

July 24, 1985

ADMINISTRATIVE ORDER
No. 123-A s. 1985

SUBJECT: STANDARD FOR BANANA SAUCE

Pursuant to Section 13 of the Republic Act 3720, this regulation prescribing the standard for **BANANA SAUCE** is hereby promulgated for the information and compliance of all concerned.

1. DESCRIPTION / IDENTITY OF THE PRODUCT

Banana Sauce is the food prepared from the pulp of mature, sound and wholesome bananas seasoned with salt, vinegar pepper and carbohydrate sweeteners, with or without added starch and other spices. Permissible food color is added to stimulate the red color of tomato catsup.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Essential Ingredients

Bananas – puree or powder
Vinegar
Carbohydrate Sweeteners – cane sugar, glucose or corn syrup
Salt
Pepper
Water

2.2 Optional Ingredients

Onions
Garlic
Chili Powder
Other Spices
Starch (other than from bananas), max. 0.1% (w/w)

2.3 Food Additives

Sodium benzoate, max 0.1% (w/w)
Food Color GMP

2.4 Quality Criteria

| | | |
|-------|--------------------------------------|-------------------|
| 2.4.1 | End- Product specifications: | |
| | Total Solids, min. | 25% (w/w) |
| | Titrateable acidity (as acetic acid) | 0.7% - 1.2% (w/w) |
| | pH, max | 4.0 |

2.4.2 Sensory Attributes

- The finished product shall have a homogenous consistency indicative of improper blending.
- It must have an acceptable color, which is neither too pale nor too bright due to excessive or improper use of coloring substances.

- It must have an acceptable blend of sweet, sour and spicy flavor.

3. HYGIENIC REQUIREMENTS

- Banana Sauce shall be prepared under hygienic conditions in accordance with BFAD's Good Manufacturing Practice regulation. It is so processed by heat, before or after packing into a sealed container, to prevent spoilage when held at ambient temperatures.
- To the extent possible in good manufacturing practice, the product shall be free from filth and other objectionable foreign matter.
- When tested by appropriate methods of sampling and analysis, the product:
 - Shall be free from pathogenic microorganisms; and
 - Shall not exceed the microbiological limits set by BFAD.

4. PACKAGING AND FILL OF CONTAINER

- Banana sauce shall be packed in sealed containers made of glass, plastic or any other suitable packaging material.
- The product shall occupy not less than 90% of water capacity of the container.

5. LABELING

5.1 Name of the product

The product described hereto shall be identified as: "BANANA SAUCE", "BANANA CATSUP", "BANANA CATCHUP" or "BANANA KETCHUP".

The name of the product shall be represented on the principal display of the label without any intervening printed or graphic matter and in boldface capital letters of the same size, style and color.

- Other label declarations shall be in accordance with the BFAD labeling regulation.

6. METHODS OF ANALYSIS

In case of disputes the methods of analysis in Appendices A to C shall serve as referee methods.

7. SAMPLING AND ACCEPTANCE

The sampling and acceptance procedure in appendix D shall be applied in evaluating lot acceptance in terms of the quality requirements specified in this standard. There will be a separate acceptance procedure for microbiological quality requirements.

This regulation shall take effect upon approval. Full compliance with labeling requirements shall be not later than March 1986.

Recommended by:

(SGD) CATALINA C. SANCHEZ
Director

Approved:

(SGD) J.C. AZURIN
Minister of Health

APPENDIX - A

Determination of Total Solids

- A.1 Weigh accurately into a pre-dried glass or stainless steel flat bottom dish (~10 cm diameter) 15-20 g of sample and spread as thinly as possible over the base of the dish.
- A.2 Evaporate to apparent dryness in a water bath or air oven maintained at 90°C. Transfer the dish in a vacuum oven maintained at 70°C. Close the oven and reduce the pressure (50 mbar maximum). Remove the dish from the oven after 6 hours; cool in a dessicator and weigh.
- A.3 Return the dish to the oven and re-dry for one hour. Remove the dish from the oven, cool and weigh. Repeat this process until difference in weight between two successive weighings is less than 1 mg. Note the lowest weight.
- A.4 Calculation

$$\% \text{ Total solids} = \frac{M_2 - M_0}{M_1 - M_0} \times 100$$

Where:

- M₀ = mass, in grams, of empty dry dish
- M₁ = mass, in grams, of sample and dish before drying
- M₂ = mass, in grams, of sample and dish after drying

APPENDIX - B

Determination of Titratable Acidity

- B.1 Weigh accurately 15-20 g of sample into a 500 ml Erlenmeyer flask. Add about 200 ml distilled water and mix thoroughly.
- B.2 Titrate with standardized 0.1N NaOH using phenolphthalein as an indicator. Note the volume of alkali used until the end point is reached.
- B.3 Calculation

$$\% \text{ T.A. (as HAC)} = \frac{(\text{Normality} \times \text{Volume}) \text{ NaOH} \times 0.06}{\text{wt. of sample}} \times 100$$

APPENDIX - C

Determination of Ph

- C.1 Place about 15-20 ml of sample in a 50 ml beaker. Add 20 ml of distilled water and mix thoroughly.
- C.2 Determine the pH with a pH meter pre-calibrated against standard buffer solution.

APPENDIX - D

1. DEFINITIONS

For purposes of this sampling and acceptance procedure, the following definitions shall apply:

- 1.1 Lot. A lot collection of primary containers or sample units of the same size, type and style, manufactured or processed under essentially similar conditions.
- 1.2 Lot size (N). The number of primary containers or sample units in the lot.
- 1.3 Sample Size (n). The number of primary containers or sample units taken as the sample for examination.
- 1.4 Sample Unit. The primary container, a portion of the contents of the primary container or a composite mixture of the product from primary containers that is examined or tested as a single unit.
- 1.5 Defective. Any sample unit shall be regarded as defective when it does not conform with the requirement(s) specified in the standard.
- 1.6 Acceptance number (c). The maximum number of defective sample units permitted in the sample in order to consider the lot as meeting the requirements in the standard.
- 1.7 Acceptable Quality Level (AQL). The maximum percent of defective sample units permitted in a lot which will be accepted approximately 95 percent of the time.

2. SAMPLING PLANS

Sampling plan 1 shall be used for normal sampling for compliance with the standard and Sampling plan 2 shall be used in case of disputes.

2.1 Sampling Plan 1 (AQL = 6.5)

| Lot size (N) (c) | Sample size (n) | Acceptance Number |
|--|-----------------|-------------------|
| Net weight ≤ 1 kg (2.2 lbs.) | | |
| 4,800 or less | 6 | 1 |
| 4,801 - 24,000 | 13 | 2 |
| 24,001 - 48,000 | 21 | 3 |
| 48,001 - 84,000 | 29 | 4 |
| 84,001 - 144,000 | 48 | 6 |
| 144,001 - 240,000 | 84 | 9 |
| More than 240,000 | 126 | 19 |
| Net weight ≤ 1 kg (2.2 lbs.) ≤ but 4.5 kg. (10 lbs.) | | |
| 2,400 or less | 6 | 1 |
| 2,401 - 15,000 | 13 | 2 |
| 15,001 - 24,000 | 21 | 3 |
| 24,001 - 42,000 | 29 | 4 |
| 42,001 - 72,000 | 48 | 6 |
| 72,001 - 120,000 | 84 | 9 |
| more than 120,000 | 126 | 13 |

APPENDIX - D

| Lot size (N) (c) | Sample size (n) | Acceptance Number |
|-------------------------------|-----------------|-------------------|
| Net weight > 4.5 kg (10 lbs.) | | |
| 600 or less | 6 | 1 |
| 601 – 2,000 | 13 | 2 |
| 2,001 – 7,200 | 21 | 3 |
| 7,201 – 15,000 | 29 | 4 |
| 15,001 – 24,000 | 48 | 6 |
| 24,001 – 42,000 | 84 | 9 |
| more than 42,000 | 126 | 13 |
| | | |
| | | |

2.2 Sampling plan 2 (AQL = 6.5)

| Lot size (N) (c) | Sample size (n) | Acceptance Number |
|--|-----------------|-------------------|
| Net weight ≤ 1 kg (2.2 lbs.) | | |
| 4,800 or less | 13 | 2 |
| 4,801 – 24,000 | 21 | 3 |
| 24,001 – 48,000 | 29 | 4 |
| 48,001 – 84,000 | 48 | 6 |
| 84,001 – 144,000 | 84 | 9 |
| 144,001 – 240,000 | 126 | 13 |
| More than 240,000 | 200 | 19 |
| Net weight > 1 kg. (2.2 lbs.) but ≤ 4.5 kg (10 lbs.) | | |
| 2,400 or less | 13 | 2 |
| 2,401 – 15,000 | 21 | 3 |
| 15,001 – 24,000 | 29 | 4 |
| 24,001 – 42,000 | 48 | 6 |
| 42,001 – 72,000 | 84 | 9 |
| 72,001 – 120,000 | 126 | 13 |
| more than 120,000 | 200 | 19 |
| Net weight > 4.5 kg (10 lbs.) | | |
| 600 or less | 13 | 2 |
| 601 – 2,000 | 21 | 3 |
| 2,001 – 7,200 | 29 | 4 |
| 7,201 – 15,000 | 48 | 6 |
| 15,001 – 24,000 | 84 | 9 |
| 24,001 – 42,000 | 126 | 13 |
| more than 42,000 | 200 | 19 |