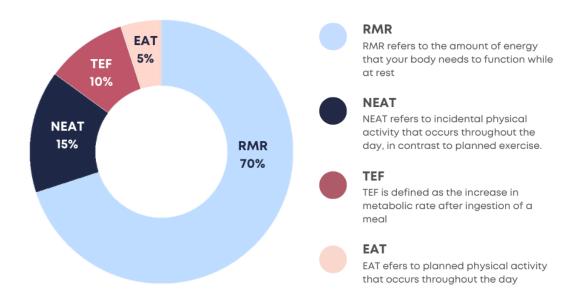
## UNDERSTANDING metabolism

#### **Total Daily Energy Expenditure**



### **METABOLISM VS WEIGHT**

Metabolism determines your energy needs, not your weight. Metabolic rate seems to be influenced by total body mass and organ size, although your metabolic rate is largely genetic and unchangeable. A "slow metabolism" is not typically the cause of weight gain.



### WEIGHT LOSS PARADOX

The body has powerful protective mechanisms to detect and avoid starvation. Extreme dieting and/or exercise can mimic starvation and lower our metabolic rate, making weight loss seem even more difficult.



#### **MUSCLE MASS**

Building and maintaining muscle mass is the most effective way to increase your metabolic rate (although the impact is modest and should not be overstated). More muscle mass means you will burn more calories both at rest and when active.



#### AGE

The impact of age on metabolism is unclear. Some research suggests that starting at age 20, there is 2–3% decrease in metabolic rate. Other research indicates metabolic rate stays fairly steady from age 20 to 60. Stay tuned!





Eating more frequently will speed up your metabolism.

Eating certain types of foods will speed up your metabolism.

# Eating breakfast will jump start your metabolism.

Eating late at night will slow down your metabolism.