

Republic of the Philippines  
Department of Health  
OFFICE OF THE SECRETARY  
Manila

August 30, 1971

ADMINISTRATIVE ORDER  
NO. 154 s. 1971

SUBJECT: Regulation B-4 Definition and Standards of Identity for Foods.  
4.14 Meat and Meat Products.  
4.14.01 Sausages.

B-14.01.1 Identity

1. Sausage is fresh or preserved meat, chopped or comminuted fine, to which has been added salt and spices and may contain sugar, seasoning, saltpetre (potassium or sodium nitrate) potassium or sodium nitrite, with or without binder.
2. Canned sausage shall be packaged in hermetically sealed containers and shall be treated after sealing. Heat treatment shall be sufficient to insure that the product is shelf-stable.
3. Vienna Sausage, Frankfurter (Hot Dog) German Sausage is sausage prepared from beef and/or pork. Vegetable protein may be added to an extent not exceeding 5 Gm. of dry vegetable protein per 100 Gm. of the sausage.

B-14.01.2 Standard of Quality

The drained weight of the sausage shall not be less than 70% of the net weight content of the container and the weight of the packing medium (brine) shall not be more than 30% of the net weight contents of the container.

The maximum quantity of cereal or binder such as flour or starch prepared from grain, or potato or sweet potato; bread, biscuit or bakery products, present in the sausage, shall not exceed 5% when determined in accordance with the official method of estimating cereal content. (see Annex)

The amount of potassium or sodium salts present calculated as sodium nitrate shall not exceed 500 mg. per Kilogram (500 p.p.m.) of the total net content of the sausage.

The amount of potassium or sodium salts present calculated as sodium nitrite shall not exceed 200 mg per Kilogram (200 p.p.m.) of the total net content of the sausage.

B-14.01.3 Statement of Substandard Quality

If the quality of sausage falls below the standard of quality, the label shall bear the general statement "Below Standard in Quality" or "Substandard in Quality" or "Imitation". Such words shall be placed immediately below the name of the product and shall be in prints not less than 1/2 the size of the name of the product.

B-14.01.4 Fill of Container

The container shall be well-filled with sausage. The headspace shall be not more than 1/4 of an inch or 6 millimeters from the inside surface of the container.

B-14.01.5 Labeling

Labels shall contain, prominently and informatively displayed, the true name of the product, the word "ingredients" followed by a list

of the ingredients when the product is fabricated from two or more ingredients.

Meat from mature carabao shall be designated as carabeef, and meat from young carabao shall be designated as caraveal.

The statement of the quantity of contents shall represent the weight of the drained product when removed from the container to the exclusion of the packing substance. The packing substance shall not be used in such a manner as will result in the container being so filled as to be misleading. Statement of quantity shall be in the metric system.

B-14.01.6 Effectivity

This regulation shall take effect ninety (90) days after publication in the Official Gazette.

(SGD) AMADEO H. CRUZ, M.D., CPH  
Secretary of Health

RECOMMENDED BY:

(SGD) L. M. PESIGAN  
Food and Drug Administrator

A N N E X

METHODS OF ANALYSIS FOR CEREAL CONTENT OF SAUSAGES

I. Starch in Sausages - The Chemical Analysis of Food  
By: Pearson 1964

1. Weigh 5 g of the sausage and make it into a paste with 5 ml of 5% alcoholic potash solution.
2. Add 50 ml more of the alcoholic potash solution and heat on the water bath for 15 minutes. Allow to settle and decant the liquid through a filter paper in a Buchner funnel.
3. Extract the residue twice more with 25 ml of alcoholic potash and then boil with 2 x 25 ml lots of alcohol (80%), washing all the extracts through the filter.
4. Add the filter paper and residue to main residue.
5. Add 75 ml of 0.7% aqueous potassium hydroxide and gelatinize the starch by placing in boiling water for 30 minutes.
6. Transfer the hot liquid to a 200 ml graduated flask, cool, make up to volume and filter.
7. Pipette 20 ml of the filtrate into a centrifuge tube and neutralize with 5% acetic acid to phenolphthalein.
8. Add 4 ml of N/10 iodine solution and 4 ml of 10% potassium acetate solution. Allow to stand until the precipitates settles (at least 1 hour) centrifuge and pour off the supernatant liquid.
9. To the residue add 12 ml of a mixture containing 10 ml of 95% alcohol and 2 ml of N/10 sodium thiosulfate, adding in several small quantities and breaking up the residue thoroughly with a rod.
10. Add 25 ml of 80% alcohol, filter through a Gooch crucible, wash with 95% alcohol, dry and weigh as starch.

II. Starch in Meat Product - Chemical Analysis of Food & Food Products by Jacob

1. Weigh 10 g of the finely divided meat into a 250 ml beaker.
2. Add 75 ml of an 8% of alcoholic solution of potassium hydroxide and heat on a steam or water bath until all the meat is dissolved (This generally requires 30-45 minutes).
3. Add an equal volume of 95% alcohol, cool and allow to stand for at least an hour.
4. Filter through a thin layer of asbestos in a Gooch crucible.
5. Wash twice with a warm 4% alcoholic solution of potassium hydroxide 50% by volume and then twice with warm 50% alcohol. Discard the washin. Retain as much of the precipitate in the beaker as possible until the last washing.
6. Place the crucible with its content in the original beaker and add 40ml of water and 25 ml of sulfuric acid. Stir during the addition of the acid and make sure that the acid comes in contact with all the precipitate. Allow th stand about 15 minutes, add 40 ml of water, heat just to boiling while stirring constantly.
7. Transfer the solution to a 250 ml volumetric flask add 2 ml of ~~of the filtrate into a 200 ml vol. flask, neutralize with 20%~~ phosphotungstic acid solution, allow to cool to room temperature and make up to mark with water.
8. Filter through a starch-free filter paper, pipette 100 ml of the filtrate into 200 Vol. flask, neutralize with 20% sodium hydroxide solution make up to volume and determine the dextrose present in a 50 ml portion of the filtrate as directed in the Munson and Walker method.

If much dextrose is obtained, the Lane-Eynon volumetric method may be used.

Calculation - Wt. of dextrose x 0.9 = wt. of starch.

### III. Cereals (for meat product) - AOAC and Jacob

1. Weigh 10 g of meat sample in 250 ml beaker
2. Add 75 ml 8% ~~of~~ alcoholic potassium hydroxide and heat on steam bath until dissolve for 1 hour.
3. Add equal volume of 95% alcohol, cool and let it stand for 1 hour, rotating gently once or twice during this period to loosen particles on side of tube.
4. Transfer in Nessler tube and measure the height of the sediment (after 1 hour standing or after the upper supernatant liquid is clear.)

$$\text{Volume of sediment} = \pi \left(\frac{D}{2}\right)^2 h$$

D - inside diameter of Nessler tube

h - height of sediment