Calculating BMR

**Homework**

Directions: Calculate the BMR (Basal Metabolic Rate) for the three adults. Use the *Factors in Calculating BMR* chart to answer the activity levels questions.

1. **Tom**
   - 220 lbs.
   - 6’ 1”
   - 25 years old
   - High activity level

2. **Mary**
   - 185 lbs.
   - 5’ 6”
   - 33 years old
   - Light activity level

She wants to lose weight. What should she do?

3. **John**
   - 120 lbs.
   - 5’ 8”
   - 14 years old
   - Moderate activity level

He wants to gain weight. What should he do?
Calculating BMR

Homework (KEY)

1. Calculate BMR for:
   Male
   220 lbs.
   6’ 1”
   25 years old
   High activity level

   Male
   \[ 66 + (6.23 \times 220 \text{ lbs.}) + (12.7 \times 73 \text{ inches}) - (6.8 \times 25 \text{ years}) = 2193.7 \text{ BMR} \times 1.725 \text{ activity level} \]
   = 3784.13 daily calorie needs

2. Calculate BMR for:
   Mary
   185 lbs.
   5’ 6”
   33 years old
   Light activity level

   Female
   \[ 655 + (4.35 \times 185 \text{ lbs.}) + (4.7 \times 66 \text{ inches}) - (4.7 \times \text{ years}) = 1614.85 \text{ BMR} \times 1.375 \text{ activity level} \]
   = 2220.42 daily calorie needs

She wants to lose weight. What should she do?
**Mary needs to consume fewer calories and/or increase her physical activity.**

3. Calculate BMR for:
   John
   120 lbs.
   5’ 8”
   14 years old
   Moderate activity level

   Male
   \[ 66 + (6.23 \times 120 \text{ lbs.}) + (12.7 \times 68 \text{ inches}) - (6.8 \times 14 \text{ years}) = 1582 \text{ BMR} \times 1.55 \text{ activity level} = 2452.10 \text{ daily calorie needs} \]

He wants to gain weight. What should he do?
**John needs to increase his intake of complex carbohydrates especially whole grains. He needs to continue exercising or the extra calories will turn to fat.**