

Date: _____

Admission Test

MS Human Nutrition and Dietetics

Name: _____

Reference ID: _____

Marks Obtain: _____

1. Which of the following is a macronutrient?
 - a) Vitamin C
 - b) Iron
 - c) Protein
 - d) Zinc
2. Which vitamin is primarily involved in calcium absorption?
 - a) Vitamin A
 - b) Vitamin D
 - c) Vitamin E
 - d) Vitamin K
3. Which of the following is a source of dietary fiber?
 - a) White rice
 - b) Chicken

- c) Apples
 - d) Butter
4. Which combination of nutrients enhances the absorption of non-heme iron?
- a) Calcium and Vitamin D
 - b) Vitamin C and non-heme iron
 - c) Zinc and copper
 - d) Vitamin A and Vitamin K
5. Which nutrient interaction is critical for preventing osteoporosis?
- a) Vitamin E and selenium
 - b) Vitamin C and iron
 - c) Calcium and Vitamin D
 - d) Magnesium and phosphorus
6. Where does the majority of nutrient absorption occur?
- a) Stomach
 - b) Large intestine
 - c) Small intestine
 - d) Esophagus
7. What is the primary function of carbohydrates in the body?
- a) Building muscles
 - b) Providing energy
 - c) Storing vitamins
 - d) Synthesizing hormones

8. Which metabolic pathway is responsible for converting glucose to pyruvate?
 - a) Krebs cycle
 - b) Glycolysis
 - c) Beta-oxidation
 - d) Gluconeogenesis
9. Which condition is most commonly associated with a deficiency of Vitamin D?
 - a) Scurvy
 - b) Rickets
 - c) Anemia
 - d) Pellagra
10. What is the recommended daily intake of fiber for adults?
 - a) 10-15 grams
 - b) 20-25 grams
 - c) 25-30 grams
 - d) 30-35 grams
11. Which trace element is important for thyroid function?
 - a) Selenium
 - b) Chromium
 - c) Manganese
 - d) Molybdenum
12. Which vitamin acts as a coenzyme in the Krebs cycle?
 - a) Vitamin C

b) Vitamin D

c) Niacin (B3)

d) Biotin (B7)

13. Which type of fat is considered the most harmful to cardiovascular health?

a) Saturated fats

b) Monounsaturated fats

c) Polyunsaturated fats

d) Trans fats

14. Which nutrient is most affected by food processing?

a) Vitamin C

b) Protein

c) Fat

d) Carbohydrate

15. What is the primary purpose of pasteurization?

a) Enhance flavor

b) Improve texture

c) Kill harmful bacteria

d) Increase shelf life

16. Which of the following is a functional food?

a) Whole wheat bread

b) Yogurt with probiotics

c) Butter

d) Soda with flavor

17. Which program provides nutrition education and food assistance to low-income families in the United States?

a) SNAP

b) WIC

c) CDC

d) NIH

18. Excessive intake of which vitamin can lead to hypercalcemia?

a) Vitamin A

b) Vitamin D

c) Vitamin E

d) Vitamin K

19. Deficiency in which vitamin can lead to Beriberi?

a) Thiamine (B1)

b) Riboflavin (B2)

c) Niacin (B3)

d) Folic acid (B9)

20. What is the primary goal of nutritional epidemiology?

a) Develop new food products

b) Study the relationship between diet and disease

c) Promote food safety

d) Conduct clinical trials

21. What is the best indicator of long-term nutritional status?

- a) Blood glucose levels
- b) Body mass index (BMI)
- c) Weight
- d) Waist circumference

22. Which condition is most likely to require enteral nutrition?

- a) Type 2 diabetes
- b) Crohn's disease
- c) Stroke with swallowing difficulties
- d) Osteoporosis

23. What is the primary focus of medical nutrition therapy for diabetes?

- a) Reduce carbohydrate intake
- b) Increase protein intake
- c) Balance blood glucose levels
- d) Lower fat intake

24. Which vitamin deficiency is associated with neural tube defects in newborns?

- a) Vitamin B6
- b) Vitamin B12
- c) Folic acid (B9)
- d) Vitamin A

25. Which mineral can interfere with the absorption of antibiotics when taken together?

- a) Calcium
- b) Iron

c) Potassium

d) Magnesium

26. Which of the following is an example of a complete protein?

a) Rice

b) Beans

c) Peanut butter

d) Egg

27. Which behavior is most likely to lead to weight loss?

a) Skipping meals

b) Eating high-protein diets

c) Reducing calorie intake

d) Drinking more water

28. Which nutrient is essential for muscle repair and growth in athletes?

a) Fat

b) Protein

c) Carbohydrate

d) Vitamin C

29. Which condition is associated with a deficiency in both iron and vitamin B12?

a) Anemia

b) Osteoporosis

c) Hypertension

d) Diabetes

30. Which vitamin is critical for preventing night blindness?

- a) Vitamin C
- b) Vitamin B12
- c) Vitamin A
- d) Vitamin D

31. Which of the following fatty acids is considered essential?

- a) Palmitic acid
- b) Oleic acid
- c) Linoleic acid
- d) Stearic acid

32. What is the main function of antioxidants in the body?

- a) Provide energy
- b) Repair tissue
- c) Neutralize free radicals
- d) Build muscle

33. Which of the following is a water-soluble vitamin?

- a) Vitamin A
- b) Vitamin D
- c) Vitamin E
- d) Vitamin C

34. Which hormone regulates blood glucose levels?

- a) Glucagon

b) Insulin

c) Thyroxine

d) Cortisol

35. Which mineral is involved in over 300 enzymatic reactions in the body?

a) Iron

b) Calcium

c) Magnesium

d) Sodium

36. Which nutrient interaction can reduce the risk of cardiovascular disease?

a) Omega-3 fatty acids and Vitamin D

b) Soluble fiber and cholesterol

c) Protein and calcium

d) Vitamin K and magnesium

37. Which mineral is crucial for oxygen transport in the blood?

a) Calcium

b) Potassium

c) Iron

d) Sodium

38. Which food is a good source of omega-3 fatty acids?

a) Chicken breast

b) Salmon

c) Olive oil

d) Apples

39. Which of the following is not a characteristic of a healthy diet?

a) Variety

b) Balance

c) Moderation

d) Restriction

40. Which nutrient plays a key role in bone health?

a) Vitamin C

b) Iron

c) Vitamin K

d) Calcium

41. What is the glycemic index a measure of?

a) Fat content of food

b) Vitamin content of food

c) Effect of food on blood sugar levels

d) Protein content of food

42. Which vitamin deficiency is associated with megaloblastic anemia?

a) Vitamin B12

b) Vitamin B6

c) Vitamin B1

d) Vitamin B2

43. Which mineral is a component of hemoglobin and essential for oxygen transport?

- a) Magnesium
- b) Iron
- c) Potassium
- d) Sodium

44. Which metabolic condition is characterized by insulin resistance and hyperglycemia?

- a) Type 1 diabetes
- b) Type 2 diabetes
- c) Hypoglycemia
- d) Celiac disease

45. Which type of dietary fiber is most effective at lowering blood cholesterol levels?

- a) Insoluble fiber
- b) Soluble fiber
- c) Cellulose
- d) Lignin

46. Which form of iron is most readily absorbed by the body?

- a) Ferric iron (Fe^{3+})
- b) Ferrous iron (Fe^{2+})
- c) Heme iron
- d) Non-heme iron

47. Which condition is commonly treated with a gluten-free diet?

- a) Lactose intolerance
- b) Irritable bowel syndrome

- c) Celiac disease
- d) Crohn's disease

48. Which nutrient deficiency is most likely to result in a microcytic, hypochromic anemia?

- a) Vitamin B12
- b) Folate
- c) Iron
- d) Vitamin K

49. Which vitamin acts as an antioxidant and is important for immune function and skin health?

- a) Vitamin A
- b) Vitamin C
- c) Vitamin D
- d) Vitamin K

50. Which dietary pattern is characterized by high intakes of fruits, vegetables, nuts, and olive oil, and is associated with reduced risk of cardiovascular disease?

- a) Western diet
- b) Mediterranean diet
- c) Vegetarian diet
- d) Ketogenic diet

51. Which element is essential for the synthesis of thyroid hormones?

- a) Iron
- b) Iodine
- c) Zinc

d) Selenium

52. Which metabolic pathway is responsible for the production of ketone bodies?

a) Glycolysis

b) Krebs cycle

c) Beta-oxidation

d) Ketogenesis

53. Which type of fatty acid is produced during the hydrogenation of vegetable oils?

a) Saturated fatty acids

b) Monounsaturated fatty acids

c) Polyunsaturated fatty acids

d) Trans fatty acids

54. Which vitamin is synthesized by intestinal bacteria and is essential for blood clotting?

a) Vitamin A

b) Vitamin C

c) Vitamin K

d) Vitamin

55. Which hormone is primarily responsible for the regulation of calcium homeostasis?

a) Insulin

b) Glucagon

c) Parathyroid hormone

d) Thyroxine

56. Which enzyme is crucial for the conversion of beta-carotene to retinol?

a) Amylase

- b) Lipase
- c) Beta-carotene dioxygenase
- d) Protease

57. Which type of dietary fat is most likely to increase LDL cholesterol levels?

- a) Monounsaturated fats
- b) Polyunsaturated fats
- c) Saturated fats
- d) Trans fats

58. Which phytochemical is found in cruciferous vegetables and is believed to have anti-cancer properties?

- a) Lycopene
- b) Sulforaphane
- c) Resveratrol
- d) Flavonoids

59. Which amino acid is a precursor for the synthesis of serotonin?

- a) Tyrosine
- b) Tryptophan
- c) Glycine
- d) Arginine

60. Which of the following is the first step in the Nutrition Care Process (NCP)?

- a) Nutrition intervention
- b) Nutrition assessment
- c) Nutrition monitoring and evaluation

d) Nutrition diagnosis

61. Which of the following is an appropriate method for assessing dietary intake in a clinical setting?

- a) Food frequency questionnaire
- b) 24-hour recall
- c) Food diary
- d) All of the above

62. Which lab value is most commonly used to assess protein status in hospitalized patients?

- a) Hemoglobin
- b) Serum albumin
- c) Blood glucose
- d) Creatinine

63. Which diet is most appropriate for a patient with chronic kidney disease (CKD) on dialysis?

- a) Low-protein diet
- b) High-protein diet
- c) Low-potassium diet
- d) High-potassium diet

64. Which nutrition intervention is typically recommended for a patient with type 2 diabetes?

- a) High-carbohydrate diet
- b) Low-carbohydrate diet
- c) Low-fat diet
- d) High-protein diet

65. Which dietary recommendation is most appropriate for managing hyperlipidemia?

- a) Increase intake of trans fats
- b) Reduce intake of saturated fats
- c) Increase intake of sodium
- d) Reduce intake of fiber

66. Which of the following is a key component of a Mediterranean diet?

- a) High intake of red meat
- b) High intake of fruits, vegetables, and olive oil
- c) Low intake of fish
- d) High intake of dairy products

67. Which of the following is a primary goal of medical nutrition therapy (MNT) for patients with cancer?

- a) Promote weight gain
- b) Prevent malnutrition
- c) Reduce sodium intake
- d) Increase saturated fat intake

68. Which of the following is most appropriate for a patient with celiac disease?

- a) High-protein diet
- b) Gluten-free diet
- c) Low-fat diet
- d) High-carbohydrate diet

69. Which of the following diets is typically recommended for patients with hypertension?

- a) DASH diet

- b) Ketogenic diet
- c) Atkins diet
- d) Low-protein diet

70. Which type of nutrition support is provided intravenously?

- a) Oral supplementation
- b) Enteral nutrition
- c) Parenteral nutrition
- d) Tube feeding

71. Which of the following is a common goal of nutritional counseling?

- a) Persuade clients to adopt a vegan diet
- b) Provide education on making informed food choices
- c) Limit client autonomy in decision-making
- d) Focus solely on calorie restriction

72. Which of the following best describes the concept of “patient-centered care” in dietetics?

- a) The dietitian makes all decisions for the patient.
- b) The dietitian collaborates with the patient to develop a personalized nutrition plan.
- c) The patient follows a generic diet plan without input.
- d) The patient is expected to manage their diet independently without guidance.

73. Which of the following is an appropriate dietary recommendation for managing osteoporosis?

- a) Increase intake of Vitamin C
- b) Reduce calcium intake

c) Increase calcium and Vitamin D intake

d) Increase sodium intake

74. Which of the following is most appropriate for a patient with lactose intolerance?

a) Increase dairy intake

b) Use lactose-free dairy products

c) Follow a high-fat diet

d) Avoid all forms of sugar

75. Which nutrition screening tool is commonly used to assess malnutrition risk in hospitalized patients?

a) Food frequency questionnaire

b) Malnutrition Universal Screening Tool (MUST)

c) Body mass index (BMI)

d) 24-hour dietary recall

76. Which of the following is a key consideration when developing a nutrition care plan for a patient with multiple chronic conditions?

a) Focusing only on the primary condition

b) Considering the interactions between dietary recommendations and all conditions

c) Avoiding all dietary changes

d) Prescribing a standard diet without individualization

77. Choose the word that is most similar in meaning to "abundant."

a) Scarce

b) Plentiful

- c) Sparse
- d) Insufficient

78. Select the synonym of "obstinate."

- a) Flexible
- b) Stubborn
- c) Agreeable
- d) Compliant

79. Choose the word that is most similar in meaning to "elaborate":

- a) Simple
- b) Detailed
- c) Brief
- d) Basic

80. Select the synonym for "exceed":

- a) Surpass
- b) Fall short
- c) Conform
- d) Fail

81. Choose the correct preposition to complete the sentence:

"She is interested ____ learning new languages."

- a) at
- b) for

- c) in
- d) with

82. Select the correct preposition:

"The cat is hiding ____ the table."

- a) on
- b) in
- c) under
- d) above

83. Convert the following sentence into indirect speech:

"She said, 'I am going to the market.'"

- a) She said she was going to the market.
- b) She said that she is going to the market.
- c) She says she is going to the market.
- d) She said I am going to the market.

84. Convert the following sentence into direct speech:

He said that he had finished his homework.

- a) "He said, 'I have finished my homework.'"
- b) "He said, 'I finished my homework.'"
- c) "He said, 'He finished his homework.'"
- d) "He said, 'I had finished my homework.'"

85. Choose the correct sentence:

- a) He don't like to read books.
- b) He doesn't likes to read books.
- c) He doesn't like to read books.
- d) He don't likes to read books.

86. Identify the sentence with correct grammar:

- a) She are going to the store.
- b) She is going to the store.
- c) She were going to the store.
- d) She be going to the store.

87. Select the word that best completes the sentence:

"The scientist was _____ in her field and received many awards."

- a) ignorant
- b) notorious
- c) eminent
- d) infamous

88. Choose the word that best completes the sentence:

"The teacher's explanation was so _____ that everyone understood the concept immediately."

- a) confusing
- b) ambiguous

- c) clear
- d) vague

89. Solve for x in the equation $3x-7=2x+5$:

- a) 7
- b) 10
- c) 12
- d) 5

90. If the ratio of boys to girls in a class is 3:2 and there are 30 students in total, how many girls are there?

- a) 10
- b) 12
- c) 15
- d) 18

91. If a train travels at a speed of 60 miles per hour, how long will it take to cover a distance of 180 miles?

- a) 1 hour
- b) 2 hours
- c) 3 hours
- d) 4 hours

92. What is the least common multiple (LCM) of 12 and 15?

a) 30

b) 45

c) 60

d) 90

93. A store is offering a 25% discount on a jacket that originally costs \$80. What is the sale price of the jacket?

a) \$20

b) \$60

c) \$65

d) \$70

94. A farmer has 180 eggs and wants to pack them in cartons that hold 12 eggs each. How many cartons does he need?

a) 12

b) 15

c) 18

d) 20

95. A factory produces 150 widgets per day. How many widgets will the factory produce in 7 days?

a) 750

b) 900

c) 1050

d) 1200

96. What is the next number in the sequence: 2, 6, 12, 20, ?

- a) 30
- b) 28
- c) 32
- d) 36

97. If all roses are flowers and some flowers fade quickly, which of the following statements must be true?

- a) Some roses fade quickly.
- b) All flowers fade quickly.
- c) Some roses do not fade quickly.
- d) All roses are flowers that fade quickly.

98. Dog is to Puppy as Cat is to:

- a) Kitten
- b) Pup
- c) Cub
- d) Calf

99. A clock shows the time as 3:15. What is the angle between the hour hand and the minute hand?

- a) 30 degrees
- b) 37.5 degrees
- c) 45 degrees
- d) 90 degrees

100. A rectangular garden has a length that is 4 times its width. If the area of the garden is 320 square meters, what is the length of the garden?

- a) 16 meters
- b) 20 meters
- c) 24 meters
- d) 32 meters