

Texas Dairy Matters

Higher Education Supporting the Industry

THERE ARE \$\$ IN THOSE GENES

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In today's fast-paced dairy industry, we look for quick fixes and instant results. The game of genetics is long-term. But it is a game worth playing because the results are permanent.

Producers often fail to appreciate the bottom line impact of genetic programs. Results are not realized for three to four years, but over time genetic improvement in a herd can increase profits. With Multiple Component Pricing (MCP) in place, 70 to 75 % of your pay check is based on pounds of fat and protein shipped. Therefore, consider new strategies in selecting sires.

In the past, volume of milk produced drove milk price. The shift to payment based on pounds of components shipped, suggests a shift in selection criteria from milk yield to component yield. The following table from the Milk Market Administrator shows that the pounds of protein, the other solids, butterfat and value of somatic cell adjustment are what determine the majority of the price you receive. In this scenario, of the \$130,519,725 collected from processors, \$119,758,496 is accounted for by the value received from the components.



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COMPUTATION OF PRODUCER PRICE DIFFERENTIAL

		Pounds	Price	Value
Add:	Class I Differential			\$98,948.80
	Class I Butterfat	60(a) 8,078,071	\$1.2631	\$10,203,411.50
	Class I Skim Per Cwt	357,119,117	\$9.9000	\$35,354,792.60
	Class II Butterfat	60(b) 10,578,943	\$1.2652	\$13,384,478.68
	Class III Nonfat Solids	10,853,653	\$0.7711	\$8,369,251.86
	Class III Butterfat	60(c) 13,318,641	\$1.2582	\$16,757,514.13
	Class III Protein	11,339,453	\$1.9115	\$21,675,364.41
	Class III Other Solids	21,766,662	\$0.1251	\$2,723,009.43
	Class IV Butterfat	60(d) 7,059,658	\$1.2582	\$8,882,461.69
	Class IV Nonfat Solids	18,314,559	\$0.6819	\$12,488,697.82
	Class II, III & IV Somatic Cell Adj.			\$581,794.40
	Total Producer Milk-Product Lbs & Value	1,083,401,146		\$130,519,725.32
Add:	Value as for 60(f) Thru 60(j)			\$99,131.81
Less:	Total Protein Pounds	61(b) 32,529,374	\$1.8115	\$62,179,898.46
	Total Other Solids Pounds	62,149,736	\$0.1251	\$7,774,932.00
	Total Butterfat Pounds	39,035,313	\$1.2582	\$49,114,230.85
	Total Value of Somatic Cell Adjustment			\$788,566.34
	Total Milk and Value	1,083,401,146		\$10,761,229.48
Add:	Location Differential Adjustments	61(c)		\$4,936,804.88
	Producer-settlement Fund	61(d)		\$314,676.34
	Total Producer Milk/URSP and Value	1,083,401,146	\$1.47800	\$16,012,710.70
Less:	Producer-settlement Fund	61(f)	\$0.04800	\$520,074.31
	Producer Price Differential (Dallas County)		\$1.43	\$15,492,636.39

Approximately 30% of the variation in yield traits (heritability) is related to the genetic make-up of the animal. Since genetic variability exists for these traits, it is possible to increase components by choosing sires with those traits.

Although genetic correlations between milk yield and fat or protein yield is high, it is not perfect. Selecting sires solely on the basis of milk yield may not improve the component yield trait enough to increase the amount of protein and/or fat you are shipping.

Since the percent fat and protein increases as yield decreases, place selection emphasis on yield not percent. When using indices, keep in mind USDA calculates several that incorporate pounds of fat and pounds of protein. Study the indices and choose the one that reflects how you are paid for your milk.

Another concern in sire selection is intensity. The fewer traits selected, the greater the intensity. Selection for several traits simultaneously can have a detrimental effect on traits of major economic importance. Each additional trait selected reduces intensity from the economically-important traits.

With today's shift to MCP, selecting sires based on pounds of fat or protein, or a calculated index that reflects this new pricing strategy, will be financially beneficial. Select traits that return dollars. Yield is still important, of course, but pounds of fat and pounds of protein are the keys to increasing your pay price.