



Name :

1st Med -term.

Course: CHS -453

Std ID : Sample!!

Time : 2 hrs

1st semester- 1431-1432 H

Case I:

Hessah is a 65 yrs old Saudi female, admitted through ER c/o SOB for the last 15 days, dyspnea, orthopenia, palpitation and fatigue that exacerbate with physical activity. She is a k/c of HTN (for 6 yrs) on Captopril. On examination she showed pulmonary edema, chest X-ray showed dilated left ventricle, echocardiography detected AF expressed in reverse mitral flow, dilated left atrium and ventricle and decreased left ventricular function. Δ MVR, CHF, Dyslipidemia.

On admission her weight was 73 kg, height was 157 cm. Lab results:

Na : 140 mmol/L

HDL : 35 mg/dl

K : 5.0 mmol/L

LDL : 190 mg/dl

Cl : 98 - 108 mmol/L

Cholesterol : 285 mg/dl

BUN : 52 mg/dl

Fasting blood sugar : 145 mg/dl

Creatinine : 0.9 mg/dl

B/P: 160/100 mm Hg.

Diet Rx : 1200 kcal + 1.5 L fluid restriction.

Upon interview, she reported to have very poor food intake and appetite, she was instructed to reduce salt intake and consume bran products and to do regular exercise. While in her full state of health she reported that she was not following diet properly and she eats from the family's food. she also reported to have poor denture. Allergic to fish and banana and dislikes red meat

Using the above mentioned information answer the following questions:

1. Perform a Nutritional Assessment, show your calculations.

(2.0 Marks)

$$BMI = 73 / (1.57)^2 = 29.6 \quad (\text{over wt.})$$

$$IBW = 22.1 \times (1.57)^2 = 54.4 \text{ kg}$$

$$\% IBW = 73 / 54.4 = 134 \%$$

$$Adj. wt = (73 - 54.4) \times 0.25 + 54.4 = 59 \text{ kg}$$

2. Calculate Energy and Nutrient Requirement.

(2.0 Marks)

$$* BEE = (655.1 + 9.56(59) + 1.85(157) - 4.68(65)) = 1205 \text{ kcal}$$

$$1205 \times "1.2 \text{ upto } 1.4" = 1440 \text{ upto } 1680 \text{ kcal}$$

$$* 25 - 30 \text{ kcal/kg} \times 59 = 1475 \text{ upto } 1770 \text{ kcal}$$

\therefore kcal should be between 1440 - 1770 kcal. ≈ 1500 kcal

* Nutrient req:

$$50\% \text{ CHO} = 0.5 \times 1500 / 4 = 188$$

$$30\% \text{ fat} = 0.3 \times 1500 / 9 = 50 \text{ gm}$$

$$20\% \text{ pro} = 0.2 \times 1500 / 4 = 75 \text{ gm}$$

Na⁺ =

K⁺ =

Cholesterol =

SFA's =

3. Calculate Exchanges for Meal Planning

(1.5 Marks)

Exchanges	CHO 188 gm	Pro 75 gm	Fat 50 gm
Milk (2) Lowfat	$2 \times 12 = 24$	$2 \times 8 = 16$	$2 \times 5 = 10$
Veg. (5)	$5 \times 5 = 25$	$5 \times 2 = 10$	-
Fruits (4)	$4 \times 15 = 60$	-	-
	Total = 109	Total = 26	Total = 10
		$(188 - 109) / 15 = 5.2$	
Bread (5)	$5 \times 15 = 75$	$5 \times 3 = 15$	$5 \times 1 = 5$
		Total = 41	Total = 15
		$(75 - 41) / 7 = 4.8 \approx 5$	
Meat (5) Lean	-	$5 \times 7 = 35$	$5 \times 3 = 15$
			Total =
		$(50 - 30) / 5 = 4$	
Fat (4)			

4. In highlight of the given Diet Rx, discuss your recommended diet therapy.

(2.0 Marks)

Object to Current Rx

- Diet recommended is:
- ① --- kcal, wt. reducing plan (over wt.)
 - ② ↓ Fat ↓ Cholesterol for (dyslipidemia)
 - ③ ↓ Na ↑ K⁺ for (HTN)
 - ④ fluid restriction
 - ⑤ Soft diet for (poor denture)
 - ⑥ Consider dislikes & allergen meal planning

5. Write a half day meal menu using the following exchanges.

(3.5

Marks)

BF : 1 Milk
2 Bread
1 meat
1 fat
1 fruit

φ fish
bannana
Red Meat

+ Soft diet.

↓ Na⁺ ↓ Cholesterol

Lunch: 1 Milk
3 Bread
3 meat
1 vegetable
2 fat
1 fruit

Food Item	amount	List	# of Ex.			

6. Write a full SOAP note for the case.

(4.0 Marks)

Good Luck ! ☺



PHYSICIAN'S PROGRESS NOTES

Date and Sign each entry:

Date	Clinical Notes
1/11/10	Nutrition note...
10:30 AM	S.E. pt. reported to have very poor food intake & appetite. She was not following any type of diet. She was instructed to reduce salt intake and consume bran products and to do exercise. She also reported to have poor denture. Allergic to fish and banana and dislikes red meat.
	O: 65 y/o Wt=73 kg Ht= 157 cm IBW= 54 kg %IBW= 134% Adj wt = 59 kg
	labs showed (1/11/10)
	Na 140 N mmol/L 135 - 145
	K 5 N ~ 3.4 - 5
	Cl 98-108 N ~ 95 - 105
	BUN 52 N mg/dL 8 - 25
	HDL 35 N ~ (40-60) mg/dL
	LDL 1 N ~ 190 mg/dL
	Cholesterol 285 H ~ 239 mg/dL
	FBG 145 N ~
	Creatinine 0.9 N ~
	BP 160/100 mm Hg. 120/70
	Meds: Captopril
	DX: HTN, Pulmonary edema, MUR, CHF, dyslipidemia
	diet Rx: 1200 kcal + I.S. Fluid restriction
	A: A 65 y/o Saudi female, she is over wt, poor appetite, k/o of HTN, Pulmonary edema, MUR, CHF and dyslipidemia. admitted to Hospital & SUR (for 15 days), dyspnea, orthopnea, palpitation and fatigue. Labs showed high level of cholesterol and BP.
	DNI = 0

nutritional assessment:

TER = 2000 kcal/d

CHO (50%) = 250 gm/d

CHON (20%) = 100 gm/d

Fat (30%) = 66.6 gm/d

cholesterol = < 300 mg/d

fluid = 1.5 L/d

Na = < 2.4 g/d

K = 60 mmol/d as minimum

fiber = 26 gm/d

DASH diet

P = • provide 2000 kcal/d low salt + ↓ fat + ↓ cholesterol, high K + fiber modified diet.

- saturated fat should not exceed 10%.
- monitor labs (cholesterol, BP)
- monitor wt. & appetite
- ~ pt diet tolerance, tolerance to diet.
- instruct pt to do light exercise "on bed"
- F/U in 4 days
- fluid restriction on 1.5 L/d.

intern dietitian

1/11/10

Maryam