

Anlage 2 Blatt 1 zu "Leitfaden - Ableitung von mikrobiologischen Orientierungswerten bei Futtermitteln", Arbeitskreis Futtermittelmikrobiologie der FG VI des VDLUFA

1 Extraktionsschrote (Soja+Lein) 1994-1996 N=429

	KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7	
CfU/g	1.000.000	1.000.000	100.000	10.000	20.000	1.000	30.000	Median	Median	
CfU/g	10*log(50.Quantil +1)	870.000	1.020.000	60.000	5.000	20.000	2.236	10.247	3.503	
CfU/g	10*log(50.Quantil +0,5)	275.118	322.552	18.974	1.581	6.325	707	3.240		
CfU/g	10*log(90.Q)	744.292	789.905	50.000	4.000	21.401	2.246	17.218		
	Quant.Rang (OW)	91,6	91,7	96,0	96,2	89,4	76,1	94,0		
	Quant.Rang (50.Q+1)	91,3	92,7	93,6	93,0	89,4	89,9	86,1		
	Quant.Rang (50.Q+0,5)	76,5	80,0	75,8	80,7	74,2	73,0	71,6		
Median	log	4,940	5,009	3,778	2,699	3,301	2,349	3,011	5,301	3,544

Häufigkeit	73,9%	96,7%	29,4%	46,9%	88,1%	37,3%	70,4%	98,6%	94,9%
N= 429									

Futter	KONS	log KBE/g							KG1-3	KG4-7
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7		
1 1-Exschrot		5,0000	6,0414	4,1139	2,3010	3,3010		3,4150	6,0839	3,6813
2 1-Exschrot		6,1761	6,5441					3,0000	6,6990	3,0013
3 1-Exschrot			6,7482	4,4771	2,7782	4,0253		3,4150	6,7505	4,1399
4 1-Exschrot		6,7404	5,3010		2,8195	4,4082		4,0000	6,7559	4,5594
5 1-Exschrot		6,1761			3,3010	4,2718		4,2380	6,1761	4,5798
6 1-Exschrot			5,5315	4,6990		2,5441		2,1761	5,5911	2,7007
7 1-Exschrot			4,8451			3,3010		3,0000	4,8451	3,4774
8 1-Exschrot			6,5798			3,1461		3,3222	6,5798	3,5443
9 1-Exschrot			5,2788		1,4771	2,0000		2,4771	5,2788	2,6345
10 1-Exschrot	4,0000		5,2041					5,2305		
11 1-Exschrot			5,4624					3,3424	5,4624	3,3430
12 1-Exschrot			5,7076			2,9031		2,4771	5,7076	3,0422
13 1-Exschrot			4,7782	4,1461	3,6021	2,2041		2,1139	4,8692	3,6326
14 1-Exschrot	4,4771		5,4314					2,9138	5,4771	2,9154
15 1-Exschrot			4,9031		2,4771	3,6021	3,0000	3,7482	4,9031	4,0374
16 1-Exschrot			4,0899			3,8388		2,4771	4,0900	3,8575
17 1-Exschrot	3,4771	3,3010			2,3617			3,2923	3,6991	3,3408
18 1-Exschrot	4,3010	4,5563	3,4771			2,1139		4,7709	2,4183	
19 1-Exschrot	3,6021	4,3424				2,0000		4,4150	2,0128	
20 1-Exschrot		5,0792	3,3010	2,0000	2,0000			5,0864	2,3054	
21 1-Exschrot		4,3010			2,0000			4,3011	2,6042	
22 1-Exschrot	4,0000	4,0000		3,0000				4,3011	3,0013	
23 1-Exschrot		4,6021			2,7482			4,6021	2,7505	
24 1-Exschrot		5,0000			2,0000			5,0000	2,0128	
25 1-Exschrot	5,0000	5,1461			3,2041			5,3802	3,2049	
26 1-Exschrot		4,4771			2,0000	2,3010		4,4772	2,4800	
27 1-Exschrot		5,3010	5,0000		2,7782	3,9031		5,4771	3,9346	
28 1-Exschrot		5,9542	5,3010			5,2553		6,0414	5,2553	
29 1-Exschrot	4,8451	6,2041			3,0792		2,4771	6,2227	3,1767	
30 1-Exschrot		3,0000			2,0000			3,0009	2,0128	
31 1-Exschrot		3,4771						3,4774		
32 1-Exschrot		3,7782				3,7853		3,7783	3,7925	
33 1-Exschrot		5,6021				2,7782		5,6021	2,7803	
34 1-Exschrot	5,4771	6,4771				2,9542		2,8451	6,1585	3,2047
35 1-Exschrot		5,1761	3,0000					5,1790		
36 1-Exschrot		5,1139	4,4771					5,2041	2,6345	
37 1-Exschrot	5,1139	4,3010				3,7853		5,1761	3,8514	
38 1-Exschrot	5,6532	5,4771	4,0000			3,3802		5,8808	3,3808	
39 1-Exschrot	5,1139	4,6990				2,6990	2,0000	5,2553	2,7796	
40 1-Exschrot		4,6990						4,6990		
41 1-Exschrot	4,3010	5,1139		3,0000	3,5563		3,4771	5,1761	3,8809	

2 Ölkuchen 1994-1996 N= 49

	KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7	
CfU/g	1.000.000	1.000.000	100.000	10.000	20.000	2.000	30.000	Median	Median	
CfU/g	10*log(50.Quantil +1)	1.300.000	550.000	50.000	4.000	18.000	3.000	15.000	245.001	5.351
CfU/g	10*log(50.Quantil +0,5)	411.096	173.925	15.811	1.265	5.692	949	4.743		
CfU/g	10*log(90.Q)	991.751	632.487	41.826	7.483	11.485	2.585	23.729		
	Quant.Rang (OW)	90,3	94,4	95,6	97,5	94,8	85,3	92,8		
	Quant.Rang (50.Q+1)	92,4	88,5	94,4	79,2	94,4	92,6	85,1		
	Quant.Rang (50.Q+0,5)	84,2	72,3	78,1	70,2	80,3	75,5	78,4		
Median	log	5,114	4,740	3,699	2,602	3,255	2,477	3,176	5,389	3,728

Häufigkeit	91,8%	100,0%	38,8%	53,1%	100,0%	85,7%	91,8%	100,0%	100,0%
N= 49									

Futter	KONS	log KBE/g							KG1-3	KG4-7		
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7				
1 2-Ölkuchen		5,1614	4,3118					3,4771	2,9777	2,1761	5,2188	3,6129
2 2-Ölkuchen		5,3118	4,8129	3,3010				2,3617	1,0000	1,6021	5,4346	2,4487
3 2-Ölkuchen		5,4472	4,6532	4,6021	2,6021			3,5682	2,7782	3,4314	5,5623	3,8692
4 2-Ölkuchen		5,1139	5,0607					3,1614	2,7782	3,5185	5,3892	3,7284
5 2-Ölkuchen		5,2279	4,5441	2,6990	3,7782	3,0792		2,5441	2,6021	5,3107	3,9004	
6 2-Ölkuchen		4,1139	4,8531	4,1139	2,7782	3,4624		3,6021	3,6021	4,9881	3,8751	
7 2-Ölkuchen		4,0000	4,9031	4,0000	4,1139	4,5185	4,0000	4,8195	5,0000	5,0864		
8 2-Ölkuchen		5,0000	5,3010			3,6990	3,3010	3,0000	5,4771	3,9031		
9 2-Ölkuchen		6,8129	6,2041		2,8451	3,7243	2,8451	4,0899	6,9085	4,2788		
10 2-Ölkuchen		5,3010	6,6628		3,1206	3,7774	3,4249	4,3284	6,6812	4,4951		
11 2-Ölkuchen		4,6021				3,1139	3,9685	2,4771	4,6021	4,0375		
12 2-Ölkuchen		4,3010	5,9031	4,6990	3,8451	4,0000	2,4771	3,3010	5,9395	4,2856		
13 2-Ölkuchen		3,6990	5,0531			2,8751	2,6021	2,0000	5,0719	3,0973		
14 2-Ölkuchen			5,7924			3,3010	3,0000	3,5315	5,7924	3,8062		
15 2-Ölkuchen		4,3010	4,0000		2,3010	3,2553	2,0000	3,3010	4,4771	3,6128		
16 2-Ölkuchen		5,2665	4,7404	2,4771		3,9294	3,3010	3,2430	5,3802	4,0882		
17 2-Ölkuchen			4,8451			3,4771	3,1761		4,8451	3,6534		
18 2-Ölkuchen		4,3010	4,3010		2,4771	4,1461	2,0000		4,6021	4,1584		
19 2-Ölkuchen		6,2175	4,6990			4,1761	3,9294	3,6021	6,2304	4,4393		
20 2-Ölkuchen		6,1917	5,3424	3,6990	2,3010	4,4065	3,1761	3,1761	6,2504	4,4579		
21 2-Ölkuchen		5,3775	3,9542	3,1761		3,0969	2,0000	2,4771	5,3962	3,2177		
22 2-Ölkuchen		5,1303	5,1303	4,1761	3,9294	4,0212	3,4771	4,4065	5,4548	4,6767		
23 2-Ölkuchen		4,1761	5,6628	4,0000	3,0792	3,4983	2,0000	4,2672	5,6857	4,3608		
24 2-Ölkuchen		4,3802	4,6021			2,3010	3,0414		4,8062	3,1146		
25 2-Ölkuchen		5,0569	4,6628			2,5441	2,9294	2,0000	3,0607	5,2041	3,3892	
26 2-Ölkuchen		5,5855	5,5798			2,6021	2,0000		3,9294	5,8837	3,9543	
27 2-Ölkuchen		3,8751	5,0792			3,6990	2,8751	4,4878	5,1055	4,5623		
28 2-Ölkuchen		4,7059	4,5159	4,0531		4,0386	1,6990	1,8751	4,9773	4,0436		
29 2-Ölkuchen		4,6990	5,2730	6,0443		4,9230	2,8751	3,3010	6,1287	4,9370		
30 2-Ölkuchen		6,1639	3,1761			2,0000	3,2175	2,0000	2,4771	6,1644	3,3324	
31 2-Ölkuchen		3,6532	3,7782			2,0000	2,5441	2,3010	3,3010	4,0212	3,4232	
32 2-Ölkuchen		3,3979	4,2553	3,4771		3,6435	1,8751	2,5119	4,3711	3,6813		
33 2-Ölkuchen		4,2368	3,8129	3,5740		3,0000	2,1761	2,9777	4,4393	3,3224		
34 2-Ölkuchen		4,6047	4,1688	3,0043	1,4771	3,1703	1,6990	2,1461	4,7482	3,2304		
35 2-Ölkuchen		6,0058	4,8228			2,1761	2,9777	2,0000	2,6990	6,0334	3,2304	
36 2-Ölkuchen		4,8248	4,3892			2,6021	2,0000		3,0000	4,9605	3,1764	
37 2-Ölkuchen		5,9823	6,2195	4,5119		3,1761	2,8751	4,6990	6,4232	4,7181		
38 2-Ölkuchen		5,0792	5,1461			2,9031	2,3010	2,7782	5,4150	3,2044		
39 2-Ölkuchen		5,4325	4,5658	3,4150		3,2227			3,1761	5,4915	3,5013	
40 2-Ölkuchen		4,1139	5,8357			2,9031	2,4393	2,7782	5,8439	3,2243		
41 2-Ölkuchen		5,9031	5,6902			3,6990	3,6812	2,3010	3,7482	6,1106	4,1931	



3 Fischmehle 1994-1996 N= 194

	KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7
CFU/g	1.000.000	1.000.000	10.000	5.000	5.000	1.000	30.000	Median	Median
CFU/g	10*log(50.Quantil +1)	800.000	948.683	50.000	2.500	9.000	1.500	192.485	1.852
CFU/g	10*log(50.Quantil +0,5)	252.982	300.000	15.811	791	2.846	474	3.162	
CFU/g	10*log(90.Q)	685.315	800.000	35.652	1.908	5.030	1.697	20.695	
	Quant.Rang (OW)	92,3	93,6	75,0	91,6	89,9	81,9	92,2	
	Quant.Rang (50.Q+1)	91,4	92,9	100,0	90,4	94,2	88,8	84,9	
	Quant.Rang (50.Q+0,5)	76,5	76,7	85,0	77,9	81,2	73,4	68,7	

Median	log	4,903	4,977	3,699	2,398	2,954	2,176	3,000	5,284	3,268
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Häufigkeit		81,4%	97,9%	12,9%	25,3%	90,7%	37,6%	69,1%	100,0%	94,3%
N= 194										

Futter	KONS	log KBE/g							KG1-3	KG4-7
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7		
1 3-Fisch		6,1761	6,1761			2,4771		2,8451	6,4771	3,0009
2 3-Fisch			5,3222			2,6021			5,3222	2,6053
3 3-Fisch		6,6990	5,4771			2,3010		3,0414	6,7243	3,1146
4 3-Fisch			4,6021					4,6021		
5 3-Fisch			4,9542		1,4771	1,5185		1,5185	4,9543	1,9868
6 3-Fisch		5,6990	6,1461			2,8451		2,8470	6,2788	2,8470
7 3-Fisch			4,0000			2,4771		4,0001	4,0001	2,4814
8 3-Fisch			4,6990			3,7404		4,6990	4,7771	3,7406
9 3-Fisch			4,7782					4,7782		
10 3-Fisch		6,3054	4,6990			2,8129		2,7404	6,3160	3,0799
11 3-Fisch		5,0434	4,7853			3,3222	3,4232	1,6990	5,2343	3,6813
12 3-Fisch		5,6021	5,2304					5,7559		
13 3-Fisch		6,3118	4,6990			2,3010		6,3222	2,3075	
14 3-Fisch		6,3424	4,6990	4,6990	2,3979	2,6532	1,6990	6,3617	2,8756	
15 3-Fisch		6,2553	5,8751			2,8751	2,0000	3,5378	6,4065	3,7284
16 3-Fisch		5,4624	5,0000		2,0000	3,8325		3,9345	5,5911	3,9345
17 3-Fisch		4,2041	4,7243			2,4771		2,3010	4,8389	2,7007
18 3-Fisch		4,0000	4,6128			3,3522		4,7076	3,3528	
19 3-Fisch		4,6990	5,4314			3,0000	2,3979	4,6580	5,5052	4,6698
20 3-Fisch		3,6021	4,6812			2,6021		1,9031	4,7160	2,6830
21 3-Fisch		6,1621	5,3997			3,5315		2,0000	6,2313	3,5443
22 3-Fisch		4,7889	4,4065			3,0414		4,9395	3,0426	
23 3-Fisch		5,3892	4,8451				2,0000	3,3424	5,4983	3,3621
24 3-Fisch		4,4472	4,2553			3,0969		2,0000	4,6628	3,1310
25 3-Fisch		4,6990	5,1614			2,9542		1,6990	5,2900	2,9786
26 3-Fisch		5,5441	4,3979			2,6021	2,0000	5,5740	2,7007	
27 3-Fisch		4,9777	4,8129	3,6990		2,7782		5,2175	2,7803	
28 3-Fisch		4,6902	5,0531			3,1461		5,2095	3,1471	
29 3-Fisch		4,3979	5,0969			2,7404	2,0000	5,1761	2,8457	
30 3-Fisch		4,4065	4,0414			1,6990		1,6990	4,5623	2,5453
31 3-Fisch		5,5798	5,1903			2,6532	2,0000	3,2672	5,7284	3,4150
32 3-Fisch		5,0065	4,8129			2,6021		1,6990	5,2214	2,6551
33 3-Fisch		4,9031	4,1139					2,6990	4,9685	2,7016
34 3-Fisch		5,6385	4,3979			3,2788	2,4771	2,3010	5,6628	3,3804
35 3-Fisch			6,1461					6,1461		
36 3-Fisch		4,1139	5,0294			1,8751	1,8751	5,0792	2,1818	
37 3-Fisch		4,5798	4,0414					4,6902		
38 3-Fisch		4,6021	5,4548			3,1761	2,6990	3,6532	5,5119	3,8130
39 3-Fisch		5,0212	4,1761			3,0000		3,9031	5,0792	3,9543
40 3-Fisch		5,6990	5,4472			3,3222		2,4771	5,8921	3,3806
41 3-Fisch		3,6990	4,6021			2,7782		4,6532	2,7803	

4 Kleien 1994-1996 N= 252

	KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7	
CFU/g	8.000.000	1.000.000	100.000	50.000	50.000	2.000	80.000	Median	Median	
CFU/g	10*log(50.Quantil +1)	15.000.000	2.000.000	346.410	40.000	94.868	7.246	90.000		
CFU/g	10*log(50.Quantil +0,5)	4.743.416	632.456	109.545	12.649	30.000	2.291	28.460	1.920.001	28.250
CFU/g	10*log(90.Q)	7.329.756	1.904.942	100.000	16.224	50.531	5.000	58.000		
	Quant.Rang (OW)	91,7	83,4	83,0	97,1	88,8	75,7	90,7		
	Quant.Rang (50.Q+1)	96,5	90,5	97,0	96,5	95,2	95,6	91,1		
	Quant.Rang (50.Q+0,5)	78,1	75,6	93,3	84,6	76,5	81,1	79,4		

Median	log	6,176	5,301	4,540	3,602	3,977	2,860	3,954	6,283	4,451
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Häufigkeit		98,8%	91,3%	21,4%	80,2%	96,8%	41,3%	88,1%	99,6%	99,2%
N= 252										

Futter	KONS	log KBE/g							KG1-3	KG4-7		
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7				
1 4-Kleien		5,9777	5,1761			2,4771		3,4150	3,3010	6,0414	3,6903	
2 4-Kleien		5,3617	5,6335		4,0000			3,2041	3,4771	2,4771	5,8261	3,6903
3 4-Kleien		5,2304	4,0000			2,0000		2,4771			5,2553	2,6042
4 4-Kleien		5,9031	4,0000			3,9031				3,0000	5,9085	3,9543
5 4-Kleien		6,1761	5,6628			5,6633	4,6021	2,4771			6,2923	5,6998
6 4-Kleien		6,5366	5,4150	5,0000		3,7782	4,3010		4,1139	6,5798	4,5911	
7 4-Kleien		6,7348	6,5911	4,0000		3,5682	5,0980	2,8451	4,0000	6,9703	5,1452	
8 4-Kleien		4,4771	5,9031			2,3010	2,0000	2,4771	2,4771	5,9191	2,7789	
9 4-Kleien		6,7559	6,8751			3,9345	3,6990		4,6435	7,1206	4,7604	
10 4-Kleien		5,0000	4,6990			2,7782	3,3010		3,3010	5,1761	3,6629	
11 4-Kleien		6,1761	6,0792			2,0000	2,8451		2,0000	6,4314	2,9547	
12 4-Kleien		6,7482	5,3010				3,3010		4,0414	6,7634	4,1140	
13 4-Kleien		5,9191	5,0414				4,0792		3,4771	5,9731	4,1761	
14 4-Kleien		6,7782	5,0000			3,0000	3,8633		4,1139	6,7853	4,3284	
15 4-Kleien			5,4771				3,8451		4,3010	5,4771	4,4314	
16 4-Kleien		6,8751	5,4771			4,0414	3,6335			6,8921	4,1847	
17 4-Kleien		5,1761	4,4771			2,4771	3,5798			5,2553	3,6130	
18 4-Kleien		6,0792	4,0000				4,0000		3,6021	6,0828	4,1462	
19 4-Kleien		6,2553	5,0792			3,3010	3,3010		3,7782	6,2833	4,0000	
20 4-Kleien		6,3617	6,3560			3,0000	4,1847		3,7559	6,6599	4,3424	
21 4-Kleien		6,1761	6,4314			3,9542	3,8692	3,0000	3,4771	6,6232	4,3096	
22 4-Kleien		7,3404	6,3802			4,1732	4,5740	3,8751	4,1732	7,3856	4,8739	
23 4-Kleien		5,7782	5,6021			3,0792	2,9031	2,3010		6,0000	3,3426	
24 4-Kleien		6,9638	5,6990			3,0000	4,0414		4,5821	6,9868	4,7007	
25 4-Kleien		5,8195	5,6021			3,0000	3,0000		3,2041	6,0253	3,5564	
26 4-Kleien		4,9345	4,9191	3,4771			3,2041		3,0000	5,2355	3,4153	
27 4-Kleien		4,0607	3,9542			2,6532	3,7993	1,6990	2,9031	4,3118	3,8808	
28 4-Kleien		6,1139	4,9031	4,4771		3,4771	4,4983		4,1614	6,1492	4,6902	
29 4-Kleien		5,6232	4,5441			3,3979	3,6021		4,0212	5,6580	4,2305	
30 4-Kleien		6,4232	5,9542			3,9542	5,3865		3,8325	6,5502	5,4138	
31 4-Kleien		6,4065	5,0000			3,9912	4,4669		4,2553	6,4232	4,7566	
32 4-Kleien		6,3424	5,3010	3,6990		3,9777	4,3711	2,6990	3,8451	6,3811	4,6075	
33 4-Kleien		7,7033	6,0000			4,9445	4,5315	3,6990	5,1973	7,7118	5,4541	
34 4-Kleien		6,7076	5,9031	4,1761		4,0607	4,6075	3,0000	4,3010	6,7720	4,8633	
35 4-Kleien		6,1492	4,6990			3,1761			3,1761	6,1644	3,4774	
36 4-Kleien		6,1761	4,3010			3,8751	3,3979		3,8451	6,1818	4,2305	
37 4-Kleien		6,4624				4,1614	4,1903		3,8751	6,4624	4,5740	
38 4-Kleien		6,5855	4,8129	4,6990		3,5441	3,0000		3,7634	6,5982	4,0129	
39 4-Kleien		7,3314	5,3010			4,1303	4,0969	3,0000	5,0253	7,3355	5,1239	
40 4-Kleien		6,6021	5,5441	5,0000		4,4771	5,1189	2,6990	4,6990	6,6484	5,3263	
41 4-Kleien		6,6812	5,1139			3,7404	4,2175	2,6990	4,2430	6,6928	4,6021	



5 Getreide (Weizen, Roggen, Triticale) n= 227, 24, 8 1994-1996 N=259

	KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7
CfU/g	5.000.000	1.000.000	100.000	50.000	30.000	2.000	50.000	Median	Median
CfU/g	10*log(50.Quantil +1)	5.049.752	450.000	70.711	25.000	15.000	3.464	50.000	
CfU/g	10*log(50.Quantil +0,5)	1.596.872	142.302	22.361	7.906	4.743	1.095	15.811	
CfU/g	10*log(90.Q)	3.512.296	550.000	100.000	19.500	18.986	1.835	44.394	
	Quant.Rang (OW)	94,5	96,7	88,2	95,3	92,1	90,5	90,7	
	Quant.Rang (50.Q+1)	94,5	88,5	79,8	91,5	88,7	93,2	90,7	
	Quant.Rang (50.Q+0,5)	77,5	73,9	65,4	74,2	74,0	83,4	74,0	
Median	log	5,703	4,653	3,849	3,398	3,176	2,540	3,699	5,756 4,021

Häufigkeit	97,3%	66,0%	6,9%	83,0%	74,1%	20,8%	75,3%	98,5%	96,5%
N= 259									

Futter	KONS	log KBE/g							KG1-3	KG4-7
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7		
1 5-Getreide		5,6021	5,8451			2,4771		3,4771	6,0414	3,5188
2 5-Getreide		6,7709	5,7782		3,2041	3,1139		3,8451	6,8129	3,9957
3 5-Getreide		6,1038	6,4472		2,6021	2,4771		3,5315	6,6096	3,6129
4 5-Getreide		4,4771	5,4771		2,7782	3,6335		3,0000	5,5185	3,7709
5 5-Getreide		6,2553	6,9031		4,6021	4,4771		5,1461	6,9912	5,3222
6 5-Getreide		5,9542	5,7782		4,5185	4,0000		4,6990	6,1761	4,9685
7 5-Getreide		6,1461			3,0792	3,0000	2,6990	3,9912	6,1461	4,0969
8 5-Getreide		5,9031	5,3010		4,7782	5,0414		4,0000	6,0000	5,2553
9 5-Getreide		6,1761	3,6990		3,5441	3,0000		4,1461	6,1775	4,2672
10 5-Getreide		6,6721	5,0000		4,0607	3,1761		3,9294	6,6812	4,3325
11 5-Getreide		5,9294	3,6990		3,0212	3,4069		3,1761	5,9320	3,4069
12 5-Getreide		5,9420			4,2430	3,0000		4,1903	5,9420	4,5315
13 5-Getreide		6,1917	4,6990		3,1761	3,4771		3,6990	6,2055	3,9778
14 5-Getreide		6,7284	4,6990		3,1761	3,3979		3,8129	6,7324	4,0212
15 5-Getreide		6,5185	5,0000		2,8129	2,3979		5,3802	6,5315	2,9552
16 5-Getreide		5,4914	3,6990		3,1761	3,9031		3,0000	5,4983	4,0212
17 5-Getreide		5,2788			3,3979	3,7404		4,0212	5,2788	4,2672
18 5-Getreide		6,8949	5,1761		4,0212	2,6990		3,7404	6,9031	4,2175
19 5-Getreide		5,7364	4,4771		2,6990	3,1761		3,0000	5,7597	3,4773
20 5-Getreide		6,0969	5,1761		3,1761			3,6990	6,1461	3,8130
21 5-Getreide		6,4914			3,6990			3,7404	6,4914	4,0213
22 5-Getreide		6,1761	4,6990	3,6990	3,4771	3,1761		3,3010	6,1917	3,8130
23 5-Getreide		6,6075			4,7427			3,3617	6,6075	4,7604
24 5-Getreide		5,4249			2,6990	3,3010		3,4771	5,4249	3,7404
25 5-Getreide		6,2214	5,3010	4,6990	4,1139	3,4771	3,0000	4,3711	6,2822	4,6075
26 5-Getreide		6,2430	5,0000		3,9294	2,6990		3,3010	6,2672	4,0414
27 5-Getreide		5,3324			3,1761	3,1761		2,6990	5,3324	3,5442
28 5-Getreide		4,4771			3,6990	3,3010		4,4771	4,4772	4,5682
29 5-Getreide		6,0000			3,8451	3,3010		3,6021	6,0000	4,1140
30 5-Getreide		4,9542	4,4771			4,7076		5,0792	4,7076	
31 5-Getreide		4,6990				3,4771	3,3010		3,8451	4,6990
32 5-Getreide		4,7782				4,6990		4,1761	4,7782	4,8129
33 5-Getreide		6,0569	4,0000			3,7782	3,3010		3,9031	6,0607
34 5-Getreide						4,4771		4,4771	4,4771	4,6990
35 5-Getreide		5,3010				4,7782		4,4771	5,3010	4,9543
36 5-Getreide		6,3010				4,9031		4,4771	6,3010	5,0414
37 5-Getreide		5,6990	4,3010				4,1139	3,6990	5,7160	4,2553
38 5-Getreide		7,3617			4,2041		3,9031		7,3617	4,3802
39 5-Getreide		5,7243	4,6021				5,4624	5,3010	5,7559	5,6902
40 5-Getreide							3,6021		3,6021	6,0024
41 5-Getreide		5,8451			4,3010		4,0000	4,4771	5,8451	4,7782

6 Eiweisskonzentrate 1994-1996 N=225

	KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7
CfU/g	1.000.000	1.000.000	50.000	10.000	20.000	1.000	30.000	Median	Median
CfU/g	10*log(50.Quantil +1)	1.600.000	1.250.000	47.958	4.000	14.250	2.000	23.000	350.001 3.701
CfU/g	10*log(50.Quantil +0,5)	505.964	395.285	15.166	1.265	4.506	632	7.273	
CfU/g	10*log(90.Q)	1.149.311	836.779	21.000	1.600	10.589	1.000	21.349	
	Quant.Rang (OW)	89,5	92,3	94,2	99,9	94,4	82,5	95,6	
	Quant.Rang (50.Q+1)	93,2	93,6	93,9	98,7	91,7	98,3	91,2	
	Quant.Rang (50.Q+0,5)	77,2	78,1	89,0	85,6	78,5	79,3	78,1	
Median	log	5,204	5,097	3,681	2,602	3,154	2,301	3,362	5,544 3,568

Häufigkeit	85,8%	99,1%	16,0%	32,0%	95,6%	53,8%	81,8%	100,0%	99,1%
N= 225									

Futter	KONS	log KBE/g							KG1-3	KG4-7		
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7				
1 6 EKS	?	4,8451	6,0969			2,6021		3,5315	2,3010	3,2430	6,1206	3,7597
2 6 EKS	?	5,5051	5,2553			2,3010		3,0414	2,0000	3,0000	5,6990	3,3802
3 6 EKS	?	5,8603	5,7889					4,2304	3,6990	3,6990	6,1271	4,3425
4 6 EKS	?	6,2304	5,4771	4,9031				6,4669	3,3010	4,4771	6,3181	6,4716
5 6 EKS	?	5,2430	5,1139					2,8451	2,3010	4,6021	5,4843	4,6117
6 6 EKS	?	5,0792	5,0414					3,6021	3,0000	4,3979	5,3617	4,4771
7 6 EKS	?	5,1761	5,7404			3,0000		3,7782		3,0000	5,8451	3,9031
8 6 EKS	?	4,1139	5,0000					4,0000			5,0531	4,0001
9 6 EKS	?	4,6990	4,5441					3,9031		3,6990	4,9294	4,1140
10 6 EKS	?		5,3424					2,3010		3,4150	5,3424	3,4475
11 6 EKS	?	5,3979	4,9031	4,0000				3,4771		3,7404	5,5315	3,9295
12 6 EKS	?	5,8692	5,0414			2,6990		3,0792	2,3010	3,7404	5,9294	3,8692
13 6 EKS	?	5,8261	5,3617	4,0000		2,6990		3,0792	2,0000	3,7324	5,9590	3,8573
14 6 EKS	?	5,7160	5,3010	4,6990		2,6990		4,5551		3,3979	5,8865	4,5900
15 6 EKS	?	5,3802	5,7634	4,0000		2,6021		2,8129	2,1761	3,5682	5,9191	3,6902
16 6 EKS	?	5,4771	4,9542					3,3979	2,3010	2,9031	5,5911	3,5442
17 6 EKS	?	6,2430	5,8751	5,0000				4,5682	3,1761	4,3979	6,4150	4,8028
18 6 EKS	?	5,2788	5,0000	4,0000				3,6990	2,6990	3,4771	5,4771	3,9295
19 6 EKS	?	5,3979	5,2788					3,3522		3,5798	5,6435	3,7819
20 6 EKS	?	5,5911	5,0000	4,0000				3,2553	1,6990	3,2430	5,6990	3,5564
21 6 EKS	?	4,7782	5,4472	4,0000				3,2672	2,0000	2,3010	5,5441	3,3326
22 6 EKS	?	3,9542	5,6542					3,2553	2,6021	3,8195	5,6628	3,9445
23 6 EKS	?	4,1761	4,9777					2,1761	2,0000	3,5682	5,0414	3,5967
24 6 EKS	?	5,2304	5,1139					4,0000		3,3979	5,4771	4,0970
25 6 EKS	?	6,0755	5,1139	4,0000	3,1761			3,7889		4,2175	6,1239	4,3829
26 6 EKS	?	4,0792	4,7924	3,0000				2,0000	1,6990		4,8751	2,1818
1 6 EKS	nein		6,9494					2,0000	3,0000	2,4771	6,9494	3,1464
2 6 EKS	nein	6,3010	6,5922					2,3010	2,4771	2,0000	3,6021	6,7716
3 6 EKS	nein	6,7709						2,5185	4,3541	4,1761	6,7709	4,5790
4 6 EKS	nein	4,8451	5,3979					3,2041	3,3617	3,0000	5,5052	3,8976
5 6 EKS	nein	4,8451	5,1139					3,2201			5,3010	3,2209
6 6 EKS	nein	5,0414	5,0414					2,6628	2,0000	3,3502	5,3424	3,4473
7 6 EKS	nein	5,2041	5,6021			1,4771		2,2553			5,7482	2,3263
8 6 EKS	nein	5,7782	5,6021			2,3010		3,1761			6,0000	3,2310
9 6 EKS	nein	5,6021	6,6128					3,4771		4,3979	6,6532	4,4472
10 6 EKS	nein	5,0000	5,4914					4,1461		3,1139	5,6128	4,1847
11 6 EKS	nein		5,5051					2,8451		2,6990	5,5052	3,0799
12 6 EKS	nein	4,6021	5,5441					2,4771	3,1761	4,1139	5,5911	4,1703
13 6 EKS	nein		5,1461					3,2304	2,4771	3,8451	5,1461	3,9543
14 6 EKS	nein	5,3222	5,0000					2,7782	2,4771	3,3617	5,4914	3,5053
15 6 EKS	nein	5,8808	4,6990					2,4771		3,6990	5,9085	3,7244



7 Mischfutter Schweine										1994-1996 N=352		Konservierungsstoffe		
Mehl										?	Ohne= nein	mit		
	KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7					
CFU/g	6.000.000	1.000.000	100.000	50.000	50.000	5.000	80.000	Median	Median					
CFU/g	10*log(50.Quantil +1)	16.024.980	4.000.000	200.000	32.500	120.000	10.000	112.472						
CFU/g	10*log(50.Quantil +0,5)	5.067.544	1.264.911	63.246	10.277	37.947	3.162	35.567	2.300.001	36.000				
CFU/g	10*log(90.Q)	6.739.372	3.006.928	218.672	26.660	70.000	5.000	85.000						
	Quant.Rang (OW)	87,8	71,3	75,0	95,9	82,4	89,5	89,1						
	Quant.Rang (50.Q+1)	97,9	94,1	89,4	93,5	95,0	95,0	95,2						
	Quant.Rang (50.Q+0,5)	85,0	76,2	71,2	79,3	78,2	82,8	74,8						
Median	log	6,205	5,602	4,301	3,512	4,079	3,000	4,051	6,362	4,556				

Häufigkeit	97,7%	96,6%	21,9%	63,9%	97,2%	57,1%	86,9%	100,0%	99,1%
N= 352									

Futter	KONS	log KBE/g							KG1-3	KG4-7
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7		
1 7-SM	?	6,0792	6,6964			4,0000		3,9542	6,7903	4,2788
2 7-SM	?	6,0000	4,7782		3,3010	3,6335		3,4771	6,0253	3,9685
3 7-SM	?	6,5185	5,4771		3,2788	3,2041	2,6021	4,0792	6,5563	4,2014
4 7-SM	?	6,9165	6,1072		3,1761	3,9777		3,8129	6,9791	4,2431
5 7-SM	?	6,6180	5,7782	4,0000	3,6532	4,0212	2,1761	3,4150	6,6776	4,2492
6 7-SM	?	6,1139	4,9031	4,4771		4,8451		4,9542	6,1492	5,2041
7 7-SM	?	5,5315	5,4314		3,8451	4,1761		3,9542	5,7853	4,4914
8 7-SM	?	5,8195	5,2553			4,7745	3,0000	3,9777	5,9243	4,8451
9 7-SM	?	7,0645	6,4150	4,4771	3,3979	4,9294	3,9031	3,8865	7,1532	5,0137
10 7-SM	?	6,2718	6,1847	5,0000	3,3010	3,9930		3,6021	6,5441	4,1998
11 7-SM	?	6,0828	5,9085		2,8261	3,3729		3,1139	6,3054	3,6366
12 7-SM	?	6,6042	5,6021		4,5441	4,6767	3,6990	4,1461	6,6454	5,0065
13 7-SM	?	6,0969	4,6990		3,1761	3,4771	2,6990	4,7924	6,1139	4,8261
14 7-SM	?	6,3962	5,1761	4,0000		3,7782	3,5302		6,4232	3,9728
15 7-SM	?	7,3385	5,6021		3,8451	4,2041	3,3010	3,6021	7,3464	4,4624
16 7-SM	?	6,6990				4,8096			6,6990	4,8096
17 7-SM	?		5,1139						5,1140	
18 7-SM	?	6,3222	5,3010		3,0000	4,1761		4,2041	6,3617	4,5052
19 7-SM	?	6,6812	6,3802			4,9138	4,4472	4,8451	6,8573	5,2553
20 7-SM	?	6,3424	6,2304	5,3010		5,2175		4,6021	6,6128	5,3118
21 7-SM	?	5,9685	5,6021	5,9031		4,6561	3,0000	4,9004	6,3284	5,0997
22 7-SM	?	6,7243	6,7324			3,9031	3,0000	4,4983	7,0294	4,6075
23 7-SM	?	5,9777	5,5563	4,4771		4,1139		4,8293	6,1271	4,9058
24 7-SM	?	5,4914	5,9868			4,4843	4,0000	5,5563	6,1072	5,6026
25 7-SM	?	6,6021	6,2304	5,0000	3,1761	4,0607		4,5250	6,7634	4,6675
26 7-SM	?	6,6021	6,2304	5,0000	3,1761	4,0607		4,5250	6,7634	4,6675
27 7-SM	?	6,5441	5,6021	5,4771		4,8513	3,0000	4,4232	6,6232	4,9934
28 7-SM	?	6,0294	6,4771		2,6990	4,4065	2,6990	4,0414	6,6096	4,5740
29 7-SM	?	6,3711	6,3010			4,5315	3,1761	4,7160	6,6385	4,9420
30 7-SM	?	6,2304	6,5315			4,0792	3,0000	3,5441	6,7076	4,2175
31 7-SM	?	5,5185	6,6128			4,4624		3,3979	6,6464	4,4983
32 7-SM	?	5,4771	6,5798			3,4624			6,6128	3,4628
33 7-SM	?	6,3802	5,5682			4,0607	3,0000	4,3711	6,4425	4,5563
34 7-SM	?	5,9294	4,4771	4,0000		3,7520	2,0000	2,9294	5,9494	3,8196
35 7-SM	?	4,3424	4,9445			2,4771			5,0414	2,4814
36 7-SM	?	5,4771	6,5798			4,3424		2,6990	6,6128	4,3522
37 7-SM	?	6,3096	5,8451	5,7243		5,3617		4,6532	6,5145	5,4393
38 7-SM	?	6,2601	4,9031			3,0792	2,0000	3,0414	6,2788	3,3804
39 7-SM	?	5,9031	5,0414			3,6990		3,6990	5,9590	4,0001
40 7-SM	?	6,2878	5,0000			2,3979	2,3010	3,4150	6,3096	3,4844
41 7-SM	?	6,1173	5,7782		4,1761	3,4771	2,6990	4,1614	6,2810	4,5185

8 Mischfutter Schweine										1994-1996 N=239		Konservierungsstoffe		
Pellets										?	Ohne= nein	mit		
	KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7					
CFU/g	1.000.000	500.000	50.000	5.000	10.000	1.000	5.000	Median	Median					
CFU/g	10*log(50.Quantil +1)	500.000	820.000	50.000	2.000	10.000	1.000	3.000	146.001	1.300				
CFU/g	10*log(50.Quantil +0,5)	158.114	259.307	15.811	632	3.162	316	949						
CFU/g	10*log(90.Q)	365.967	1.130.000	30.000	1.320	7.570	600	5.000						
	Quant.Rang (OW)	96,6	80,8	92,5	95,9	92,5	91,4	89,6						
	Quant.Rang (50.Q+1)	93,6	86,9	92,5	92,8	92,5	91,4	87,0						
	Quant.Rang (50.Q+0,5)	75,3	69,5	79,2	83,4	74,8	77,6	71,0						
Median	log	4,699	4,914	3,699	2,301	3,000	2,000	2,477	5,164	3,114				

Häufigkeit	77,4%	96,7%	25,9%	23,8%	90,8%	29,7%	32,6%	99,2%	92,5%
N= 239									

Futter	KONS	log KBE/g							KG1-3	KG4-7	
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7			
239 1 8-SP	?			4,0000				3,2304		4,0001	3,2312
2 8-SP	?			5,5315	5,4314		3,8451	4,1761		5,7853	4,4914
3 8-SP	?			5,2253	5,4698	4,4914		2,9031	1,6990	5,6937	2,9304
4 8-SP	?			4,9031	3,9542	3,0000		3,5682		4,9542	3,5686
5 8-SP	?				6,0000			3,1139		6,0000	3,1149
6 8-SP	?			3,6021	4,2041			3,3010		4,3011	3,3017
7 8-SP	?			5,1461	5,8976			3,3010	2,6990	5,9685	3,3983
8 8-SP	?				5,7782			3,7782		5,7782	4,0793
9 8-SP	?			4,0000	5,2553			3,1761		5,2788	3,1770
10 8-SP	?				5,9494			3,0000		5,9494	3,4774
11 8-SP	?				4,5441			3,6021		4,5441	3,6024
12 8-SP	?			4,6990	4,7782	4,4771		4,1461		5,1461	4,2305
13 8-SP	?			4,9031	5,7559			3,4472	2,0000	5,8129	3,4627
14 8-SP	?				4,0414	3,0000		2,8451		4,0792	2,8470
15 8-SP	?			4,0792	4,5051	3,0000		2,3010		4,6532	2,3075
16 8-SP	?			5,0000	6,6812			2,3979		6,6902	2,4031
17 8-SP	?				5,0334			2,6021	1,3979	5,0334	2,6304
18 8-SP	?			4,0000	5,0682	3,4771		2,7782	2,6021	5,1139	3,0009
19 8-SP	?			4,8451	5,7404	4,4771		3,6385		5,8129	3,6388
20 8-SP	?			4,0792	4,6532	3,7782		3,5563		4,7993	3,5567
21 8-SP	?			5,4771	6,3010	5,0000		2,3010	1,6990	6,3802	2,4014
22 8-SP	?			4,1139	4,6812	3,0000				4,7924	
23 8-SP	?				5,0607	4,1461	2,9031	3,6128	2,0000	2,1761	5,1106
24 8-SP	?			4,5682	4,8129	3,9031		4,0065	2,0000	2,3010	5,0414
25 8-SP	?			5,1139	5,0792	5,0792		3,3802	2,0000	2,9031	5,5682
26 8-SP	?				4,1761	3,3010		2,5441		4,2305	2,5478
27 8-SP	?			5,6021	6,5798	5,4771		3,3979	2,0000	6,6532	3,4153
28 8-SP	?			5,5563	4,9542	4,0000		3,0000	2,0000	5,6628	3,3713
29 8-SP	?			4,3010	4,5682	3,3010		3,8808		4,7709	3,8894
30 8-SP	?				4,0792			1,8751		4,0793	1,8921
31 8-SP	?			5,4771	6,4624			4,0000	2,6990	6,5052	4,0213
32 8-SP	?			3,3010	4,2304	3,0000	1,3010	2,1139		4,3010	2,1818
33 8-SP	?			5,0414	5,5051	4,0000		3,0000	2,0000	5,6435	3,0795
34 8-SP	?			5,1139	5,0792	4,3010	2,3010	3,6532	2,0000	5,4314	3,6813
35 8-SP	?			4,0000	5,2148			2,8751		5,2406	2,8768
36 8-SP	?			5,3979	6,5798			4,6355		6,6075	4,6355
37 8-SP	?				5,6232			1,8751		5,6233	1,8921
38 8-SP	?			5,0792	4,9868	3,4771		3,0212	1,6990	5,3424	3,0422
39 8-SP	?			4,0000	4,8451			2,3010		4,9031	2,3075
40 8-SP	?				5,2788	3,6021		2,3010		5,2878	2,3075
41 8-SP	?				4,9542						

9 Mischfutter Legehennen		1994-1996 N=436								Konservierungsstoffe			
Mehl		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7	?	Ohne= nein	mit
CfU/g	Orientierungswerte	5.000.000	1.000.000	100.000	50.000	50.000	5.000	50.000	Median	Median			
CfU/g	10*log(50.Quantil +1)	3.700.000	1.750.000	100.000	15.000	70.000	10.000	80.000	685.000	20.551			
CfU/g	10*log(50.Quantil +0,5)	1.170.043	553.399	31.623	4.743	22.136	3.162	25.298					
CfU/g	10*log(90.Q)	2.649.528	1.609.954	50.000	20.000	51.817	6.129	61.488					
	Quant.Rang (OW)	95,0	83,8	92,7	95,8	89,2	87,4	87,2					
	Quant.Rang (50.Q+1)	93,2	91,1	92,7	88,4	92,2	93,7	92,7					
	Quant.Rang (50.Q+0,5)	76,6	71,8	81,3	73,0	76,0	82,2	79,7					
Median	log	5,568	5,243	4,000	3,176	3,845	3,000	3,903	5,836	4,313			

Häufigkeit	93,1%	97,9%	19,3%	50,9%	94,5%	58,7%	79,1%	99,8%	98,6%
N= 436									

436	Futter	KONS	log KBE/g							KG1-3	KG4-7
			KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7		
1	9-LH-M	?		7,4771		3,0000	2,8451	2,4771	4,0414	7,4771	4,1139
2	9-LH-M	?	7,3617	6,9031		2,7782	3,3617		3,1139	7,4914	3,6234
3	9-LH-M	?	4,3010	4,9031		2,5441	3,8062	2,3979		5,0000	3,8452
4	9-LH-M	?	4,3010	4,4771			3,0000	3,4771		4,6990	3,6023
5	9-LH-M	?	6,2304	6,0414		4,4150	3,8195			6,4472	4,5132
6	9-LH-M	?	5,4771	4,3010		4,4362				5,5052	4,4362
7	9-LH-M	?	6,3802	5,7782		3,0000	4,0792	4,3010	4,3010	6,4771	4,7243
8	9-LH-M	?	4,3010	5,8976	5,1139	3,4771	3,0000			5,9731	3,6023
9	9-LH-M	?	4,3010	5,0374		3,8633	3,0000			5,1106	3,9192
10	9-LH-M	?	6,1931	6,1206	4,4771	3,7782	4,2788	3,4771	4,5185	6,4639	4,7853
11	9-LH-M	?		4,5563	3,7782	3,0000	2,9542		3,2041	4,6233	3,5442
12	9-LH-M	?	6,7408	4,0000	3,4771	2,0000	4,0792	2,8451		6,7418	4,1072
13	9-LH-M	?	5,1461	5,9777			4,6990			6,0374	4,6990
14	9-LH-M	?	7,4698	6,3010	3,6990	3,6128	4,6294	3,1761	3,9031	7,4984	4,7497
15	9-LH-M	?	5,6902	6,3979		3,3010	4,1303		5,1761	6,4757	5,2188
16	9-LH-M	?	5,7853	6,2304	3,7782	3,1761	4,2175	2,6990	4,7993	6,3647	4,9112
17	9-LH-M	?	5,8129	5,3979			3,7782	3,0000	4,4771	5,9542	4,5682
18	9-LH-M	?	5,6990	5,4771			3,6180	3,5682		5,9031	3,8950
19	9-LH-M	?	5,8451	5,3979		3,6435	4,5514	3,3010	4,3032	5,9777	4,7931
20	9-LH-M	?	4,8451	6,6794		2,3010	3,4314	2,7782	3,0000	6,6857	3,6532
21	9-LH-M	?	5,5051	3,4771			4,1461	2,6021	3,3010	5,5092	4,2149
22	9-LH-M	?	5,0000	4,6990			4,3617			5,1761	4,3618
23	9-LH-M	?	5,9031	6,3802			4,1461	3,4771	4,6990	6,5052	4,8261
24	9-LH-M	?	3,6990	5,4843			4,0414	3,3010		5,4914	4,1140
25	9-LH-M	?		4,3010			3,0000			4,3011	3,0013
26	9-LH-M	?	4,3010	5,0000		3,0000	4,4150	3,0000	4,6990	5,0792	4,8921
27	9-LH-M	?	5,1761	4,6990			4,0414		3,0000	5,3010	4,1462
28	9-LH-M	?	5,8751	4,8451	4,6021	3,3010		3,8129	4,3522	5,9345	4,4914
29	9-LH-M	?	4,0000	4,3010		1,9031	2,8129	1,6021		4,4771	2,8871
30	9-LH-M	?	5,5051	4,6990	4,3010		3,4065	2,6990	4,5911	5,5911	4,6238
31	9-LH-M	?	6,0000	5,0000	4,6021		3,3010	3,3010	3,8129	6,0569	4,0212
32	9-LH-M	?	3,0000	3,6990			2,0000			3,7782	2,0128
33	9-LH-M	?	5,0792	4,4771	4,3010		4,5441		5,3711	5,2304	5,4314
34	9-LH-M	?	5,7782	4,6990	4,6990	2,6990	3,6532	3,0000	4,7959	5,8451	4,8357
35	9-LH-M	?	6,0000	6,1847			5,2041	4,1761	4,3979	6,4031	5,3010
36	9-LH-M	?	5,8129	5,3424			2,7404	1,6990	4,2095	5,9395	4,2253
37	9-LH-M	?		4,6021		2,0000	2,0000			4,6021	2,3054
38	9-LH-M	?	5,5682	4,8451			3,5966		3,3617	5,6435	3,7960
39	9-LH-M	?	4,9031	5,6021			3,6532	3,1761	3,3010	5,6812	3,9031
40	9-LH-M	?	4,6021	4,1761		2,6532	2,1761		3,7324	4,7404	3,7782
41	9-LH-M	?	5,6021	6,0414		2,3010	3,6021	3,3979	2,3010	6,1761	3,8388

10 Mischfutter Legehennen		1994-1996 N=232								Konservierungsstoffe			
Pellets		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7	?	Ohne= nein	mit
CfU/g	Orientierungswerte	500.000	500.000	50.000	5.000	10.000	1.000	5.000	Median	Median			
CfU/g	10*log(50.Quantil +1)	202.485	600.000	20.000	1.500	6.000	1.500	3.000	86.499	852			
CfU/g	10*log(50.Quantil +0,5)	64.031	189.737	6.325	474	1.897	474	949					
CfU/g	10*log(90.Q)	159.668	600.000	18.000	2.287	5.975	1.000	4.896					
	Quant.Rang (OW)	95,0	86,3	#NV	96,8	95,1	87,0	90,2					
	Quant.Rang (50.Q+1)	92,0	90,4	92,0	82,8	90,6	93,8	86,1					
	Quant.Rang (50.Q+0,5)	74,9	71,7	71,0	67,9	76,0	78,6	74,7					
Median	log	4,306	4,778	3,301	2,176	2,778	2,176	2,477	4,937	2,930			

Häufigkeit	70,7%	95,3%	22,0%	28,0%	78,4%	27,2%	31,5%	95,7%	83,2%
N= 232									

232	Futter	KONS	log KBE/g							KG1-3	KG4-7
			KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7		
1	10-LH-P	?	3,4771	4,5563	3,0000		3,2041			4,6021	3,2049
2	10-LH-P	?		5,4914		2,6990	3,2492			5,4914	3,3574
3	10-LH-P	?		4,3010						4,3011	
4	10-LH-P	?	4,6990	4,3010			3,7782			4,8451	3,7784
5	10-LH-P	?	4,6990	5,1761			3,0000			5,3010	3,0013
6	10-LH-P	?	4,0000	4,0000			2,6990			4,3011	2,7016
7	10-LH-P	?		5,0000		3,0000	3,0000			5,0000	3,3015
8	10-LH-P	?	4,3010	5,2788						5,3222	
9	10-LH-P	?		4,5441			2,6990			4,5441	2,7016
10	10-LH-P	?	3,6990	4,2304	3,0000		2,8751			4,3617	2,8768
11	10-LH-P	?	4,3424	5,8927						5,9047	
12	10-LH-P	?	3,9031	4,8921	3,0000		2,1761	2,0000		4,9395	2,4014
13	10-LH-P	?	4,1461	5,1004			2,1761			5,1461	2,3054
14	10-LH-P	?	4,9542	4,3010	4,0000		3,0414		2,6021	5,0792	3,1767
15	10-LH-P	?	4,0000	4,1461	3,0000		2,6021	1,6990		4,3979	2,6551
16	10-LH-P	?	4,6021	5,2788	4,1761		3,2553			5,3892	3,2560
17	10-LH-P	?	3,6990	4,7404			2,8129			4,7782	2,8149
18	10-LH-P	?	5,1139	6,3617			2,1761			6,3856	2,1847
19	10-LH-P	?	5,3617	6,4314						6,4669	
20	10-LH-P	?	4,2788	4,8573	3,3010		1,6990		1,6990	4,9685	2,0086
21	10-LH-P	?	3,8451	4,6021			2,6990			4,6721	2,7016
22	10-LH-P	?	5,5682	6,4314			2,6532		2,3010	6,4871	2,8142
23	10-LH-P	?	3,3617	4,9576			3,0212			4,9685	3,0224
24	10-LH-P	?		4,9031						4,9031	
25	10-LH-P	?		6,2041					2,6021	6,2041	2,6053
26	10-LH-P	?	3,7782	4,7482	3,0000		2,5441			4,7993	2,5478
27	10-LH-P	?	4,3010	5,7160			2,3979		2,5441	5,7324	2,7796
28	10-LH-P	?	3,6021	4,3979						4,4624	
29	10-LH-P	?	3,8451	4,4314	3,0000		2,0000			4,5441	2,0128
30	10-LH-P	?	4,0000	5,6128						5,6233	
31	10-LH-P	?	4,0792	4,3617	3,0000		2,0000	1,6990	2,1761	4,5563	2,4786
32	10-LH-P	?	4,4472	4,4150			2,8751	1,6990		4,7324	2,9042
1	10-LH-P	nein		4,8451						4,8451	
2	10-LH-P	nein	5,0000	5,3617		2,0000	3,6990	3,1139	4,6990	5,5185	4,7513
3	10-LH-P	nein	5,6990	5,3979			3,6021	2,9542	3,6021	5,8751	3,9494
4	10-LH-P	nein		4,5635	3,5185					4,6010	
5	10-LH-P	nein		5,7782		2,0000	2,4771			5,7782	2,6042
6	10-LH-P	nein		4,6990			3,0792		3,0000	4,6990	3,3428
7	10-LH-P	nein		5,2480	4,2304	2,4771	2,4314			5,2878	2,7574
8	10-LH-P	nein	4,4771	4,3010			2,4771			4,6990	2,4814
9	10-LH-P	nein	4,6232	3,8751			2,2041	1,6021	1,0000	4,6946	2,3243



11 Mischfutter Rinder (Milch+Mast) Mehl		1994-1996 N= 83								Konservierungsstoffe			
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7	?	Ohne= nein	mit
CfU/g	Orientierungswerte	10.000.000	1.000.000	100.000	50.000	50.000	5.000	80.000	Median	Median			
CfU/g	10*log(50.Quantil +1)	26.000.000	4.124.924	273.861	30.000	83.427	10.000	143.718					
CfU/g	10*log(50.Quantil +0,5)	8.221.922	1.304.416	86.603	9.487	26.382	3.162	45.448	3.450.002	39.880			
CfU/g	10*log(90.Q)	19.500.000	3.452.162	282.370	24.580	58.916	3.000	97.750					
	Quant.Rang (OW)	85,0	66,1	68,4	94,9	88,8	94,0	85,3					
	Quant.Rang (50.Q+1)	95,5	92,4	89,7	91,1	92,6	100,0	94,0					
	Quant.Rang (50.Q+0,5)	80,4	76,4	67,3	83,0	75,0	90,6	75,3					
Median	log	6,415	5,615	4,438	3,477	3,921	3,000	4,158	6,538	4,601			

Häufigkeit		97,6%	86,7%	24,1%	75,9%	98,8%	61,4%	91,6%	100,0%	100,0%
N= 83										

Futter	KONS	log KBE/g							KG1-3	KG4-7
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7		
1 11-MLF-M	?	7,1303	6,4362			4,3711	2,6990	4,3979	7,2103	4,6902
2 11-MLF-M	?	5,2553	5,9542			4,9518	2,6990	3,9777	6,0334	4,9978
3 11-MLF-M	?	6,9031	5,8129		3,6990	4,6425	3,0000	4,6021	6,9370	4,9538
4 11-MLF-M	?	7,2122	5,3010					4,3424	7,2175	4,3425
5 11-MLF-M	?	5,7782				5,0414			5,7782	5,0414
6 11-MLF-M	?	6,4624	5,6990		3,0000	4,5798			6,5315	4,5911
7 11-MLF-M	?	5,7782	4,6021			3,6021	3,0000	3,4771	5,8062	3,9031
8 11-MLF-M	?	6,3222	5,4771		3,4771	4,0414		3,8451	6,3802	4,3222
9 11-MLF-M	?	6,4900	6,7513	5,1761	5,8893	3,0700		5,6284	6,9484	6,0796
10 11-MLF-M	?	6,6640	6,0792		4,4002	3,7782	3,3979	3,7959	6,7644	4,6008
11 11-MLF-M	?	6,5153	6,3570		3,4771	3,9948	3,3979	3,0969	6,7444	4,2209
1 11-MLF-M	nein	6,2553				4,5051		3,4314	6,2553	4,5404
2 11-MLF-M	nein	6,7782			4,0899	4,3784		4,2856	6,7782	4,7443
3 11-MLF-M	nein	6,2304	5,0000			2,9542	3,0000	4,4786	6,2553	4,5052
4 11-MLF-M	nein	6,6812	6,3222			3,9542		4,3010	6,8388	4,4624
5 11-MLF-M	nein	6,3424	5,0000			3,3010	3,4771	4,6990	6,3617	4,7404
6 11-MLF-M	nein	5,4771	5,6990			3,3010		3,7782	5,9031	3,9032
7 11-MLF-M	nein	6,6812	4,1761		3,5441	4,0212	2,6990	3,8751	6,6826	4,3424
8 11-MLF-M	nein	6,7076	4,7404		3,6990	3,9031	3,1761	4,2430	6,7122	4,5051
9 11-MLF-M	nein	6,7364	5,3010	4,6990	3,6990	4,4065	3,1761	4,5502	6,7559	4,8293
10 11-MLF-M	nein	7,1477			3,9542	3,6075	2,8129	4,7482	7,1477	4,8432
11 11-MLF-M	nein	7,8751	6,0000		2,6990	3,6532	3,0000	5,5502	7,8808	5,5575
12 11-MLF-M	nein	6,9294	5,7404		3,8751	3,9031		4,6180	6,9566	4,7559
13 11-MLF-M	nein	5,7076	4,6990		4,5740	3,8751		3,4771	5,7482	4,6813
14 11-MLF-M	nein	6,9281	6,1614		3,0000	3,4771	2,6990	4,8976	6,9967	4,9217
15 11-MLF-M	nein	7,3324			3,3010	4,3522	2,8751	4,4150	7,3324	4,7097
16 11-MLF-M	nein	7,2967	5,6990		3,3010	4,4232	3,3979	4,3617	7,3075	4,7324
17 11-MLF-M	nein	6,6284	5,1761			3,3617	3,8451	2,6990	6,6435	4,6794
18 11-MLF-M	nein	6,5378			2,6990	3,6990	3,1761		6,5378	3,8452
19 11-MLF-M	nein	5,6946	4,7404		3,0000	3,4771	3,0000	3,3010	5,7404	3,8451
20 11-MLF-M	nein	7,2900	6,6532		3,1761	3,6532		4,1303	7,3802	4,2901
21 11-MLF-M	nein	5,3118	5,0792	4,0000	3,0000	3,6021	3,1761	3,0000	5,5250	3,8751
22 11-MLF-M	nein	5,9112	4,1761			3,6532	3,0000	3,5441	5,9191	3,9543
23 11-MLF-M	nein	6,3729	4,3979		3,1761	4,5502	3,3010	3,8751	6,3775	4,6675
24 11-MLF-M	nein	7,3118			3,6021	4,1303	3,0000	3,3979	7,3118	4,3222
25 11-MLF-M	nein	5,9004	5,1761	4,6990	3,4771	3,6990		3,1761	5,9978	3,9778
26 11-MLF-M	nein	6,0969	5,8751		2,6990	3,6021	2,6990	4,5185	6,3010	4,5798
27 11-MLF-M	nein	6,8325	4,6990	4,6990	2,6990	3,8751	3,0000	4,0414	6,8388	4,3010
28 11-MLF-M	nein	6,4314	5,1761		4,0414	2,6990		3,7404	6,4548	4,2305
29 11-MLF-M	nein	6,6284	5,1761		3,1761	3,3979	3,0000	3,7782	6,6435	4,0414
30 11-MLF-M	nein	6,5826	5,5441	5,0000	3,3979	4,2041	3,3979	4,5441	6,6309	4,7482

12 Mischfutter Rinder (Milch+Mast) Pellets		1994-1996 N= 527								Konservierungsstoffe			
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7	KG1-3	KG4-7	?	Ohne= nein	mit
CfU/g	Orientierungswerte	1.000.000	500.000	50.000	5.000	10.000	1.000	5.000	Median	Median			
CfU/g	10*log(50.Quantil +1)	372.492	900.000	40.000	1.000	5.600	2.000	2.500	142.000	880			
CfU/g	10*log(50.Quantil +0,5)	117.792	284.605	12.649	316	1.771	632	791					
CfU/g	10*log(90.Q)	382.171	1.110.388	40.000	1.617	6.176	1.000	2.500					
	Quant.Rang (OW)	96,6	80,8	93,1	95,8	94,2	88,8	94,6					
	Quant.Rang (50.Q+1)	89,7	87,7	87,2	83,3	89,4	95,2	90,0					
	Quant.Rang (50.Q+0,5)	73,6	73,0	70,1	75,9	71,4	84,8	73,2					
Median	log	4,571	4,954	3,602	2,000	2,748	2,301	2,398	5,152	2,945			

Häufigkeit		67,6%	99,2%	19,5%	27,5%	81,0%	24,1%	28,7%	99,8%	85,4%
N= 527										

Futter	KONS	log KBE/g							KG1-3	KG4-7
		KG 1	KG 2	KG 3	KG 4	KG 5	KG 6	KG 7		
1 12-MLF-P	?	4,6021	4,7782	4,3010		2,9542	2,3010		5,0792	3,0422
2 12-MLF-P	?		5,5563						5,5563	
3 12-MLF-P	?	3,3010	5,9854	3,0000	2,0000	3,2041			5,9868	3,2310
4 12-MLF-P	?	4,0792	4,6812						4,7782	
5 12-MLF-P	?		4,9956	3,0000	2,3010	2,9031			5,0000	3,0009
6 12-MLF-P	?	4,3010	5,1139						5,1761	
7 12-MLF-P	?		5,7404				3,1761		5,7404	3,1770
8 12-MLF-P	?	4,6990	4,3222				3,9031		5,5441	3,9033
9 12-MLF-P	?		5,5185						5,5185	
10 12-MLF-P	?	4,0000	4,7404						4,8129	
11 12-MLF-P	?	5,3617	4,9542		3,0000	4,5798			5,5052	4,5911
12 12-MLF-P	?		4,3010			2,6990			4,3011	2,7016
13 12-MLF-P	?	4,0000	5,2304			2,6990			5,2553	2,7016
14 12-MLF-P	?	4,0000	4,3979	3,4771		2,3979			4,5798	2,4031
15 12-MLF-P	?		4,0000			4,0000			4,0001	1,5185
16 12-MLF-P	?	3,6990	4,4150						4,4914	
17 12-MLF-P	?		4,3979			2,7634			4,3980	2,7657
18 12-MLF-P	?	4,9542	5,3222			3,2430			5,4771	3,2438
19 12-MLF-P	?	3,6990	5,1139						5,1303	
20 12-MLF-P	?	4,3979	4,4472						4,7243	
21 12-MLF-P	?		4,2788			2,0969			4,2788	2,1072
22 12-MLF-P	?		4,4624			2,2430			4,4624	2,2504
23 12-MLF-P	?	4,0000	4,8633						4,9191	
24 12-MLF-P	?	4,4472	4,0414			1,6990			4,5911	1,7243
25 12-MLF-P	?	3,6990	4,1139	3,0000	1,6990				4,2788	1,7243
26 12-MLF-P	?	3,0000	4,6232			2,0000			4,6335	2,0128
27 12-MLF-P	?	4,0000	4,3010			2,0000			4,4771	2,0128
28 12-MLF-P	?	4,0000	5,8451	4,0000	2,0000	2,0000	2,0000	2,3010	5,8573	2,6990
29 12-MLF-P	?		4,4314	3,0000	3,0792	2,0000			4,4472	3,1146
30 12-MLF-P	?		4,3010			2,4771			4,3011	2,4814
31 12-MLF-P	?		4,6812			2,6284			4,6813	2,6314
32 12-MLF-P	?	4,9823				2,1761			4,9823	2,1847
33 12-MLF-P	?	4,1139	4,6532	3,3010		1,6990			4,7782	1,7243
34 12-MLF-P	?		4,6990			2,7202			4,6990	2,7226
35 12-MLF-P	?	4,0792	4,5798			2,7404			4,6990	2,7427
36 12-MLF-P	?	4,3802	4,5441	3,3010		2,7404			4,7853	2,7427
37 12-MLF-P	?		4,6021			2,0969			4,6021	2,1072
38 12-MLF-P	?	4,3802	4,4150			1,6990		2,4771	4,6990	2,5465
39 12-MLF-P	?	3,8451	5,1303			2,0000			5,1523	2,0128
40 12-MLF-P	?		4,1139			2,1761			4,1140	2,1847
41 12-MLF-P	?	4,0414	4,4771			2,5441			4,6128	2,5478