

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **COTTONSEED MEAL**

Choose Ingredient:

COTTONSEED MEAL

	Average Values		
	Total %	DC	Dig %
Lysine	1.70	62.81	1.07
Methionine	0.65	71.89	0.46
Cysteine	0.70	70.94	0.50
TSAA	1.35	71.40	0.96
Threonine	1.28	67.16	0.86
Tryptophan	0.78	80.26	0.63
Arginine	4.38	85.29	3.74
Isoleucine	1.19	72.83	0.86
Valine	1.75	76.29	1.33
Leucine	2.26	74.63	1.69
Histidine	1.02	64.14	0.65
Phenylalanine	2.14	83.96	1.79

Crude Protein: 39.58

AA's to CP Ratios	
Total %	Dig %
4.30	2.70
1.64	1.16
1.77	1.26
3.41	2.43
3.23	2.17
1.97	1.59
11.07	9.45
3.01	2.17
4.42	3.36
5.71	4.27
2.58	1.64
5.41	4.52

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
38.24	42.99
41.18	46.73
79.41	89.72
75.29	80.37
45.88	58.88
257.65	349.53
70.00	80.37
102.94	124.30
132.94	157.94
60.00	60.75
125.88	167.29

	Adjusted Values		
	Total %	DC	Dig %
Lysine	1.70	62.81	1.07
Methionine	0.65	71.89	0.47
Cysteine	0.70	70.94	0.50
TSAA	1.35	71.40	0.96
Threonine	1.28	67.16	0.86
Tryptophan	0.78	80.26	0.63
Arginine	4.38	85.29	3.74
Isoleucine	1.19	72.83	0.87
Valine	1.75	76.29	1.34
Leucine	2.26	74.63	1.69
Histidine	1.02	64.14	0.65
Phenylalanine	2.14	83.96	1.80

Crude Protein: 39.58

AA's to CP Ratios	
Total %	Dig %
4.30	2.70
1.64	1.19
1.77	1.26
3.41	2.43
3.23	2.17
1.97	1.59
11.07	9.45
3.01	2.20
4.42	3.39
5.71	4.27
2.58	1.64
5.41	4.55

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
38.24	43.93
41.18	46.73
79.41	89.72
75.29	80.37
45.88	58.88
257.65	349.53
70.00	81.31
102.94	125.23
132.94	157.94
60.00	60.75
125.88	168.22

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **SOYBEAN MEAL (48% CP)**

Choose Ingredient:

SOYBEAN MEAL (48% CP)

	Average Values		
	Total %	DC	Dig %
Lysine	3.06	90.80	2.77
Methionine	0.66	92.21	0.61
Cysteine	0.77	84.35	0.65
TSAA	1.43	87.98	1.26
Threonine	1.90	88.48	1.68
Tryptophan	0.64	88.57	0.57
Arginine	3.61	92.83	3.35
Isoleucine	2.16	91.85	1.99
Valine	2.25	90.89	2.05
Leucine	3.78	91.91	3.47
Histidine	1.28	90.10	1.15
Phenylalanine	2.43	92.25	2.24

Crude Protein: 48.72

AA's to CP Ratios	
Total %	Dig %
6.28	5.69
1.35	1.25
1.58	1.33
2.94	2.59
3.90	3.45
1.31	1.17
7.41	6.88
4.43	4.08
4.62	4.21
7.76	7.12
2.63	2.36
4.99	4.60

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
21.57	22.02
25.16	23.47
46.73	45.49
62.09	60.65
20.92	20.58
117.97	120.94
70.59	71.84
73.53	74.01
123.53	125.27
41.83	41.52
79.41	80.87

	Adjusted Values		
	Total %	DC	Dig %
Lysine	3.06	90.80	2.78
Methionine	0.66	92.21	0.61
Cysteine	0.77	84.35	0.65
TSAA	1.43	87.98	1.26
Threonine	1.90	88.48	1.68
Tryptophan	0.64	88.57	0.57
Arginine	3.61	92.83	3.35
Isoleucine	2.16	91.85	1.98
Valine	2.25	90.89	2.05
Leucine	3.78	91.91	3.47
Histidine	1.28	90.10	1.15
Phenylalanine	2.43	92.25	2.24

Crude Protein: 48.72

AA's to CP Ratios	
Total %	Dig %
6.28	5.71
1.35	1.25
1.58	1.33
2.94	2.59
3.90	3.45
1.31	1.17
7.41	6.88
4.43	4.06
4.62	4.21
7.76	7.12
2.63	2.36
4.99	4.60

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
21.57	21.94
25.16	23.38
46.73	45.32
62.09	60.43
20.92	20.50
117.97	120.50
70.59	71.22
73.53	73.74
123.53	124.82
41.83	41.37
79.41	80.58

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **RAPESEED MEAL**

Choose Ingredient:

RAPESEED MEAL

	Average Values		
	Total %	DC	Dig %
Lysine	2.09	79.15	1.65
Methionine	0.61	93.39	0.57
Cysteine	0.98	74.45	0.73
TSAA	1.59	81.72	1.30
Threonine	1.74	78.86	1.37
Tryptophan	0.63	80.37	0.51
Arginine	2.33	85.43	1.99
Isoleucine	1.44	83.69	1.20
Valine	1.96	82.83	1.62
Leucine	2.55	85.67	2.18
Histidine	1.36	89.87	1.23
Phenylalanine	1.56	85.40	1.33

Crude Protein: 38.75

AA's to CP Ratios	
Total %	Dig %
5.39	4.26
1.57	1.47
2.53	1.88
4.10	3.35
4.49	3.54
1.63	1.32
6.01	5.14
3.72	3.10
5.06	4.18
6.58	5.63
3.51	3.17
4.03	3.43

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
29.19	34.55
46.89	44.24
76.08	78.79
83.25	83.03
30.14	30.91
111.48	120.61
68.90	72.73
93.78	98.18
122.01	132.12
65.07	74.55
74.64	80.61

	Adjusted Values		
	Total %	DC	Dig %
Lysine	2.09	79.15	1.65
Methionine	0.61	93.39	0.57
Cysteine	0.98	74.45	0.73
TSAA	1.59	81.72	1.30
Threonine	1.74	78.86	1.37
Tryptophan	0.63	80.37	0.51
Arginine	2.33	85.43	1.99
Isoleucine	1.44	83.69	1.21
Valine	1.96	82.83	1.62
Leucine	2.55	85.67	2.18
Histidine	1.36	89.87	1.22
Phenylalanine	1.56	85.40	1.33

Crude Protein: 38.75

AA's to CP Ratios	
Total %	Dig %
5.39	4.26
1.57	1.47
2.53	1.88
4.10	3.35
4.49	3.54
1.63	1.32
6.01	5.14
3.72	3.12
5.06	4.18
6.58	5.63
3.51	3.15
4.03	3.43

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
29.19	34.55
46.89	44.24
76.08	78.79
83.25	83.03
30.14	30.91
111.48	120.61
68.90	73.33
93.78	98.18
122.01	132.12
65.07	73.94
74.64	80.61

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **SUNFLOWER MEAL**

Choose Ingredient:

SUNFLOWER MEAL

	Average Values		
	Total %	DC	Dig %
Lysine	1.24	80.37	1.00
Methionine	0.70	91.15	0.64
Cysteine	0.53	79.20	0.42
TSAA	1.23	86.00	1.06
Threonine	1.22	83.72	1.02
Tryptophan	-	-	-
Arginine	2.69	93.07	2.50
Isoleucine	1.37	88.86	1.22
Valine	1.65	85.75	1.42
Leucine	2.07	88.74	1.84
Histidine	0.84	86.07	0.72
Phenylalanine	1.50	90.83	1.36

Crude Protein: 32.82

AA's to CP Ratios	
Total %	Dig %
3.78	3.05
2.13	1.95
1.61	1.28
3.75	3.23
3.72	3.11
-	-
8.20	7.62
4.17	3.72
5.03	4.33
6.31	5.61
2.56	2.19
4.57	4.14

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
56.45	64.00
42.74	42.00
99.19	106.00
98.39	102.00
-	-
216.94	250.00
110.48	122.00
133.06	142.00
166.94	184.00
67.74	72.00
120.97	136.00

	Adjusted Values		
	Total %	DC	Dig %
Lysine	1.24	80.37	1.00
Methionine	0.70	91.15	0.64
Cysteine	0.53	79.20	0.42
TSAA	1.23	86.00	1.06
Threonine	1.22	83.72	1.02
Tryptophan	-	-	-
Arginine	2.69	93.07	2.50
Isoleucine	1.37	88.86	1.22
Valine	1.65	85.75	1.41
Leucine	2.07	88.74	1.84
Histidine	0.84	86.07	0.72
Phenylalanine	1.50	90.83	1.36

Crude Protein: 32.82

AA's to CP Ratios	
Total %	Dig %
3.78	3.05
2.13	1.95
1.61	1.28
3.75	3.23
3.72	3.11
-	-
8.20	7.62
4.17	3.72
5.03	4.30
6.31	5.61
2.56	2.19
4.57	4.14

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
56.45	64.00
42.74	42.00
99.19	106.00
98.39	102.00
-	-
216.94	250.00
110.48	122.00
133.06	141.00
166.94	184.00
67.74	72.00
120.97	136.00

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **RICE BRAN (PARBOIL)**

Choose Ingredient:

Rice Bran (Parboil) ▼

	Average Values		
	Total %	DC	Dig %
Lysine	0.84	84.43	0.71
Methionine	0.38	83.80	0.32
Cysteine	0.36	88.43	0.32
TSAA	0.74	86.05	0.64
Threonine	0.69	78.97	0.54
Tryptophan	-	-	-
Arginine	1.65	90.92	1.50
Isoleucine	0.63	85.47	0.54
Valine	1.13	87.04	0.98
Leucine	1.32	86.67	1.14
Histidine	0.54	88.38	0.48
Phenylalanine	0.80	87.09	0.70

Crude Protein: 17.37

AA's to CP Ratios	
Total %	Dig %
4.84	4.09
2.19	1.84
2.07	1.84
4.26	3.68
3.97	3.11
-	-
9.50	8.64
3.63	3.11
6.51	5.64
7.60	6.56
3.11	2.76
4.61	4.03

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
45.24	45.07
42.86	45.07
88.10	90.14
82.14	76.06
-	-
196.43	211.27
75.00	76.06
134.52	138.03
157.14	160.56
64.29	67.61
95.24	98.59

	Adjusted Values		
	Total %	DC	Dig %
Lysine	0.84	84.43	0.71
Methionine	0.38	83.80	0.32
Cysteine	0.36	88.43	0.32
TSAA	0.74	86.05	0.64
Threonine	0.69	78.97	0.54
Tryptophan	-	-	-
Arginine	1.65	90.92	1.50
Isoleucine	0.63	85.47	0.54
Valine	1.13	87.04	0.98
Leucine	1.32	86.67	1.14
Histidine	0.54	88.38	0.48
Phenylalanine	0.80	87.09	0.70

Crude Protein: 17.37

AA's to CP Ratios	
Total %	Dig %
4.84	4.09
2.19	1.84
2.07	1.84
4.26	3.68
3.97	3.11
-	-
9.50	8.64
3.63	3.11
6.51	5.64
7.60	6.56
3.11	2.76
4.61	4.03

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
45.24	45.07
42.86	45.07
88.10	90.14
82.14	76.06
-	-
196.43	211.27
75.00	76.06
134.52	138.03
157.14	160.56
64.29	67.61
95.24	98.59

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **FISH MEAL**

Choose Ingredient:

FISH MEAL

	Average Values		
	Total %	DC	Dig %
Lysine	4.75	90.21	4.29
Methionine	1.75	92.86	1.62
Cysteine	0.58	77.69	0.45
TSAA	2.33	89.08	2.08
Threonine	2.67	91.19	2.43
Tryptophan	0.62	88.34	0.55
Arginine	4.06	92.57	3.76
Isoleucine	2.48	93.33	2.32
Valine	2.94	92.37	2.72
Leucine	4.55	93.64	4.26
Histidine	1.55	89.08	1.38
Phenylalanine	2.41	91.59	2.21

Crude Protein: 63.04

AA's to CP Ratios	
Total %	Dig %
7.53	6.81
2.78	2.57
0.92	0.71
3.70	3.30
4.24	3.85
0.98	0.87
6.44	5.96
3.93	3.68
4.66	4.31
7.22	6.76
2.46	2.19
3.82	3.51

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
36.84	37.76
12.21	10.49
49.05	48.48
56.21	56.64
13.05	12.82
85.47	87.65
52.21	54.08
61.89	63.40
95.79	99.30
32.63	32.17
50.74	51.52

	Adjusted Values		
	Total %	DC	Dig %
Lysine	4.75	90.21	4.28
Methionine	1.75	92.86	1.63
Cysteine	0.58	77.69	0.45
TSAA	2.33	89.08	2.08
Threonine	2.67	91.19	2.43
Tryptophan	0.62	88.34	0.55
Arginine	4.06	92.57	3.76
Isoleucine	2.48	93.33	2.31
Valine	2.94	92.37	2.72
Leucine	4.55	93.64	4.26
Histidine	1.55	89.08	1.38
Phenylalanine	2.41	91.59	2.21

Crude Protein: 63.04

AA's to CP Ratios	
Total %	Dig %
7.53	6.79
2.78	2.59
0.92	0.71
3.70	3.30
4.24	3.85
0.98	0.87
6.44	5.96
3.93	3.66
4.66	4.31
7.22	6.76
2.46	2.19
3.82	3.51

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
36.84	38.08
12.21	10.51
49.05	48.60
56.21	56.78
13.05	12.85
85.47	87.85
52.21	53.97
61.89	63.55
95.79	99.53
32.63	32.24
50.74	51.64

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **BONE MEAL**

Choose Ingredient:

Bone Meal

	Average Values		
	Total %	DC	Dig %
Lysine	1.54	69.20	1.07
Methionine	0.34	79.80	0.27
Cysteine	0.20	48.70	0.10
TSAA	0.54	68.28	0.37
Threonine	1.01	75.40	0.76
Tryptophan	-	-	-
Arginine	2.38	70.50	1.68
Isoleucine	0.83	76.20	0.63
Valine	1.38	75.60	1.04
Leucine	1.85	77.90	1.44
Histidine	0.43	60.50	0.26
Phenylalanine	1.09	77.50	0.84

Crude Protein: 39.80

AA's to CP Ratios	
Total %	Dig %
3.87	2.69
0.85	0.68
0.50	0.25
1.36	0.93
2.54	1.91
-	-
5.98	4.22
2.09	1.58
3.47	2.61
4.65	3.62
1.08	0.65
2.74	2.11

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
22.08	25.23
12.99	9.35
35.06	34.58
65.58	71.03
-	-
154.55	157.01
53.90	58.88
89.61	97.20
120.13	134.58
27.92	24.30
70.78	78.50

	Adjusted Values		
	Total %	DC	Dig %
Lysine	1.54	69.20	1.07
Methionine	0.34	79.80	0.27
Cysteine	0.20	48.70	0.10
TSAA	0.54	68.28	0.37
Threonine	1.01	75.40	0.76
Tryptophan	-	-	-
Arginine	2.38	70.50	1.68
Isoleucine	0.83	76.20	0.63
Valine	1.38	75.60	1.04
Leucine	1.85	77.90	1.44
Histidine	0.43	60.50	0.26
Phenylalanine	1.09	77.50	0.84

Crude Protein: 39.80

AA's to CP Ratios	
Total %	Dig %
3.87	2.69
0.85	0.68
0.50	0.25
1.36	0.93
2.54	1.91
-	-
5.98	4.22
2.09	1.58
3.47	2.61
4.65	3.62
1.08	0.65
2.74	2.11

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
22.08	25.23
12.99	9.35
35.06	34.58
65.58	71.03
-	-
154.55	157.01
53.90	58.88
89.61	97.20
120.13	134.58
27.92	24.30
70.78	78.50

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **COCONUT MEAL**

Choose Ingredient:

COCONUT MEAL

	Average Values		
	Total %	DC	Dig %
Lysine	0.59	50.30	0.30
Methionine	0.34	83.61	0.28
Cysteine	0.37	55.22	0.20
TSAA	0.71	68.82	0.49
Threonine	0.66	62.98	0.42
Tryptophan	0.20	51.05	0.10
Arginine	2.43	83.70	2.04
Isoleucine	0.61	76.61	0.47
Valine	1.00	78.86	0.79
Leucine	1.28	79.74	1.02
Histidine	0.39	71.96	0.28
Phenylalanine	0.87	83.73	0.73

Crude Protein: 21.78

AA's to CP Ratios	
Total %	Dig %
2.71	1.38
1.56	1.29
1.70	0.92
3.26	2.25
3.03	1.93
0.92	0.46
11.16	9.37
2.80	2.16
4.59	3.63
5.88	4.68
1.79	1.29
3.99	3.35

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
57.63	93.33
62.71	66.67
120.34	163.33
111.86	140.00
33.90	33.33
411.86	680.00
103.39	156.67
169.49	263.33
216.95	340.00
66.10	93.33
147.46	243.33

	Adjusted Values		
	Total %	DC	Dig %
Lysine	0.59	50.30	0.30
Methionine	0.34	83.61	0.28
Cysteine	0.37	55.22	0.20
TSAA	0.71	68.82	0.49
Threonine	0.66	62.98	0.42
Tryptophan	0.20	51.05	0.10
Arginine	2.43	83.70	2.03
Isoleucine	0.61	76.61	0.47
Valine	1.00	78.86	0.79
Leucine	1.28	79.74	1.02
Histidine	0.39	71.96	0.28
Phenylalanine	0.87	83.73	0.73

Crude Protein: 21.78

AA's to CP Ratios	
Total %	Dig %
2.71	1.38
1.56	1.29
1.70	0.92
3.26	2.25
3.03	1.93
0.92	0.46
11.16	9.32
2.80	2.16
4.59	3.63
5.88	4.68
1.79	1.29
3.99	3.35

AA's to Lysine Ratios	
Total %	Dig %
100.00	100.00
57.63	93.33
62.71	66.67
120.34	163.33
111.86	140.00
33.90	33.33
411.86	676.67
103.39	156.67
169.49	263.33
216.95	340.00
66.10	93.33
147.46	243.33

TRUE AMINO ACID DIGESTIBILITY VALUES FOR POULTRY RATIOS FOR INGREDIENT: **L-TRYPTOPHAN**

Choose Ingredient:

L-Tryptophan

	Average Values		
	Total %	DC	Dig %
Lysine	-	-	-
Methionine	-	-	-
Cysteine	-	-	-
TSAA	-	-	-
Threonine	-	-	-
Tryptophan	98.50	100.00	98.50
Arginine	-	-	-
Isoleucine	-	-	-
Valine	-	-	-
Leucine	-	-	-
Histidine	-	-	-
Phenylalanine	-	-	-

Crude Protein: 85.80

	AA's to CP Ratios	
	Total %	Dig %
Lysine	-	-
Methionine	-	-
Cysteine	-	-
TSAA	-	-
Threonine	-	-
Tryptophan	114.80	114.80
Arginine	-	-
Isoleucine	-	-
Valine	-	-
Leucine	-	-
Histidine	-	-
Phenylalanine	-	-

	AA's to Lysine Ratios	
	Total %	Dig %
Lysine	-	-
Methionine	-	-
Cysteine	-	-
TSAA	-	-
Threonine	-	-
Tryptophan	Infinity	Infinity
Arginine	-	-
Isoleucine	-	-
Valine	-	-
Leucine	-	-
Histidine	-	-
Phenylalanine	-	-

	Adjusted Values		
	Total %	DC	Dig %
Lysine	-	-	-
Methionine	-	-	-
Cysteine	-	-	-
TSAA	-	-	-
Threonine	-	-	-
Tryptophan	98.50	100.00	98.50
Arginine	-	-	-
Isoleucine	-	-	-
Valine	-	-	-
Leucine	-	-	-
Histidine	-	-	-
Phenylalanine	-	-	-

Crude Protein: 85.80

	AA's to CP Ratios	
	Total %	Dig %
Lysine	-	-
Methionine	-	-
Cysteine	-	-
TSAA	-	-
Threonine	-	-
Tryptophan	114.80	114.80
Arginine	-	-
Isoleucine	-	-
Valine	-	-
Leucine	-	-
Histidine	-	-
Phenylalanine	-	-

	AA's to Lysine Ratios	
	Total %	Dig %
Lysine	-	-
Methionine	-	-
Cysteine	-	-
TSAA	-	-
Threonine	-	-
Tryptophan	Infinity	Infinity
Arginine	-	-
Isoleucine	-	-
Valine	-	-
Leucine	-	-
Histidine	-	-
Phenylalanine	-	-

