National Food Safety Standard

Hygienic Standard for Irradiated Hog Carcass
1 Subject content and scope of application
This standard specifies the technical requirements and test methods for irradiating Trichinella pork.
This standard applies to Trichinella pork irradiated by γ radiation or electron beam (the trichinella has a parasitic density of no more than 5 cystic or calcified Trichinella in 24 meat specimens).

2 Reference standard
GB 2722 Fresh Pork Hygiene Standard

3 Technical requirements

3-1 Irradiation Restriction: The average absorbed dose of Trichinella pork, which is irradiated by a low-cost 10 MeV electron beam generated by a $^{60}$Co or $^{137}$Cs Y ray or electron accelerator, the average absorbed dose is 0.65kGy.

3-2 Irradiation principle: uniform irradiation, reliable and accurate dose.

4 sensory indicators
Executed according to GB 2722.

5 physical and chemical indicators
Executed according to GB 2722.

6 Parasite indicators
Irradiated pork Trichinella must be inactivated and cannot develop into adult parasites in the intestinal tract of animals.

7 Inspection method
The inspection of irradiated inactivated pork Trichinella is carried out in accordance with Appendix A (Supplementary).
Appendix A
Method for testing inactivated pork Trichinella
(Supplementary)

A1 reagent
1% pepsin digestive juice, take gastric protease powder 1 Og (activity 3000 • 1 into concentrated hydrochloric acid 1 OmL, distilled water 990mL, mix and serve.

A2 artificial collection of muscle Trichinella
Take 50g of irradiated pork (transverse muscle, psoas muscle or hind leg muscle), cut into pieces and put into the digestive juice at a ratio of 1 g • 20m L.
In a 37 ° C incubator or water bath 1 - 2h, keep stirring. Precipitate for 30 min, discard the supernatant and leave a sediment to collect the muscle Trichinella.

A3 mouse bioassay test
A3-1 The above-mentioned collected muscle Trichinella was administered to the mice, and each of the muscles was infected with a thousand and thirty.
A3-2 After 24 hours of intragastric administration, the mice were sacrificed, and the small intestine was taken and cut longitudinally to prepare a glass tablet. The presence or absence of Trichinella spiralis was observed under a microscope.

Additional information,
This standard was proposed by the Health Supervision Department of the Ministry of Health.
This standard was drafted by Henan Food Hygiene Supervision and Inspection Institute.
The main drafters of this standard are Wang Peiren, Wang Zhongzhou, Meng Guang, Li Shi, and Chen Yurong.
This standard is interpreted by the Food Hygiene Supervision and Inspection Institute of the Ministry of Health, which is entrusted by the Ministry of Health.