

ICS 67.050

CCS X 04



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

GB/T 18525.6-2026

Replacing GB/T 18526.3-2001

**Irradiation processing practice for agricultural products - Part
6: Dehydrated vegetables**

农产品辐照工艺 第6部分：脱水蔬菜

Issued on: May 25, 2026

Implemented on: December 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 6 of GB/T 18525 "Irradiation Processes for Agricultural Products". GB/T 18525 has already published the following parts.

- 1. Legumes and their products;
- 2. Cereals and their products;
- Irradiation process for insect control and mold prevention in dried shiitake mushrooms (GB/T 18525.5);
- 6. Dehydrated Vegetables;
- 7. Spices and Seasonings;
- 8. Cooked Meat Products;
- 11. Dried Longan;
- 12. Pollen. This document replaces GB/T 18526.3-2001 "Irradiation Sterilization Process for Dehydrated Vegetables". Compared with GB/T 18526.3-2001, except for the structure... Aside from adjustments and editorial changes, the main technical changes are as follows:
 - a) Added terms and definitions for "process dosage", "dose nonuniformity", "dose distribution test", and "average absorbed dose" (see Chapter 3);
 - b) The term "irradiation device" has been changed (see Chapter 4, Chapter 5 in the 2001 edition);

c) The pre-irradiation packaging and storage has been changed (see 5.1, 4.2 of the 2001 edition);

4 Irradiation device

4.1 Irradiation devices shall comply with the provisions of GB/T 17568, GB/T 25306 and relevant standards.

4.2 The irradiation device shall be a gamma-ray device generated by ^{60}Co or ^{137}Cs radionuclides, and an accelerator with an electron beam energy not exceeding 10 MeV. The device is an X-ray device that meets the relevant standards.

5.1 Packaging and Storage

5.1.1 Packaging specifications shall meet the requirements of irradiation processing, and the packaging materials shall not cause secondary pollution to the product after irradiation.

5.1.2 The storage environment shall meet the temperature, humidity and ventilation requirements of the product.

5.1.3 Irradiation should be carried out as soon as possible after the dehydrated vegetables are packaged to prevent microbial contamination.

5.2 Process Determination

5.2.1 Dosage distribution tests should be conducted based on the characteristics of the dehydrated vegetables, such as type, packaging, and intended use, to determine the location of the monitoring dosimeter.

5.2.2 The process dosage should preferably be

10.0 kGy, with an average absorbed dosage not exceeding

10.0 kGy. Specific dosages can be determined based on the actual product microbiology. The initial loading level, irradiation purpose, and hygiene quality requirements are determined, and the process dose is not lower than the minimum effective dose and not higher than the maximum tolerated dose. dose.

5.2.3 The loading mode should be determined based on the packaging specifications of the dehydrated vegetables, the type of irradiation device, and the type of irradiation container, and the product under the loading mode... Dosage nonuniformity should meet the process dosage requirements.

5.2.4 Equipment operating parameters should be set according to process dosage and loading mode.

5.2.5 Irradiation process documentation shall be developed, including but not limited to

process dose, loading mode, equipment operating parameters, and dose measurement system. Systematically monitor the location of the dosimeter.

6 Irradiation process

6.1 Irradiation Operation Irradiation processing is organized according to the requirements of the irradiation process documents. The processing includes setting parameters, loading and unloading products, irradiation implementation, and dose monitoring. It also monitors and records the irradiation equipment, related parameters, and online product flow process.

6.2 Dose Monitoring According to the irradiation process documentation, monitoring dosimeters are deployed for measurement and recording. The dosimeter measurement system is selected according to GB/T 16640. Select and regularly trace back to the national absorbed dose standard.

6.3 Irradiation Interruption If the irradiation process is interrupted, the impact on the absorbed dose of the product should be assessed, and subsequent processing and recording should be carried out.

7 Post-irradiation management

7.1 Storage Irradiated and unirradiated products should be stored separately. The storage environment should meet the requirements of 5.1.2.

7.2 Release

7.2.1 The irradiated product can only be released after confirming that the absorbed dose meets the process dose requirements and that there are no other abnormalities in the irradiation process.

7.2.2 When non-compliance with process dosage requirements or other non-conforming situations occur, they shall be handled in accordance with the non-conforming product management procedure.

8. Record and File Management All records and documents should be properly kept and retained for up to 6 months after their expiration date.