

Feed Additive Needed to Increase Net Phosphorus

%	Flaxseed	Rice Bran	Wheat Bran	Oats	Soy Meal	Distillers Grains	Chia Seed	Sunflower Seed
Ca	0.317	0.693	0.164	0.139	0.432	0.08	0.625	0.326
P	0.694	1.824	1.092	0.411	0.757	0.898	0.95	0.65
CP	28.034	14.87	17.429	12.741	51.368	30.736	16	22
Fat	23.4	15.5	4.54	6.67	3.968	13.067	-	34
ESC	4.5	7.16	5.6	2.5	10.103	6.772	-	3.461
Starch	2.5	19.36	22.3	44.2	1.964	5.607	-	1.086
ESC + Starch	7.0	26.5	27.9	46.7	12.1	12.4	-	4.5

Calcium, Phosphorus, Net Phosphorus and CP Provided (grams)

	Flaxseed	Rice Bran	Wheat Bran	Oats	Soy Meal	Distillers Grains	Chia Seed	Sunflower Seed	
Pounds Fed	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<i>2 oz = 0.125 lbs</i>
Ca	0.7	1.6	0.4	0.3	1.0	0.2	1.4	0.7	<i>4 oz = 0.25 lbs</i>
P	1.6	4.1	2.5	0.9	1.7	2.0	2.2	1.5	<i>8 oz = 0.5 lbs</i>
Grams Net P	0.9	2.6	2.1	0.6	0.7	1.9	0.7	0.7	
Grams CP	64	34	40	29	117	70	36	50	

Omega-3,6 Fatty Acids Content and Ratios

	Flaxseed	Rice Bran	Wheat Bran	Oats	Soy Meal	Distillers Grains	Chia Seed	Flaxseed Oil	Sunflower Seed
Cups	1	1	1	1	1	1	1	1 Tablespoon	1
Grams	168	118	58	156	122	166	168	14	140
Ounces	5.9	4.2	2.0	5.5	4.3	5.8	6	0.5	4.9
Omega-3 (mg)	38,325	373	97	173	150	108	29,490	7,196	104
Omega-6 (mg)	9,931	8,428	1,183	3,781	1,124	3,041	9,720	1,715	32,268
Ratio	3.86:1	0.04:1	0.08:1	0.05:1	0.13:1	0.04:1	3.03:1	4.2:1	0:1

Grass has an Omega-3 to Omega-6 ratio of approximately 4 (4:1) *see notes* *see notes* *see notes*

Calculate Omega-3,6 Fatty Acid Ratios - Goal > 3:1 or better

Nutrient	Ounces Fed	Omega-3	Omega-6
Flaxseed	6.00	38,873	10,073
Rice Bran	2.00	180	4,057
Wheat Bran	0.00	0	0
Distillers Grains*	0.00	0	0
Oats	0.00	0	0
Soy Meal	0.00	0	0
Chia Seed	0.00	0	0
Sunflower Seed	0.00	0	0
Flaxseed Oil-Tbsp	0.00	0	0
Total		39,052	14,130
Omega-3 to Omega-6 ratio = 2.76:1			

This is used simply to calculate the Omega-3:Omega-6 ratios of your "add-ins" to assure you are not nullifying the antioxidant value of your Omega-3 supplements. Flaxseed oil uses "tablespoon" instead of ounces as it is the measure most likely to be used.

Sources:

DairyOne Feed Composition Library (except Chia Seed)
<http://www.dairyone.com/Forage/FeedComp/default.asp>
 NutritionData
<http://www.nutritiondata.com/>

Notes:

Fatty Acid (Omega-3, Omega-6) data is from Nutritiondata.com
 Distillers grains (derived from corn) may be deficient in lysine
 Unable to find specific Omega-3 data, however, corn has a poor Omega-3 to 6 ratio.
 Omega-3 and -6 numbers used here are for corn and are shown for comparative estimate only.
 Chia Seed information is from NutritionData.com