(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR

MAIN

FOURTH YEAR FIRST SEMESTER EXAMINATIONS
FOR THE DEGREE
OF
BSC. HUMAN NUTRITION & DIETETICS

COURSE CODE: HND 400

COURSE TITLE: NUTRITION EDUCATION AND COUNSELING

DATE: 6/12/2023   **TIME:** 3.00 PM - 5.00 PM

INSTRUCTIONS TO CANDIDATES

Answer all questions in SECTION A and B
Answer only TWO questions in SECTION C
Read additional instructions under various sections

TIME: 2 Hours

SECTION A
Multiple Choice Questions

Answer ALL the questions in this section by choosing the correct answer from the options provided under each question. (**10 Marks**).

1. An 82-year-old woman was admitted to hospital for shortness of breath, nausea, vomiting and ascites. She reports a recent rapid weight gain of 7 kg (height: 160 cm, present weight 67 kg). Upon admission, lab data reveal a low serum albumin and normal liver function tests. Her diet provides about 6,000 KJ (1,400 kcal) and 60 g protein. Which conclusion should the dietitian make based on this information?

   A. Weight gain is a positive indicator of improved nutritional status.

   B. Recent weight gain reflects an increased oral intake.

   C. Serum albumin is low due to the intake of a low-protein, high-fat diet.

   D. Recent weight gain is related to low serum albumin.

2. The dietitian is developing nutrition education materials to use in a pre-retirement worksite health promotion program.The dietitian wants to be sure the audience understands the messages. The participants include several ethnic groups with a range of literacy skills. Which strategy would be most effective for the dietitian to use?

   A. Hold a focus group with a representative sample of participants to pilot the material.

   B. Distribute a questionnaire at the end of the workshop to assess understanding.

   C. Use pictures, charts and diagrams to reinforce information presented in written form.

   D. Assess readability to confirm all materials are written at grade 6 level.

3. A 3-month-old breast fed infant is referred to the dietitian. His weight is at the 5th percentile and his length is at the 40th percentile. No other medical problems are identified. His mother reports that he feeds frequently and requires four diaper changes per day. What should the dietitian do first?

   A. Advise his mother to feed him more frequently.

   B. Refer his mother to a support group that promotes breastfeeding.

   C. Obtain more information on his mother's milk supply and breastfeeding technique.

   D. Suggest his mother supplement breastfeeding with an infant formula.

4. A 70-year-old man with anemia of unknown cause is referred to the dietitian. The diet history shows an adequate intake from all food groups in the Food Guide. He mentions he has been taking herbal products for fatigue. Which action should the dietitian take first?

   A. Recommend a daily iron supplement taken with orange juice.

   B. Assess his intake of foods rich in iron, vitamin B_{12}, and folate.

C. Research the herbal products he is taking.

D. Determine his living circumstances before giving advice.

CASE STUDY: Questions 5 to 10 refer to this case.

A 25-year-old client with cerebral palsy (CP) lives in a group home. His motor, mental and communication functions are partly affected by his CP. He is presently experiencing endstage renal disease (ESRD) and dialysis treatment in the future is inevitable. The dietitian knows him well and is planning to meet with him to discuss his short-term and long-term nutrition goals.

5. How are diets for pre-end-stage renal disease (pre-ESRD) and dialysis different?

    A. The recommended amount of dietary protein for pre-ESRD is lower than that for Dialysis.

    B. The recommended amount of dietary protein for pre-ESRD is higher than that for dialysis.

    C. The recommended amount of dietary fat for pre-ESRD is lower than that for dialysis.

    D. The recommended amount of energy for pre-ESRD is higher than that for dialysis.

6. To decide on the type of dialysis for the client, who should be consulted, in addition to the administrator of the home?

    A. The client and the hospital renal team.

    B. A designated decision-maker for the client and the hospital renal team.

    C. The client and/or a designated decision-maker and the hospital kidney transplant team.

    D. The client and/or a designated decision-maker and the hospital renal team.

7. If the client goes on hemodialysis, which conditions should the dietitian consider in the long term?

    A. Hypokalemia and hyperphosphatemia.

    B. Hyperlipoproteinemia and osteodystrophy.

    C. Hyperkalemia and hypophosphatemia.

    D. Hypotension and diabetes.

8. The client is known to consume large amounts of fresh fruit, vegetables and snacks such as potato chips. Which condition will most likely result if he continues this diet?

    A. Hyperkalemia.

    B. Hyperphosphatemia.

    C. Hyponatremia.

    D. Elevated urea.

9. The administrator of the home calls the dietitian to report that the client has been eating potato chips again. He has some edema and his blood pressure is rising. What action should the dietitian take?

    A. Discontinue services for the client.

    B. Explain to the administrator that the client has been advised about his diet already.

    C. Ask the administrator to monitor the situation.

    D. Meet with the client and/or a designated decision-maker to discuss the situation.

10. One year later, the client is on hemodialysis and arrives for dialysis with a weight gain of 2 kg over the prescribed limit. He has a normal serum sodium. What is the most likely cause of his weight gain?

    A. Too much phosphorous and potassium.

    B. Too much fluid and potassium.

    C. Too many fruits and vegetables.

    D. Too much fluid and sodium.

SECTION B

Short Answer Questions. Answer ALL the questions (20 Marks)

11. Nutrition counseling is to help a person make and maintain dietary changes.

    a) Outline the four components of nutrition counseling (2 Marks)

    b) Elaborate on eight principles of nutrition counseling(4 Marks)

12. Briefly explain four (4) areas to emphasize in counseling an hypertensive client. (2mks)

13. One of the Top Ten Basic Counseling Skills is empathy.

    a) Explain what empathy is (2 Marks)

    b) Discuss three primary skills associated with the communication of empathy. (3 Marks).

14. a) Outline six (6) general characteristics of nutrition counseling. (3 Marks)

    b) Define five (4) principles that underlie motivational interviewing? (4 Marks)

SECTION C

There are THREE (3) Questions in this section.

Answer any TWO (2) Questions (20 Marks)

15. a) Discuss the six (6) methods/theories of nutrition counseling, giving one relevant example for each, where applicable. (6 marks)

    b) Explain the four-stage process of counseling used in directive counseling session. (4 Marks)

16. To set the stage for understanding the basics of an effective counseling relationship, one will need to explore and investigate the characteristics of effective nutrition counselors.

    a) Review eight (8) desirable characteristics of an effective nutrition counselor. (4Marks)

    b) Why is it important for nutrition counselors to understand their worldviews to achieve cultural sensitivity? (3 Marks)

c) Identify 3 issues for novice nutrition counselors. (3 Marks)

17. Behavior Change Communication (BCC) strategies are aimed at influencing the action of families and communities in promoting nutritional improvements.
  a) Illustrate eight strategies in behavior change that will help the people you are working with change from being uninformed person to someone who may be able to teach or influence others about their behavior. (8 Marks)
  b) Food and nutrition professionals who counsel clients need continually to strengthen their skills, update competencies, and document outcomes as they practice. What four techniques do you recommend for professionals to stay up-to-date in their practice? (2 Marks)