

Table 4.9. (cont.)

BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal
34	600	86	1204	138	1716	190	2181
35	613	87	1214	139	1726	191	2190
36	626	88	1225	140	1735	192	2199
37	639	89	1235	141	1744	193	2207
38	652	90	1246	142	1753	194	2216
39	665	91	1256	143	1763	195	2224
40	678	92	1266	144	1772	196	2233
41	691	93	1277	145	1781	197	2241
42	703	94	1287	146	1790	198	2250
43	716	95	1297	147	1800	199	2258
44	728	96	1307	148	1809	200	2267
45	741	97	1318	149	1818	205	2309
46	753	98	1328	150	1827	210	2351
47	765	99	1338	151	1836	215	2393
48	777	100	1348	152	1845	220	2435
49	789	101	1358	153	1854	225	2476
50	801	102	1368	154	1863	230	2518
51	813	103	1378	155	1873	240	2599
52	825	104	1388	156	1882	250	2680

BW, body weight.

^aDER = 1.1 × RER (resting energy requirement).

formula $DER = 1.8 \times RER$. The daily energy requirement for the last weeks of gestation is calculated by the formula $DER = 3 \times RER$. Daily energy requirements for early and late gestation in dogs are found in Tables 4.10 and 4.11, respectively.

■ Lactation

Milk production places the largest nutritional demands on the dam. She must metabolize very large amounts of nutrients in order to produce sufficient milk to support the growth of her puppies. Dams with a large litter may require four times more calories during lactation than they needed for maintenance. Peak milk production occurs when the puppies are 4–5 weeks of age, right before they are weaned. The daily energy requirement for lactation for dams nursing up to four

Table 4.10. Daily energy requirement (DER) for dogs in the first 6 weeks of gestation.^a

BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal
1	70	53	1370	105	2288	157	3094
2	117	54	1389	106	2304	158	3108
3	159	55	1409	107	2321	159	3123
4	197	56	1428	108	2337	160	3138
5	233	57	1447	109	2353	161	3153
6	267	58	1466	110	2369	162	3167
7	300	59	1485	111	2385	163	3182
8	332	60	1504	112	2401	164	3197
9	362	61	1522	113	2417	165	3211
10	392	62	1541	114	2434	166	3226
11	421	63	1560	115	2449	167	3240
12	450	64	1578	116	2465	168	3255
13	478	65	1597	117	2481	169	3269
14	505	66	1615	118	2497	170	3284
15	532	67	1633	119	2513	171	3298
16	558	68	1652	120	2529	172	3313
17	584	69	1670	121	2545	173	3327
18	610	70	1688	122	2560	174	3342
19	635	71	1706	123	2576	175	3356
20	660	72	1724	124	2592	176	3370
21	684	73	1742	125	2608	177	3385
22	709	74	1760	126	2623	178	3399
23	733	75	1778	127	2639	179	3413
24	756	76	1795	128	2654	180	3428
25	780	77	1813	129	2670	181	3442
26	803	78	1831	130	2685	182	3456
27	826	79	1848	131	2701	183	3470
28	849	80	1866	132	2716	184	3485
29	872	81	1883	133	2732	185	3499
30	894	82	1901	134	2747	186	3513
31	916	83	1918	135	2763	187	3527
32	938	84	1935	136	2778	188	3541
33	960	85	1953	137	2793	189	3555

Table 4.10. (cont.)

BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal
34	982	86	1970	138	2808	190	3570
35	1004	87	1987	139	2824	191	3584
36	1025	88	2004	140	2839	192	3598
37	1046	89	2021	141	2854	193	3612
38	1068	90	2038	142	2869	194	3626
39	1089	91	2055	143	2884	195	3640
40	1109	92	2072	144	2900	196	3654
41	1130	93	2089	145	2915	197	3668
42	1151	94	2106	146	2930	198	3682
43	1171	95	2122	147	2945	199	3696
44	1192	96	2139	148	2960	200	3710
45	1212	97	2156	149	2975	205	3779
46	1232	98	2173	150	2990	210	3848
47	1252	99	2189	151	3005	215	3916
48	1272	100	2206	152	3020	220	3984
49	1292	101	2222	153	3034	225	4052
50	1312	102	2239	154	3049	230	4120
51	1331	103	2255	155	3064	240	4253
52	1351	104	2272	156	3079	250	4385

BW, body weight.

^aDER = 1.8 × RER (resting energy requirement).

Table 4.11. Daily energy requirement (DER) for dogs in the last 3 weeks of gestation.^a

BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal
1	116	53	2284	105	3813	157	5156
2	196	54	2316	106	38400	158	5181
3	265	55	2348	107	3868	159	5205
4	329	56	2380	108	3895	160	5230
5	389	57	2412	109	3922	161	5254
6	446	58	2443	110	3949	162	5279
7	500	59	2475	111	3976	163	5303
8	553	60	2506	112	4002	164	5328
9	604	61	2537	113	4029	165	5352

Table 4.11. (cont.)

BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal
10	654	62	2569	114	4056	166	5376
11	702	63	2600	115	4082	167	5401
12	750	64	2630	116	4109	168	5425
13	796	65	2661	117	4136	169	5449
14	841	66	2692	118	4162	170	5473
15	886	67	2722	119	4189	171	5497
16	930	68	2753	120	4215	172	5521
17	973	69	2783	121	4241	173	5545
18	1016	70	2813	122	4267	174	5569
19	1058	71	2843	123	4294	175	5593
20	1099	72	2873	124	4320	176	5617
21	11400	73	2903	125	4346	177	5641
22	1181	74	2933	126	4372	178	5665
23	1221	75	2963	127	4398	179	5689
24	1261	76	2992	128	4424	180	5713
25	1300	77	3022	129	4450	181	5737
26	1339	78	3051	130	4476	182	5760
27	1377	79	3081	131	4501	183	5784
28	1415	80	3110	132	4527	184	5808
29	1453	81	3139	133	4553	185	5832
30	1490	82	3168	134	4579	186	5855
31	1527	83	3197	135	4604	187	5879
32	1564	84	3226	136	4630	188	5902
33	1601	85	3254	137	4655	189	5926
34	1637	86	3283	138	4681	190	5949
35	1673	87	3312	139	4706	191	5973
36	1709	88	3340	140	4731	192	5996
37	1744	89	3369	141	4757	193	6020
38	1779	90	3397	142	4782	194	6043
39	1814	91	3425	143	4807	195	6066
40	1849	92	3453	144	4833	196	6090
41	1884	93	3481	145	4858	197	6113
42	1918	94	3510	146	4883	198	6136
43	1952	95	3537	147	4908	199	6159

Table 4.11. (cont.)

BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal	BW (lb)	Daily kcal
44	1986	96	3565	148	4933	200	6183
45	2020	97	3593	149	4958	205	6298
46	2053	98	3621	150	4983	210	6413
47	2087	99	3649	151	5008	215	6527
48	2120	100	3676	152	5033	220	6641
49	2153	101	3704	153	5057	225	6754
50	2186	102	3731	154	5082	230	6866
51	2219	103	3759	155	5107	240	7089
52	2251	104	3786	156	5132	250	7309

BW, body weight.

^aDER = $3 \times$ RER (resting energy requirement).

puppies is calculated by the formula DER = $4 \times$ RER. The daily energy requirement for lactation for dams nursing more than four puppies is calculated by the formula DER = $6 \times$ RER. If dams have very large litters, the daily energy requirement may be as high as eight times RER. Daily energy requirements for dogs during lactation are found in Tables 4.12 and 4.13.

Daily Energy Requirements for Cats

■ Adult

The daily energy requirement for adult cats is based on the resting energy requirement multiplied by a factor that takes into account whether the cat is intact, neutered, or breeding. Neutering decreases the activity level and thus decreases the daily energy requirement. The daily energy requirements for intact adult cats can be found in Table 4.14. For intact adult cats, the daily energy requirement is calculated by the formula DER = $1.4 \times$ RER. The daily energy requirements for neutered adult cats can be found in Table 4.15. For neutered adult cats, the daily energy requirement is calculated by the formula DER = $1.2 \times$ RER. Actively breeding male and female cats have a slightly higher daily energy requirement, and the daily energy requirement is calculated by the formula DER = $1.6 \times$ RER. The daily energy requirement for breeding females and males can be found in Table 4.16.