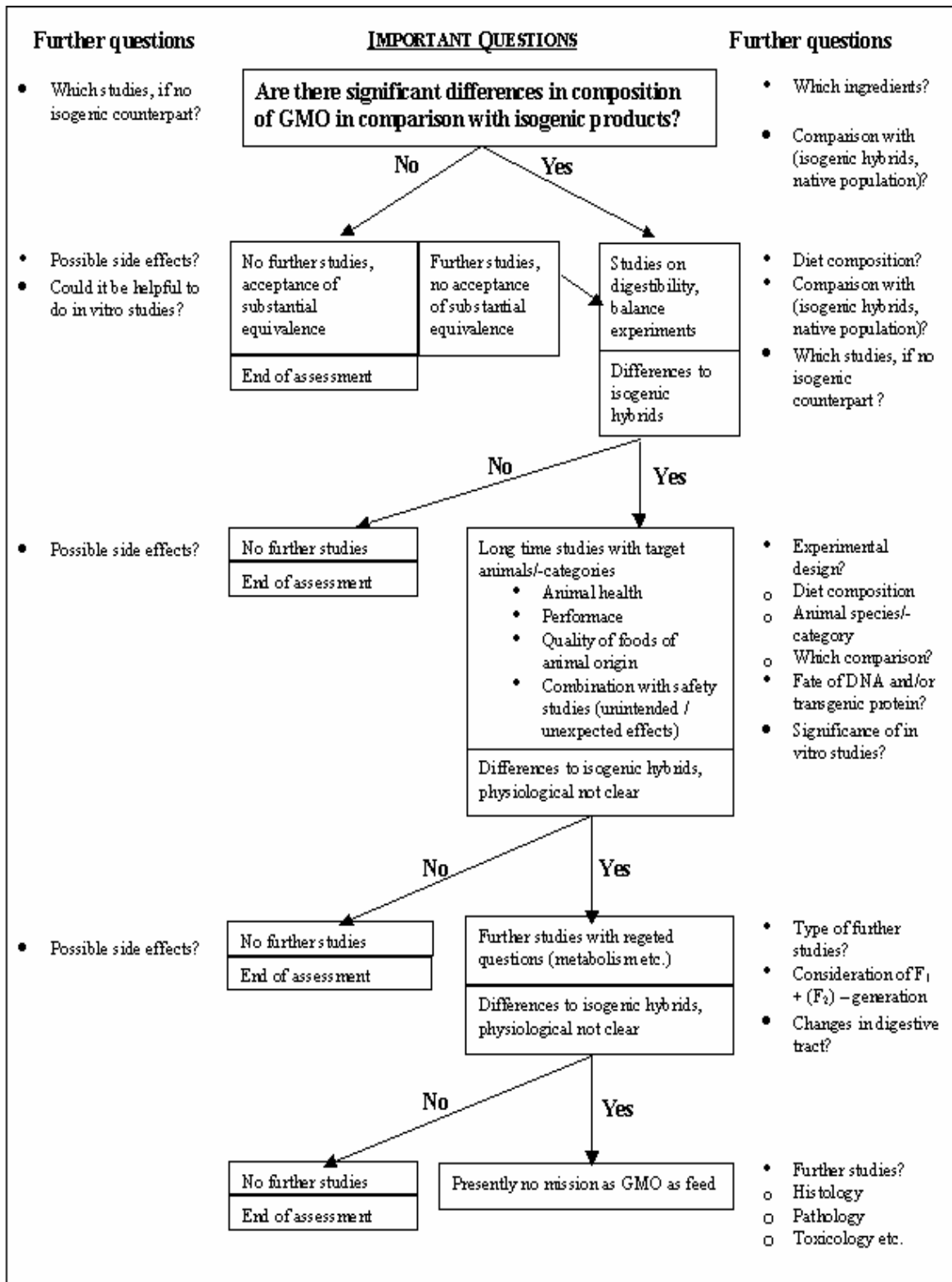


10 Appendix

10.1 Proposal for nutritional assessment (under consideration of safety aspects) of feeds from GMO (Decision tree) (Flachowsky, 2004)



Appendix

10.2 Control and experimental group individual body weight (BW) (g)

10.2.1 Control group (consumed diet containing non transgenic maize)

Bird identification wing number	Age (days)					
	1	7	14	21	28	35
894/292	41.9	103.0	269.4	559.6	958.5	1430.0
837/464	40.7	109.4	216.4	383.1	608.9	916.0
895/209	42.0	99.9	237.8	512.3	825.3	1310.0
895/134	41.2	104.9	215.0	432.2	809.7	1267.0
895/379	44.7	90.5	214.7	448.9	804.1	1260.0
837/0052	36.5	96.7	272.1	-	-	-
895/313	41.1	111.2	276.3	574.4	893.1	1418.0
835/223	43.8	105.7	273.0	592.5	1003.6	1580.0
840/165	42.5	67.6	190.1	452.9	801.7	1265.0

10.2.2 Experimental group (consumed diet containing transgenic Bt176 maize)

Bird identification wing number	Age (days)					
	1	7	14	21	28	35
900/317	42.2	94.8	224.9	456.5	817.6	1221.0
835/243	44.0	102.6	247.7	531.7	920.4	1354.0
837/0025	42.7	114.8	257.5	484.5	626.3	-
895/196	44.1	111.2	278.9	562.1	976.0	1532.0
895/642	48.9	133.3	310.2	644.2	1067.6	1494.5
895/0014	44.2	108.4	226.9	493.6	818.6	1218.0
895/171	39.2	94.7	243.5	473.4	814.3	1222.0
840/0092	44.6	122.8	269.2	537.2	939.2	1423.0
894/304	41.0	99.9	225.8	555.1	771.0	1164.0
895/327	46.7	97.6	221.0	457.2	658.4	1025.0
894/451	42.4	100.0	223.6	461.8	792.5	1217.0
895/395	41.2	107.6	246.5	460.6	715.0	1027.0
840/253	39.5	117.6	291.6	537.5	978.5	1109.0
895/221	38.3	106.8	251.7	539.3	889.9	1341.0
894/226	40.8	91.9	209.8	440.3	835.9	1392.0
894/346	43.0	102.2	245.3	477.9	-	-
840/254	40.6	87.2	152.6	553.9	646.1	1037.0
840/302	39.3	88.4	149.1	414.0	709.2	1135.0
894/410	41.3	94.6	229.2	501.5	926.6	1505.0
840/298	44.0	100.9	222.6	421.2	696.7	1014.0
894/385	41.6	89.0	189.0	-	-	-
895/325	38.7	105.5	264.7	449.9	909.8	1315.0
840/225	41.8	95.2	224.9	478.8	863.4	1366.0
894/218	46.6	128.5	275.1	502.1	-	-
835/123	40.1	88.7	160.4	409.6	812.6	1308.0
895/202	40.4	105.9	248.0	506.3	911.8	1472.0

10.3 Control and experimental group individual body weight gain (g)

10.3.1 Control group (consumed diet containing non transgenic maize)

Bird identification wing number	Age (days)					
	1	7	14	21	28	35
894/292	-	61.1	166.4	290.2	398.9	471.5
837/464	-	68.7	107.0	166.7	225.8	307.1
895/209	-	57.9	137.9	274.5	313.0	484.7
895/134	-	63.6	110.1	217.2	377.5	457.3
895/379	-	45.9	124.1	234.2	355.2	455.9
837/0052	-	60.2	175.4	-	-	-
895/313	-	70.0	165.1	298.1	318.7	524.9
835/223	-	61.8	167.2	319.5	411.1	576.4
840/165	-	25.1	122.6	262.8	348.8	463.3

10.3.2 Experimental group (consumed diet containing transgenic Bt176 maize)

Bird identification wing number	Age (days)					
	1	7	14	21	28	35
900/317	-	52.6	130.1	231.6	361.1	403.4
835/243	-	58.6	145.0	284.0	388.7	433.6
837/0025	-	72.0	142.7	227.0	141.8	-
895/196	-	67.0	167.7	283.2	413.9	556.0
895/642	-	84.4	176.9	334.0	423.4	426.9
895/0014	-	64.1	118.6	266.7	325.0	399.4
895/171	-	55.5	148.9	229.9	340.9	407.7
840/0092	-	78.1	146.4	268.0	402.0	483.8
894/304	-	59.0	125.9	329.3	215.9	393.0
895/327	-	50.9	123.4	236.2	201.2	366.6
894/451	-	57.6	123.7	238.2	330.7	424.5
895/395	-	66.4	139.0	214.1	254.4	312.0
840/253	-	78.1	174.0	245.9	441.0	130.5
895/221	-	68.5	144.9	287.6	350.6	451.1
894/226	-	51.1	117.9	230.5	395.6	556.1
894/346	-	59.2	143.0	232.6	-	-
840/254	-	46.6	65.4	401.3	92.2	391.0
840/302	-	49.0	60.7	265.0	295.2	425.8
894/410	-	53.2	134.6	272.3	425.1	578.4
840/298	-	56.9	121.7	198.6	275.5	317.3
894/385	-	47.4	100.0	-	-	-
895/325	-	66.8	159.2	185.2	459.9	405.2
840/225	-	53.4	129.7	253.9	384.6	502.6
894/218	-	81.9	146.6	227.1	-	-
835/123	-	48.5	71.8	249.2	403.0	495.4
895/202	-	65.5	142.0	258.3	405.5	560.2

Appendix

10.4 Control and experimental group individual feed intake (g)

10.4.1 Control group (consumed diet containing non transgenic maize)

Bird identification wing number	Age (days)					
	1	7	14	21	28	35
894/292	-	72.6	244.1	458.2	606.9	933.5
837/464	-	84.2	171.5	291.5	541.4	632.8
895/209	-	77.2	212.8	426.1	630.1	851.5
895/134	-	76.2	188.0	335.1	560.5	840.1
895/379	-	65.5	194.7	361.5	588.2	824.0
837/0052	-	71.4	232.9	-	-	-
895/313	-	73.4	224.0	452.8	690.7	917.1
835/223	-	83.8	256.0	534.0	788.6	1078.3
840/165	-	63.7	172.1	395.7	671.7	855.5

10.4.2 Experimental group (consumed diet containing transgenic Bt176 maize)

Bird identification wing number	Age (days)					
	1	7	14	21	28	35
900/317	-	70.9	191.6	360.1	603.4	821.3
835/243	-	72.7	226.0	414.3	657.7	820.0
837/0025	-	85.7	221.5	372.3	465.1	-
895/196	-	93.2	242.4	444.5	736.2	996.6
895/642	-	90.1	265.7	493.7	793.7	940.8
895/0014	-	72.8	207.0	373.2	590.2	755.1
895/171	-	73.8	217.0	390.4	597.7	782.3
840/0092	-	88.1	245.0	421.7	669.4	908.5
894/304	-	77.7	219.9	371.3	578.8	753.0
895/327	-	73.7	193.3	364.6	498.4	658.4
894/451	-	69.3	206.5	379.8	601.7	834.7
895/395	-	70.8	216.8	342.5	464.7	576.3
840/253	-	79.3	243.9	409.8	603.9	645.2
895/221	-	79.6	223.0	412.3	628.6	817.1
894/226	-	54.1	183.5	356.1	641.8	961.9
894/346	-	76.5	217.6	361.3	-	-
840/254	-	60.0	146.2	280.3	502.8	725.5
840/302	-	73.7	170.1	323.4	557.2	759.5
894/410	-	69.2	234.0	415.3	710.1	979.0
840/298	-	65.6	186.0	323.7	487.8	614.9
894/385	-	73.4	170.1	-	-	-
895/325	-	74.2	220.8	430.8	635.9	788.2
840/225	-	72.2	190.8	378.4	646.5	862.2
894/218	-	88.2	245.7	402.4	-	-
835/123	-	61.8	151.9	337.2	688.5	910.5
895/202	-	84.4	220.9	395.6	663.7	995.9

10.5 Control and experimental group individual feed conversion (FCR)

10.5.1 Control group (consumed diet containing non transgenic maize)

Bird identification wing number	Age (days)					
	1	7	14	21	28	35
894/292	-	1.19	1.47	1.58	1.52	1.98
837/464	-	1.23	1.60	1.75	2.40	2.06
895/209	-	1.33	1.54	1.55	2.01	1.76
895/134	-	1.20	1.71	1.54	1.48	1.84
895/379	-	1.43	1.57	1.54	1.66	1.81
837/0052	-	1.19	1.33	-	-	-
895/313	-	1.05	1.36	1.52	2.17	1.75
835/223	-	1.35	1.53	1.67	1.92	1.87
840/165	-	2.53	1.40	1.51	1.93	1.85

10.5.2 Experimental group (consumed diet containing transgenic Bt176 maize)

Bird identification wing number	Age (days)					
	1	7	14	21	28	35
900/317	-	1.35	1.47	1.55	1.67	2.04
835/243	-	1.24	1.56	1.46	1.69	1.89
837/0025	-	1.19	1.55	1.64	3.30	-
895/196	-	1.39	1.45	1.57	1.78	1.79
895/642	-	1.07	1.50	1.48	1.87	2.20
895/0014	-	1.13	1.75	1.40	1.82	1.89
895/171	-	1.33	1.46	1.70	1.75	1.92
840/0092	-	1.13	1.67	1.57	1.67	1.88
894/304	-	1.32	1.75	1.13	2.68	1.92
895/327	-	1.45	1.57	1.54	2.48	1.80
894/451	-	1.20	1.67	1.59	1.82	1.97
895/395	-	1.07	1.56	1.60	1.83	1.85
840/253	-	1.01	1.40	1.67	1.37	4.94
895/221	-	1.16	1.54	1.43	1.79	1.81
894/226	-	1.06	1.56	1.54	1.62	1.73
894/346	-	1.29	1.52	1.55	-	-
840/254	-	1.29	2.24	0.70	5.45	1.86
840/302	-	1.50	2.80	1.22	1.89	1.78
894/410	-	1.30	1.74	1.53	1.67	1.69
840/298	-	1.15	1.53	1.63	1.77	1.94
894/385	-	1.55	1.70	-	-	-
895/325	-	1.11	1.39	2.33	1.83	1.95
840/225	-	1.35	1.47	1.49	1.68	1.72
894/218	-	1.08	1.68	1.77	-	-
835/123	-	1.27	2.12	1.35	1.71	1.84
895/202	-	1.29	1.55	1.53	1.64	1.78

10.6 Cumulative body weight gain, total feed intake and final feed conversion

10.6.1 Control group (consumed diet containing non transgenic maize)

Bird identification wing number	Feed intake (g)	Body weight gain (g)	Feed conversion ratio
894/292	2315.3	1388.1	1.67
837/464	1721.4	875.3	1.97
895/209	2197.7	1268.0	1.73
895/134	1999.9	1225.8	1.63
895/379	2033.9	1215.3	1.67
895/313	2358.0	1376.9	1.71
835/223	2740.7	1536.2	1.78
840/165	2158.7	1222.5	1.77

10.6.2 Experimental group (consumed diet containing transgenic Bt176 maize)

Bird identification wing number	Feed intake (g)	Body weight gain (g)	Feed conversion ratio
900/317	2047.3	1178.8	1.74
835/243	2190.7	1310.0	1.67
895/196	2512.9	1487.9	1.69
895/642	2584.0	1445.6	1.79
895/0014	1998.3	1173.8	1.70
895/171	2061.2	1182.8	1.74
840/0092	2332.7	1378.4	1.69
894/304	2000.7	1123.0	1.78
895/327	1788.4	978.3	1.83
894/451	2092.0	1174.6	1.78
895/395	1671.1	985.8	1.70
840/253	1982.1	1069.5	1.85
895/221	2160.6	1302.7	1.66
894/226	2197.4	1351.2	1.63
840/254	1714.8	996.4	1.72
840/302	1883.9	1095.7	1.72
894/410	2407.6	1463.7	1.64
840/298	1678.0	970.0	1.73
895/325	2149.9	1276.3	1.68
840/225	2150.1	1324.2	1.62
835/123	2149.9	1267.9	1.70
895/202	2360.5	1431.6	1.65

Appendix

10.7 Nutritional evaluation experiment (from 20 to 25 days of age)

10.7.1 Control group (consumed diet containing non transgenic maize)

Bird identification wing number	BW at 20 d of age (g)	BW at 25 d of age (g)	Body weight gain (g)	Feed intake (g)	Excreta* (g)	Apparent digestible nutrients (%)
894/292	522.5	700.8	178.3	226.6	69.9	69.2
837/464	359.9	454.7	94.8	249.3	53.9	78.4
895/209	466.0	595.9	129.9	259.0	92.6	64.2
895/134	407.9	574.2	166.3	237.5	60.6	74.5
895/379	409.7	571.5	161.8	240.9	58.0	75.9
895/313	537.2	702.8	165.6	283.8	72.0	74.6
835/223	540.9	680.8	139.9	293.5	97.5	66.8
840/165	406.8	576.5	169.7	290.0	91.0	68.6

* Expressed as dry matter weight

10.7.2 Experimental group (consumed diet containing transgenic Bt176 maize)

Bird identification wing number	BW at 20 d of age (g)	BW at 25 d of age (g)	Body weight gain (g)	Feed intake (g)	Excreta* (g)	Apparent digestible nutrients (%)
900/317	427.6	576.5	148.9	237.6	66.0	72.2
835/243	481.1	651.9	170.8	282.4	71.8	74.6
895/196	522.6	718.5	195.9	306.7	73.5	76.0
895/642	579.5	802.4	222.9	339.1	99.0	70.8
895/0014	452.7	614.6	161.9	248.2	61.4	75.3
895/171	454.4	596.8	142.4	241.0	67.6	72.0
840/0092	489.0	667.2	178.2	276.3	68.4	75.2
894/304	426.2	576.2	150.0	240.5	69.7	71.0
895/327	419.5	583.0	163.5	247.3	62.6	74.7
894/451	436.0	572.1	136.1	246.6	66.9	72.9
895/395	433.0	551.5	118.5	195.9	53.7	72.6
840/253	506.6	652.3	145.7	244.5	73.3	70.0
895/221	487.3	640.9	153.6	260.2	68.4	73.7
894/226	410.8	535.7	124.9	231.2	66.3	71.3
840/254	316.8	454.6	137.8	199.7	53.6	73.2
840/302	374.6	513.1	138.5	223.4	61.5	72.5
894/410	476.7	651.9	175.2	282.9	72.5	74.4
840/298	391.2	537.5	146.3	213.0	58.0	72.8
895/325	516.5	659.2	142.7	267.1	71.1	73.4
840/225	447.0	621.0	174.0	253.1	66.6	73.7
835/123	371.6	526.9	155.3	288.7	70.9	75.4
895/202	468.4	629.4	161.0	262.9	67.1	74.5

* Expressed as dry matter weight