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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 9695.20-2008

Replacing GB/T 9695.20-1990

Meat and meat products -- Method for determination of Zinc

肉与肉制品 锌的测定

(English Translation)

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Foreword

GB/T 9695 consists of the following components.

- GB/T 9695.1 "Meat and meat products - Determination of free fat content";
- GB/T 9695.2 "Meat and meat products - Determination of fatty acid";
- GB/T 9695.3 "Meat and meat products - Determination of iron content";
- GB/T 9695.4 "Meat and meat products - Determination of total phosphorus content";
- GB/T 9695.5 "Meat and meat pH measurement";
- GB/T 9695.6 "meat Carmine colorant determination";
- GB/T 9695.7 "Meat and meat products - Determination of total fat content";
- GB/T 9695.8 "Meat and meat products - Determination of chloride content";
- GB/T 9695.9 "Meat and meat products polyphosphate determination";
- GB/T 9695.10 "meat and meat products BHC and DDT residues determination";
- GB/T 9695.11 "Meat and meat products - Determination of nitrogen content";
- GB/T 9695.13 "Meat and meat products - Determination of calcium content";
- GB/T 9695.14 "meat starch content determination";
- GB/T 9695.15 "Meat and meat products - Determination of moisture content";
- GB/T 9695.17 "Meat and meat products - Determination of glucono-lactone content of -delta-";
- GB/T 9695.18 "Meat and meat products - Determination of ash";
- GB/T 9695.19 "Meat and meat sampling method";

- GB/T 9695.20 "Meat and meat products - Determination of zinc";
- GB/T 9695.21 "Meat and meat products - Determination of magnesium content";
- GB/T 9695.22 "Meat and meat products - Determination of copper content";
- GB/T 9695.23 "Meat and meat products L (-) - hydroxyproline determination";
- GB/T 9695.24 "Meat and meat cholesterol content determination";
- GB/T 9695.25 "Meat and meat products - Determination of vitamin PP";
- GB/T 9695.26 "Meat and meat products - Determination of vitamin A content";
- GB/T 9695.27 "Meat and meat products - Determination of vitamin B1";
- GB/T 9695.28 "Meat and meat products - Determination of vitamin B2";
- GB/T 9695.29 "Meat vitamin C content determination";
- GB/T 9695.30 "Meat and meat products - Determination of vitamin E content";
- GB/T 9695.31 "Meat total sugar content determination." this section GB/T Part of 209,695, GB/T 9695.20-1990 "Meat and meat products - Determination of zinc content" instead.

This section compared with the GB/T 9695.20-1990 main changes are as follows.

- Modify the standard Chinese name, standard Chinese name to "Meat and meat products - Determination of zinc";
- Sample processing method, adding a microwave digestion;
- Adjust the measurement conditions (the wavelength of the lamp current, slit, air flow, and the flow of acetylene burner height);
- Adjusted measurement method;
- According to GB/T 20001.4-2001 "Rules for drafting standards - Part 4. Chemical analysis of" structure has been modified.

This part of the People's Republic of China Ministry of Commerce and focal points.

This section is drafted. Jiangsu Yurun Food Industry Group Co., Ltd., the national agricultural and sideline products Quality Supervision and Inspection Center (Nanjing), Business Ministry of slaughtering technical appraisal center.

1 Scope

GB/T 9695 This section specifies the method for the determination of meat and meat products of zinc content by atomic absorption spectrometry.

This section applies to confirmation and quantitative determination of zinc in meat and meat products.

The detection limit of this part of 0.4mg/kg.

2 Normative references

The following documents contain provisions which, through reference to GB/T 9695 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 9695.19 Meat and meat products - Sampling Methods Principle 3 the treated samples, import atomic absorption spectrophotometer, after the atomic absorption 213.8nm resonance line, within a certain range, Zn absorption value is proportional to the standard series solution preparation of zinc content determined by comparison or calculation of the linear regression equation, zinc content.

4 Reagents and materials

4.1

General. This section is used analytically pure reagents were of analytical grade or above, deionized water or water are appropriate purity water.

4.2

hydrochloric acid solution (1 + 1). Measure 50mL of hydrochloric acid, was added to an appropriate amount of water and then diluted to 100mL.

4.3

hydrochloric acid solution (0.3mol/L). Measure 27mL of hydrochloric acid, add water and dilute to 1000mL.

4.4

nitrate.

4.5

hydrogen peroxide.

4.6

Zinc standard solution (1000μg/mL). Accurately weigh 1.000g metallic zinc (99.99%) was dissolved in 10mL of hydrochloric acid solution (4.2), and then After evaporation to near dryness on a water bath, with a small amount of water dissolved moved 1000mL volumetric

flask, dilute to the mark with water, stored in polyethylene bottles, this 1000 μ g per milliliter of solution equivalent to zinc.

4.7

zinc standard solution (100 μ g/mL). Imbibe 10.0mL standard zinc solution was placed in 100mL flask, hydrochloric acid solution (4.3) diluted to the mark, and this solution is equivalent to 100 μ g per milliliter of zinc.

5 Instruments

5.1

muffle furnace.

5.2

Crucible. quartz or porcelain, capacity 40mL ~ 50mL.

5.3

meat grinder. quality stainless steel, perforated plate pore size of not more than 4mm.

5.4

microwave digestion (with high pressure digestion tank, acid pre-digestion and catch with electronic temperature control board).

5.5

Flame atomic absorption spectrophotometer.

6 Sample preparation

6.1

according to the provisions of GB/T 9695.19 sampling.

6.2

Sample removal of inedible parts, with a meat cutter 2 or 3 times, and mix. Good twist sample specimen in a covered box in the back.