Making Mixes Using the UPenn Dairy Ration Analyzer

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UPenn Dairy Ration Analyzer
University of Pennsylvania

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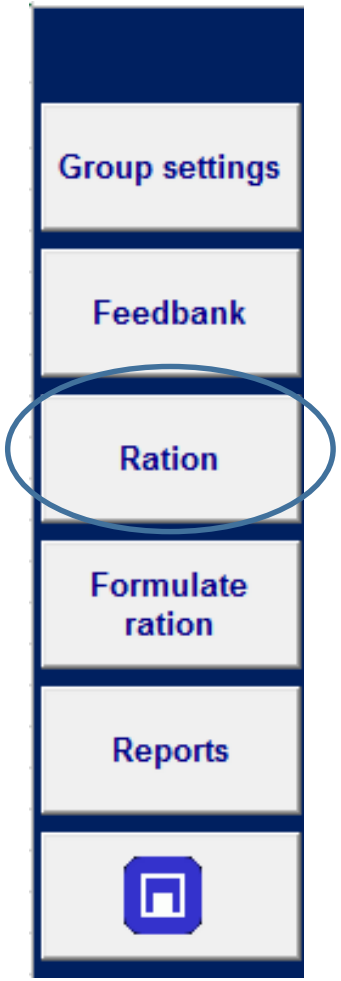
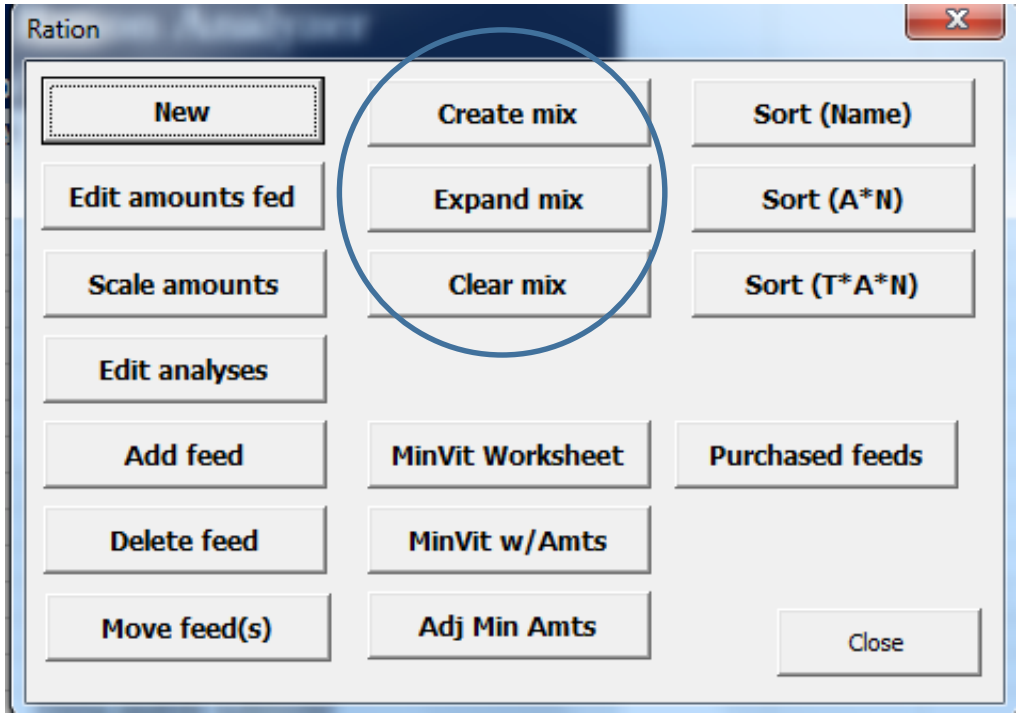
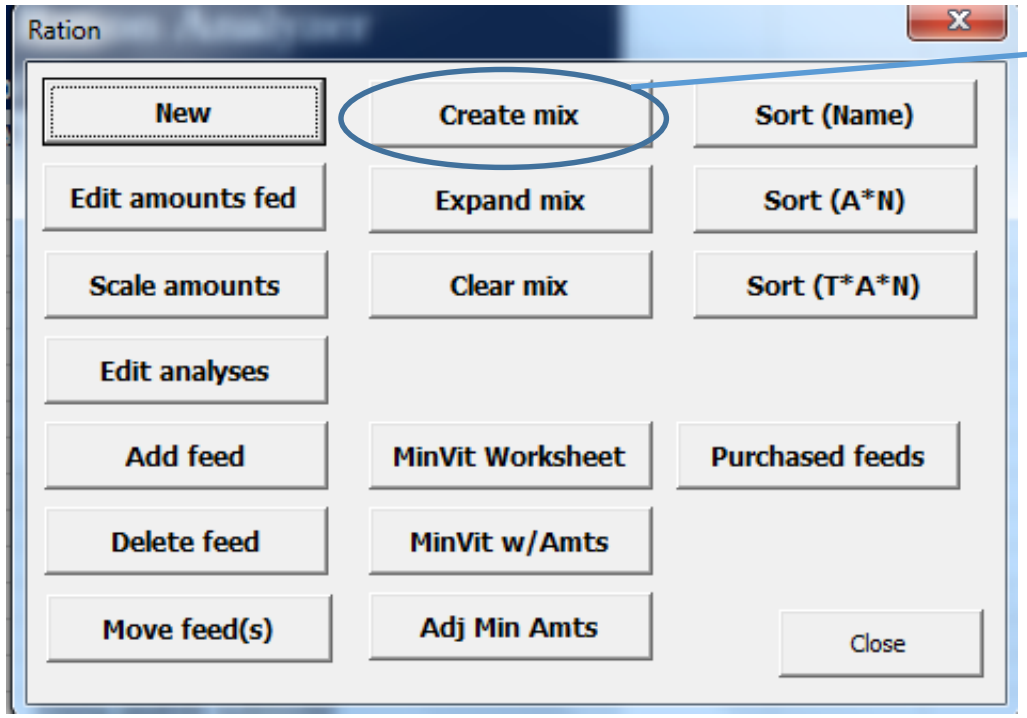
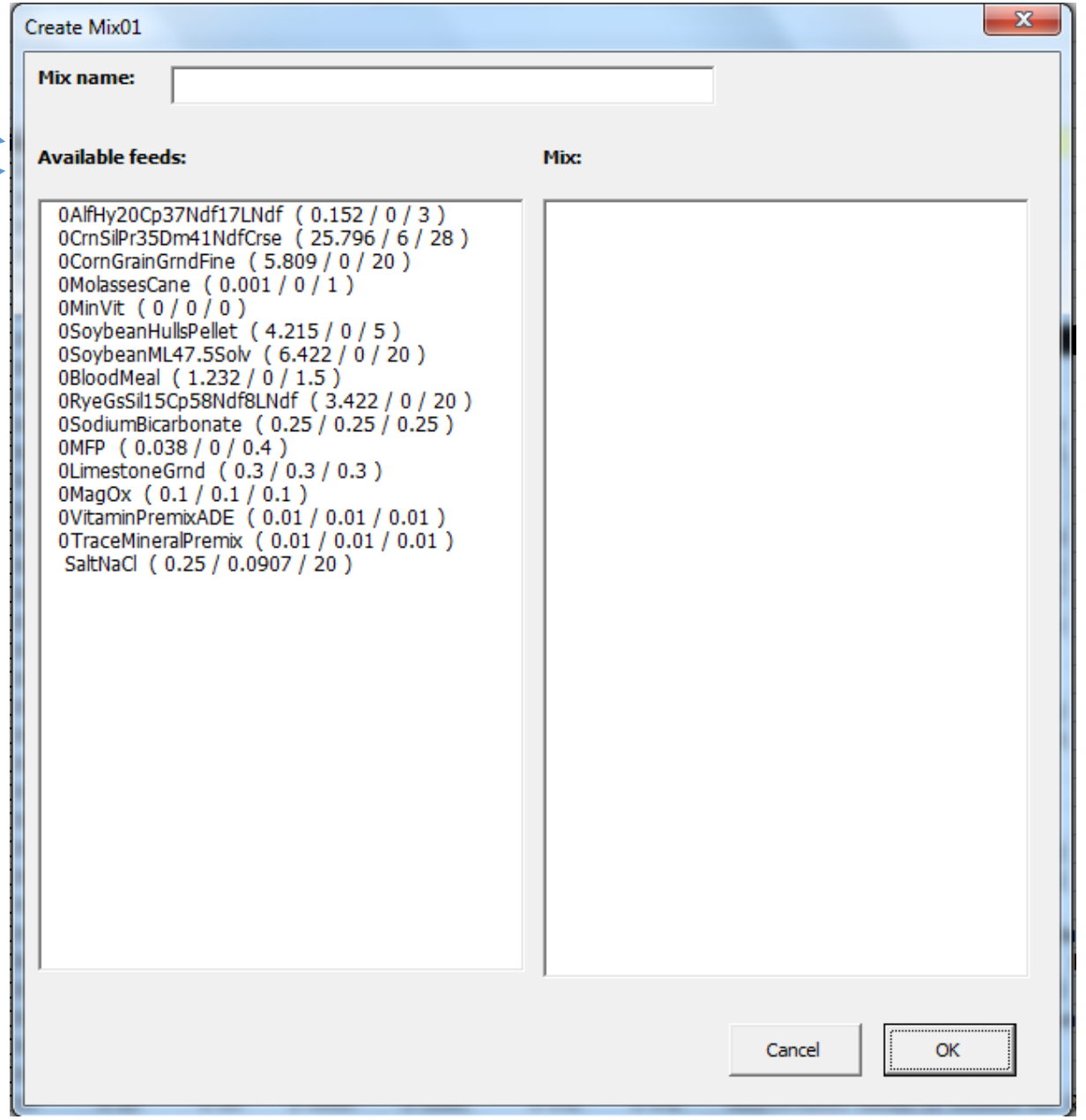
Overview



- Your happy with your final formulation
- You need to make a mix(es) for the herd
- Use the Ration Box to create mixes
- Or use the “Mix” Icon on the banner to open the mix box







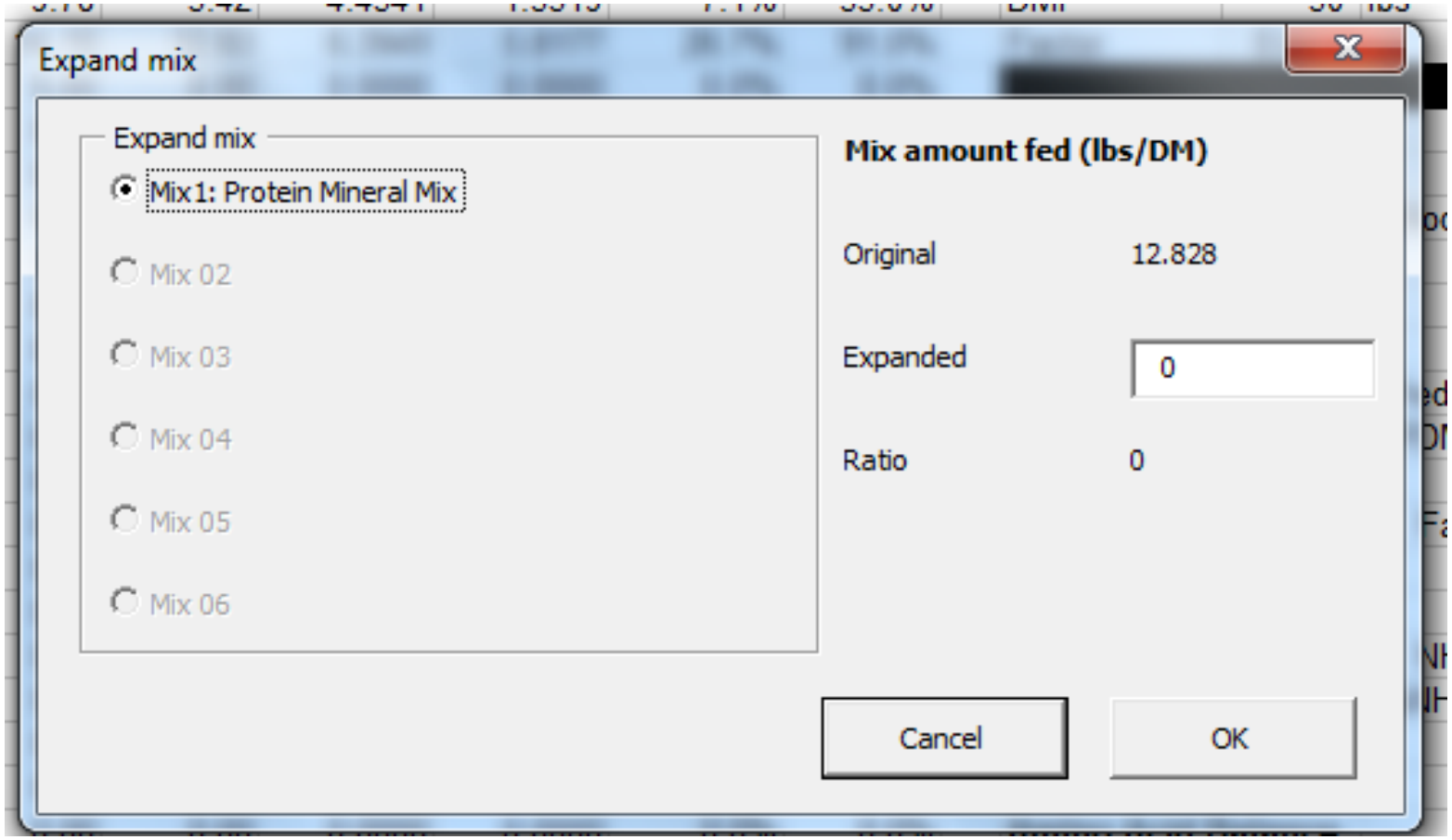
“Create Mix01” opens
Name the mix
Double click on feeds to add to mix

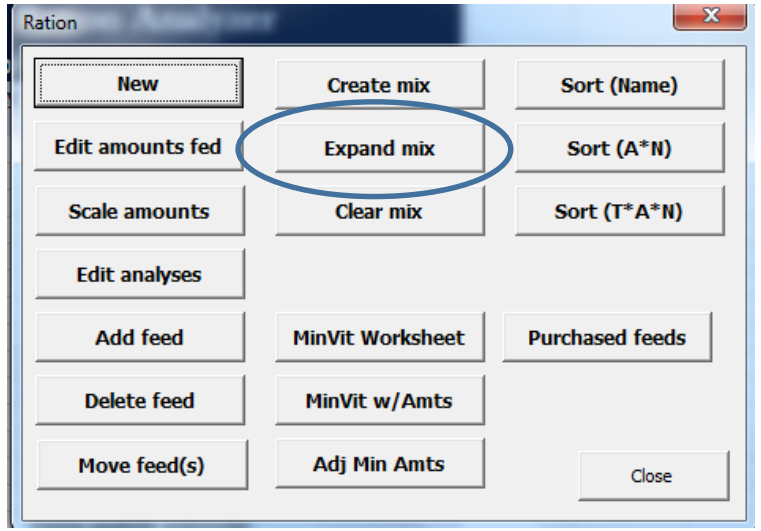
When finished selecting feeds, click on “OK” and the feeds are transferred to the appropriate Mix Sheet, which opens and you can specific the batch amount of the mix
Amounts for each feed are calculated and composition calculated

Farm: **Back 40 Acres**			Ration by: Neddy Eccles								**MX1**
02/29/2008 High Group 1											
Mix Name: Protein Mineral Mix			Mix Size:	10000	lbs/AF	14.1007					
			Mix Init Unit:	lbs		12.828					
Feed:	AF	%Mix AF	DM	%Mix DM	**Nutrient**	**DM**	**AF**	**Nutrient**	**DM**	**AF**
0MolassesCane	0.97	0.01%	0.71	0.01%	Dry matter (%)	100.00	90.97	Dry matter (%)	100.00	90.97
0SoybeanHullsPellet	3284.85	32.85%	2989.22	32.86%	Forage (%)	0.00	0.00	Calcium (%)	1.23	1.12
0SoybeanML47.5Solv	5060.43	50.60%	4554.39	50.06%	Crude protein (%)	40.66	36.99	Phosphorus (%)	0.44	0.40
0BloodMeal	970.80	9.71%	873.72	9.60%	RUP (%CP)	46.12	46.12	Magnesium (%)	0.72	0.66
0SodiumBicarbonate	178.19	1.78%	177.30	1.95%	RDP (%CP)	53.88	53.88	Potassium (%)	1.64	1.50
0MFP	27.22	0.27%	26.95	0.30%	RDP (%)	21.91	19.93	Sulfur (%)	0.42	0.38
0LimestoneGrnd	213.82	2.14%	212.76	2.34%	Sol Prot (%CP)	17.39	17.39	Sodium (%)	1.35	1.23
0MagOx	71.27	0.71%	70.92	0.78%	ME (mcal/lb)			Chlorine (%)	1.23	1.12
0VitaminPremixADE	7.13	0.07%	7.09	0.08%	NEl (mcal/lb)			Iron (ppm)	535.71	487.36
0TraceMineralPremix	7.13	0.07%	7.09	0.08%	NEm (mcal/lb)			Zinc (ppm)	43.78	39.83
SaltNaCl	178.19	1.78%	177.30	1.95%	NEg (mcal/lb)			Copper (ppm)	32.91	29.94
	0.00	0.00%	0.00	0.00%	ADF (%)	18.46	16.79	Manganese (ppm)	103.07	93.77
	0.00	0.00%	0.00	0.00%	NDF (%)	24.83	22.59	Selenium (ppm)	0.62	0.56
	0.00	0.00%	0.00	0.00%	For NDF (%NDF)	0.00	0.00	Cobalt (ppm)	1.63	1.49
	0.00	0.00%	0.00	0.00%	Forage NDF (%)	0.00	0.00	Iodine (ppm)	1.56	1.42
	0.00	0.00%	0.00	0.00%	peNDF (%)	6.83	6.21	VitA (KIU/lb)	0.85	0.77
	0.00	0.00%	0.00	0.00%	Lignin (%)	0.78	0.71	VitD (KIU/lb)	0.28	0.26
	0.00	0.00%	0.00	0.00%	NFC (%)	19.64	17.87	VitE (IU/lb)	3.54	3.22
	0.00	0.00%	0.00	0.00%	Sil Acid (%)	0.00	0.00	DCAD1 (meq/100g)	39.87	36.27
	0.00	0.00%	0.00	0.00%	Sugar (%)	5.68	5.17	DCAD2 (meq/100g)	55.76	50.72
	0.00	0.00%	0.00	0.00%	Starch (%)	1.43	1.30			

Return to the Ration Amount Worksheet – the mix has been added as a feed at the amount the feeds summed to
You can expand the mix to add the feeds back in the ration, but the mix remains as a feed

	A	B	C	D	E	F	G	H	I
1	**Feed**	**Input**	**Units**	**lbsAF (2)**	**lbsDM (4)**	**kgAF (1)**	**kgDM (3)**	**DM basis**	**Feed DM**
2	0AlfHy20Cp37Ndf17LNdf	0.1520	lbs/DM	0.17	0.15	0.0766	0.0689	0.3%	90.0%
3	0CrnSilPr35Dm41NdfCrse	25.7960	lbs/DM	73.70	25.80	33.4253	11.6989	53.7%	35.0%
4	0CornGrainGrndFine	5.8090	lbs/DM	6.60	5.81	2.9937	2.6345	12.1%	88.0%
5	0MinVit	0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	95.0%
6	0RyeGsSil15Cp58Ndf8LNdf	3.4220	lbs/DM	9.78	3.42	4.4341	1.5519	7.1%	35.0%
7	Protein Mineral Mix	12.8280	lbs/DM	14.10	12.83	6.3949	5.8177	26.7%	91.0%
8		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%
9		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%
10		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%
11		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%
12		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%
13		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%





Expand mix opens the “Expand mix” Box. You select the mix to expand and You can use the Original feed amount or Input an amount to use

Click OK

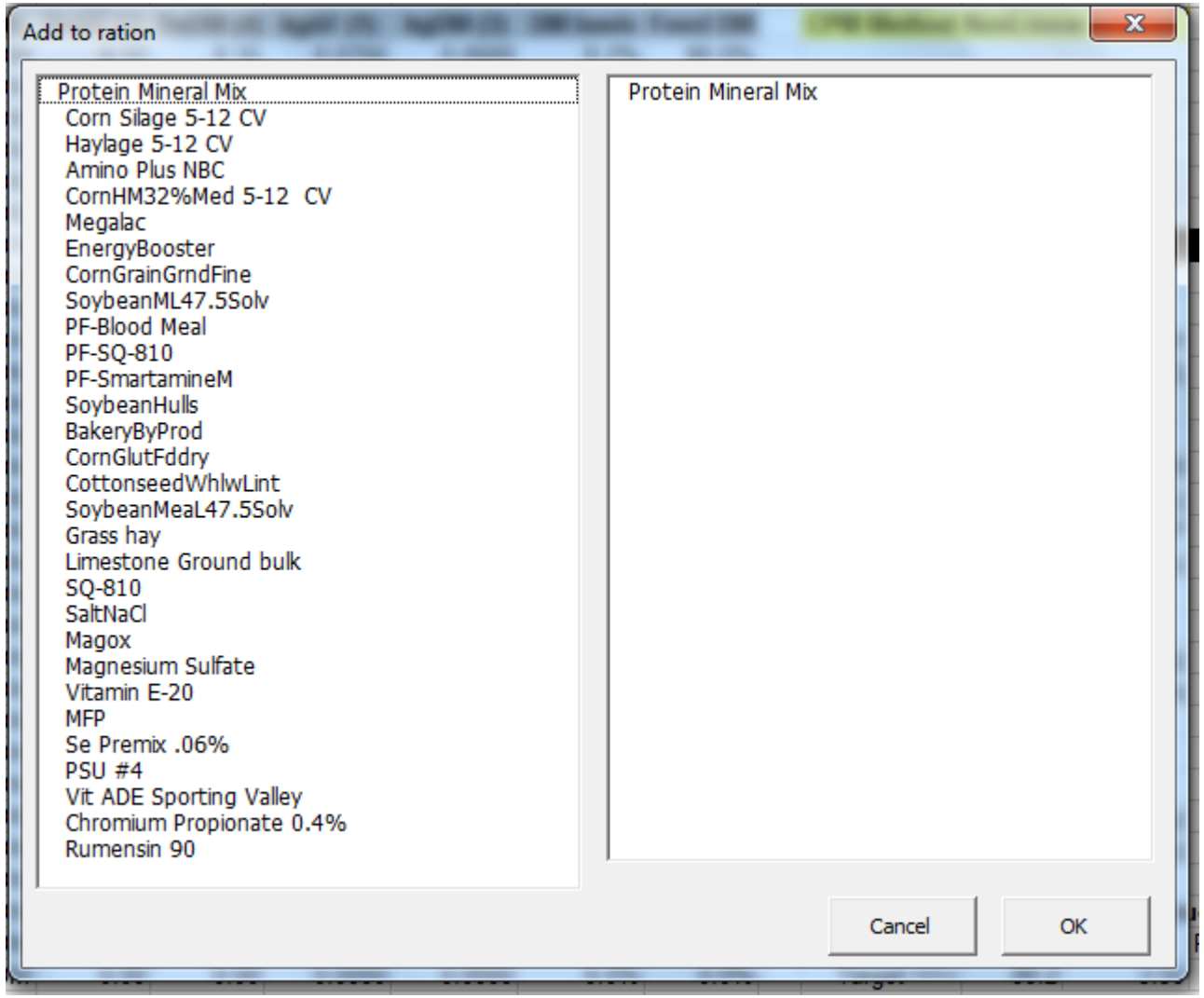
Note – you can make up to six mixes

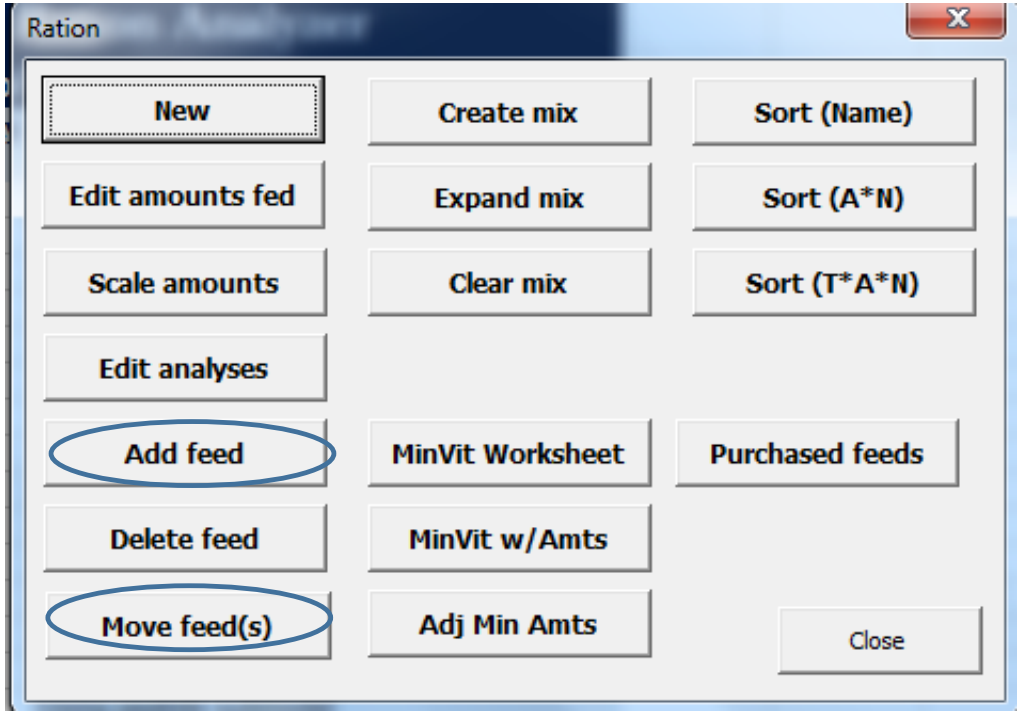
	A	B	C	D	E	F	G	H	I
	Feed	Input	Units	lbsAF (2)	lbsDM (4)	kgAF (1)	kgDM (3)	DM basis	Feed DM
2	0AlfHy20Cp37Ndf17LNdf	0.1520	lbs/DM	0.17	0.15	0.0766	0.0689	0.2%	90.0%
3	0CrnSilPr35Dm41NdfCrse	25.7960	lbs/DM	73.70	25.80	33.4253	11.6989	42.4%	35.0%
4	0CornGrainGrndFine	5.8090	lbs/DM	6.60	5.81	2.9937	2.6345	9.5%	88.0%
5	0MinVit	0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	95.0%
6	0RyeGsSil15Cp58Ndf8LNdf	3.4220	lbs/DM	9.78	3.42	4.4341	1.5519	5.6%	35.0%
7	Protein Mineral Mix	12.8280	lbs/DM	14.10	12.83	6.3949	5.8177	21.1%	91.0%
8	0MolassesCane	0.0010	lbs/DM	0.00	0.00	0.0006	0.0005	0.0%	73.0%
9	0SoybeanHullsPellet	4.2150	lbs/DM	4.63	4.22	2.1006	1.9116	6.9%	91.0%
10	0SoybeanML47.5Solv	6.4220	lbs/DM	7.14	6.42	3.2361	2.9125	10.6%	90.0%
11	0BloodMeal	1.2320	lbs/DM	1.37	1.23	0.6208	0.5587	2.0%	90.0%
12	0SodiumBicarbonate	0.2500	lbs/DM	0.25	0.25	0.1139	0.1134	0.4%	99.5%
13	0MFP	0.0380	lbs/DM	0.04	0.04	0.0174	0.0172	0.1%	99.0%
14	0LimestoneGrnd	0.3000	lbs/DM	0.30	0.30	0.1367	0.1361	0.5%	99.5%
15	0MagOx	0.1000	lbs/DM	0.10	0.10	0.0456	0.0454	0.2%	99.5%
16	0VitaminPremixADE	0.0100	lbs/DM	0.01	0.01	0.0046	0.0045	0.0%	99.5%
17	0TraceMineralPremix	0.0100	lbs/DM	0.01	0.01	0.0046	0.0045	0.0%	99.5%
18	SaltNaCl	0.2500	lbs/DM	0.25	0.25	0.1139	0.1134	0.4%	99.5%
19		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%
20		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%
21		0.0000	lbs/DM	0.00	0.00	0.0000	0.0000	0.0%	0.0%

The mix is expanded
And the original feeds and
Their amounts are added
Back to the ration

In this manner you can use
The feeds to create more
Mixes and the mix made
Can be used as a feed for
Other groups of cows

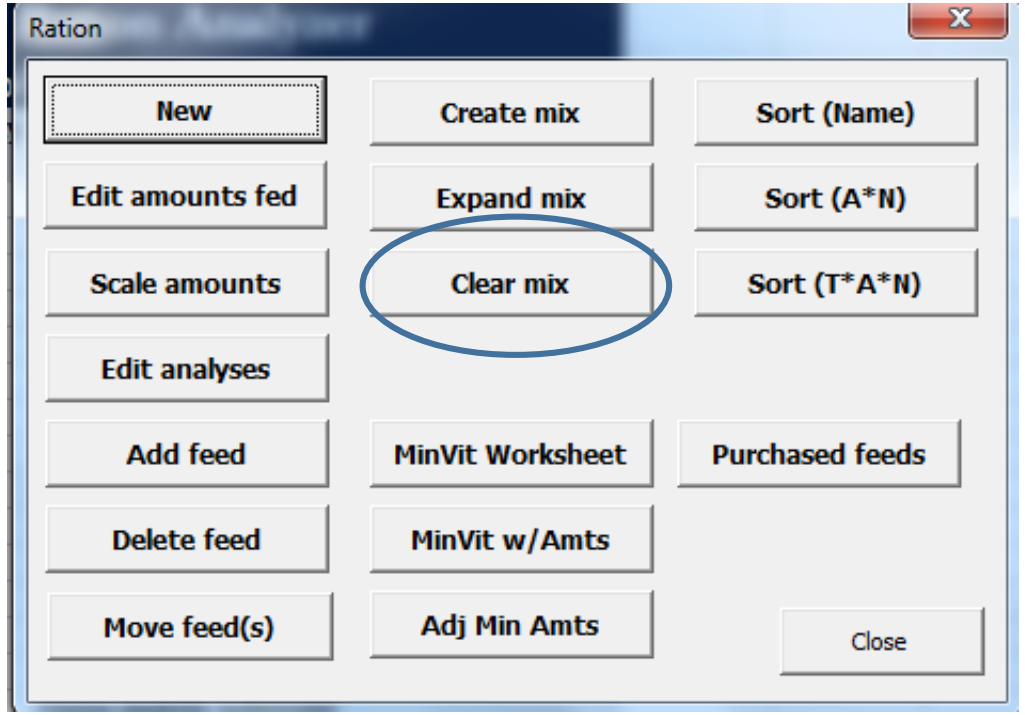
You will need to edit the
Amounts fed as now the mix
And the ingredients are both
In the ration!!





You can add feed (mix) to the ration several times, Essentially copying the feed in the ration (Add feed)

And you can move the mix (feed) to the Feedbank and Save it out in a feedbank for use in other rations



“Clear mix” tab clears feeds from the mix worksheet
This allows that mix sheet to be used for another mix.
It DOES NOT REMOVE THE MIX FROM THE RATION. The mix
Remains as a feed until it is deleted from the ration, using the
“Delete feed” button and selecting the mix