



# DAIRY RECORDS MANAGEMENT SYSTEMS

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## Better Lactation Persistency Means More Milk in the Tank!

- Are my cows performing consistently throughout the lactation?
- Do my cows perform as they should when moved to a low ration later in lactation?
- Is the overcrowding in my pregnant pens costing me milk?
- I'm thinking of delaying the first breeding on first lactation cows by 30 days. Have they been producing well enough in late lactation to justify a 30 day delay?

## Introducing the Persistency Analysis Report

◆		PERSISTENCY ANALYSIS		Test Date: 02-23-2009		55-99-9999																Page 1 of 1		
		DHI-231		Processed: 02-24-2009		HENRY SMITH																		
Calved in Interval Ending		03-25-08	04-30-08	05-28-08	06-24-08	07-28-08	08-26-08	09-22-08	10-27-08	11-25-08	12-29-08	01-27-09	02-23-09											
TD Milk		91	87	81	73	69	73	75	83	81	67	80	72											
TD Fat %		3.8	4.2	3.8	3.7	4.1	3.8	3.6	4.2	4.0	4.9	4.5	4.4											
# Fresh		49	54	35	20	50	47	48	40	62	51	60	39											
Current		18	40	24	15	35	45	40	38	56	48	55	39											
Test Num	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers
1	97		95		85		82		73		82		81		90		85		72		86		83	
2	97		98		97	+11	83		82	+9	97	+15	90	+8	93		86		88	+15	93			
3	90		98		85	-13	82		76		95		85	-6	81	-11	94	+9	83					
4	92	+6	81	-17	80		79		75		84	-10	69	-15	84	+6	88							
5	77	-16	75		82	+7	77		67	-9	71	-11	74	+10	79									
6	69	-7	77	+5	75		65	-15	58	-10	75	+9	68											
7	72	+6	78	+5	63	-16	58	-6	65	+20	67	-6												
8	67		68	-12	52	-14	65	+20	56	-11														
9	58	-10	54	-16	59	+25	49	-22																
10	40	-25	57	+14	50	-12																		
11	47	+24	54																					
12	45																							
# Fresh	8		17		9		9		14		28		19		15		10		25		14		17	
Current	6		10		7		9		13		22		16		14		10		24		12		17	
Test Num	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers	Milk	Pers
1	60		63		64		61		52		57		59		66		47		58		57		47	
2	67	+5	70	+8	76	+14	60	-5	59	+9	63	+8	63		65	-7	61	+20	70	+14	64	+5		
3	63	-5	66	-5	67	-11	58		66	+12	64		64		63		66	+8	68					
4	64	+5	60	-6	68		60	+5	64		59	-10	57	-10	64	+6	59	-9						
5	55	-12	58		65		60		63		58		65	+21	62									
6	57	+7	63	+9	69	+8	60		54	-10	60	+12	55	-12										
7	64	+13	64		63	-8	53	-8	58	+16	59													
8	62		59	-9	53	-14	60	+22	55															
9	59		43	-24	63	+28	58																	
10	48	-16	54	+36	55	-11																		
11	57	+25	51	-5																				
12	48	-16																						

Quickly detect when a calving cohort group runs into trouble.

Lactation 2+

Lactation 1

Persistency values shown are greater than or equal to 5.0 percent from the predicted lactation curve.

693 total cows In Milk on test day.

03-06-09

- see detailed explanation of report on back -

## Lactation Persistency

To achieve a high "tank average", a herd must have strong **Peaks** and be highly **Persistent**. Lactation Persistency tells us how quickly milk production is declining after peak milk production.

Although first lactation cows peak lower than older cows, we expect them to be more persistent. These differences make it imperative to analyze persistency differently for 1st lactation compared to later lactation cows. Good persistency results from healthy cows, high quality forages, and a low-stress environment.

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## Using The Persistency Analysis Report (DHI-231)

Persistency values are presented for calving groups so you can see production and persistency over time across similar stages of lactation. Here's how it works:

- Predicted Milk is milk production that is "predicted" based on standard lactation curves
  - Persistency = actual milk / predicted milk x 100. (If predicted milk for a cow is 75 and actual milk is 60, her persistency is  $60/75 = .8 * 100 = 80\%$  - this would be presented on the report as -20).
  - Each column represents a calving group - cows that calved between test days
  - A persistency value is calculated for each cow and averages are given for each calving group
  - Cows that calved during the current test period are summarized in the rightmost column. They have had only one test day and will have no persistency measure. The report does show how many cows calved ( "# Fresh" row) and the number remaining ("Current" row) as of the current test day.
  - The first column represents cows that calved in the oldest calving period summarized - as many as 12 test periods ago. The second column represents cows that calved in the next oldest period, and so on.
  - For cows that calved in the same test period, the report displays their average milk for each test day and the persistency for that test day (if the difference from the predicted standard curve is at least 5+ percent).
  - Reading down a column illustrates production and persistency for cows that calved in the same period. Each milk or persistency change may represent different cow numbers depending on when cows left.
  - Reading across a row illustrates production and persistency values across similar stages of lactation over time. Consistent testing intervals make the data more useful.
  - Bold numbers at the bottom of each column allow comparisons of performance on current test day
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## Get the Persistency Analysis report

If you want to receive this report for your herd with each test, just tell your DHI Technician to enroll you on the 231 report. The cost is just \$5 per test.