

AUSTRALIAN Water Buffalo

*Selected Meat Cuts
and Information*



AUSTRALIAN BUFFALO INDUSTRY COUNCIL INC.





BBQ Rump Steak

FOREWORD



The Buffalo Industry has recognized the need to develop a manual of Specifications to further increase trading and marketing opportunities. In the past the Rural Industry Research and Development Corporation (RIRDC) has funded manuals for a range of new animal industries in an endeavor to foster the acceleration of the development of viable animal product businesses. Therefore it became a priority for the Corporation to publish this manual with AUS-MEAT. The professionalism of AUS-MEAT in delivering this publication is acknowledged by the Rural Industry Research and Development Corporation (RIRDC).

Buffalo meat is low in fat, high in protein and minerals, and as such provides a food that promotes a healthy nutritional regime.

To ensure purchasers receive a consistent product of high quality a Quality Assurance Program called “TenderBuff®” has been implemented. The “TenderBuff®” program is an initiative of the NT Buffalo Industry Council which has registered the product name.

The “TenderBuff®” program is being implemented Australia wide and purchasers of buffalo products are advised to enquire as to whether the product is of “TenderBuff®” or similar standard.

The Corporation recognizes the interest, support and input that the Australian Buffalo Industry Council Inc. has provided for the manual.

Simon Hearn
Managing Director
Rural Industry Research and Development Corporation

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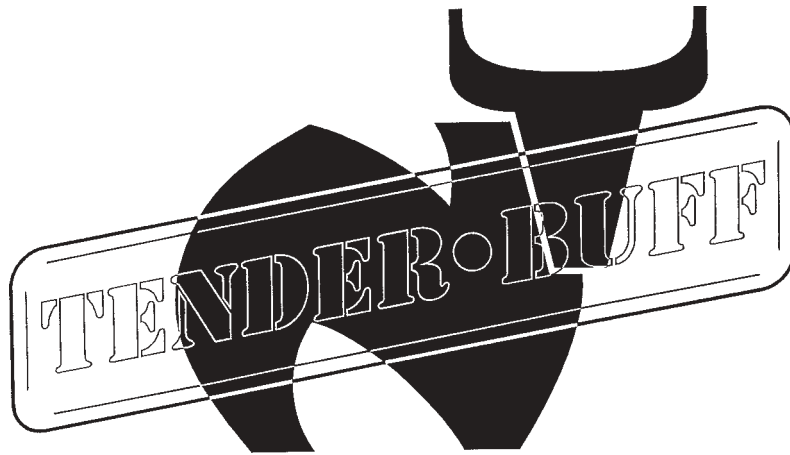
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Product code numbers are referenced from the Beef Industry Standard Specifications and Descriptions provided in the **AUS-MEAT Handbook of Australian Meat 6th Edition**.

TENDER•BUFF



Buffalo have lived and thrived in a wild state in the Top End of the Northern Territory for over one hundred and eighty years. They have been shot and trapped for pet meat and more recently for human consumption. Now, however, buffalo are being properly farmed and buffalo meat of high quality is becoming available.

TenderBuff® has been available since early 1993 in Darwin and is also becoming available interstate in butcher shops, supermarkets and restaurants. It is a quality assured product which is strip branded to differentiate it from normal buffalo meat.



TenderBuff® is the registered trademark of the NT Buffalo Industry Council.

The essential characteristics of a buffalo suitable for TenderBuff® is a young, well-grown animal in good condition with an even layer of fat. The buffalo require sufficient handling to enable them to be processed with no transport or handling induced stress occurring that could compromise carcass quality.

TenderBuff® has nutritional qualities which give it a marketing edge in today's more nutritionally conscious society where fat and cholesterol tend to be avoided, it has a significantly lower fat content in the lean meat, is less prone to marbling and has approximately 43% less cholesterol than beef.

As the farming of buffalo is expanding, it is envisaged that TenderBuff® will ultimately be available fresh from retailers and wholesalers throughout Australia.

TENDER•BUFF SPECIFICATIONS

1. Dressed weight 150 - 300 kg
2. Fat depth 3 - 12 mm at P8
3. No permanent incisors
4. Electrical stimulation at point of slaughter
5. Final muscle pH less than 5.8

NUTRITIONAL COMPOSITION OF BUFFALO MEAT

Buffalo meat is very low in fat, less than 2% and comparatively low in cholesterol, this leanness makes Buffalo meat very healthy but also means that the meat must be cooked with care to avoid overcooking. The fat composition in the lean meat has a higher proportion of polyunsaturated and omega 3 fatty acids than chicken, lamb or beef. Buffalo meat has been found to be very high in protein, iron and zinc content.

NUTRIENT ANALYSIS OF MEAT TYPES PER 100g RAW LEAN EDIBLE PORTION

	Energy (kg)	Protein (kg)	Iron (g)	Fat (g)	Cholesterol (mg)	Saturated Fat (g)	Monounsaturated Fat (g)	Polyunsaturated Fat (g)
TenderBuff unspecified cut	430	21.1	3.3	1.8	46	0	0.475	0.318
Chicken unspecified cut	506	21.0	1.1	4.2	69	1.18	1.81	0.47
Beef unspecified cut	502	22.0	2.2	3.7	60	1.6	1.52	0.24
Fish unspecified type	386	18.0	0.3	2.2	60	0.54	0.45	0.55

This table illustrates the qualities of Buffalo meat.

Tritip (Bottom Sirloin) Moroccan Goulash



COOKING RECOMMENDATIONS



BBQ Rump Steak

As with most lean meats in general, TenderBuff should be cooked for shorter times than would be done for beef to retain the natural moisture in the muscle. As the TenderBuff muscle contains much less fat than beef, over-cooking will tend to dry out the meat because of the lack of fat to compensate for cooking juice moisture loss. If you prefer “well done” soak TenderBuff in cooking oil or marinade before cooking.

Steaks can be soaked in a good quality polyunsaturated vegetable oil two hours before grilling. Make sure the cooking plate is sizzling hot when the steak is applied to seal in the natural meat juices.

Roasts are more successfully cooked using oven bags or by wrapping the meat in dough or pastry to seal in the natural juices, your favorite sauces and spices can be “cooked in” using this method. Cook according to taste for 3/4 to 1 hour per kg of meat at normal roasting temperatures.

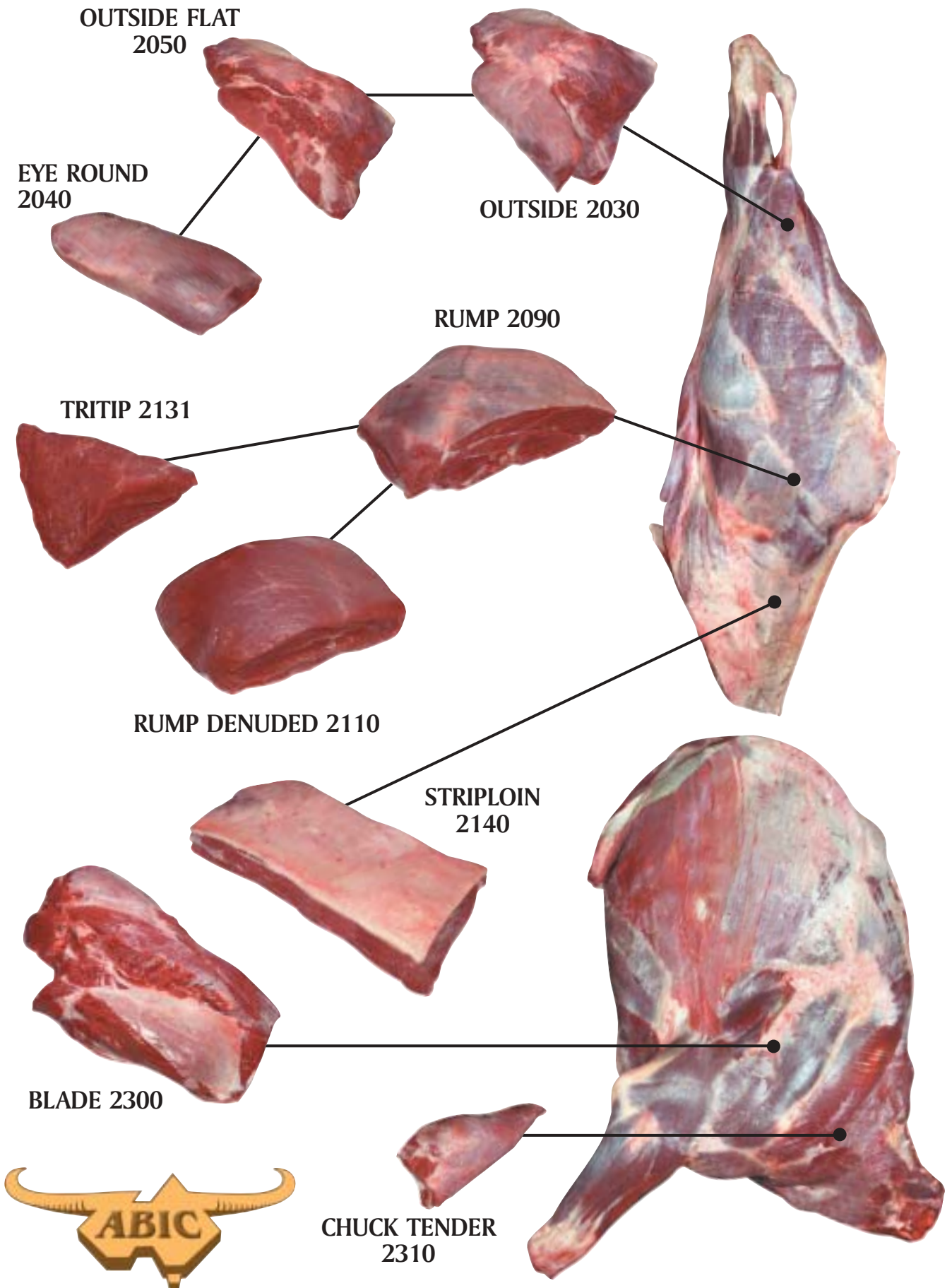
TenderBuff sausages and burgers are generally readily available and very popular. Be careful with cooking times as over cooking can lead to dryness in these products.

Because of its low fat content, TenderBuff mince is the ideal premium mince for those Italian dishes such as bolognese or lasagne.

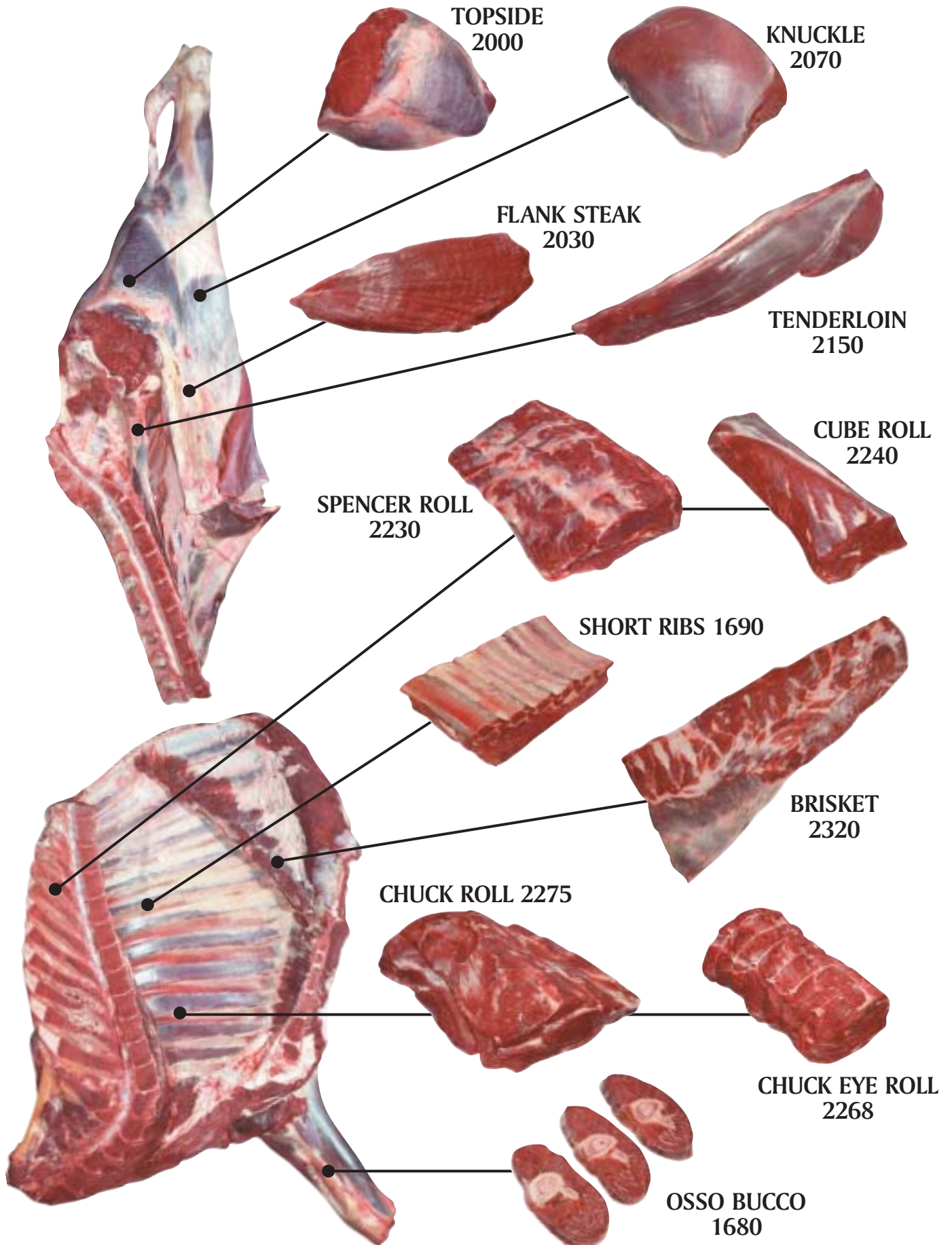
SUGGESTED COOKING METHODS - PREPARATION & PROCESSING IDEAS FOR TENDER•BUFF

Product	Food Service Description	Pan Fry	BBQ / Grill	Roast	Casserole / Curry	Cure	Braise	Mince	Raw	Pies	Dried
Tenderloin	Eye Fillet	✓	✓	✓					✓		
Striploin	Porterhouse	✓	✓	✓					✓		
Rump	Rump	✓	✓	✓							
Topside	Topside			✓	✓		✓	✓			✓
Knuckle	Round		✓	✓	✓	✓	✓	✓			✓
Outside	Silverside				✓	✓	✓	✓		✓	✓
Trip	Trip				✓			✓		✓	
Flank Steak	Flank Steak				✓		✓				
Blade	Blade / Oyster			✓	✓	✓	✓	✓		✓	
Chuck Tender	Oyster	✓			✓		✓				
Chuck Roll	Chuck			✓	✓		✓	✓		✓	
Spencer Roll	Rib Roll	✓	✓	✓							
Cube Roll	Rib Eye Roll	✓	✓	✓					✓		
Brisket	Brisket					✓		✓			
Strips	Stir Fry	✓			✓						
Dice	Cubes				✓					✓	
Mince	Mince	✓	✓					✓			
Sausage	Sausage	✓	✓								
Burger Patties	Patties	✓	✓								

BUFFALO PRIMAL CUTS



BUFFALO PRIMAL CUTS



BUFFALO HINDQUARTER AND PRIMAL CUTS



TOPSIDE 2000

Topside is prepared from the Hindquarter and is removed by following the natural seam between the Knuckle and Outside.

HINDQUARTER 1012 (1 rib)

Hindquarter is prepared from the carcass side by the separation of the hindquarter and forequarter by a cut along the specified rib.



RUMP 2090

Rump is prepared from the hindquarter by a cut separating Rump from the butt cuts of the hindquarter and another cut severing the loin at the lumbo sacral junction. The Rump tail is removed at a specified distance from the main muscles of the cut.



RUMP STEAK



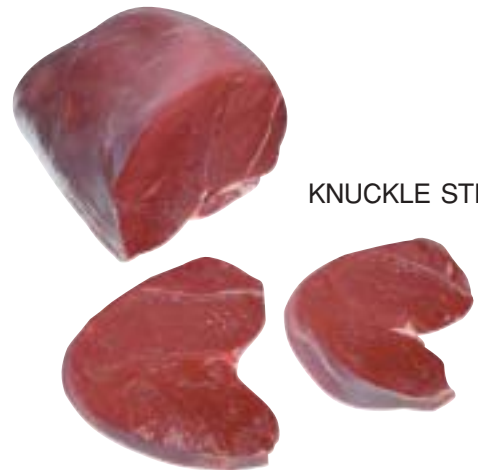
RUMP (Denuded) 2110

Rump (denuded) is prepared from the Rump by the removal of the cap muscle along the natural seam. Fat cover is removed to silver skin or to a specified red meat trim.



KNUCKLE 2070

Knuckle is prepared from the hindquarter and is removed along the natural seams between the Outside and Topside. The cap muscle and associated fat is removed.



KNUCKLE STEAK



OUTSIDE 2030

Outside is prepared from the Hindquarter and is removed by following the natural seam between the Topside and Knuckle. The heel muscle is removed following the natural seam along with the surrounding gland fat.



OUTSIDE FLAT 2050

Outside Flat is prepared from the Outside by following the natural seam separating the Outside Flat muscle and the Eye Round muscle.



EYE ROUND 2040

Eye Round is prepared from the Outside by following the natural seam separating the Outside Flat muscle and the Eye Round muscle.



STRIPLOIN 2140

Striploin is prepared from the hindquarter and is that portion of the longissimus muscle attached to the lumbar vertebrae. The tail of the Striploin (flank portion) is removed at a specified distance and parallel to the dorsal edge of the eye of meat.

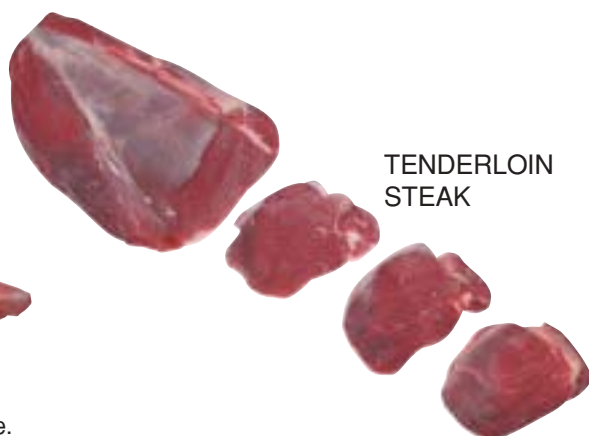


STRIPLOIN
STEAK-READY



TENDERLOIN 2150

Tenderloin is removed from the hindquarter in one complete piece. The side muscle is retained. Trim the fat surface of the Tenderloin to silver skin.



TENDERLOIN
STEAK



BOTTOM SIRLOIN (TRITIP) 2131

Tritip is the triangle shape muscle portion of Rump tail and is removed along the natural seam from the muscles of the Rump.



FLANK STEAK 2210

Flank Steak is derived from the flank portion of the hindquarter and is removed following the natural seam. The membrane tissue is stripped from the muscle.



Tenderloin Fillet Steak Poached

BUFFALO FOREQUARTER AND PRIMAL CUTS



FOREQUARTER
1062 (12 rib)

Forequarter is prepared from the carcass side by the separation of the forequarter and hindquarter along the specified rib.



CUBE ROLL STEAK

CUBE ROLL (RIB EYE ROLL) 2240

Cube Roll is prepared from the Spencer Roll and is the eye muscle portion removed along the natural seam as one complete muscle.



BLADE 2300

Blade is prepared from the forequarter and is removed by a cut following the natural seam between the ribs and the scapular removing the blade muscles in one piece.



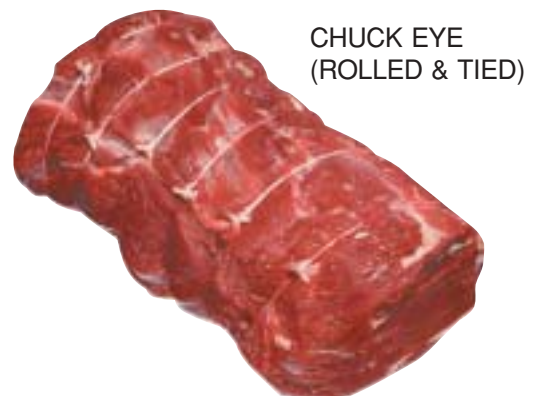
SPENCER ROLL
2230

Spencer Roll is prepared from the forequarter and is a portion of a boneless rib set prepared from a specified number of ribs located from the 6th to the 13th rib. The Spencer Roll rib meat is removed at a specified distance from the eye muscle by a cut parallel to the chine edge. Paddywhack and blade bone cartilage is removed.



CHUCK EYE ROLL 2268

Chuck Eye Roll is prepared from the Chuck Roll by removing the rib meat to approximately 75mm from the eye of meat at the 5th rib. A portion of the hump muscle on the dorsal edge is removed by a cut parallel with the ventral rib cutting line.



CHUCK EYE (ROLLED & TIED)



BRISKET (BONELESS) 2320

Brisket is prepared from the forequarter by a straight cut commencing from the junction of the 1st rib and 1st sternum segment to the reflection of the 11th rib to the specified rib. Fatty tissue, bone and cartilage are removed. The fibrous tissue on the ventral edge is removed.



SHORT RIBS 1690

Short Ribs are prepared from the forequarter and is that portion of the ribs (bone in) remaining after the removal of the brisket and the Spencer Roll. Short Ribs are prepared from a specified number of ribs located from the 6th to the 13th rib.

CHUCK TENDER 2310

Chuck Tender is prepared from the forequarter and is the conical shape muscle lying lateral to the blade bone ridge and the blade.



FOREQUARTER SHIN (OSSO BUCCO) 1680

Ossobuco is prepared from a forequarter shin (bone in) and is sliced transversely across the muscle and bone to a specified thickness per piece.

MANUFACTURING 2615

Manufacturing (bulk pack) Buffalo meat consists mainly of neck meat and those portions of lean Buffalo meat remaining after the preparation of primal cuts from a carcass or portion of a carcass. Specify lean content.



FURTHER PROCESSED PRODUCTS



DICE



STRIPS



MINCE



BURGER PATTIES



SAUSAGES

*Mince / Sausages/
Burger Patties/ Strips/ Dice:
Preparation: As specified.*



BUFFALO FANCY MEATS

TAIL 6070



**TONGUE - SHORT CUT
6010**



HEART 6100



KIDNEY 6090



LIVER 6080

PACKAGING



IW INDIVIDUAL WRAPPED ITEM

This method allows for the product to be wrapped in an approved material (sheet or bag) individually.



LP LAYER PACKED ITEM

This method allows the product to be packed into a carton containing two or more layers of meat with each layer separated by an approved material.



MW MULTI-WRAP ITEM

This method allows product to be packed in a single bag or covering and contains two or more cuts.



TP TRAY PACK ITEM

This method allows for one or more portions of meat to be packed in an open container and covered with film.



VAC VACUUM PACK ITEM

This method allows for the product to be vacuum packed in a special bag that allows a considerably longer shelf life.

VACUUM PACKAGING

Vacuum packing is a process that significantly extends the shelf life of chilled Buffalo meat. This process provides an airtight, moisture-proof package that protects the meat from oxidation, dehydration and evaporation during storage.

CHILLER (Vacuum Pack)

Chilled Buffalo meat is packaged in a special formulated bag which is then vacuum-sealed to a snug fit. The oxygen free environment inhibits the growth of spoilage bacteria while still allowing the natural tenderising process of aging.

FROZEN ((Vacuum Pack)

Vacuum packaged Buffalo meat can be frozen in the normal manner without sacrificing most handling benefits of chilled product. Thawing of the product will still give the pack a wholesome appearance provided that this is done under controlled conditions.

RIVERINE GENETICS THE FUTURE OF BUFFALO MEAT

There will be a tremendous improvement in both the growth rates and the quality of the primal cuts in young buffalo as the use of Riverine genetics becomes more widespread.

Early results from crossbreeding trials conducted by the Northern Territory Government at Beatrice Hill Farm near Darwin have shown up to 40% increase in growth rates of the first cross animals. The eye muscle area on these animals was 38% greater than pure Swamp Buffalo.

As more animals of the various cross's become available for slaughter, carcass yield and meat analysis research will be carried out.



Young Pure Riverine and Second Cross Bull



Second Cross Female



First Cross Weaners



Second Cross Animals





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