



A Selection Index for Commercial Feeder Cattle

Achieve your efficiency, profitability & sustainability targets sooner

Livestock Gentec's selection indexes:

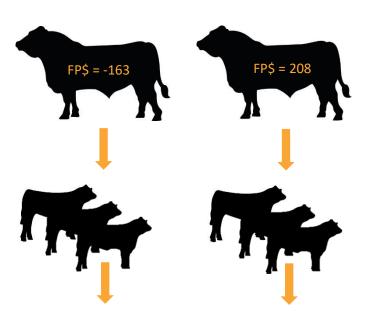
- Increase the rate of genetic improvement for multiple traits at the same time
- Are customized and adapted to your targets
- Put you in control of developing your herd

Built and proven on commercial cattle in western Canada



EEDER PROFIT DEX

A tool to improve feed efficiency, growth, carcass value and net return in feeder progeny



On average, each 100 unit change in sire FPI resulted in increased profit of \$29 per feeder

From Trait to Index

 Improves highly relevant traits relating to feeder calf profitability including: Growth

Trait Identification

- •Feed intake
- ·Feed efficiency, and
- •Carcass merit

Genomic Testing

- •Collect a hair sample from each animal and mail to the lab
- Lab extracts the DNA
- •DNA genotyped into SNPs ("snips"), which are the smallest differences in DNA between animals

Determine **MBVs**

- SNPs are compared to Gentec's propietary genomic database to estimate effects on traits.
- •SNP effects are summed up into molecular breeding values (MBVs) to predict an animals transmitting ability of traits to offspring

Selection Index

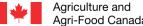
- An economic index combines genomic (MBVs) and economic values of multiple traits, including relationship between traits
- Increasing the rate of genetic improvement for multiple traits at the same time



Profit =

\$103/feeder





Profit =

\$211/feeder







- Improved profitability delivered through increased carcass value
- Greater than 500 points in FPI between 124 sires used to produce crossbred progeny
 - o opportunity to improve feeder profit
- Cost to genotype a young sire commercially is \$45
 - Net gain for increased FPI (100 units) is \$580/year for 20 feeders produced!

Traits included in the FPI

Trait	Approximate Emphasis
Post-wean ADG	5
Feed intake	3
Metabolic mid-weight	2
Residual feed intake	2
Carcass Merit	1

Ask us about a free consult on an index specifically calibrated to your target outcomes

Customized to meet your goals

FPI can be customized to your desired outcomes.

- Tailored to meet the needs of the target market (i.e. lean vs. marbling). A primary goal could be to increased AAA cut-out yields by:
 - o Optimizing back and seam fat and
 - Increasing lean meat yield

FPI can increase the profit and carcass value of feeders by selecting superior sires and/or cows

Continuous Improvement in Genomic Tools Delivering Industry Value

Livestock Gentec is working to improve your herd and create value for the beef industry by:

- validating and refining a replacement heifer \$ index to improve calf crop %
- validating DNA pooling to drive down the cost of genomic testing
- improving the accuracy of MBVs for hard to measure traits like feed efficiency, carcass quality and fertility traits

The Beef Industry Needs YOU! Gentec can Help!

Using genomic tools to create value for the beef industry requires innovative farms to lead the way.

 We are looking for young sires and replacement heifers for genomic testing



Genotyping only \$15 per test (vs. \$45) for a limited time!

Ask us how we can help you reach your goals faster

