

# A Quick 6-Month Business Check-up: Net Milk Income Over Purchased Feed Cost

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Got a minute? This one is easily to calculate – it uses information that is readily available and is quick. Better yet, it is a good indicator of the performance of the feed program.

The measure is called “Net Milk Income Over Purchased Feed Cost” (NMIOPFC) and it is a very good way to track the performance of the feed program and also a way to predict if the business is improving. The chart below shows the correlation between NMIOPFC and return on assets (ROA) – a standard measure (though more difficult to calculate) of profitability. If all farms were exactly on the line drawn, there would be perfect correlation ( $R^2 = 1$ ). In this chart,  $R^2$  is 0.46, indicating that NFIOPFC only partially explains the variation in ROA. Still, this level of correlation is relatively high for a single number. Visually, you can see that as ROA increases, NMIOPFC tends to do the same. And, given that it is easy to calculate, it makes sense to monitor it and to

be aware of trends on your farm.

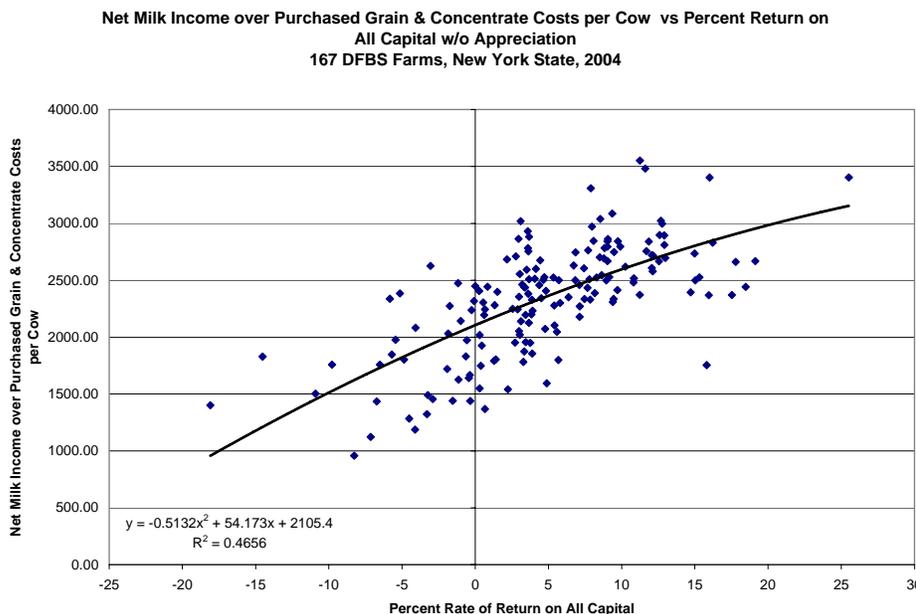
## How to calculate NMIOPFC

1. Get your most recent milk check and note:
  - a. Gross milk sales
  - b. Milk hauling and marketing deductions (hauling, stop charges, CWT deduction, promotion, marketing fees, coop dues)
2. Estimate the cost of the total amount of grain fed (include heifer grain, but not purchased forage) for the same month you were last paid for milk. While you may use the monthly purchased feed bill, if changes occurred in inventories or open accounts, this may be misleading. More accurate estimates can be made by estimating inventory of grain at the beginning and end of the month and adjusting for the difference along with adjusting for any difference in open feed accounts.
3. Note the average number of cows (milking + dry) in your herd over the period you are measuring.
4. Do the following calculation:

$$\begin{aligned} \text{NMIOPFC} = & \text{Gross milk payment} \\ & (\text{subtract}) \quad \text{Marketing/Hauling Expense} \\ & (\text{subtract}) \quad \text{Purchased Feed Cost} \\ & (\text{divide by}) \quad \text{Average \# of Cows} \end{aligned}$$

## Using the numbers

Since it can be calculated quickly, NMIOPFC is a good number to monitor in between, or along with, annual detailed business analyses. Try it quarterly, or even monthly. If you participate in the Dairy Farm Business Summary (DFBS) program, take the information from your recent report to figure that year’s average NMIOPFC for reference. How does this number compare to your last year’s performance, your last month, your last quarter, or what you were doing before you made a change in your feed program?



You can also compare your NMIOFPC to other farms. The following chart shows a breakdown of NMIOFPC for 167 dairy farms in New York State that participated in the DFBS program in 2004. The chart is organized by deciles (tenths), with the top line representing the average NMIOFPC of the lowest decile and the bottom representing the average of the top decile. Where do you fit?

### Understanding Management Effects

Change in NMIOFPC is an indication primarily that one or more of the following has changed:

- Milk production per cow
- Milk component profile
- Total grain fed per cow
- Price of milk components
- Price of purchased concentrate

The first three of these are generally within control of management, while there may be little or no control

of price factors. So, while doing the calculation described above gives you a bottom-line idea of how your feeding program is performing, understanding how your management (e.g., a change to the ration) affects this number is better accomplished by calculating NMIOFPC with a fixed price for milk components, PPD, and marketing values. This calculation takes more time because it requires you break out your milk check into parts. (More on this in the August issue of the Lewis County Ag Digest).

### Summary

Now is a great time to reflect on the first half of 2005. Is your business headed in the right direction? Is your feeding program working for you? A quick look at the trend in NMIOFPC or a comparison to other dairy businesses can indicate whether you should investigate further.

#### Net Milk Income over Purchased Grain and Concentrates

167 DFBS Farms, New York State, 2004  
Sorted by 10% Increments

\$1,395	(lowest 10%)
\$1,780	
\$2,033	
\$2,249	
\$2,355	
\$2,447	
\$2,528	
\$2,660	
\$2,787	
\$3,094	(highest 10%)