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No. 24.

FIRST YEAR BLOCK

SCHOOL 53.

Normal Nutrition.

26th November, 1962

Time allowed: - 1 hour

Normal Nutrition

School 53

26-11-1962

No. 24.

IMPORTANT: Read your questions very carefully and answer only what is asked as no marks will be given for irrelevant material. Complete on this sheet the following:-

1. Food is essential to the body for:-

a. heat + energy.

b. body build and repair.

c. ~~the~~ essential ^{chemical} body processes

3 Marks

2. Metabolism is the process involving the building up and breaking down of food substances before being absorbed. Two stages (1) anabolism - building up (2) catabolism - breaking down.

2 Marks

3. A Calorie is a) a unit of heat

1 Mark

b) amount of heat required to raise one Kilogram of water to 1° Centigrade.

2 Marks

4. Caloric requirements depend on:-

a) i. Age

ii. Sex

iii. Climate

iv. State of health.

v. Occupation

4 Marks

b) i. Economic and religious ~~theories~~ views.

ii. Rate of metabolism

2 Marks

5. Work carried out by the individual is estimated in terms of energy needed. How many calories does each of these individuals need?

a) Man at complete rest 15-1700 calories

b) Sedentary worker 2500-2800 calories

c) Heavy manual worker 3000-4000 calories

3 Marks

6. What proportion of food substances should a well balanced diet contain?

a) Carbohydrates 30-35% *

d) Vitamins

b) Fats 50-55% *

e) Minerals

c) Proteins 12-15%

f) ~~Water~~ Water - at least 8 pints per day.

4

6 Marks

7. State how organic food substances differ.

Organic food substances contain a large molecule which has to be digested before being absorbed which contains carbon.

1 Mark.

(e) (d)

8. List the organic food substances

a) Carbohydrates

b) Proteins

c) Fats

d) Vitamins.

4 Marks

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9. List the inorganic food substances.

- a. Mineral Salts
- b. Water
- c. Vitamins

3 Marks.

10. State the reason why carbohydrates, fats and proteins need digesting

Carbohydrates, fats and proteins need digestion because they are Organic food substances containing carbon and have a large molecule which has to be broken up before absorption takes place. They consist of

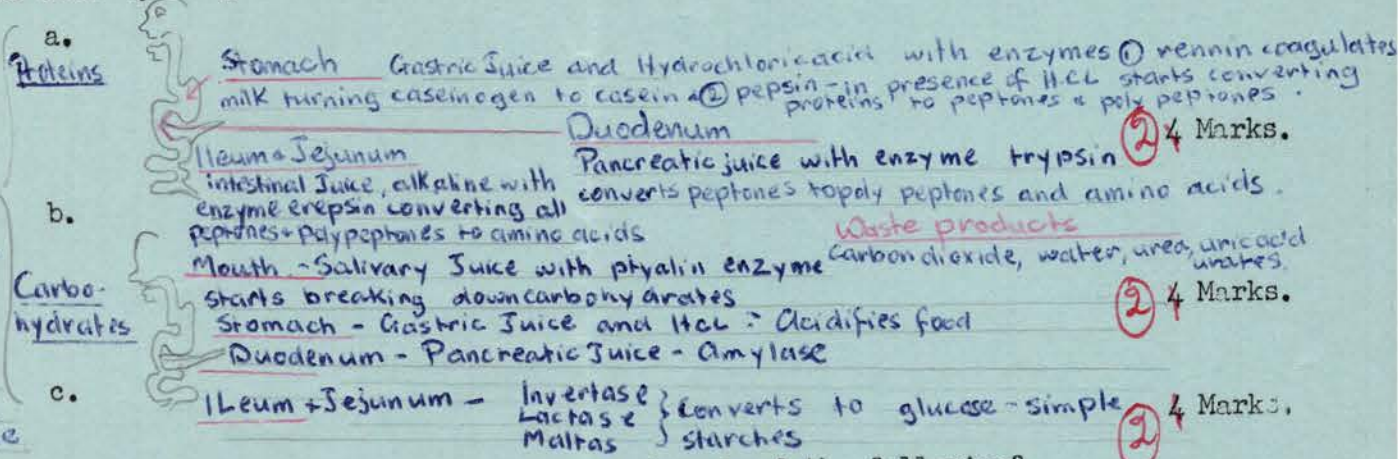
2 Marks.

11. Give the end products of:-

- Carbohydrate digestion 1. glucose
- Fat 2. fatty acids & glycerin.
- Proteins 3. amino acids

3 Marks.

12. Show by diagrams how each of these are absorbed into the body



purely diagrammatic
Fats
Stomach - Gastric Juice + HCl - enzyme
Gastric Lipase
Duodenum
Pancreatic J - lipase - enzyme
Bile.

13. What is the caloric value of 1 gram of each of the following?

- a) Carbohydrates 1 gram = 4 calories
- b) Fats 1 gram = 9 calories
- c) Proteins 1 gram = 4 calories

3 Marks

14. State the two functions of vitamins.

- 1. assists in hormone and enzyme activities
- 2. regulates body functions.

2 Marks

15. Name the principal electrolytes.

- 1. Sodium
- 2. Potassium
- 3. Chlorides
- 4. Phosphorus

3 Marks

16. What is the function of electrolytes in the body?

Electrolytes help to keep the composition of body fluids constant by ① osmosis, diffusion, osmotic pressure ② excretion of

2 Marks

17. List 2 (two) good sources of each:-

- Vitamin A 1) butter 2) Carrots
- " B2 1) yeast 2) wholemeal flour.

4 Marks

18. Of what use is cellulose in the diet?

Cellulose supplies the roughage in the diet which form bulk of the waste products and enables peristalsis to take place resulting in elimination of waste products from the body. (2) Marks

19. List 5 (five) reasons why water is essential to the body

1. essential for elimination of waste products (urine)
2. All body fluid consists of water, blood plasma, lymph, saliva
3. Essential for equal electrolyte balance.
4. Transport system for food particles, blood, lymph.
5. Saliva is a natural cleansing agent.

(5) Marks.

20. List the amount of carbohydrate, fats and proteins and water contained in milk.

a.	Carbohydrate	3.5%
b.	Fats	5%
c.	Proteins	3.5%
d.	Water	88%

Contained in 100 gms of Cows milk

(4) Marks.

21. What measures would you adopt to persuade a patient to take fluids

Offer fluids frequently and at ^{regular} intervals and encourage patient to drink them.

Give variations of dr fluids by flavouring eg milk drinks, barley water, beef tea, soups, cordials.

Leave fluids on heart table for patient and explain procedure (if allowed) so as to get cooperation. (6) Marks.

22. Name the important principles you would apply when preparing a meal for a patient.

- ① Meals should be served attractively, should be appetising.
- ② Meals should contain correct caloric requirements ✓
- ③ Meals should have all necessary food requirements. ✓
- ④ Economic and religious views should be observed.
- ⑤ If meals are hot they should be served hot, and cold meals cold. (4) Marks.
- ⑥ Likes and dislikes should be noted.

23. List 8 (eight) ways in which milk may be served to supply a light diet.

- ① Beverages - cocoa, coffee, egg flips, milk shakes, tea (milk)
- ② Barley water may be added to make milk more digestible
- ③ In sauces - vegetable and meat ~~gravy~~ sauces
- ④ General cooking - custards, junkets.
- ⑤ Added to vegs. - mashed potatoes.
- ⑥ Sweets - creamed rice, milk jelly.
- ⑦ Soups - creamed vegetable soup.
- ⑧ Milk can be used for toppings or artificial flavouring

(8) Marks.

25. What are the junior nurses responsibilities in regard to forbidden substances on trays? The pt should be told what food he is forbidden

~~and~~ (if allowed) and explained why.

The tray should be checked before being taken to patient to make sure that substance is not included.

If possible the patient should be allowed a substitute

(3) Marks.
Total 100 Marks.
95 .. marks adjusted to percentage