



Gestión y monitorización de los precios de los alimentos

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ECONOMÍA NUTRICIÓN Y MANEJO

Promoción y mejora de los beneficios de la explotación
lechera a través de la nutrición y la reproducción

FeedVal

Herramienta

Completamente
“online”



Estima

Valor real de los
ingredientes de
alimentación de vacas
lecheras

Soporte en decisiones críticas de

Compra de alimentos

Use de alimentos

disponibles

Formulación de dietas

Introducción: precio real de alimentos

Vacas necesitan nutrientes

No necesitan “alimentos”



Precio de alimento

Diferente del valor de nutrientes

Alimentos tienen muchos nutrientes

Valor real de un alimento

Agregación del valor de nutrientes individuales

El mejor negocio

Alimentos con precio real menor que el precio de mercado

Que hace FeedVal

Estima precios
Ingredientes



Predice
Precios de alimentos

Calcula valores
de nutrientes
individuales



Provee valores
relativos
Comparados con los
precios de mercado

Valor de nutrientes

Si

Corn: 09%CP + 2.00Mcal/kg = \$0.267/kg (89%DM)

SBM: 54%CP + 2.20Mcal/kg = \$0.587/kg (89% DM)

Y

CP: \$0.748/kg DM

Mcal: \$0.116/Mcal

Entonces

Corn: [(9%CP)(\$0.748/kg)+(2Mcal)(\$0.116/Mcal)]*89%=\$0.267

SBM: [(54%CP)(\$0.748/kg)+(2.2Mcal)(\$0.116/Mcal)]*89%=\$0.587

Que pasa cuando 3 nutrientes

	CP	Nel	NDF		Precio
	%	Mcal/ kg	%		\$/kg
Corn	9	2	9		0.3
SBM	54	2.2	15		0.66
Hay	18	1.3	50		0.13
	\$/kg	\$/Mcal	\$/kg		
Valor(\$)	0.7903	0.1306	-0.0036		

Precio para otro alimento

	CP	Nel	NDF	Precio
	\$/kg	\$/Mcal	\$/kg	\$/kg
Valor (\$)	0.7903	0.1306	-0.0036	
	%	Mcal/kg	%	
Ensilado Maíz	7%	0.67	42%	\$0.14

Si el precio de mercado es **\$0.20**

Entonces CARO

Mas realista

Muchos alimentos
y muchos nutrientes

Diferente número
Alimentos y
nutrientes

$$V = \begin{bmatrix} 12 & 7 & 21 & 31 & 11 \\ 45 & -2 & 14 & 27 & 19 \\ -3 & 15 & 36 & 71 & 26 \\ 4 & -13 & 55 & 34 & 15 \end{bmatrix}$$

Matriz de solución

Es irregular

Solución es el promedio

FeedVal 2012

V. E. Cabrera, L. Armentano, R. D. Shaver

Overview

Tool

Upload Data

Template Spreadsheet:

Upload data as Excel file:
 no file selected

Select Nutrients and Date

Select nutrients:

Price date:

Comandos

Perform Analysis

Remove nutrients with negative predicted unit costs.

	<input type="checkbox"/>	Ingredient	Nutrients				As-Fed Basis			Calculated	
			RUP %	RDP %	NEFB Mcal/lb	penDF %	DM %	Price* \$/Unit	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	4.89	bu		
2	<input checked="" type="checkbox"/>	Soybean Meal 48%	21	33	1	0	89	498	ton		
3	<input checked="" type="checkbox"/>	Soybean Meal 44%	17.5	32.5	0.97	0	89	486	ton		
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	14.3	bu		
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	216.44	ton		
8	<input checked="" type="checkbox"/>	Poor Quality Hay	4.8	11.2	0.5	50	87	118.75	ton		
9	<input checked="" type="checkbox"/>	Corn Silage	2.8	4.2	0.67	30	35	48.9	ton		
10	<input type="checkbox"/>	Earlage/Snaplage	3.6	5.4	0.82	0	60		ton		
11	<input checked="" type="checkbox"/>	Distillers Dried Grains	15	15	0.9	0	89	210	ton		
12	<input type="checkbox"/>	High-Moisture Corn	3.6	5.4	0.95	0	70		ton		
13	<input checked="" type="checkbox"/>	Tallow	0	0	2.06	0	99	30.5	cwt		
14	<input checked="" type="checkbox"/>	Blood Meal	76	15	1.06	0	94	1000	ton		
15	<input checked="" type="checkbox"/>	Urea	0	287	0	0	99	472	ton		
16	<input type="checkbox"/>	Straw	4	1	0.45	75	85		ton		
17	<input checked="" type="checkbox"/>	Soy Hulls	6	8	0.67	0	89	210	ton		
18	<input checked="" type="checkbox"/>	Corn Gluten Feed	7.5	16.5	0.79	0	89	155	ton		
19	<input checked="" type="checkbox"/>	Canola Meal, expeller	17	21	0.8	0	89	390.5	ton		

Ingredientes

Nutrientes
Contenido de nutrientes de ingredientes

Precios de mercado

Resultados

1

**Selecciona
nutrients de
referencia
y
combinación
de
nutrientes**

Upload Data

Template Spreadsheet:

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Upload data as Excel file:

Choose File no file selected

Upload

Perform Analysis

Analyze Download Results Convert all to kg

Remove nutrients with negative predicted unit costs.

Select Nutrients and Date

Select nutrients:

4 selected ▾

Price date:

2014-06-02

- RUP %
- RDP %
- Nel3x Mcal/lb
- Lipid %
- peNDF %
- Ca %
- Phos %
- Lys %
- Met %
- NDF %
- dNDF
- Starch
- Sugars
- CP %

	<input type="checkbox"/>	Ingredient	Nutrients				As-Fed Basis			Calculated	
			RUP %	RDP %	NEI3x Mcal/lb	peNDF %	DM %	Price* \$/Unit	Unit	Predicted Value \$/Unit	Actual Price as % of Predicted Value
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3	<input checked="" type="checkbox"/>	Soybean Meal 44%	17.5	32.5	0.97	0	89	486	ton ▾		
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	14.3	bu ▾		
6	<input type="checkbox"/>	Soybeans, heated	22	21	1.24	0	92		ton ▾		
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9	<input checked="" type="checkbox"/>	Corn Silage	2.8	4.2	0.67	30	35	48.9	ton ▾		
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11	<input checked="" type="checkbox"/>	Distillers Dried Grains	15	15	0.9	0	89	210	ton ▾		
12	<input type="checkbox"/>	High-Moisture Corn	3.6	5.4	0.95	0	70		ton ▾		
13	<input checked="" type="checkbox"/>	Tallow	0	0	2.06	0	99	30.5	cwt ▾		
14	<input checked="" type="checkbox"/>	Blood Meal	76	19	1.06	0	94	1000	ton ▾		
15	<input checked="" type="checkbox"/>	Urea	0	287	0	0	99	472	ton ▾		
16	<input type="checkbox"/>	Straw	4	1	0.45	75	85		ton ▾		
17	<input checked="" type="checkbox"/>	Soy Hulls	6	8	0.67	0	89	210	ton ▾		
18	<input checked="" type="checkbox"/>	Corn Gluten Feed	7.5	16.5	0.79	0	89	155	ton ▾		
19	<input checked="" type="checkbox"/>	Good Quality Hay	6	14	0.6	35	87	216.44	ton ▾		

2

Selecciona
ingredientes
e
ingredientes
de
referencia

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Analyze Download Results Convert all to kg

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13	<input checked="" type="checkbox"/>	Tallow	0	0	2.06	0	99	30.5	cwt ↕		
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16	<input type="checkbox"/>	Straw	4	1	0.45	75	85		ton ↕		
17	<input checked="" type="checkbox"/>	Soy Hulls	6	8	0.67	0	89	210	ton ↕		
18	<input checked="" type="checkbox"/>	Corn Gluten Feed	7.5	16.5	0.79	0	89	155	ton ↕		

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Analyze

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3	<input checked="" type="checkbox"/>	Soybean Meal 44%	17.5	32.5	0.97	0	89	486	ton ↕		
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	14.3	bu ↕		
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	216.44	ton ↕		
8	<input checked="" type="checkbox"/>	Poor Quality Hay	4.8	11.2	0.5	50	87	118.75	ton ↕		
9	<input checked="" type="checkbox"/>	Corn Silage	2.8	4.2	0.67	30	35	48.9	ton ↕		
10	<input type="checkbox"/>	Earlage/Snaplage	3.6	5.4	0.82	0	60		ton ↕		
11	<input checked="" type="checkbox"/>	Distillers Dried Grains	15	15	0.9	0	89	210	ton ↕		
12	<input type="checkbox"/>	High-Moisture Corn	3.6	5.4	0.95	0	70		ton ↕		
13	<input checked="" type="checkbox"/>	Tallow	0	0	2.06	0	99	30.5	cwt ↕		
14	<input checked="" type="checkbox"/>	Blood Meal	76	19	1.06	0	94	1000	ton ↕		
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16	<input type="checkbox"/>	Straw	4	1	0.45	75	85		ton ↕		
17	<input checked="" type="checkbox"/>	Soy Hulls	6	8	0.67	0	89	210	ton ↕		
18	<input checked="" type="checkbox"/>	Corn Gluten Feed	7.5	16.5	0.79	0	89	155	ton ↕		
19	<input checked="" type="checkbox"/>	Corn Meal	17	31	0.8	0	89	200.5	ton ↕		

3

Edita nombres de ingredientes y composición

Upload Data

Template Spreadsheet:

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Select Nutrients and Date

Select nutrients:

4 selected ▾

Price date:

2014-06-02

Perform Analysis

Analyze

Download Results

Convert all to kg

Remove nutrients with negative predicted unit costs.

4
Edita unidades,
materia seca y
precio de
mercado de
ingredientes

	<input type="checkbox"/>	Ingredient	Nutrients				As-Fed Basis			Calculated	
			RUP %	RDP %	NEI3x Mcal/lb	peNDF %	DM %	Price* \$/Unit	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	4.89	bu ↕		
2	<input checked="" type="checkbox"/>	Soybean Meal 48%	21	33	1	0	89	498	ton ↕		
3	<input checked="" type="checkbox"/>	Soybean Meal 44%	17.5	32.5	0.97	0	89	486	ton ↕		
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	14.3	bu ↕		
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	216.44	ton ↕		
8	<input checked="" type="checkbox"/>	Poor Quality Hay	4.8	11.2	0.5	50	87	118.75	ton ↕		
9	<input checked="" type="checkbox"/>	Corn Silage	2.8	4.2	0.67	30	35	48.9	ton ↕		
10	<input type="checkbox"/>	Earlage/Snaplage	3.6	5.4	0.82	0	60		ton ↕		
11	<input checked="" type="checkbox"/>	Distillers Dried Grains	15	15	0.9	0	89	210	ton ↕		
12	<input type="checkbox"/>	High-Moisture Corn	3.6	5.4	0.95	0	70		ton ↕		
13	<input checked="" type="checkbox"/>	Tallow	0	0	2.06	0	99	30.5	cwt ↕		
14	<input checked="" type="checkbox"/>	Blood Meal	76	19	1.06	0	94	1000	ton ↕		
15	<input checked="" type="checkbox"/>	Urea	0	287	0	0	99	472	ton ↕		
16	<input type="checkbox"/>	Straw	4	1	0.45	75	85		ton ↕		
17	<input checked="" type="checkbox"/>	Soy Hulls	6	8	0.67	0	89	210	ton ↕		
18	<input checked="" type="checkbox"/>	Corn Gluten Feed	7.5	16.5	0.79	0	89	155	ton ↕		
19	<input checked="" type="checkbox"/>	Good Quality Hay	6	14	0.6	35	87	216.44	ton ↕		

5

Realiza un análisis

Upload Data

Template Spreadsheet:

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Select Nutrients and Date

Select nutrients:

4 selected ▾

Price date:

2014-06-02 

Perform Analysis

Analyze Download Results Convert all to kg

Remove nutrients with negative predicted unit costs.

	<input type="checkbox"/>	Ingredient	Nutrients				As-Fed Basis			Calculated	
			RUP %	RDP %	NEI3x Mcal/lb	peNDF %	DM %	Price* \$/Unit	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	0.19	kg ▾	0.281/kg	68
2	<input checked="" type="checkbox"/>	Soybean Meal 48%	21	33	1	0	89	0.55	kg ▾	0.534/kg	103
3	<input checked="" type="checkbox"/>	Soybean Meal 44%	17.5	32.5	0.97	0	89	0.54	kg ▾	0.489/kg	110
4	<input type="checkbox"/>	Soybean Meal, expeller	30	16	1.09	0	92		kg ▾	0.645/kg	
5	<input checked="" type="checkbox"/>	Soybeans, raw	12	28	1.25	0	87	0.53	kg ▾	0.485/kg	109
6	<input type="checkbox"/>	Soybeans, heated	22	21	1.24	0	92		kg ▾	0.607/kg	
7	<input checked="" type="checkbox"/>	Good Quality Hay	6	14	0.6	35	87	0.24	kg ▾	0.229/kg	105
8	<input checked="" type="checkbox"/>	Poor Quality Hay	4.8	11.2	0.5	50	87	0.13	kg ▾	0.184/kg	71
9	<input checked="" type="checkbox"/>	Corn Silage	2.8	4.2	0.67	30	35	0.05	kg ▾	0.080/kg	62
10	<input type="checkbox"/>	Earlage/Snaplage	3.6	5.4	0.82	0	60		kg ▾	0.175/kg	
11	<input checked="" type="checkbox"/>	Distillers Dried Grains	15	15	0.9	0	89	0.23	kg ▾	0.416/kg	55
12	<input type="checkbox"/>	High-Moisture Corn	3.6	5.4	0.95	0	70		kg ▾	0.231/kg	
13	<input checked="" type="checkbox"/>	Tallow	0	0	2.06	0	99	0.67	kg ▾	0.594/kg	113
14	<input checked="" type="checkbox"/>	Blood Meal	76	19	1.06	0	94	1.10	kg ▾	1.166/kg	94
15	<input checked="" type="checkbox"/>	Urea	0	287	0	0	99	0.52	kg ▾	0.530/kg	98
16	<input type="checkbox"/>	Straw	4	1	0.45	75	85		kg ▾	0.138/kg	
17	<input checked="" type="checkbox"/>	Soy Hulls	6	8	0.67	0	89	0.23	kg ▾	0.250/kg	92
18	<input checked="" type="checkbox"/>	Corn Gluten Feed	7.5	16.5	0.79	0	89	0.17	kg ▾	0.311/kg	55
19	<input checked="" type="checkbox"/>	Canola Meal, expeller	17	21	0.8	0	89	0.43	kg ▾	0.421/kg	102 14

Analiza los resultados

Rojo

Mala compra

Verde

Buena compra

Wheat Middlings

0.19 Mercado vs. 0.268 Proyectado

22	<input checked="" type="checkbox"/>	Wheat Middlings	4.5	14	0.76	0	89	0.19	kg ↕	0.268/kg	71
23	<input checked="" type="checkbox"/>	Whole Cottonseed	6	18	0.88	22	89	0.53	kg ↕	0.317/kg	167

Whole Cottonseed

0.53 Mercado vs. 0.317 Proyectado

Algunas aplicaciones prácticas

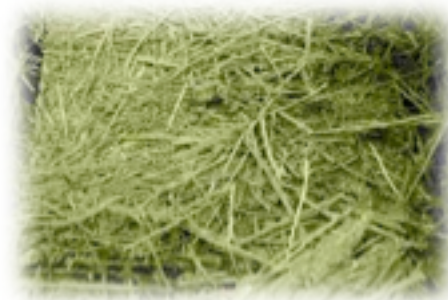
Alertas de mercado

Mensual para el
medio oeste US



Precio justo

Ensilado de maíz
afectado por sequía



Precio justo

Alfalfa tratada
con fungicidas

Alerta de mercado Mayo 2014

FeedVal 2012 predicted dairy feed prices and rankings for May 2014¹

V.E. Cabrera, P. Hoffman, and R. Shaver

Ingredient	DM %	Unit	Feed Prices (\$/Unit)		Actual Price as % of Predicted	Best-buy Ranking
			Market	Predicted		
Corn Gluten Feed	89	ton	155.0	282.4	55	1
Hominy	89	ton	138.0	252.7	55	2
Distillers Dried Grains	89	ton	210.0	377.6	56	3
Corn Silage	35	ton	48.9	73.4	67	4
Shelled Corn	86	bu	4.9	7.1	68	5
Poor Quality Hay	87	ton	118.8	169.4	70	6
Wheat Middlings	89	ton	170.0	242.9	70	7
Wheat	89	bu	6.3	8.1	78	8
Soy Hulls	89	ton	210.0	227.0	92	9
Blood Meal	94	ton	1000.0	1059.4	94	10
Barley	89	cwt	11.7	12.3	95	11
Urea	99	ton	472.0	480.0	98	12
Canola Meal, expeller	89	ton	390.5	382.1	102	13
Soybean Meal 48%	89	ton	498.0	485.4	103	14
Good Quality Hay	87	ton	216.4	209.8	103	15
Sunflower Meal	89	ton	265.0	256.2	103	16
Linseed Meal	89	ton	375.0	346.2	108	17
Molasses	89	ton	230.0	213.5	108	18
Soybean Meal 44%	89	ton	486.0	444.2	109	19
Soybeans, raw	87	bu	14.4	13.2	109	20
Cottonseed Meal	89	ton	453.0	412.0	110	21
Tallow	99	cwt	30.5	27.0	113	22
Oats	89	ton	286.3	246.5	116	23
Corn Gluten Meal	89	ton	810.0	689.5	117	24
Beet Pulp	89	ton	270.0	213.0	127	25
Whole Cottonseed	89	ton	480.0	288.4	166	26

Mejores
Compras

OK
Compras

Peores
Compras



Thanks