



## Your Test Results

Variable	Unit	Test Results	Previous Results
Measured REE	Kcal/day	1642	3011
REE from MSJE <sup>1</sup>	Kcal/day	1331	1331
RQ <sup>2</sup>	None	0.85	0.86
Estimated TEE <sup>3</sup>	Kcal/day	2090	3834
VO <sub>2</sub>	mL/min	236	431
VCO <sub>2</sub>	mL/min	199	371
Exhalation Rate <sup>4</sup>	mL/min	5253	11269
Breath Frequency	/min	13	17
Tidal Volume <sup>5</sup>	mL	389	660

### Notes:

1. REE from MSJE: REE calculated using Mifflin-St. Jeor metabolic equation.
  2. RQ: Respiratory Quotient
  3. Estimated TEE: Estimated total Energy expenditure.
  4. Exhalation Rate: Volume rate of air exhaled during the test.
  5. Tidal Volume - Volume of every breath (normal range for a resting and afebrile adult is 7–9 mL/kg or 3.2 – 4.1 mL/lb.)\*
- \* James R Sills. The Comprehensive Respiratory Therapist Exam Review.

The REE tested is 1642 Kcal/day. Related to body weight it is 27.4 kcal /day/kg. In this interval the mean VO<sub>2</sub> value is 236 mL/min, the mean VCO<sub>2</sub> value is 199 mL/min and the mean RQ value is 0.85. Refer to the RQ table below for the primary source of fuel your body is using to generate energy.

## What is the Meaning of RQ?

The RQ is helpful in planning nutritional therapy. The physiologic RQ values are influenced by relative the contribution from fat, protein, and carbohydrate. RQ values for fat, protein, and carbohydrate are generally considered to be 0.7, 0.8, and 1.0, respectively. A RQ of >1.0 could suggest excessive carbohydrate calorie intake that can result in increased CO<sub>2</sub> production.

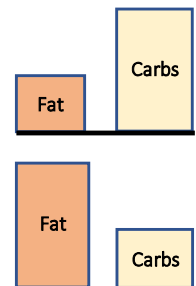
$$RQ = \text{CO}_2 \text{ produced} / \text{O}_2 \text{ consumed}$$

### RQ Table for Reference Only

Source of Energy	RQ Value
Carbohydrate	> 0.95
Protein	0.8
Mixed Diet	0.85
Fat	< 0.7

(Source: Dietician's Handbook)

- RQ > 0.95 indicates the body is using predominantly carbohydrate by 80% or more.
- RQ equals 0.85, indicating the body is using a mixture of carbs and fats to generate energy.
- RQ < 0.7 indicates the body is using predominantly fat by 80% or more.



## Metabolic adaptation

Know when you face metabolic adaptations by tracking your REE over time. To detect metabolic adaptations helps guide lifestyle changes that are conducive to sustainable healthy weight management. It is recommended that you set an appointment for retest REE after a month of being in your weight management plan or after losing 10% of your initial body weight.

**Your Nutrition Diet Plan**

Discuss your eating habits with your healthcare provider. It’s important to eat a variety of fruits, vegetables, grains, protein foods, dairy, and fortified soy alternatives. Choose options for meals, beverages, and snacks that have limited added sugars, saturated fat, and sodium. Utilize the link <https://www.myplate.gov/resources/tools/startsimple-myplate-app> to help you make changes as it simplifies healthy eating.

<b>CALORIE BUDGET:</b>	<b>FAT CALORIES:</b>
<b>FAT (G):</b>	<b>CHOLESTEROL (MG):</b>
<b>SAT.FAT (G):</b>	<b>SUGAR (G):</b>
<b>CARBOHYDRATE (G):</b>	<b>FIBER (G):</b>
<b>PROTEIN (G):</b>	<b>IRON (G):</b>
<b>SODIUM (MG):</b>	<b>VITAMIN C (MG):</b>
<b>VITAMIN A (MG):</b>	<b>CALCIUM (MG):</b>

Adjustment to Calorie Budget for Weight Gain:	
Adjustment to Calorie Budget for Weight Loss:	
Anticipated Weight Loss or Gain (lbs./week):	

**Notes From Healthcare Professional**

Notes: