

## DAIRY Feed Management Plan Checklist

Feeding management is one of six components of a Comprehensive Nutrient Management Plan (CNMP) as defined by the Natural Resource Conservation Service. Feeding management as part of a CNMP should be viewed as a “consideration” but not a “requirement” as some practices will not be economical on some dairies.

Field specific resource concerns that may be impacted by feed management (but not limited too) are soil and water quality. For example, nutrients may build-up in the soil or leach into ground water due to manure application. Feed management practices with or without several other practices may reduce the volume and nutrient content of manure. The Opportunity Checklist identifies key practices such as precision feeding that could significantly impact whole farm nutrient management. If opportunities exist for Feed Management to address resource concerns such as soil or water quality, then a Feed Management Plan (FMP) should be considered and the FMP checklist completed.

### Feed Management Plan Checklist

The following checklist is designed to assist Dairy Operators and their nutrient management advisor to determine feeding management factors that affect nutrient management. The checklist is meant to be used as an *on-farm* assessment tool. The factors contained in this assessment can be used as a guide to document and identify feeding management practices that will impact whole farm nutrient management. This document can be used as part of the FMP.

To use this checklist, each practice should be discussed with the operator: Are they already implementing the practice? If Yes, indicate so and skip to the next question. If No, discuss whether or not the practice could be implemented and consider the economic implications. The ‘Benefit to the Environment’ column provides the possible impact the practice could have on whole farm nutrient management. It is meant to be informative and should not be answered for each farm.

Dairy Name \_\_\_\_\_

Date Completed \_\_\_\_\_

Producer Signature \_\_\_\_\_

Adviser Signature \_\_\_\_\_

On the following pages is a list of feeding management practices that can affect nutrient balance. Please read through each feeding management consideration and record your answer.

### Feed Management Plan Checklist

Feed Management Considerations	Is it already implemented?	Was it considered?		Will it be economical?		Will it be implemented?		Will it be considered in the future?		Benefit to environment
		Yes	No	Yes	No	Yes	No	Yes	No	
<b>Targeting Nutrient Requirements</b>										
Formulate multiple rations to meet nutrient requirements of cattle (high producing, low producing lactating, dry, multiple heifer groups)										N, NH3, P
Analyze CP/ RUP/ RDP content of ingredients or ration										N, NH3
Analyze P and K content of ingredients or rations										P
Determine dry matter intake										N, NH3, P

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<b>Ration Balancing</b>										
Reformulate rations routinely for the following:										
a) Forage quality (NDF, ADF, CP, P, starch, DM)										N, NH3, P
b) Changes in ration feedstuffs										N, NH3, P
c) Dry matter content of ingredients										N, NH3, P
d) Formulate for positive or negative DCAD rations (Na, K, Cl, and S)										K
e) Balance rations using either rumen degradable protein or amino acid content										N, NH3

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<b>Ration Management Practices</b>										
Are employees trained in feeding practices?										
Feed for limited feed refusal in lactating ration										N, NH3, P
Use TMRs										N, NH3, P
Evaluate particle size of TMR using Penn State TMR Particle Separator regularly										
Follow manufacturer's/nutritionist's suggested order of loading feeds in mixer										N, NH3, P
Use computer grain feeders										
Monitor loading and scale accuracy										N, NH3, P
Clean feedbunks at least 3x/ week										
Clean water troughs at least weekly										

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		Yes	No	Yes	No	Yes	No	Yes	No	
<b>Production Aids/Enhancers</b>										
Direct fed microbials/yeast										
Ionophores										
rBST										
<b>Monitoring Tools</b>										
Use Milk Urea Nitrogen (MUN) to assess nitrogen utilization										N, NH3
Monitor N intake/N in milk										N, NH3
Monitor water quality for minerals and nitrates										
Estimate P balance (Does milk P = Feed P import?)										P
Monitor feed efficiency (lbs milk / lbs DMI)										N, NH3, P
Feed Mgt tracking software										
Milk 2006										

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		Yes	No	Yes	No	Yes	No	Yes	No	
<b>Forage Management Practices</b>										
Maximize the amount of home grown OR locally sourced feeds in ration										
Maximize quality of home grown forages (CP, NDF, NDF digestibility, lignin, starch) by adopting the following practices:										
a) Harvest crop when nutrients such as protein (grass/legume) or starch (corn) are high and fiber is low										
b) Pack silage tightly, cover quickly, and use a proven silage additive										
c) Store different quality forages separately to match nutrient level of forages to nutrient requirement of animal										
d) Mechanically process corn silage										
e) Analyze all silages for fermentation profile, fiber digestibility, and particle size										

Information contained in this checklist assessment was developed  
by: \_\_\_\_\_

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The suggested feeding management practices were the best management  
practices based on research and professional judgment.

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