

# Estimated Energy Requirements

## Resting Energy Requirements

$$\text{RER (kcal/day)} = 70 \times \text{wt}_{\text{kg}}^{0.75}$$

lbs	kg	RER (kcal/day)
1	0.5	39
2	0.9	65
3	1.4	88
4	1.8	110
5	2.3	130
6	2.7	149
7	3.2	167
8	3.6	184
9	4.1	201
10	4.5	218
11	5.0	234
12	5.5	250
13	5.9	265
14	6.4	280
15	6.8	295
16	7.3	310
17	7.7	324
18	8.2	339
19	8.6	353
20	9.1	366
25	11.4	433
30	13.6	497
35	15.9	558
40	18.2	616
45	20.5	673
50	22.7	729
55	25.0	783
60	27.3	835
65	29.5	887
70	31.8	938
75	34.1	988
80	36.4	1037
85	38.6	1085
90	40.9	1132
95	43.2	1179
100	45.5	1225
105	47.7	1271
110	50.0	1316
115	52.3	1361
120	54.5	1405
125	56.8	1449
130	59.1	1492
135	61.4	1535
140	63.6	1577
145	65.9	1619
150	68.2	1661
155	70.5	1702
160	72.7	1743
165	75.0	1784
170	77.3	1824
175	79.5	1864
180	81.8	1904
185	84.1	1944
190	86.4	1983
195	88.6	2022
200	90.9	2061

### Feline

#### Growth DER (kcal/day)

Growing kittens =  $2.5 \times \text{RER}$

#### Maintenance DER (kcal/day)

Normal, neutered adult =  $1.2 \times \text{RER}$

Intact adult =  $1.4 \times \text{RER}$

Obese prone =  $1.0 \times \text{RER}$

Weight loss =  $0.8 \times \text{RER}$

### Canine

#### Growth DER (kcal/day)

Up to four months =  $3 \times \text{RER}$

Four months and older =  $2 \times \text{RER}$

#### Maintenance DER (kcal/day)

Average, neutered adult =  $1.6 \times \text{RER}$

Intact adult =  $1.8 \times \text{RER}$

Obese prone =  $1.4 \times \text{RER}$

Weight loss =  $1.0 \times \text{RER}$

#### Work DER (kcal/day)

Light work =  $2 \times \text{RER}$

Moderate work =  $3 \times \text{RER}$

Heavy work =  $4-8 \times \text{RER}$

**RER** - Resting Energy Requirement

represents the energy requirement for a normal animal at rest in a thermoneutral environment, and is based on body weight.

**DER** - Daily Energy Requirement

represents the average daily energy expenditure of an animal, dependent on lifestyle and activity (work, gestation, lactation and growth).

