THE DIGESTIVE SYSTEM – NUTRITION

Section A

Before Reading

1. Enumerate as many words connected to the digestive system as you can:

2. Discuss the following:

- What task does the digestive system perform?
- What are proteins and fats?
- What do you understand by digestion?

Section B

Reading Comprehension

3. Read the text below and see if your predictions in ex. 2 were correct:

The digestive system performs the essential task of **breaking up** food into its chemical building units; **otherwise** food cannot be absorbed through the intestinal wall and pass into the blood and lymph of the body. **Foodstuff** must first be broken down into their basic molecular units – the "**bricks**" – and from these bricks the body must build up its tissues and its own substances.

Digestion is the chemical separation of the complex molecules of food into the simple one that can be absorbed. Next comes assimilation, in which these simple molecules are recombined into new and more complex molecules – molecules that can form the body of an athlete who can run a mile in less than four minutes, or the brain of Shakespeare capable of fashioning an **immortal** Hamlet. The proteins of the hen's embryo, digested and then assimilated, are transformed into the cells of a brain capable of human feeling and thought. Yesterday a plant in the field, today food on the table, tomorrow human energy – this is possible **due to** digestion.

Carbohydrates, proteins and fats are the three basic foodstuff. The carbohydrates are sources of energy, providing fuel for the body machine. This is the chemical term for the **bulk** of our food: bread. flour, cereals, potatoes, sugar. The most common carbohydrate is glucose or fructose. This is the sugar that plants compose out of air and water and water energy. More complex carbohydrates form the starches. Proteins are the basic material for building up protoplasm. the material of living substance. Chemically proteins are formidable chains of amino acids. There are more than one hundred amino acids known to occur in nature, but only about twenty-three of these join in forming protein chains and twenty are important for human proteins. Fats are compounds of one molecule of glycerol and three molecules of fatty acids. The fatty acids consist of long row of atoms, so that the **breakdown** of the molecule releases the considerable amount of energy contained in the bonds between atoms. Thus, the body can use fat as a kind of high octane fuel. Burning slowly but intensely, the fats vield more than double the energy of equal weights of carbohydrates and proteins.

Fat digestion in the intestine begins in the duodenum. Here the bile secreted by the liver flows into the intestinal tube and transforms the fat into an emulsion by dispersing it into microscopic **droplets** conferring the aspect of milky fluid. After the fat inside the duodenum is dispersed, the enzymes from the pancreas and the intestinal glands start the chemical digestion. The drops of emulsified fat, broken down into glycerol and the fatty acids, are then apparently picked up by the thousands of lymph channels in the intestinal villus, and reach the lymphatic tubes.

Fred Kahn, The Human Body, 1965

to break up, broke up, broken up [b r e i k a p, b r o u k a p, b r o u k \ni n a p] = a separa, a desface otherwise [a $\Theta \ni$ r w a i z] = altfel foodstuff [f u: d s t a f] = alimente brick [b r i k] = cărămidă (fig.) immortal [i m o r t \ni l] = nemuritor due to [d i u t u] = datorită bulk [b a l k] = cantitate, volum starch [s t a: r t*f*] = amidon breakdown [b r e i k d a u n] = defalcare, degradare to yield [i: l d] = a da, a produce droplet [d r o p l i t] = picătură

4. Try to give your own definition of the digestive system. Work in pairs. Compare your definition with the ones of other pairs and decide which is the most appropriate.

5. Though not specialists yet, you can understand most of the specialized medical terms. Can you explain why?

Section C

Vocabulary Practice

6. Work in groups. Make a list of medical terms from the text. Decide which are general medical terms and which are specialized medical terms:

GENERAL MEDICAL TERMS	SPECILIZED MEDICAL TERMS

7. Create your own sentences using your favourite words from exercise 5. Work in pairs.

Section D Grammar Review and Practice

8. Use the verb in brackets in the correct form:

- 1. If my sister _____(to go) to Cluj-Napoca, she will have a breast check-up as well.
- 2. If I _____ (to know) what to do, I would have done it.
- 3. What ______the patient's relatives ______(to do) if they had found out the truth about his state?
- 4. Jenny's grandmother _____ (not be able) to read if she lost her glasses.
- 5. June _____ (to pass) the Biochemistry examination if she studies a lot.
- 6. If I _____ (to be) a doctor, I would spend most of my time in a hospital.
- 7. The surgeon hoped that she would understand the situation if he _____(to explain) the situation to her.
- 8. If the student _____ (to understand) the subject discussed, he wouldn't have had so much trouble studying for the examination.
- 9. What would you do if you _____ (to be) in the position of saving someone's life?
- 10. If only she _____(to tell) about the pills, we could have saved her.

9. Put *if* or *unless* in the following sentences:

- 1. What would Michael do his hand got stuck in the door?
- 2. their watch had been slow, they wouldn't have lost the train.
- 3. I will get pneumonia I do not change my wet clothes.

- 4. she graduates the Faculty of Dentistry, she will not be a dentist.
- 5. That nurse wouldn't have believed that she had seen it with her eyes.

10. Role-play a conversation between you and your best friend. Use all types of Conditional sentences to ask and answer questions about the medical specialty you would like to practice. Give reasons for your choice.