

Dairy Selection Indexes



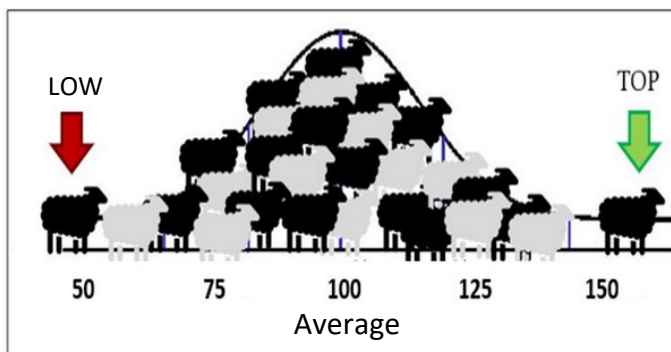
Two dairy selection indexes are available for dairy producers to facilitate animal selection. Genetic selection indexes are used to select animals that perform better on different traits assessed simultaneously. The indexes consider the correlations and heritability of traits that influence genetic progress based on the importance of one trait over another. Without genetic index, selecting quickly becomes a difficult task for breeders wishing to improve more than one trait at a time in their flock.

The dairy index is not a numeric indicator of an animal performance measured in barn. It doesn't indicate how many more kg of milk a ewe will produce within her lactation, but ranks animals on a fair basis. The animals having the higher genetic index value will bring a faster genetic gain.

The genetic index can be expressed on different forms as numeric value, economic value and index value of 100. GenOvis milk module expresses the genetic index in index value of 100.

Index Value of 100

The index value of 100 is an indication of the ranking of an animal within the dairy population.



- 100 index points is the average
- 101 to 150 index points is superior to the average
- 50 to 99 index points is inferior to the average

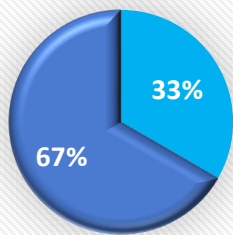
Most of the dairy sheep (68%) rank from 75 to 125 index points. Best animals rank close to 150 index points. Only 2.5% of the dairy population rank less than 50 index points or more than 150 index points. Animals with index value higher than 150 index points are very exceptional.

2 Dairy Selection Indexes (to facilitate selection)

Since December 2020, two selection indexes are available for dairy sheep producers.

- The **PROD index**, for production index, is used to increase the kg of milk produced per lactation.
- The **COM index**, for components index, is used to increase the kg of butter fat and protein per lactation.

PROD Index



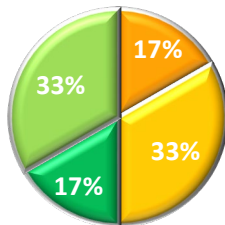
■ EBV Milk Yield Lactation 1
■ EBV Milk Yield Lactation 2

Used by: Producer who meters but does not collect component information.

Purpose: To select ewes that will produce more kg of milk at first and subsequent lactations. More emphasis is put on later lactations to get better improvement on this trait.

It is an index value of 100 that combines the kg of milk produced at first and later lactations to do selection based on only one number to improve both traits.

COMP Index



■ EBV Fat Lactation 1
■ EBV Fat Lactation 2
■ EBV Protein Lactation 1
■ EBV Protein Lactation 2

Used by: For producer who meters and collects component information.

Purpose: To select ewes that will produce more kg of butter fat and protein at first and subsequent lactations. More emphasis is put on later lactations to get better improvement on these traits. By correlation, the kg of milk produced will be improved.

It is an index value of 100 that combines the kg of butter fat and protein produce at first and later lactations to do selection based on only one number to improve all those traits.

Use of Dairy Selection Indexes

Animals with the higher index points are the ones having a better genetic merit. EBV and dairy selection index values can be compared across breed groups and so are the value to use to do fair comparison between animals from different breed compositions. Animals having higher index value have the better potential to producer high productive progeny.

The EBVs and dairy selection indexes include all dairy records on GenOvis (from Canada, USA and Ecuador).