

# DAIRY RATION **R**

## *Output Interpretation and Adjusted Analysis*

Michigan State University • Cooperative Extension Service  
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Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Date \_\_\_\_\_

### **I Information Base:**

Ration: \_\_\_\_\_ based on the following information:

Animals:                      Lot No. \_\_\_\_\_

    milking cows \_\_\_\_\_      dry cows \_\_\_\_\_

    heifers \_\_\_\_\_      dairy steers \_\_\_\_\_

Average weight: \_\_\_\_\_

Average production: \_\_\_\_\_

Average butterfat test: \_\_\_\_\_

Expected daily gain: \_\_\_\_\_



# *Explanation*

## **Section I. Information Base**

This section contains an identification of the ration and indicates for which class of animals the ration has been balanced. This section also includes other information about the animals such as weight, production, etc. This information should help you more accurately feed your animals, realizing that animals that are larger or higher producers than the average may require more than the recommended amount of feed.

## **Section II. Limitation and Special Requirements**

This section contains the limitations which were imposed on the computer when the ration was balanced. These include, as you suggested: amount of hay, silage, or proportions of ingredients that you prefer to feed. It is important to realize that too many limitations may not allow the computer to achieve a ration that is truly a least-cost combination of ingredients.

## **Section III. Feed Prices**

This section contains the complete list of feed ingredients you wanted considered in your ration formulation. The center column is the price per cwt. entered into the computer as the cost of that ingredient. The "Use more" column is the break-even price at which more of that ingredient would be used in the ration. If this blank contains all 9s, this indicates the maximum allowable amount is being used and no more would be used at any price. The "Use less" column contains the break-even price at which less of that ingredient would be used. If the ingredient is not used in the ration, a "Use less" price will not appear, as this would be meaningless. It must be realized that the price of each ingredient affects not only its own break-even price but may also affect the

break-even prices of several other ingredients. As feed ingredient prices shift, new ration formulations should be made to maintain a least-cost combination of ingredients.

## **Section IV. Recommended Ration**

This section is broken down into three subsections. All, only two, or just one may be used, depending on your individual feeding situation. All the feed ingredients included in the balanced ration by the computer are listed. The amounts of the feed ingredients included in each batch and the pounds of feed fed per head per day are also included. The subsection entitled "Feeds Fed Separately" is used for items such as hay, silage, high-moisture corn, top dressings, free-choice minerals, etc.

## **Section V. Intake Information**

This section contains information about daily intakes of various ration components. Also included here are the pounds of additional concentrate which should be given to a cow for each additional 10 pounds of milk she produces over the amount for which the ration was balanced. It must be realized that the additional 10 pounds of milk must come first; due to the genetic dependence of milk production, feeding the extra concentrate first will not cause a 10-pound increase in milk production.

## **Note**

Vitamins A, D and E are not included in the computer formulation because sufficient information on the vitamin content of feeds is not available. Most commercial supplements contain adequate vitamins, or pre-mixes are available. Trace mineral requirements are normally met by using trace-mineralized salt, or mineral and protein supplements.

**VI Current Ration Evaluation** (only upon request)

Cost per Head/day

Deviations from recommended dry matter and nutrients:

Dry matter/feed/day, lb. \_\_\_\_\_

Estimated net energy, MCal \_\_\_\_\_

Protein, lb. \_\_\_\_\_

Calcium, grams \_\_\_\_\_

Phosphorus, grams \_\_\_\_\_

Fiber, % \_\_\_\_\_

***COMMENTS:***

FARM

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