# Integrity Systems

red meat customer assurance

# Understanding your data: Lean Meat Yield

**1**  What is Livestock Data Link?

**2**  What is Lean Meat Yield percentage (LMY%) and why is it important?

**3**  How do you access Lean Meat Yield percentage (LMY%) using LDL?

## 1. What is Livestock Data Link?

Livestock Data Link (LDL) is an online program that enables the timely sharing of carcase information between processors and their producers with the aim of optimising supply chain performance.

LDL uses carcase data from the National Livestock Identification System (NLIS), Meat Standards Australia (MSA) and the Central Animal Health (CAH) databases. On-going research and development activities will expand the number of data sources LDL has access to in the future.

## 2. What is Lean Meat Yield percentage (LMY%) and why is it important?

LDL has a predictive algorithm that describes the Lean Meat Yield percentage (LMY%) for sheep and MSA-graded beef carcases. LMY% is the proportion of a carcase that is lean meat (muscle), expressed as a percentage. The LMY% of a carcase is a standard way to assess the composition of a carcase and does not change depending on the cutting specifications used to market the carcase.

LMY% is calculated differently for sheep and beef. For sheep, LMY% is predicted using hot standard carcase weight (HSCW) and knife GR tissue depth. The higher the HSCW and the lower the GR value the higher the LMY%.

The algorithm for beef LMY% is calculated using HSCW, rib fat depth and, in some cases, eye muscle area (EMA). For this reason, only MSA-graded carcases have LMY% displayed in LDL. The higher the HSCW and the lower the rib fat depth (and where EMA is used, the larger the EMA), the higher the LMY%.

Processors may use different systems to determine LMY% but these systems have all been calibrated against a CT scan – the gold standard system to measure LMY%. This allows processors and producers to compare carcases in a standard way.

As more technology is introduced, greater precision and accuracy of measurement will be achieved. DEXA is one of these technologies and is currently being installed in some plants.

The quantity of lean meat recovered from a carcase is a key profit driver for the beef and sheepmeat industries. However, there is a negative correlation between LMY% and eating quality (the other key profit driver). It is critical producers balance the traits contributing to both measures for an optimum outcome.

Producers can manage LMY% through key on-farm practices such as nutrition and genetic selection. Providing information about LMY% on LDL means, producers can make better informed management decisions to maximise carcase value in the future.

### 3. How do you access LMY% using LDL?

Start by creating an account. To do this, you need your NLIS user ID and password, then head to ldl.mla.com.au and follow the prompts to register your account. You need to create an account in LDL before you can link it to your MyMLA account.

If you don't already have an account with NLIS, you will need to set one up first. Please go to www.nlis.com.au for more information.

> Even if you only breed or consign sheep, and have never previously held an NLIS account, you may still have data available in LDL.

## ONCE YOU HAVE CREATED YOUR LDL ACCOUNT:

# Step 1

Go to ldl.mla.com.au and enter your NLIS user ID and password and click 'Log in'. This will take you through to the LDL dashboard. Alternatively, if you have linked your LDL account in MyMLA, enter through here.
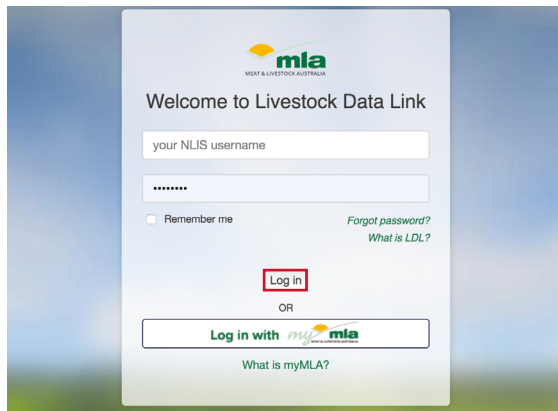


# Step 2

You can access the LMY% data on recent consignments by clicking the 'View' option for each consignment in the Carcase feedback table on the dashboard. Example highlighted in red.

## Carcase feedback

| Kill Date | Species | Processor | Target Market | Number of head | |
|---|---|---|---|---|---|
| 27-09-2016 | Sheep | LDL TEST DATA | 50KG | 92 | View |
| 23-09-2016 | Sheep | LDL TEST DATA | 40KG | 90 | View |
| 23-09-2016 | Sheep | LDL TEST DATA | 50KG | 8 | View |
| 22-09-2016 | Sheep | LDL TEST DATA | 20KG | 10 | View |
| 22-09-2016 | Sheep | LDL TEST DATA | 30KG | 100 | View |
| 22-09-2016 | Sheep | LDL TEST DATA | 40KG | 10 | View |
| 21-09-2016 | Sheep | LDL TEST DATA | 20KG | 65 | View |
| 20-09-2016 | Sheep | LDL TEST DATA | 10KG | 100 | View |
| 20-09-2016 | Sheep | LDL TEST DATA | 20KG | 25 | View |

# Step 3

You can also access the carcase analysis by clicking 'My Reports' at the top of the page and clicking on 'Carcase Analysis' from the drop-down menu (highlighted in red).
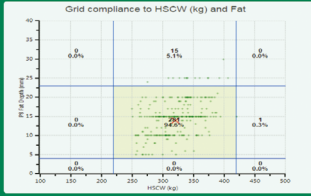


# Step 4

These will take you through to the Carcase Analysis Report page, which will automatically display the results of your latest consignment on the graph and table.

The compliance table includes information about the Lean Meat Yield, including the minimum, maximum and average percentage for the animals consigned.

Clicking on the green *Lean Meat Yield %* text in the table will take you directly through to further reading on LMY% in the Solutions to Feedback Library.

Carcase Analysis Report
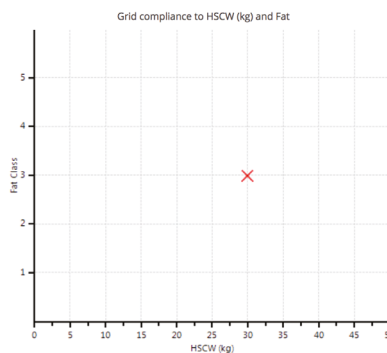


| Compliance by Gender | | | | |
|---|---|---|---|---|
| | Male | Female | Unknown | All |
| No. Head | 50 | 50 | | 100 |
| No. Condemned | 0 | 0 | | 0 |
| Total HSCW (kg) | 1,500.0 | 1,500.0 | | 3,000.0 |
| Max HSCW (kg) | 30.0 | 30.0 | | 30.0 |
| Min HSCW (kg) | 30.0 | 30.0 | | 30.0 |
| Avg HSCW (kg) | 30.0 | 30.0 | | 30.0 |
| Max Fat Class | | | | |
| Min Fat Class | | | | |
| Fat Class mode | 3 | 3 | | 3 |
| Min Lean Meat Yield % | 57.05 | 57.05 | | 57.05 |
| Max Lean Meat Yield % | 57.05 | 57.05 | | 57.05 |
| Avg Lean Meat Yield % | 57.05 | 57.05 | | 57.05 |

- View or Download individual **Carcase Details**

## Key Definitions

| Measure/trait | Description |
|---|---|
| **Lean meat yield percentage** | The proportion of a carcase that is meat. |
| **Dressing percentage** | The proportion of the live weight of an animal that is carcase. |
| **Saleable meat yield** | The proportion of a carcase (including some bone and fat) sold as cuts to the consumer. |
| **GR tissue depth** | The site located 110mm from the midline of a sheep carcase along the lateral surface of the 12th rib, where tissue is measured. |
| **Rib fat depth** | Measured in millimetres at the AUS-MEAT standard site during MSA grading. It is the depth of sub-cutaneous fat at a point three quarters along the lateral edge of the eye muscle from the chine. |
| **Eye muscle area** | EMA is the surface of the M.longissimus dorsi measured in square centimetres using an AUS-MEAT grid. |
| **DEXA** | Dual Energy X-ray Absorptiometry – an objective measurement tool which measures bone, muscle and fat in a carcase |
| **CT Scanning** | Computed Tomography Scanning – x-ray measurements that produce cross sectional images enabling three-dimensional calculation of bone, muscle and fat. |
| **Meat Standards Australia** | MSA was developed by the Australian red meat industry to improve the eating quality consistency of beef and sheepmeat. |
| **AUS-MEAT** | AUS-MEAT provides a language that is a set of objective descriptions for meat and livestock that can be used by beef and sheepmeat producers, abattoirs, wholesalers, retailers and the food service industry. It is a common language that enables all sectors of the industry to communicate their requirements to each other clearly and concisely. The language provides a means of describing saleable meat characteristics including Meat Colour, Fat Colour, Marbling, Eye Muscle Area, Subcutaneous Rib Fat Measurement, Total Rib Fat Measurement and Maturity. |

## Find out more

Once you have access to LDL, you can access answers on frequently asked questions and user manuals. These can be found on the Support page, accessible by clicking the 'Support' hyperlink on the top right-had corner of the page.

You can also get more information by visiting integritysystems.com.au/ldl, email ldl@integritysystems.com.au or phoning the helpdesk on 1800 654 743.

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