

PHILIPPINE NATIONAL STANDARD

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Beef primal cuts



BUREAU OF PRODUCT STANDARDS

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Foreword

The Philippine National Standard on Beef primal cuts was prepared by the Bureau of Agriculture and Fisheries Product Standards (BAFPS) in collaboration with a multi-stakeholder Technical Working Group (TWG) created per Department of Agriculture Special Order No. 99 series of 2008, dated 29 January 2008. The proposed document was presented and reviewed during public consultations conducted in the cities of Cagayan de Oro, Cebu and Quezon. Comments gathered during the public consultations and from various stakeholders were carefully evaluated by the TWG and included accordingly in the final version of this document.

This document aims to provide a standard commodity classification system for uniform primal cuts of beef carcasses to meet the needs and requirements of end-users.

Beef primal cuts

1 Scope

The standard given applies to fresh, chilled and frozen beef primal cuts, which passed the meat inspection for trading purposes.

Standard beef primal cuts offer specifications written in consistent, detailed and accurate manner using anatomical names to identify cutting lines and boundaries.

2 References

The titles of the standards publications referred to in this standard are listed on the inside back cover.

3 Definition of terms

For the purpose of this standard, the following definitions apply:

3.1**beef**

refers to a fresh, chilled or frozen meat including offal derived from cattle

3.2**carcass**

the body of a slaughtered cattle after removing the blood, head, feet, tail, hide and all the internal organs

3.3**caudal**

means posterior or primal cut towards the tail

3.4**connective tissues**

refer to the tissues between and within muscles that helps bind together and attach muscle to bone for support

3.5**cranial**

means anterior or primal cut towards the head

3.6**distal**

primal cut towards the far end of the limb or appendage from the center of the body

3.7

dorsal

primal cut towards the back

3.8

lateral

primal cut or surface at the outside or far side of the center of the body

3.9

meat inspection

required by law to provide assurance of safety and wholesomeness of meat to be sold. This assures that meat is fit for human consumption, whereby sanitary guidelines in handling, processing and proper labeling are followed

3.10

medial

primal cut or surface near the center of the body

3.11

median

the center line that divides the central body surface into right and left

3.12

primal cuts

also known as wholesale cuts. These are basic major cuts that result from cutting carcasses and sides into smaller portions. The wholesale or primal cuts are front limb, neck, chuck, brisket, rib set, plate, flank, loin, rump, round and hind shank.

3.13

seams

connective tissues and fats located between muscle bundles where muscles are bluntly separated

3.14

ventral

primal cut towards the ground

4 Recommended carcass handling prior to fabrication

4.1 Slaughtering, chilling and fabrication should be a continuous process. The chilling process should start 1.5 hours to 2 hours after slaughter.

4.2 The chilling room temperature should be within 1 °C – 3 °C. Ideally, beef carcasses are chilled to attain an internal temperature of 3 °C prior to fabrication.

4.3 The fabrication room temperature should not be higher than 10 °C.

4.4 Trimming of blood clots, bruises and extra fats and devoiding of lymph nodes are done during fabrication.

4.5 To ensure intact and clean-cut surfaces of meat, sharp knives, appropriate tools and equipments should be used.

5 Beef skeletal anatomy

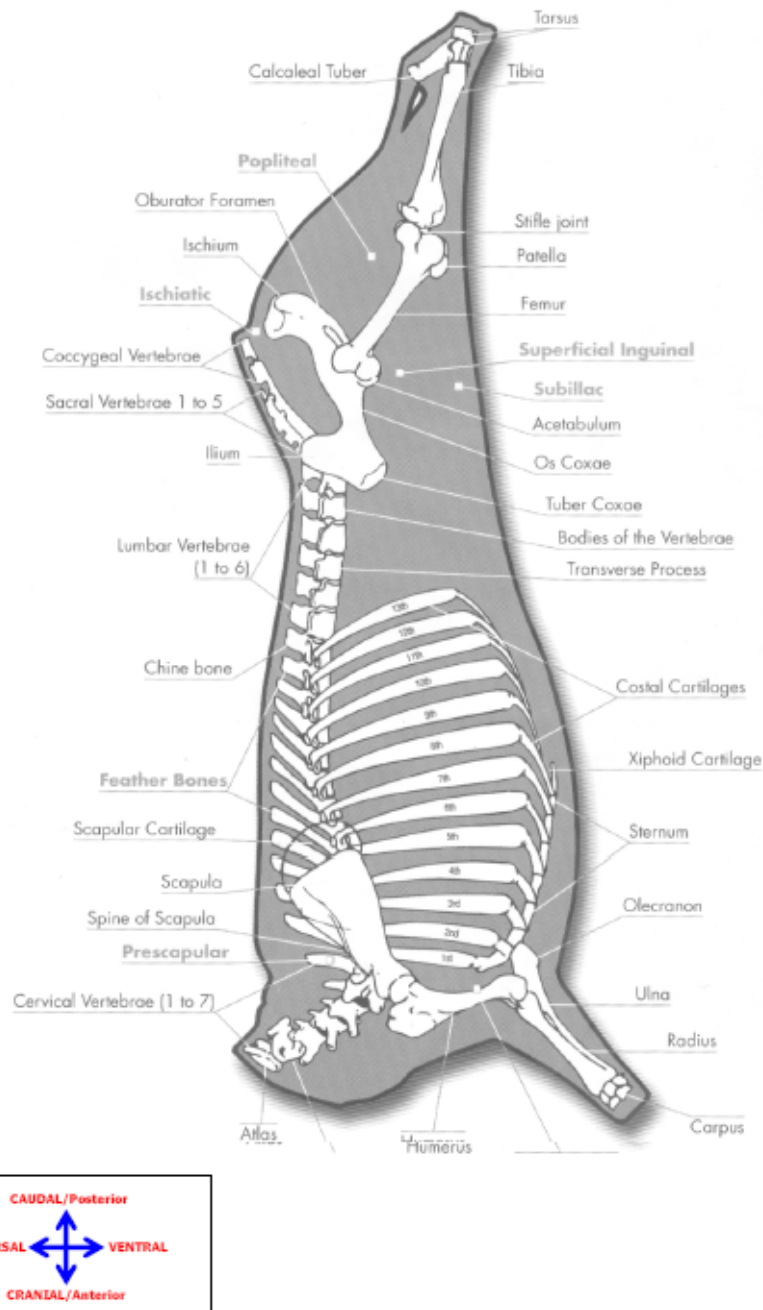


Figure 1 – Beef side skeletal diagram

6 Beef cuts

The standard beef carcass is the body of a cattle after:

- a. bleeding
- b. removal of the hide, head, feet and tail
- c. removal of all digestive, respiratory, excretory, reproductive and circulatory organs
- d. removal of minimum trimmings as required by the National Meat Inspection Service

The standard beef carcass is first cut into beef sides:

Side means one of the two approximately equal (halves) portions of a beef carcass obtained by cutting from the remaining tailbone to the neck along the median line following the vertebral column.



Figure 2 – Left beef side showing lateral and medial view

The beef sides are further cut into quarters:

Quarters are the portions of the beef side, which are separated by a cut usually passing between the 12th and 13th ribs, back muscles and thoracoabdominal muscles.

6.1 Forequarter is the anterior portion of the beef side, which is separated from the hindquarter by a cut usually passing between the 12th and 13th ribs.



Figure 3 – Left forequarter showing lateral and medial view

The following are the primal cuts of the *forequarter*:

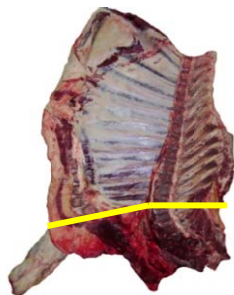
6.1.1 Front limb

The front limb is composed of the shoulder blade, arm, and front shank bones, muscles and other tissues. It is separated from the forequarter by an initial cut made on the fifth intercostal muscles to loosen the seam between the blade/arm and chest. With the use of a meat hook, the front limb is pulled down while cutting the said seam until it is completely separated. It is also known as *paypay at kenchi sa unahan*.



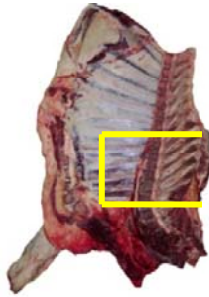
6.1.2 Neck

The neck is composed of the neck bones, muscles and other tissues. It is separated from the forequarter by making a straight cut of all the muscles and other soft tissues at the level of the joint of the last neck (cervical) and first back (thoracic) bones. It is also known as *leeg*.



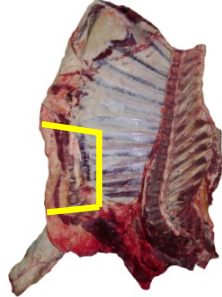
6.1.3 Chuck

The chuck is composed of the first five backbones, first five ribs, muscles and other tissues. It is separated from the forequarter by a complete cut of the back and the fifth intercostal muscles caudally, removal of the neck in front of the first rib cranially and the removal of the brisket by a cut across the first five ribs with an approximate measurement of four fingers from the backbone on the first rib and six fingers from the backbone on the fifth rib ventrally. It is also known as *kadera sa unahan*.



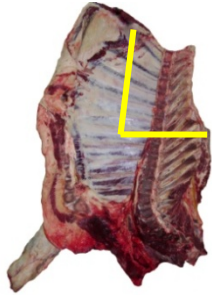
6.1.4 Brisket

The point end brisket is composed of the sternum, five ribs, muscles and other tissues. It is separated from the forequarter by the removal of the neck cranially, the chuck dorsally and the plate caudally. This is the chest of the carcass and also known as *punta y pecho*.



6.1.5 Rib set

The rib set is composed of the last seven back (thoracic) bones, seven ribs, muscles and other tissues. It is separated from the forequarter by the caudal cutting line of the chuck cranially and the removal of the plate ventrally by cutting the sixth rib with a saw at about four fingers from the backbone. It is also known as *kadera sa hulihan*.



6.1.6 Plate

The plate is composed of the last seven ribs, navel end brisket, muscles and other tissues. It is separated from the forequarter by the caudal cutting line of the point end brisket cranially and by the ventral cutting line of the rib set dorsally. It is also known as *tadyang*.



6.2 Hindquarter is the posterior portion of the beef side which is separated from the forequarter by a cut between the twelfth and thirteenth ribs.



Figure 4 – Left hindquarter showing lateral and medial view

The following are the primal cuts of the *hindquarter*:

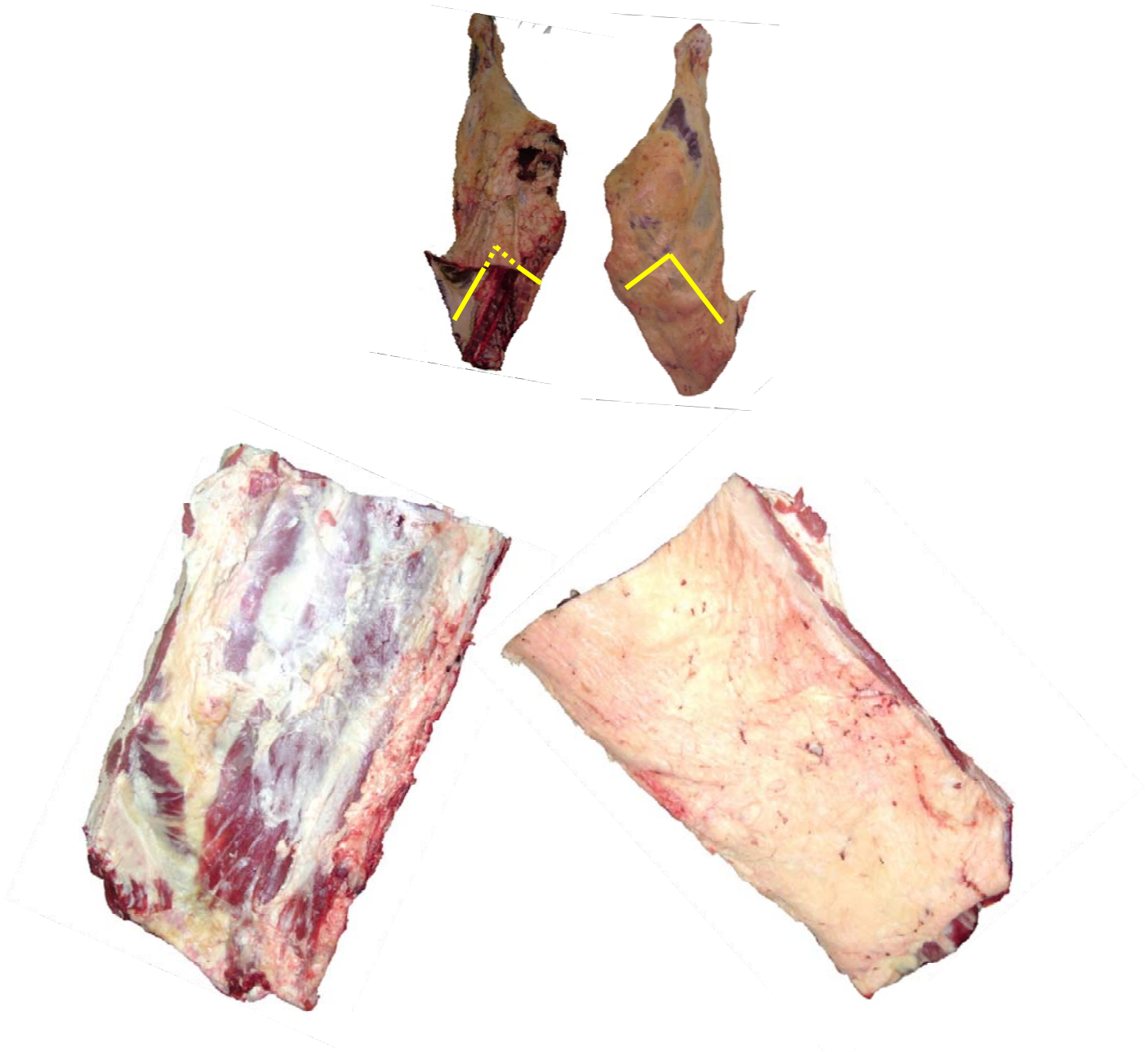
6.2.1 Flank

The flank is composed of a rib, muscles and other tissues of the abdomen. It is separated from the hindquarter by cutting its tip from the medial side of the round 45 ° towards the tip of the hip bone. The cut is continued forward nearly parallel to the loin bones and tenderloin cutting across the last rib approximately six fingers from the backbone. It is also known as *kamto*.



6.2.2 Loin

The loin is composed of the last backbone, first five loin bones, muscles and other tissues. The tenderloin is or may be separated first from the loin and rump by cutting along the base of the hip bone towards the wings of the loin bones down to the last backbone. The loin is then separated from the hindquarter by cutting the muscles and other tissues between the fifth and sixth loin bones detaching it from the rump. It is also known as *tagiliran*.



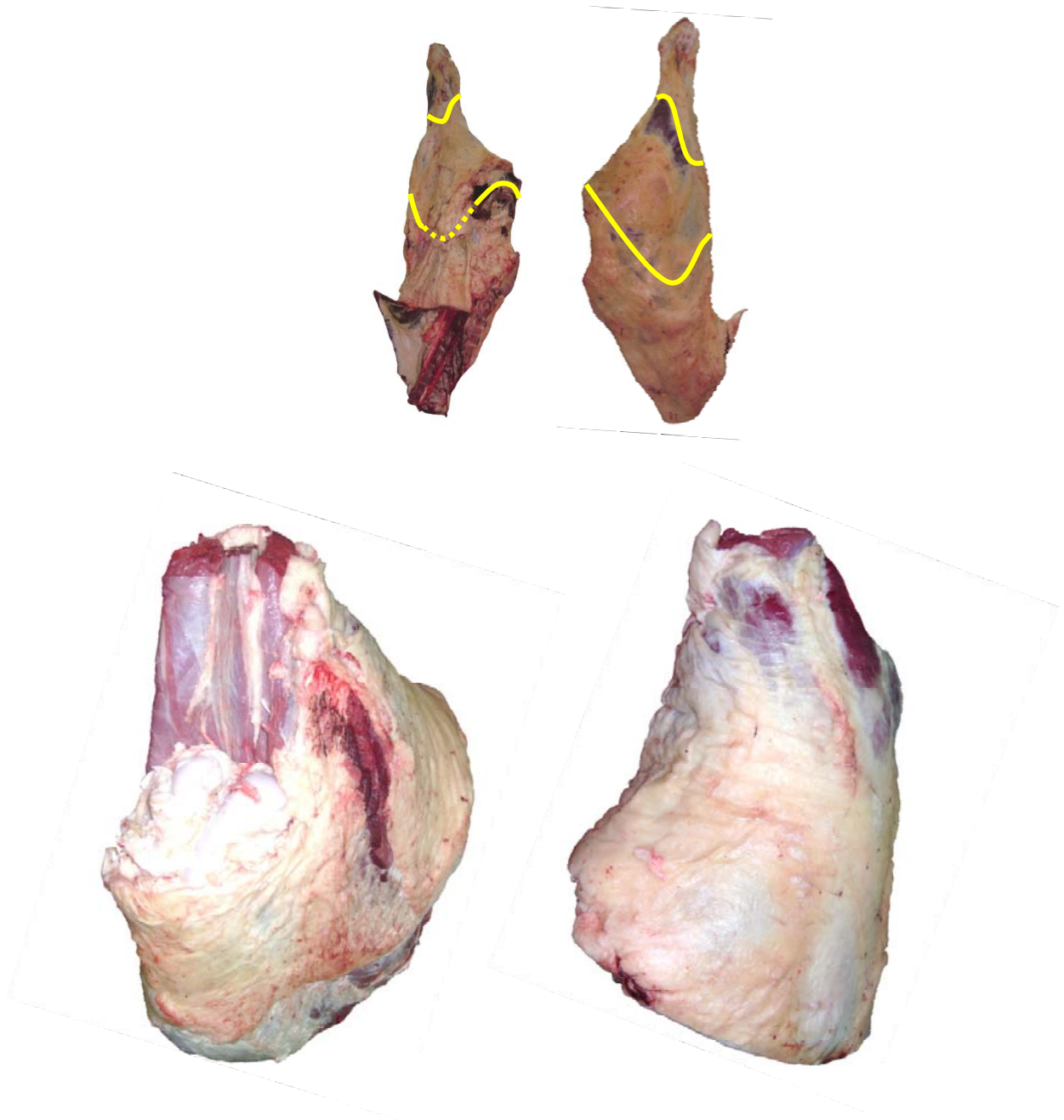
6.2.3 Rump

The rump is composed of the last loin bone, hip bone, sacrum, muscles and other tissues. It is separated from the hindquarter by cutting the natural seam of the muscle in front of the knuckle up to its origin. The muscles on the lateral side of the hip are then cut at the level of hip joint. The cut is continued towards the opposite side passing through the hip joint separating the rump from the round. It is also known as *tapadera*.



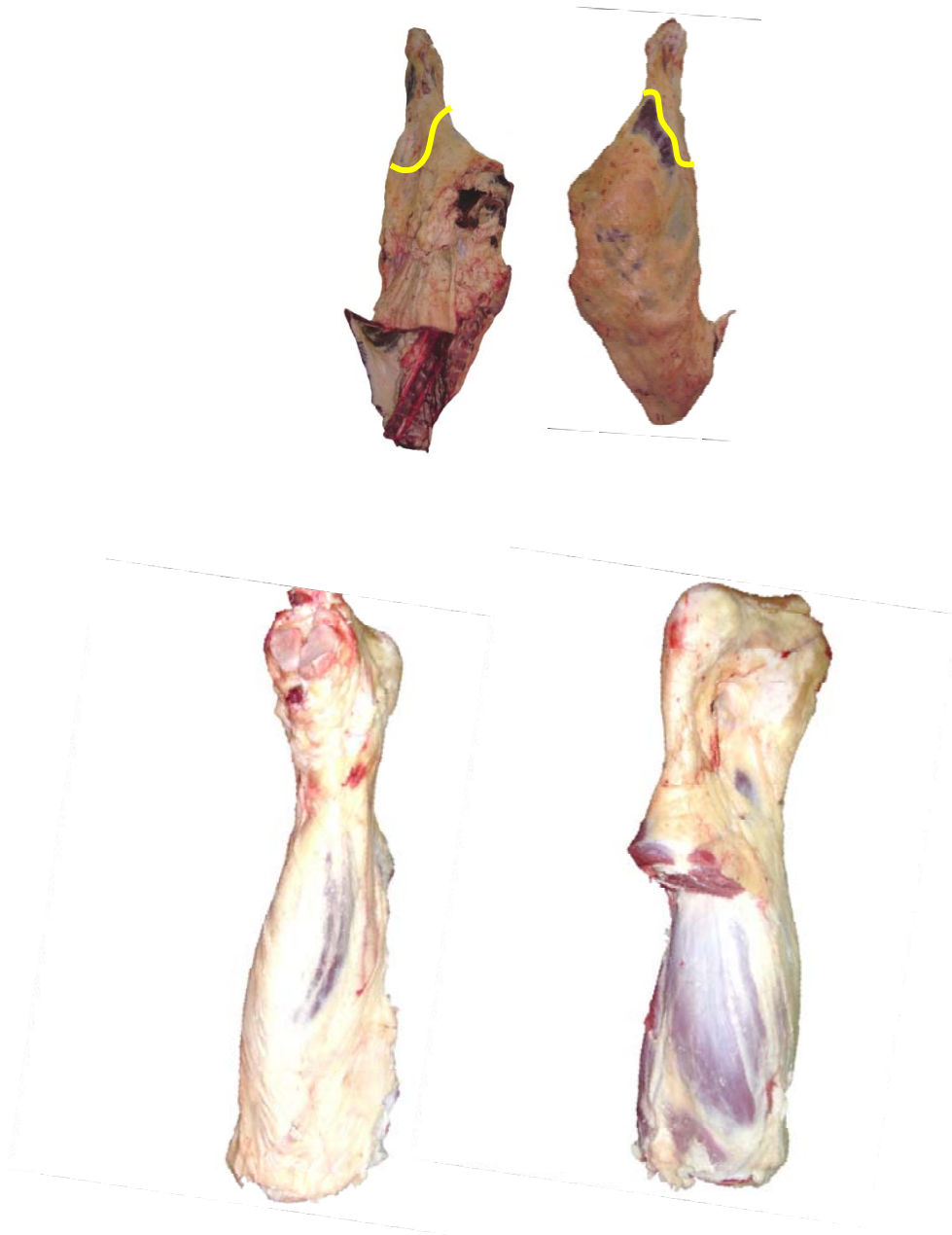
6.2.4 Round

The round is composed of the leg bone (femur), knee cap, muscles and other tissues of the thigh. The round is separated from the hindquarter by caudal cutting line of the rump cranio-dorsally and by a cut passing through the stifle joint distally. It is also known as *kabilugan*.



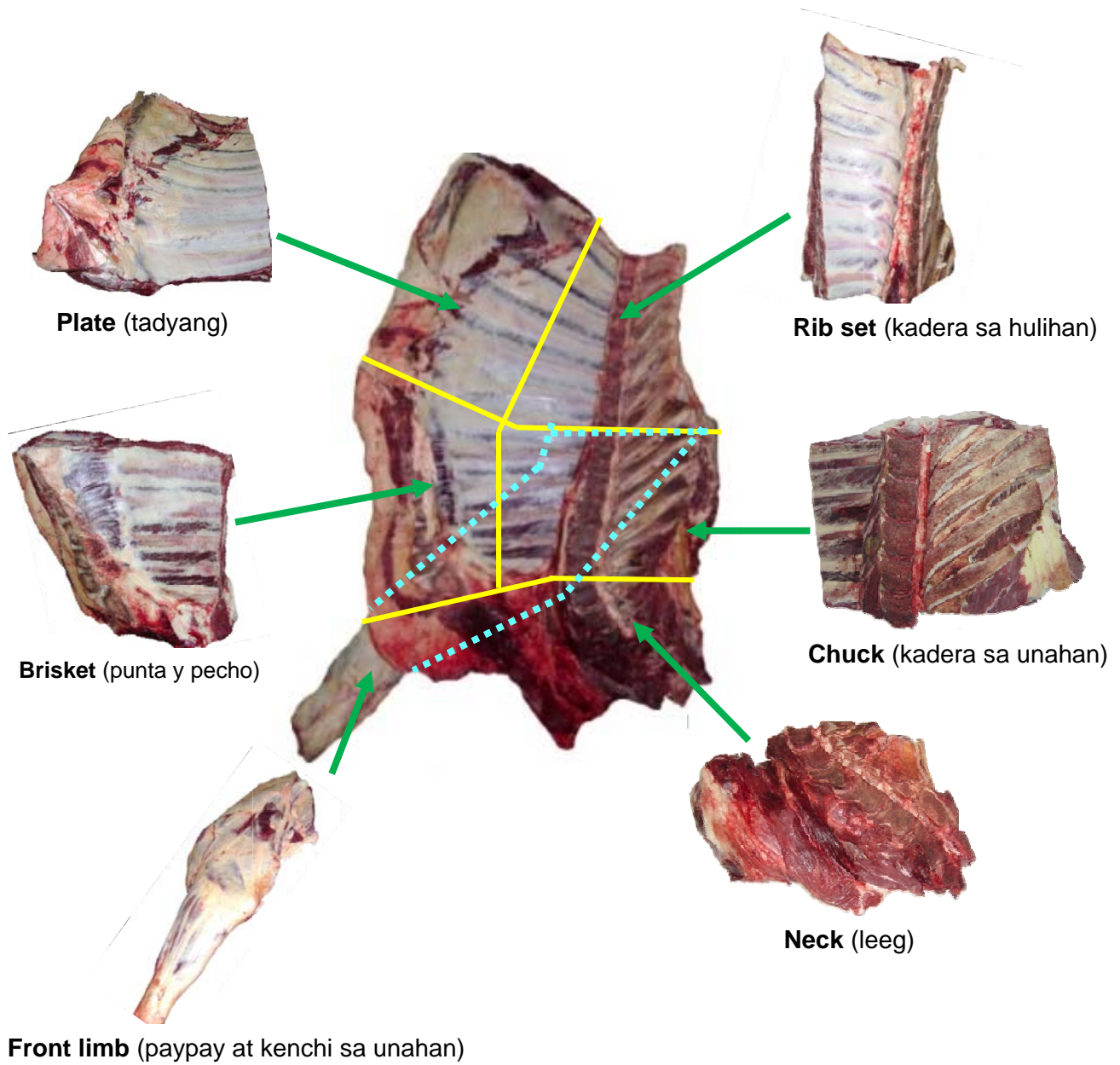
6.2.5 Hind shank

The hind shank is composed of the shank bone, muscles and other tissues. It is separated from the hindquarter by a cut passing through the stifle joint separating it from the round. This is also known as *kenchi sa hulihan*.

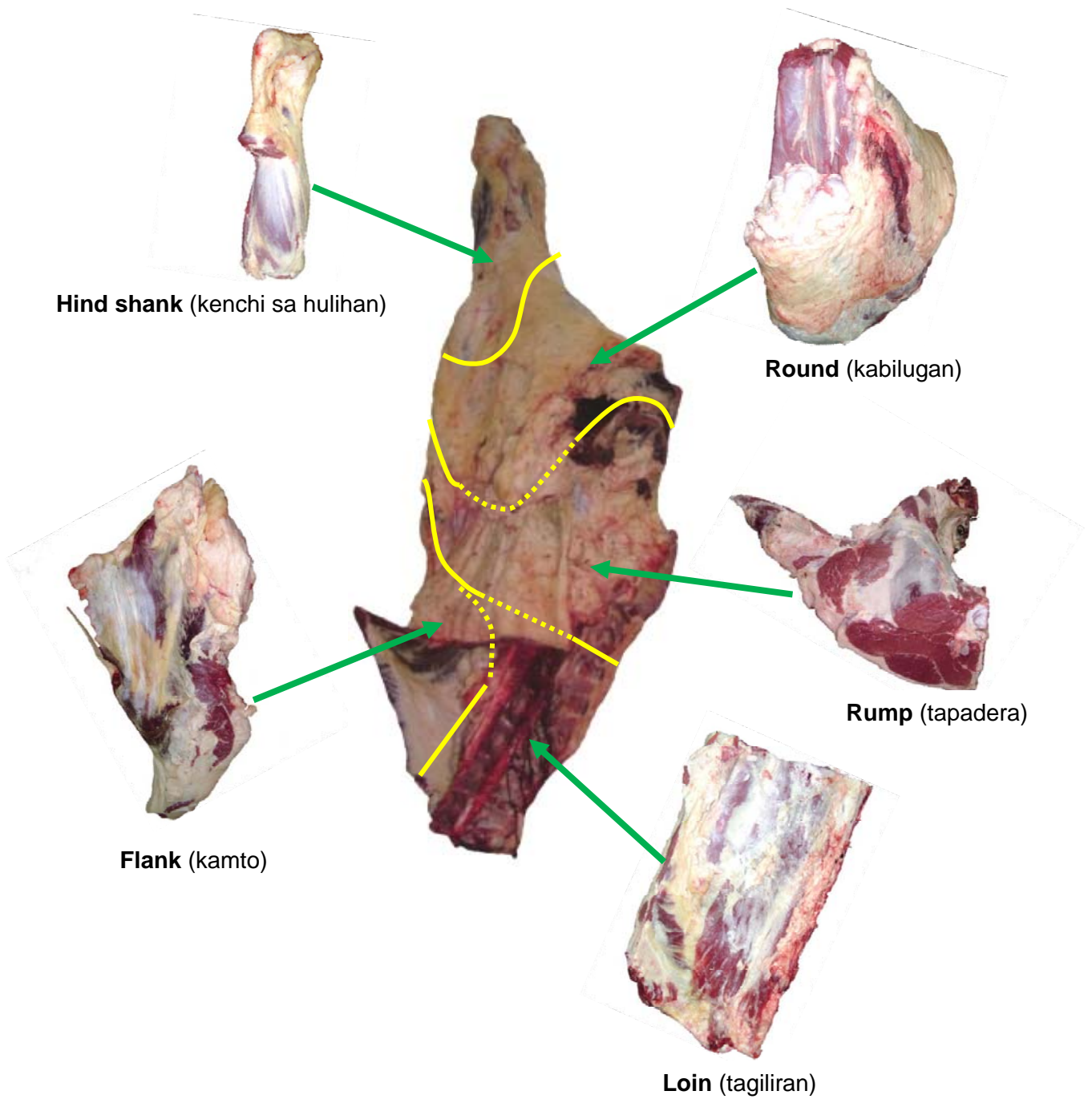


7 Beef charts

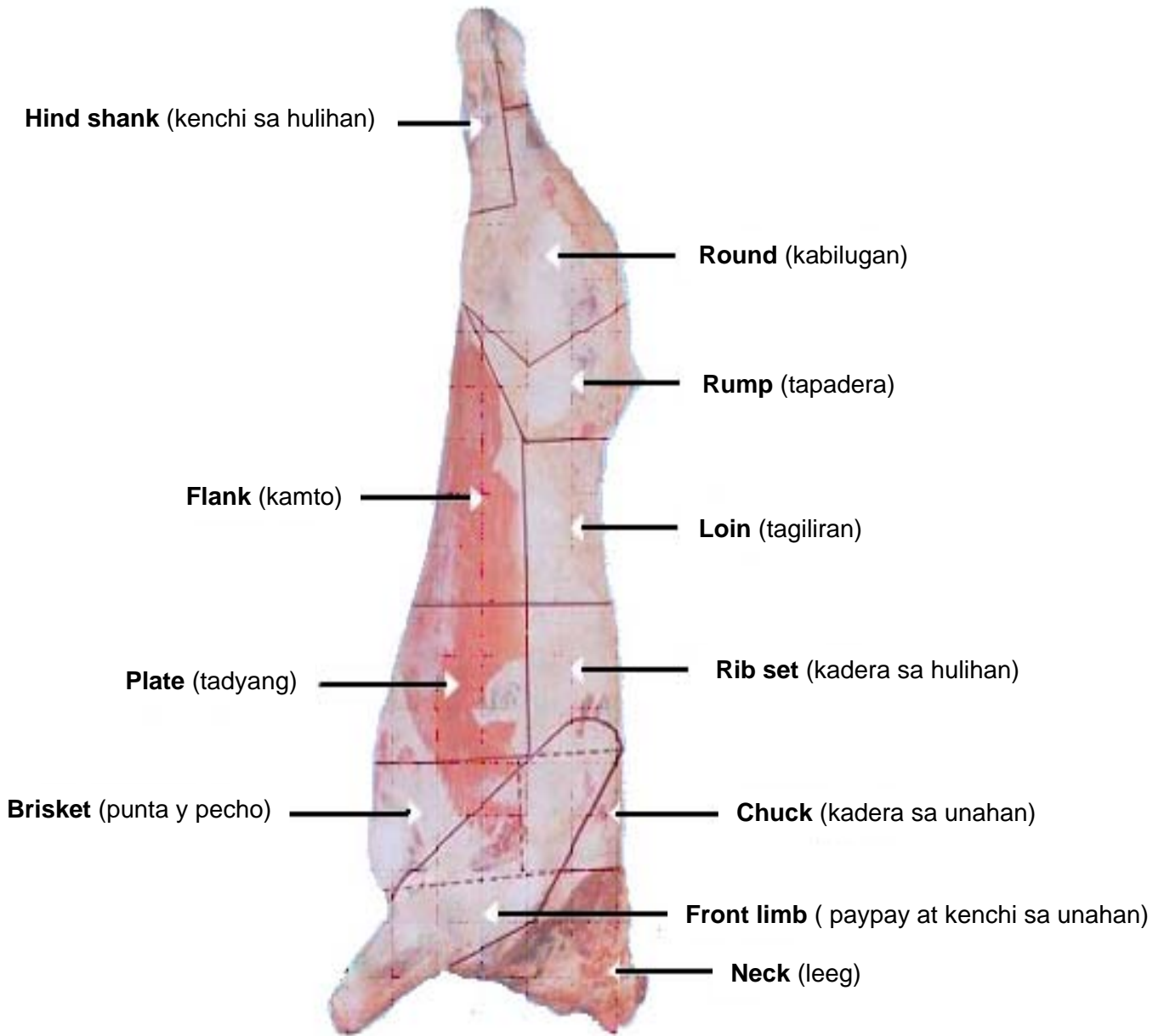
7.1 Forequarter



7.2 Hindquarter



7.3 Side



References

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The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Animal Products Development Center – Bureau of Animal Industry (APDC-BAI), 2005. Manual on Slaughtering Techniques for Cattle/Pigs.

Beef Fabrication, Major Cuts And Boning Procedures, Monterey Foods Corporation Slaughter Operations

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BUREAU OF PRODUCT STANDARDS

3F Trade and Industry Building
361 Sen. Gil J. Puyat Avenue, Makati City 1200, Metro Manila, Philippines
T/ (632) 751.3125 / 751.3123 / 751.4735
F/ (632) 751.4706 / 751.4731
E-mail : bps@dti.gov.ph
www.dti.gov.ph