

ANNEX VII

RISK-MITIGATING TREATMENTS FOR PRODUCTS OF ANIMAL ORIGIN (MEAT, CASINGS, MILK AND EGGS) FROM A RESTRICTED ZONE

(as referred to in Articles 27, 33 and 49 of this Regulation)

1. Treatments for foot-and-mouth disease

Meat

Heat treatment in a hermetically sealed container, to achieve a minimum F_0^1 value of 3;

Heat treatment to achieve a core temperature of at least 70°C;

Heat treatment in a hermetically sealed container, applying at least 60°C for a minimum of 4 hours;

Natural fermentation and maturation for minimum 9 months, to achieve maximum values of A_w of 0,93 and pH of 6 throughout the product;

Drying after salting for minimum 182 days (porcine meat only).

Casings

Salting with sodium chloride (NaCl) either dry or as saturated brine ($A_w < 0,80$), for a continuous period of 30 days or longer at an ambient temperature of 20°C or above;

Salting with phosphate supplemented salt 86,5 % NaCl, 10,7 % Na_2HPO_4 and 2,8 % Na_3PO_4 either dry or as saturated brine ($A_w < 0,80$) for a continuous period of 30 days or longer at an ambient temperature of 20°C or above.

Milk

Heat treatment (sterilization process) to achieve a minimum F_0 value of 3;

Heat treatment Ultra High Temperature (UHT) at a minimum of 132°C for a minimum of 1 second;

If milk pH is lower than 7, heat treatment High temperature short time (HTST) pasteurisation at a minimum of 72°C for a minimum of 15 seconds;

If milk pH is 7 or higher, heat treatment HTST pasteurisation at a minimum of 72°C for a minimum of 15 seconds, applied twice;

¹ F_0 is the calculated killing effect on bacterial spores. An F_0 value of 3 means that the coldest point in the product has been heated sufficiently to achieve the same killing effect as 121°C (250°F) in three minutes with instantaneous heating and chilling.

Heat treatment HTST pasteurisation at a minimum of 72°C combined with a physical treatment to achieve pH value below 6 for a minimum of 1 hour;

Heat treatment HTST pasteurisation at a minimum of 72°C combined with desiccation.

2. Treatments for Rinderpest

There is no risk mitigating treatment for Rinderpest.

3. Treatments for Rift Valley fever

Meat without offal

Maturation of carcasses at a minimum temperature of 2°C for a minimum of 24 hours following slaughter.

Offal and meat from carcasses not matured

Heat treatment in a hermetically sealed container, to achieve a minimum F_0 value of 3.

Milk

Heat treatment (sterilization process) to achieve a minimum F_0 value of 3;

Heat treatment High temperature short time (HTST) pasteurisation at a minimum of 72°C for a minimum of 15 seconds.

4. Treatments for lumpy skin disease

Offal

Heat treatment in a hermetically sealed container, to achieve a minimum F_0 value of 3.

Casings

Safe commodity.

Milk

Heat treatment (sterilization process) to achieve a minimum F_0 value of 3;

Heat treatment High temperature short time (HTST) pasteurisation at a minimum of 72°C for a minimum of 15 seconds.

5. Treatments for contagious bovine pleuropneumonia

Offal

Heat treatment in a hermetically sealed container, to achieve a minimum F_0 value of 3.

6. Treatments for Sheep Pox and Goat Pox

Offal

Heat treatment in a hermetically sealed container, to achieve a minimum F_0 value of 3.

Milk

Heat treatment (sterilization process) to achieve a minimum F_0 value of 3.

7. Treatments for Peste des Petits ruminants

Meat

Heat treatment in a hermetically sealed container, to achieve a minimum F_0^2 value of 3;

Heat treatment to achieve a core temperature of at least 70°C;

Heat treatment to achieve a core temperature of 65°C for a period of time to achieve a minimum pasteurisation value of 40;

Heat treatment in a hermetically sealed container, applying at least 60°C for a minimum of 4 hours;

Casings

Salting with sodium chloride (NaCl) either dry or as saturated brine ($A_w < 0,80$), for a continuous period of 30 days or longer at an ambient temperature of 20°C or above;

Salting with phosphate supplemented salt 86,5 % NaCl, 10,7 % Na_2HPO_4 and 2,8 % Na_3PO_4 either dry or as saturated brine ($A_w < 0,80$) for a continuous period of 30 days or longer at an ambient temperature of 20°C or above.

Milk

Heat treatment (sterilization process) to achieve a minimum F_0 value of 3;

Heat treatment Ultra High Temperature (UHT) at a minimum of 132°C for a minimum of 1 second;

² F_0 is the calculated killing effect on bacterial spores. An F_0 value of 3 means that the coldest point in the product has been heated sufficiently to achieve the same killing effect as 121°C (250°F) in three minutes with instantaneous heating and chilling.

If milk pH is lower than 7, heat treatment High temperature short time (HTST) pasteurisation at a minimum of 72°C for a minimum of 15 seconds;

If milk pH is 7 or higher, heat treatment HTST pasteurisation at a minimum of 72°C for a minimum of 15 seconds, applied twice;

Heat treatment HTST pasteurisation at a minimum of 72°C combined with a physical treatment to achieve pH value below 6 for a minimum of 1 hour;

Heat treatment HTST pasteurisation at a minimum of 72°C combined with desiccation.

8. Treatments for contagious caprine pleuropneumonia

Offal

Heat treatment in a hermetically sealed container, to achieve a minimum F_0 value of 3.

9. Treatments for classical swine fever

Meat

Heat treatment in a hermetically sealed container, to achieve a minimum F_0^3 value of 3;

Heat treatment to achieve a core temperature of at least 70°C;

Heat treatment in a hermetically sealed container, applying at least 60°C for a minimum of 4 hours;

Natural fermentation and maturation for minimum 9 months (except for loins: 140 days and for hams: 190 days), to achieve maximum values of A_w of 0,93 and pH of 6;

Drying after salting for minimum 182 days for hams and loins.

Casings

Salting with sodium chloride (NaCl) either dry or as saturated brine ($A_w < 0,80$), for a continuous period of 30 days or longer at an ambient temperature of 20°C or above;

Salting with phosphate supplemented salt 86,5 % NaCl, 10,7 % Na_2HPO_4 and 2,8 % Na_3PO_4 either dry or as saturated brine ($A_w < 0,80$) for a continuous period of 30 days or longer at an ambient temperature of 20°C or above;

³ F_0 is the calculated killing effect on bacterial spores. An F_0 value of 3 means that the coldest point in the product has been heated sufficiently to achieve the same killing effect as 121°C (250°F) in three minutes with instantaneous heating and chilling.

Salting with citrate supplemented salt 89.2% NaCl, 8.9% trisodium citrate dihydrate and 1.9% citric acid monohydrate (wt/wt/wt) with pH 4.5, for a continuous period of 30 days or longer at an ambient temperature of 20°C or above.

10. Treatments for African swine fever

Meat

Heat treatment in a hermetically sealed container, to achieve a minimum F_0^4 value of 3;

Heat treatment to achieve a core temperature of at least 80°C;

Heat treatment to achieve a core temperature of at least 70°C for a minimum of 30 minutes;

Heat treatment in a hermetically sealed container, applying at least 60°C for a minimum of 4 hours;

For deboned meat, natural fermentation and maturation of for minimum 9 months (except for loins: 140 days and for hams: 190 days), to achieve maximum values of A_w of 0,93 and pH of 6;

Drying after salting for minimum of 182 days.

Casings

Salting with sodium chloride (NaCl) either dry or as saturated brine ($A_w < 0,80$), for a continuous period of 30 days or longer at an ambient temperature of 20°C or above;

Salting with phosphate supplemented salt 86,5 % NaCl, 10,7 % Na_2HPO_4 and 2,8 % Na_3PO_4 either dry or as saturated brine ($A_w < 0,80$) for a continuous period of 30 days or longer at an ambient temperature of 20°C or above.

11. Treatments for African horse sickness

Meat, casings and milk are safe commodities.

12. Treatments for highly pathogenic avian influenza

Meat

Heat treatment in a hermetically sealed container, to achieve a minimum F_0^5 value of 3;

⁴ F_0 is the calculated killing effect on bacterial spores. An F_0 value of 3 means that the coldest point in the product has been heated sufficiently to achieve the same killing effect as 121°C (250°F) in three minutes with instantaneous heating and chilling.

⁵ F_0 is the calculated killing effect on bacterial spores. An F_0 value of 3 means that the coldest point in the product has been heated sufficiently to achieve the same killing effect as 121°C (250°F) in three minutes with instantaneous heating and chilling.

Heat treatment to achieve a core temperature of at least 70°C;

Heat treatment to achieve a core temperature of at least 65,0°C for a minimum of 42 seconds;

Heat treatment to achieve a core temperature of at least 60°C for a minimum of 507 seconds.

Eggs

Heat treatment (with temperatures reaching at the core of the product at least the indicated value for a minimum of the time indicated):

Whole egg:

- Completely cooked;
- 60°C - 188 seconds.

Whole egg blends:

- Completely cooked;
- 61.1°C - 94 seconds;
- 60°C - 188 seconds.

Liquid egg white:

- 56.7°C - 232 seconds;
- 55.6°C - 870 seconds.

Plain or pure egg yolk:

- 60°C - 288 seconds.

10 % salted yolk:

- 62.2°C - 138 seconds.

Dried egg white:

- 67°C - 20 hours;
- 54.4°C - 21.38 days.

13. Treatments for Newcastle disease

Meat

Heat treatment in a hermetically sealed container, to achieve a minimum F_0^6 value of 3;

Heat treatment to achieve a core temperature of at least 70°C;

Heat treatment to achieve a core temperature of 60°C for a minimum of 507 seconds;

⁶ F_0 is the calculated killing effect on bacterial spores. An F_0 value of 3 means that the coldest point in the product has been heated sufficiently to achieve the same killing effect as 121°C (250°F) in three minutes with instantaneous heating and chilling.

Heat treatment to achieve a core temperature of 57.8°C for a minimum of 63.3 minutes.

Eggs

Heat treatment (with temperatures reaching at the core of the product at least the indicated value for a minimum of the time indicated):

Whole egg:

- Completely cooked;
- 59 °C - 674 seconds;
- 57 °C - 1596 seconds;
- 55 °C - 2521 seconds.

Fortified egg:

- 62.2°C - 3.5 minutes;
- 61.1°C - 6.2 minutes.

Sugared/salted egg:

- 63.3°C - 3.5 minutes;
- 62.2°C - 6.2 minutes.

Liquid egg white:

- 59°C - 301 seconds;
- 57°C - 986 seconds;
- 55°C - 2278 seconds.

Plain or pure egg yolk:

- 61.1°C - 3.5 minutes;
- 60°C - 6.2 minutes.

10 % salted egg yolk:

- 55°C - 176 seconds.

Dried egg white:

- 57°C - 54 hours.