

Name: .....

## BASAL METABOLISM RATE (BMR)

The Harris–Benedict equations revised by [Mifflin](#) and St Jeor in 1990.<sup>[4]</sup>

Men	$BMR = (10 \times \text{weight in kg}) + (6,25 \times \text{height in cm}) - (5 \times \text{age in years}) + 5$
Women	$BMR = (10 \times \text{weight in kg}) + (6,25 \times \text{height in cm}) - (5 \times \text{age in years}) - 161$

Your BMR is ..... Kcal/day

## TOTAL ENERGY EXPENDITURE (TEE)

Little to no [exercise](#)

Daily kilocalories needed = BMR x 1.2

Light exercise (1–3 days per week)

Daily kilocalories needed = BMR x 1.375

Moderate exercise (3–5 days per week)

Daily kilocalories needed = BMR x 1.55

Heavy exercise (6–7 days per week)

Daily kilocalories needed = BMR x 1.725

Very heavy exercise (twice per day, extra heavy workouts) Daily kilocalories needed = BMR x 1.9

Your estimated TEE is ..... Kcal/day

## Conversion

1 MET = 3.5 ml/kg/min

1 MET = 1 kcal/kg/hr

METS to Kcal/min = multiply METS x 3.5 x body weight in kg then divide by 200

MET for physical activities are in 2011 compendium

<https://sites.google.com/site/compendiumofphysicalactivities/compendia/2011%20Compendium%20of%20Physical%20Activities.pdf?attredirects=0&d=1>

## Homework:

- 1) TEE during 1 week day (kcal)
- 2) TEE during 1 weekend day (kcal)
- 3) Energy income (nutrition) during 1 week day (kcal)
- 4) Energy income (nutrition) during 1 weekend day (kcal)
- 5) Compare the data

Check <http://nutritiondata.self.com/> for nutrition facts