AHDB

Lamb yield guide

Animal to carcase, to primals to cuts

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Introduction

The industry aim is to add value, use every part of the carcase and minimise wastage. This brochure has been produced to help people working with lamb to get a basic understanding about the yield figures from farm to plate. Traditionally, the carcase is divided into three primal cuts, the Forequarter, the Middle and the Leg. Each of these primal cuts is then cut into a range of individual cuts and muscles, from which weights have been taken, to calculate the overall yield.

Dick van Leeuwen

AHDB Business Development Manager and Master Butcher

Processing the lamb carcase, from farm to plate

Animal = 100%



- 1. Fifth Quarter is the parts of the animals that are not the carcase and removed in the abattoir.
- 2. KKCF kidney knob and channel fat or can go for as an edible co-product to be rendered for human consumption, eg baking or frying or for the manufacture of petfood, soap, pharmaceuticals or biofuel.
- 3. Products that require further processing before they are fit for human consumption.
- 4. The skull, including the brain, eyes, tonsils and spinal cord of sheep over 12 months (or permanent incisor erupted) becomes SRM and has to be disposed of as Category 1.
- 5. See Regulation (EC) No 1069/2009 andgov.uk/dealing-with-animal-by-products.

Fifth quarter¹ = variety meats/offal/edible co-products/animal by-products = 52.56%

Droduct	Figures below are from a lamb of 40.05kg liveweight, average fatness R3L			
Floquet	kg	% of fifth quarter	% of liveweight	
F	leece and p	elt		
Fleece and pelt	4.42	21.00	11.04	
Fat can be us	ed directly	with the meat ²		
KKCF	0.65	3.09	1.62	
Caul fat	0.70	3.33	1.75	
Intestinal fat	0.54	2.57	1.35	
Red offal normally sold for	human cor	sumption on ho	ome market	
Kidneys	0.10	0.48	0.25	
Liver, gall bladder	0.69	3.28	1.72	
Skirt	0.22	1.04	0.55	
Heart	0.22	1.04	0.55	
Edib	ole co-produ	ucts ³		
Stomachs	1.08	5.13	2.70	
Intestines	1.29	6.13	3.22	
Feet	0.78	3.71	1.95	
Variety meats fit for huma	in consump	tion (tend to be	exported)	
Tail	0.11	0.52	0.27	
Reproductive organs	0.14	0.67	0.35	
Head⁴ incl. tongue	1.63	7.74	4.08	
Lungs, trachea, sweetbreads	0.86	4.09	2.15	
Tend to be de	spatched a	s Category 3⁵		
Blood	1.84	8.74	4.60	
Pancreas	0.11	0.52	0.27	
Trim	0.59	2.80	1.47	
Have to be de	espatched a	s Category 2 ⁵		
Gut contents	4.86	23.08	12.13	
Have to be de	espatched a	as Category 1 ⁵		
Illeum	0.11	0.52	0.27	
Spleen	0.11	0.52	0.27	
Total	21.05	100.00	52.56	



*Bone/fat/drip loss = 12.20%**

Edible meat = 35.24%*



*Traditional lamb cuts. Average yield of prepared bone-in cuts and joints as a percentage of the lamb carcase. If more modern cuts are produced, yields may vary.

Source: AHDB

Lamb primal cuts





Carcase classification

Carcase assessment addresses conformation and fat. Conformation is assessed from E to P, with E being the best conformed and P being the poorest. Fat cover is assessed as described on a scale of 1-5 with class 1 being extremely lean and class 5 being extremely fat. Classes 3 and 4 are divided into low (L) and high (H).

FAT CLASS Increasing fatness Fat is determined by visual assessment of external fat cover. There are five main classes. Classes 4 and 5 are subdivided into L (leaner) and H (fatter) 3L 3H 4H 4L The Quality Standard Mark Scheme stipulates specific carcase classifications for lamb. Fat Class 2-3H, Conformation E-O, the optimum classification for better meat yield R (see note on right). 0 Ρ

Carcases within the following parameters can carry the Quality Standard Mark.

- Females must have no permanent incisors and neither have been used for breeding or pregnant, ie nulliparous and not pregnant.
- Castrated and entire males must have no permanent incisors.
- Carcases must have a fat class of between 2-3H and have a conformation of between E-O. An equivalent to classification is acceptable for plants not grading lamb.
- Carcases of any acceptable animal slaughtered during the period from 1 January through to 30 April of any year and born before 1 October of the previous year must be subjected to a minimum of 7 days maturation (and ideally 10 days) from slaughter to the final consumer. Alternatively, one of the postslaughter processes to enhance tenderness as outlined in 'AHDB Beef & Lamb Guidance to Meat Quality' can be used, ie Aitch bone suspension or electrical stimulation.



CONFORMATION CLASS

Improving conformation

Conformation is determined by a visual appraisal of shape, taking into account carcase profile and fullness of legs. No adjustment is made for the influence of fat on overall shape.

Lamb carcase to primal cuts – yield information





The information in this brochure is based on a 20.12kg carcase. Classification R3L (after 7 days maturation).

As soon as the carcase is cut into, cutting and drip loss will be experienced.

Lamb forequarter cuts – yield information

Short Fore		Short Fore – single (ri removed)	b cage	Shoulder – traditiona	l bone-in
Code: Forequarter L00	1	Code: Forequarter L03	39	Code: Forequarter L0	02
Description: A 6-rib short fore.		Description: A single forequarter and neck bones removed.	r with rib, back	Description: A square cut shou the knuckle removed.	lder with part of
		Weight	3.04kg	Weight	2.50kg
Weight	8.50kg	Percentage of primal	35.76%	Percentage of primal	29.41%
Percentage of carcase	42.25%	Percentage of carcase	15.11%	Percentage of carcase	12.43%

Shoulder

Code: Forequarter L023



Description: Round untrimmed shoulder. The blade bone cartilage remains attached to the shoulder.

Weight	2.47kg
Percentage of primal	29.06%
Percentage of carcase	12.28%

Code: Forequarter L011

Rack – 6-rib (shoulder)



Description: This rack is cut from the rib section of the forequarter.

Weight	0.34kg
Percentage of primal	4.00%
Percentage of carcase	1.69%

The information in this brochure is based on a 20.12kg carcase. Classification R3L (after 7 days maturation).

Lamb forequarter cuts – yield information

Neck Fillet		Scrag Joint	
Code: Forequarter L016		Code: Forequar	ter L004
Description: A fully trimmed neck fille yellow gristle removed and end square	et with the ed.	Description: Cut from	a section of the neck.
Weight	0.29kg	Weight	0.5

0.29kg	Weight	0.57kg
3.41%	Percentage of primal	6.71%
1.44%	Percentage of carcase	2.83%

Knuckle

Breast Tip
Code: Breast L004
Description: Tip of the breast from the forequarter.

Weight	0.56kg
Percentage of primal	6.59%
Percentage of carcase	2.78%

Knuckle Standard Should	ler
Code: Forequarter L019	
Description: Knuckle with one end so	luare cut.
Weight	0.34kg
Percentage of primal	4.00%
Percentage of carcase	1.69%

Percentage of primal

Percentage of carcase



Description: This is the meaty knuckle version, which contains extra shoulder meat and is French trimmed.

Weight	0.44kg
Percentage of primal	5.18%
Percentage of carcase	2.19%

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Lamb middle cuts – yield information

Middle	Middle excl. breast fla	anks	Loin with Chump	
Code: Loin L001	Code: Loin L002		Code: Loin L008	
Description: The fore end and the legs and chumps are removed.	Description: The breast flanks a at a distance equal to 1½ times eye muscle.	re removed the length of the	Description: The length of the b is a maximum of 1½ times the le eye muscle.	preast flanks angth of the
Weight 4.68kg	Percentage of primal	72.86%	Weight	2.49kg
Percentage of carcase 23.26%	Percentage of carcase	16.95%	Percentage of carcase	12.38%
Loin without Chump	Best End of Neck – sl un-split	nort and	Best End of Neck – sl and split	hort
Code: Loin L009	Code: Loin L006		Code: Loin L007	
Description: The length of the breast flanks is a maximum of 1½ times the length of the average of the average of the average of the second se	Description: The length of the b is a maximum of 1½ times the length	reast flanks ngth of the	Description: The length of the bis a maximum of 1½ times the length	rreast flanks
Weight 1 70kg	Weight	1.62kg	Weight	0.81ka
Percentage of primal 36.32%	Percentage of primal	35.26%	Percentage of primal	17.31%
Percentage of carcase 8.45%	Percentage of carcase	8.05%	Percentage of carcase	4.03%

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Lamb middle cuts – yield information

Rack – 7-rib	Short Saddle	Cannon – bone-in	'Premium' Lamb Sirloin
Code: Loin L010	Code: Loin L003	Code: Loin L014	Code: Loin L015
Description: The rib section of the loin is used.	Description: The length of the breast flanks is a maximum of 1 ¹ / ₂ times the length of the eye muscle.	Description: A bone-in cannon of lamb with the fat left on but the bark removed.	Description: Highly trimmed loin of lamb with the fat left on but the bark removed.
Weight 0.52kg	Weight 1.82kg	Weight 0.46kg	Weight 0.34kg
Percentage of primal 11.11%	Percentage of primal 38.89%	Percentage of primal 9.83%	Percentage of primal 7.26%
Percentage of carcase 2.58%	Percentage of carcase 9.05%	Percentage of carcase 2.29%	Percentage of carcase 1.69%
	I on - eve muscle tully trimmed	Fillets	
Code: Loin L016	Loin – eye muscle fully trimmed Code: Loin L042	Fillets Code: Loin L026 Description: Fully trimmed fillets of lamb.	
Code: Loin L016 Description: Just a fully trimmed eye muscle is used for this premium cannon. Weight 0.27kg	Loin – eye muscle fully trimmed Code: Loin L042 Description: Fully trimmed eye muscle, fat and connective tissue removed.	Fillets Code: Loin L026 Description: Fully trimmed fillets of lamb. Weight 0.11kg	
Code: Loin L016 Description: Just a fully trimmed eye muscle is used for this premium cannon. Weight 0.27kg Percentage of primal 5.77%	Loin – eye muscle fully trimmed Code: Loin L042 Description: Fully trimmed eye muscle, fat and connective tissue removed. Weight 0.54kg Percentage of primal 11.54%	Fillets Code: Loin L026 Description: Fully trimmed fillets of lamb. Weight 0.11kg Percentage of primal 2.35%	

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Lamb middle cuts – yield information

Breast – with flank		Breast – with flank (bo	neless)	Breast – Square Cut	
Code: Breast L003		Code: Breast L016		Code: Breast L002	
Description: Breast without the buthin flank part remains.	reast tip but	Description: Boneless breast wit	h flank.	Description: Breast without the thin flank part.	breast tip and
				Weight	0.58kg
Weight	0.84kg	Weight	0.70kg	Percentage of primal	12.39%
Percentage of carcase	4.17%	Percentage of carcase	3.48%	Percentage of carcase	2.88%





Description: The flank is removed from the rib section of the breast, excess fat is removed and the outer is scored. Ideal for slow or sous vide cooking.

Weight	0.48kg
Percentage of primal	10.26%
Percentage of carcase	2.39%

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Lamb leg cuts – yield information

Legs with chump	Leg with chump	Leg without chump
Code: Leg L029	Code: Leg L001	Code: Leg L002
Description: Pair of legs and chump.	Description: Whole leg and chump.	Description: Leg where the chump is removed, part of the tail still attached.
	Weight 3.46kg	Weight 2.57kg
Weight 6.92kg	Percentage of primal 50.00%	Percentage of primal 37.14%
Percentage of carcase 34.39%	Percentage of carcase 17.19%	Percentage of carcase 12.77%
Chump – bone-in	Chump – boneless	Chump – Centre Cut (boneless and fully trimmed)
Code: Leg L008	Code: Leg L009	Code: Leg L028
Description: The chump is removed from the leg.	Description: The chump is removed from the	Description: The chump centre cut is
	leg and deboned. A very versatile cut. It can be used as a small joint, cut into pavés, steaks or dice.	removed from the leg without the remainder of the silverside. All fat and connective tissue is removed.

Weight	0.50kg
Percentage of primal	7.23%
Percentage of carcase	2.48%

0.25kg
3.61%
1.24%

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0.89kg

12.86%

4.42%

Weight

Percentage of primal

Percentage of carcase

Lamb leg cuts – yield information

Topside Roast		Thick Flank (untrimme	ed)	Silverside (trimmed)	
Code: Leg L010		Code: Leg L044		Code: Leg L045	
Description: Whole topside with thickness of 5mm.	maximum fat	Description: Untrimmed thick fla	ank muscle.	Description: Silverside muscle heel (trimmed).	with
Weight	0.54kg	Weight	0.40kg	Weight	0.51kg
Percentage of primal	7.80%	Percentage of primal	5.78%	Percentage of primal	7.37%
Percentage of carcase	2.68%	Percentage of carcase	1.99%	Percentage of carcase	2.53%

Lamb Chateaubriand

Code: Leg L038



Description: As the head of the fillet of lamb is very small, the small tender flank muscle is left attached to this Chateaubriand.

Weight	0.10kg
Percentage of primal	1.45%
Percentage of carcase	0.50%

Code: Leg L022

Shank



Description: Cut from the leg with some of the heel muscle attached to create a meaty shank.

Weight	0.46kg
Percentage of primal	6.65%
Percentage of carcase	2.28%

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