



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

GB 17404-2016

**National food safety standard - Hygienic specification for
manufacturing of puffed food**

食品安全国家标准 膨化食品生产卫生规范

(English Translation)

Issued on: December 23, 2016

Implemented on: December 23, 2017

Issued by: National Health and Family Planning Commission of the PRC

Table of Contents

Foreword...	3
1 Scope...	4
2 Terms and definitions...	4
3 Field selection and factory environment...	4
4 Plant and workshop...	4
5 Facilities and equipment...	4
6 Hygienic management...	5
7 Food ingredients, food additives and food related products...	6
8 Food safety control in production process...	7
9 Inspection...	9
10 Food storage and transportation...	9
11 Product recall management...	9
12 Training...	9
13 Management system and personnel...	9
14 Records and document management...	10
Appendix A Guidelines for microbiological monitoring...	11
procedures in puffed food processing...	11

Foreword

This standard replaces GB 17404-1998 "Good manufacturing practice for puffed food".

As compared with GB 17404-1998, the main changes of this standard are as follows.

- CHANGE the standard name into "National food safety standard - Hygienic specification for manufacturing of puffed food";
- MODIFY the standard structure;
- MODIFY the terms and definitions;
- ADD the terms on the product recall management and training;
- ADD Appendix A "Microbiological monitoring procedures for puffed food

processing".

National food safety standard - Hygienic
specification for manufacturing of puffed food

1 Scope

This standard specifies the basic requirements and management criteria for the fields, facilities and personnel of raw material procurement, processing, packaging, storage and transportation in puffed food production.

This standard applies to the production of puffed food.

2 Terms and definitions

The terms and definitions in GB 14881-2013 apply to this standard.

2.1 Puffing

It refers to the process of volume expansion or texture loosening of the raw materials after being heated or subject to pressure difference change.

3 Field selection and factory environment

It shall comply with the relevant provisions of Chapter 3 of GB 14881-2013.

4.1.1 It shall comply with the relevant provisions of clause 4.1 of GB 14881-2013.

4.1.2 It shall arrange different functional areas in accordance with the production process requirements, such as batching area, extruding area, molding area, baking area, frying area, and the areas having relative high cleanliness requirements including flavor endowing area, cooling area, and packaging area, etc.

4.2 Building internal structure and materials

It shall comply with the relevant provisions of clause 4.2 of GB 14881-2013.

5.1 Facilities

insects, AND they shall not be mixed with odor substances. During the preventative fumigation to avoid pest pollution, the fumigation place, personnel, reagents, and follow-up treatment shall comply with the relevant provisions.

7.2.6 When thawing the frozen raw materials, it shall control the thawing

temperature and time, to prevent the deterioration or corruption of raw materials.

7.2.7 When using the uncleaned fresh raw materials, such as potatoes, fruits

and vegetables, etc., they shall be cleaned, AND the production water shall comply with the requirements of GB 5749. If the processing water is recycled, it shall take the necessary measures to avoid cross-contamination of raw materials.

7.3 Food additives

It shall comply with the relevant provisions of clause 7.3 in GB 14881-2013.

7.4 Food related products

It shall comply with the relevant provisions of clause 7.4 of GB 14881-2013.

7.5 Others

It shall comply with the relevant provisions of clause 7.5 in GB 14881-2013.

8.1.1 It shall comply with the relevant provisions of clause 8.1 in GB

14881-2013.

8.1.2 As for the key processes that need to be controlled in the production

process, such as cooking, kneading, frying, baking, flavoring and other processes, it shall establish corresponding operating procedures.

8.1.2.1 Potatoes, fruits and vegetables and other fresh raw materials shall be

properly sorted or cut after cleaning to ensure compliance with food safety

requirements.

8.1.2.2 In the process of cooking and kneading, it shall control the temperature, time, and pressure (high pressure steaming), etc., AND keep the records.

8.1.2.3 Oils used in the process of frying shall comply with the corresponding food safety standards. In the frying process, it shall control the frying temperature, time, vacuum (in case of vacuum frying), and oil quality changes. After frying, it shall pre-cool it in time AND avoid the formation of condensate in the package.

8.4.1 It shall comply with the relevant provisions of clause 8.4 of GB 14881-2013.

8.4.2 As for the products using the extrusion process, the materials of the extruder screw and sleeve shall comply with the food safety requirements, AND it shall monitor the wearing conditions of the extrusion equipment, and replace it in time if necessary.

8.5.1 It shall comply with the relevant provisions of clause 8.5 in GB 14881-2013.

8.5.2 The product shall take appropriate measures before being packaged, to ensure that the product does not deteriorate due to condensation in the packaging bag.

8.5.3 It shall be packaged by waterproof impermeable materials, AND the seal shall be tight to avoid moisture absorption.

8.5.4 If using the desiccant, desiccant packaging shall be complete, AND it shall take appropriate measures to avoid contaminating other products during dosing.