

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية
GCC STANDARDIZATION ORGANIZATION (GSO)

Final Draft Standard

GSO 05/FDS 816 /2008

اللبنه

Labneh

Prepared By

GSO Technical Committee 05 for standards of food and agriculture products

This document is a draft GSO Standard circulated for comments. It is, therefore, subject to alteration and modification and may not be referred to as a GSO Standard until approved by GSO Board Of Directors.

Foreword

GCC Standardization Organization (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No. 5 "Gulf technical committee for standards of food and agriculture products" has updated the GSO Standard No. 816/1997 "Labneh". The Draft Standard has been prepared by Sultanate of Oman.

This standard has been approved as a Gulf Technical Regulation by GSO Board of Directors in its meeting No. (), held on / / H, / / G. The approved standard will replace and supersede the GSO standard No. 816/1997.

LABNEH

1- SCOPE AND FIELD OF APPLICATION

This standard is concerned with Labneh, Labneh heat-treated after fermentation and Labneh-in-Oil.

2- COMPLEMENTARY REFERENCES

- 2.1 GSO 9 Labeling of Prepackaged Foods.
- 2.2 GSO 2 1 Hygienic Regulations for Food Plants and Their Personnel.
- 2.3 GSO150 Expiration Periods of Food Products – Part 1.
- 2.4 GSO 323 General Requirements for Transportation and Storage of Chilled and Frozen Foods.
- 2.5 GSO 398 Packages of Foodstuffs- Part 1: General Requirements.
- 2.6 GSO 569 Methods of Sampling Milk and Milk Products.
- 2.7 GSO 678 Methods of Test for Fermented Milk.
- 2.8 GSO 841 Maximum Limits of Mycotoxins Permitted in Foods and Animal Feeds- Aflatoxins.
- 2.9 GSO 988 Limits of Radiation Levels Permitted in Foodstuffs- Part 1.
- 2.10 GSO 998 Method for Detection of Radionuclides in food- Part 1: Gamma Spectrometry Analysis.
- 2.11 GSO 1016 Microbiological Criteria of Food Product- Part 1.
- 2.12 GSO 1019 Edible Olive Oil and Pomace Olive Oil.
- 2.13 GSO1020 Methods of Test for Edible Olive Oil and Pomace Olive Oil.
- 2.14 GSO Standard for Food Additives (CODEX STAN. 192 Food Additives).
- 2.15 GSO Standard for Pesticide Residues (Maximum residue limits (MRLs) for pesticide established by Codex Alimentarius Commission).
- 2.16 GSO Standard for Veterinary Drugs Residues (Maximum residue limits for veterinary drugs in food established by Codex Alimentarius Commission).
- 2.17 GSO Analysis of Pesticide Residues (CODEX STAN. 229 Analysis of Pesticide Residue: Recommended Methods).

3- DEFINITIONS

- 3.1 Labneh: A coagulated milk product obtained by lactic acid fermentation of milk or milk products (4.1.6) through the action of suitable pure starters of lactic acid bacteria and then concentrating the product by one of the suitable methods.
- 3.2 Labneh-in-oil: Labneh with firm texture and like balls preserved in olive oil.
- 3.3 Labneh heat-treated after fermentation: Labneh which has been subjected to a heat treatment after fermentation to inhibit the activity of the bacteria and enzymes.

REQUIREMENTS

The following requirements shall be met in Labneh, Labneh heat-treated after fermentation and Labneh-in-oil:

- 4.1 Labneh and Labneh heat-treated after fermentation
- 4.1.1 It shall be completely free from pig products or their derivatives.
- 4.1.2 It shall be free from extraneous matter, impurities and insects, or their parts.
- 4.1.3 The raw materials used in manufacturing the Labneh shall comply with the relevant GSO standards.
- 4.1.4 It shall have the characteristic texture, taste and odor of Labneh and shall be free from undesirable taste and odor.
- 4.1.5 The milk used in manufacturing Labneh shall be inoculated with suitable, pure starters of lactic acid bacteria, i.e, Lactobacillus bulgaricus and streptococcus thermophilus.
- 4.1.6 One type of the following milk shall be used as raw material:
- Full cream pasteurized milk; or partly skimmed or fully skimmed.
 - Full cream concentrated milk; or partly skimmed or fully skimmed.
 - Full cream milk powder; or partly skimmed or fully skimmed.
 - Pasteurized, partly skimmed milk or concentrated partly skimmed milk, or
 - Pasteurized skimmed milk or concentrated skimmed milk, or
 - Milk powder, skimmed milk powder, partly skimmed milk powder.
- 4.1.7 The following animal fat sources may be used when the fat percentage is adjusted:
1. Pasteurized butter.
 2. Pasteurized cream.
 3. Butter oil.
- 4.1.8 It shall be processed in accordance with the hygienic regulations of the GSO standard mentioned in 2.3.
- 4.1.9 Heat-treatment
- 4.1.9.1 It is permitted to treat Labneh with heat before packing at 70°C for 35 seconds or at 55°C for 15-30 minutes after packing.
- 4.1.9.2 In addition to what is mentioned 4.1.9.1, it is permitted to treat Labneh with heat after fermentation and before packing at 90°C for 30 seconds.
- 4.1.10 Food additives may be used according to the limits stated in the GSO standard mentioned in 2.14.
- 4.1.11 Salt (sodium chloride) may be used according to good manufacturing practice (GMP).
- 4.1.12 The acidity percentage shall not be more than 2.5% and not less than 1.2% as lactic acid.
- 4.1.13 The chemical characteristics shall be in accordance with Table 1.

Table (1)

Labneh	Fat %	S.N.F. Min. %
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Labneh (cow's)	7% min.	15%
Low fat Labneh (cow's)	3% min	19%
Skimmed Labneh (cow's)	1% max.	21%
Labneh (sheep's)	12% min.	15%
Low fat Labneh (sheep's)	6% min.	21%
Skimmed Labneh (sheep's)	1.5% max.	25%

- 4.1.14 The microbiological criteria of micro-organisms in Labneh shall be according to the GSO standard mentioned in 2.11.
- 4.2 Labneh-in-oil
- 4.2.1 It shall comply with all above requirements items except (4.1.11,4.1.12,4.1.13).
- 4.2.2 The acidity shall not be more than 3.5% and not less than 1.7% as lactic acid.
- 4.2.3 The chemical characteristics shall comply with the requirements mentioned in Table No.2.

Table (2)

Product	Fat%	S.N.F. % min.
Labneh-in-oil	12% min	23%
Low fat Labneh-in-oil	6%	29%
Skimmed Labneh-in-oil	1.5%	33%

- 4.2.4 The oil used for preservation shall be olive oil and shall comply with the GSO standard mentioned in 2.12.
- 4.2.5 The weight of Labneh shall be not less than 55% w/w.

5- SAMPLING

Samples shall be drawn according to the GSO standard mentioned in 2.6.

6- METHODS OF TEST

Tests shall be carried out according to the GSO standards mentioned in 2.7, 2.10 2.13 and 2.17.

7- PACKAGING

Without prejudice to the GSO standard mentioned in 2.5, the following shall be met:

- 7.1 The containers shall be made from hygienic non-toxic or harmful and impermeable materials, sterile and shall not cause any change to the properties of the product.
- 7.2 The product shall be packed in such a way so as to prevent any external contamination.
- 7.3 The containers shall be hermetically sealed so as to prevent any external

8- STORAGE AND TRANSPORTATION

Without prejudice to the GSO standard mentioned in 2.4, the following shall be met:

- 8.1 The storage and distribution shall be done by suitable cooled means wherein the temperature shall be from 0°C to 5°C.
- 8.2 The storage and handling temperature shall be from 0°C to 5°C.
- 8.3 The storage and transportation of Labneh-in-oil shall be at a temperature not exceeding 25°C.

9- LABELLING

Without prejudice to what has been stated in the GSO standards mentioned in 2.1 and 2.5, the following shall be labelled on Labneh packages.

- 9.1 The source of milk used (cow, sheep, goat).
- 9.2 The kind of milk used (fresh milk, powder ... etc.).
- 9.3 In case of Labneh heat-treated after fermentation, the statement “Labneh heat-treated after formation” shall be written.
- 9.4 Fat percentage and the type of Labneh according to its fat content (Labneh, reduced Fat Labneh, skimmed Labneh).
- 9.5 Nutrition information (energy in calories, percentages of protein – fat – total sugars, calcium, sodium and added vitamins).
- 9.6 Percentage of salt added.

References:

- GSO No 816/2002 “ Labneh”
- Codex Standard No.192/1995 , rev 2007
General Standard for Food additives

FOR STUDY PURPOSES