

AminoCow[®] Setup and Overview

AminoCow[®]

- ❁ **Create dairy rations with simple steps.**
- ❁ **Follow a logical sequence.**
- ❁ **Create rations that allow cows to remain healthy at sustained, optimal production.**
- ❁ **Easy balancing for amino acids.**
- ❁ **Clear understanding of where adding Mepron to the diet should be beneficial.**

AminoCow®

- ⊗ **Based upon current research data.**
- ⊗ **Accurate values in feeds database.**
- ⊗ **Wide variety of feeds; international.**
- ⊗ **Designed for “real world” conditions.**
- ⊗ **Practical, flexible and easy to use.**

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creating essentials

AMINO Cow[®]

Mepron Ration Evaluator 3.5



meptron

Degussa Feed Additives – amino acids and more.

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Mepron Ration Evaluator 3.5



The Main Menu Screen is what first appears when you open the program.

○ Degussa Feed Additives – amino acids and more.

Catalog: Mep30_Rations.MDB

Here are the menu items available for working on a dairy ration.

The splash screen features the Degussa logo at the top right with the tagline "creating essentials". The main title "AMINO Cow" is displayed in green and grey, with "Mepron Ration Evaluator 3.5" below it. A circular graphic shows a cow standing on a bar chart with four gold bars of increasing height, with a green arrow pointing upwards. The Mepron logo is faintly visible in the background. A teal banner at the bottom contains the text "Degussa Feed Additives – amino acids and more."

○ Degussa Feed Additives – amino acids and more.

Selecting “Setup” will take you to the Setup screen. Here you can enter information about your business, default parameters for evaluating rations and other important details. This is the place to start when you first work with AminoCow.

AMINO Cow®

Mepron Ration Evaluator 3.5



○ Degussa Feed Additives – amino acids and more.

Global Settings

Language	English	
Weight/Energy Units	lb-Mcal/lb	<input checked="" type="checkbox"/> ton
Currency Symbol	\$	<input type="checkbox"/> tonne

Price Units

WARNING: Program never converts prices from one currency to another.

Corn Price (\$ per unit)	0.05	
Soybean Meal 48% (\$ per unit)	0.11	<input type="checkbox"/> Calculate RFV Hay
100 RFV Hay (\$ per unit)	0.1	
Digestibility of MICRB Protein	80	
Adjst MCRB for Deficient RDP?	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Use NRC method for NEI?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Auto Recalc AA by Formula on CP change?	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Express Milk Protein as True Protein?	<input checked="" type="radio"/> Yes <input type="radio"/> No	

Prepared By* Charles W. Cheeseman

Preparer's Disclaimer (255 char max)

programming nearly complete Sept 1 release

 Include Disclaimer on Reports by DefaultPaper Size Letter (8.5" x 11.5") A4 (210 mm x 297 mm)

Company Information

Name*	Charles Cheeseman
Address1	123 Milky Way
Address2	
City*	Madison
State/Province*	WI
Postal Zone	55555
Country	US
Business Phone*	111-222-3333
Fax	111-222-3334
E-mail	cheese@net.com
Web Site	
Feed Label	
<input type="checkbox"/> Include Logo on Reports	

This is the "Setup Screen". To make changes in the Setup screen you must first select "Edit". Then type in the necessary information. Also make any other changes or selections you want for your rations.

* If present, item is included on report headers

Installation Date 5/5/2003

Global Settings

Company Information

Language: English

Weight/Energy Units: lb-Mcal/lb

Currency Symbol: \$

Price Units: ton tonne

Name*: Charles Cheeseman

Address1: 123 Milky Way

Address2:

City*: Madison

State/Province*: WI

Postal Zone: 55555

Country: US

Business Phone*: 111-222-3333

Fax: 111-222-3334

E-mail: cheese@net.com

WARNING: Program never converts prices from one currency to another.

Corn Price (\$ per unit): 0.05

Soybean Meal 48% (\$ per unit): 0.11

100 RFV Hay (\$ per unit): 0.1

Digestibility of MICRB Protein: 80

Adjust MCRB for Deficient RDP? Yes No

Use NRC method for NEI? Yes No

Auto Recalc AA by Formula

Express Milk Protein as True

Calculate RFV Hay

We recommend entering current prices for corn, soybean meal and 100 RFV hay. Also, we recommend selecting "Yes" for the "Adjust MCRB in Deficient RDP?" box.

Prepared By*: Charles W. Cheeseman

Preparer's Disclaimer (255 char max): programming nearly complete Sept 1 release

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* If present, item is included on report headers

Paper Size: Letter (8.5" x 11.5") A4 (210 mm x 297 mm)

Installation Date: 5/5/2003

Global Settings

Company Information

Language: English

Weight/Energy Units: lb-Mcal/lb

Currency Symbol: \$

Price Units: ton tonne

WARNING: Program never converts prices from one currency to another.

Corn Price (\$ per unit): 0.05

Soybean Meal 48% (\$ per unit): 0.11

100 RFV Hay (\$ per unit): 0.1

Digestibility of MICRB Protein: 80

Calculate RFV Hay:

Adjst MCRB for Deficient RDP? Yes No

Use NRC method for NEI? Yes No

Auto Recalc AA by Formula on CP change? Yes No

Name*: Charles Cheeseman

Address1: 123 Milky Way

Address2:

City*: Madison

State/Province*: WI

Postal Zone: 55555

Country: US

Business Phone*: 111-222-3333

Fax: 111-222-3334

E-mail: cheese@net.com

Web Site:

Feed Label:

It is also generally recommended to check yes for "Auto Recalc AA by Formula on CP change" to ensure amino acid values are consistent with the ingredient being used.

Include Disclaimer on Reports by Default

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Paper Size: Letter (8.5" x 11.5") A4 (210 mm x 297 mm)

Installation Date: 5/5/2003

Global Settings

Language	English	
Weight/Energy Units	lb-Mcal/lb	<input checked="" type="checkbox"/> ton
Currency Symbol	\$	<input type="checkbox"/> tonne

Price Units

WARNING: Program never converts prices from one currency to another.

Corn Price (\$ per unit)	0.05	
Soybean Meal 48% (\$ per unit)	0.11	<input type="checkbox"/> Calculate RFV Hay
100 RFV Hay (\$ per unit)	0.1	
Digestibility of MICRB Protein	80	
Adjst MCRB for Deficient RDP?	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Use NRC method for NEI?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Auto Recalc AA by Formula on CP change?	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Express Milk Protein as True Protein?	<input checked="" type="radio"/> Yes <input type="radio"/> No	

Company Information

Name*	Charles Cheeseman
Address1	123 Milky Way
Address2	
City*	Madison
State/Province*	WI
Postal Zone	55555
Country	US
Business Phone*	111-222-3333
Fax	111-222-3334
E-mail	cheese@net.com
Web Site	
Feed Label	
	<input type="checkbox"/> Include Logo on Reports

Check the appropriate box to describe how milk protein is recorded in your area i.e. as milk true protein or crude (total) milk protein.

Milk true protein = 0.94 X milk crude protein

Include Disclaimer on Reports by Default

Paper Size Letter (8.5" x 11.5") A4 (210 mm x 297 mm)

Installation Date 5/5/2003

Global Settings

Language: English

Weight/Energy Units: lb-Mcal/lb

Currency Symbol: \$

Price Units: ton tonne

WARNING: Program never converts prices from one currency to another.

Corn Price (\$ per unit): 0.05

Soybean Meal 48% (\$ per unit): 0.11

100 RFV Hay (\$ per unit): 0.1

Digestibility of MICRB Protein: 80

Adjst MCRB for Deficient RDP?

Use NRC method for NEI? Yes No

Auto Recalc AA by Formula on CP change? Yes No

Express Milk Protein as True Protein? Yes No

Prepared By*: Charles W. Cheeseman

Preparer's Disclaimer (255 char max)

This program is based on the currently available research and the information as provided. Due to the many outside factors affecting livestock performance ABC Nutrition does not warrant individual performance results.

Include Disclaimer on Reports by Default

Paper Size: Letter (8.5" x 11.5") A4 (210 mm x 297 mm)

Company Information

Name*: Charles Cheeseman

Address1: 123 Milky Way

Address2:

City*: Madison

State/Province*: WI

Web Site:

Feed Label:

Include Logo on Reports

You may also write a disclaimer statement and have it included on reports. Simply enter your disclaimer in the section below, maximum of 255 characters, and then check the box to "Include Disclaimer on Reports by Default".

If present, item is included on report headers

Installation Date: 5/5/2003

Install Your Company Logo into AminoCow

To install a logo, follow this procedure.

- 1. Create or save your company logo as a Windows Bitmap file (i.e., a BMP file). This is most easily accomplished by importing the logo into Microsoft Paint and saving it as a .BMP file. Paint normally ships as a part of Windows and is normally found under “Programs” in “Accessories”.**
- 2. Logo size must be no greater than 1.5 inches wide by 1.25 inches high (4 cm x 3.5 cm).**

Install Your Company Logo into AminoCow

- 3. Save the file with the name: Mep_Logo.BMP.**
- 4. Copy the file to the installation folder. If you performed a normal installation, this would be C:\Program Files\Mepron30.**
- 5. Restart AminoCow. The logo should load in the right-hand portion of the screen.**

Install Your Company Logo into AminoCow

- 6. If you want the logo to print on reports, go to 'SetUp' and check the "Include logo on reports" option box (following slide).**
- 7. If you are a user of a former version of AminoCow and have your logo installed, it should continue to be displayed.**

Global Settings

Company Information

Language: English

Weight/Energy Units: lb-Mcal/lb

Currency Symbol: \$

Price Units: ton tonne

Name*: Jane Thompson

Address1: 234 Wilson Rd

Address2:

City*: Madison

State/Province*: WI

Postal Zone: 55555

WARNING: Program never converts prices from one currency to another.

Corn Price (\$ per unit): 0.1

Soybean Meal 48% (\$ per unit): 0.12

100 RFV Hay (\$ per unit): 0.13

Digestibility of MICRB Protein: 80

Adjst MCRB for Deficient RDP? No Yes

Use NRC method for NEI? No Yes

Auto Recalc AA by Formula on CP change? No Yes

After following the steps in the previous slides, return to the Setup screen and check the "Include Logo on Reports" box. Your company logo will now appear in AminoCow. It will be displayed on the Main Menu screen and on reports you provide to customers.

Preparer*: Jane Thompson

Include Logo on Reports

Preparer's Disclaimer (255 char max)

Formulations and recommendations provided hereon are based on information that will support good performance and meet animal needs. However, ABC Nutrition assumes no responsibility for results obtained with the formula and its use.

Include Disclaimer on Reports by Default

* If present, item is included on report headers

Paper Size: Letter (8.5" x 11.5") A4 (210 mm x 297 mm)

Installation Date: 5/17/2004

Example of a Feed Sheet with the logo for ABC Nutrition displayed.

Jane Thompson
Madison, WI
111-222-3333
Hope Dairy
Provided to: David Hope

Ration Second Change
Altered Dairy Ration
Catalog: Mep30_Demos
Date: 7/8/2004
Prepared by: Jane Thompson



ABC Nutrition

Group Feeding Sheet

Cows in Group

Feed	17		19		21		23		25		27		29	
	Mix	Acc	Mix	Acc	Mix	Acc	Mix	Acc	Mix	Acc	Mix	Acc	Mix	Acc
Alfa hay barn 2	34	34	38	38	42	42	46	46	50	50	54	54	58	58
Alfa sil bag	255	289	285	323	315	357	345	391	375	425	405	459	435	493
Corn sil proc	400	689	446	769	494	851	540	931	588	1013	634	1093	682	1175
Corn grain ground	115	804	128	897	142	993	155	1086	169	1182	182	1275	196	1371
Soybean meal 48 %	61	865	68	965	76	1069	83	1169	90	1272	97	1372	104	1475
Urea 45%	0.8	866	1	966	1	1070	1.2	1170	1.2	1273	1.4	1373	1.4	1476
Molasses black strap	8.5	874	9.5	975	10	1080	12	1182	12	1285	14	1387	14	1490
Animal fat	6.4	881	7.1	982	7.9	1088	8.6	1191	9.4	1295	10	1397	11	1502
Wheat midds	17	898	19	1002	21	1109	23	1214	25	1320	27	1424	29	1530
Soybean hulls	17	915	19	1020	21	1130	23	1237	25	1345	27	1451	29	1560
VitMinMix	7.2	922	8.1	1029	8.9	1139	9.8	1246	11	1356	11	1462	12	1572
SoyPlus	16	938	18	1047	20	1159	22	1268	24	1380	26	1488	28	1600
Mepron	0.3	938	0.3	1047	0.4	1159	0.4	1269	0.4	1380	0.5	1489	0.5	1600

Global Settings

Company Information

Language

Weight/Energy Units

Currency Symbol

Price Units ton tonne

WARNING: Program never converts prices from one currency to another.

Corn Price (\$ per unit)

Soybean Meal 48% (\$ per unit)

100 RFV Hay (\$ per unit)

Digestibility of MICRB Protein

Adjst MCRB for Deficient RDP?

Use NRC method for NEI? Yes No

Auto Recalc AA by Formula on CP change? Yes No

Express Milk Protein as True Protein? Yes No

Prepared By*

Preparer's Disclaimer (255 char max)

This program is based on the currently available research and the information as provided. Due to the many outside factors affecting livestock performance ABC Nutrition does not warrant individual performance results.

Include Disclaimer on Reports by Default

* If present, item is included on report headers

Paper Size Letter (8.5" x 11.5") A4 (210 mm x 297 mm)

Installation Date

Name*

Address1

Address2

City*

State/Province*

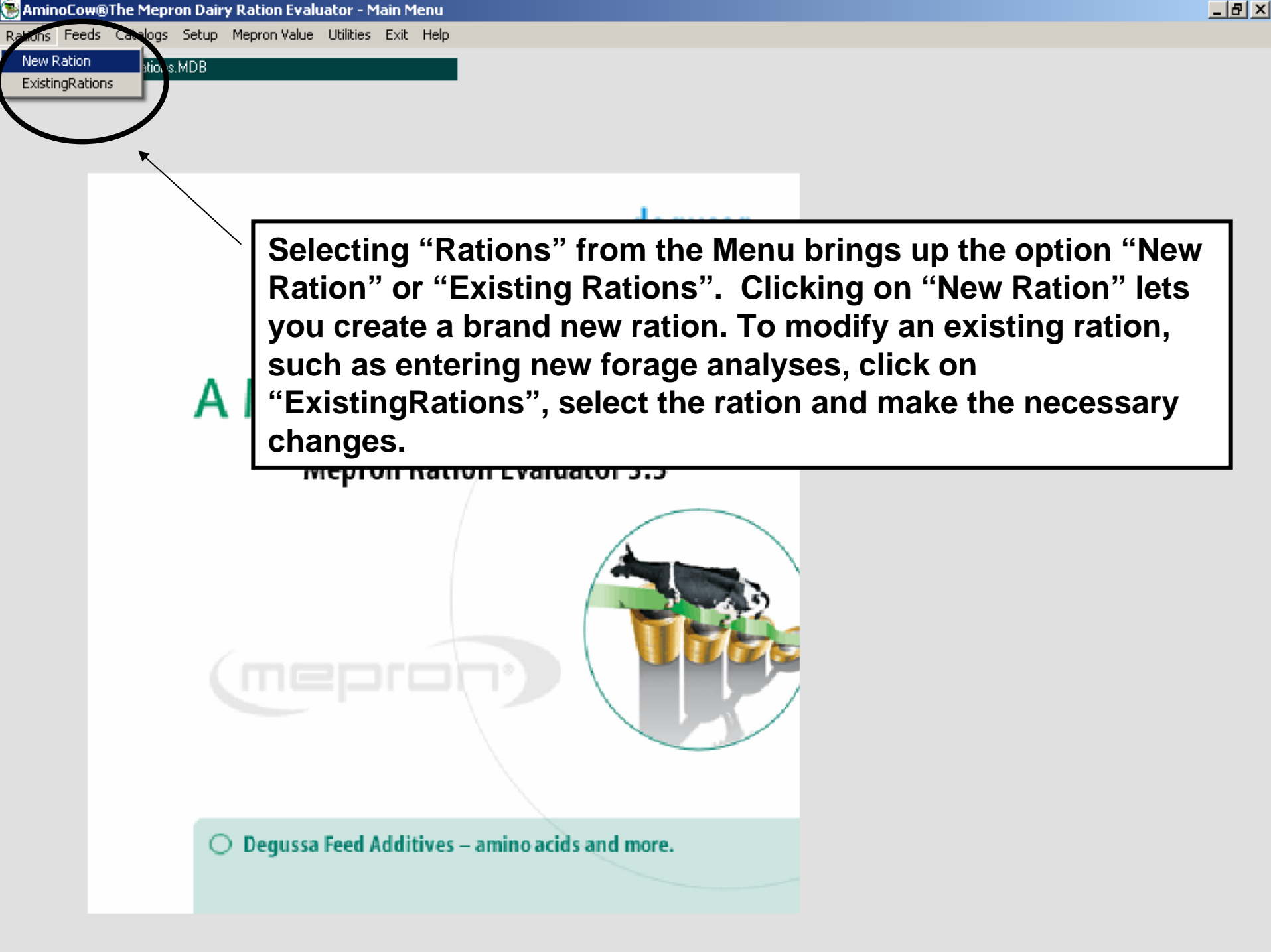
E-mail

Web Site

Feed Label

Include Logo on Reports

When you have completed entering the setup information, click "Save". You may return to the setup screen at any time to change this information as required.



Selecting "Rations" from the Menu brings up the option "New Ration" or "Existing Rations". Clicking on "New Ration" lets you create a brand new ration. To modify an existing ration, such as entering new forage analyses, click on "ExistingRations", select the ration and make the necessary changes.



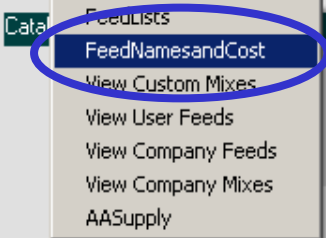


Selecting “Feeds” from the Menu allows you to work in the “FeedLists”, “FeedNamesandCosts”, “View Custom Mixes”, “View User Feeds” and “AASupply”. Changes made at this point will affect all future rations.

From this site you can change the default feeds available for computer balancing, alter feed names/costs and modify the lists you use. Also you can review the amino acids supplied from feeds.

The Mepron logo, featuring the word 'mepron' in a lowercase, sans-serif font with a registered trademark symbol, enclosed in a light blue oval shape.

○ Degussa Feed Additives – amino acids and more.



Changing and updating feed costs is vital to providing profitable rations to a dairy. To make changes in the database so all subsequent rations have updated prices, begin by clicking “Feeds”, then “FeedNamesandCosts”.

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 Degussa Feed Additives – amino acids and more.

Clicking “FeedNames” brings up the buttons for the major feed groups. In our example we will select “Grains” so we can change the price of Soybean Meal 48%.

Forages

Grains

By Products

Vit/Minerals

Save

Clicking “Cost” moves you to the “Main Feed Names and Cost” screen. Here you may click on the buttons for the major feed groups. In our example we will select “Grains” so we can change the price of Soybean Meal 48%.

Forages

Grains

By Products

Vit/Minerals

User Feeds

Custom

Save

Currency

\$

Price Units

ton

Price Units

Product sold is \$/lb. Price is \$ per unit.

Feed Cost Maintenance			
Feed Name	AsSold	Units	Price
Poultry meal	0.0773	ton	154.6
Pro-Lak	0.1591	ton	318.2
Rapeseed meal protected	0.0773	ton	154.6
Rapeseed, whole	0.1091	ton	218.2
Rice, broken	0.0409	ton	81.8
Rye grain	0.0545	ton	109
Safflower meal	0.0682	ton	136.4
Sesame expeller	0.0955	ton	191
Sesame meal	0.0864	ton	172.8
Sesame seeds	0.1591	ton	318.2
Skim milk powder	0.1409	ton	281.8
Sorghum grain dry rolled	0.0545	ton	109
Sorghum grain steam flaked	0.0591	ton	118.2
Sorghum-milo grain	0.0545	ton	109
Soybean meal 44 %	0.1000	ton	200
▶ Soybean meal 48 %	0.1045	ton	209
Soybean meal expeller	0.1000	ton	200
Soybean ml 43%, w./ hulls	0.1000	ton	200
Soybean whole, raw	0.1045	ton	209
Soybean whole, roast	0.1091	ton	218.2
SoyPlus	0.1182	ton	236.4
Sunflower meal	0.0591	ton	118.2
Sunflower meal, expeller	0.0636	ton	127.2
Sunflower seeds	0.0591	ton	118.2
Tapioca	0.0500	ton	100
Triticale grain	0.0591	ton	118.2
Urea 45%	0.2409	ton	481.8
Wheat gluten meal	0.1591	ton	318.2
Wheat grain	0.0636	ton	127.2

- Forages
- Grains
- By Products
- Vit/Minerals
- User Feeds
- Custom
- Save

In the "Grains" database we scroll down to Soybean meal 48%, click on the price.

Currency: \$

Price Units: ton

Price Units

Dsold is \$/lb. Price is \$ per unit.

Feed Cost Maintenance			
Feed Name	AsSold	Units	Price
Poultry meal	0.0773	ton	154.6
Pro-Lak	0.1591	ton	318.2
Rapeseed meal protected	0.0773	ton	154.6
Rapeseed, whole	0.1091	ton	218.2
Rice, broken	0.0409	ton	81.8
Rye grain	0.0545	ton	109
Safflower meal	0.0682	ton	136.4
Sesame expeller	0.0955	ton	191
Sesame meal	0.0864	ton	172.8
Sesame seeds	0.1591	ton	318.2
Skim milk powder	0.1409	ton	281.8
Sorghum grain dry rolled	0.0545	ton	109
Sorghum grain steam flaked	0.0591	ton	118.2
Sorghum-milo grain	0.0545	ton	109
Soybean meal 44 %	0.1000	ton	200
▶ Soybean meal 48 %	0.1550	ton	310
Soybean meal expeller	0.1000	ton	200
Soybean ml 43%, w./ hulls	0.1000	ton	200
Soybean whole, raw	0.1045	ton	209
Soybean whole, roast	0.1091	ton	218.2
SoyPlus	0.1182	ton	236.4
Sunflower meal	0.0591	ton	118.2
Sunflower meal, expeller	0.0636	ton	127.2
Sunflower seeds	0.0591	ton	118.2
Tapioca	0.0500	ton	100
Triticale grain	0.0591	ton	118.2
Urea 45%	0.2409	ton	481.8
Wheat gluten meal	0.1591	ton	318.2
Wheat grain	0.0636	ton	127.2

- Forages
- Grains
- By Products
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- User Feeds
- Custom
- Save

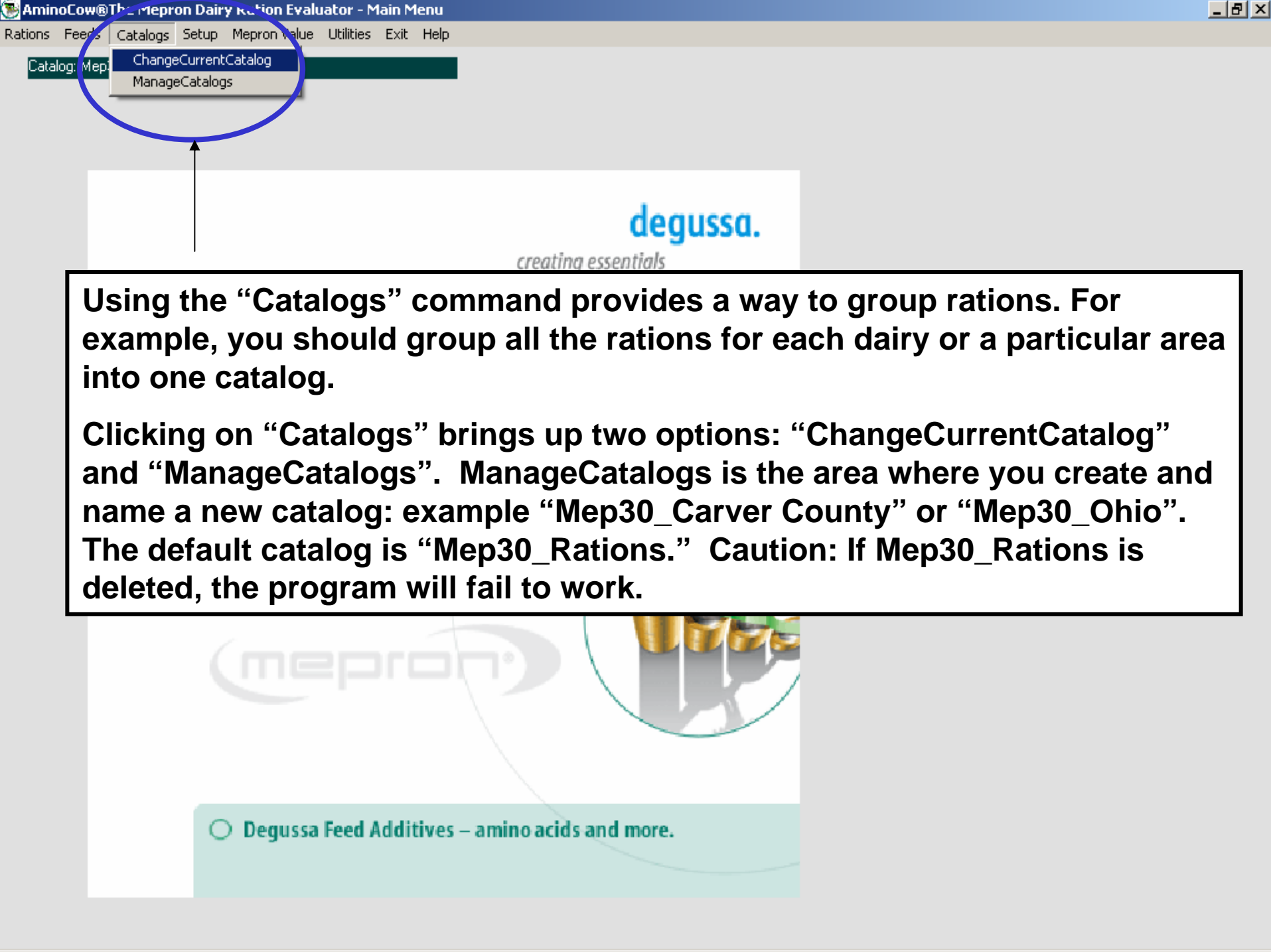
Type in the new price and click enter. "As Sold" automatically changes. Repeat this procedure for all the feeds with new prices. When done, click "Save".

Currency

Price Units

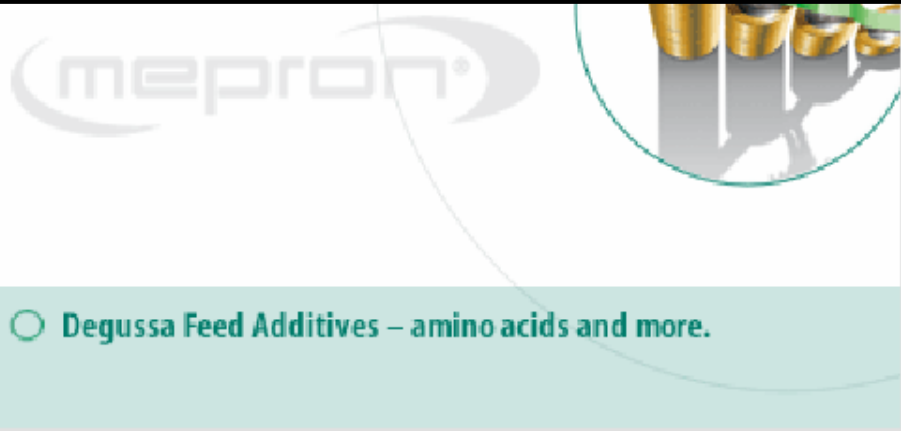
Price Units

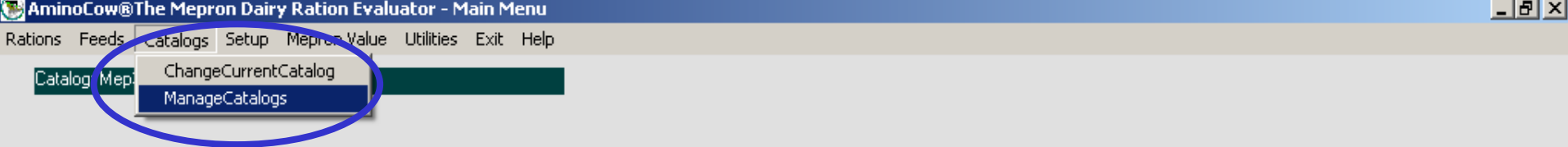
Dsold is \$/lb. Price is \$ per unit.



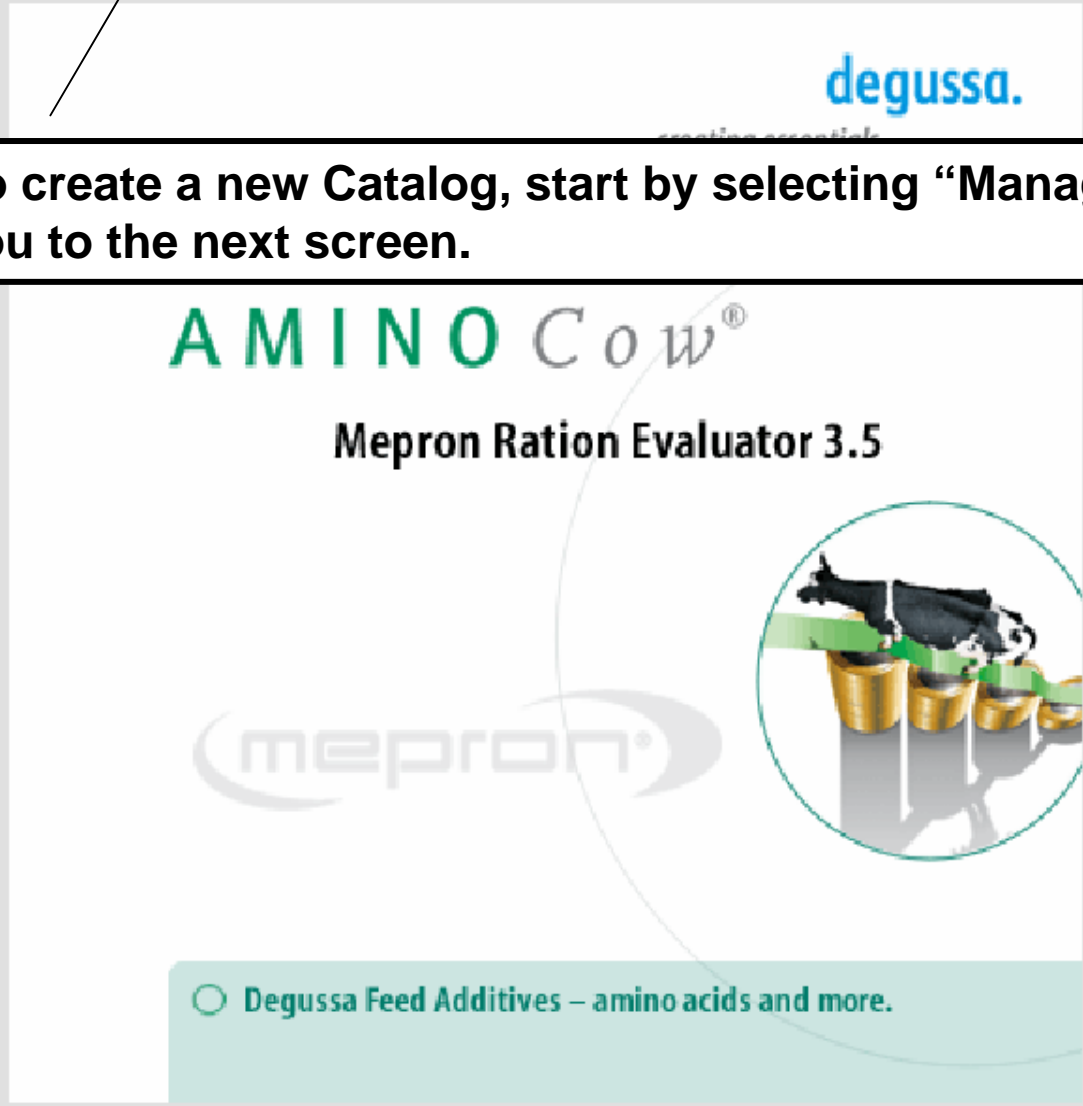
Using the “Catalogs” command provides a way to group rations. For example, you should group all the rations for each dairy or a particular area into one catalog.

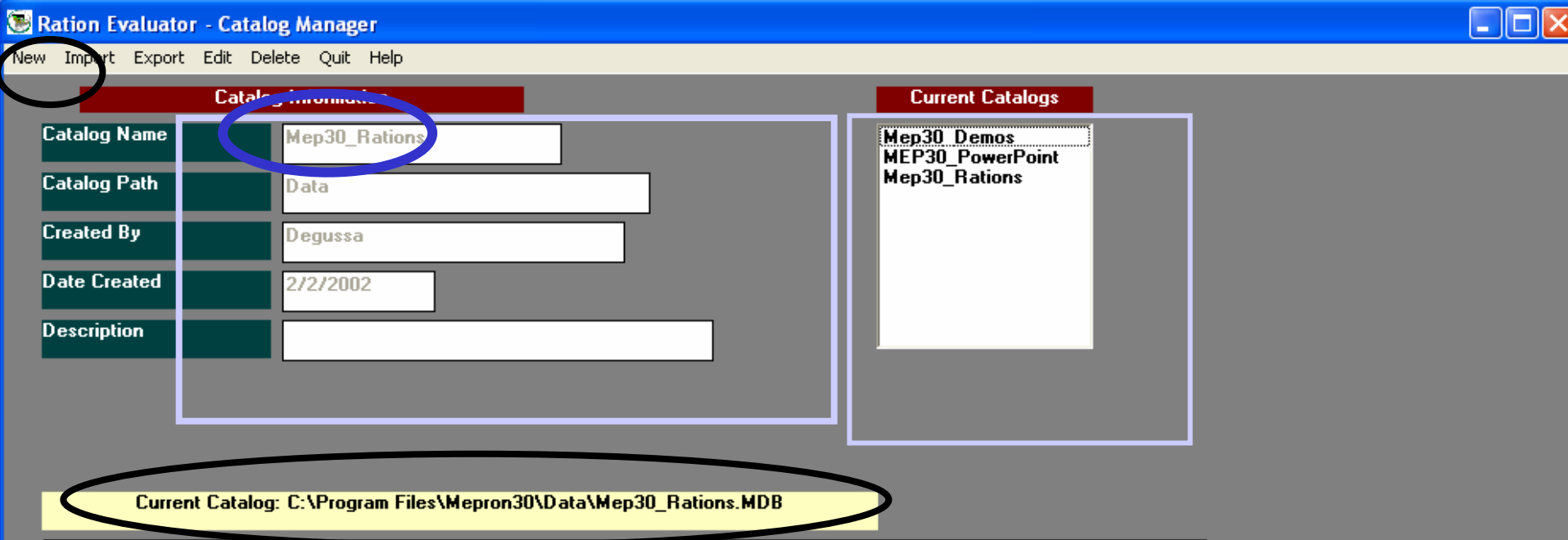
Clicking on “Catalogs” brings up two options: “ChangeCurrentCatalog” and “ManageCatalogs”. ManageCatalogs is the area where you create and name a new catalog: example “Mep30_Carver County” or “Mep30_Ohio”. The default catalog is “Mep30_Rations.” Caution: If Mep30_Rations is deleted, the program will fail to work.





To create a new Catalog, start by selecting “ManageCatalogs”, which takes you to the next screen.





In the “Catalog Manager” screen notice the catalog information and listing of current catalogs. To create a new catalog, click “New” from the menu. Currently the Catalog Name is Mep30_Rations; this is the default catalog and must be present for the program to run. Notice all the Catalog Information in the white boxes is a gray color. That will change after we click “New”.

Catalog Information

Catalog Name	MEP30_
Catalog Path	C:\Program Files\Meptron30\Data
Created By	
Date Created	5/28/2004
Description	

Current Catalogs

- Mep30_Demos
- MEP30_PowerPoint
- Mep30_Rations

Save Cancel

Enter Catalog Information and then click Save

“MEP30_ “ is now displayed. This is where you type the name of your new catalog. Place your cursor at the end and type the name of your new catalog.

Catalog Information

Catalog Name	MEP30_Ohio
Catalog Path	C:\Program Files\Meptron30\Data
Created By	Jane Thompson
Date Created	5/28/2004
Description	Accounts in Ohio

Current Catalogs

- Mep30_Demos
- MEP30_PowerPoint
- Mep30_Rations

Save Cancel

Enter Catalog Information and then click Save

In this example, we added "Ohio" after "MEP30_" to name the new catalog and filled in the Created by, Date Created and Description information. Clicking "Save" completes the process.

IMPORTANT: All catalogs SHOULD begin with "MEP30_". If you delete that information, the program will save catalogs or rations. However, it will make retrieval much more difficult.

Catalog Information

Catalog Name	MEP30_Ohio
Catalog Path	C:\Program Files\Mepro30\Data\
Created By	Jane Thompson
Date Created	5/28/2004
Description	Accounts in Ohio

Current Catalogs

- Mep30_Demos
- MEP30_PowerPoint
- Mep30_Rations
- MEP30_Ohio

Enter Catalog Information and then click Save

AminoCowUpdate
Catalog saved
OK

After clicking "Save", your "Current Catalogs" will display the new addition. Click "OK" and then "Quit" from the menu.

If you want to work in the "Ohio" catalog, you must be in the Main Menu screen, click Catalogs, ChangeCurrentCatalog and from Select Catalog click the drop down arrow and select the "Ohio" catalog.

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“Mepron Value” is a feature that lets you calculate the profit to a dairy when a methionine deficiency is eliminated by adding Mepron, a rumen protected methionine, to the ration.

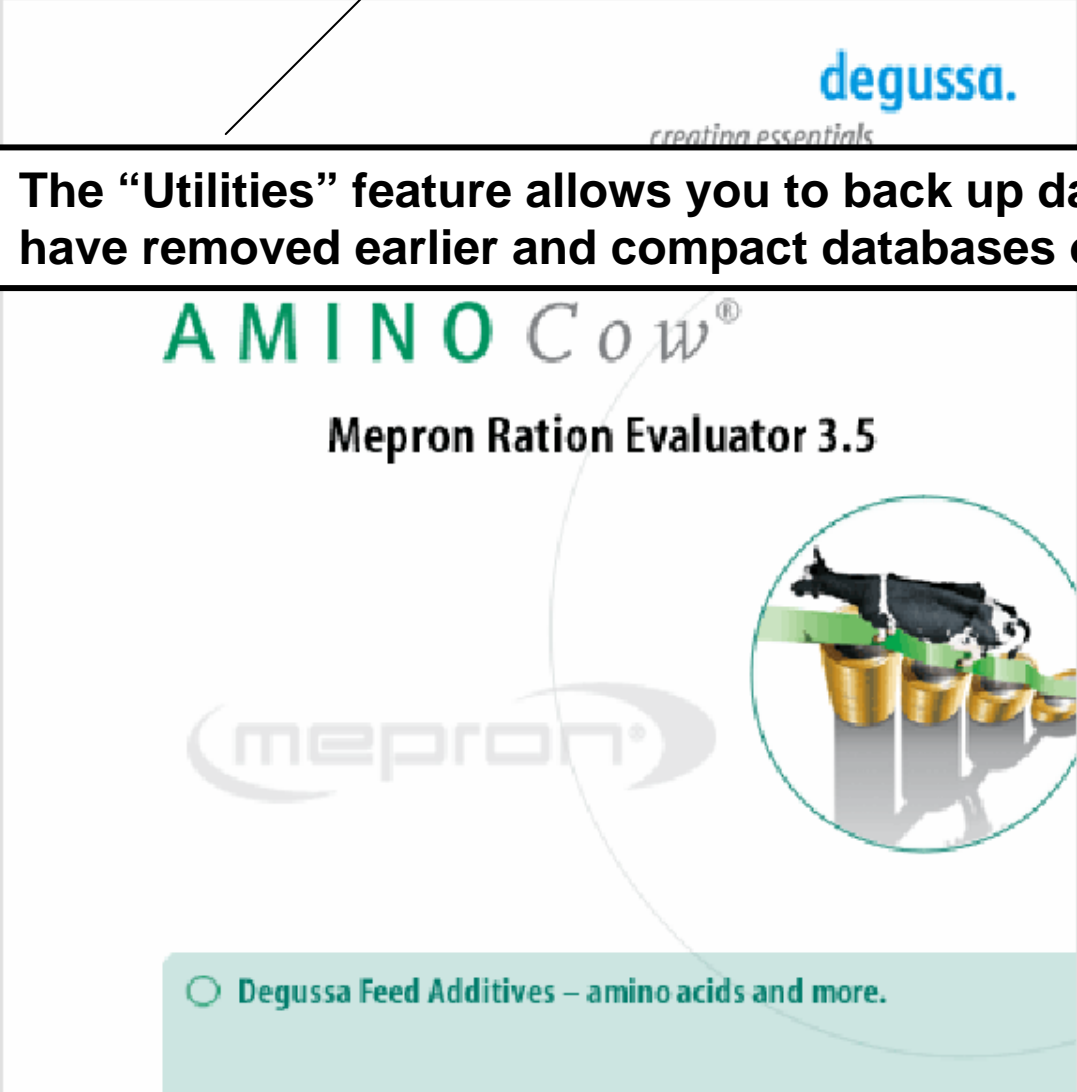
Mepron Ration Evaluator 3.5

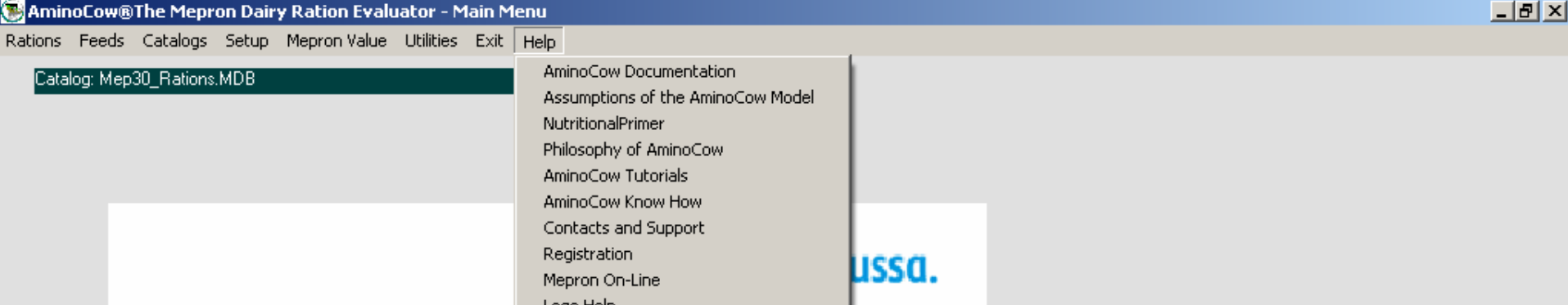


○ Degussa Feed Additives – amino acids and more.



The “Utilities” feature allows you to back up data, restore a note you may have removed earlier and compact databases or user catalogs.





The “Help” section on the Main Menu screen is the operator’s manual for the program. It details how the calculations in AminoCow are made as well as how to use the program features. It includes help with registration so you will receive program updates and instructions for logo placement.



Catalog: Mep30_Rations.MDB

- AminoCow Documentation
- Assumptions of the AminoCow Model
- NutritionalPrimer
- Philosophy of AminoCow
- AminoCow Tutorials
- AminoCow Know How
- Contacts and Support
- Registration
- Mepron On-Line
- Logo Help
- About
 - Version
 - View License
 - Acknowledgements

AMINO Cow®

Mepron Ration Evaluator 3.5

Also under “Help” is information on how to get additional support for the program. Under “About” is the version of AminoCow you have, the license information, and acknowledgements.

○ Degussa Feed Additives – amino acids and more.

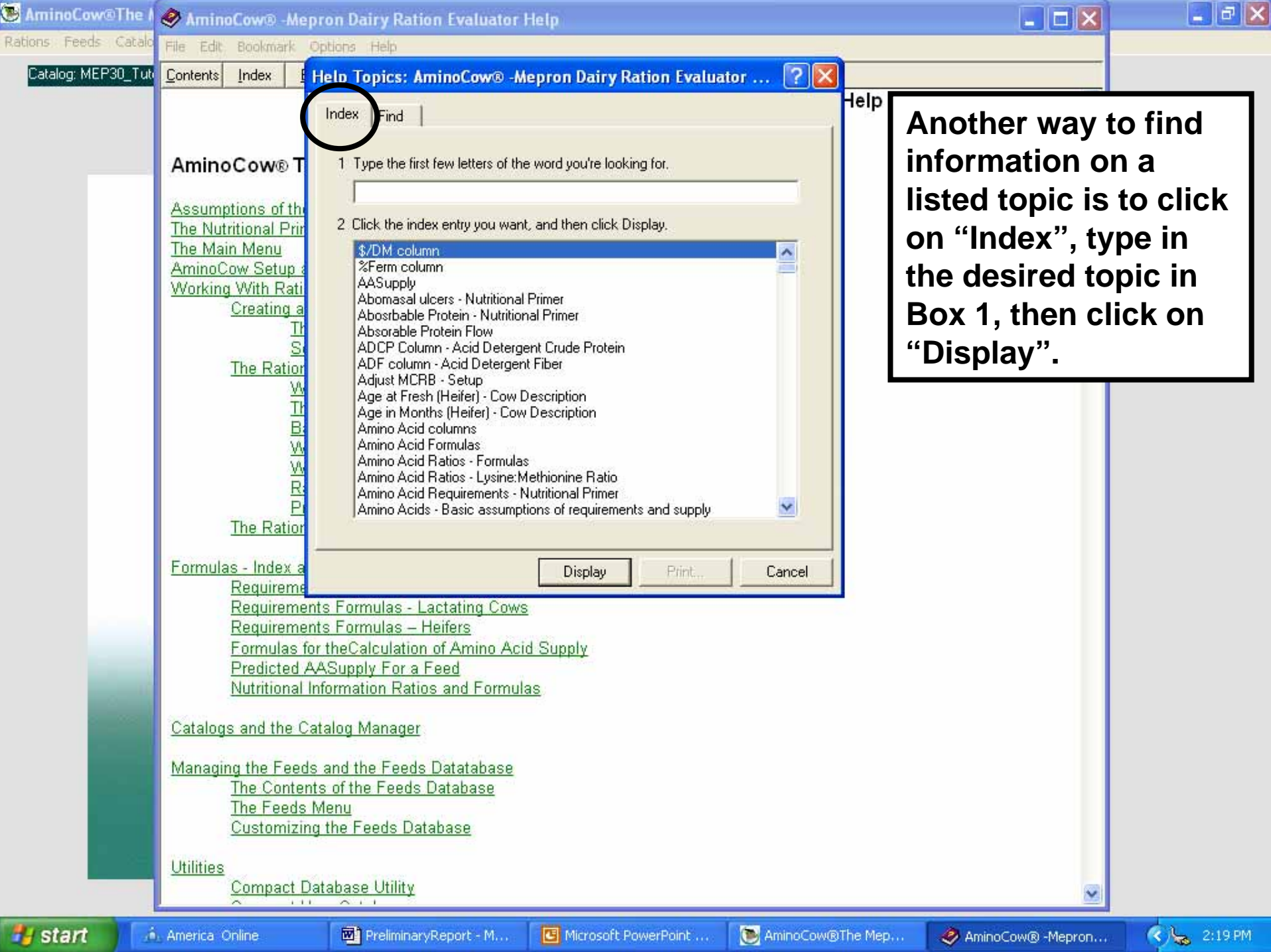
AminoCow® - The Mepron Dairy Ration Evaluator Help

(June 22, 2004)

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 - [The Ration Worksheet](#)
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Clicking on “AminoCow Documentation” under “Help” in the Main Menu brings up the Table of Contents. Details of the topics listed are accessed by clicking on these links.



Index Find

1 Type the first few letters of the word you're looking for.

2 Click the index entry you want, and then click Display.

- \$/DM column
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Another way to find information on a listed topic is to click on "Index", type in the desired topic in Box 1, then click on "Display".

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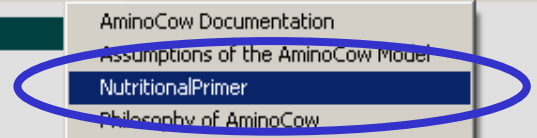
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Catalog: Mep30_Rations.MDB

- AminoCow Documentation
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- Philosophy of AminoCow
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- AminoCow Know How
- Contacts and Support
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- Mepron On-Line
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- About



The Nutritional Primer provides a summary of current concepts of dairy cattle nutrition. It also explains the categories found in AminoCow.

AMINO Cow®

Mepron Ration Evaluator 3.5



○ Degussa Feed Additives – amino acids and more.

AminoCow® Nutritional Primer Contents

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Clicking on “NutritionalPrimer” brings up the links to the many topics covered in this section. It is helpful to review the two-page list to see what information is available in the Primer.

General Outline of Dairy Rations with AminoCow

- ⊗ **This has been a general overview of AminoCow and what it contains.**
- ⊗ **The following tutorials will go into more detail on how to work with rations.**
- ⊗ **Remember to use “Help” to answer your questions.**