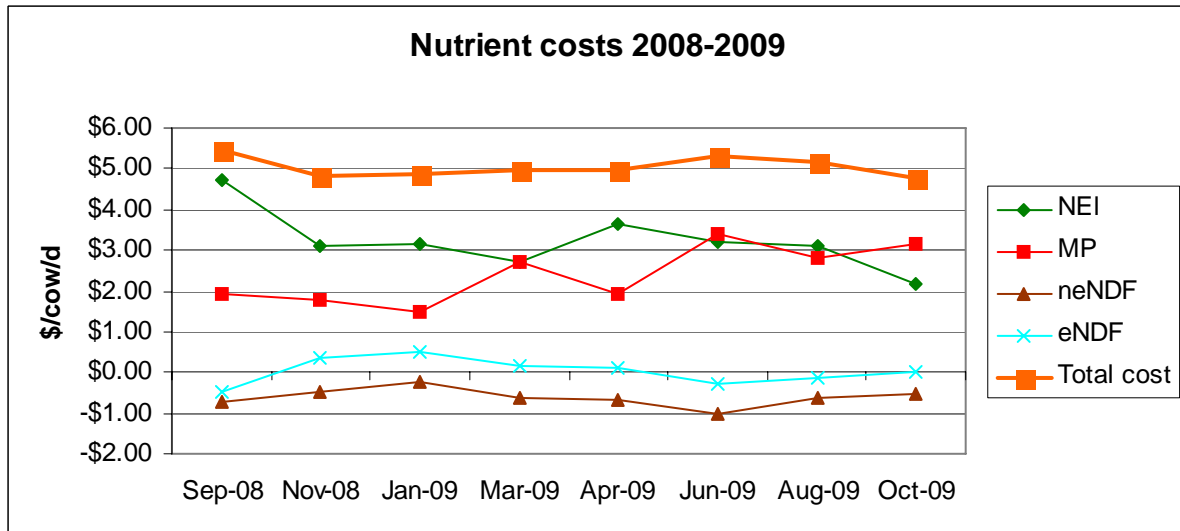


## The Good News: Feed Costs Have Declined Over The Past Year

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We've been tracking the cost of nutrients over the past three years, based on the estimates obtained from SesameIII predictions. Since last fall, the average cost of nutrients to feed a cow producing 75 lbs/day of milk has decreased 70¢/day (Figure 1). Energy prices have declined by more than 50%, but some of this has been counter-balanced by the large increases in protein prices. Currently, it costs more to deliver metabolizable protein (MP) to the cow than energy (Figure 1).

Figure 1. Predicted nutrient costs to feed a 1500 lb Holstein cow producing 75 lbs/day of milk with 3.80% fat and 3.10% true protein. While the cost of energy has decreased over the past year, the cost of metabolizable protein has increased by more than 50%.



While some of this increased MP cost is derived from RDP (rumen degradable protein), the price of digestible RUP (dRUP; RUP = rumen undegradable protein) makes a larger contribution (Table 1). Work with your nutritionist or feed company representative to ensure that you're getting the best quality (highly digestible and consistent) ingredients to provide RUP in your rations.

Table 1. Estimated price of protein fractions in 2008 and 2009.

Date	Jul-08	Sep-08	Nov-08	Jan-09	Mar-09	Apr-09	Jun-09	Aug-09	Oct-09	Average
RDP (\$/lb)	0.255	0.133	0.011	0.100	0.055	0.112	0.128	0.235	0.175	0.113
dRUP (\$/lb)	0.336	0.307	0.315	0.372	0.479	0.334	0.590	0.485	0.450	0.390

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The cost of the key nutrients was estimated using SesameIII software and break-even prices of commodities and forages used in dairy rations were predicted (Table 2). Net Energy of Lactation (NEL) is estimated at 4.8¢/Mcal, which is substantially lower than what we've seen during the past three years. Metabolizable Protein (MP) at 61¢/lb is the highest we've seen historically. The prices of corn gluten meal and hydrolyzed feather meal are heavily impacting this value, while blood meal currently is a good value in providing digestible RUP. Non-effective neutral detergent fiber (neNDF) and effective NDF (eNDF) are -6.9 and 5.3¢/lb, respectively, well within their normal ranges. It is common for neNDF to be negative, as feeds that have high levels of this nutrient, such as by-products like distillers' grains, corn gluten feed, etc., are discounted in the market relative to other feeds. Good- to high-quality, home-grown forages continue to be an excellent and inexpensive source of effective NDF.

Based on mid October wholesale prices for central Ohio, feed commodities fall into three groups:

Bargains	At Breakeven %	Overpriced
Brewers' grains, wet	Alfalfa hay, 44 NDF 20% CP	Canola meal
Corn grain, ground	Bakery byproduct	Cottonseed meal, 41% CP
Corn silage	Blood meal	Fish meal
Distillers' grains w/sol	Cottonseed, whole	Molasses
Expeller SBM	Feather meal	Soybean meal, 44% CP
Gluten feed	Gluten meal	Soyhulls
Meat and bone meal	Hominy	Tallow
Wheat midds	Soybeans, whole	
	Soybean meal, 48% CP	
	Wheat bran	

The usual caveats with SesameIII™ results apply. You cannot formulate a balanced diet using only the feeds in the Bargains column. These feeds represent savings opportunities and can be utilized in rations to reduce feed costs within limitations for providing a balanced nutrient supply to the dairy cow. Prices for commodities can vary because of quality differences as well as non-nutritional value added by some suppliers in the form of nutritional services, blending, terms of credit, etc. Feeds may also bring value to a ration in addition to their nutrient value, e.g. tallow as a "carrier" and dust suppressant in vitamin/mineral pre-mixes and molasses as a source of sugars.

The detailed results of the SesameIII™ analysis are given in Table 2. The lower and upper limits give the 75% confidence range for the predicted Break-Even prices. Feeds in the "Appraisal Set" are either those that were completely out of price range (outliers) or had unknown prices, such as the alfalfa hays of different nutritional quality.

Table 2. Prices of dairy nutrients, and actual wholesale, breakeven (predicted) and 75% confidence limits for feed commodities used on Ohio dairy farms.

Price Prediction Reliability	42.067
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<b>Estimate of Nutrient Unit Costs</b>	
Nutrient name	Estimate
NEI - 3X (2001)	0.048445 *
Metabolizable Protein (MP, g)	0.611725 **
ne-NDF	-0.069249 ~
e-NDF	0.053376 ~

- A blank means that the nutrient unit cost is likely equal to zero
- ~ means that the nutrient unit cost may be close to zero
- \* means that the nutrient unit cost is unlikely to be equal to zero
- \*\* means that the nutrient unit cost is most likely not equal to zero

<b>Calibration set</b>							
Name	Actual [T]	Predicted [T]	Lower limit	Upper limit	Corrected	75.0% CI	75.0% CI
Alfalfa Hay 44NDF 20CP	165.000	153.305	126.247	180.364	156.626	129.568	183.684
Bakery Byproduct Meal	175.000	167.708	145.337	190.080	-	-	-
Blood meal, commodity	700.000	684.236	656.065	712.407	-	-	-
Brewers Grains, wet	35.000	44.114	39.195	49.032	-	-	-
Canola Meal, mech. extracte	280.000	218.457	206.577	230.336	-	-	-
Corn Grain, ground, dry	158.000	182.476	161.784	203.168	-	-	-
Corn Silage, 32-38% DM	45.000	59.858	50.716	69.000	59.858	50.716	69.000
Cotton Seed Meal, 41% CP	370.000	329.324	313.761	344.887	-	-	-
Cotton Seed, Whole w lint	224.000	237.590	200.951	274.230	-	-	-
Distillers Dried Grains w Sol	159.000	233.425	214.746	252.105	-	-	-
Feathers Hydrolyzed Meal	610.000	598.053	574.860	621.246	-	-	-
Gluten Feed, dry	135.000	180.467	167.154	193.780	-	-	-
Gluten Meal, dry	630.000	625.385	600.319	650.451	-	-	-
Hominy	152.000	156.290	140.055	172.525	-	-	-
Meat Meal, rendered	360.000	411.143	391.985	430.302	-	-	-
Molasses, Sugarcane	200.000	121.221	102.207	140.235	-	-	-
SBM 44% adj.	372.000	310.100	296.594	323.606	-	-	-
SBM 48% adj.	380.000	378.333	363.944	392.722	-	-	-
Soybean Seeds, whole roa	375.000	374.677	350.703	398.651	-	-	-
Soybean hulls adj.	150.000	101.187	70.208	132.166	-	-	-
Wheat Bran	109.000	101.283	79.968	122.597	-	-	-
Wheat Middlings	102.000	126.464	108.052	144.876	-	-	-
expeller SBM, adj.	415.000	471.301	454.636	487.966	-	-	-

<b>Appraisal set</b>			
Name	Actual [T]	Predicted [T]	Corrected
Alfalfa Hay 38NDF 22CP	0.000	161.400	184.727
Alfalfa Hay 48NDF 17CP	0.000	150.434	129.630
Fish Menhaden Meal, mech	1000.000	614.010	-
Tallow	520.000	336.302	-

<b>Calculation log</b>	
Action	Reason
Feedstuffs "Fish Menhaden Meal, mech." removed	Outlier

Sesame 3.03: Regression results (Sesame [Administrator])

While feed costs are down and this will help improve income-over-feed costs, producers will still want to work closely with their nutritionists and feed sales representatives to control feed costs and maximize income over feed costs.