

Calculate Calories Burned

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Total Daily Energy Expenditure (TDEE)

The total daily energy expenditure (DTEE) is an important calculation in the determination of:

- The overall dietary and exercise practices of any person.
- The amount of energy needed by anyone to meet the daily physical demands will have two components:
 - The amount of energy needed to maintain the body's needs at rest, (BMR),
 - The needs generated by the daily activity levels, which include employment, sport, and any other activities.



Harris-Benedict equation

- The **Harris-Benedict equation** (also called the **Harris-Benedict principle**) is a general method used to estimate the daily calorie requirements of an individual using their basal metabolic rate or BMR.
- The estimated value is then multiplied by a number that corresponds to the person's activity level.
- The resulting number is the recommended daily calorie intake to *maintain* your current weight.

Harris-Benedict equation

- The equation does not take into account calories burned by existing large amounts of muscle mass, nor does it account for the additional calories provided by excess body fat—so the equation is more effective for individuals at an ideal body weight or close to it



- Individuals who have excess body fat should underestimate the results, and individuals who have excess muscle mass should over estimate them.

Harris Benedict Equation

- The **Harris Benedict Equation** uses **BMR** and then applies an activity factor to determine **Total Daily Energy Expenditure** (calories).
- The only factor omitted by the Harris Benedict Equation is lean body mass.
- Leaner bodies need more calories than less leaner ones.

Harris Benedict Equation

- The Harris Benedict equation use the factors of

1) Height



2) Weight



3) Age



4) Sex



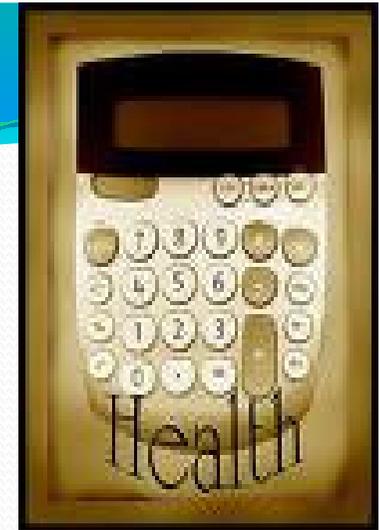
To determine Basal Metabolic Rate (BMR)



Harris-Benedict equation

- The Harris Benedict equation may be used to assist weight loss—by reducing your calorie intake to a number below the outcome of the equation

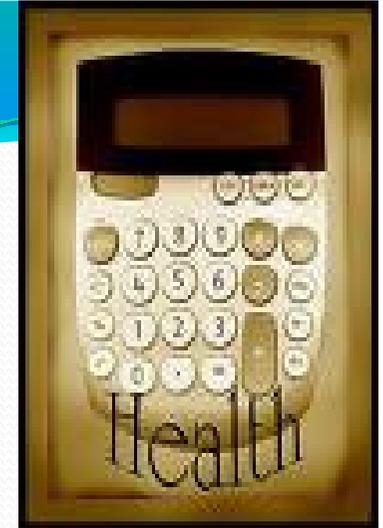
Determine Total Daily Energy Expenditure (TDEE)



STEP 1-Calculating the BMR

BMR Calculation for men	$\text{BMR} = 66 + (13.7 \times \text{weight in kg}) + (5 \times \text{height in cm}) - (6.8 \times \text{age in years})$
BMR Calculation for men	$\text{BMR} = 66 + (6.23 \times \text{weight in pounds}) + (12.7 \times \text{height in inches}) - (6.8 \times \text{age in years})$
BMR Calculation for women	$\text{BMR} = 655 + (9.6 \times \text{weight in kg}) + (1.8 \times \text{height in cm}) - (4.7 \times \text{age in years})$
BMR Calculation for women	$\text{BMR} = 655 + (4.35 \times \text{weight in pounds}) + (4.7 \times \text{height in inches}) - (4.7 \times \text{age in years})$

Determine Total Daily Energy Expenditure (TDEE)



STEP 2- Applying the Harris-Benedict Principle

If you get little to no exercise	Daily calories needed= BMR x 1.2
If you exercise lightly(1-3 days per week)	Daily calories needed= BMR x 1.375
If you exercise moderately (3-5 days per week)	Daily calories needed= BMR x 1.55
If you exercise heavily (6-7 days per week)	Daily calories needed= BMR x 1.725
If you exercise very heavily (i.e. 2x per day, extra heavy workouts)	Daily calories needed= BMR x 1.9