

## DETERMINING ENERGY REQUIREMENTS: CALORIE CALCULATOR

*Developed by J. Greenwood, RD. Update 7/2009*

**Step 1:** See Table 1; select pt age and gender.

**Step 2:** Go to Table 2; identify stress level.

**Step 3:** Return to Table 1; read across to corresponding energy requirement and goal rate.

**NOTE:** Table 1 based on wt of 60 – 65 kg (females)/ 70 – 75 kg (males). Refer to Table 3 to modify energy (kcal) for pts who do not fall within this wt range.

**Table 1**

AGE	SEX	STRESS LEVEL	ENERGY (Kcal)	GOAL RATE (ml/hr) Isosource 1.2 kcal/ml	GOAL RATE (ml/hr) Resource: 2 kcal/ml
18 - 25	M	Mild	2150	75	45
		Mod	2300	80	50
		High	2650	90	55
	F	Mild	1700	60	35
		Mod	1850	65	40
		High	2150	75	45
26 - 35	M	Mild	2050	70	45
		Mod	2200	75	45
		High	2600	90	55
	F	Mild	1650	60	35
		Mod	1800	65	40
		High	2100	70	45
36 - 50	M	Mild	1950	70	40
		Mod	2100	75	45
		High	2400	85	50
	F	Mild	1600	55	35
		Mod	1700	60	35
		High	2000	70	45
51 - 70	M	Mild	1800	65	40
		Mod	1950	70	45
		High	2250	80	50
	F	Mild	1450	50	30
		Mod	1550	55	35
		High	1850	65	40
71 - 90	M	Mild	1650	60	35
		Mod	1800	65	40
		High	2050	70	45
	F	Mild	1400	50	30
		Mod	1500	50	35
		High	1750	60	40

**Table 2**

STRESS LEVEL	EXAMPLES - CLINICAL CONDITION
MILD	<10% burn; mild infection; minor surgery
MOD	10 – 20% burn; significant surgery; moderate pancreatitis
HIGH	20% - 40 % burn; severe infection; major surgery; multiple trauma; severe pancreatitis; severe CHI
SEVERE	> 40% burn injury (requires individual assessment; use high stress level in short term)

**Table 3**

BODY MASS	WEIGHT (Kg)	ADJUST ENERGY GOAL	ADJUST GOAL FEED RATE
VERY SMALL	F <40 M <55	- 250 kcal	↓ Isosource 10 ml/hr ↓ Resource 5 ml/hr
SMALL	F 40 - 50 M 55 - 65	- 125 kcal	↓ Isosource 5 ml/hr Resource 2 (same)
LARGE	F 70 - 80 M 90 - 100	+ 125 kcal	↑ Isosource 5 ml/hr Resource 2 (same)
VERY LARGE	F >80 M >100	+ 250 kcal	↑ Isosource 10 ml/hr ↑ Resource 5 ml/hr

Obese patients: use corrected wt.  
(ABW – IBW) X 0.25 + IBW

### ENTERAL PRODUCTS FORMULARY

FORMULA	ISOSOURCE	PROMOTE	RESOURCE 2	NOVASOUCE RENAL	PEPTAMEN
Kcal/ml	1.2	1.0	2.0	2.0	1.0
Protein content Gm/1000 Kcal	44	63	44.5	37	40
Fat content Gm/1000 kcal	35	26	43	50	39
CHO content Gm/1000 kcal	126	130	107	100	128
H <sub>2</sub> O content ml/1000 kcal	670	830	475	500	850
K content mEq/1000 kcal	38	46	20	11	39
Modification		↑↑ PRO	↓ H <sub>2</sub> O	↓ PRO/↓ K <sup>+</sup>	Predigested
Indication	Feed of choice	Large burn	Fluid restriction	CRF/No dialysis	Malabsorption