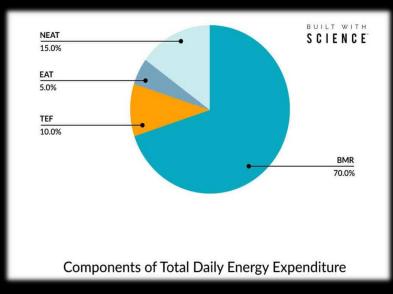
## **Total Daily Energy Expenditure (TDEE)**

Total daily energy expenditure, or TDEE, is the number of calories required to fuel our daily lives. In other words, TDEE is roughly the number of calories you need to eat to maintain your current bodyweight. There are four components of TDEE: Basal metabolic rate (BMR), thermic effect of feeding (TEF), exercise activity thermogenesis (EAT), and non-exercise activity thermogenesis (NEAT)1,2. The chart pictured here shows the percentage of calories we allocate to each component of TDEE. That percentage is a percentage of the calories you consume each day. About



70% of our calories each day are used to fuel our BMR. For example, if you consume 1,000 calories in a day, your body will use 700 of those calories for your BMR. TEF is the energy required to digest food we consume, which uses about 10% of daily calories¹. EAT is the energy required to fuel our exercise and activities at work where we consciously exert ourselves and requires about 5% of daily calories. This includes work done out on the job and generally any work that increases heart rate. NEAT is the energy required to fuel non-voluntary movements (fidgeting, breathing, etc.). NEAT requires about 15% of daily calories¹.².

TDEE is significantly impacted by daily activity, both related to our exercise and our jobs. This number depends on a wide range of factors like age, height, weight, and individual activity level. The following equations show you how to APPROXIMATE your BMR and find your ESTIMATED TDEE:

## **Calculating Your BMR to Find TDEE**

- MEN: BMR = (10 x weight in kg) + (6.25 x height in cm) (5 x age in years) + 5
- **WOMEN**: BMR = (10 x weight in kg) + (6.25 x height in cm) (5 x age in years) 161

Conversions: Body weight in kg = body weight in lbs/2.2; Height in cm = height in inches x = 2.54

Once you find your BMR, use these formulas below to find your approximate TDEE:

- Sedentary (little to no exercise) = BMR x 1.2
- Light Activity (light intensity exercise 1-3x/week) = **BMR x 1.4**
- Moderate Activity (moderate intensity exercise 3-5x/ week) = **BMR** x **1.6**
- Heavy Activity (heavy intensity exercise 3-5x/week with intense job) = BMR x 1.75
- Very Heavy Activity (heavy intensity exercise 4-6x/week with intense job) = BMR x 1.9

## References

1. Ndahimana, D., & Kim, E.-K. (2017). Measurement Methods for Physical Activity and Energy Expenditure: a Review. *Clinical Nutrition Research*, 6(2), 68–80. https://doi.org/10.7762/cnr.2017.6.2.68

2. Chung, N., Park, M.-Y., Kim, J., Park, H.-Y., Hwang, H., Lee, C.-H., Han, J.-S., So, J., Park, J., & Lim, K. (2018). Non-exercise activity thermogenesis (NEAT): a component of total daily energy expenditure. *Journal of Exercise Nutrition & Biochemistry*, 22(2), 23–30. https://doi.org/10.20463/jenb.2018.0013

