

2916/103
DIET THERAPY I, MEAL PLANNING
AND MANAGEMENT AND PRINCIPLES
OF HUMAN NUTRITION PRACTICE
Oct./Nov. 2022
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN NUTRITION AND DIETETICS
MODULE I

DIET THERAPY I, MEAL PLANNING AND MANAGEMENT AND PRINCIPLES OF HUMAN
NUTRITION PRACTICE

3 hours

INSTRUCTIONS TO CANDIDATES

*This paper consists of FOUR questions.
Question ONE carries 40 marks while questions 2, 3 and 4 carry 20 marks each.
Answer ALL the questions in the answer booklet provided.
Candidates should answer the questions in English.*

This paper consists of 3 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

CASE STUDY 1

1. *Read the case study below and answer the questions that follow.*

Kaji, a 44 years old man was referred for nutrition management. He had a high output jejunostomy following surgery six weeks earlier for ischaemic small bowel. He has 12 cm of jejunum connected to a stoma.

Kaji spends most of his day on a chair or in bed. Kaji was on parenteral nutrition via a peripherally inserted central catheter (PICC) but developed an infection, therefore the PICC was removed two weeks ago.

Since then, he has been maintained on two litres of intravenous (IV) fluids and electrolytes via a peripheral cannula and oral feeding has been initiated.

Kaji is recuperating well and hopes to regain back his strength.

- (a) Explain the following terms:
- (i) jejunostomy; (2 marks)
 - (ii) parenteral nutrition; (2 marks)
 - (iii) ischaemic small bowel. (2 marks)
- (b) Other than infection, indicate **three** catheter related complications. (6 marks)
- (c) Describe **five** dietary adjustments necessary when initiating Kaji's oral feeding. (10 marks)
- (d) Highlight **four** effects of hospital malnutrition to a patient. (8 marks)
- (e) Give **five** reasons why Kaji needs to continue receiving fluids and electrolytes. (10 marks)

CASE STUDY 2

2. *Read the case study below and answer the questions that follow.*

Rica is a newly certified dietitian working at her first job in an 'assisted -living facility' for the elderly. She wants to re-evaluate the meal plan at the facility cafe where the majority of the residents take their meals.

The facility serves a culturally diverse group of residents, so Rica decides to interview the residents to assess the feeding patterns and dietary needs.

Evelyn, one of the residents tells her that she typically chooses snacks over meals but that she eats an egg salad sandwich every day and has done so for 40 years.

- (a) Describe **five** advantages of meal planning in the facility. (10 marks)

- (b) Explain five benefits that Evelyn will derive from including a variety of foods to her diet. (10 marks)

CASE STUDY 3

3. Read the case study below and answer the questions that follow.

Yary is an alcoholic and pays no attention to his diet. He has a painful inflamed tongue and cracking of tissues around the corners of the mouth.

On visiting a physician he is informed that excess alcohol consumption can cause nutrient deficiencies.

On taking a laboratory examination, it is verified that Yary has low haemoglobin count which is confirmed by a 24 hours recall history of diet intake.

He will be on support for some days to improve his nutrient status.

- (a) Highlight **four** other nutrient deficiencies Yary may experience due to alcoholism. (4 marks)
- (b) Describe **four** ways of improving iron bio-availability in Yary's diet. (8 marks)
- (c) Examine **four** possible effects of drugs on Yary's food intake. (8 marks)

CASE STUDY 4

4. Read the case study below and answer the questions that follow.

The dietitian received a phone call from a specialist metabolic dietitian (MeD) at the regional metabolic centre. A patient with phenylketonuria (PKU) is being admitted next week for a planned knee cartilage repair operation.

Emmy is 24 years old and has followed a life long low phenylalanine diet. She will be staying in hospital for two days post-surgery and the MeD would like the dietitian to organise her low phenylalanine diet for her hospital admission.

Emmy weighs 65 kg with no recent weight loss. She is 1.62 m tall.

- (a) Highlight **five** factors that determine modification of Emmy's diet in and out of hospital. (5 marks)
- (b) Indicate **five** possible outcomes of unmanaged PKU. (5 marks)
- (c) Describe **five** factors to consider when serving Emmy's meals at the hospital. (10 marks)

THIS IS THE LAST PRINTED PAGE.