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THE VISCERA

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ABSTRACT:

This article explains the structure, functions, and interactions of the internal organs of the human body. The article provides a detailed overview of the anatomy and physiology of the main internal organs, such as the heart, lungs, liver, kidneys, and gastrointestinal system. It also discusses factors that promote healthy organ function and problems associated with diseases. The article aims to help readers better understand the internal organ system and be useful in the practice of medicine, biology, and healthy living.

Introduction: The human body consists of complex and interconnected systems, and its vital activity directly depends on the normal functioning of internal organs. Internal organs, including the heart, lungs, liver, kidneys, gastrointestinal system, and other vital organs, provide the body's vital processes. They not only perform functions such as blood circulation, respiration, digestion of nutrients, and excretion of toxins, but also play an important role in maintaining hormonal balance, supporting the immune system, and stabilizing the body's internal environment. A thorough study of the anatomy and physiology of internal organs is of great importance not only for the medical and biological sciences, but also for the formation of a healthy lifestyle and the prevention of diseases. Each organ has its own specific functions, and the integrity of the body is ensured by their synchronous work with each other. For

example, the heart and blood vessel system delivers oxygen and nutrients to the entire body, the liver regulates metabolic processes and neutralizes toxins, and the kidneys maintain fluid and electrolyte balance.Therefore, a thorough study of the structure, functions, and interrelationships of internal organs helps students better understand the complex systems of the human body. This article aims to review the main anatomical and physical characteristics of the internal organs, the factors that ensure their healthy functioning, and the problems associated with them.

Main part: 1. Heart and circulatory system The heart is the vital center of the human body, ensuring the circulation of blood throughout the body. The four chambers of the heart - the right and left atria and the right and left ventricles - contract and expand synchronously, which delivers oxygen-rich blood and nutrients to the tissues. The arteries release blood from the heart, and the veins return it to the heart. Capillaries, on the other hand, carry out the exchange of oxygen, nutrients and metabolic waste. The circulatory system, together with the heart, supports the immune system and maintains the internal environment of the body. 2. Respiratory system The lungs and airways allow oxygen to enter the blood and carbon dioxide to be expelled. The breathing process consists of two stages: external breathing (gas exchange with air) and internal breathing (gas exchange with blood in tissues). Oxygen is absorbed into the blood through capillaries on the surface of the alveoli, while carbondioxide is released. The respiratory system is not only responsible for providing oxygen for cells to produce energy, but also plays an important role in maintaining the body's acid-base balance. 3. Gastrointestinal system The stomach and intestines ensure the digestion and absorption of nutrients. The stomach breaks down protein with the help of pepsin and hydrochloric acid, while fats and carbohydrates are broken down into easily absorbable forms by enzymes in the intestines. The intestinal microflora is also important in the digestion of nutrients, supporting the immune system, and metabolic processes. In addition, the peristaltic movements of the intestines ensure the even distribution of food throughout the body. 4. Liver and metabolism The liver is the center of metabolism, processing substances from food and neutralizing toxins. It stores glucose reserves, maintains a stable level of glucose in the blood through gluconeogenesis, and also regulates fat and protein metabolism. The liver also has functions such as storing hormones and vitamins, filtering blood, and providing hemostasis. Liver dysfunction in any organism can cause problems in metabolic processes. 5. Kidneys and fluid-electrolyte balance The kidneys maintain the body's fluid-electrolyte balance by filtering the blood, removing toxins, and producing urine. They also produce renin, which regulates blood pressure, erythropoietin, which stimulates the production of red blood cells, and antidiuretic

hormones, which regulate fluid balance. The kidneys control the amount of ions in the body, such as sodium, potassium and chloride, which is very important for heart and muscle function. 6. Endocrine system and hormonal control The endocrine system also plays an important role in regulating the functioning of internal organs. Hormones control metabolic processes in the body, ensure growth and development, control the functioning of the reproductive system, and help adapt to stress. For example, hormones produced by the liver and kidneys synchronize the activity of other organs, ensuring the stable functioning of the body. 7. Interdependence between organs Internal organs work in a complex relationship with each other. The heart and blood vessel system delivers oxygen and nutrients, the lungs provide oxygen, the gastrointestinal system absorbs nutrients, and the liver regulates metabolism. The kidneys and the endocrine system coordinate the functioning of the organs. This synchronized functioning helps maintain the internal environment of the body and prevent the development of diseases

Conclusion: The human body consists of a complex and interconnected system of internal organs, and its healthy functioning directly depends on the proper functioning of each organ. Improves the heart and blood vessel system, provides payment services and self-help tools, practically increases the process of additional breathing, the gastrointestinal system digests and maintains its own substances, controls liver metabolism, and purchases maintain fluid and electro balance. At the same time, the endocrine system synchronizes the functioning of organs, ensuring the stable functioning of the body. The interdependence of internal organs and the vital functions of each of them are crucial to human health and optimal functioning of the body. Their in-depth study is important not only for the fields of medicine and biology, but also for the prevention of diseases, the formation of a healthy lifestyle, and the support of the body's normal functions. Therefore, improving and caring for the internal organ system is one of the main factors for human life and health.

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