

# Mastitis Mumbo Jumbo Cleared Up

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Mastitis, infection/infectious, acute, clinical, subclinical, contagious, environmental, cell counts, and bacteria: these are terms often used when talking about udder problems that can cause some confusion when used incorrectly.

Germs that cause mastitis are considered infectious bacteria.

## Average Farm Feed Costs For Handy Reference

To help farmers across the state to have handy reference of commodity input costs in their feeding operations for DHIA record sheets or to develop livestock feed cost data, here's this week's average costs of various ingredients as compiled from regional reports across the state of Pennsylvania. Remember these are averages so you will need to adjust your figures up or down according to your location and the quality of your crop.

Corn, No. 2y - 2.37 BU. 4.24 CWT.

Wheat, No. 2 - 2.61 BU. 4.36 CWT.

Barley, No. 3 - 2.01 BU. 4.30 CWT.

Oats, No. 2 - 1.36 BU. 4.24 CWT.

Soybeans, No. 1 - 5.37 BU. 8.97 CWT.

New Ear Corn - 55.48 BU. 2.77 CWT.

Old Ear Corn - 71.79 BU. 3.59 CWT.

Alfalfa Hay - 110.00 BU. 5.50 CWT.

Mixed Hay - 91.00 BU. 4.55 CWT.

Timothy Hay - 93.00 BU. 4.65 CWT.



Some have a greater ability to cause illness than others and are terms highly infectious, others are mildly infectious, and a few are opportunistic bacteria which rarely cause an infection.

Mastitis is confirmed by testing for the presence of bacteria in the udder. Bacteria are found in the udder by taking less than a drop of cow's milk and incubating it onto a media made from blood and agar for 48 hrs. Growth of bacteria indicate that the cow has bacteria in her udder, is infected, and the udder infection is called mastitis.

Strep. ag is considered highly infectious. Pseudomonas is rarely found and is considered poorly infectious.

In a similar fashion, dairy plants place small amounts of bulk tank milk on special media, incubate the plates, and then count the number of bacteria. These are called standard plate counts or cell counts and refer to the number of bacteria present in bulk tank milk.

The quality of milk handling and storage conditions are measured this way and for the most part are unrelated to mastitis.

These bacteria counts are unrelated to somatic cell counts but the two counts are often confused because they both use the unit cell count/ml.

Somatic cells are mostly white blood cells from the cows' blood that are sent to the milk to fight infections. Bacterial infections of

the udder cause large numbers of white blood cells to enter the milk in the udder and in turn raise the somatic cell count of milk. The more toxic the infection or the more numerous the bacteria the higher the cell count.

Contagious mastitis is represented by Strep ag. and Staph. aureus which are spread from infected cows by milkers' hands, wash cloths, milking equipment

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## National DHIA Adopts Position

COLUMBUS, Ohio — "National DHIA recognizes that inequities exist in the present funding of DHIA data collection," says J. Robert Kindig, president.

"In order for DHIA to remain current with rapidly advancing technology, it is necessary for allied industry to recognize the value of these data," adds Kindig.

At an early December meeting the National DHIA Board adopted the following position statement:

"Sufficient additional income must be generated to equitably

compensate for the cost of collecting DHIA data and for research, development and education to improve the usefulness of management information for the producer and the dairy industry."

The National DHIA Board believes these issues can be approached with a true cooperative spirit and resolved through successful negotiations. A National DHIA committee has been appointed to negotiate the value of DHIA data with primary users in allied industry.

## How Does Your Herd Compare?

STATE COLLEGE (Centre Co.) — This data is pulled from Pennsylvania DHIA's mainframe computer each week. It is a one-week summary representing approximately one-fourth of the herds on test, as they are tested monthly.

These data are valuable from a business management standpoint and can be used for comparing your operations to the averages from almost 1,400 herds across the state.

DHIA Averages for all herds processed between 12/03/90 and 12/10/90

|                              |        |
|------------------------------|--------|
| Number of Herds Processed    | 1,480  |
| Number of Cows Processed     | 83,074 |
| Number of Cows Per Herd      | 56.1   |
| Milk Per Cow (Lbs)           | 17,133 |
| %-Fat                        | 3.66   |
| Fat Per Cow (Lbs)            | 628    |
| %-Protein                    | 3.19   |
| Protein Per Cow (Lbs)        | 547    |
| Average Days in Milk Per Cow | 315    |
| *Value for CWT Milk(\$)      | 14.73  |
| *Value for CWT Grain(\$)     | 8.04   |
| *Value for CWT Hay(\$)       | 4.37   |

|                                       |         |
|---------------------------------------|---------|
| *Value for CWT Silage(\$)             | 1.52    |
| *Value for Pasture Per Day(\$)        | .30     |
| *Value for Milk Per Cow Per Year(\$)  | 2,524   |
| *Feed Consumed Per Cow Per Year(Lbs)  |         |
| A: Grain                              | 6,812   |
| B: Hay                                | 2,645   |
| C: Silage                             | 14,688  |
| D: Day Pasture                        | 68      |
| *Feed Cost Per Cow Per Year(\$)       |         |
| A: Grain                              | 548     |
| B: Hay                                | 115     |
| C: Silage                             | 224     |
| D: Pasture                            | 21      |
| *Total Feed Cost Per Cow Per Year(\$) | 909     |
| *Income Over Feed Costs Per Year(\$)  | 1,614   |
| *Grain to Milk Ratio                  | 1:2.5   |
| *Feed Cost Per CWT Milk(\$)           | 5.31    |
| Avg Level For 1,222 SCC Herds         | 325,223 |
| *Member generated figures             |         |

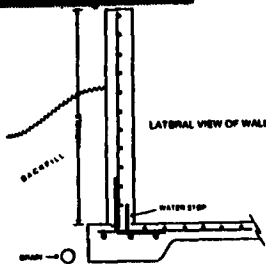
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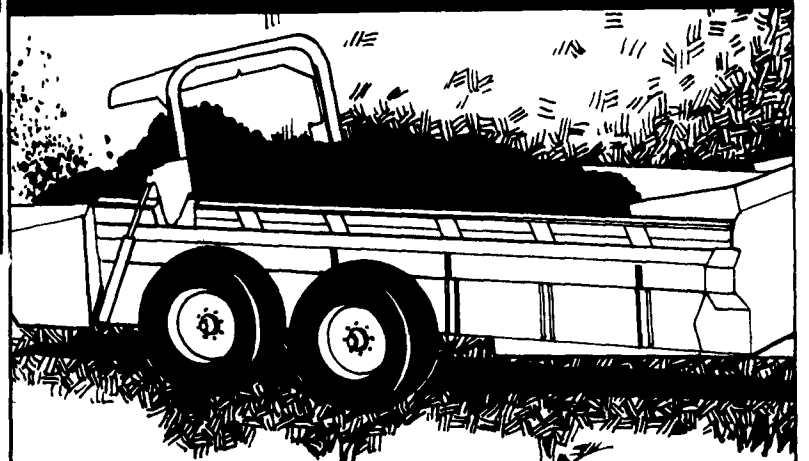


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