

Resting Energy Expenditure Equation

**MALE**  $10 \times \text{wt (kg)} + 6.25 \times \text{ht (cm)} - 5 \times \text{age (y)} + 5$

**FEMALE**  $10 \times \text{wt (kg)} + 6.25 \times \text{ht (cm)} - 5 \times \text{age (y)} - 161$

Sample Calculations:

How to Apply the Mifflin St. Jeor Equation to Find Resting Energy Expenditure (REE)



Find the REE of a 50-year-old man who weighs 200 pounds and is 5'9" tall

$$\begin{array}{rcccccc}
 10 \times (200 \text{ lb}/2.2\text{kg}) & + & 6.25 \times (69 \text{ in} \times 2.54 \text{ cm}) & - & 5 \times 50 \text{ yr} & + & 5 \\
 \downarrow & & \downarrow & & \downarrow & & \\
 909 & + & 1095 & - & 250 & + & 5 \\
 & & & = & 1,759 & & \\
 & & & & \text{kcal} & & 
 \end{array}$$



Find the REE of a 50-year-old female who weighs 120 pounds and is 5'0" tall

$$\begin{array}{rcccccc}
 10 \times (120 \text{ lb}/2.2\text{kg}) & + & 6.25 \times (60 \text{ in} \times 2.54 \text{ cm}) & - & 5 \times 50 \text{ yr} & - & 161 \\
 \downarrow & & & & \downarrow & & \\
 545 & + & 952 & - & 250 & - & 161 \\
 & & & = & 1,086 & & \\
 & & & & \text{kcal} & & 
 \end{array}$$