TURKISH FOOD CODEX COMMUNIQUÉ ON FERMENTED MILK PRODUCTS (DRAFT/2015)

Objective

ARTICLE 1 - (1) The objective of this Communiqué is to determine the product specifications in order to provide the production, preparation, processing, packaging, conservation, storage, transportation and marketing of fermented milk products in conformity with the relevant technique and hygienically.

Scope

ARTICLE 2 – (1) This Communiqué covers the fermented milk products, concentrated fermented milk products, heat- treated fermented milk products and composite milk products which are based on those products.

Basis

ARTICLE 3 – (1) This Communiqué has been prepared on the basis of the Turkish Food Codex Regulation published in the Official Gazette dated 29/12/2011 and with the third repeated numbered 28157.

Definitions

- **ARTICLE 4** (1) The following terms used in this Communiqué are defined as follows:
- a) Ayran: The fermented milk product prepared by adding water to yoghurt or by adding *Streptococcus thermophilus* and *Lactobacillus delbrueckii sub. sp. Bulgaricus* together as a specific starter culture to milk whose composition has been adjusted.
- b) Flavoured / aromatized fermented milk products: The composite fermented milk product which includes ingredients, which are not milk-based, maximum 50% by weight (such as sugar and/or sweetener, fruit and vegetable and their juices, puree, pulps of these, preparates and canned foods produced from these, grains, honey, chocolate, nuts, coffee, spice and other flavouring foods who do not cause imitation and adulteration) and the products covered by this Communiqué.
- c) Raw milk: Cow milk, ship milk, water buffalo milk and goat milk which are conformed to the raw milk definition set out in the Specific Hygiene Rules Regulation on Animal-Origin Products published in the Official Gazette dated 27/12/2011 and numbered 28155.
- ç) Fermented milk product heat-treated after fermentation: The milk product whose fermentation was stopped with heat-treatment.
- d) Fermented milk- based drinks: Except ayran, the composite milk product including water, milk ingredients such as milk-based by-products (whey, buttermilk etc.), milk by-products and the ingredients not milk based as well as including at least 40% (m/m) fermented milk product in its composition.
- e) Fermented milk product: The milk product which is formed as a result of reduction of pH value with fermentation of milk by appropriate microorganism in a way which will lead coagulation or not and provides the required microorganisms in accurate amounts as live and active until the end of its shelf life.
- f) Kefir: The fermented milk product in which starter cultures or kefir grains which contain the strains belonging to yeast types that ferment or not the lactose with various strains of *Lactobacillus*, *Leuconostoc*, *Lactococcus* and *Acetobacter* genera during fermentation are specifically used.
- g) Kumis: The fermented milk product in which *Lactobacillus delbrueckii sub. sp. bulgaricus* and *Kluyveromyces marxianus* cultures are specifically used during fermentation.

- ğ) Concentrated fermented milk products: The fermented milk products in which the milk protein rate is increased to at least 5.6% rate after or before fermentation.
- h) Fermented milk products named with specific microorganism names: fermented milk products named with the name/s of specific microorganism/s particular to the product used during fermentation (such as for acidophilus milk: *Lactobacillus asidofilus*, for bifidus milk: *Bifidobacterium spp*)
- 1) Strained yoghurt/ bag yoghurt: The fermented milk product in which the protein content is adjusted to at least 8% by mass by extracting whey of yoghurt with a technology or method and which contains living and active starter bacterium in its expire date.
- i) Yoghurt: The set or stirred fermented milk product in which *thermophilus* and *Lactobacillus delbrueckii sub. sp. Bulgaricus* are used together as specific starter culture during fermentation.

Raw material and product specifications

- **ARTICLE 5** (1) Specifications of fermented milk products within the scope of this Communiqué are given below:
 - a) Milk and/or milk products in conformity with the legislation shall be used in the production of fermented milk products.
 - b) In the products covered by this Communiqué, the drinking water in conformity with the legislation shall be used during reconstitution and recombination process.
 - c) The products covered by this Communiqué shall have specific taste, odour and structure.
- ç) In the production of the products covered by this Communiqué, other starter cultures and/or by-cultures in addition to starter cultures stated in Article 4 titled "Definitions" of this Communiqué can be used.
- d) Gelatine and farina can be used only in fermented milk products heat-treated after fermentation and flavoured/aromatized fermented milk products.
 - e) Yoghurt and ayran shall be complied with the fat rates indicated in Annex-1.
- f) The fermented milk products shall contain the specific microorganism as living and active until the end of shelf life and in amounts stated in Annex-2.
- g) The fermented milk products heat-treated after fermentation which do not provide the specific microorganisms in Annex-2 as living, active and in the stated amounts shall not be named with specific product definitions.
- ğ) In production of fermented milk products, except for the concentrated fermented milk products, whey shall not be extracted after fermentation.
- h) The fruit rate in fruit yoghurts shall be at least 6%. However this rate should be at least 2% in the fruit and tropic fruit added yoghurts which contain titrable acid in at least 2.5% rate by weight as citric acid in juice.
 - 1) Ayran can contain salt at the rate of 0.80% at most.
- i) Except for milk fat, any fat composition shall not be added to the products covered by this Communiqué. However, the fermented milk products, in which flavouring substance is used during their production, may contain herbal oil or farina arising from the flavouring substance used in addition to the milk fat naturally found in their ingredient and in an amount proportional to the used flavouring substance.
- j) Other specifications belonging to the products covered by this Communiqué are given in Annex-2.
- k) Total bacteria number in Heat-Treated Fermented Milk Products can be maximum 10^2 .

Food additives

ARTICLE 6-(1) The food additives used in products within the scope of this Communiqué shall be complied with the provisions of the Turkish Food Codex Regulation on Food Additives published in the Official Gazette dated 30/06/2013 and numbered 28693.

Veterinary drug residues

ARTICLE 7-(1) The residue amounts of pharmacologic active substances within the scope of this Communiqué shall be complied with the provisions of the Turkish Food Codex Turkish Food Codex Regulation on Classification and Maximum Residue Limits of Pharmacologically Active Substances in Foodstuffs of Animal Origin published in the Official Gazette dated 04/05/2012 and numbered 28282.

Coccidiostat and Histomonostat residues

ARTICLE 8- (1) The amounts of Coccidiostat and Histomonostat in the products covered by this Communiqué shall be complied with the provisions of the Turkish Food Codex Regulation on Maximum Levels of Coccidiostats or Histomonostats in Foodstuffs of Animal Origin Resulting From the Unavoidable Carry-Over of These Substances in Non-Target Feed published in the Official Gazette dated 08/02/2015 and numbered 29261.

Flavourings

ARTICLE 9- (1) The flavourings used in the products covered by this Communiqué shall be complied with the provisions of the Turkish Food Codex Regulation on Flavourings and Food Ingredients with Flavouring Properties published in the Official Gazette dated 29/12/2011 and with the third repeated numbered 28157. In addition to those general rules, in the products covered by this Communiqué, the milk and milk products flavourings, such as ship milk aroma, goat milk aroma and butter aroma, shall not be used.

Contaminants

ARTICLES 10-(1) The contaminant levels in the products covered by this Communiqué shall be complied with the provisions of the Turkish Food Codex Regulation on Contaminants published in the Official Gazette dated 29/12/2011 dated and with the third repeated numbered 28157.

Pesticide Residues

ARTICLE 11- (1) The amounts of pesticide residues in the products covered by this Communiqué shall be complied with the provisions of the Turkish Food Codex Regulation on Maximum Residue Limits of Pesticides published in the Official Gazette dated 05/8/2014 and with the first repeated numbered 29099.

Hygiene

- **ARTICLE 12-** (1) The products covered by this Communiqué shall be produced according to the provisions of the Regulation on Special Hygiene Measures for Animal Products, Regulation on Food Hygiene published in the Official Gazette dated 17/12/2011 and numbered 28145 and Turkish Food Codex Regulation on Microbiologic Criteria published in the Official Gazette dated 29/12/2011 and with the third repeated numbered 28157.
- (2) The products covered by this Communiqué which are pre-packaged for direct sale shall be supplied to the market only where the hygiene-related criteria of this Communiqué are fulfilled.

Packaging

ARTICLE 13- (1) The packages of the products covered by this Communiqué shall be complied with the provisions of the Turkish Food Codex Regulation on Substances and Materials in Contact with Food published in the Official Gazette dated 29/12/2011 and with the third repeated numbered 28157 and Regulation on Food Hygiene.

Labelling

ARTICLE 14 - (1) The label of the products covered by this Communiqué shall be complied with the following provisions in addition to the provisions of Turkish Food Codex

Regulation on Labelling published in the Official Gazette dated 29/12/2011 dated and with the third repeated numbered 28157. In addition to these rules:

- a) The fermented milk products heat-treated after fermentation are shall be named as "Heat-Treated Fermented Milk Product".
- b) The name of the flavouring substance added to the flavoured fermented milk products shall be used with specific product name.
- c) The name of the aromatizing substance used in the fermented milk products produced only by using aromatizing substances shall be used with specific product name.
- ç) In the products which sugar and/or sweetener is used in its production, one of the statements: "sugar added", "contains sweetener" or "sweetened" "contains sugar or sweetener" of "sugared and sweetened", also in case another ingredient except for those is used in order to sweeten, the statement "it is sweetened with....", should be on the label in the same field of vision with the product name and in readable size.
- d) Except for the flavoured fermented milk products, the nutrition statements related to fat specified in Turkish Food Codex Regulation on Labelling Annex 14 shall not be valid for yoghurt and ayran. Yoghurt and ayran shall be named in terms of fat content according to the classification in Annex 1.
- e) "Reduced-fat" or similar statements can be used for yoghurts whose milk fat content is lower than 1.5 % and ayrans whose milk fat content is lower than 0.8%.
- f) The milk fat amount of the products covered by this Communiqué shall be stated as the mass or volume percentage in the sight of the label and in a size and place which can be easily seen.
- g) Protein amounts of products within the content of this Communiqué, should be stated as "...%" by weight in the sight of the label and in a size and place which can be easily seen.
- ğ) Some processes, such as homogenization, preparation of clotted cream, etc., used in the production of the products covered by of this Communiqué shall be used with product name.
- h) In the productions covered by this Communiqué and in which the milk belongs to an animal kind is used a hundred percent, the name of the relevant animal species can be used with the product name.
- 1) In the fermented milk products heat-treated after fermentation, the gelatine and farina used as processing aid should be stated in the ingredient list on the product label.
- i) In the production of the products covered by this Communiqué, in addition to starter cultures stated in Article 4 titled "Definitions" of this Communiqué, when other starter cultures and/or by-cultures are used, these shall be stated in the ingredients list of the label.
- j) The fermented milk products registered as geographical indication shall be supplied to market according to the specifications stated in geographical indication registration provided that they are not contrary to the provisions of horizontal food codex.
- k) In case there is not any provision in this Communiqué and horizontal food codex for fermented milk products known with their regional/national names, primarily the relevant national standard shall be taken into consideration; in case there is not any national standard, the international standards shall be taken into consideration.

Transportation and storage

- **ARTICLE 15-** (1) During transportation and storage of the products covered by this Communiqué, the provisions laid down in the Section on Transportation and Storage of Foods of the Turkish Food Codex Regulation shall be followed.
- (2) The products covered by this Communiqué shall be kept below 6°C during conservation, transportation and placing on the market.

Sampling and Analysis Methods

ARTICLE 16- (1) Sampling from the products within the context of this Communiqué and the analysis of these shall be conducted in compliance with the Turkish Food Codex Regulation.

Administrative Sanction

ARTICLE 17 – (1) The administrative sanctions shall be applied against the individuals who act contrary to this Communiqué according to the relevant articles of the Veterinary Services, Plant Health, Food and Feed Law dated 11/06/2010 and numbered 5996.

Repealed Legislation

ARTICLE 17 – (1) By this Communiqué, the Turkish Food Codex Communiqué on Fermented Milks published in the Official Gazette dated 16/2/2009 and numbered 27143 has been repealed.

Conformity Obligation

PROVISIONAL ARTICLE 1- (1) The food operators which operates before the publication date of this Communiqué shall comply with the provisions of this Communiqué within 1 year from the date of publication of this Communiqué.

(2) The food operators which operate within the context of this Communiqué shall comply with the provisions of the Turkish Food Codex Communiqué on Raw Milk and Heat-Treated Drinking Milks taking into force by published in the Official Gazette dated 14/02/2000 dated and numbered 23964 until they fulfil the provisions of this Communiqué.

Entry into Force

ARTICLE 18- (1) This Communiqué shall enter into force on the date of publication.

Execution

ARTICLE 19- (1) the provisions of this Communiqué shall be executed by the Minister of Food, Agriculture and Livestock.

ANNEX-1: Fat Rates for Yoghurt and Ayran

Fat Rate

Whole Yoghurt	milk fat ≥ % 3,8						
Low Fat Yoghurt	$\% 2 > milk fat \ge \% 1,5$						
Non-fat Yoghurt	milk fat \leq % 0,5						
% fat yoghurt	Milk fat other than whole, low fat and non-fat yoghurt classes						
	Fat Rate						
	Fat Rate						
Whole Ayran	Fat Rate milk fat ≥ % 1,8						
Whole Ayran Low Fat Ayran							
•	milk fat ≥ % 1,8						

ANNEX – 2: Product Specifications

	Fermented Milk Product	Yoghurt	Ayran	Kefir	Kumis	Strained Yoghurt	Concentrated Fermented Milk Product	Fermented Milk-Based Drink
Milk protein* (% by Weight)	Minimum 2,8	Minimum 3,0	Minimum 2,0	Minimum 2,8	Minimum 1.0	Minimum 8	Minimum 5,6	Minimum 1,1
Milk fat (% by Weight)	Maximum 10	Maximum 15	-	Maximum 10	Maximum 10	Maximum 30	Maximum 20	-
Titratable acidity (As lactic acid, % by Weight)	Minimum 0,3	Minimum 0,6 Maximum 1,5	Minimum 0,5 Maximum 1,0	Minimum 0,6	Minimum 0,7	Minimum 0,6 Maximum 2,0	Minimum 0,6 Maximum 1,5	Minimum 0,6 Maximum 1,5
Ethanol (% volume/weight)	-	-	-	-	Minimum 0,5	-	-	-
Total Specific Microorganism (cfu/g)	Minimum 10^7	Minimum 10 ⁷	Minimum 10^6	Minimum 10^7	Minimum 10^7	Minimum 10^7	Minimum 10^7	Minimum 10^7
Total Added Microorganism Stated on Label (cfu/g) **	Minimum 10 ⁶	Minimum 10^6	Minimum 10 ⁶	Minimum 10^6	Minimum 10^6	Minimum 10^6	Minimum 10^6	Minimum 10^6
Ferments (cfu/g)	-	-	-)	Minimum 10^4	Minimum 10 ⁴			

^{*} Milk Protein; Total nitrogen content determined by Kjeldahl method x 6.38

In the flavoured fermented milk products (excluding flavoured ayran), the aforementioned criteria must be calculated in proportion to the fermented milk product quantity used in the product. However, the milk protein must be minimum 2.8 %.

^{**} Other starter and/or auxiliary cultures added to the starter cultures stated in the article 4 titled definitions of this Communiqué in the production of products covered by this Communiqué.