

THE NORTHERN DISTRICT SCHOOL OF NURSING

FIRST YEAR BLOCK

NORMAL NUTRITION EXAMINATION

Time allowed: 1 hour.

IMPORTANT - Read your questions carefully. Answer only what is asked as no marks will be given for irrelevant material.

1. Make a list of the foods and their portions which are considered to provide a "Protective" diet.

- 1 pint of milk
- 1 egg
- 1 serving of meat of fish
- 1 potato and 2 other vegetables, preferably raw
- 2 servings of fruit (at least one raw)
- at least one serving of whole grain cereal or brown bread
- 1/2 bushel

These are the protective foods. If they are taken the need of the calories in the diet may be made up as desired to satisfy the appetite

15 marks.

2. (a) State the four (4) factors which influence the individuals caloric needs.

- ① Climate
- ② Activities
- ③ Body build, age and sex
- ④ State of health

4 marks.

(b) What is meant by:-

- i. Basal Metabolism is the minimum requirement of energy in any individual. It is the amount of energy used by a person at complete rest at least 12 hours after the last meal sufficient only to meet the needs of the essential processes of respiration, circulation and maintenance of body temperature.
- ii. Ideal Body Weight is usually measured on a chart and obtained by surface area multiplied by age surface area and build.

5 marks.

(c) How many calories per kilograms of ideal body weight do the following need per day:-

- i. A man in bed 1500 - 1700
- ii. A man sitting about at home 2000
- iii. A man working in an office 2500 to 2800
- iv. A man engaged in hard labour 3000 to 4000

4 marks.

(d) If a man is ordered a diet of:-

- i. Carbohydrate 400 grams 1600
- ii. Fat 100 grams 900
- iii. Protein 100 grams 400

State the number of calories he is to have. 2900 calories

10 marks.

3. List 5 points you would observe when preparing to serve a meal to a patient.

- 1. It must contain all the essential constituents in correct proportion
- 2. Calories value must be correct
- 3. Food must be digestible and suitably cooked
- 4. Food must be appetisingly served
- 5. If meal is to be hot serve hot and if to be cold serve cold

10 marks.

4. (a) How much fluid should a normal adult take per day?
 minimum amount is 2 pints usual 4-5 1 mark.

(b) In a hot climate what substance should be added to drinking water to prevent heat exhaustion.
 Sodium chloride 2 marks.

(c) Name the ways in which fluids can be made attractive to a patient (exclude milk drinks).
 1. Desserts, junket, milk jelly
 2. Creme soups
 3. White sauces for vegetables + fruit
 4. General cooking - egg custard
 5. Artificial colourings 5 marks.

(d) List five points you could employ to encourage a patient to take fluids.
 1. Flavour drinks - cordials, cocoa, malted milk, weak coffee
 2. Soups
 3. Beef tea or meat extractives
 4. Barley water
 5. By giving beverages with biscuits 5 marks.

5. (a) List the food constituents contained in milk.
 1. First class proteins
 2. Carbohydrates in the form of lactose
 3. Fats in the form of an emulsion
 4. Vitamins
 5. Calcium + phosphorus
 6. Small am of iron 6 marks.

(b) Why is milk considered to be a valuable food.
 " it is the most nearly perfect natural food available because of high water content, it quenches thirst, it neutralises gastric acidity, it can be served in so many ways, it is easily swallowed & the am given can be regulated. " measured 5 marks.

(c) Show how you would distribute 2 pints of milk over a days menu for a patient on a very light diet.
 5 oz on porridge for breakfast
 5 oz milk coffee " "
 5 oz milk coffee for ml tea
 3 oz milk left for dinner
 4 oz custard for " "
 2 oz sauce on meat
 5 oz milk coffee for after tea
 3 oz milk tea for tea
 3 oz milk gelatine dessert
 1 oz milk to pts for tea
 5 oz milk coffee for supper
 Total = 2 pints 10z. 10 marks.

6. Name one condition which is prevented by adequate amounts of the following in the diet:-

- | | | |
|-------|------------|----------------------------|
| i. | Vitamin A. | 1. healthy bones + teeth |
| ii. | " C. | anaemia + scurvy prevented |
| iii. | " D. | rickets |
| iv. | " K. | haemorrhage prevented |
| v. | " B 12. | pernicious anaemia |
| vi. | Iron. | anaemia |
| vii. | Iodine. | mt poor body metabolism |
| viii. | Calcium | dental caries |

8 marks.

7. List 2 good sources of each of the following:-

- (a) i. Carbohydrates. Cereals - wheat
Sugar - fruits
- ii. Fats. Animal fats - butter
Vegetable fats - cocoa
- iii. Proteins. Animal - eggs
Vegetable - cereals

6 marks.

(b) Define essential proteins.
 are considered necessary for maintenance of healthy human tissue. A food containing all the essential amino acids are described as first class or complete proteins & are derived from animal sources.

2 marks.

(c) List one good source of First Class Protein.
 milk

List one good source of Second Class Protein.
 nuts

2 marks.

10 marks.

Total - 100 marks.