

# Profitability and Income Over Feed Cost



2009 Bucknell Nutrition Conference  
Dr Tim Snyder



**RENAISSANCE NUTRITION, INC.**

# Good News !!

## **The world grows thirstier for milk**

By Dairy Herd news source | Friday, June 12, 2009

- Global consumption of milk and other liquid dairy products is expected to increase by a compound annual growth rate of 2.2 percent over the next three years.
- 2008 global consumption of liquid dairy products reached a record high of 258 billion liters; a worldwide increase of 1.6 percent over 2007

# Good News !!

## **Ice cream sales stay strong**

Dairy Herd news source | Friday, June 12, 2009

- Good news for June dairy month – ice cream sales are up as much as 20 percent in some areas; a comfort food in tough economic times.

## ***Skim milk compared with a fruit drink reduces appetite and energy intake in those overweight***

*Am J Clin Nutr* June 2009.

- Participants consumed significantly less energy at lunch after consuming skim milk than after consuming a fruit drink

# Good News !!

## **Vilsack promises help for dairy farmers**

By Dairy Herd news | Monday, July 06, 2009

- U.S. Agriculture Secretary Tom Vilsack said he expects an announcement in the next week or so about efforts to help dairy farmers take out lower-interest loans, reduce the principle of existing loans or temporarily forego payments.

# Good News !!

As seen in



**AMERICA'S DAIRY FARMERS:**

## Investing In America's Future

**Investing in Our Children**...over the next five years, dairy farmers will invest over \$250 million in a major school initiative to help fight childhood obesity in schools.

**Investing in Our Community**...the 56,000 dairy farm families and processors generate billions of dollars in economic benefits to local communities.

**Investing in Our Environment**...in the past sixty years, dairy farmers have reduced their carbon emissions by 63%; the equivalent of taking 32 million cars off the road!

**June is Dairy Month**...dairy foods, like milk, cheese, and yogurt, are naturally nutrient-rich, providing important nutrients such as protein, vitamin D, potassium and calcium to the diet. Compare the cost per nutrient of dairy products to other food and beverages; you'll see the enormous value they provide.

\*Research conducted by Cornell University  
(Judith L. Gepper, Esridise Castaneda-Gutierrez, Roger A. Coody, and Dale E. Bauman, Journal of Animal Science, March 2009)



<http://www.cwt.coop/>

2<sup>nd</sup> Round Bids Due July 24th

Good News

!?!



Dairy farmers turning

**DIMES INTO DOLLARS**

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### Latest News

[2009-2 Herd Retirement Brochure](#)



[2009-2 Herd Retirement Bid Form](#)



[2009-2 Herd Retirement Bid Calculator](#)

[2009-2 Herd Retirement Process](#)



[2009-2 Herd Retirement FAQs](#)

[Bred Heifer Bid Form](#)



[Bred Heifer Option Process](#)



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### NCES SECOND HERD RETIREMENT OF 2009



[LATEST HERD RETIREMENT ROUND, REMOVES 101,000 COWS in CWT Spring 2009-1 Herd Retirement](#)



### **Farms Accepted in CWT Spring 2009-1 Herd Retirement**



# FRIDAY FACTS

## Positive Signs For Milk Price

We are all looking for some positive signs on the milk price. This week, the block price rose \$.055. It was the first significant movement upward in a long time. The futures market for 2010 rose this week, which is another positive sign. California seems to be having a serious milk production decline that will eventually affect cheese and powder production. While it is too soon to tell if this upward trend has begun in earnest or if this is just a blip, we welcome any positive news.

## CME Class III Futures Price Settlement

Delivery	07/17/09	07/10/09
July	\$10.00	\$9.88
August	\$10.52	\$10.35
September	\$11.65	\$11.17
October	\$12.46	\$12.03
November	\$13.42	\$12.94
December	\$13.98	\$13.35
January	\$14.25	\$13.80
February	\$14.49	\$14.03



July 17, 2009

Vol. 14 | No. 29

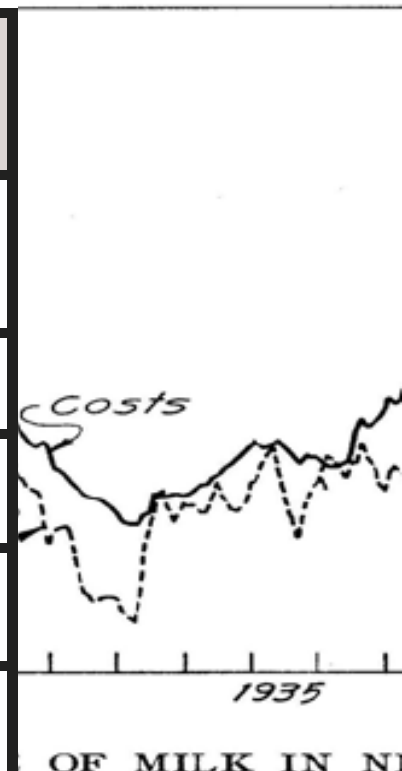
Commodity	1 year ago	6 months ago	1 month ago
Commodity			
Corn Meal	- 105	- 10	- 13
Soybean Meal	- 45	+ 62	- 56
Canola Meal	- 43	- 33	- 93
Whole Cottonseed	- 215	+ 2	- 7

# Topics

- Monitor milk and commodity price trends
- Develop Cost of Production information
- Take opportunities to manage risk
- Using economics in his language, review rations to meet producer goals for profit
- Make best use of farm feedstuffs; improve forage varieties, management, storage
- Optimize feeding management
- Evaluate other management practices to remove bottlenecks

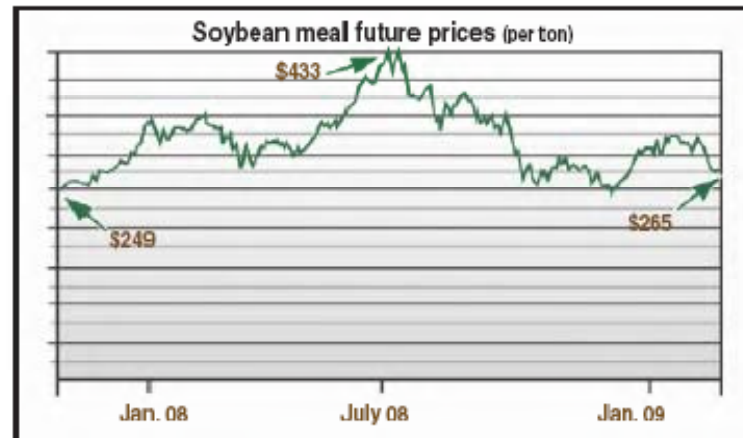
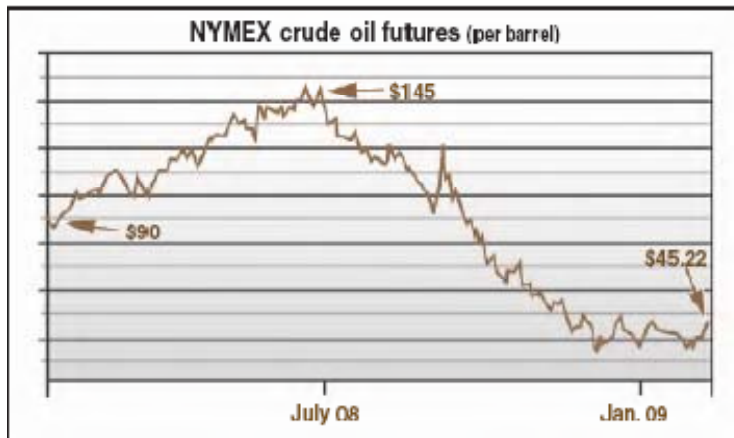
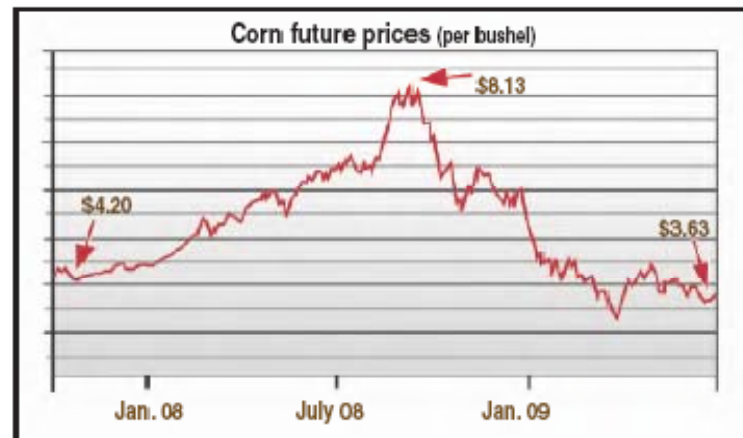
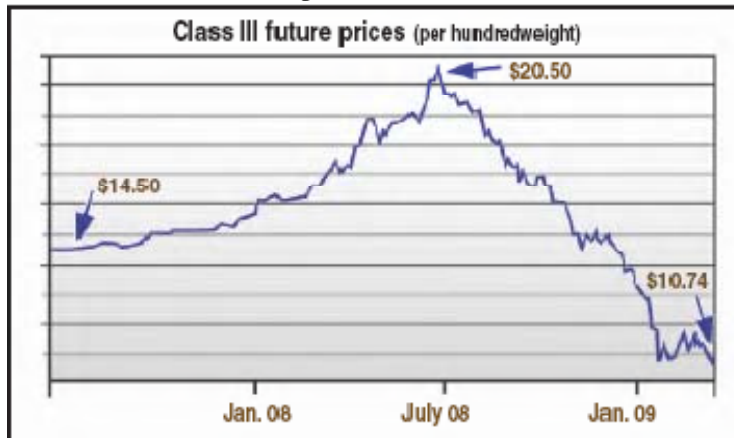
C.L. Peck wrote in his book Profitable Dairying, “The last two decades have witnessed greater changes and more material improvements than any previous century”. Nine years earlier, Jacob Biggle wrote, “The dairy business is undergoing rapid changes the world over; nowhere more rapidly than in America”.

YEAR	Farm milk price average	Average cost of production
Mid-1865	3.26	N/A
1914	1.60	1.72
1919	3.53	2.90
1920	2.90	3.48
1932	1.68	2.11



# Volatility

Hoard's Apr 2009

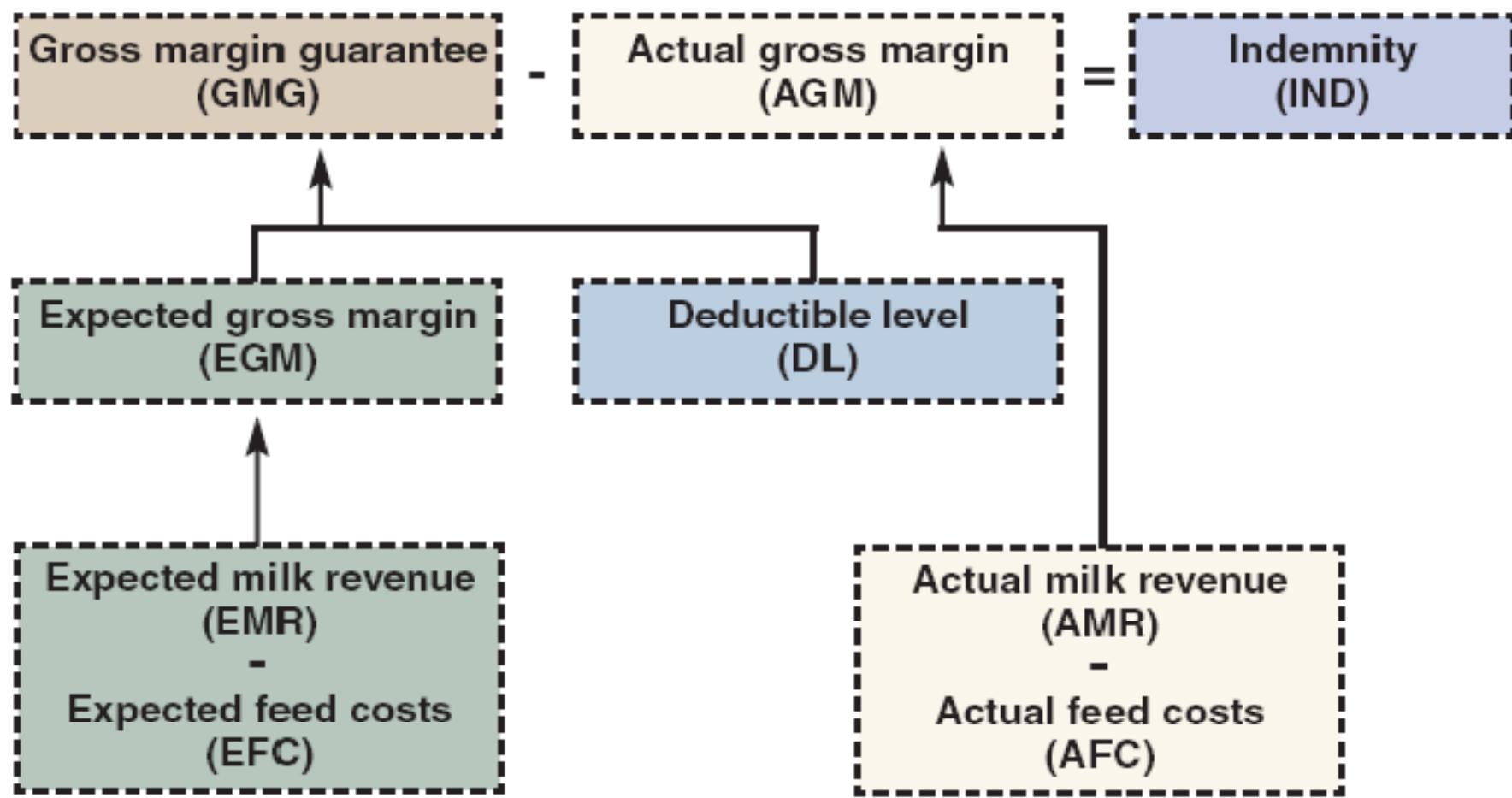


- Be realistic, don't expect to lock in milk highs & feed lows.
- Protect yourself both on the milk side and the input side.
- Don't expect to make a killing.
- Strive for a margin that you can live with.

# Milk price insurance is here

Hoard's May 25, 2009

LGM- Dairy: How does it work?



May 28 2009  
Changes

<http://www.rma.usda.gov/>

# MILK CHECK OUTLOOK

by Carl Babler and Chris Atten

## Hoards June 2009

### There are ways to avoid milk price troughs

**Milk “Price Victim” Comments:**  
“Nothing we can do about it”,  
“Got to ride it out”, “Just got to cut costs.” A small, peculiar group of dairyman have decided to take action...

**Mathematical outcome for a dairyman who in June of 2008 protected one million pounds of monthly production with the purchase of \$16 Class III put options for the first four months of 2009**

Class III milk options 200,000 lbs. each	Premium 40 cents per cwt.	Announced price	Net option hedge gain/million lbs.
Bought 5 Jan. \$16 Puts	\$4,000/million lbs.	\$10.78	\$48,200
Bought 5 Feb. \$16 Puts	\$4,000/million lbs.	\$9.31	\$62,900
Bought 5 March \$16 Puts	\$4,000/million lbs.	\$10.44	\$51,600
Bought 5 April \$16 Puts	\$4,000/million lbs.	\$10.78	\$48,200
<b>Total</b>	<b>\$16,000</b>		<b>\$210,900</b>

**“every dairyman has the choice to manage their milk price risk or not. ....it is recommended that lenders, agribusinesses and producers move forward... implementing hedging tools, rather than lamenting low milk prices”**

Prudent risk management helped the producer avoid \$210,900 of damage at the low end of the milk price cycle.

# Watch your C.O.P. - in good times and bad

May 29th, 2009 Eastern Dairy Business

*By Mark Mapstone*

“Cost of production is the factor that determines farm level profit during high milk price periods.”

“It’s just as important during the good times as during the bad times.”

“As a farm business consultant, a cost of production focus **just** during low milk price frustrates me.”

## Farm Credit Northeast Dairy Farm Summary 2008

- Top 25% COP \$15.90/cwt.
- Bottom 25% COP \$21.35/cwt.
- Top 25% farm made \$223,817
- Bottom 25% farm lost \$106,753 (using the avg 227 cow dairy)

Name \_\_\_\_\_

Date \_\_\_\_\_

**Worksheet for Calculating Your  
Cost per cwt of Milk Produced**

Instructions for completing the worksheet are on the back.

One Year Ago _____	A
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**Penn State University**

**DairyCOP\$**



***Cost of Production System***

**Worksheet 1\***

**Historic and Projected Out-of-Pocket Cost of Production**

Records used for a sole proprietorship with most of the income coming from the dairy enterprise: Federal Income Tax Schedule F, Form 4797, year beginning and ending in cwt. of milk sold for the calendar year.

**Farm Calculation  
Using \_\_\_\_\_ Financials  
(year)**

Schedule F Expenses<sup>1</sup> \_\_\_\_\_



## A Summary of Strategies for Tight Milk Margins

Excerpts from 15 articles during 1<sup>st</sup> quarter 2009 – Dr. Tim Snyder

- “Most farms don’t fail because they don’t make enough when prices are good; they can’t handle prices that are too low.”
- “Think of forward contracting as a loss minimizing tool, not as a profit maximizing tool. Occasionally missing the peak is a fair price to pay for avoiding the deep valley.” Feb 2009 PSU Dairy Focus – Dickinson
- **“To stay in the dairy business, I must sell the cows NOW”.**

Middle aged Arizona dairyman, April 2009

## Center for Dairy Profitability

<http://cdp.wisc.edu/>

University of Wisconsin - Madison  
1675 Observatory Drive  
266 Animal Science Building  
Madison, WI 53706  
Phone: (608) 263-5665  
Fax: (608) 263-9412  
Email: [Dairyprofit](mailto:Dairyprofit)

[Budgets & Other Resources](#)

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# Good News !!



80% of farmers concerned about the economy use risk management tools

- 33% pre-sell, 26% hedge, 22% lock in margins, 10% other

# Risk Management Services Update

**Dairylea Cooperative Inc.**

**DAIRY FARMERS of AMERICA**

- Fire Insurance
- Crop Insurance
- Milk Price Insurance

Other Co-ops and dairy plants offer risk management also

## Fence Contract

January - June 2009

11/21/08

\$14.00 Floor

\$15.50 Ceiling

Total Cost

January - December 2009

\$14.50 Floor

\$16.00 Ceiling

## Fence Contract

June - December 2009

06/12/09

\$12.00 Floor

\$13.00 Ceiling

Total Cost

October - December 2009

\$13.00 Floor

\$15.50 Ceiling

# 2009 SUPPLY MANAGEMENT PROPOSALS

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## Dairy Price Stabilization Program

- HFA and USDA-FSA - set allowable milk marketings, if exceeded, pay \$2 - \$3 /cwt on all milk into pool

## Enhanced Demand Price Stability

- Long term market contracts

## Dairy Pricing Association

- Farmer owned business that would buy excess milk, convert to powder for feeding programs

## Federal Milk Marketing Act 2009

- Base with lower price for excess, new producer exempt

# Earning and Keeping Customers - Understand their Budget

Clearly understand and use the producers **current** language – price/bag(ton); cost/hd; cost/CWT; Feed Efficiency - FE or Income Over Feed Cost - IOFC (purchased or total cost, market or input)  
--- If not, a competitor may use it against you;

**Be the one to offer the dairyman a choice**

Educate where/when possible on IOFC, FE, total cost/CWT of production, Marginal milk, Breakeven IOFC, forward pricing feed/milk, LGM – Dairy Ins.

Give more than one option when presenting solutions,

- 1) Invest in nutrition and get more milk (IOFC),
- 2) Cut price and keep same milk production,
- 3) Get buy-in from producer, monitor closely; recheck

# Renaissance IOFC Tool

## Winning Plays (examples only; use actual values)

1. Optimize ration with CPM, maintain production and components: Save \$.25 / hd / day
2. Increase RUP, AA, Sol Fiber, sugar and increase production/components; Invest \$.50 / hd / day
3. Sell 25 low producers, reduce overcrowding (gain SCC bonus?); no ration change, feed fewer cows

### Scenarios reflecting changes in milk production, components, cows and feed costs

	Scenario 1	Scenario 2	Scenario 3
Herd Change in I O F C, daily	\$125.00	\$97.18	\$97.68
Herd Change in I O F C, yearly	\$45,625.00	\$35,470.70	\$35,653.33
Predicted average milk	70 lbs.	75 lbs.	73 lbs.
Predicted average milk fat	3.8 %	3.9 %	3.8 %
Predicted average protein	3.1 %	3.1 %	3.1 %
Predicted other solids	5.7	5.7	5.7
Calculated milk income/cow	\$8.58	\$9.27	\$8.94
Price \$/CWT	\$12.25	\$12.36	\$12.25
Number of milking Cows	500	500	475
Daily gross milk income	\$4,288.27	\$4,635.45	\$4,248.45
Estimated new daily feed costs/cow	\$5.25	\$6.00	\$5.50
Predicted daily gross feed costs	\$2,625.00	\$3,000.00	\$2,612.50

# Renaissance IOFC Tool

## Other Plays (examples only; use actual values)

1. Use more/better forage, harvest small grain, CS & haycrop right & feed more; Reduce cost (\$0.50) more than lost milk/components (\$0.25)
2. Use more/better forage, harvest right & feed more; Increase RUP, AA, Sol Fiber, sugar and increase production/components; Sell 25 low producers, buy 50 high producers (gain SCC bonus?);

Herd Change in IOFC, daily	\$25.48	\$516.66
Herd Change in IOFC, yearly	\$9,299.47	\$188,580.44
Predicted average milk	68 lbs.	75 lbs.
Predicted average milk fat	3.7 %	3.9 %
Predicted average protein	3 %	3.2 %
Predicted other solids	5.7	5.7
Calculated milk income/cow	\$8.13	\$9.41
Price \$/CWT	\$11.95	\$12.55
Number of milking Cows	500	525
Daily gross milk income	\$4,063.75	\$4,942.43
Estimated new daily feed costs/cow	\$5.00	\$5.50

# Calibrating / Optimizing CPM for Herds

## Guidelines 2009 (on Ren Website)

- Input Current Feed Amounts in Diet
- Confirm DMI - (predicted vs. actual vs. what is in the current diet)
- Evaluate peNDF, use more good forages
- Evaluate Corn & Forage CHO Rates
- Calibrate predicted ME & MP Milk to actual
- Evaluate protein efficiency / AA
- Optimize and Review
- Give more than 1 option !

# Feed/Forage Calibration – peNDF & rates (Kd)

Feed Name	Cost	DM	Date	
07 BMR Crn Silage	44.00	36.000	12-08-07	Forage

Kd Calculator for Avail NDF

Nutrient Fraction		%DM	%NDF	Rates	Intest Digest
				%/h	%Escape
ADF		24.700			
NDF		43.600			
peNDF		40.112	92.000		
Lignin		3.900	8.945		
ChoB3	Avail NDF	31.540	72.339	3.200	20.000
ChoC	Unavail NDF	9.360	21.468		
Ash		4.200			
Ether Extract		2.800			
			<u>%NFC</u>		
NFC		41.500			
ChoA1	Silage Acids	6.640	16.000	0.000	100.000
ChoA2	Sugar	1.300	3.133	300.000	100.000
ChoB1	Starch	31.800	76.627	10.000	60.000
ChoB2	Soluble Fiber	1.760	4.241	10.000	60.000

Renaissance peNDF Estimator Spreadsheet

**PSU box Targets & peNDF est.**  
 Enter type and amounts on screens

3	1 =TMR 2 =Haylage 3 =CS		
grams	%	Target	
20	11	3 to 8	Top
140	79	45 to 65	2nd
12	7	30 to 40	3rd
5	3	under 5	pan
177	100	Total	
94	% peNDF Corn Silage		
78	peNDFadj Corn Silage		
61	Sample % NDFD30hr		
51	CS Lab Avg %NDFD30hr		

Starch Kd rate changes

peNDF (%)	23	25	28
DMI peak	74	68	61

# Estimated Starch Ruminal Fermentability Rates

If Calibrated MP is low increase, if high decrease rate

Microns                    > 2,725                    2,725-800                    80% < 800

                                 Coarse                    Med                    Fine

*Moisture*

Fall/Winter    RATES

18%	10%	12%	14%
22%	12%	14%	16%
26%	14%	16%	18%
30%	18%	20%	22%

Spring/Summer

Color = kernel hardness: yellow = hard/vitreous, white = soft/floury

Gas Analysis; 6 Hr starch digestion;

Relative Grain Quality – RGQ this fall ?

# Review Fatty Acid Contributed by Feeds to the Total Ration on the “Fatty Acids Intake Tab”

**LACTATING: BW=1655 lb,Growth=0.16 lb/d,Milk=80.00 lb,Fat=3.80%,TP=3.15%**

CNCPS | Amino Acids | MinVit | Met E & P | P & E | Diet Summary | Prot Pools | Carb Pools | Carb Ferm | Bact Eval | Feeding Sheet | Batch Mix | kp

Fatty Acids | P & N Bal | RUP Dig

Intake  Lipolysed  Duodenal  Absorbed  Fecal  Digested  Summary

	Fatty Acids - Intake (g/d)										Total
	C12:0	C14:0	C16:0	C16:1	C18:0	C18:1T	C18:1C	C18:2	C18:3	Other	
CrnSilUp35Dm41NdfMed	0.59	0.90	34.44	0.70	4.68	0.01	37.16	92.23	15.93	6.56	193.20
MixSil18Cp48Ndf12LNdf	3.69	0.24	7.08	0.71	1.05	0.00	1.17	7.14	19.88	-1.13	39.84
CornGrainGrndMed	0.00	2.76	15.63	0.15	2.35	0.00	28.51	65.9	1.92	1.11	118.33
CitrusPulpDry	0.35	0.30	14.04	0.31	2.58	0.03	12.19	18.26	3.36	0.89	52.30
CanolaMealSolv	0.00	0.08	4.01	0.37	0.92	0.25	18.55	12.91	3.16	0.79	41.03
SoybeanML47.5Solv	0.00	0.29	6.01	0.00	1.55	0.15	4.60	18.85	2.93	0.42	34.80
SoybeanHullsGrnd	0.00	0.17	1.91	0.03	0.83	0.08	1.88	5.04	1.55	0.31	11.80
CottonseedWhlwLint	0.00	0.80	27.73	0.64	2.70	0.00	17.67	65.50	0.22	0.71	115.96
Grass Hay	0.03	0.00	0.71	0.00	0.09	0.00	0.95	2.36	0.24	0.35	4.73
BloodMeal	0.01	0.07	1.01	0.05	1.01	0.24	1.23	0.69	0.02	0.33	4.66
WheatMidids	0.00	0.01	1.79	0.01	0.12	0.00	1.86	6.06	0.49	0.14	10.49
SoybeanRldRst	0.00	0.05	4.97	0.03	1.81	0.00	9.93	22.05	2.94	0.33	42.11
Megalac	0.26	2.11	67.08	0.00	5.41	0.00	47.14	9.24	0.26	0.53	132.05
Ration	4.93	7.76	186.42	3.00	25.11	0.76	182.83	326.24	52.91	11.33	801.30

**Total RUFAL < 650; < 550 ??**      +      +      +      +      +      = 607

**C18:1 < 200; < 150 ??**

# Calibrating Lactation Protein Metabolic Efficiency based on calculated Protein (N) Efficiency

Click on CPM Constants Icon – use caution  
click reset if unsure of changes

**Constants**

Reset

Bacterial Growth | Bacterial Digestibility | Bacterial Composition | **Metabolic Efficiency** | Amino Acid Co

Parameter	Value
Maintenance Protein:	67.00
Maintenance Energy:	65.00
Lactation Protein:	65.00
Lactation Energy:	64.40
Growth Protein:	33.24
Growth Energy:	40.00
Pregnancy Protein:	33.00
Pregnancy Energy:	14.00
TDNFat:	2.25

Std default value

**LACTATING: BW=163**

Fatty Acids

CNCPS | Amino Acids | MinVit

Cost (\$)	6.45
DMI (lb/d)	60.0
ME Bal (mCal)	0.1
MP Bal (g)	-7.9
NP / MP (%)	67.2
BactMP (% MP)	51.1

Suggested Value

# AA Formulation with Protein Efficiency

Lactation Protein Metabolic Efficiency	0.64	0.67	0.685	0.70
Lysine/Methionine	6.2/2.15	6.5/2.25	6.7/2.27	6.8/2.35
Lysine, % MP	85	89	91	93
Methionine, % MP	86	90	92	94

At higher efficiencies keep Lysine higher; start at lower Methionine and increase while monitoring milk protein % for cost effectiveness.

Contact the Renaissance Help Desk to discuss this concept further if you want to try it on herds

# IOFC on CPM

Enter production & price to reflect current and/or predicted performance

Lower of ME & MPmilk must = milk entered, DMI must be accurate for the IOFC to be valid

Milk	
Production:	85.00
Price:	0.150
Fat:	3.80
Days In Milk:	180
Crude Protein:	<input type="checkbox"/> 3.39
True Protein:	<input checked="" type="checkbox"/> 3.15

Accurate Feed prices needed; Milk price must reflect actual components

CNCPS		Amino Acids	MinVit	Met E & P	P & E	Diet Summary	Prot Pools	Carb Pools	Carb Ferm
Cost (\$)	4.39	IOF (\$)	8.36						
DMI (lb/d)	53.0	Model	56.0	% Model	94.6				
ME Bal (mCal)	0.0	CP (%)	16.8	NDF (%)	35.4				
MP Bal (g)	1.5	RUP (% CP)	38.7	ForageNDF (% NDF)	61.7				
NP / MP (%)	64.9	LCFA (%)	3.5	ForageNDF (% DM)	21.8				
BactMP (% MP)	53.6	EE (%)	4.4	peNDF (%)	23.0				
Rumen N Balance				Lignin (%)	2.6				
Pept (g)	17	Pept & NH3 (g)	78	NFC (%)	39.9				
% rqd	108	% rqd	120	Sil Acids (%)	3.6				
Amino Acid Balance				Sugar (%)	5.0				
Met (g)	8.0	Lys (g)	31.4	Starch (%)	24.0				
Met (% rqd)	116	Lys (% rqd)	120	Sol Fiber (%)	7.3				
Met (% mp)	2.10	Lys (% mp)	7.04	Lys:Met	3.35:1				
Possible production due to ME and MP									
	Milk(lb)	Fat (%)	TP (%)	Milk(lb)	Fat (%)	TP (%)			
Trg:	85.0	3.80	3.15	85.0	3.80	3.15			
	Yield Constant			Composition Constant					
ME:	85.0	n/a	n/a	85.0	3.80	n/a			
MP:	85.0	n/a	3.15	85.1	3.80	3.15			
Adjustments based on Rulauin AA Ratios:									



# Can you still afford a one-group TMR?

Today's cost-price situation may trump the simplicity and convenience of having one mix.

by Michael F. Hutjens

Hoard's June 2009

- The 80-pound TMR costs \$6.15 per cow per day with 51.9 pounds of dry matter consumed at 11.8 cents per pound of dry matter.

- The 60-pound TMR costs \$4.90 per cow per day with 45.2 pounds of dry matter consumed at 10.8 cents per pound of dry matter.

The price difference between the two rations was \$1.25 per cow per day. However, the low-producing group consumed 6.7 pounds less dry matter compared to the high group valued at 11.8 cents per pound or 74 cents lower feed cost. When correcting for the lower dry matter consumption, the potential difference is **51 cents per cow per**

## Grouping strategy selected

First-lactation cows and older cows  
High-producing and low-producing cows

BSC (cows over 3.5 and cows under 3.5)

Open cows, breeding pen, and/or pregnant cows

Low SCC and high SCC group/staph group

Expensive feed additives

Herds average 25 percent above state average

Herds experiencing metabolic disorders

Herd averaging over 225 days in milk

## Ration strategy

One ration

Multiple rations

Multiple rations

One ration

One ration

Multiple rations

One ration

Multiple rations

Multiple rations

## How high- and low-group cows differ

	High cows	Low cows
<b>Metabolic status</b>		
Dry matter intake limitations	Gut fill	Ration fermentability
Glucose needs	Higher	Low
Insulin sensitivity	Low	High
Natural BST levels	High	Low
<b>Ration adjustments</b>		
Forage to grain ratio	Higher grain	Higher forage
Forage NDFD (quality)	Higher	Lower
Starch fermentation in the rumen	Higher	Moderate
Added fat/oil	Higher	Lower
Use of by-product feeds	Less	Higher

Source: Michigan State University.

# Social effect of group change

- Milk production dropped 1.8 #/d during the 3 days following group change, more marked in heifers than cows. --- If animals change pens in groups of 3 or more, affect is short & small

ADSA Abstracts

July 2009 Bach

- Drop 8# for 3 days then return to normal; or Drop 2 # for a week Hutjens Hoard's June 2009
- Behavior of singly moved heifers differed more than if introduced in pairs

App An Behavior 2009 Gygax et al

- Grant (Miner) collecting more on-farm data

# Recommendation for Fresh Cows

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- **Slow to moderately fermentable starch**
- **Forage fiber with long ruminal retention time**
- **Watch the fat- especially unsaturated fat**
- **Can switch to peak-lactation diet when intake is increasing**

# Recommendation for Peak

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- **Low fill- higher fermentable diet**
  - **Intake primarily limited by fill**
- **Respond well to higher fermentable diets**
  - **BMR corn silage**
  - **Lower forage diets**
  - **Higher starch fermentability**

**Can invest when it will provide a return**

# Recommendation for Lower Producing

- **Avoid high fermentability grain and forage**
- **Glucose responsive and insulin sensitive**
  - **Results in increased BCS and weight gain**
- **Meet energy demand with lower cost ration**
  - **Higher forage**
  - **Lower fermentability feedstuffs**
  - **Traditional hybrids**



# **AgSource**

## *Cooperative Services*

*A subsidiary of Cooperative Resources International*

**<http://agsource.crinet.com/>**

## **Profit Opportunity Analyzer<sup>®</sup>**

**Prepared especially for  
Example Dairy**

**The Profit Opportunity Analyzer identifies the areas where your time and management focus will generate the most revenue and profit.**


**The following areas are analyzed:**

- Turnover management**
- Milking herd reproductive management**
- Heifers age at first calving management**
- Udder health management**
- Transition cow management**
- Genetics management**
- Production management**

# Performance and Economics Tools

A number of spreadsheets are available from the Nutrition Help Desk to troubleshoot evaluate and opportunities.

**Training will be ongoing.**

ECONOMIC ANALYSIS OF HERD PERFORMANCE FACTORS FROM DHIA INFORMATION					
Enter Name	Milk Price==>	\$14.00	20-Dec-99		
Enter Your Option ==>	2	HERD AVERAGE	ECONOMIC FACTOR	ECONOMIC LOSS PER COW PER YEAR	
<b>MILK/COW/DAY</b>					
PEAK MILK - 3 <sup>rd</sup> + LACT	95	88	\$31.50	\$225.02	
PEAK MILK - 2 <sup>nd</sup> LACT	95	85	\$31.50	\$319.52	
PEAK MILK - HEIFERS	74	68	\$38.50	\$239.15	
<b>REPRO</b>					
AVERAGE DIM	185	205	\$7.38	\$147.68	
PREGNANCY RATE	18.0%	14.0%	\$6.00	\$24.00	
<b>UDDER HEALTH</b>					
MASTITIS (% ≤ LS 5.0)	75%	68%	\$4.15	\$29.05	
<b>COW MANAGEMENT</b>					
CULL RATE	33.0%	38.0%	\$1,300.00	\$65.00	
<b>REPLACEMENTS</b>					
AGE @ 1st CALVING	25.00	28.00	\$55.50	\$166.50	
 <p>CHOOSE THE 2 CATEGORIES THAT PRESENT THE GREATEST OPPORTUNITY FOR IMPROVEMENT OF INCOME AND WORK TO IMPROVE YOUR MANAGEMENT OF THOSE AREAS.</p>		# COWS	100	<b>LOST INCOME</b> <b>LOSS (25 yrs)</b>	
				% Herd	
		PEAK MILK - 3rd+ LACT	35%	\$7,876	\$196,888
		PEAK MILK - 2nd LACT	28%	\$8,946	\$223,661
		PEAK MILK - HEIFERS	37%	\$8,849	\$221,218
		AVERAGE DIM		\$14,768	\$369,198
		PREGNANCY RATES		\$2,400	\$60,000
		MASTITIS (% < LS 5.0)		\$2,905	\$72,625
		CULL RATE		\$6,500	\$162,500
		AGE @ 1st CALVING		\$16,650	\$416,250
		Production		\$25,671	\$641,766
		Repro		\$17,168	\$429,198
		Udder Health		\$2,905	\$72,625
		Cow Management		\$6,500	\$162,500
		Replacements		\$16,650	\$416,250
		<b>TOTAL</b>		<b>\$68,894</b>	<b>\$1,722,339</b>
Dry Cow (DC), Forage Quality (FQ), Nutrition (N), Cow Comfort (CC), Transition Cow (TC) Environment (Env), Milking Procedure (MP), Heat Detection (HD), Insemination Techniques (AI)					

# Summary

- Monitor milk and commodity price trends
- Develop Cost of Production information
- Take opportunities to manage risk
- Using economics in his language, review rations to meet producer goals for profit
- Make best use of farm feedstuffs, improve forage variety, management, storage
- Optimize feeding management
- Evaluate other management practices to remove bottlenecks