



Feed Pricing Tools & Resources

By Ryan Sterry, Regional Dairy Educator, Spring 2023

Feed has historically been the greatest dairy farm expense, ranging from 45-55% of total operating expenses. Data from the University of Minnesota's FINBIN program show that in 2021 feed costs averaged \$2,392 per cow, and ranged from \$1,377 to \$3,146. On a per hundred weight basis, this translated to an average of \$9.97 per cwt/milk produced (range \$7.60-\$13.97 per cwt.) for participating farms.

Most often it's not within our power to change high feed prices, but it is within our power to compare prices of different feeds to determine which is the best value. This may be as simple as looking at the content of two different feeds, and then determining the price per unit. Other times, we may need a more in-depth analysis that looks at several nutritional factors, such as digestibility, RUP, starch, minerals, and more before deciding which feed is the most economical.

Before jumping into pricing tools, it's important to point out what they cannot tell us. Does a potential new feed work with your current storage and handling equipment? Will there be added transportation or handling costs? Will you have to manage shrink and spoilage differently with this feed? That said, there are times when making new investments in storage and handling make sense in order to add a new feed. However, making that decision requires additional pencil pushing beyond just the feed cost.

Two feed pricing tools are available for use from UW-Extension. These tools are free to use, all they require is a computer and internet connection.

UW Feed Pricing Tool: <https://fyi.extension.wisc.edu/wbic/files/2018/11/UW-feed-cost-tool-10-30-18.xlsx>

- Excel file for download
- Basic look at Crude Protein and Energy
- 44% Soybean meal used as benchmark for protein price, and shell corn benchmark for energy
- User enters:
 - Feed name
 - Price
 - Est. storage loss
 - Nutritional analysis
- Option to enter hauling costs
- Need to update prices: do not use defaults

Feedstuff Nutrient Cost Calculator											
See directions tab below for instructions for use.											
users enter/change information in blue cells											
Delivery Cost Calculator			Delivery cost \$/per ton			Maximum to pay \$/ton relative to:					
Miles hauled	Haul cost \$/load d mile	Tons per load	Delivery cost \$/per ton	Price \$/ton + delivery cost	% Dry Matter	Shrink/ Storage loss %	% Crude Protein, DM	Cost \$/lb crude protein	% TDN, DM	SBM 44% for protein	Corn for energy (TDN)
48	\$4.00	24	\$8.00								
Click on the Adobe Acrobat Document link at the left for a fact sheet on storage loss estimates											
Energy Feeds											
#2 yellow corn	\$115.00	84.5%	2.0%	9.0%	\$0.77	88.0%				\$57.86	\$115.00
oats					\$0.76	76.0%				\$85.56	\$101.67
wheat midds					\$0.44	82.0%				\$0.131	\$115.12
corn silage					\$0.79	72.0%				\$0.118	\$17.12
pelleted soy hull					\$1.01	74.0%				\$0.248	\$81.26
Protein Feeds											
soybean meal 44%	\$315.00	90.0%	2.0%	46.0%	\$0.39	84.0%		\$0.218	0.92	\$0.194	0.61
DDGS	\$150.00	91.0%	2.0%	31.0%	\$0.27	96.0%		\$0.088	1.09	\$0.077	0.74
wet DDG	\$50.00	36.0%	15.0%	31.0%	\$0.26	96.0%		\$0.085	1.09	\$0.075	0.74
whole soybeans	\$249.50	88.0%	2.0%	41.0%	\$0.35	92.0%		\$0.157	1.03	\$0.140	0.7
alfalfa hay	\$165.00	90.0%	5.0%	19.0%	\$0.51	59.0%		\$0.164	0.59	\$0.164	0.28
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FeedVal versions 6 & 7: <https://dairymgt.cals.wisc.edu/tools.php>

Tutorial Video: <https://www.youtube.com/embed/PX1aKkHObQ?rel=0>

- Tailored for evaluating feeds in lactating cow rations
- FeedVal 6 = more streamlined and user friendly
- FeedVal 7 = larger library of quality factors to include in analysis
- Need to update prices: do not use defaults

	<input type="checkbox"/>	Ingredient	Nutrients				As-Fed Basis			Calculated	
			RUP %	RDP %	NE13x Mcal/lb	peNDF %	DM %	Unit	Price* \$/Unit	Predicted Value \$/Unit	Actual Price as % of Predicted Value
1	<input checked="" type="checkbox"/>	Shelled Corn	4.5	4.5	0.91	0	86	ton	142.86		
2	<input checked="" type="checkbox"/>	Soybean Meal 48%	21	33	1	0	89	ton	388		
3	<input checked="" type="checkbox"/>	Soybean Meal 44%	17.5	32.5	0.97	0	89	ton	376		
4	<input type="checkbox"/>	Soybean Meal, expeller	30	16	1.09	0	92	ton			
5	<input checked="" type="checkbox"/>	Soybeans, raw	12	28	1.25	0	87	ton	325.67		
6	<input type="checkbox"/>	Soybeans, heated	22	21	1.24	0	92	ton			
7	<input checked="" type="checkbox"/>	Good Quality Hay	6	14	0.6	35	87	ton	227		
8	<input checked="" type="checkbox"/>	Poor Quality Hay	4.8	11.2	0.5	50	87	ton	156		
9	<input checked="" type="checkbox"/>	Corn Silage	2.8	4.2	0.67	30	35	ton	40		

An additional popular resource for feed pricing is the Extension Hay Market Report. This report is free for download at <https://cropsandsoils.extension.wisc.edu/hay-market-report/>. The report categorizes hay prices based on bale type and quality grade. All prices are on a per ton basis. Prices come from public auction results across the upper mid-west.

Hay market report prices are published on an as fed basis. Eighty-five to eighty-seven percent dry matter (DM) is standard for hay. So how do we deal with haylage or baleage, that is much lower in DM percent? We can use a few basic conversions from dry matter to as fed to still use the hay market report to price wetter forages.

For example:

- \$225 per ton is the hay market report reference price
- \$225 divided by 0.85 = \$264.71 per ton of DM
- We're pricing haylage that tests 43.5% DM
- \$264.71 x 0.435 = \$115.15 per ton as fed

Extension also updates an Excel spreadsheet and paper form for spot pricing corn silage. Our series of corn silage pricing resources and recommendations is located at:

<https://cropsandsoils.extension.wisc.edu/articles/tools-for-pricing-standing-corn-silage/>