# Metabolic Rate Calculations

## Harris - Benedict

| | Imperial |
|---|---|
| M | BMR = 6.23 x Wt (lbs) + 12.7 x Ht (in) - 6.76 x Age (yrs) + 66 |
| w | BMR = 4.35 x Wt (lbs) + 4.7 x Ht (in) - 4.7 x Age (yrs) + 655 |

| | Metric |
|---|---|
| M | BMR = 13.75 x Wt (kg) + 5 x Ht (cm) - 6.76 x Age (yrs) + 66 |
| w | BMR = 9.56 x Wt (kg) + 1.85 x Ht (cm) - 4.68 x Age (yrs) + 655 |

## Harris – Benedict Exercise Principle

| | |
|---|---|
| Little to no exercise | Daily calories needed= BMR x 1.2 |
| Light exercise (1-3 days per week) | Daily calories needed= BMR x 1.375 |
| Moderate exercise (3-5 days per week) | Daily calories needed= BMR x 1.55 |
| Heavy exercise (6-7 days per week) | Daily calories needed= BMR x 1.725 |
| Very heavy exercise (twice per day, extra heavy workouts) | Daily calories needed= BMR x 1.9 |

## Mifflin – St. Joer

| | Metric |
|---|---|
| M | REE = 10 x Wt (kg) + 6.25 x Ht (cm) - 5 x Age (yrs) + 5 |
| w | REE = 10 x Wt (kg) + 6.25 x Ht (cm) - 5 x Age (yrs) -161 |