

codex alimentarius commission

FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD HEALTH
ORGANIZATION

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Agenda Item 2

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON MILK AND MILK PRODUCTS

Fourth Session

Wellington, New Zealand, 28 February - 3 March 2000

MATTERS REFERRED TO THE COMMITTEE BY THE CODEX ALIMENTARIUS COMMISSION AND OTHER CODEX COMMITTEES

CONSIDERATION OF RAW MATERIALS AND MINIMUM PROTEIN LEVEL IN THE GENERAL STANDARD FOR CHEESE

BACKGROUND

1. During the discussion on the Draft Revised Standard for Cheese at the 23rd Session of the Codex Alimentarius Commission¹, the Delegation of Japan, while not opposing the adoption of the Draft Revised Standard, proposed that the Commission request the Committee on Milk and Milk Products to consider the inclusion of a minimum level of protein in the Standard to provide for better guidance on product classification/identification, and to ensure that the coagulation was the key factor in the production of cheese. Many delegations supported this proposal. The Delegation of Australia expressed the view that the inclusion of a minimum protein level as a definitional criterion was unnecessary.
2. The Delegation of Norway, also not opposed to the adoption of the Draft Standard, proposed to reconsider Section 3.1 Raw Materials because the change made at the 3rd Session of the Committee as a consequential amendment was, in effect, a substantial one and would require further consideration.
3. The Commission **requested** the Committee on Milk and Milk Product to consider: (1) inclusion of a minimum level for protein; and (2) raw materials.
4. The Committee is invited to consider the above matters based on the comments submitted to the 23rd Session Commission (attached to this paper) and oral comments made at the 4th Session of the Committee and report the conclusions to the Commission including possible amendments to the Standard for Cheese.

¹ 28 June - 3 July 1999, Rome (ALINORM 99/37, paras 91-95)

COMMENTS SUBMITTED TO THE COMMISSION AT ITS 23RD SESSION
REGARDING RAW MATERIAL AND MINIMUM PROTEIN LEVEL

RAW MATERIAL

Norway

2. Description, and 3.1 Raw Materials

The change (in Montevideo) of Raw Materials and, for the sake of consistency, the Description from: “milk, skimmed milk, partly skimmed milk, creme, whey creme and buttermilk or any combination of these materials” to “milk and/or products obtained from milk” was done as a consequential amendment. However, as a matter of fact, this is a substantial change of the definition of cheese and should have been considered as such or been an issue for specific comments by Governments.

Australia

Australia notes the proposal by Norway to reverse the Montevideo decision on the description of raw materials. Australia believes that the new description (“milk and/or products obtained from milk”) agreed at Montevideo and currently incorporated in the standard at Step 8, more appropriately reflects the broad range of milk products available today than the previous prescriptive list.

MINIMUM PROTEIN LEVEL

Japan

Japan proposes the inclusion of minimum protein content in section 3 as follows:

3.3 composition

Minimum protein in dry matter 6%

Section 2.1 of the Draft indicates that coagulation is the key characteristic of cheese. As it is the milk protein in cheese that coagulates for something to be called “cheese”, it should contain some minimum amount of milk protein. Note also that there are no specific methods developed to check whether coagulation has occurred.

Minimum protein content is the key criterion to ensure coagulation. Even mascarpone contains 8.12% in dry matter (see appendix). We consider that 5% is a reasonable standard for all real cheese to be assured of coagulation.

It is one of the purposes of CODEX to ensure fair practices in the food trade.

Without any compositional criteria in standard, in the extreme case “cheese” could be manufactured by the mixing of milk fat and a small amount of protein that is not enough to coagulate and at the same time, such products also come under the classification, “dairy spreads” or “other products”.

Appendix: Fat and Protein content in a variety of Cheese

No.	Name	% in Dry Matter	
		Fat	Protein
1	Cottage	37.05	60.96
2	Ricotta	48.66	45.22
3	Quark	43.88	49.36
4	Neufchatel	71.02	23.43
5	Cream	75.69	16.97
6	Feta	43.05	55.41
7	Edam	49.62	48.73
8	Gauda	52.02	46.40
9	Swiss	50.55	47.68
10	Cheddar	56.37	42.19
11	Blue-veined	60.86	37.97
12	Mozarella	45.26	52.70

No.	Name	% in Dry Matter	
		Fat	Protein
13	Bococini	46.44	52.55
14	Provolone	49.82	48.76
15	Washed-rind	62.57	36.42
16	Camambert	57.70	40.81
17	Brie	59.30	39.33
18	Parmesan	46.03	52.17
19	Romano	46.22	51.86
20	Repato	53.63	44.84
21	Pecorino	48.45	49.88
22	Mascarpone	85.13	8.12

sources: 1 to 21, “Typical composition of Cheese”, ADC, Australia; and 22; “Nutrition Fact Sheet”, FDA, USA

We have already sent our proposal that a certain limitation for chemical composition, minimum level of protein in particular, should be included in the Proposed Draft Standard for Cheese (A6). Our proposal of "**minimum protein in dry matter: 6%**" was circulated as one of the government comments in ALINORM 99/21 Part 1-Add.3.

Australia submitted its comments to our comments thereafter in CAC/LIM 5 (1999) dated 11 June, 1999. The purpose of this paper is to respond to the Australian comments to us and to make our position clearer.

There are three points we have to make our position clearer and to point out that the Australian claims are not relevant

1. Australia mentioned that "This is a major change to the Standard and as such should not be contemplated at Step 8".

Japan proposes that discussion on the inclusion of the compositional limitation in A6 should be commenced in the relevant Codex Committee as **NEW WORK**, which means that while adopting A6 in CAC meeting it instructs CCMMP to begin discussion on compositional limitation in the next CCMMP meeting. This is following the Codex procedure properly and Australian claim is irrelevant. Japan does **not** intend to object adoption of A6 as a whole. However, we do claim that consideration on the chemical composition should be taken place because a sort of hypothetical extreme case in older days became reality.

2. Australia mentioned that "Protein is not the only criterion for coagulation to take place. Temperature and acidity are equally important, and protein should not be taken in isolation of these other two elements. All the components coagulate (not just the protein)".

Section 2.1 of the Draft Standard A6 describes that coagulation is the key characteristics of cheese. As it is the milk protein in cheese that coagulates for something to called as "cheese". it should contain a certain level of protein at least. Temperature and acidity may also be important, however, "Temperature" should not be included in "composition". About acidity, we can agree with inclusion of pH requirement, if it is justified by CCMMP.

We are also ready to agree with introducing maximum fat and lactose contents in the Standard. Japan contends that compositional criteria should be included in the Standard to make third party personnel being able to confirm. Japan also considers that inclusion of compositional limitations will minimize "gray" zone between Standards and will ensure fair practices in food trade.

3. Australia mentioned that "There is no scientific basis for the choice of an arbitrary minimum of 6 %. The table provided by Japan only provides some examples of some products. It does not establish basis for any particular minimum. Given the inadequacy of existing test methods in definitively measure protein levels, a high degree of tolerance should be allowed in establishing any level in the standard".

Japan considers that compositional limitations/standards should always be determined by referring to that in conventional products. Since we have no intention of reclassification of conventional cheese varieties, our proposal of 6% for minimum protein in dry matter includes tolerance for analytical errors in Mascarpone. Therefore, we do not stick to the figure of 6 % and so 7 or 8 % can be acceptable. We consider that the figure should be discussed by experts in the relevant Codex Committee.

Australia

While cheese varieties have traditionally been defined according to fat content (as in Section 7.2 of the standard) and moisture content (as in Section 7.1.1 of the standard), a case is yet to be made for the imposition of limits on other components in either the general standard or the varietal standards.

Australia notes the proposal from Japan to amend this draft standard by the addition of a new section 3.3 requiring a minimum protein in dry matter of 5%.

Australia strongly objects to this proposal on the grounds that:

- this is a major change to the Standard and as such should not be contemplated at Step 8.
- protein is not the only criterion for coagulation to take place. Temperature and acidity are equally important and protein should not be taken in isolation of these other two key elements. All the components coagulate (not just the protein).
- there is no scientific basis for the choice of an arbitrary minimum of 5%. The table provided by Japan only provides some examples of some products. It does not establish a scientific basis for any particular minimum. Given the inadequacy of existing test methods in definitively measuring protein levels, a high degree of tolerance should be allowed in establishing any level in the standard.

Australia disagrees with the suggestion that this additional requirement in the standard would assist in determining whether a product is really cheese or simply milk fat with protein added.

The implications of such a change in direction and the justification for it need to be very carefully considered by the relevant Codex Committee (Milk and Milk Products) before any such move is made.