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Calculating TEE: Total Energy Expenditure

The number of calories you burn in a day is known as your total energy expenditure (TEE). Rates vary from person to person, so it's crucial that you take the time to learn yours. Once you know your TEE, you will be able to balance your caloric intake and expenditure in a totally efficient way as you work toward your weight loss goal.

Your TEE takes into account three factors, so be prepared to do three calculations to get your final number. First is your **BMR**, Basal Metabolic Rate.

Your BMR is the number of calories your body burns in a day when operating at absolute minimum capacity, ie. Sitting on the couch all day. Your BMR then, is the number of calories your body burns just to maintain your heartbeat, digestion, respiration, tissue repair and other organ functions.

BMR is influenced by a number of factors, including age, weight, height, gender, environmental temperature, and diet and exercise habits. Because of these varying factors, it's hard to pin down your BMR to the precise calorie, but we can get close. This is the formula to determine your BMR:

MALE: $66 + (6.3 \times \text{body weight in pounds}) + (12.9 \times \text{height in inches}) - (6.8 \times \text{age in years})$

BMR: $66 + (\quad) + (\quad) - (\quad) = \underline{\hspace{2cm}}$

FEMALES: $655 + (4.3 \times \text{weight in pounds}) + (4.7 \times \text{height in inches}) - (4.7 \times \text{age in years})$

BMR: $655 + (\quad) + (\quad) - (\quad) = \underline{\hspace{2cm}}$

Keep in mind, that BMR accounts for only 75% of your total daily caloric needs.

Calculating TEE: Daily Activity Level

The second thing you need to know is your physical activity level. Determine which one of these descriptions best fits your day-to-day routine, then give yourself the appropriate score.

a. Sedentary Physical Activity Level

Do you have a desk job or do some other kind of work that keeps you in your chair for most of the day? If the answer is yes, your score is 1.1.

b. Light Physical Activity Level

Are you on your feet and walking around for at least half the day? Stay-at-home moms, salespeople, and doctors fall into this category. If this is you, your score is 1.2.

c. Moderate Physical Activity Level

If you're on the move pretty much all day, with a few limited periods of being sedentary, this

is the level for you. People in this category include gardeners, carpenters, and mail carriers. If you're in this category, your score is 1.3.

d. High Physical Activity Level

Does your job require being constantly on the move, and does it entail significant amounts of manual labor? Construction workers, farm workers, and movers are among those who land in this category. If you're in this group, your score is 1.4.

TEE: Putting It All Together

Finally, we'll investigate exercise expenditure, the last piece of the total energy expenditure (TEE) formula, and put it into place to calculate your overall calorie needs and expenditures.

The third and final element you need to calculate your TEE is the number of calories you burn from exercise on an average day. The number of calories you burn during any exercise session depends on a few things, primarily your body weight.

Use [this chart](#) to help you determine the number of calories you burn from exercise on an average day according to your weight, the type of exercise you do, and its duration. Write the number down.

Now get the three numbers you've come up with. Simply multiply your BMR by your daily activity score, and then add your exercise expenditure. Whatever you get from this final calculation is your magic number.

LOSE WEIGHT

Exercise Expenditure Chart

Exercise Expenditure Chart											
WEIGHT (in pounds)	100	125	150	175	200	225	250	275	300	325	350
ACTIVITY	Calories Burned During One Hour										
Walking 4 mph	199	249	299	349	399	449	499	549	599	649	699
Jogging 5 mph	376	426	476	526	576	626	676	727	776	826	876
Swimming	199	249	299	349	399	449	499	549	599	649	699
Cycling 13 mph	560	610	660	710	760	810	860	910	960	1010	1060
Heavy Aerobic	444	494	544	594	644	694	744	794	844	894	944
Light Weights	172	222	272	322	372	422	472	522	572	622	672
Intense Weights	392	442	492	542	592	642	692	742	792	842	892

(BMR x Daily Activity Score) + Exercise Expenditure = Total Energy Expenditure

(_____ x _____) + _____ = _____