Using Your DHI Data to Evaluate Your Feeding Program – Interpreting Standardized 150-Day Milk

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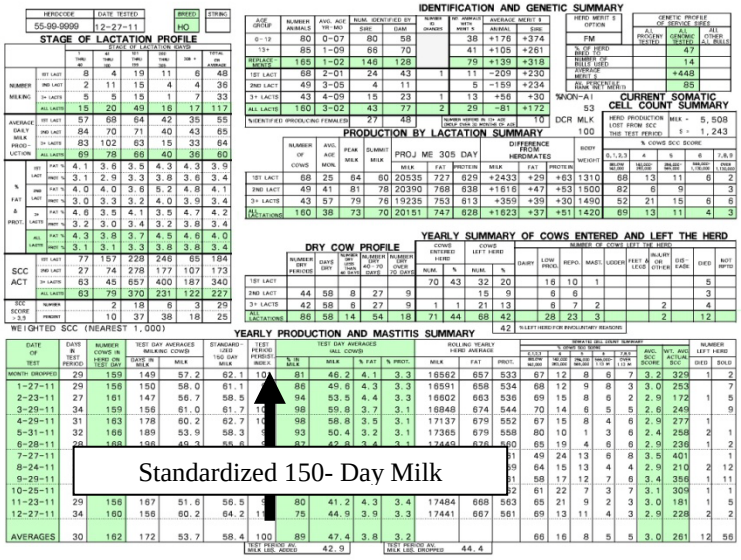
This article is one in a series of articles describing (or reviewing) how to use data from your DHI reports to help you better manage your herd. Each article covers one or two numbers found on these reports. The goal of these articles is to explain how the numbers are calculated but, more importantly, how you can use them to better manage your dairy operation. This article reviews how to use Standardized 150-day Milk found on the second page of your Herd Summary sheet (DHI- 202) to better manage your dairy herd.

What is Standardized 150-day Milk?

Standardized 150-day Milk allows one to compare the average milk production of a dairy herd from one month to the next. It removes the effects of days in milk, breed, and number of lactations which will vary from test to test. For each cow in the herd under 330 days in milk, the computer calculates what she would have given if she was exactly 150 days after calving. The computer then averages all cows in the herd and reports this average on the second page of the Herd Summary (DHI-202).



How to use this information to evaluate your dairy feeding and management program

Example #1: In example #1, Standardized 150-day Milk dropped in the summer months. Three possible scenarios to explain this drop which can include, but are not limited to:

Example #1:	
Date of test	Standardized 150-day Milk
Month dropped	65.5
2-11-xx	64.8
3-15-xx	67.7
4-18-xx	63.5
5-14-xx	67.4
6-22-xx	63.0
7-21-xx	56.2
8-25-xx	57.8
9-18-xx	58.7
10-11-xx	62.6
11-16-xx	65.8
12-19-xx	71.1
1-15-xx	69.4

1) Cows are subjected to heat stress and do not have adequate cooling in place to maintain milk production or minimize decreases in milk production.

Areas to evaluate:

- Are fans and sprinklers or shade provided near the feed bunk and loafing areas?
- Are fans and sprinklers used in the holding pen?
- Are dry cows provided adequate shade and cool, clean water?

2) Forages and/or ration fed during the summer does not provide adequate energy or other nutrients to maintain milk production

Areas to evaluate: Contact your nutritionist and retest forages and rebalance rations to reflect forages and other feeds currently being fed.

3) Disease issues in the herd such as an increase in the incidence of mastitis or fresh cow problems

Areas to evaluate: Review milking practices and cleanliness of cows if somatic cell count has increased. Did you have a higher incidence of fresh cow problems within the first 60 days after calving?

4) Are there other possibilities to explain the drop in production?

Example #2: In example #2, decreases are seen in Standardized 150-day Milk in the fall. Milk production improves later in the fall but never recovers to that seen in previous years. Cows are housed in the same facilities as previous years and no changes are seen in disease status. However, forage quality may have changed from the previous year or more variability in the nutrient content or composition of the TMR fed may be occurring.

Areas to investigate include – but not limited to:

1) Decrease in energy available to support high milk production.

Example #2:	
Date of test	Standardized 150 day Milk
Month dropped	65.5
2-11-xx	64.8
3-15-xx	67.7
4-18-xx	63.5
5-14-xx	67.4
6-22-xx	63.0
7-21-xx	66.2
8-25-xx	67.8
9-18-xx	63.7
10-11-xx	52.6
11-16-xx	57.8
12-19-xx	62.1
1-15-xx	61.4

Areas to evaluate: Retest forages, request a silage fermentation analysis, and/or evaluate digestibility of NDF to look for places that have decreased the amount of nutrients available to support milk production. You will more than likely need to add additional nutrients from purchased feeds in order to improve milk production and income over feed cost. Again, you will need to work closely with your nutritionist to correct the problems.

2) Feed bunk management and maintenance of TMR mixer

Areas to evaluate:

- Are the groups of cows overcrowded for resting space or feed bunk space?
- Is a consistent mixture of feed being supplied to the cows?
- Are the cows getting the amounts of each feed (accounting for varying dry matter) noted on the balanced ration?
- Are cows sorting their feed?
- Is the mixer weighing added feeds accurately?
- Is the TMR mixture mixed for the correct amount of time?
- Is the feedbunk being managed so cows always have feed available?