BMR CALCULATOR

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You use energy no matter what you're doing, even when sleeping. The **BMR Calculator** will calculate your Basal Metabolic Rate (BMR), which is the number of calories you would burn if you did nothing and just stayed in bed all day. **Why is it important to know our basal metabolic rate?** We all have different body types and body mass composition, therefore, we each expend different amounts of energy to sustain our basic functions. Once you know your basal metabolic rate, it's easier to calculate how many calories you need to eat in order to achieve and maintain a healthy weight. In addition we will calculate your target heart rate to make sure you're in the right zone during your required cardio days.

Have you noticed that every year it becomes harder to eat whatever you want and stay slim? Well, this is related to a decrease in your BMR as you age. Likewise, depriving yourself of food in hopes of losing weight will also decrease your BMR, which is the complete opposite of your intensions. How to fix this? Start a regular routine of cardiovascular exercises which can increase your BMR, improving your overall health and fitness by increasing your body's ability to burn energy as it gradually slows down.

STEP 1. DETERMINE YOUR WEIGHT IN KILOGRAMS

Simple: If you know your weight in pounds, you can multiply it by .454 to find your weight in kilograms.

Example: Male, 200lbs
200 X .454 = 90.8 Kg
Example: Female, 150
150 X .454 = 68.1 Kg

STEP 2. CALCULATE BMR EQUATION. BASED ON YOUR GENDER, CHOOSE WHICH EQUATION TO USE.

This simple equation takes into account your height, weight, age, and gender. BMR increases with height and weight but decreases with age.

Male: 1.0 x body weight (kg) x24
Example 1.0 x 90.8 kg x 24 = 2, 179 Calories
Female: 0.9 x bodyweight (kg) x 24
Example 0.9 x 68.1 kg x 24 = 1470.96

STEP 3. DETERMINE LEAN FACTOR MULTIPLIER. BASED ON YOUR GENDER AND BODY FAT PERCENTAGE, DETERMINE YOUR LEAN FACTOR MULTIPLIER-USING TABLE

Male: Lean factor Percent body fat% Multiplier

1	10-14	1.0
2	15-20	.95
3	21-28	.90
4	28 – over	.85

Female: Lean factor Percent body fat% Multiplier

1	14 -18	1.0
2	19 – 28	.95
3	29 - 38	.90
4	39 - Over	.85

STEP 4. CALCULATE BMR BASED ON THE NUMBER CHOSEN FROM STEP 3

Example: Male 200 lbs, 15% body fat: lean factor 2; multiplier: .95
Use number from step 2 x lean factor multiplier: (2179 x 0.95=2070=BMR)
BMR = 2,070

STEP 5: DETERMINE DAILY ACTIVITY MONITOR

Your Average Daily activity levels: **1.30= very light:** sitting, studying, talking, little walking or other activities throughout the day
1.55= Light: typing, teaching, lab/shop work, some walking through day
1.65= Moderate: walking, jogging, activities such as cycling, tennis, dancing, skiing, or weight training 1-2 hours a day
1.80= Heavy: Heavy manual labor, w/ activities such as football, soccer or bodybuilding 2-4 hours a day
2.00= Very Heavy: Combination of heavy and moderate activity 8 or more hours a day, plus 2-4 hours of intense training per day.

STEP 6: CALCULATE DAILY CALORIC EXPENDITURE

Example:
Male: 200 lbs, 15% body fat, ski instructor, tennis player, weight lifter, jogger
Moderate: multiplier: 1.65
BMR (2070)x daily activity multiplier (1.65)=3420
Total daily caloric expenditure=3417 cal.

TARGET HEART RATE

Your target heart rate zone is simply a scale of how hard your heart is working when you exercise measured in beats per minute. It is your "goal" for measuring how fast your heart is beating during exercise.

Simple math is required to determine your target heart rate zone. You can purchase a heart rate monitor to automatically measure your heart rate for you while you exercise or you can use the cardio machine hand sensors to measure your heart rate while you are exercising on the machine

Note: The cardio machine hand sensors can be inaccurate, so for that reason a heart rate monitor is recommended.
If you don't have a heart rate monitor, you can always measure your heart rate the old fashioned way by taking your pulse and using a second hand stop watch, and counting for a minute when you are at your hardest point of exercise. Use your Heart rate zone as a goal to be reached during your cardio activity every week on your "Cardio" Day.

(220 - (YOUR age)) x 0.7 = THR (Target Heart Rate)
Example: Male 36 yrs old
220 – (26) x 0.7 = 136 BPM