

No	Period	Hay	Cow	Live weight kg	Intake (g or kcal)							Digested (g or kcal, %)								
					dry matter	crude protein 6.25xN	crude fat	crude fibre	N-free extract.	min. matter	C	keal	No	dry matter g (%)	organic matter g (%)	crude protein 6.25xN g (%)	crude fat g (%)	crude fibre g (%)	N-free extr. g (%)	min. g (%)
(1)	P I, R 42	H I, Friesland	(Anna 3477)	569	5070	758	99	1598	2078	536	2251	21937	(1)	3291 (64)	2977 (65.7)	434 (57.2)	30 (30.5)	1208 (75.6)	1304 (62.8)	314
2	"	"	K I, Hinke	428	4243	634	83	1335	1736	455	1881	18328	2	2791 (64)	2516 (66.4)	370 (58.3)	28 (33.9)	1014 (75.9)	1104 (63.6)	276
3	"	"	K II, Albertje	484	4807	763	132	1402	1898	612	2070	20264	3	3218 (66)	2906 (69.3)	465 (60.9)	62 (47.4)	1112 (79.3)	1268 (66.8)	312
4	"	"	K III, Roosje	525	5158	819	142	1506	2037	655	2222	21752	4	3540 (66)	3174 (70.5)	512 (62.4)	77 (54.3)	1196 (79.4)	1390 (68.2)	366
(5)	P II, R 43	H II, N.Holland	(Anna 3477)	583	6280	1011	173	1862	2460	774	2729	26746	(5)	4250 (66)	3847 (69.9)	630 (62.3)	79 (45.9)	1484 (79.7)	1654 (67.2)	403
6	"	"	K I, Hinke	436	4998	804	137	1481	1956	621	2169	21263	6	3368 (66)	3046 (69.6)	505 (62.8)	65 (47.2)	1187 (80.1)	1290 (66.0)	321
7	"	"	K II, Albertje	481	5513	835	114	1765	2246	553	2473	24106	7	3520 (66)	3224 (65.0)	485 (58.1)	32 (28.4)	1331 (75.4)	1375 (61.2)	296
8	"	"	K III, Roosje	536	5947	898	123	1900	2417	609	2662	25944	8	3885 (66)	3524 (66.0)	533 (59.4)	46 (37.8)	1443 (75.9)	1502 (62.1)	360
(9)	P III, R 44	H III, Utrecht	(Anna 3477)	600	6428	930	156	2028	2798	515	2941	28686	(9)	4147 (66)	3892 (65.8)	525 (56.5)	59 (37.9)	1482 (73.1)	1826 (65.2)	255
10	"	"	K I, Hinke	447	5120	740	124	1614	2226	416	2340	22822	10	3420 (66)	3195 (67.9)	451 (60.9)	50 (40.6)	1210 (75.0)	1483 (66.6)	225
11	"	"	K II, Albertje	484	6237	543	120	2068	3137	370	2877	27735	11	3823 (66)	3656 (62.3)	268 (49.4)	47 (38.8)	1356 (65.6)	1985 (63.3)	167
12	"	"	K III, Roosje	553	6698	583	129	2218	3365	404	3086	29748	12	4173 (66)	3976 (63.2)	295 (50.7)	56 (43.5)	1476 (66.6)	2148 (63.9)	197
13	P IV, R 45	H V, Overijssel	K II, Albertje	475	5843	564	127	1808	2706	638	2551	24445	13	3663 (66)	3450 (66.3)	251 (44.5)	62 (48.8)	1309 (72.4)	1828 (67.6)	213
14	"	"	K III, Roosje	546	6270	606	137	1941	2905	682	2738	26239	14	4036 (66)	3780 (67.6)	285 (47.1)	68 (50.0)	1448 (74.6)	1979 (68.1)	256
15	"	"	K IV, Roosje	549	5855	895	118	1863	2392	586	2604	26392	15	3690 (63)	3398 (64.5)	515 (57.6)	42 (35.7)	1384 (74.3)	1456 (60.9)	292
16	"	"	K V, Lamkje	548	6174	950	125	1976	2537	586	2762	26911	16	3985 (64)	3666 (65.6)	560 (59.0)	42 (33.9)	1492 (75.5)	1571 (61.9)	319
17	P V, R 46	H IV, N.Brabant	K VI, Zwarte	500	6674	580	134	2291	3269	400	3068	28618	17	4226 (63)	4029 (64.2)	292 (50.4)	62 (45.9)	1562 (68.2)	2113 (64.6)	197
18	"	"	K I, Hinke	464	6080	527	122	2081	2971	379	2788	26911	18	3743 (61)	3559 (62.4)	246 (46.8)	46 (38.1)	1403 (67.4)	1863 (62.7)	184
19	"	"	K IV, Roosje	543	6121	577	145	1953	2813	633	2686	26845	19	3867 (63)	3665 (66.8)	249 (43.1)	78 (54.0)	1434 (73.4)	1903 (67.7)	203
20	"	"	K V, Lamkje	548	6000	570	143	1931	2781	574	2656	25550	20	3840 (64)	3660 (67.4)	260 (45.6)	78 (54.5)	1440 (74.6)	1882 (67.7)	180
21	P VI, R 47	H III, Utrecht	K II, Albertje	477	5846	847	144	1933	2461	462	2679	26033	21	3838 (65)	3615 (67.1)	487 (57.5)	56 (38.8)	1427 (73.8)	1645 (66.8)	224
22	"	"	K III, Roosje	537	6511	940	159	2147	2734	530	2976	28920	22	4303 (66)	4032 (67.4)	564 (60.0)	65 (40.7)	1591 (74.1)	1812 (66.3)	271
23	"	"	K IV, Roosje	548	6367	566	123	2196	3097	385	2938	28255	23	3824 (60)	3646 (60.9)	271 (47.9)	50 (41.0)	1396 (63.6)	1929 (62.3)	178
24	"	"	K V, Lamkje	546	6348	568	123	2202	3105	350	2946	28332	24	3863 (60)	3697 (61.6)	290 (51.0)	56 (45.2)	1420 (64.5)	1931 (62.2)	166
25	P VII, R 48	H V, Z.Holland	K VI, Zwarte	497	6353	538	99	2053	3151	513	2860	27432	25	3727 (58)	3556 (60.9)	252 (46.9)	39 (39.3)	1257 (61.2)	2008 (63.7)	171
26	"	"	K I, Hinke	471	6008	508	94	1939	2977	490	2701	25914	26	3442 (57)	3295 (59.7)	221 (43.6)	37 (39.4)	1169 (60.3)	1868 (62.7)	147
27	"	"	K IV, Roosje	549	5623	814	134	1836	2385	455	2581	25041	27	3698 (65)	3471 (67.2)	479 (58.8)	49 (36.7)	1378 (75.0)	1566 (65.7)	226
28	"	"	K V, Lamkje	547	5612	817	135	1844	2395	421	2592	25150	28	3703 (66)	3488 (67.2)	482 (59.0)	52 (38.8)	1372 (74.4)	1582 (66.0)	215
29	P VIII, R 49	H VI, Z.Holland	K II, Albertje	482	5958	504	95	1945	2960	454	2680	25741	29	3515 (59)	3382 (61.4)	227 (44.9)	44 (46.3)	1211 (62.3)	1900 (64.2)	133
30	"	"	K III, Roosje	538	7048	588	110	2266	3449	635	3122	28996	30	4029 (57)	3866 (60.3)	241 (40.9)	49 (44.6)	1420 (62.6)	2156 (62.5)	164
31	"	"	K IV, Roosje	546	6132	946	158	1864	2408	756	2659	25914	31	4061 (66)	3694 (68.7)	542 (57.3)	70 (44.4)	1483 (79.5)	1599 (66.4)	366
32	"	"	K V, Lamkje	547	6121	944	158	1861	2404	754	2654	25865	32	4131 (67)	3717 (69.3)	562 (59.5)	71 (44.9)	1457 (78.3)	1628 (67.7)	414
33	P IX, R 50	H V, Overijssel	K VI, Zwarte	490	6031	565	127	1965	2748	627	2659	25552	33	3814 (63)	3590 (66.4)	255 (45.1)	61 (48.3)	1432 (72.9)	1842 (67.0)	224
34	"	"	K I, Hinke	479	5762	539	121	1874	2622	606	2537	24380	34	3576 (62)	3378 (65.5)	234 (43.3)	58 (47.8)	1349 (72.0)	1738 (66.3)	198
35	"	"	K IV, Roosje	540	6346	528	98	2041	3153	526	2844	27256	35	3699 (58)	3595 (61.8)	226 (42.8)	41 (41.7)	1306 (64.0)	2022 (64.1)	104
36	"	"	K V, Lamkje	546	6278	525	97	2029	3135	492	2827	27098	36	3757 (59)	3622 (62.6)	242 (46.2)	44 (45.2)	1310 (64.6)	2026 (64.6)	135

TABLE A. Data referring to individual cows on live weight, feed intake, digested feed constituents, digestion coefficients, urine, gaseous ex- change, metabolisable energy and balances.

Digested (g or kcal, %)				Urine										Gaseous exchange (CO ₂ in urine included)				Metabolisable energy		Balance (g or kcal)								
crude protein 6.25xN (%)	crude fat (%)	crude fibre (%)	N-free extr. (%)	min. matter (%)	C (%)	kcal (%)	No	6.25xN		C		kcal		CO ₂		CH ₄		kcal	kcal	6.25xN	C	from CN-bal.	from heat det.	average				
								g	g	g	g	ltr	ltr	ltr	ltr	ltr	ltr								ltr	ltr	ltr	ltr
434	(57.2)	30	(30.5)	1208	(75.6)	1304	(62.8)	314	(58.7)	1384	(61.5)	13215	(60.2)	(1)	489	112	1153	15	2514	2510	184	1734	10328	(47.1)	- 164	- 1985	- 2191	- 2088
370	(58.3)	28	(33.9)	1014	(75.9)	1104	(63.6)	276	(60.6)	1172	(62.3)	11190	(61.1)	2	433	96	1006	16	1935	1993	158	1498	8686	(47.4)	- 68	- 801	- 1003	- 902
465	(60.9)	62	(47.4)	1112	(79.3)	1268	(66.8)	312	(51.0)	1342	(64.8)	12879	(63.6)	3	527	115	1072	51	2361	2436	180	1701	10106	(49.9)	- 149	- 1795	- 1729	- 1762
512	(62.4)	77	(54.3)	1196	(79.4)	1390	(68.2)	366	(55.9)	1477	(66.5)	14170	(65.1)	4	553	122	1240	33	2505	2569	198	1874	11056	(50.8)	- 111	- 1342	- 1479	- 1411
630	(62.3)	79	(45.9)	1484	(79.7)	1654	(67.2)	403	(52.0)	1790	(65.6)	17263	(64.5)	(5)	562	137	1336	23	2893	2938	223	2109	13818	(51.7)	- 29	- 414	- 641	- 528
505	(62.8)	65	(47.2)	1187	(80.1)	1290	(66.0)	321	(51.7)	1415	(65.2)	13621	(64.1)	6	497	114	1183	21	1949	2138	186	1760	10678	(50.2)	+ 66	+ 811	+ 792	+ 802
485	(58.1)	32	(28.4)	1331	(75.4)	1375	(61.2)	296	(53.6)	1506	(60.9)	14369	(59.6)	7	533	120	1151	27	2371	2479	195	1845	11373	(47.2)	- 34	- 386	- 540	- 463
533	(59.4)	46	(37.8)	1443	(75.9)	1502	(62.1)	360	(59.2)	1649	(62.0)	15782	(60.8)	8	571	133	1361	18	2464	2592	219	2072	12348	(47.6)	+ 19	+ 258	- 40	+ 109
525	(56.5)	59	(37.9)	1482	(73.1)	1826	(65.2)	255	(49.5)	1820	(61.9)	17429	(60.8)	(9)	431	140	1268	41	3236	3249	238	2246	13915	(48.5)	- 166	- 2131	- 2267	- 2199
451	(60.9)	50	(40.6)	1210	(75.0)	1483	(66.6)	225	(54.1)	1497	(64.0)	14353	(62.9)	10	436	121	1143	32	2057	2246	195	1846	11364	(49.8)	+ 84	+ 1028	+ 921	+ 974
268	(49.4)	47	(38.8)	1356	(65.6)	1985	(63.3)	167	(45.1)	1693	(58.8)	16003	(57.7)	11	277	104	1024	11	2541	2730	238	2246	12732	(45.9)	+ 4	+ 52	- 174	- 61
295	(50.7)	56	(43.5)	1476	(66.6)	2148	(63.9)	197	(48.7)	1837	(59.5)	17422	(58.6)	12	302	119	1160	7	2633	2868	261	2469	13793	(46.4)	+ 44	+ 553	+ 384	+ 468
251	(44.5)	62	(48.8)	1309	(72.4)	1828	(67.6)	213	(33.4)	1594	(62.5)	14928	(61.1)	13	260	103	905	27	2379	2577	230	2177	11846	(48.5)	+ 1	+ 15	- 259	- 122
285	(47.1)	68	(50.0)	1448	(74.6)	1979	(68.1)	256	(37.6)	1753	(64.0)	16416	(62.6)	14	286	116	1041	28	2482	2713	248	2339	13036	(49.7)	+ 64	+ 792	+ 381	+ 587
515	(57.6)	42	(35.7)	1384	(74.3)	1456	(60.9)	292	(49.8)	1562	(60.0)	14953	(58.9)	15	572	129	1307	17	2605	2697	214	2024	11622	(45.8)	- 119	- 1430	- 1438	- 1434
560	(59.0)	42	(33.9)	1492	(75.5)	1571	(61.9)	319	(54.5)	1698	(61.5)	16210	(60.2)	16	602	135	1384	14	2692	2785	212	2006	12820	(47.6)	- 37	- 430	- 680	- 555
292	(50.4)	62	(45.9)	1562	(68.2)	2113	(64.6)	197	(49.3)	1856	(60.5)	17720	(59.8)	17	277	112	1076	7	2780	2984	269	2540	14103	(47.6)	+ 3	+ 26	- 15	+ 5
246	(46.8)	46	(38.1)	1403	(67.4)	1863	(62.7)	184	(48.4)	1638	(58.8)	15549	(57.8)	18	242	101	958	7	2377	2604	235	2218	12373	(46.0)	+ 5	+ 231	+ 240	+ 236
249	(43.1)	78	(54.0)	1434	(73.4)	1903	(67.7)	203	(32.0)	1689	(62.9)	15907	(61.5)	19	271	110	995	28	2557	2745	238	2254	12658	(49.0)	- 22	- 49	- 331	- 190
260	(45.6)	78	(54.5)	1440	(74.6)	1882	(67.7)	180	(31.4)	1681	(63.3)	15955	(62.4)	20	298	113	1032	31	2630	2801	236	2232	12691	(49.7)	- 44	- 517	- 643	- 580
487	(57.5)	56	(38.8)	1427	(73.8)	1645	(66.8)	224	(48.4)	1696	(63.3)	16175	(62.1)	21	490	137	1257	41	2581	2734	219	2071	12846	(49.3)	- 2	- 26	- 182	- 104
564	(60.0)	65	(40.7)	1591	(74.1)	1812	(66.3)	271	(51.1)	1894	(63.7)	18062	(62.5)	22	592	162	1521	45	2987	3116	242	2292	14250	(49.3)	- 44	- 523	- 772	- 648
271	(47.9)	50	(41.0)	1396	(63.6)	1929	(62.3)	178	(46.4)	1684	(57.3)	15939	(56.4)	23	265	109	1056	9	2634	2789	234	2214	12669	(44.8)	- 41	- 514	- 674	- 594
290	(51.0)	56	(45.2)	1420	(64.5)	1931	(62.2)	166	(47.5)	1712	(58.1)	16185	(57.1)	24	295	115	1108	12	2681	2851	246	2327	12750	(45.0)	- 5	- 694	- 834	- 764
252	(46.9)	39	(39.3)	1257	(61.2)	2008	(63.7)	171	(33.3)	1638	(57.3)	15455	(56.3)	25	272	111	1020	4	2673	2816	243	2296	12138	(44.2)	- 111	- 1359	- 1362	- 1371
221	(43.6)	37	(39.4)	1169	(60.3)	1868	(62.7)	147	(30.0)	1519	(56.2)	14330	(55.3)	26	220	92	869	4	2342	2519	216	2039	11422	(44.1)	+ 1	- 459	- 489	- 474
479	(58.8)	49	(36.7)	1378	(75.0)	1566	(65.7)	226	(49.7)	1632	(63.2)	15511	(61.9)	27	497	144	1288	46	2666	2752	212	2001	12222	(48.8)	- 77	- 937	- 1160	- 1049
482	(59.0)	52	(38.8)	1372	(74.4)	1582	(66.0)	215	(51.0)	1643	(63.4)	15598	(62.0)	28	500	136	1278	41	2606	2735	213	2016	12305	(48.9)	- 52	- 628	- 823	- 725
227	(44.9)	44	(46.3)	1211	(62.3)	1900	(64.2)	133	(29.4)	1556	(58.1)	14687	(57.1)	29	250	91	830	13	2600	2725	224	2115	11742	(45.6)	- 110	- 1339	- 1401	- 1370
241	(40.9)	49	(44.6)	1420	(62.6)	2156	(62.5)	164	(25.7)	1775	(56.8)	16737	(55.8)	30	280	106	1066	6	2962	3087	250	2360	13312	(44.4)	- 117	- 1420	- 1648	- 1534
542	(57.3)	70	(44.4)	1483	(79.5)	1599	(66.4)	366	(48.5)	1718	(64.6)	16400	(63.3)	31	534	138	1196	41	2750	2885	224	2114	13091	(50.5)	+ 8	- 804	- 757	- 781
562	(59.5)	71	(44.9)	1457	(78.3)	1628	(67.7)	414	(54.9)	1735	(65.4)	16561	(64.0)	32	576	132	1301	56	2757	2886	217	2049	13211	(51.1)	- 15	- 367	- 661	- 514
255	(45.1)	61	(48.3)	1432	(72.9)	1842	(67.0)	224	(35.7)	1671	(62.9)	15754	(61.7)	33	262	100	887	23	2533	2714	237	2243	12623	(49.4)	+ 0	+ 10	- 242	- 116
234	(43.3)	58	(47.8)	1349	(72.0)	1738	(66.3)	198	(32.6)	1569	(61.9)	14803	(60.7)	34	225	96	834	23	2356	2554	222	2096	11874	(48.7)	+ 9	- 38	- 127	- 82
226	(42.8)	41	(41.7)	1306	(64.0)	2022	(64.1)	104	(19.8)	1662	(58.4)	15610	(57.3)	35	242	96	942	8	2718	2825	234	2209	12458	(45.7)	- 16	- 861	- 1258	- 1060
242	(46.2)	44	(45.2)	1310	(64.6)	2026	(64.6)	135	(27.5)	1676	(59.3)	15792	(58.3)	36	242	96	950	8	2532	2711	230	2178	12663	(46.7)	+ 7	+ 88	- 198	- 55