



Calculation of Energy Requirement Worksheet

Use the following sample worksheet to step through the calculation process.

Name: _____ **Species/Breed:** _____
Age: _____ **BCS (9-point scale):** ____ / 9
Weight: _____ **MCS:** normal mild wasting moderate wasting severe wasting

STEP 1: Identify Patient's Body Condition Score (BCS)

Use the table below to select and record the **% lean mass** most applicable to this patient: _____

BCS	% BODY FAT	% LEAN MASS
1/9	0	100
2/9	5	95
3/9	10	90
4/9	15	85
5/9	20	80
6/9	25	75
7/9	30	70
8/9	35	65
9/9	40	60

STEP 2: Calculate Patient's Ideal Weight

Ideal weight (kg) = (Current body weight) x (% lean mass) / 0.8

_____ kg = _____ kg x _____ % / 0.8

STEP 3: Calculate Patient's Resting Energy Requirement (RER)

RER (kcal/day) = 70 x (ideal weight)^{0.75}

_____ kcal/day = 70 x (_____ kg)^{0.75}

STEP 4: Identify Daily Energy Requirement Key Nutritional Factor

Use the tables below to select and record the **factor** most applicable to this patient: _____

DOGS

FOR WEIGHT GAIN		FOR GROWTH		FOR LACTATION		FOR OTHER	
Weight gain	Based on current energy intake	< 4 months	3.0	1 puppy	3.0	Intact	1.8
Light work	2.0	> 4 months	2.0	2 puppies	3.5	Neutered	1.6
Moderate work	3.0			3-4 puppies	4.0	Inactive / obese prone	1.4
Heavy work	4.0-8.0			5-6 puppies	5.0	Weight loss	1.0
Gestation	1.8 (first 42 days); 3.0 (last 21 days)			7-8 puppies	5.5	Critical care	1.0
				9+ puppies	6.0		

CATS

FOR WEIGHT GAIN		FOR LACTATION		FOR OTHER	
Critical care	1.0	Week 1-2	RER + 30% per kitten	Intact	1.4
Weight gain	Based on current energy intake	Week 3	RER + 45% per kitten	Neutered	1.2
Gestation	1.6 (gradual change to 2.0 at parturition)	Week 4	RER + 55% per kitten	Active adult	1.6
Growth	2.5	Week 5	RER + 65% per kitten	Inactive / obese prone	1.0
		Week 6	RER + 90% per kitten	Weight loss	0.8

STEP 5: Calculate Patient’s Daily Energy Requirement (DER)

DER (kcal/day) = DER Factor x RER

_____ kcal/day = _____ x _____ kcal/day

STEP 6: Determine Caloric Density of Recommended Diet

Diet: _____

kcal/cup or kcal/can = _____

STEP 7: Calculate Patient's Daily Energy Requirement (DER)

Amount to Feed (cup or can) = DER / Caloric Density (kcal/cup or kcal/can)

_____ (cup) = _____ kcal/day / _____ (kcal/cup)

OR

_____ (can) = _____ kcal/day / _____ (kcal/can)

STEP 8: Subtract for Treats, if Necessary (Optional)

Up to 10% of calories can consist of unbalanced foods (e.g., treats).

Calories to come from Recommended Diet:

Diet (kcal/day) = 0.9 x DER

_____ kcal/day = 0.9 x _____ kcal/day

Repeat step six to determine amount to feed

Calories to Come from Treats:

Treats (kcal/day) = 0.1 x DER

_____ kcal/day = 0.1 x _____ kcal/day