 3.5% m/m calculated on the

dry matter.

Fat-free milk solids: not less than 10.5% m/m in their natural

proportions calculated on the dry matter.

Total fat: not less than 25% m/m calculated on the

dry matter.

Sugars: not more than 55% m/m.

#### 2.1.4 Skimmed Milk Couverture and Skimmed Milk Couverture Chocolate

As for milk chocolate except that there shall be no requirement as to milk fat and the provision for fat-free milk solids shall be 14% m/m in their natural proportions calculated on the dry matter.

#### 2.1.5 Cream Chocolate

Pat-free cocoa solids: not less than 2.5% m/m calculated on the

dry matter.

Total cocoa solids: not less than 25% m/m calculated on the

dry matter.

Milk fat: not less than 7% m/m calculated on the dry

matter.

Fat-free milk solids: not more than 14% m/m and not less than

3% m/m in their natural proportions

calculated on the dry matter.

Total fat: not less than 25% m/m calculated on the

dry matter.

Sugars: not more than 55% m/m

2.1.6 Chocolate Vermicelli and Chocolate Flakes

Fat-free cocoa solids: not less than 14% m/m calculated on the

dry matter.

Cocoa butter: not less than 12% m/m calculated on the

dry matter.

Total cocoa solids: not less than 32% m/m calculated on the

dry matter.

2.1.7 Milk Chocolate Vermicelli and Milk Chocolate Flakes

Fat-free cocoa solids: not less than 2.5% m/m calculated on the

dry matter.

Total cocoa solids: not less than 20% m/m calculated on the

dry matter.

Milk fat: not less than 3.5% m/m calculated on the

dry matter.

Fat-free milk solids: not less than 10.5% m/m in their natural

proportions calculated on the dry matter.

Total fat: not less than 12% m/m calculated on the

dry matter.

Sugars: not more than 66% m/m.

2.2 Optional ingredients

Maximum level Food

Spices limited by good Products described

Sald (sodium chloride) manufacturing under IV.1.1.

practice

#### 3. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in section ... of the Codex Alimentarius have been endorsed by the Codex Committee on Food Additives.

<u>Additive</u>	Maximum level	Food
Emulsifiers: all substand listed below:	ces 1.5% m/m single or in combination except as provided below:	Products described under IV.1.1
Lecithin	0.5% m/m of the acetone insoluble component of lecithin	" "
Mono- and di-glycerides edible fatty acids	s of 1.5% m/m	" "
Ammonium salts of phosphatidic acids	0.7% m/m	" "
Flavouring agents		· ·
Natural Savours as defithe Codex Alimentarius their synthetic equivaler synthetic flavours appeathe Codex list except the which would imitate natichocolate or milk flavou	, and manufacturing practice nts, and aring in ose ural	Products described under IV.1.1
Vanillin Ethyl vanillin )	in small amounts for flavo adjustment	our "

Temporarily endorsed

# 4. CONTAMINANTS

The following provisions in respect of contaminants <u>are subject to endorsement</u> by the Codex Committee on Food Additives:

Contaminant	<u>Maximum Level</u> <sup>a</sup>	Food		
Copper	[20 mg/kg]	Produc under I	ts descr V.1.1	ibed
Arsenic		i)	()	
Lead	/2 mg/kg/	()	"	

# 5. HYGIENE

- 5.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the appropriate sections of the Recommanded International Code of Hygienic Practice entitled "General Principles of Food Hygiene" as approved by the Codex Alimentarius Commission (Reference No. CAC/RCP1-1969).
- 5.2 To the extent possible in good manufacturing practice, the products shall be free from objectionable matter.

- 7.3 [The product shall not contain any pathogenic micro-organisms or any toxic substance originating from micro-organisms.]
  The products shall not contain any substance originating from micro-organisms in amounts which are toxic.
- LABELLING ( subject to endorsement by the Codex Committee on Food Labelling)
   In addition to sections 1, 2, 4 and 6 of the General Standard for the Labelling of

In addition to sections 1, 2, 4 and 6 of the General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS. 1-1969) the following specific declaration shall be made.

- 6.1 <u>Designation of the product</u>
- 6.1.1 Chocolate, including Sweet or Plain Chocolate: Only products described under section IV.1.1.1 and complying with the appropriate requirements of section IV.2.1.1 or IV.2.1.2 of the standard may be designated 'chocolate', 'sweet chocolate' or 'plain chocolate'.
- 6.1.2 Sweet or Plain Chocolate: Only products described under section IV.1.1 and complying with the appropriate requirements of section IV.2.1.2 of the standard may be designated 'sweet chocolate' or 'plain chocolate'.
- Not endorsed, decision postponed. Limits for lead, in particular, to be reconsidered (See ALINORM 70/12 para. 18).
- 6.1.3 Unsweetened Chocolates Products described under section IV.1.1.2 and complying with section 17.2.1.1 of the standard must be designated 'unsweetened chocolate'.
- 6.1.4 Couverture Chocolate: Only products described under section IV.1.1.5 and complying with the appropriate requirements of section.IV.2.1.1 of the standard may be designated 'couverture chocolate'. Couverture chocolate containing not less than 16% m/m fat-free cocoa solids, calculated on the dry matter, may be designated 'dark couverture chocolate'.
- 6.1.5 Milk Chocolate and Milk Couverture Chocolate: Only products described under section IV. 1.1.3 and IV.1.1.6 and complying with section IV.2.1.3 of the standard may be designated as 'milk chocolate' and 'milk chocolate'.
- 6.1.6 Skimmed Milk Chocolate and Skimmed Milk Couverture Chocolate: Products not complying with section IV.2.1.3 but complying with section IV.2.1.4 of the standard must be designated 'skimmed milk chocolate' or 'skimmed milk couverture chocolate' as appropriate.
- 6.1.7 Cream Chocolate: Only products described under section IV.1.1.4 and complying with section IV.2.1.5 of the standard may be designated 'cream chocolate'.
- 6.1.8 Chocolate Vermicelli and Chocolate Flakes: Only products described under section IV.1.1.7 and complying with section IV.2.1.6 of the standard may be designated 'chocolate vermicelli' or 'chocolate flakes' as appropriate.
- 6.1.9 Milk Chocolate Vermicelli and Milk Chocolate Flakes: Only products described under section IV.1.1.8 and complying with section IV.2.1.7 of the standard may be designated 'milk chocolate vermicelli' or 'milk chocolate flakes' as appropriate.

# 6.2 <u>List of ingredients</u>

Ingredients such as alkalizing and neutralizing agents, emulsifiers and flafouring agents shall be declared under generic or specific names.

# 6.3 Net Contents

The net contents shall be declared by weight in either the metric system ("Système International" units) or avoirdupois or both systems of measurements as required by the country in which the food is sold.

# 6.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

#### 6.5 Country of Origin

- 6.5.1 The country of origin of the products covered by the standard shall be declared, unless they are sold within the country of origin, in which case the country of origin need not be declared.
- 6.5.2 When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling.

# METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

#### 7.1 Analysis

<u>Criterion</u>	<u>Method</u>	
Total fat (HCl digested)	OICC 3-E/1952 or	
	AOAC <sup>a</sup> 1965: - 12.023; JAOAC ref. 8,705 (1925)	
	28,482 (1945), 33,342 (	, ,
Milk fat content	OICC p. 8i/1962 semi-n	•
	residual) indices of fats	
		tyric acid <sup>a</sup> (19655-26.034-
	·	212 (1956), 40,531 (1957)
Pat-free cocoa solids	AOAC (1965:-12.021, J	AOAC ref. 14,526, 530
	(1931), 24,720 (1941)	
Fat-free milk solids	OICC 6 a, or	
	6 b, or	E/1963
	6 c,	
Total cocoa solids	(Method to be proposed	by governments)
Sugars	OICC 7 a	
	7 b	
	7 c	E/1960
	7 d	
	7 e	

# 7.2 <u>Sampling</u> [To be completed later]

<sup>&</sup>lt;sup>a</sup> Regarded as alternative referee methods (see para. 44 of ALINORM 69/10).

Annex V <u>SECTION 2 - ESSENTIAL COMPOSITION AND QUALITY FACTORS</u> (prepared in table form by the Secretariat)

Components		Cocoa		ſ	Milk	Cocoa Milk	Sugar	Option Ingred s	
Product	Cocoa butter*	Fat-free cocoa solids*	Total cocoa solids*	fat*	Fat-free milk solids*	Total fat*		Spice s salts	
Chocolate	≥ 18	≥ 14	≥ 35						
Sweet (plain) chocolate	≥18	≥ 6	≥ <i>[</i> 35]					tice	
Unsweetened chocolate	≥ 50							practice	
	≤ 58								
Couverture chocolate	≥ 18	≥ 2,5	≥35					turir	
(Dark couverture chocolate	≥ 18	≥ 16	≥ 35))					manufacturing	
Milk chocolate		≥ 2.5	≥ 25	≥ 3.5	≥ 10.5	≥ 25	≥ 55	Ë	
Milk couverture choclate		≥ 2.5	≥ 25	≥ 3.5	≥ 10.5	≥ 25	≥ 55	poob	
Skimmed milk chocolate		≥ 2.5	<b>[≥</b> 25]		≥ 14		≥ 55	by g	
Skimmed milk couverture chocolate		≥ 2.5	[≥ 25]		≥ 14		≥ 55		
Cream chocolate		≥ 2.5	≥ 25	≥7	≥ 3 ≤ 14	≥ 25	≥ 55	Maximum level limited	
Chocolate vermicelli	≥ 12	≥ 14	≥ 32		14			E	
Chocolate flakes	≥ 12	≥ 14	≥ 32					dim.	
Milk chocolate vermicelli		≥ 2.5	≥ 20	≥ 3.5	≥ 10.5	≥ 12	≥ 66	Ma	
Milk chocolate flakes		≥ 2.5	≥ 20	≥ 3.5	≥ 10.5	≥ 12	≥ 66		

<sup>\*</sup> All figures are calculated on the dry matter of the product

<sup>\*\*</sup> The various constituents of fat-free milk solids should appear in their natural proportions

#### STANDARD No. V

# PROPOSED DRAFT STANDARD FOR COMPOSITE AND FLAVOURED CHOCOLATES (at Step 4)

- 1. DESCRIPTION
- 1.1 Composite chocolate [to be elaborated]
- 1.2 Flavoured chocolate Ito be elaborated I
- 2. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**
- 2.1 Composition
- 2.1.1 Composite chocolate
- 2.1.1.1 Composite chocolate must contain not less than 60% by weight of chocolate as defined under Standards IV.2.1.1 Chocolate, Unsweetened Chocolate and Couverture Chocolate, IV.2.1.2, Sweet (Plain) Chocolate, IV.2.1.3 Milk Chocolate and Milk Couverture Chocolate, IV.2.1.4 Skimmed Milk Chocolate and Skimmed Milk Couverture Chocolate and/or IV.2.1.5 Cream Chocolate.
- [2.1.1.2 No substance may be added to these products which could replace the cocoa constituents specified in standards IV.2.1.1 to IV.2.1.4 listed in V.2.1.1.1 above).
- 2.1.2 Flavoured Chocolate

/Flavoured chocolate must conform with the definitions of chocolate as provided in standards IV.2.1.1 to IV.2.1.7].

2.2 **Optional Ingredients** 

> Maximum level Food

All products described Spices Limited by good

under V.1. Salt (sodium chloride) manufacturing practice

3. **FOOD ADDITIVES** 

> The following provisions in respect of food additives and their specifications as contained in Section ... of the Codex Alimentarius have been endorsed by the Codex Committee on Food Additives.

<u>Additive</u>	Maximum level	<u>Food</u>	
<u>Emulsifiers</u>			
All emulsifiers listed below:	1 .5% m/m singly or in combination, except as provided below:	All products d described under V.1	
Lecithin	0.5% m/m cc the acetone insoluble component of lecithin.		
Mono- and di-glycerides of edible fatty acids	e 1.5% m/m	- ditto -	

Ammonium salts of phosphatidic 0.7% m/m

- ditto -

acids

#### Flavouring Agents

Natural flavours as defined in the limited by good manufacturing

Codex Alimentarius and their practices

synthetic equivalents and

synthetic flavours apppearing in the Codex list, other than those

which would imitate natural chocolate or milk flavours (a)

Vanillin in small amounts for flavour Ethyl vanillin adjustment

(a) Temporarily endorsed.

#### 4. CONTAMINANTS

The following provisions in respect of contaminants <u>are subject to endorsement</u> by the Codex Committee on Food Additives:

- ditto -

<u>Contaminant</u>	Maximum level (a)	<u>Food</u>
Copper	<i>[</i> 20 mg/kg <i>]</i>	All products described
Arsenic	<i>[</i> 1 mg/ka <i>]</i>	under V.1
Lead	<i>[</i> 2 mg/kg <i>]</i>	

(a) Not endorsed. Decision postponed. Limits for lead, in particular, to be reconsidered (see ALINORM 70/12 para 18).

# 5. HYGIENE

- 5.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the appropriate sections of the Recommended International Code of Hygienic Practice entitled "General Principles of Food Hygiene" as approved by the Codex Alimentarius Commission (Reference No. CAC/RCP 1-1969)
- 5.2 To the extent possible in good manufacturing practice, the products shall be free from objectionable matter.
- 5.3 [The products shall not contain any pathogenic micro-organisms or any toxic substance originating from micro-organisms].
  The products shall not contain any substances originating from micro-organisms in amounts which are toxic.
- 6. LABELLING (subject to endorsement by the Codex Committee on Food Labelling)

In addition to Setions 1, 2, 4, 5 and 6 of the General Standard for the Labelling of Pre-packaged Foods (Ref. No. CAC/RS 1-1969) the following specific declarations shall be made.

- 6.1 Designation of the Product
- 6.1.2 Composite Chocolate other than Flavoured Chocolate
- 6.1.2.1 Only ingredients in excess of 5% by weight of the product may be declared as part of the name of the product (e.g. Hazelnut Chocolate).

[6.1.2.2 Ingredients which do not characterize the product, and are present in amounts less than 5% by weight of the product, may not be declared as part of the name of the product].

#### 6.1.3 Flavoured Chocolate

- [6.1.3.1 Flavoured Chocolate must declare the characterizing flavour other than chocolate.
- 6.1.3.2 Ingredients which are especially aromatic and characterise the product shall form part of the name of the product (e.g. Mocca Chocolate).

# 6.2 List of Ingredients

Ingredients such as alkalizing and neutralizing agents, emulsifers and flavouring agents shall be declared under generic or specific names.

# 6.3 Net Contents

The net contents shall be declared by weight in either the metric system ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the food is sold.

# 6.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

#### 6.5 Country of Origin

- 6.5.1 The country of origin of the products covered by the standard shall be declared, unless they are sold within the country of origin, in which case the country of origin need not be declared.
- 6.5.2 When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling.

#### 7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which <u>are to be endorsed</u> by the Codex Committee on Methods of Analysis and Sampling.

#### 7.1 Analysis

/To be completed later./

# 7.2 Sampling

To be completed later.