



# Quality Standard Mark Scheme for Beef and Lamb

Scheme Standard and Specifications  
**August 2012**







# Introduction

The EBLEX Quality Standard Mark Scheme was launched in October 2004 to stimulate the market conditions in England. The scheme has now strengthened its specifications for beef and lamb to improve efficiency, add value in the supply chain and guarantee enhanced eating quality.

## Benefits of the Scheme

- Enhanced eating quality
- Assured from farm to point of purchase, providing total product integrity
- Independently inspected
- Consumer confidence, encouraging a purchasing preference
- Better returns through the supply chain
- Improving carcase yield and value
- Provenance
- Consumer marketing campaigns
- Trade marketing support
- Point-of-sale and consumer literature

The scheme provides consumers with beef and lamb, assured from the farm to point-of-purchase, providing provenance and integrity throughout the supply chain.

The standards and specifications cover farm assurance and quality assurance throughout the supply chain, animal age, carcase specifications, maturation, eating quality and care for the environment.



# Revised Specifications

Following consultation with the trade, EBLEX is revising the specifications for Quality Standard Mark beef and lamb and these changes will be introduced in August 2012.

**(All changes are highlighted in this document in red)**

## Quality Standard Mark beef

Qualifying livestock up to 30 months must now have a minimum of 7 days maturation on primals used for frying, grilling and roasting.

Qualifying livestock between 30–36 months must now have a minimum of 14 days maturation on primals used for frying, grilling and roasting.

The eligible age of Bull Beef has been reduced from 20 months to 16 months and a minimum of 14 days maturation applied to the carcass or primals.

Carcass classifications have been introduced:

Fat Class 2–4H Conformation E–O+.

## Quality Standard Mark lamb

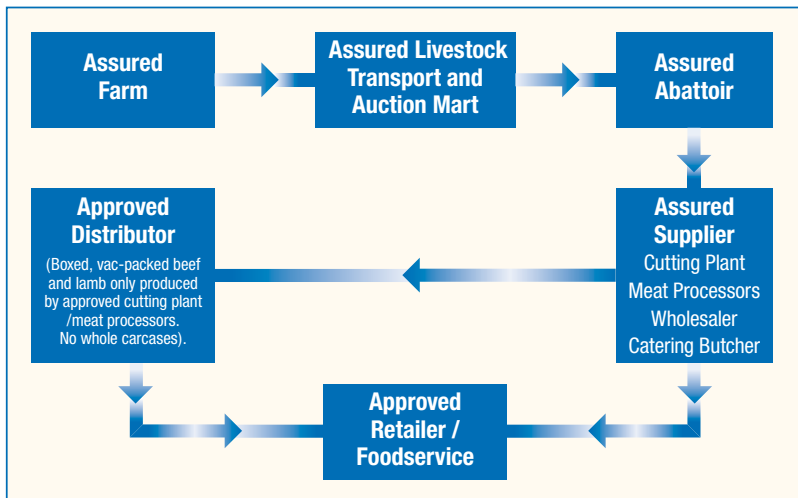
Carcass classifications have been introduced: Fat Class 2–3H Conformation E–O.



# Scheme Requirements

- Farm Assured Livestock
- Assured Livestock Transport and Auction Mart
- Assured Abattoir/Cutting Plant/Meat Processor/Catering Butcher/Meat Wholesaler
- Assured = Member of a qualifying assurance scheme (Appendix 1). In order for the customer, retailer or foodservice operator to have confidence we must be able to demonstrate the scheme's integrity at all stages of the supply chain. In addition to assurance (where required) all abattoirs, processors, suppliers, wholesalers, distributors and retailers must be registered members of the EBLEX Quality Standard Mark Scheme. All members must be independently inspected to verify compliance with scheme standards and specifications.

There are specific requirements for Quality Standard Mark beef and lamb, beef mince and beef burgers, as outlined on pages 7, 8 and 9.



# The Quality Standard Mark - Provenance

The Quality Standard Mark highlights where your beef and lamb was born, raised and slaughtered. For example, beef or lamb indicating English origin with the St George's flag must have been born, raised and slaughtered in England.

If an animal cannot meet all the criteria, for example, if it is born in Scotland or Wales, it will be able to carry the Quality Standard Mark but indicate British origin with the Union flag.



# Specifications for Quality Standard Mark beef

- Females under the age of 36 months are acceptable. They must not have been used for breeding or be in calf, they must not be pregnant.
- Steers under the age of 36 months are acceptable.
- Carcases must have a fat class of between 2–4H and have a conformation of E–O+.
- For qualifying livestock 30 months or under: Maturation of 7 days is required on primals used for frying, roasting and grilling (from slaughter to the final consumer).
- For qualifying livestock aged between 30–36 months: Maturation of 14 days is required on primals used for frying, roasting and grilling (from slaughter to the final consumer). Alternatively, one of the post-slaughter processes to enhance tenderness as outlined in 'EBLEX Guidance to Meat Quality' can be used, ie, Hip bone suspension or electrical stimulation plus the standard 7 day maturation as outlined for under 30 months cattle.
- Bulls must be no older than 16 months at slaughter. Primals used for frying, roasting and grilling must be subject to a minimum 14 days maturation (from slaughter to the final consumer).
- Meat from young cattle is subject to specific labelling requirements based on age at slaughter. Meat from such animals must be labelled as either veal or beef depending on age. Therefore, the Quality Standard Mark veal logo will apply to meat from animals under 8 months of age and the Quality Standard Mark beef logo for animals over 8 months at slaughter.



# Beef Mince

- All livestock must be from farms operating in compliance with a farm assurance scheme and must be transported, slaughtered and processed in compliance with a quality assurance scheme. Each assurance scheme must have been approved by EBLEX (see Appendix 1).
- Cattle of any age or sex are acceptable.
- Beef mince must contain a maximum of 20% fat (as measured by chemical analysis using British Standard methods), approximately equivalent to beef having overall 85% visual lean prior to mincing (final mix stage).
- Beef mince must be 100% beef with no added water, additives, fillers or other ingredients.

# Burgers

- No meat other than beef may be used.
- The beef may be obtained from cattle of any age or sex.
- The beef used must be of a quality such that it would, if minced, satisfy the requirements of the Quality Standard Mark for beef mince.
- The minimum beef content of the burger is 70% (as defined by The Food Labelling Regulations 1996 as amended in 2003).
- The manufacturer or processor must be a registered member of the EBLEX Quality Standard Mark Scheme.
- All beef burgers must be produced and labelled in accordance with current legislative requirements.





# Specifications for Quality Standard Mark lamb

- 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 post-slaughter processes to enhance tenderness as outlined in 'EBLEX Guidance to Meat Quality' can be used, ie, Aitch bone suspension or electrical stimulation.



## Abattoirs

- Must be able to show documentation that livestock slaughtered for Quality Standard Mark beef and lamb are derived from a farm registered with an approved farm assured scheme. (Appendix 1)
- That Quality Standard Mark beef and lamb is clearly marked (in a way appropriate to your business procedures) and separated from non-Quality Standard Mark beef and lamb and is traceable via documentation throughout the process, ie, abattoirs to cutting plants.
- That maturation (where appropriate) is carried out according to the requirements of the standard.
- Delivery notes and invoices to clearly indicate that the product is Quality Standard Mark beef or lamb.

## Cutting Plants, Wholesaler, Meat Processors

- Must be able to show by documentation that Quality Standard Mark beef and lamb comes from an EBLEX Quality Standard Mark approved assured abattoir.
- That Quality Standard Mark beef and lamb is clearly marked as Quality Standard Mark beef and lamb and is separated from non-Quality Standard Mark beef and lamb.
- That invoices and delivery notes clearly indicate what is Quality Standard Mark beef and lamb.
- Where appropriate, maturation is undertaken in line with scheme requirements.



## Foodservice

For example, hotels, restaurants, pubs, pub groups, cafes, mobile caterer.

- When identifying Quality Standard Mark beef, lamb, beefburger or beef mince on menus in the establishment a system must be in place to ensure that Quality Standard Mark product is identifiable and traceable back to an EBLEX Quality Standard Mark approved supply chain.

## Approved Distributors

- Quality Standard Mark beef and lamb must only be supplied boxed or vacuum packed and must be obtained from an EBLEX approved Quality Standard Mark supplier. Boxes and vacuum packs must be clearly marked Quality Standard Mark beef or lamb (Appendix 2)
- No open 'chilled' product or further cutting is allowed to carry the Quality Standard Mark unless the depot has assured status.
- Delivery notes, invoices and product delivered to retailers and foodservice operators must clearly identify Quality Standard Mark beef and lamb.



# Retailer

- Through documentation (appropriate to your own system) be able to show beef and lamb sold as Quality Standard Mark is from an EBLEX Quality Standard Mark approved supplier. (Delivery notes/invoices).
- Must be able to demonstrate separation in display and storage of Quality Standard Mark beef and lamb and non-Quality Standard Mark beef and lamb. (Separation does not need to be in a separate area or chiller but in a way appropriate to space available).
- Must be complying with statutory beef labelling requirements by clearly indicating to consumers:
  - A reference number code
  - Origin: UK
  - Slaughtered in the UK (Approval number of slaughterhouse)
  - Cut in (Approval numbers of cutting plants)
- Quality Standard Mark beef or lamb can ONLY be labelled with any or all of the following claims under the EBLEX Group Voluntary Beef Labelling Scheme:
  - Farm Assured
  - English / British
  - Independently inspected from farm to shop
  - Fully traceable

Maturation where appropriate is undertaken in line with scheme requirements.





## Scheme Auditing

EBLEX is obliged to have the Quality Standard Mark Scheme independently audited.

Your declaration form signed on joining the scheme made this requirement and your acceptance clear, auditors will in general contact you in advance of your audit.

Our auditors are:

PAI (Product Authentication International)  
The Hamlet  
Hornbeam Park  
Harrogate  
North Yorkshire  
HG2 8RE  
Tel: 01423 878878

Auditors will give general advice if minor problems are found, to help resolve them. They will report all problems to the scheme manager who will contact you if necessary to discuss.

## Scheme Management

### Quality Standard Mark Scheme Hotline **0845 491 8787**

The Quality Standard Mark scheme is managed by Laura Bishop, Marketing Manager (Quality Schemes). We value your feedback and can provide advice to members via our Hotline.

This dedicated enquiry service is available to facilitate calls from members and other general enquiries and is manned from 7am – 6pm, Monday to Friday.

Outside of these hours, a messaging service is available to callers and these will be dealt with at the earliest opportunity.



# Appendix 1

**The whole supply chain from farm to supplier must be assured. In order to use the Quality Standard Mark businesses must be accredited with one of the following assurance schemes**

	Beef and Lamb
<b>Farm Assurance/ Assured Auction Mart</b>	<ul style="list-style-type: none"> <li>• Red Tractor Assurance for Farms – Beef and Lamb (Previously ABM Beef and Lamb Assurance)</li> <li>• Farm Assured Welsh Livestock (FAWL)</li> <li>• Red Tractor Assurance for Livestock Markets and Collection Centres (Previously ABM Auction Market Standards)</li> <li>• NIBL FQAS Northern Ireland Beef and Lamb Farm Quality Assurance Scheme</li> <li>• QMS - Cattle and Sheep</li> <li>• Genesis Quality Assurance (Whole Farm) (Beef and Sheep Module)</li> </ul>
<b>Transport</b>	<ul style="list-style-type: none"> <li>• Red Tractor for Livestock Transport Scheme (Previously ABM Transport Standard)</li> <li>• QMS - Haulage</li> </ul>
<b>Abattoir</b>	<ul style="list-style-type: none"> <li>• Red Tractor Assurance Meat Processing Scheme (Previously ABM Abattoirs &amp; Cutting Plants)</li> <li>• Global Food Standard (BRC) + Red Tractor Assurance Meat Processing Scheme (Traceability and Animal Welfare Modules)</li> <li>• International Food Standard (IFS) + Red Tractor Assurance Meat Processing Scheme (Traceability and Animal Welfare Modules)</li> <li>• QMS - Processor</li> </ul>
<b>Cutting Plant/ Further Processing</b>	<ul style="list-style-type: none"> <li>• Red Tractor Meat Processing Scheme</li> <li>• QMS - Processor</li> <li>• Global Food Standard (BRC) + *Red Tractor Assurance Meat Processing Scheme (Traceability Module)</li> <li>• International Food Standard (IFS) + *Red Tractor Assurance Meat Processing Scheme (Traceability Module)</li> <li>• NACB Catering Butchers Standard</li> </ul>
<b>Wholesaler</b>	<ul style="list-style-type: none"> <li>• Storage and Distribution Standard (BRC)</li> <li>• International Food Standards (IFS) - Logistics</li> <li>• CMI Standard for Storage, Wholesale and Distribution</li> </ul>

\*The EBLEX appointed auditing company is approved to audit these additional modules. EBLEX will consider requests from other comparable assurance schemes for recognition.



## **Additional Post-Slaughter requirements for Quality Standard Mark beef**

- No part of any muscle must fall below 10°C in the first 10 hours after stunning. Thereafter, the sides should be chilled as rapidly as possible, while avoiding freezing any part.
- Chilling rates which cause any part of any muscle to fall below 10°C within 10 hours of stunning are only acceptable if an approved high voltage electrical stimulation system is applied.

## **Additional Post-Slaughter requirements for Quality Standard Mark lamb**

- Regardless of the age of the lamb, no part of any muscle must fall below 10°C in the first 10 hours after stunning unless an effective stimulation treatment is applied within 30 minutes of stunning. Thereafter, carcasses should be chilled as rapidly as possible.



# Electrical Stimulation

Electrical Stimulation was developed primarily to allow rapid chilling without the risk of cold shortening. The electrical current applied stimulates the muscles to contract and hence, use up ATP (and hence, glycogen). This accelerates the onset of rigor mortis enabling chilling to take place earlier. High voltage electrical stimulation (HVES) has additional benefits in tenderness, perhaps through accelerating the ageing process or direct physical damage to the muscle fibre structure.

If low voltage electrical stimulation (LVES) is used, it must be applied while the nervous system is still intact. In practice, this means while the animal is being bled. Good contact (ie electrode positioning) and timing are critical for low voltage stimulation to be effective. This means that it is a less reliable approach than HVES. Where LVES is effective it seems to simply prevent cold shortening. HVES does not depend on an intact nervous system. It is applied later on the slaughterline (after pelting) and therefore, electrode contact is easier and the high voltage makes positioning less critical. Because it is applied later, the carcass has cooled to an extent where hot shortening is not induced by stimulation.

HVES also has the benefit of being most effective on tougher carcasses, thus reducing variation in eating quality. The 'EBLEX Guidance to Meat Quality' includes HVES as an alternative to hip suspension for the improvement of eating quality in older lambs.





# Appendix 2

## Material currently available to help identify Quality Standard Mark beef and lamb

### On-pack Stickers

English Beef                      British Beef  
English Lamb                    British Lamb



### Box Stickers, A6 (148 x 105mm)

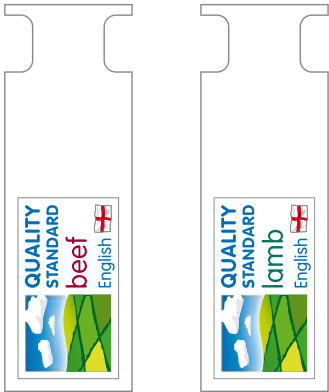
English Beef                      British Beef  
English Lamb                    British Lamb



### Carcase Tags

English Beef                      British Beef  
English Lamb                    British Lamb

Also available for export – various tags available



### Carcase and Invoice Stamp

English Beef                      British Beef  
English Lamb                    British Lamb



# Zebu genetics

The Zebu gene described below must not be present in any beef or beef products that carry the Quality Standard Mark. Presence of the gene has been shown to have adverse effects on eating quality and is therefore excluded. Zebu cattle predominate in tropical environments and this should therefore, not affect beef reared in the UK or other European countries.

EBLEX reserves the right to genetically test beef or beef products bearing the Quality Standard Mark and if it is found to contain the Zebu gene, to notify the appropriate authorities regarding the misrepresentation of the product. This may result in a criminal prosecution.

The business concerned will be suspended from the scheme until such time as they can demonstrate no further use of beef containing the Zebu gene.

## The impact of Zebu genetics on meat eating quality

### Background

Zebu or humped cattle are probably related to the cattle from India, first domesticated around 10,000 years ago. There are about 75 known pure breeds and a wide range of crossbreeds. In addition to humps, the cattle have large ears and dewlaps, are well adapted to hot climates and have better parasite resistance than European cattle. They were introduced into Brazil in the early 20th Century and crossbred to Charolais cattle to give improved heat resistance.

The scientific name for the Zebu breeds, *Bos indicus*, was used to differentiate them from the temperate adapted *Bos taurus* used in Europe.

### Zebu and meat eating quality

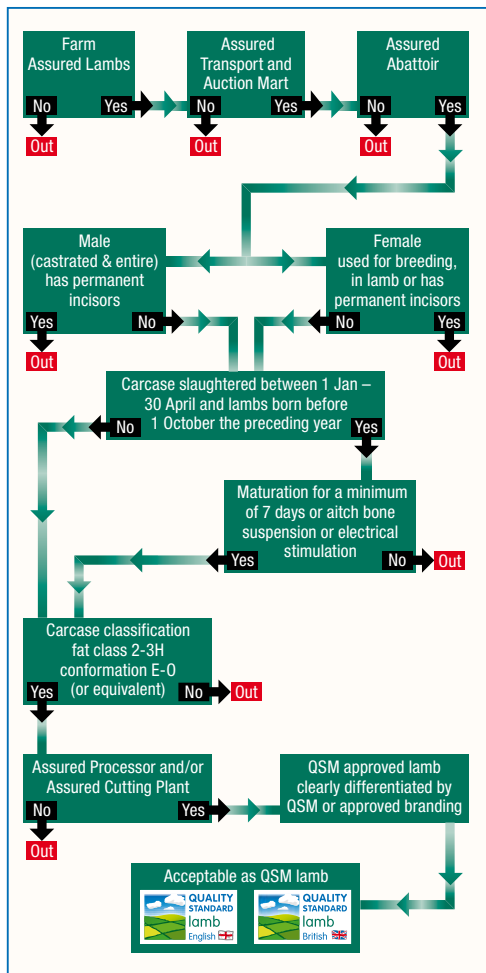
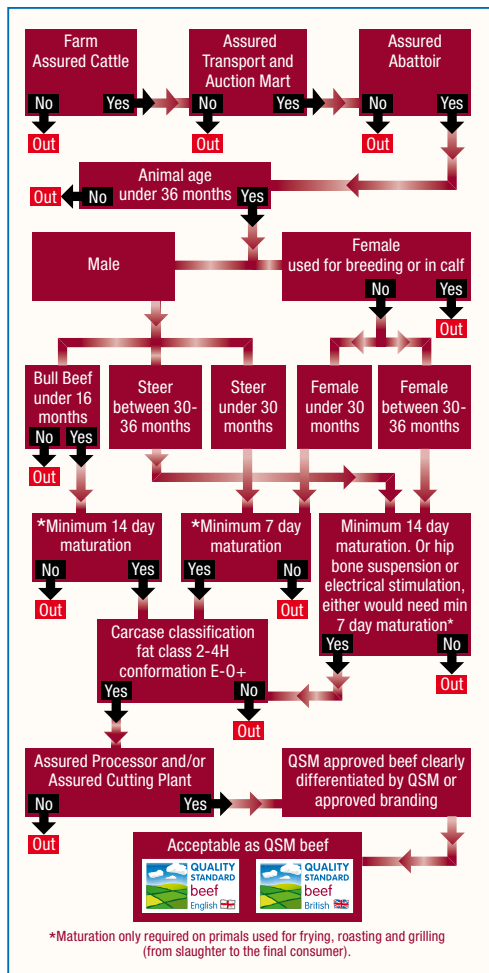
A large amount of research has shown that tropically adapted Zebu breeds produce meat with an overall poorer eating quality and more variability than that from British or European breeds.

Since eating quality is a primary driver for consumer purchasing decisions, the content of Zebu genes is a matter for concern in countries where quality beef production is carried out in tropical areas. For example, in Australia, where the tropical adaptations of the Zebu are useful for beef production in the hot and arid areas, the recognition that Zebu genes have a negative impact on eating quality means that producers are required by Meat Standards Australia (MSA) to declare the Zebu content for MSA grading.

Comparative studies have shown clearly that meat from Zebu and Zebu cross bred animals is less tender than that from British and European breeds and cross breeds. The tendency for Zebu-type cattle to produce less tender meat is heritable. Studies also show that toughness increases as the content of Zebu genes increases with meat from Zebu and Zebu crosses having less potential for post mortem tenderisation.



# EBLEX Quality Standard Mark beef and lamb qualifying criteria



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