

LAMBPLAN terminal indexes

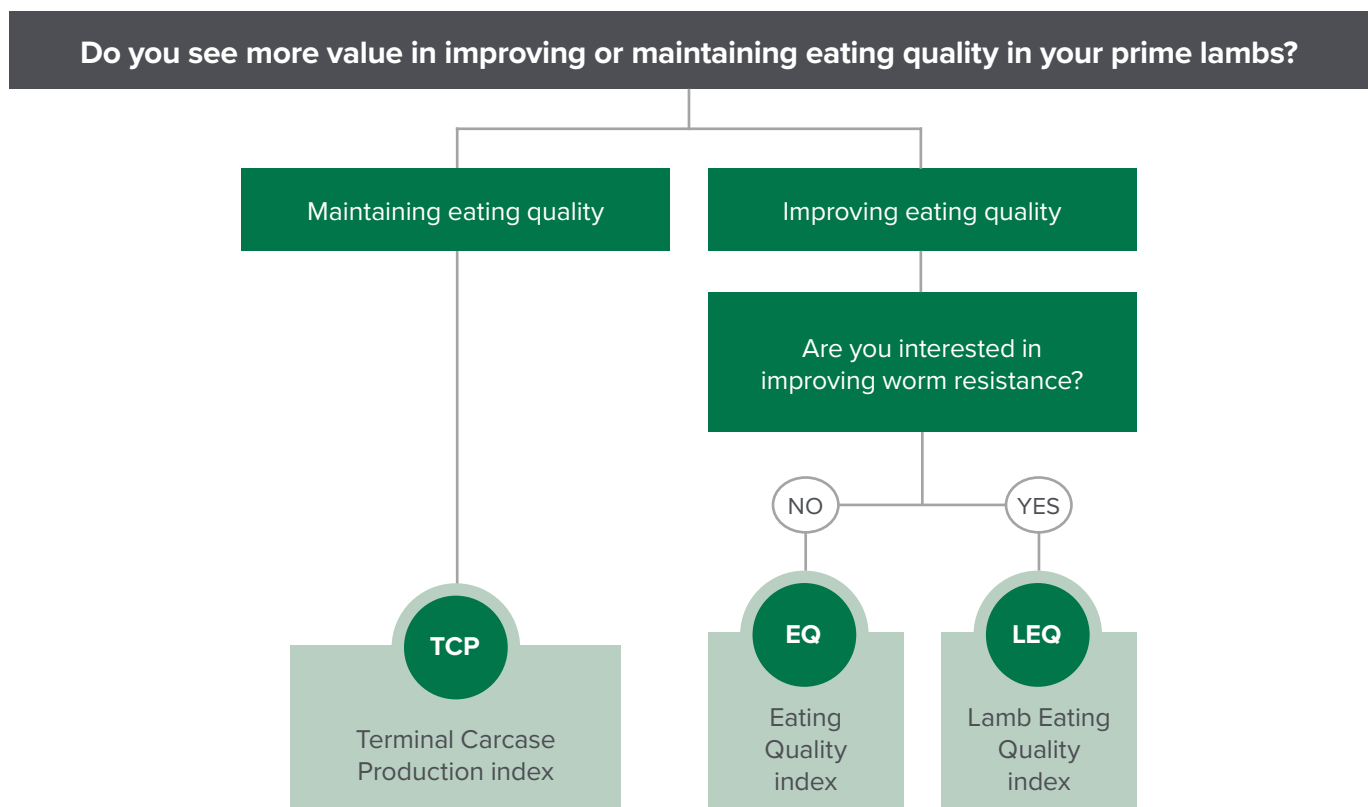
A ram buyer's guide

Indexes help producers select animals for use within a breeding program when there are a range of traits of economic or functional importance, so that genetic gain in one trait is not made in isolation from other traits.

Using indexes in your ram purchasing decisions allows you to make balanced genetic progress towards more profitable sheep. A ram with a higher index will produce progeny that are more profitable in that production system.

Choosing the right index

The following flowchart helps producers determine the best index for their terminal production system:



How to use the chosen index to assist in purchasing decisions:

Before the sale:

1. Rank animals in the sale on the value of your chosen index.
2. Consider the individual ASBVs which are important to you to create a short list of rams to look at on sale day.

At the sale:

3. Look through your short list of rams to find the ones that meet your structural and type requirements.

To assist in benchmarking sale rams relative to the current year drop of animals in the Sheep Genetics database, use the percentile band tables, which are found on the Sheep Genetics website: www.sheepgenetics.org.au/Getting-started/ASBVs-and-Indexes. The animals in the top 10th percentile rank the highest on the index, and those in the 90th percentile rank the lowest.

A brief overview of each of the indexes is included below. If you would like further information on how these selection indexes are generated, please refer to the *Terminal Indexes – ram breeder guide* at sheepgenetics.org.au/terminal-breeder.

Terminal Carcase Production (TCP)

The TCP index is for a prime lamb production system where terminal sires are joined to ewes of a Merino/maternal breed or cross. The TCP index focuses on increasing weight and muscle while reducing carcase fat. These are changes which contribute to higher lean meat yield. TCP also has emphasis on modest improvements in eating quality.

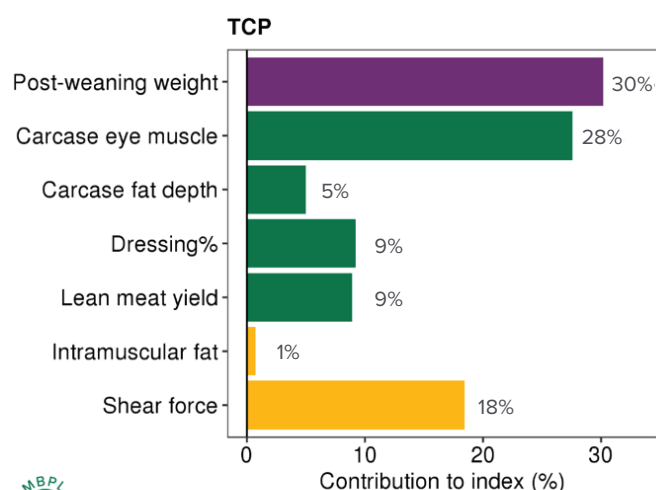
Typical trait changes for the TCP index include:

- increasing post weaning weight
- increasing carcase eye muscle depth
- decreasing carcase fat depth
- increasing dressing percentage
- increasing lean meat yield
- slightly improving eating quality.

Sheep with better eating quality will have higher ASBVs for intramuscular fat (more marbling) and lower ASBVs for shear force (better tenderness).

Figure 1 illustrates which traits are in the index and how much they contribute to the overall balance of the index. The longer the bar, the greater the impact on the index, and the greater impact on the profitability of the production system.

Figure 1: The traits in the TCP index and how they contribute to the overall balance of the index



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Eating Quality (EQ)

The EQ index is for a prime lamb operation where terminal sires are joined to ewes of a Merino/maternal breed or cross, and where producers are interested in improving the eating quality of their lambs to a greater degree than is possible with the TCP index. Because of the added emphasis on eating quality, there is less emphasis on growth and carcass traits, although they will still improve.

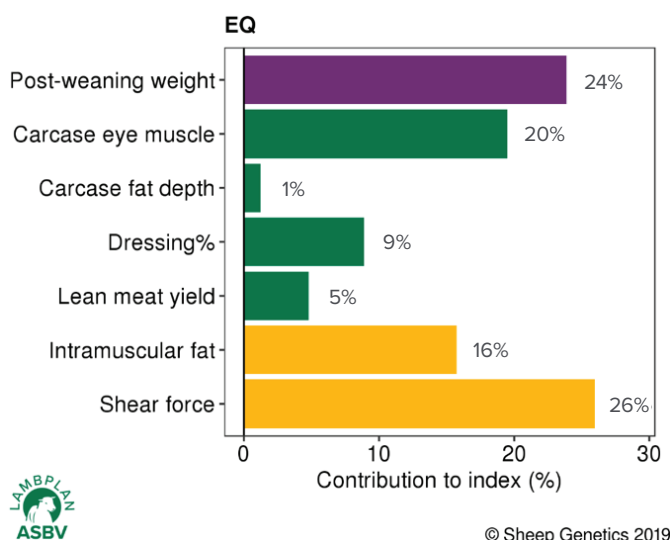
Typical trait changes for the EQ index include:

- increasing post weaning weight
- increasing eye muscle depth
- maintaining/small reduction in carcass fat
- increasing dressing percentage
- increasing lean meat yield
- large improvement in eating quality.

Sheep with better eating quality will have higher ASBVs for intramuscular fat (more marbling) and lower ASBVs for shear force (better tenderness).

Figure 2 illustrates which traits are in the index and how much they contribute to the overall balance of the index. The longer the bar, the greater the impact on the index, and the greater impact on the profitability of the production system.

Figure 2: The traits in the EQ index and how they contribute to the overall balance of the index



Lamb Eating Quality (LEQ)

The LEQ index is for a prime lamb operation where terminal sires are joined to ewes of a Merino/maternal breed or cross in high rainfall and/or high input management systems where internal parasites may cause significant economic losses.

Producers who select this index are interested in improving the eating quality of their lambs to a greater degree than is possible with the TCP index. Growth and carcass traits will still improve, and inclusion of worm egg count will aid in control of internal parasites.

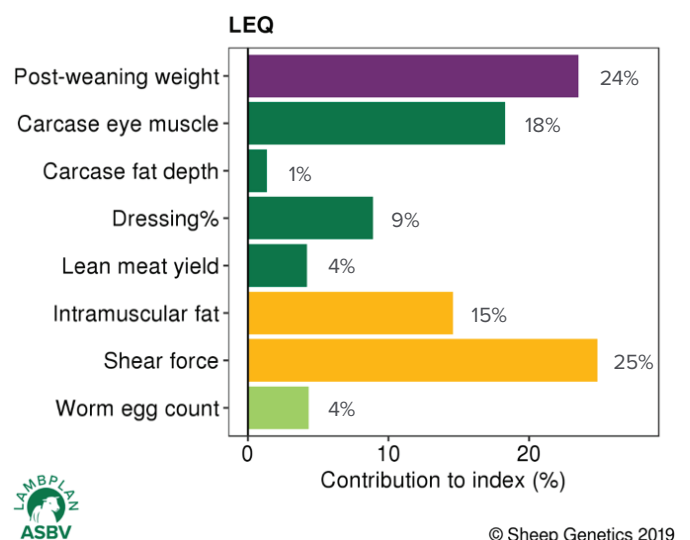
Typical trait changes for the LEQ index include:

- increasing post weaning weight
- increasing eye muscle depth
- maintaining/small reduction in carcass fat
- increasing dressing percentage
- increasing lean meat yield
- large improvement in eating quality
- increasing resistance to worms.

Sheep with better eating quality will have higher ASBVs for intramuscular fat (more marbling) and lower ASBVs for shear force (better tenderness).

Figure 3 illustrates which traits are in the index and how much they contribute to the overall balance of the index. The longer the bar, the greater the impact on the index, and the greater impact on the profitability of the production system.

Figure 3: The traits in the LEQ index and how they contribute to the overall balance of the index



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More information

02 8055 1818

info@sheepgenetics.org.au

www.sheepgenetics.org.au