

# Texas Dairy Matters

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## MONITOR PRODUCTION TRENDS: PEAK MILK AND AVERAGE DAYS IN MILK

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Summer heat depresses dry matter intake in most herds. Cows adjust as the nights cool down and the days become more bearable. Daily dry matter intake rises, resulting in better body condition, increased milk production and better conception rates. Generally, you can expect a 2.5 to 3 lb. increase in milk production, for each 1 lb. increase in dry matter intake.

Two variables used to monitor production are peak milk and average days in milk. Increasing intake quickly after calving drives peak milk production. And ultimately, peak milk production determines total lactation milk production. A rule of thumb is for every pound increase in peak production, total lactation production increases 250 pounds of milk.

Monitoring peak milk tells part of the story. Stage of lactation completes the picture. For each day the Average Days in Milk (ADIM) decreases, the herd average production increases 0.15 lb. of milk.

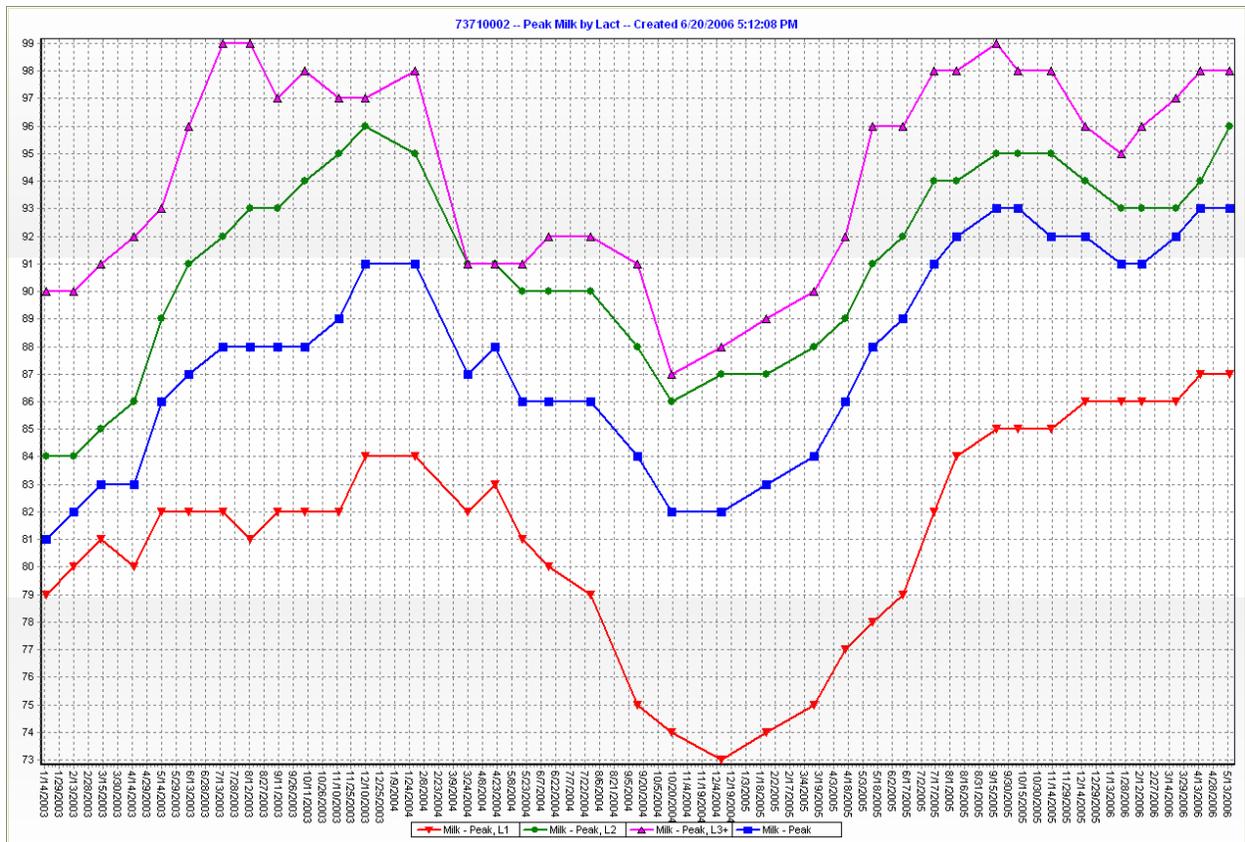
Thus, decreasing the ADIM from 200 to 170 could result in 4.5 lb. more milk per cow per day.

**STAGE OF LACTATION PROFILE**

		STAGE OF LACTATION (DAYS)					TOTAL OR AVERAGE
		1 THRU 40	41 THRU 100	101 THRU 199	200 THRU 305	306 +	
NUMBER MILKING	1ST LACT	53	118	222	186	251	830
	2ND LACT	31	67	148	90	178	514
	3+ LACTS	73	76	164	195	196	704
	ALL LACTS	157	261	534	471	625	2048
AVERAGE DAILY MILK PROD- UCTION	1ST LACT	54	71	74	72	55	66
	2ND LACT	78	87	82	66	43	66
	3+ LACTS	75	86	79	61	45	65
	ALL LACTS	69	79	78	66	48	66

Use information on your DHI-202 herd summary sheets from the DRMS to evaluate production trends in your herd. (Sheets from Provo and AgriTech have comparable figures.) Look at the section labeled “40 to 100 days.” Compare month to month production by lactation. Check the Yearly Production and Mastitis Summary and find average days in milk as well. Compare ADIM and average test day production.

Graph the data for the last several years. The graph below was taken from PCDART and represents four years of data by lactation as well as overall. Do you see the same trend each year? If so, is it caused by seasonal calving or should you modify your facilities to overcome weather-related production limiters? Did cooler weather bring an increase in your production, especially peak production? Then start planning on how to increase cow comfort next year. Did production go up as days in milk decreased? This is to be expected.



If your cows are peaking but not maintaining high production levels, evaluate the ration and how fast feed intake increased after calving. If your cows are eating more but you see no increase in production, check body condition during the dry period. Cows should average a 3.5 to 3.75 body condition score when dry. Less than that, they have insufficient reserves for peak production. Cows with higher body condition scores are more prone to postpartum metabolic disorders. If they are not peaking, evaluate the ration you are feeding.

What is the incidence of metabolic disorders around calving? If you are feeding a negative DCAD ration and still see lots of milk fevers, check urine pH to determine if the ration is working. The pH should be 6.0 to 6.5. A high incidence of milk fevers or retained placentas signals a potential transition cow ration problem.

Check the MUN values on your fresh cows. Remember, high levels may mean too much degradable protein is being fed, while very low levels may indicate insufficient protein is being fed.