



LOSE WEIGHT? LET'S MANAGE IT INSTEAD.

Calories in – Calories out = Weight Management.

An elite athlete needs to pay as much attention to their caloric intake as the exercisers trying to lose weight. While Weight Management and Nutrition can be very complex subjects, if you understand the whole concept of “**Calories In – Calories Out = Weight Management**”, you’ve jumped the first hurdle.

I am going to define and describe 2 terms to help understand this concept.

Resting Metabolic Rate (RMR) – The amount of calories your body needs in a 24-hour period in a complete resting state with no activity. Your body needs a certain amount of calories to maintain basic body functions such as proper organ function and lean tissue regeneration. RMR can represent 60% to 70% of your Total Daily Caloric needs. RMR is also referred to as Basal Metabolic Rate.

Total Daily Calories (TDC) – Not counting exercising, the amount of calories your body needs in a 24 hour period to maintain your current weight at your regular activity level (type of job, type of home life). TDC is also referred to as Total Energy Expenditure.

Let’s compare 2 runners with different needs;

If Runner X, who is not trying to lose weight, has a TDC need of 2,000 and a RMR of 1,500 calories, it’s important for him to manage calories this way.

- A 5 Mile run burns 650 calories.
- It is important that he takes in 2,650 calories that day in order to maintain his weight (by maintaining that rate of 2,000 TDC).
- If he were to lose those 650 calories and only take in 2,000, his TDC are at 1,450, which is below his RMR. If this is done on a consistent basis, Runner X is not only going to lose weight, he is going to strip lean mass and go into workouts with diminished energy and diminished muscle recovery.
- On days off, Runner X should ingest 2,000 calories.

Now let’s look at Runner Y, who is trying to lose weight. In this case, a Registered Dietitian (RD) recommended that Runner Y should lose 1 pound per week, which represents a 3,500 calorie deficit per week and 500 calorie deficit per day (some individuals should not lose 1 lb. per week based on measured differences in RMR and TDC). He has a TDC need of 2,100 and a RMR of 1,500 calories. It’s important for him to manage calories this way;

- A 4 Mile run burns approximately 500 calories.
- It is important that he takes in 2,100 calories that day in order to maintain that caloric deficit of 500 per day.
- If he were to only take in 1,600 calories as well as burn the 500 calories, his TDC is at 1,100.
- That is far below his RMR and far below recommended minimum calorie standards according to ACSM (American College of Sports Medicine).
- Sure, the weight is going to coming off rapidly but Runner Y is also going to do the following negative things;
 - Strip lean muscle along with fat.
 - Not take in enough micronutrients (vitamins and minerals).
 - Slow down his metabolism.
- On days off, Runner Y should ingest 1,600 calories to maintain enough calories to stay above his RMR but also keep to a 500 daily caloric deficit.

How can I find out my RMR and TDC? There are several general recommendations based on age, height, weight, and gender. One example is;

Men: $RMR = 66 + 13.8(\text{weight in Kg}) + 5(\text{height in cm}) - 6.8(\text{age})$

Women: $RMR = 655 + 9.6(\text{weight in Kg}) + 1.8(\text{height in cm}) - 4.7(\text{age})$

Activity Factors to measure TDC:

- 1.2 Bed Rest
- 1.3 Sedentary
- 1.4 Active
- 1.5 Very Active

Using formulas is a good start but cannot target RMR specifically to each individual. RMR can be measured and TDC can be estimated with equipment that analyzes oxygen and carbon dioxide exchange. Obviously, the more specific the information, the more it will help your weight management. There are several health club facilities, dietitian practices, and physician offices in the Central Ohio area that can measure RMR and TDC very accurately.

Weight management and nutrition can be very complex subjects. I recommend that you speak with a Registered Dietitian if any of this information is confusing or if you would like some help in meal planning, micronutrient and macronutrient needs, etc. You can find a Registered Dietitian in many ways (the Phone Book, personal referrals, the Ohio Dietetic Association website). Many fitness centers have a RD on staff. Refer to the experts if you are struggling with your weight and you know that eating is a big part of the problem.

In conclusion, your weight can be lost and maintained by understanding how to correctly manage your caloric needs. Understanding RMR and TDC and how that fits into daily caloric intake is a big first step to weight management. Rely on a RD to help with the more complex side of weight management and nutrition.

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(Good Bodies Fitness and Wellness, Inc. is a Personal Training Studio in Dublin, OH specializing in personal training, Muscle Activation Techniques™, Metabolic and Body Composition assessments, and nutrition counseling. Good Bodies has the Metabolic (dual gas analyzation) equipment described in the article and will perform RMR assessments for the general public. Good Bodies also has a RD on staff. Contact information is 614-889-2282 and www.goodbodiesfitness.com).