

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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Agenda Item 4(e)

CX/PFV 04/22/8 Add.1
September 2004

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

22nd Session,

Washington, DC metro area, U.S.A., 27 September – 1 October 2004

PROPOSED DRAFT CODEX STANDARD FOR SOY SAUCE

The following comments have been received from
China, Egypt, France, Indonesia, Malaysia, New Zealand, Switzerland, United States,
the European Soup Industry and the International Hydrolyzed Vegetable Protein Council.

CHINA

General comments:

- In China, the products named soy sauce is regarded as a liquid seasoning obtained by fermentation of soybean (or cereal grains). Some of them are added by hydrolyzed vegetable proteins (HVP). The sauce originated exclusively from Hydrolyzed Vegetable Protein is classified as delicious agents (taste enhancer agents) and can't be included in the category of soy sauce. So we strongly oppose the inclusion of "non-brew soy sauce" in this standard.

Other proposed recommendations:

1.1 Naturally Brewed Soy Sauce and Short-time Brewed Soy Sauce shall be merged into one category as ***Brewed Soy Sauce*** for the following reasons:

- **The brewed soy sauce should not be distinguished by time, temperature or time of salt addition** -- factors that have, and will continue to, evolve with innovations in production methods. These factors should be left to the manufacturer based on optimal conditions to achieve the expected product.
- **The use of the term "natural" is inappropriate**-- it is not supported by existing Codex requirements for the labelling of pre-packaged goods. "Natural" is subject to national practice and custom and will, therefore, have multiple interpretations and/or regulatory definitions. It would be particularly hard to apply to a product sold in world trade and could lead to misinterpretations by consumers.

1.2 Non-brewed soy sauce should be renamed as Sauce originated from ***Hydrolyzed Vegetable Protein***, and shall be excluded from this standard.

2. Description:

2.1 Soy Sauce:

Soy sauce is a liquid seasoning obtained by fermentation of soybeans and/or soybeans and cereal grains, or added by hydrolyzed vegetable protein after the fermentation of soybean.

2.1.1 **Brewed soy sauce** is the product obtained by:

- a) The culture of *Aspergillus oryzae* and/or *Aspergillus sojae*, as a starter, in either soy beans or soybeans and cereal grains; or the culture of bacteria and/or moulds and/or yeasts in either soybeans or soybeans and cereal grains; or the mixing of food grade enzymes with either soy beans or soybeans and cereal grains.
- b) Fermentation and aging of the mixture of the product obtained by (a) and brine.
- c) Addition of other ingredients as specified in 3.1.2.

The addition of **enzymes** should be allowed for Brewed Soy Sauce. In traditional soy sauce manufacturing, micro-organisms are added for the sole purpose of producing enzymes that hydrolyzed soy proteins for development of the characteristic taste attributes of soy sauce. Whether produced traditionally, or added directly, enzymes carry out the same function. Addition of enzymes represents continuous innovation in production methods.

2.1.2 **Mixed Soy Sauce** is the product obtained by:

- a) Brewed soy sauce and hydrolyzed vegetable protein,
 - b) The proportion added by brewed soy sauce is not less than 50%.
3. Allowance for **other permitted ingredients** in 3.1.2 should be as broad as possible to reflect worldwide production methods and consumer expectations for soy sauce, for example, spices and other edible herbs.
 4. **Quality factors** in 3.2 (e.g., total nitrogen, total solids exclusive of added salt) should be limited to the minimum requirement and should only be set where validated analytical methods are available.
 5. Allowance for use of **additives** in 4.0 should be based on the Codex General Standard for Food Additives.
 6. Use of **alternate terms** (e.g., fermented, cultured), according to national practices, should be provided for in the labeling of the various types of soy sauce.

EGYPT

Accepts the Proposed draft Codex Standard for Soy Sauce.

FRANCE

In regard to comments made by the Codex Secretariat, the following must be implemented:

- The wording of the Scope must be identical to that of other Codex Standards
- A Weights and Measures section must be introduced as well as a section on the labeling of non retail products.

Distinguishing between naturally brewed Soya sauce and hydrolyzed Soya sauce (by using enzymes or acids) is the main objective of this Draft Standard.

- Designations for these two products must be clearly separate
- The Draft Standard should retain the maximum 3 MCPD level established by Regulation 466/2001, given the toxicity of said contaminant.

Furthermore, some provisions pertaining to additives do not comply with common guidelines.

INDONESIA

Background

1. In Indonesia particularly, soy sauce has been known for more than one century with common name “**Kecap**” which famous as **sweet soy sauce**. It is a liquid, brown colored condiment, made by a two-stage batch fermentation which involves the biochemical activities of mould (R.oryzae or R.oligosporus), lactic acid bacteria (Lactobacillus) and yeast (Saccharomyces roxii). In traditional practice, the liquid is extracted, clarified and filtered before introduction of desired taste and flavor by addition brown sugar, spices and a certain additives (enhancer, preservatives and or coloring and molasses); finally it is pasteurized and packaged (enclosed). Sweet Soy Sauce in Indonesia mostly produced by medium-large enterprise (approx. 60%) while remaining 40% produced by small-medium enterprise
2. In 2003, total production of sweet soy sauce in Indonesia approximately 280.000 ton (90%) and salty soy sauce approximately 31.200 ton (10%). Potential growth is about 3.6% per year. As condiment, consumption of sweet soy sauce is about 0.9 L/Capita/Yr. Besides part of daily Indonesian cuisine, “Kecap” or Sweet Soy Sauce could be developed as Indonesian typical sauces for instant noodle and other products; therefore potential for increasing in volume in the future.

1. SCOPE

This standard applies to **soy sauce** products as defined in section 2 below **and offered for direct consumption including for catering purposes or for repacking with other product if required. It does not apply to the product when indicated as being intended for further processing.**

2. DESCRIPTION**2.1. Product Definition**

Soy sauce is a ~~clear~~ liquid seasoning obtained by fermentation of soybean and/or by hydrolysis of soybean or other vegetable protein sources **to produce soy extract for further processed into sweet soy sauce or salty soy sauce.**

~~Individual definition of each type of soy sauce is described under subsection 2.1.1 through 2.1.4.~~

2.2 Process Definition

Individual process definition for making soy extract is described under subsection 2.2.1 through 2.2.3

Naturally brewed soy sauce is the product obtained by:

2.2.1 *Aspergillus oryzae* and/or *Aspergillus sojae* **and/or Rhizopus oryzae and/or Rhizopus oligosporus as main starter** are cultured in either soybean or soybean and cereal grains **with or without addition** of bacteria and/or mold and/or yeast **and/or enzyme**.

2.2.2 **Non brewed soy sauce** is the product obtained by:

Soybean and/or other vegetable protein are hydrolyzed by using acids or enzymes in the brine or salt water (the product obtained by this process is here after referred to as “Hydrolyzed Vegetable Protein”).

2.2.3 **Mixed soy sauce** is the product obtained by:

- (a) The different types of the soy sauce(s) defined in subsection 2.1.1 through 2.1.2 are mixed; or
- (b) Soy sauce(s) and Hydrolyzed Vegetable Protein are mixed.

3 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.1. Basic Ingredients

3.1.1.1. Naturally brewed soy sauce

- (a) Soybean (including defatted soybeans)
- (b) ~~(b)~~ Salt
- (c) **Sugars and/or palm sugar (for sweet soy sauce)**
- (d) Potable water

3.1.1.2. Non brewed soy sauce

- (a) **Soybean (including defatted soybeans) and other** vegetable proteins
- (b) Sugars (for specification see relevant Codex standard) **and/or palm sugar (for sweet soy sauce)**
- (c) Potable water
- (d) Salt ~~(to be used only in the case of process using enzymes)~~

3.1.2. Optional Ingredients

~~For Naturally brewed soy sauce and Short term brewed soy sauce (a) to (g) may be used, and for Non brewed soy sauce (a) and (d) to (g) may be used.~~

~~However, these ingredients from (c) to (g) shall be supplementary use in the manufacturing process.~~

Optional ingredients may be used as supplementary in the manufacturing process:

- (a) Cereal grains
- (b) Vegetable proteins (**for Naturally brewed soy sauce**)
- (c) ~~Sugars~~ **Starch(es) or Flour(s)**
- (d) Vinegar
- (e) ~~Sweet rice wines~~ **Fermented wine(s)**
- (f) Distilled alcohol of agricultural origin
- (g) ~~Salt~~ **Molasses**
- (h) ~~Hydrolyzed Vegetable Protein~~ **Herb(s) and/or Spice(s)**

3.2. QUALITY CRITERIA

- (a) **Total nitrogen not less than 0.4% w/w in salty soy sauce and not less than 0.15% in sweet soy sauce**
- (b) Soluble solid contents, exclusive of added salt not less than 6% (w/v)
- (c) **Sugar content for sweet soy sauce is not less than 30% and salt content for salty soy sauce is not less than 10%**

4. FOOD ADDITIVES**4.1 Acidity Regulators**

INS No	Name of Food Additive	Maximum Level
260	Acetic acid, gracial	Limited by GMP
262	Sodium acetate	
270	Lactic acid (L-, D-, and Dl)	
330	Citric acid	
334	Tartaric acid (L(+)-)	200 mg/kg

4.2 Antifoaming Agents

INS No	Name of Food Additive	Maximum Level
900a	Polydimethylsiloxane	50 mg/kg

4.3 Colours

INS No	Name of Food Additive	Maximum Level
150a	Caramel I - plain (Caramel Colour class I)	Limited by GMP
150c	Caramel III - ammonia process (Caramel Colour class III)	1500 mg/kg
150d	Caramel IV - ammonia sulphite process (Caramel Colour class IV)	

4.4 Flavour Enhancers

INS No	Name of Food Additive	Maximum Level
508	Potassium chloride	Limited by GMP
621	Monosodium glutamate	
627	Disodium 5'-guanylate	
631	Disodium 5'-inosinate	
635	Disodium 5'-ribonucleotides	

4.5. Preservatives

INS No	Name of Food Additive	Maximum Level
210	Benzoic acid	1000 mg/kg as benzoic acid singly or combination
211	Sodium benzoate	
212	Potassium benzoate	
213	Calcium benzoate	
214	Ethyl p-hydroxybenzoate	1000 mg/kg as p-hydroxybenzoate singly or combination
216	Propyl p-hydroxybenzoate	
218	Methyl p-hydroxybenzoate	
200	Sorbic acid	1000 mg/kg as sorbic acid singly or combination
201	Sodium sorbate	
202	Potassium sorbate	
203	Calcium sorbate	

4.7. Sweetener(s)

INS No	Name of Food Additive	Maximum Level
420	Sorbitol	Limited by GMP
950	Acesulfame K	350 mg/kg
954	Saccharine	160 mg/kg

4.8. Thickening and Stabilizing Agents

INS No	Name of Food Additive	Maximum Level
412	Guar gum	Limited by GMP
414	Gum Arabic	
415	Xanthan gum	
466	Sodium carboxy methyl cellulose	

7. LABELING**7.2. Name of the Products**

7.2.1. The name of the products shall be labeled as follow:

Naturally Brewed soy sauce	}	in accordance with the process definitions
Non-Brewed soy sauce		
Mixed soy sauce		in subsection 2-2-1 through 2-2-3

- 7.2.2. In accordance with product definition, the name of the products shall be labeled as sweet soy sauce or salty soy sauce or in accordance with national legislation
- 7.2.3. Soy sauce which intended to be labeled as “Halal”, the products shall follow the appropriate section of the Codex General Guideline for Use the Term “Halal” (CAC/GL 24-1997)

MALAYSIA

1. SCOPE

Malaysia proposes the addition of the following text to be consistent with other standards elaborated by this Committee e.g. *Proposed Draft Codex Standard for Certain Canned Vegetables*:

“This standard applies to soy sauce as defined in Section 2 below and offered for direct consumption including for catering purposes or for repacking if required. It does not apply to the product when indicated as being intended for further processing”.

2. DESCRIPTION

2.1. Product Definition

Malaysia proposes that there should only be 3 product definitions for soy sauce, to allow for future development in the fermentation process and for the standard to be as broad as possible. As such Malaysia proposes to replace the 4 categories 2.1.1 Naturally brewed soy sauce, 2.1.2 Short-term brewed soy sauce, 2.1.3 Non brewed soy sauce and 2.1.4 Mixed soy sauce with the following 3 categories:

2.1.1 *Fermented soy sauce*

2.1.2. *Hydrolyzed Vegetable Protein and Seasoning sauce*

2.1.3. *Mixed/Blended soy sauce*

2.1.1 (b)

Malaysia to proposes the deletion of Section 2.1.1 (b) *‘the mixture of the product obtained by (a) and salt water is fermented and aged for not less than 90 days below its temperature of 40°C’*. Justification for deletion of Paragraph 2.1.1 (b) is as follows:

Soy sauce is a mixture of protein hydrolysate and carbohydrate materials made by the action of enzymes and microorganisms. The product contains amino acids, peptides, reducing sugars and flavour compounds which are formed during the process and which impart a tasty flavour.

Traditionally, these compounds are produced during a long maturation period at elevated temperature. Continuous improvement of soy sauce fermentation technology has been made for years by many soy sauce producers. Currently, there are innovative processes that do not rely on the classified values of these 2 parameters, temperature and time. Various processes have been proposed to shorten the duration of fermentation. Fermentation time has been reduced from about 6 to 8 months to 4 to 8 weeks.

2.1.2 Short-term brewed soy sauce

Malaysia proposes to delete Section 2.1.2 to in line with the proposed changes in Section 2.1. – Product Definition for ***Fermented soy sauce*** to cover both naturally brewed soy sauce and short-term brewed soy sauce.

2.1.3 Non brewed soy sauce

Malaysia proposes to delete Section 2.1.3 and replace it with **2.1.2 Hydrolyzed Vegetable Protein and Seasoning sauce** in line with the proposed changes in Section 2.1. – Product Definition

2.1.3 (b)

Malaysia to proposes to delete Section 2.1.3‘ (b) *sugars, salt, etc. are added to (a)*’ and replace it with **Section 2.1.2 (b) Other optional ingredients as specified in paragraph 3.1.2. are added to (a)**. This section is to read:

“(b) Other optional ingredients as specified in section 3.1.2 are added to (a)”.

Malaysia proposes to add in a note below section 2.1.2 (b). This sentence should read as follows:

“This type of soy sauce shall be named as Hydrolyzed Vegetable Protein sauce or seasoning sauce as is currently used in commercial practice”.

2.1.4. Mixed soy sauce

Malaysia proposes to delete Section 2.1.4 *Mixed soy sauce* and replace it with **Section 2.1.3** which read as follows :

“ 2.1.3 Mixed/Blended soy sauce is the product obtained by:

in line with the proposed changes in Section 2.1. – Product Definition

2.1.4 (b)

Malaysia proposes to delete ‘Section 2.1.4(b) *Soy sauce(s) and Hydrolyzed Vegetable Protein are mixed*’ and replace it with ‘Section 2.1.3 (b) *Mixing of Soy sauce(s) as define in subsections 2.1.1 and 2.1.2 and Hydrolyzed Vegetable Protein*’. This section is to read:

“(b) Mixing of Soy sauce(s) as defined in subsections 2.1.1 and 2.1.2 and Hydrolyzed Vegetable Protein”.

Malaysia also proposes the inclusion of the above 3 products namely ‘fermented soy sauce’, ‘hydrolyzed vegetable protein and seasoning sauce’ and ‘mixed/blended soy sauce’ in the Draft Food Category System of the Codex General Standard for Food Additives (ALINORM 04/27/12 Appendix V-Part I) under CCFAC to be in line with other Codex Standards.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1.1.1 Naturally brewed soy sauce and short term brewed soy sauce

Malaysia proposes the deletion of the sentence ***Naturally brewed soy sauce and short term brewed soy sauce*** and replace with the sentence ***Fermented soy sauce*** to be in line with Section 2.1.1.

3.1.1.2 Non brewed soy sauce

Malaysia proposes to delete the sentence ‘***Non brewed soy sauce***’ and replace with the sentence ‘***Hydrolyzed Vegetable Protein and Seasoning sauce***’ to be in line with Section 2.1.2.

3.1.1.1 (b) and 3.1.1.1 (d) - Salt

Malaysia proposes the inclusion of the words “(CX STAN 150-1985) Rev. 1-1997, Amend 1-1999)” after “Salt”.

This paragraph is to read:

“3.1.1.1 (b) salt (CX STAN 150-1985 REV. 1-1997, AMEND 1-1999)

3.1.1.1 (d) salt (CX STAN 150-1985 REV. 1-1997, AMEND 1-1999)”

3.1.2 Optional Ingredients

Malaysia proposes the following ingredients to be included in the Optional Ingredient:

h) Molasses

Malaysia proposes the inclusion of *molasses* as specified in the Draft Food Category System, Appendix V, Alinorm 04/27/12, Codex Committee on Food Additives and Contaminants.

i) Yeast extract

Malaysia proposes the inclusion of *yeast extract* as a permitted ingredient. The industry practice is to add *yeast extract* in soy sauce formulation as an ingredient, which contributes to a good mouth feel and body to the sauce.

These sentences should read as follows:

(a) Cereal grains

(b) Vegetable proteins

(c) Sugars

(d) Vinegar

(e) Sweet rice wines

(f) Distilled alcohol of agricultural origin

(g) Salt

(h) Molasses

(i) Yeast extract

(j) Hydrolyzed Vegetable Protein

Malaysia proposes to reword the first paragraph as follows:

- i. For Fermented Soy Sauce (a) to (i) may be used and*
- ii. Non-fermented Soy Sauce (a) and (c) to (j) may be used.*

3.2 QUALITY CRITERIA

(a) Total nitrogen not less than 0.7%(w/v)

Malaysia proposes the following change of the text concerning total nitrogen:

3.2 (a) *Total nitrogen not less than 0.6% (w/v)*”

Provided, however, that the product derived from wheat not less than 80% of total of soybeans and cereal grains weight shall have the total nitrogen of not less than 0.4% (w/v).

Malaysia would like to seek clarification on the necessity of requiring a two-tiered total nitrogen specification

4. FOOD ADDITIVES

4.5 COLOURS

Malaysia is of the view that the Maximum Level (ML) for Caramel in the products covered by this standard should be limited by GMP since the ML for most products under GSFA is limited by GMP. The addition of Caramel in the products contributes to colour, taste, mouth feel, body and viscosity. Malaysia proposes the ML for Caramel I (INS 150a), Caramel III (INS 150c) and Caramel IV (INS 150d) to be limited by GMP.

4.5 PRESERVATIVES

Malaysia proposes the deletion of INS 214 – *Ethyl p-hydroxybenzoate* and INS 216 *Propyl p-hydroxybenzoate* since they are not in the GSFA (CCFAC 2002, ALINORM 03/12, APPENDIX II).

4.7 THICKENING AND STABILIZING AGENTS

Malaysia proposes the inclusion of modified starches (corn starch, sago starch, tapioca starch) as thickening and stabilizing agents. The maximum level is limited by GMP.

7 LABELLING

7.2.1 Malaysia proposes to delete the words *Naturally brewed soy sauce, short-term brewed soy sauce, Non brewed soy sauce and Mixed soy sauce* and replace with the words *Fermented soy sauce, Hydrolyzed Vegetable Protein and Seasoning sauce, Mixed/Blended soy sauce* in line with the proposed changes in Section 2.1. – Product Definition. This paragraph is to read:

Fermented soy sauce

Hydrolyzed Vegetable Protein and Seasoning sauce

Mixed/Blended soy sauce

According to the descriptions
in subsection 2.1.1
through 2.1.3

NEW ZEALAND

New Zealand notes that [this code] refers to the Codex General Principles of Food Hygiene, and Codes of Hygienic Practice and Codes of Practice.

It is suggested that, where Hygiene Codes are referred to and do not contain relevant food safety requirements, this information should be included in the Standard. We suggest that this information should be about particular food safety hazards associated with the food products.

This information will be useful to the users of the end-document when developing their HACCP programme.

For example, the Hygiene section in the Proposed Draft Codex Standard for Soy Sauce should be expanded to include information on the management of Chloropropanols in “Non brewed soy sauce.”

SWITZERLAND**General Comments**

The current Proposed Draft Codex Standard for Soy Sauce should cover all types of soy sauces in the world trade market in order to avoid creating barriers to trade. This can be realised by making sure that the Scope of the Standard is as broad as possible. For this reason and in order to simplify the present Draft, Switzerland would like to propose that the Standard caters for three types of soy sauces: brewed soy sauce, non-brewed soy sauce and mixed soy sauce.

HYDROLYSED VEGETABLE PROTEINS

The definition of Hydrolysed Vegetable Proteins was removed during the revision of the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981, Rev. 2-2001). Switzerland would therefore like to propose the addition of the definition in new Section 2.2, including the requirements, of Hydrolysed Vegetable Proteins in the Proposed Draft Codex Standard for Soy Sauce. The creation of a separate definition is appropriate. Hydrolysed Vegetable Proteins is not soy sauce, but in fact an ingredient that would be used in non-brewed soy sauce and mixed soy sauce.

FOOD ADDITIVES

A list of food additives for use in all types of soy sauces, which could include food additives in Tables I and III of the Codex General Standard for Food Additives (GSFA) should be established. Numerical maximum levels need to be set for additives in Table I of the GSFA which have a numerical ADI. This would be in line with the decision taken by the Codex Committee on Food Additives and Contaminants (CCFAC) at its 34th session (2002).

Switzerland would like to propose that a fundamental discussion be held regarding the list of food additives to be included in the Proposed Draft Codex Standard for Soy Sauce based on their technological justification and bearing in mind the following statement which is found in the Codex General Standard for Food Additives (GSFA) "Food additives that are listed in Table I¹ of the Codex General Standard for Food Additives (CODEX STAN 192-1995, Rev. 4-2003) may be used according to the specified limit for food category 12.6.4 (Clear sauces, e.g., soy sauce, fish sauce)".

¹ If Table I of the Codex General Standard for Food Additives has not been finalised at the time that the Draft Codex Standard for Soy Sauce is advanced to Step 8, a Table should be inserted within the Additives Section, which lists the relevant additives in Table I of the GSFA, and the maximum limits that have been set for food category 12.6.4.

Switzerland would like to propose the following amendments in the Draft Codex Standard for Soy Sauce (all changes have been underlined):

SUGGESTED DRAFT CODEX STANDARD FOR SOY SAUCE**1. SCOPE**

This Standard applies to the products as defined in Section 2 below and offered for direct consumption including for catering purposes or for repacking if required. It does not apply to the product when indicated as being intended for further processing.

2. DESCRIPTION**2.1 Product Definition**

Soy sauce is a clear liquid seasoning obtained by fermentation of soybeans and/or soybeans and cereal grains, and/or by hydrolysis of soy proteins and vegetable proteins.

Individual definition of each type of soy sauce is described under subsection 2.1.1 through 2.1.3.

2.1.1 ~~Naturally~~ Brewed soy sauce is the product obtained by:

- (a) ~~The culture of *Aspergillus oryzae* and/or *Aspergillus sojae* as a starter are cultured in either soybeans or soybeans and cereal grains; or the culture of bacteria and/or moulds and/or yeasts are cultured in either soybeans or soybeans and cereal grains; or the mixing of food grade enzymes with either soybeans or soybeans and cereal grains;~~
- (b) ~~The fermentation and aging of the mixture of the product obtained by (a) and salt water (brine) is fermented and aged for not less than 90 days below its temperature of 40°C;~~
- (c) ~~The addition of other ingredients as listed in the Section 3.1 to the product obtained by (a) and (b).~~

Instead of salt water in the process described above, Naturally brewed soy sauce, or a mixture of Naturally brewed soy sauce and salt water may be used.

2.1.2 ~~Short-term brewed soy sauce~~ is the product obtained by:

- (a) ~~*Aspergillus oryzae* and/or *Aspergillus sojae* as a starter are cultured in either soybeans or soybeans and cereal grains;~~
- (b) ~~the mixture of the product obtained by (a) and salt water is fermented and aged keeping its maximum temperature at above 40°C, or for less than 90 days;~~

2.1.2 Non-brewed soy sauce is the product obtained by:

- (a) ~~The hydrolysis of vegetable protein materials, such as defatted soybeans, are hydrolyzed by using acids or enzymes (the product obtained by this process is hereinafter referred to as "Hydrolyzed Vegetable Protein");~~
- (b) ~~The addition of other ingredients as listed in the Section 3.1 to the product obtained by (a) sugars, salt, etc. are added to (a);~~

2.1.3 Mixed soy sauce is the product obtained by:

- (a) ~~Combining the different types of the soy sauces defined in subsections 2.1.1 through 2.1.2 are mixed; or~~
- (b) ~~Combining the Soy sauce(s) described in subsections 2.1.1 and/or 2.1.2 and Hydrolyzed Vegetable Protein are mixed.~~

2.2 Hydrolysed Vegetable Proteins

Hydrolysed Vegetable Proteins (HVP) is liquid, paste or dry products obtained by the hydrolysis of suitable protein-rich vegetable substances. Other foodstuffs used in the manufacture of HVP should be declared on the label. HVP intended for retail sale for flavouring and seasoning purposes should correspond to the following characteristics:

- | | | |
|----------------------------|------|----------------------|
| - Specific gravity at 20°C | min. | 1.22 |
| - Total Nitrogen | min. | 4% (on dry matter) |
| - Amino Nitrogen | min. | 1.3% (on dry matter) |
| - Sodium Chloride | max. | 50% (on dry matter) |

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.1 Basic Ingredients

3.1.1.1 Naturally Brewed soy sauce and short-term brewed soy sauce

- (a) Soybeans (including defatted soybeans)
- (b) Salt (CX STAN 150-1985, Rev. 1-1997 (Amd. 1-1999, Amd. 2-2001))
- (c) Potable water

3.1.1.2 Non-brewed soy sauce

- (a) Soybeans (including defatted soybeans)
- ~~(b) Sugars (for specification, see relevant Codex Standard)~~
- (b) Vegetable proteins
- (c) Potable water
- (d) Salt as defined in CX STAN 150-1985, Rev. 1-1997 (Amd. 1-1999, Amd. 2-2001) (to be used only in the case of process using enzymes)

3.1.2 Optional Ingredients

~~For Naturally brewed soy sauce and Short term brewed soy sauce (a) to (g) may be used, and for Non brewed soy sauce (a) and (d) to (g) may be used.~~

~~However, these ingredients from (c) to (g) shall be supplementary use in the manufacturing process. Other safe and suitable ingredients may be used according to national legislation, including, but not limited to:~~

- (a) Cereal grains
- ~~(b) Legumes or Vegetable proteins (other than soybeans may not be used in "brewed soy sauce (2.1.1))~~
- (c) Sugars as defined in CODEX STAN 212-1999 (Amd. 1-2001)
- (d) Vinegar
- (e) Sweet rice wines
- (f) Distilled alcohol of agricultural origin
- (g) Salt (CX STAN 150-1985, Rev. 1-1997 (Amd. 1-1999, Amd. 2-2001))
- (h) Hydrolyzed Vegetable Protein
- (i) Yeast extracts
- (j) Spices and herbs
- (k) Onions
- (l) Garlic

3.2 QUALITY CRITERIA

(a) Total nitrogen not less than 0.7 % (w/v)

Provided, however, that the product derived from wheat not less than 80% of total of soybeans and cereal grains weight shall have the total nitrogen of not less than 0.4%(w/v).

~~(a)~~ (b) Soluble solids contents, exclusive of added salt not less than 6%(w/v).

4. FOOD ADDITIVES**4.1 ACIDITY REGULATORS**

INS No	Name of Food Additive	Maximum Level
260	Acetic acid, gracial	Limited by GMP
262	Sodium acetate	
270	Lactic acid (L-, D-, and DL)	
330	Citric acid	
334	Tartaric acid (L(+)-)	200 mg/kg

4.2 ANTIFOAMING AGENTS

INS No	Name of Food Additive	Maximum Level
900a	Polydimethylsiloxane	50 mg/kg

4.3 COLOURS

INS No	Name of Food Additive	Maximum Level
150a	Caramel I - plain (Caramel Colour class I)	Limited by GMP
150c	Caramel III - ammonia process (Caramel Colour class III)	1500 mg/kg
150d	Caramel IV - ammonia sulphite process (Caramel Colour class IV)	

4.4 FLAVOUR ENHANCERS

INS No	Name of Food Additive	Maximum Level
508	Potassium chloride	Limited by GMP
621	Monosodium glutamate	
627	Disodium 5'-guanylate	
631	Disodium 5'-inosinate	
635	Disodium 5'-ribonucleotides	

4.5 PRESERVATIVES

INS No	Name of Food Additive	Maximum Level
210	Benzoic acid	600mg/kg expressed as benzoic acid, singly or in combination
211	Sodium benzoate	
214	Ethyl p-hydroxybenzoate	250 mg/kg expressed as p-hydroxybenzoic acid, singly or in combination
216	Propyl p-hydroxybenzoate	

4.6 SWEETENERS

INS No	Name of Food Additive	Maximum Level
420	Sorbitol	Limited by GMP
950	Acesulfame K	350mg/kg

4.7 THICKENING AND STABILIZING AGENTS

INS No	Name of Food Additive	Maximum Level
412	Guar gum	Limited by GMP
414	Gum Arabic	
415	Xanthan gum	

5. CONTAMINANTS

5.1 The products covered by the provisions of this Standard shall comply with those maximum levels for contaminants established by the Codex Alimentarius Commission for these products.

5.2 The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission for these products.

6. HYGIENE

6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 4-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

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

7. LABELLING

7.1 The products covered by the provisions of this Standard shall be labelled in accordance with the Codex General Standard for the Labelling of Pre-packaged Foods (CODEX STAN 1-1985, Rev. 1-1991). In addition, the following specific provisions apply:

7.2 NAME OF THE PRODUCTS

~~6.1.1~~ **7.2.1** The name of the products shall be labelled as follows.

<u>Naturally brewed soy sauce</u>	<u>According to the descriptions in subsection 2.1.1 through 2.1.4</u>
<u>Short-term brewed soy sauce</u>	
<u>Non-brewed soy sauce</u>	
<u>Mixed soy sauce</u>	
<u>Brewed soy sauce</u>	<u>According to the descriptions in subsection 2.1.1. The names "fermented soy sauce" and "cultured soy sauce" may be used in accordance with national legislation.</u>
<u>Non-brewed soy sauce</u>	<u>According to the descriptions in subsection 2.1.2. The names "non-fermented soy sauce" and "non-cultured soy sauce" may be used in accordance with national legislation.</u>
<u>Mixed soy sauce</u>	<u>According to the descriptions in subsection 2.1.3.</u>

~~6.1.2~~ 7.2.2 The name of "Mixed soy sauce" shall be accompanied by the type of soy sauce mixed or Hydrolyzed Vegetable Protein in the descending order of contents in weight percentage in the product.

~~6.1.3~~ 7.2.3 Soy sauce may be labelled to indicate its character according to the national legislation, i.e. "sweet soy sauce", "salty soy sauce", "non fermented soy sauce" or "non-cultured soy sauce".

8. METHODS OF ANALYSIS AND SAMPLING

See working document CX/PFV 04/22/11.

UNITED STATES OF AMERICA

1. Scope

The Scope should be in the format used in all other Codex Standards as follows:

This Standard applies to Soy Sauce as defined in Section 2 below and offered for direct consumption including for catering purposes or for repacking if required. It does not apply to the product when indicated for further processing.

2. Description

The U.S. recommends a footnote to indicate that the word "vegetable" in this section means cereals, pulses and legumes.

2.1 Product definition

Soy Sauce is a liquid seasoning obtained by fermentation of soybeans and/or by hydrolysis of vegetable protein.

2.1.1 – 2.1.4 Types of Soy Sauce:

The four definitions of soy sauce proposed in the draft standard should be reduced to three with the following designations:

2.1.1 Brewed soy sauce is the product obtained by:

- (a) *Aspergillus oryzae* and/or *Aspergillus sojae* as a starter are cultured in either soybeans or soybeans and cereal grains; or bacteria and/or molds and/or yeasts are cultured in either soybeans or soybeans and cereal grains, and

- (b) the mixture of the product obtained by (a) and salt water is fermented and aged for an adequate period below the temperature of 40 °C.

2.1.2 *Non brewed soy sauce is the product obtained by:*

Vegetable protein materials, such as defatted soybeans, are hydrolyzed by using acids or food enzymes (the product obtained by this process is hereinafter referred to as "Hydrolyzed Vegetable Protein"),

2.1.3. *Mixed soy sauce is the product obtained by:*

- (a) The different types of the soy sauces defined in subsections 2.1.1 through 2.1.2 are mixed; or

The use of "Naturally" in section 2.1.1 Product Description should be omitted; this is supported by the *Codex General Guidelines on Claims, CAC/GL 1-1979 (Rev. 1-1991)*

5. Conditional Claims

5.1 *The following claims should be permitted subject to the particular condition attached to each:*

(iii) *Terms such as "natural", "pure", "fresh", "home made", "organically grown" and "biologically grown" when they are used, should be in accordance with the national practices in the country where the food is sold. The use of these terms should be consistent with the prohibitions set out in Section 3.*

The terms describing method of manufacture such as "Naturally Brewed or Short Term Brewed" and other such designations are allowed for **labeling purposes** by the *Codex General Standard for the Labeling of Prepackaged Foods (Codex Stan 1-1985 (rev. 1-1991))*:

4. Mandatory Labeling of Prepackaged Foods

4.1.2 *There shall appear on the label either in conjunction with, or in close proximity to, the name of the food, such additional words or phrases as necessary to avoid misleading or confusing the consumer in regard to the true nature and physical condition of the food including but not limited to the type of packing medium, style, and the condition or type of treatment it has undergone; for example: dried, concentrated, reconstituted, smoked.*

3. Essential Composition

The United States recognizes that different countries (markets) have preferences for different soy sauce flavors. These flavors are directed attributed to different ingredients used. The use of these ingredients listed in the text may not always be necessary. The text should reflect industry practices allowing soy sauce manufacturers the flexibility to meet different market preferences. The following changes are recommended:

3.1. Composition

3.1.1 Basic Ingredients

3.1.1.1. Brewed Soy Sauce

- (a) Soybean (including defatted soybeans)
- (b) Salt (optional)
- (c) Sugar (optional)
- (d) Potable water

3.1.1.2 Non brewed soy sauce

- (a) Soybean (including defatted soybeans) or other vegetable proteins
- (b) Salt (optional)
- (c) Sugar (optional)
- (d) Potable water

3.1.2 Optional Ingredients

The following optional ingredients may be used in the soy sauce production.

- (a) Cereal grains
- (b) Legume(s) or other vegetable protein(s)
- (c) Starch(es) or Flour(s)
- (d) Natural Spice(s) and/or Herbal(s)
- (e) Molasses
- (f) Vinegar
- (g) Fermented wine(s)
- (h) Distilled alcohol of agricultural origins

4. Food Additives.

Although the United States concurs with the proposed additives listed, it would prefer a general reference to the GSFA for Preservatives and Acidifying agents instead of the prescription method used.

The US questions why alternative salts of benzoates (212, 213) and hydroxybenzoates (218) and Caramel Colour Class I (150a) are not included.

The US recommends that the standard refer to acidity regulators, flavour enhancers, and thickeners and stabilizers listed in Table 3 of the GSFA.

7. Labeling**7.1 The Name of the Products**

The name of the product should be "Soy Sauce" for all varieties. Modifiers such as *brewed or natural* should be optional and be left to the legislation of importing countries.

EUROPEAN SOUP INDUSTRY

1. The standard should be as broad as possible to encompass all types of soy sauce sold in world trade and to enable flexibility for continued innovation.
2. Descriptions
 - Should be simplified to include three types only: Brewed Soy Sauce, Non-brewed Soy Sauce and Mixed Soy Sauce. Suggested descriptions are provided at the end of this position paper.

- Brewed soy sauce should not be distinguished by:
 - Use of the term "natural", which is not supported by existing Codex requirements for the labelling of pre-packaged goods.
 - Time, temperature or time of salt addition -- factors that continuously evolve with innovation in production methods.
 - The addition of enzymes should be allowed for Brewed Soy Sauce. In traditional soy sauce manufacturing, micro-organisms are added for the sole purpose of producing enzymes that hydrolyse soy proteins for development of the characteristic taste attributes of soy sauce. Whether produced traditionally, or added directly, enzymes carry out the same function. Addition of enzymes represents continuous innovation in production methods.
 - The proposed description for Non-brewed Soy Sauce implies that is a definition for Hydrolysed Vegetable Protein (HVP), which is inconsistent with worldwide practices. To properly reflect the generally accepted manufacturing principles for HVP, a description for HVP should be provided in a new section, 2.2. Also, as will be recalled, the definition for Hydrolysed Protein Products was removed from the 1995 Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981, Revised), with the understanding that it would be inserted into the future Codex Standard for Soy Sauce.
 - It should be indicated that Non-brewed Soy Sauce must be derived from soybeans or defatted soybeans as a basic ingredient.
3. Allowance for "other permitted ingredients" should be as broad as possible to reflect worldwide production methods and consumer expectations for soy sauce.
 4. Quality factors (e.g., total nitrogen, total solids exclusive of added salt) should be limited to the minimum required and should only be set where validated analytical methods are available. It should be noted that certain products, known as soy sauce for a long time (e.g., sweet Indonesian style soy sauce, ketjap manis; salty Indonesian style soy sauce, ketjap asin), which are also produced by companies represented by AIIBP, would not conform with the proposed levels for certain quality factors. AIIBP therefore supports the request for lower, or better differentiated, quality factors as were submitted by various countries in 2002, in response to CX/PFV 02/9.
 5. Allowance for use of additives should be based on the Codex General Standard for Food Additives.
 6. The denomination of the described products should be in line with the various national practices. While the term "Soy Sauce" should be the basic term used to describe any fermented or hydrolysed soy-based product, more specific terms, or alternate terms (e.g., fermented, cultured), should also be allowed, according to national practices.
 7. Reference to the potential Codex limit for 3-MCPD in soy sauce in the Contaminants section, as requested in many National comments, is acceptable. However, a specific limit should not be stated, pending the outcome of work by the Codex Committee on Food Additives and Contaminants.

Suggested revision to Section 2, Descriptions:

2. DESCRIPTION

2.1 Soy Sauce

Soy sauce is a liquid seasoning obtained by fermentation of soybeans and/or soybeans and cereal grains, and/or by hydrolysis of soy proteins and vegetable proteins.

Individual definitions for each type of soy sauce are described under Sections 2.1.1 through 2.1.3.

2.1.1 **Brewed soy sauce** is the product obtained by:

- a) The culture of *Aspergillus oryzae* and/or *Aspergillus sojae*, as a starter, in either soy beans or soybeans and cereal grains; or the culture of bacteria and/or moulds and/or yeasts in either soybeans or soybeans and cereal grains; or the mixing of food grade enzymes with either soy beans or soybeans and cereal grains.
- b) Fermentation and aging of the mixture of the product obtained by (a) and brine.
- c) Addition of other ingredients as specified in 3.1.2.

2.1.2 **Non-brewed soy sauce** is the product obtained by:

- a) Hydrolysis of soy and other vegetable proteins,
- b) Addition of other ingredients to (a), as specified in 3.1.2.

2.1.3 **Mixed soy sauce** is the product obtained by mixing the types of soy sauce described in 2.1.1 and 2.1.2, or by mixing the products described in 2.1.1 and/or 2.1.2 with Hydrolysed Vegetable Protein (as described in 2.2), or by mixing the types of soy sauce described in 2.1.1 and/or 2.1.2 with sugar, salt and/or other components.

2.2 **Hydrolysed Vegetable Protein**

Hydrolysed Vegetable Proteins (HVP) are liquid, paste or dry products obtained by the hydrolysis of suitable protein-rich vegetable substances. Other foodstuffs used in the manufacture of HVP should be declared on the label. HVP intended for retail sale for flavouring and seasoning purposes should correspond to the following characteristics:

- | | | |
|----------------------------|-----------|-----------------|
| - Specific gravity at 20°C | min. 1.22 |) |
| - Total Nitrogen | min. 4% |) |
| - Amino Nitrogen | min. 1.3% |) on dry matter |
| - Sodium Chloride | max. 50% |) |

INTERNATIONAL HYDROLYZED PROTEIN COUNCIL

The International Hydrolyzed Protein Council (IHPC) appreciates this opportunity to provide comment regarding the 2004 revised proposed draft Codex standard for soy sauce, which will be considered at Step 3 at the twenty-second session of the Codex Committee on Processed Fruits and Vegetables (CCPFV) (agenda item 4(e)). IHPC is a non-profit association of manufacturers and users of hydrolyzed proteins, such as hydrolyzed vegetable proteins (HVPs), autolyzed yeasts, and yeast extracts. Although headquartered in Washington, D.C., we are an international association representing companies that manufacture and sell hydrolyzed proteins throughout the world. IHPC and its member companies would be directly affected by the establishment of a standard for soy sauce by the CCPFV.

IHPC questions whether Codex should dedicate its limited time and resources to the development of a standard for soy sauce. IHPC is unaware of any data indicating that such a standard is needed for purposes of facilitating international trade or for consumer protection. IHPC also questions whether CCPFV is the proper committee to establish a standard for soy sauce because the product is not derived from either fruits or vegetables. Nonetheless, in the event that the standard setting process proceeds, IHPC offers the comments below on the revised proposed draft standard for soy sauce.

We note at the outset that numerous countries and interested parties submitted comments on the 2002 proposed draft Codex standard. It appears that only a limited number of these comments were included in the 2004 revised proposed standard. In the comments that follow, we identify many 2002 comments, including those of IHPC, that were not addressed in the revision process and encourage CCPFV to incorporate these and other comments in the draft standard.

PRODUCT DEFINITIONS AND LABELING

The revised proposed draft standard seeks to define “soy sauce” as “a clear liquid seasoning obtained by fermentation of soybeans and/or by hydrolysis of vegetable proteins.” In addition to this all-purpose definition, process-based definitions for four types of soy sauce are proposed: (1) naturally brewed soy sauce, (2) short-term brewed soy sauce, (3) non brewed soy sauce, and (4) mixed soy sauce. The revised proposed draft standard requires that these names be used for labeling purposes.

IHPC is concerned that the proposed process-based labeling scheme does not reflect widespread industry practice or consumer expectations throughout much of the world. IHPC and its members believe that the term “soy sauce” is customarily and appropriately used by industry and understood by consumers to describe all types of soy sauce products, regardless of the specific method of manufacture. Similar concerns are expressed in the 2002 comments submitted by the United States. A mandatory requirement to identify how a soy sauce is produced – namely, as “brewed” or “non brewed,” or variations thereof – is inconsistent with this established usage. In fact, based on proprietary data, approximately 30 percent of the U.S. market for soy sauce is comprised of “non brewed” soy sauce produced from acid hydrolyzed vegetable protein, and it is likely that a change in labeling convention to distinguish between soy sauces based on production techniques would serve to confuse this substantial consumer base. For these reasons, we believe that any process-based labeling scheme be adopted through national legislation in countries where the distinctions between types of soy sauce are more relevant to industry and consumers instead of through the Codex standard-setting process.

A process-based labeling requirement also would have the effect of discouraging innovation and the development of new production technologies by locking industry into narrowly defined categories. Moreover, the reality of incorporating such a labeling scheme into a Codex standard for soy sauce would have significant ramifications for the processed foods industry in that the ingredients statements – and, as a result, product labels – for all foods containing soy sauce would have to be changed to reflect the mandatory Codex definitions.

Although IHPC believes that the production method is not material information that should be required on the label of soy sauce products absent national legislation, IHPC does not object to the inclusion of production-specific information on a voluntary basis. Accordingly, IHPC proposes that identification of the method of production be permitted on a voluntary basis. Such an approach is supported by the 2002 comments from Indonesia and the United States and reflects the approach taken in standards set by Codex for other processed foods (e.g., Codex Standard 33 for olive oil which allows the manufacturer to decide whether a product will be designated generically as “olive oil,” or more specifically as “virgin olive oil” or “refined olive oil”).

To ensure that information on method of production is conveyed in a consumer-friendly manner and does not discourage the use of emerging technologies, IHPC proposes terms that may be used for this purpose. Specifically, IHPC proposes to permit use of the terms “Brewed,” “Fermented,” “Cultured,” “Non-brewed,” “Unfermented, and “Non-cultured.” IHPC proposes to delete the terms and definitions for “Short-term brewed soy sauce” and “Mixed soy sauce” because these terms are unnecessarily restrictive and do not convey meaningful information to consumers, as explained more fully below.

Furthermore, in light of Codex’s prior treatment of the term “natural” and the various connotations this word has throughout the world, IHPC respectfully proposes that the term “Naturally” be deleted from the phrase “Naturally brewed.” In the Codex General Guidelines on Claims (CAC/GL 1-1979 (Rev. 1-1991)) at 5.1(iii), it is stated that “Terms such as “natural” ... when they are used, should be in accordance with the national practices in the country where the food is sold.” Defining the term “naturally brewed” in the context of setting an international soy sauce standard goes directly against Codex’s historical treatment of the term “natural” in that the product would no longer be able to be defined as natural in accordance with national practices. Again, we believe that national legislation is the proper forum for addressing the use of such labeling terminology. As a result, we suggest that the term “Brewed” without further qualification be used in lieu of the term “Naturally brewed” throughout the Codex standard for soy sauce.

FOOD ADDITIVES

IHPC is concerned that the standard, as written, is unnecessarily restrictive in that it provides a positive list of food additives that may be used in soy sauce. IHPC is aware that Codex standards customarily have identified the specific food additives that may be used in a food. To permit maximum flexibility, however, IHPC believes that the standard should allow for any safe and suitable additives of the type appropriate for use in soy sauce processing or production, namely, acidity regulators, antifoaming agents, colors, flavours, flavour enhancers, preservatives, sweeteners, and thickening and stabilizing agents. Such an approach is supported, in some fashion, by the 2002 comments of Brazil, Indonesia, The Netherlands, and the United States. CCPFV is urged to permit the use, at levels consistent with current good manufacturing practice (CGMP), of safe and suitable additives. This flexible approach may be accomplished by removing the existing positive list of permissible food additives and specifying that “Safe and suitable acidity regulators, antifoaming agents, colors, flavours, flavour enhancers, preservatives, sweeteners, and thickening and stabilizing agents may be used in the production of soy sauce at levels not to exceed GMP.

IHPC believes the proposed changes are needed to avoid establishment of arbitrary barriers to innovation and technology. In the event that the proposed changes are not accepted, however, IHPC offers comment on the existing positive list, as explained more fully below.

ADDITIONAL COMMENTS

IHPC offers the following additional comments concerning the proposed draft Codex standard for soy sauce.

2.1 Product Definition (Generally). As previously noted, “soy sauce” is defined as “a clear liquid seasoning obtained by fermentation of soybeans and/or by hydrolysis of vegetable proteins.” IHPC believes that this definition inadvertently prohibits the use of wheat and other cereal grains not universally accepted as “vegetables” as the protein base from which soy sauce may be derived. Also, we note that the phrase “hydrolysis of vegetable proteins” is more accurately stated and universally known as “hydrolyzed vegetable proteins.” Thus, IHPC proposes a revised definition for soy sauce of “a clear liquid seasoning obtained by fermentation of soybeans and/or cereal grains and/or through the use of hydrolyzed vegetable proteins.”

In addition, the term “brewed” is used to characterize soy sauce items produced by fermentation. IHPC believes there should be latitude to use consumer-friendly expressions such as “fermented” or “cultured” in lieu of “brewed,” a term that more frequently is used to describe the hot water extraction of teas and coffees than the fermentation of products. This alternative nomenclature would permit users of hydrolyzed proteins to characterize their product as “unfermented,” should they wish to do so. IHPC believes that “unfermented” would have greater meaning to some consumers than “non brewed.” Such an alternate naming convention is supported by the 2002 comments from Indonesia and Thailand.

2.1 Product Definition (Permissible Cultures). The definition for “naturally brewed” soy sauce appears to permit the use of any suitable cultures of bacteria and/or molds and/or yeasts, but the definition for “short-term brewed” soy sauce specifies the use of *Aspergillus oryzae* and/or *Aspergillus sojae* only. To the extent that the definition for “short-term soy sauce” is retained, IHPC believes that any “safe and suitable” cultures should be permitted for either type of product, to maintain needed flexibility.

2.1.2 Short-term Brewed Soy Sauce. “Short-term brewed soy sauce” is distinguished from the “Naturally brewed” product because it has a fermentation period of less than 90 days. IHPC is concerned that this standard will serve as an artificial hurdle to innovation and new technology. Without question, the use of the tools of modern technology could dramatically hasten the time required for fermentation, allowing the production of the same or superior product (in composition, quality, etc.) as that termed “Naturally brewed” in a time of less than the 90 days serving as the basis of the standard. IHPC believes strongly that standards should be based only upon composition, quality, and/or other product attributes of interest to the consumer, and not processing methods or parameters that may be modified or enhanced in the future. Notably, the 2002 comments from Brazil, Indonesia, The Netherlands, China, Malaysia, and Thailand request the removal of “short term brewed soy sauce” and the 90-day fermentation requirement from the proposed description for “naturally brewed soy sauce” to simplify the product descriptions for soy sauce, as well.

2.1.3 Non brewed soy sauce. As presently drafted, the language appears to suggest that the use of a hydrolyzed soy protein is optional. IHPC proposes the following language to clarify that a soy sauce made from hydrolyzed vegetable protein must be made from hydrolyzed soy protein or a combination of hydrolyzed soy protein and other hydrolyzed cereal grain proteins: “2.1.3 Non brewed soy sauce is the product obtained when: (a) Soy protein or a combination of soy protein and other cereal grain proteins are hydrolyzed by using acids or enzymes (the product obtained by this process is hereinafter referred to as “Hydrolyzed Vegetable Protein”)”

2.1.4 Mixed soy sauce. IHPC proposes to delete the definition and standard for “mixed soy sauce” because it believes that it would not convey meaningful information to consumers.

3.1.1 Basic Ingredients. The current language appears to require the use of sugar in “non-brewed soy sauce.” In IHPC’s experience, many non-brewed soy sauce products are currently marketed without added sugar. Accordingly, IHPC proposes to delete “sugars” from the list of basic ingredients in “non-brewed soy sauce.” This suggestion is being offered to make the list more consistent with current industry practice.

3.1.1.2 Non-brewed soy sauce. The proposed standard appears to preclude the addition of salt to soy sauce produced using acid-hydrolyzed vegetable proteins. Although the addition of salt to such products may not always be necessary, the standard should allow the manufacturer the flexibility to add salt to product manufactured using acid hydrolyzed proteins. Such an approach is supported by the 2002 comments submitted by the United States.

3.1.2 Optional Ingredients. IHPC proposes modifications and clarifications to reflect current industry practice in the formulation of soy sauce products. Significantly, IHPC proposes to permit the use of “sugars (for specification, see relevant Codex standard) and/or other safe and suitable carbohydrate sweeteners.” This change is needed to allow the use of suitable carbohydrate sweeteners that may not be included in the Codex standard for sugars yet would be appropriate for use in soy sauce.

3.2 Quality Criteria. The proposed draft standard provides that “total nitrogen shall be not less than 0.7%(w/v); provided, however, that the product derived from wheat not less than 80% of total of soybeans and cereal grains weight shall have a total nitrogen content of not less than 0.4%(w/v).” IHPC questions the necessity of requiring two-tiered nitrogen specifications. In IHPC’s view, the use of a single minimum nitrogen specification should be sufficient to ensure product quality. IHPC also questions the justification for the specification that soluble solids contents, exclusive of added salt, be not less than 6%(w/v). IHPC urges that this specification be deleted.

4.0 Food Additives. As explained above, IHPC believes that Codex should allow for the use of any safe and suitable food additives of the type appropriate for use in soy sauce processing or production. Accordingly, IHPC proposes that CCPFV delete the positive list of food additives provided in the present draft and replace it with a general authorization to permit the use of safe and suitable acidity regulators, antifoaming agents, colors, flavours, flavour enhancers, preservatives, sweeteners, and thickening and stabilizing agents. As previously mentioned, a similar approach is recommended in the 2002 comments from Brazil, Indonesia, The Netherlands, and the United States. In the event that this proposal is not accepted, IHPC offers the following additional comments concerning the existing positive list.

IHPC urges that food additives be permitted for use at levels not to exceed CGMP. Food additives are used for specific technical effects; usage at levels in excess of those needed to achieve such effects would not be consistent with CGMP. Moreover, many additives have self-limiting levels of use that preclude their use at inappropriate levels. Thus, quantitative limitations on use are unnecessary in most instances. To avoid unnecessary restrictions and maintain maximum flexibility, IHPC asks that food additives be permitted for use in soy sauce in accordance with CGMP and that quantitative limitations on use be removed.

IHPC is particularly concerned that certain of the proposed quantitative limitations are unjustifiably low. For instance, the limitation of Caramel Colour class IV to 1500 mg/kg is so low as to severely limit the additive’s usefulness in soy sauce.

IHPC proposes to add potassium sorbate to the list of permitted preservatives, as does China in its 2002 comments; ammonium chloride to the list of permitted flavour enhancers; and corn starch, modified starches, and maltodextrin to the list of permitted thickening and stabilizing agents. These proposed additions are intended to make the lists more consistent with current industry practice worldwide and national laws of many countries in which IHPC member companies reside.

5. Contaminants. IHPC believes that the standard should establish acceptable levels for 3-monochloropropane-1,2-diol (3-MCPD), a contaminant that has been found in soy sauces. Such an approach is supported by the 2002 comments of the United Kingdom, IAFCO, Malaysia, and Thailand, as well. IHPC recognizes that CCFAC currently is considering the appropriate levels of 3-MCPD to establish in soy sauce. IHPC has asked CCFAC, and repeats its request here, that the level be set at 0.4 mg/kg 3-MCPD on a liquid basis.

In closing, IHPC appreciates this opportunity to provide comment on the draft soy sauce standard. IHPC continues to believe that it is unnecessary to develop a soy sauce standard and questions whether CCPFV is the best committee to work on this standard. To the extent that a decision is made to proceed with the soy sauce standard, IHPC encourages Codex to draft the standard in a flexible manner that does not create unjustified barriers to international trade in soy sauce products. In this regard, IHPC particularly urges that the traditional name “soy sauce” be maintained and required for use as such on all soy sauce products, as supported by longstanding industry practice and consumer understanding.