

NATIONAL UNIVERSITY OF LESOTHO
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF NUTRITION
NUTRITIONAL ASSESSMENT METHODS - NUT3314
SEMESTER I EXAMINATION

JANUARY 2024

TIME: 3HRS

MARKS: 100

Instructions:

- The paper consists of two (2) sections; section A (55 marks) and section B (45 marks).
- Attempt all the questions.
- Write each section on a separate page.
- Show all your workings.
- Write neat and clean.

SECTION A

Question 1

1.1 Discuss in details the assessment of 85 years old hospitalized patient based on four components of comprehensive geriatric assessment (CGA). [10 marks]

1.2 Discuss the nutrition care process for the 12 months' child at risk of malnutrition. [10 marks]

1.3 How do you measure the length of a 4 months old infant? [10 marks]

1.4 Mrs X is a 44 years old married woman working for PnP. She recently diagnosed with stage four of left breast cancer. She weighs 76kg and her demi span is 32.4cm. Her waist and hip circumferences readings are 124.7cm and 65.2cm, respectively.

1.4.1 What is her nutritional diagnosis? Show all your workings and give a detailed interpretation. [15 marks]

1.4.2 What dietary advice will you recommend to Mrs X? Outline your points clearly. [10 marks]

Total: 55 marks

SECTION B

Question 2

Gloria is a 30-year-old single mother with two young children. She is of Chinese descent and moved to the Kingdom of Lesotho 10 years ago; she has a good level of English. Recently, her mother suffered a heart attack, which prompted Gloria's first visit to the general practitioner. Meanwhile, Gloria performed a predictive genetic test independently through an online company, which showed an increased risk of developing cardiovascular disease (CVD). The company has recommended a daily supplement as well as dietary changes. She has the $\epsilon 4$ variant of the APOE gene. She has been referred to the nutritionist for lifestyle management. Gloria is very concerned and anxious about her health.

Assessment

Anthropometry and body composition:

- ✓ Weight: 78.5kg
- ✓ Height: 160cm
- ✓ Waist circumference: 93cm

Biochemistry:

Indicator	Value
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Fasting glucose	9.8 mmol/L
Plasma triglycerides (TG)	170 mg/dL
Plasma HDL cholesterol	27 mg/dL
Total cholesterol	280 mg/dL

Clinical:

BP: 170/80mmHg

Dietary recall

Time	Food eaten	Preparation	Quantity
Breakfast	White bread and margarine	Toasted	8 slices
	Orange juice		28g margarine
	Instant coffee with full cream milk	Boiled	250ml 2 mugs (20g sugar; 80g full cream milk)
Mid-morning snack			
Lunch	Plain white bread		6 slices
	Coke		1.5 glasses
Mid-afternoon snack	Coke		unmeasured
Evening meal	Parboiled white rice		3 serving spoons
	Chicken curry		2 serving spoons
Supper	Red wine		3 glasses

Questions

2.1 Calculate her LDL-C and discuss associated risks (if any). **[5 marks]**

2.2 Calculate Gloria's body mass index, what does it tell you? What are associated risk factors? **[10 marks]**

2.3 What does her waist circumference tell you? **[5 marks]**

2.4 Discuss the term cardiovascular disease (CVD)? **[5 marks]**

2.4 What modifiable and non-modifiable risk factors for CVD does Gloria present with? **[15 marks]**

2.5 Based on the nutritional assessment report, what other chronic diseases is she at risk of and why? **[5 marks]**

Total: 45 marks