Weight-Management Meal Planning (30 points) - Due

Mar 19, 2018 12:30 AM
NUTR 100 6980 Elements of Nutrition (2182)

Respond to the first part using complete sentences and paragraphs. Show all math. Responses to the second part can be provided as a list.

Note: Use complete sentences, correct spelling and grammar, and well-written and organized paragraphs. You are required to cite your course resources in these discussions to show how you have applied what you have read. Grades will reflect how well you have followed these guidelines. I am eager to see each individual's creativity in this discussion.

Part 1

- Start by calculating your BMI. *Show your math*. What is the classification? (Do not include commentary to debate the accuracy of the classification of this value.)

  Explain the acronym *BMI*. What does it stand for? What does it measure? What values are associated with it? Name one advantage to using BMI. Can you see any disadvantages to using BMI? If so, what are they? Name two other methods for assessing body fat or weight status. Provide at least one advantage and one disadvantage of each method.

- Next, calculate your EER (estimated energy requirement). Use the correct equation below (male vs. female)--these formulae were copied from the Week 6, Recommended Readings, "Estimated Energy Requirements"). *Show your math.*

EER for Women Ages 19 Years and Older

$$EER = 354 - (6.91 \times \text{age [y]}) + PA \times (9.36 \times \text{weight [kg]} + 726 \times \text{height [m]})$$

Where PA is the physical activity coefficient:

PA = 1.00 if PAL is estimated to be ≥ 1.0 < 1.4 (sedentary)
PA = 1.12 if PAL is estimated to be ≥ 1.4 < 1.6 (low active)
PA = 1.27 if PAL is estimated to be ≥ 1.6 < 1.9 (active)
PA = 1.45 if PAL is estimated to be ≥ 1.9 < 2.5 (very active)

EER for Men Ages 19 Years and Older

EER = 662 – (9.53 × age [y]) + PA × (15.91 × weight [kg] + 539.6 × height [m])

Where PA is the physical activity coefficient:

PA = 1.00 if PAL is estimated to be ≥ 1.0 < 1.4 (sedentary)
PA = 1.11 if PAL is estimated to be ≥ 1.4 < 1.6 (low active)
PA = 1.25 if PAL is estimated to be ≥ 1.6 < 1.9 (active)
PA = 1.48 if PAL is estimated to be ≥ 1.9 < 2.5 (very active)

- If your BMI falls into the classification of overweight or obese, the Mifflin St. Jeor equation is the best choice (assuming no other clinical conditions that alter needs are present). The St. Jeor has been determined to be the most accurate estimator of energy needs in the presence of overweight or obesity. **Regardless of your BMI**, calculate your needs using the Mifflin St. Jeor equation (shown below) for practice. Note that there is one equation for men and one for women.

- Compare the results from the St. Jeor and EER equations (BMR = **Basal Metabolic Rate**).

BMR (men) = 10 × *weight* (*kg*) + 6.25 × *height* (*cm*) - 5 × *age* (*years*) + 5
BMR (women) = 10 × *weight* (*kg*) + 6.25 × *height* (*cm*) - 5 × *age* (*years*) - 161

- How many calories must be reduced in your diet to have a one-pound weight loss per week? Other than diet restrictions, what else can be done to promote weight loss?

Part 2

Here is a sample one-day menu for Mr. Iwanna Loseweight. His doctor just told him that his BMI is 30.0 and he is at risk for developing some chronic diseases. The doctor has asked Mr. Iwanna Loseweight to meet with a registered dietitian to learn more about healthy eating and how to reduce his caloric intake. Mr. Iwanna Loseweight will meet with the dietitian next week, so in the meantime:

1. Provide him with five suggestions to promote weight loss.
2. Tell him which food you would have him omit and then what you would recommend to replace it. You may also change portion sizes. Highlight (yellow only, please) or bold the item you are changing and then write next to it what changes you have made.

You are being graded on five changes. If you wish to do more than five, you may, but remember that anything extra must also be correct for the directions provided.

Breakfast

8 oz. whole milk
8 oz. orange juice
2 fried eggs
2 slices toast with 1 TBSP butter

Snack

½ peanut butter and jelly sandwich: 1 slice white bread, 1 TBSP Skippy peanut butter, 1 TBSP grape jelly

Lunch

8 oz. cream of tomato soup
1 oz. potato chips
1 sandwich: 2 oz. turkey, 1 oz. salami, 2 slices white bread, 1 TBSP mayonnaise
8 oz. grape juice

Snack

6 oz. fruited yogurt (sweetened, whole milk)

Dinner

5 oz. dark-meat chicken, fried
1 medium baked potato with 1 TBSP butter, 1 TBSP sour cream, and 1 TBSP bacon, chopped
½ cup cooked broccoli with 1 TBSP butter
8 oz. cola
4 oz. whole milk

Snack

½ cup chocolate ice cream

Weight-Management Meal Planning (30 points)
Due March 19 at 12:30 AM