



## Creep Feeding Calves — Consider Bypass Protein

If you are going to use a creep feed this year, take a look at 2404R premix. It contains a bypass protein mix of blood meal, fishmeal, and corn gluten meal. University of Nebraska research documents bypass protein is essential in a calf creep diet. Encouraging early intake of a highly digestible creep feed that contains a balance of energy and protein for muscle growth, along with a balance of minerals for skeletal development, is critical to optimize growth in the young calf. In addition, getting a calf started on solid feed at a young age facilitates early weaning.

Protein sources should provide the necessary profile of essential amino acids (bypass protein) that can be used by the calf prior to and after the full development of the rumen. For a 400-pound calf, this would mean a 16% CP creep of which 35-40% is UIP. If you consider that the rumen microbes likely supply about 60% of the amino acids needed by the young calf and have a ratio of lysine:methionine of 2.86:1, then a bypass protein package with a ratio

of lysine:methionine of 3.4:1 should supply a total lysine:methionine ratio of 3:1. This ratio is similar to that of the muscle that the calf is trying to produce.

It should be noted that because of the young calf's small rumen size and high bypass protein needs, large amounts of high protein grasses or legumes containing a lot of soluble protein (SIP) won't work as well. The calf cannot utilize all of this protein. It will be wasted, and growth rates will not be optimal.

Several options are available to prepare a 16% protein creep feed. A Vigortone mineral pack is used in several commercial creep feeds, also. Check with your Vigortone area sales manager to decide what option works best for your calves. A 2404 creep ration is \$1/month higher per calf than a 2714 ration. The added bypass protein would make that a good investment.

Premix Used:	2714	3662	2404	2705	4470
			LBS AS FED		
CORN GRAIN,	1340.00	1342.00	1370.00	1340.00	1340.00
SBM 46.5%	400.00	400.00	320.00	400.00	400.00
OATS	200.00	200.00	200.00	200.00	200.00
KA2714 R	50.00				
SALT	10.00	8.00	10.00	10.00	10.00
3662SR		50.00			
KA2404			100.00		
KA2705 D				50.00	
4470D					50.00
Batch Size (As Fed):	2000.00	2000.00	2000.00	2000.00	2000.00

		AS FED NUTRIENT ANALYSIS					
2	Dry Matter	% of Wt	89.53	89.49	89.52	89.53	89.51
12	NE Maint	Mcal/Lb	.86	.86	.85	.86	.86
13	NE Gain	Mcal/Lb	.58	.58	.58	.58	.58
20	ADF	% of Wt	4.65	4.66	4.49	4.65	4.65
42	Crude Prot	% of Wt	16.18	16.19	16.15	16.18	16.18
76	Calcium	% of Wt	.80	.68	.80	.80	.58
77	Phosphorus	% of Wt	.51	.46	.51	.51	.49
80	Cal:Phos	Ratio	1.59	1.48	1.56	1.59	1.18
82	Potassium	% of Wt	.69	.71	.61	.69	.93
83	Salt	% of Wt	.52	.54	.50	.50	.50
121	Vit A, Add	KIU/Lb	10.75	7.50	7.50	10.75	10.00
122	Vit D3, Add	KIU/Lb	6.18	.75	1.50	6.18	1.00
123	Vit E, Add	IU/Lb	20.00	6.75	25.00	20.00	10.00
110	Se Added	ppm	.30	.33	.30	.30	.30
99	Copper	ppm	14.00	31.25	16.25	16.25	25.00
111	Zinc	ppm	47.04	75.00	62.50	60.00	75.00
171	Monensin	mg/lb	22.50	15.00	22.50		
160	Deccox	mg/lb				11.35	11.35