

Daily energy expenditure consists of three components: resting metabolic rate (RMR), thermic effect of food (TEF) and energy cost of physical activity.





Thermic Effect of Food Physical Activity Resting Metabolic Rate

## Resting Metabolic Rate (RMR)

- Energy expended to maintain the body during resting conditions
  - Proportional to lean body mass
  - Muscle is more metabolically active than fat

## Thermic Effect of Food (TEF)

The thermic effect of food (TEF) is the energy required to digest, absorb, transport and store food. It is different for each type of macronutrient. On average TEF represents ~10% of total energy expenditure.

- Fat 0-3%
- Carbohydrate 5-10%
- Protein 20-30%

## Physical Activity

- Daily activity
- Exercise
  - Aerobic exercise expends calories during exercise
  - In addition to calories burned during exercise, anaerobic exercise (interval and/or strength training) can increase your resting metabolism for 24-48 hours depending on muscles worked and intensity. Anaerobic exercise can also have an impact on your RMR.