

# BHUTAN STANDARD FOR ANIMAL MEAT AND CO PRODUCTS

## 1. PREAMBLE

This standard is issued pursuant to the Food Rules and Regulations of Bhutan 2007 and is based on the United Nations Economic Commission for Europe (UNECE) standard for edible meat.

## 2. SCOPE

This standard applies to meat, offal, processed meat, cured or dried meat, sausages of animals such as cattle including yak, buffalo, goat, pig, poultry and sheep that are slaughtered.

## 3. DEFINITION:

**3.1 Animal** means an animal belonging to any of the species specified below:

- a. Bovine (*Cattle- beef, veal*)
- b. Porcine (*Pig - pork*)
- c. Ovine (*Sheep – lamb, mutton*)
- d. Caprine (*Goat – chevon, cabrito*)
- e. Avian (*Chicken, turkey, duck*)

**3.2 Abattoir** means an authorized place for the slaughter of animals or poultry for food or the building, premises or place which is licensed as a slaughter house by the local authority for slaughter of animals intended for human consumption.

**3.3 “Co products”** mean products such as offal, processed meat, sausages, meat flesh

## 4. DESCRIPTION.

**4.1 Meat means** the whole or part of a carcass of cattle including yak, buffalo, goat, pig, poultry and sheep.

**4.2 Offal** means parts of a carcass such as blood, brain, heart, kidney, liver, pancreas, spleen, thymus, tongue and tripe, but excludes meat flesh, bone and bone marrow.

**4.3 Processed meat** as a category is a continuum of products ranging from meat products with a minimum of 30% meat to products that are all meat flesh. The meat must have

undergone a method of processing other than boning, slicing, dicing, mincing, or freezing. It includes manufactured meat and cured and/or dried meat flesh in whole cuts or pieces. Examples of processed meat containing between 30% and 66% meat would include some sausages and some frankfurts, whereas processed meats that contain more than 66% meat would include products like ham. The definition for processed meat encompasses the processes of smoking, drying, salting, curing, fermenting, pickling, cooking, and forming. Processed meat may contain other ingredients but must contain no less than 300 g/kg meat, i.e. they must consist of at least 30% meat.

**Processed meat** are products containing less than 300 g/kg meat, e.g. hamburger patties or meat loaf, are not prohibited by this standard. They are regarded as mixed foods and must comply with the general food standards and any food product standards that apply to components of the food.

Cured and/or dried meat flesh in whole cuts or pieces is meat flesh including attached bone and must contain at least 160 g/kg meat protein on a fat-free basis, i.e. it must have at least 16% protein on a fat-free basis. Note that fat-free meat flesh is measured analytically by determining the amount of meat protein present; it does not mean meat flesh without visible fat.

**4.4 Sausages** are a category of processed meat. They are minced processed meat and/or comminuted meat, which may be combined with other foods, and are encased or formed into discrete units. They do not include meat formed or joined into the semblance of cuts of meat.

**4.5 Meat flesh** is defined as skeletal muscle to distinguish it from other parts of a carcass of meat such as offal, bone and bone marrow. Meat flesh includes any attached fat, connective tissue, rind, nerves, blood vessels and blood, and skin (if poultry).

**4.6 Shakam** is dried beef

**4.7 Sikam** is dried pork

**4.8 Hide** is roasted yak/cow skin

The above products are prepared from edible portion of animals slaughtered in an abattoir, which have been subjected to ante-mortem and post-mortem inspection.

## **5. ESSENTIAL COMPOSITION AND QUALITY FACTORS**

### **5.1 Minimum requirements for meat:**

- 5.1.1 All meat must originate from animals slaughtered in establishments regularly operated under the applicable regulations pertaining to food safety and inspection.
- 5.1.2 Meat must be safe and suitable for human consumption.
- 5.1.3 Carcasses and parts items must be:
  - a. Free from any foreign material (e.g. glass, rubber, plastic, metal)
  - b. Free of foreign odours
  - c. Free of fecal contamination
  - d. Free of improper bleeding
  - e. Free of viscera, trachea, esophagus, mature reproductive organs, and lungs.
  - f. Practically free of feathers and hemorrhaging
  - g. Free of freezer-burn
  - h. Free of gall discoloration

## **5.2 Minimum requirements for meat co products**

- 5.2.1 All edible co-products must originate from healthy animals slaughtered in approved establishments.
- 5.2.2 Edible co-products must be:
  - a. Intact, taking into account the presentation
  - b. Free from visible blood clots, or bone dust
  - c. Free from any visible foreign matter (e.g. dirt, wood, plastic, metal particles)
  - d. Free of offensive odours
  - e. Free of unspecified bones fragments
  - f. Free of contusions having a material impact on the product
  - g. Free from freezer-burn
- 5.2.3 Removal and preparation of edible co-products shall be accomplished with sufficient care to maintain integrity and identity and avoid unnecessary scores.

## **6. FOOD ADDITIVES**

Food additives should be as per Codex Standard for Food Additives and Bhutan standard for Contaminants, food Additives and Adulterants.

## **7. MICROBIOLOGICAL REQUIREMENTS**

Contamination of microorganisms in meat and co products shall be conformed to the following requirements:

- a. Total count shall not exceed  $5 \times 10^6$  colonies per gram of sample
- b. Coliform count shall not exceed  $5 \times 10^3$  colonies per gram of sample
- c. *Staphylococcus aureus* shall not exceed  $1 \times 10^2$  colonies per gram of sample
- d. *Salmonella* spp. shall be free in 25 gram of chicken meat sample

## **8. CONTAMINANTS**

The products covered by this Standard shall comply with the Maximum Levels for contaminants that are specified for the product in the *General Standard for Contaminants and Toxins in Food and Feed* (CODEX STAN 193-1995). The product used shall comply with the maximum residue limits for veterinary drugs and pesticides established under the standard for contaminants, food additives and adulterants.

## **9. HYGIENE**

Shall follow the Hygiene Practice established for meat and co products by the Codex Committee on Meat Hygiene (CAC/RAP 58- 2005)

## **10. PACKAGING**

10.1 Meat shall be packed in clean materials. The package shall be sealed tightly. If the packaging materials are made of plastic, they shall be complied with relevant requirements. All packaging materials shall be durable during transportation. The materials shall not be torn or broken when keeping in low temperature and shall prevent product from absorbing objectionable odours from environment.

10.2 Packaged meat shall be labelled with appropriate details and kept in the cold storage.

## **11. LABELLING**

- 11.1 Mandatory information to be provided.
- 11.2 Label on Carcass must contain product name, date of slaughtering/date of arrival.
- 11.3 Information that must be listed on product labels on packed chicken carcasses and parts:
- a. Name of the product
  - b. Health stamp/inspection stamp
  - c. Sell-by/use-by date
  - d. Storage conditions: e.g. “Store at or below XX °C”
  - e. Appropriate identification of packer, distributor or dispatcher
  - f. Net weight in kg
- 11.4 Other product claims
- a. Country of birth
  - b. Country (ies) of raising
  - c. Country of slaughter
  - d. Country (ies) of processing/cutting
  - e. Country (ies) of packing
  - f. Country of origin: In this standard the term “country of origin” is reserved to indicate that birth, raising, slaughter, processing/cutting and packing have taken place in the same country
  - g. Production and feeding systems
  - h. Processing/packaging date
  - i. Quality/grade/classification
  - j. Slaughtering procedures
  - k. Chilling system
- 11.5 Labels in each package of chicken meat shall be legible and not peeled off the container. Labels shall bear the following information:
- a. Type of chicken meat and quality classification
  - b. Net weight in gram or kilogram
  - c. Storage instruction
  - d. Day/Month/Year of production and Day/Month/Year of the minimum durability best before.
  - e. Name of producer or production farm or Trade Mark or name and address of Distributor.
  - f. Language on label shall be in English/ Dzongkha
  - g. Official inspection or certification marks shall be complied with provisions and requirements of certification bodies recognized by the Ministry of Agriculture and Forest.
  - h. Shall conform to the provisions of Bhutan Standard for Labelling of Prepackaged Foods.