

## **Making More Productive, Longer-Lived Jerseys**

December genetic summaries mark a new era for Jersey Performance Index and Jersey Udder Index. The two formulas have been revised and recalculated to improve the profitability of the Jersey breed.

The purpose of Jersey cows is to produce food and to do this while using fewer resources, in particular feed. This is accomplished through two factors, increasing productivity and length of life.

Cows with greater fat and protein production use a higher percentage of their feed consumption to produce food instead of to just maintain themselves. The chart below demonstrates this effect by comparing pounds of daily energy corrected milk production to pounds of daily dry matter intake required for a Jersey cow weighing 1,100 pounds.



Increasing the length of life (longevity or survival) of animals reduces the amount of feed used by nonproducing animals (heifers) in the herd. The top chart in the second column demonstrates this effect by comparing the total lifetime energy corrected milk production to the total lifetime dry matter intake required for a Jersey cow that weighs 1,100 pounds and produces 90 pounds of energy corrected milk at maturity as the number of lactations increases.

The updated formula for JPI released with this genetic summary places the focus on productivity and



longevity of cows. Additionally, survival information from an AJCA funded study of 298,000 Jersey cows appraised in first lactation was used to determine which type traits contribute the most to survival and longevity and so should be included in JPI. Changes were made to the formula for type traits in JPI and JUI to reflect the true contribution to survival across all linear scores



as shown in the graph below where many traits have an intermediate optimum where cows with extreme scores have lower survival rates.

Dairy producers can use updated JPI and JUI values to select those animals that will improve the profitability of their operation by making cows that are more productive and live longer.