

Name:

No.

Grade:/15

Q1. Choose the best answer of the following: (0.5 mark each)**1. A female with a weight of 80 kg and Ht of 160 cm is considered to be:**

- a. Normal
- b. over weight
- c. obese I
- d. obese II

2. What is the fluid requirement for a 3 years old girl weighing 12 kg:

- a. 900 ml/d
- b. 1836 ml/d
- c. 1100 ml/d
- d. 2000 ml/d

Q2. Fill in the blanks with appropriate answer: (0.5 each)

1. Mohammad's IBW is65....., knowing that his Ht is 170 cm
2. Dietary Reference Intake include:
 - a. Estimated Average Requirement (EAR)
 - b. Adequate Intake (AI)
 - c. Tolerable Upper Intake Level (UL).
 - d. Recommended dietary allowance RDA
4. AMDR for protein & carbohydrates as a percentage of the total energy requirements for adults is ...10-35... & ...45-65....
5. For each degree above (37°C), approximately ..100-150.... ml of additional fluid is needed.

Q3. Write T for true statement and F for false ones: (0.5 mark each)

1. Frame size is one of the parameters of calculating BMI. **F**
2. RDAs are the average daily amounts of a nutrient estimated to meet the needs of 50% of healthy individuals. **F**
3. It is recommended to consume the UL of sodium daily. **F**

Q4. Calculate and interpret the % wt change, knowing that the patient currently weighing 60kg and 3 months back he was 85 kg. (1.5 marks)

$$\% \text{ wt} = \frac{\text{UBW} - \text{ABW}}{\text{UBW}} \times 100$$

$$= 85 - 60 \div 85 \times 100 = 29\%$$

Pt severely lost weight

Q5. Calculate the fluid requirements for the following using different methods:

A 10 years old boy weighing 35 kg.

First method (1 mark)	Second method (1 mark)
1000 + 500 + 300 = 1800	50 - 60 \ kg 1750 - 2100 ml
Total = 1800 ml	Total = 1750 - 2100 ml

Q6. Write down the harries Benedict equation for females (1mark)

Q7. A 40 years old male, his weight is 82 kg and Ht is 166 cm, referred to you to the clinic to assess his weight status and provide him with a healthy diet, taking into consideration that he swims for 30min daily. (4 marks)

- Calculate his energy requirements. (using institute of medicine)
- Calculate his macronutrients requirements. (55% CHO, 15% protein, 30% fat)

Knowing that:

Activity	MET	PAL/ 10 min	PAL / 1hr
Swimming	7	0.057	0.34

PA=1 if PAL $\geq 1 < 1.4$

PA=1.12 if PAL $\geq 1.4 < 1.6$

PA=1.27 if PAL $\geq 1.6 < 1.9$

BMI = 30

IBW= 62 kg

Adj wt= 67 kg

PAL = $1.1 + (0.34 \sqrt{2}) = 1.27$ PA = 1

TEE = $864 - 9.72 \times \text{Age} + \text{PA} \times (14.2 \times \text{wt} + 503 \times \text{ht})$

$864 - (9.72 \times 40) + 1 \times (14.2 \times 67 + 503 \times 1.66)$

$864 - 388.8 + 951.4 + 834.98$

= 2262 kcal/d

CHO = $2262 \times 0.55 \div 4 = 311\text{g}$

Protein = $2262 \times 0.15 \div 4 = 85\text{g}$

Fat = $2262 \times 0.3 \div 9 = 75\text{g}$