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

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**General technical specification for the quality control of foods
treated by high pressure processing**

超高压食品质量控制通用技术规范

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part

1. Structure and Drafting Rules of Standardization Documents" drafted. Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents. This document is proposed and managed by the National Standardization Technical Committee on Food Quality Control and Management (SAC/TC313). This document is drafted by: China Agricultural University, Institute of Agricultural Quality Standards and Testing Technology, Chinese Academy of Agricultural Sciences, China Standardization Research Institute Research Institute, Guangzhou Wanglaoji Great Health Industry Co., Ltd., Chungui Health Technology Co., Ltd., Shandong Runxing Kanghong Food Co., Ltd. The main drafters of this document. Liao Xiaojun, Xu Zhenzhen, Liu Wen, Wang Yongtao, Zhao Liang, Mi Lu, Liu Peng, Xu Wenliu, Weng Shaoquan, Yang Menghai, Happy Sunday. General technical specification for quality control of ultra-high pressure foods

1 Scope

China's national general technical specification for quality control of high pressure processed foods. High pressure processing subjects packaged food to several hundred megapascals of hydrostatic pressure for a few minutes, which inactivates vegetative bacteria, yeasts and moulds without heat. The attraction is that pressure destroys microorganisms by disrupting their membranes and proteins while leaving the small molecules that carry flavour, colour and vitamin activity untouched - so juice, guacamole, ready meals and deli meats come out tasting fresh and keep for weeks. What quality control has to address is what pressure does not do. It does not reliably kill bacterial spores, so a low acid food treated this way still needs refrigeration and is not shelf stable; the effect depends on pH, water activity and temperature; and the package must be flexible enough to

transmit the pressure and to recover, which excludes rigid containers and any headspace.

This document specifies the basic condition requirements, raw and auxiliary material quality control requirements, processing quality control requirements and quality control requirements for ultra-high pressure food. management requirements, packaging, marking, transportation and storage, and verification methods. This document applies to the quality control of ultra-high pressure food processing production.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 2893.1 Graphical Symbols Safety Colors and Safety Signs Part

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 The process of processing food under a pressure of not less than 100MPa.

Note

2.The treatment process includes pressure increase, pressure maintenance and pressure relief.

3.2 HPP Food Foods that have undergone ultra-high pressure processing.

3.3 A medium that transmits pressure.

4 basic requirements

4.1 Installation site requirements for ultra-high voltage equipment

4.1.1 Construction should be carried out on the floor of the workshop according to the quality of the equipment to ensure safe load-bearing.

4.1.2 The equipment site is relatively independent, the distance between the equipment and the wall and other equipment should not be less than 80cm, and should not be used for food production, equipment maintenance and other equipment. Material loading and unloading, etc. form obstacles.

5 Principles and Requirements for the Use of Safety Signs

GB 5749 Hygienic Standard for Drinking Water