

e-table 3

Estimation of basal energy expenditure and total energy requirements ⁹

Estimated energy requirements (calories/day)* = basal energy expenditure + activity factor + stress factor + weight gain

* Calories x 4.2 = kJ

Harris-Benedict Equations → Basal energy expenditure

Males (Calories/24 hr)* = 13.8(W) + 5(H) – 6.8(A) + 66.5

Females (Calories/24 hr)* = 9.6(W) + 1.8(H) – 4.7(A) + 65.5

A = age (years)

W = weight (kg)

H = height (m)

Activity factors	% calculated basal energy expenditure	Stress factors	
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Bedbound, immobile	+10%	Surgery, single fracture	+10%
Bedbound, sitting	+15–20%	Major surgery, trauma	+20%
Mobile on ward	+25%	Infection +1–2° C	+10–30%
		Multiple fractures	
		Severe sepsis, multiple trauma	+20–50%
		Burns 25–90%	+20–65%

Weight gain + 500–1000 Calories/day → Weight gain 0.5–1.0 kg/week