

CLARIFIDE® PLUS FOR JERSEY INDEXES PROVIDE POWERFUL SELECTION TOOLS



KEY TAKEAWAYS:

- CLARIFIDE® Plus for Jersey is the first test to combine wellness and profitability for the Jersey breed.
- Dairy Wellness Profit Index® (DWP\$®) is proven to provide more profit and wellness than other index options.
- Wellness Trait Index® (WT\$®) places economic weights on cow wellness traits, directly estimating potential profit contribution of these traits for an individual animal.
- Selection for DWP\$ can result in a difference in lifetime profitability of more than **\$804** between top 10th percentile and bottom 10th percentile of ranked animals.¹
- Calf Wellness Index® (CW\$®) places economic weights on calf wellness traits directly estimating potential genetic profit contributions of calf livability, respiratory disease and scours for an individual animal.

Selection indexes such as Net Merit \$ (NM\$) are important components of any genetic selection strategies to provide a path for dairy producers to rank and select animals for comprehensive genetic improvement across a host of traits. Once traits are chosen and weighted based on economic importance in an index, producers can rank animals according to the index value. Now, Dairy Wellness Profit Index (DWP\$) enhances that selection to include overall health indicators for the animal.

CLARIFIDE Plus is the first genomic test in the U.S. that delivers information on seven cow wellness traits— mastitis, lameness, metritis, retained placenta, displaced abomasum, ketosis and milk fever — and three calf wellness traits — calf livability, respiratory disease and scours — previously unavailable to dairy producers in one comprehensive offering. Zoetis developed the Wellness Trait Index (WT\$), Calf Wellness Index (CW\$) and Dairy Wellness Profit Index (DWP\$) to provide a convenient tool to help dairy producers utilize these wellness traits when implementing effective genomic herd strategies.

INSIDE WT\$, CW\$ AND DWP\$

WT\$ is made up of the seven cow wellness traits while CW\$ is made up of three new calf wellness traits, each respectively incorporating the economic impact of each trait on expected profitability outcomes. Charts 1 and 2 depict the traits included in WT\$ and CW\$, respectively, and the associated relative value.

Chart 1: WT\$® Relative Value (%)

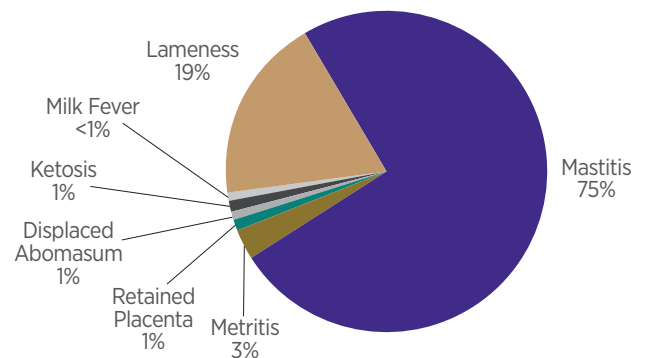




Chart 2: CW\$® Relative Value (%)

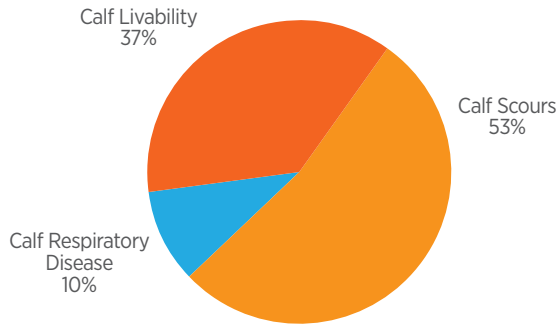
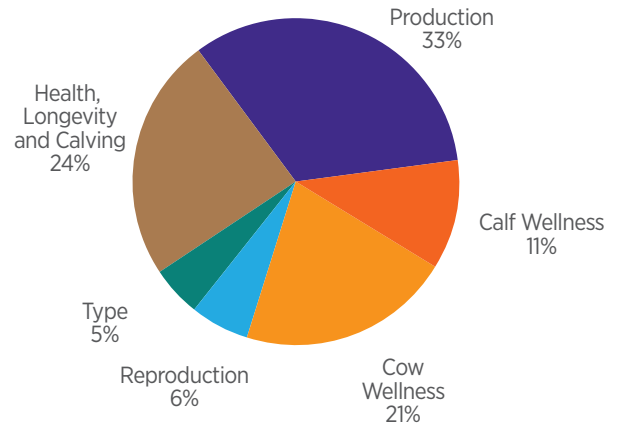


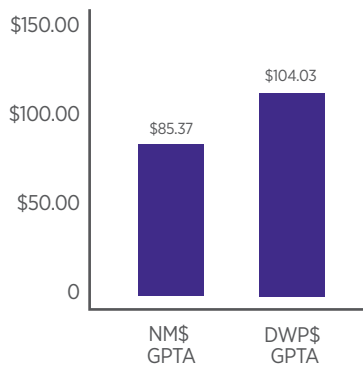
Chart 3: DWP\$® Relative Value (%)



The use of DWP\$ offers selection emphasis comparable to other well-known selection indexes such as Cheese Merit Index (CM\$) and Jersey Performance Index™ (JPI) on core traits, but applies additional selection emphasis and improvement on cow and calf wellness. This similarity makes DWP\$ a practical consideration for producers who have historically used either index, but would like to achieve faster progress towards a healthier, more profitable herd.

This index also considers the economic benefits associated with polled cattle which are added to the index with a fixed economic value for each additional copy of the polled genotype derived from published literature.

Chart 4: Increase in Average Lifetime Profitability*



*Assumes selection of top 85% of females as replacements as compared to no selection. Does not account for increases in profitability from progeny of selected animals.

The impact of DWP\$®, when used as a primary ranking tool, has benefits over other ranking methods that employ NM\$. Chart 4 compares the projected direct increase in lifetime profitability between female genetic selection based on NM\$ genomic predictions and DWP\$ when selecting the top 85% of heifers to keep as replacements, compared to no selection strategy (\$0).

The values in the chart represent direct differences in selected heifers only. Genetic merit will become greater with subsequent progeny creating additional value with each generation.¹



Selecting heifers based on DWP\$—available only through CLARIFIDE® Plus—helps build a healthier, more profitable herd.

1. Data on file, January 2018 Data Package, Zoetis Inc.