The lymphatic system

" In an essay of approximately 500 words, define and discuss the function and importance of the human body's lymphatic system." The lymphatic system is a complex network of vessels, ducts and capillaries, which run through out the body. There are many ‘ components' in the lymphatic system, including; lymph fluid, lymphatic vessels, the lymphatic duct, lymph nodes, lacteals and the spleen. The lymphatic system and it's importance were not recognised until the 1960's. The lymphatic system has 3 main importance's and functions. The lymphatic system plays a large part in the immunity of the human body, It aids in resisting the spread of disease. The system does this by identifying, removing and destroying toxic substances. Another primary function of the lymphatic system is the transportation of digested fats away from the intestine to the bloodstream. The lymphatic system transports a fluid known as lymph. Lymph consists of a diluted blood plasma and a large number of white blood cells. The majority of the white blood cells are lymphocytes. Lymphocytes are manufactured by bone marrow. Lymph may also contain a small amount of red blood cells. Lymph is transported around the human body travelling from the blood stream through lymphatic vessels. Passing through ‘ glands' known a lymph nodes. As lymph travels through the lymphatic vessels lymphocytes are released to attack foreign bodies and toxic substances found in the system. Lymph nodes also assist in the attack of foreign bodies. Lymph nodes are situated at regular intervals throughout the lymphatic system and are pocket-like in structure. The nodes contain a number of Leukocytes, also known as white blood cells. Nodes also produce phagocytes. Leukocytes and phagocytes destroy poisonous substances. Once lymph has passed through the vessels it enter the lymphatic capillaries. These capillaries are similar to very thin

veins and carry the lymph to the main lymph duct. Lymphatic capillaries collect digested fat in the intestine and carry it away from the tissue. The main organ that is included in the lymphatic system, is the spleen. The spleen is related to the circulatory system. It plays a part in the human body's immune system and works with and as part of the lymphatic system to destroy old red blood cells which may cause a danger to the body. It is only very recently that the various functions of the spleen have been discovered. The spleen has various other functions that are not connected to the function of the lymphatic system; these include, the production of opsonins, properdin, and tuftsin and the creation and storage of red blood cells There several conditions that can affect the lymphatic system these include; inflammation of the lymphatic, tuberculosis of the lymph nodes, malignancies and elephantiasis. We can therefore see that the lymphatic system plays a very important role in protecting the body from toxins, poisonous substances and illness.