

The role for maintenance of healthy body function

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The role for maintenance of healthy body function The general function of the lymphatic system is the protection of the human body by fighting foreign bodies as the role of the said system. One of the important components of the said system is the lymph node wherein a mass of lymphocytes in the nodule can be found. The lymphocytes are the main weapon of immunity and constituting 20-30 percent of the white blood cells. It can be considered that the specific function of the lymphocytes is a localized version of the function of the whole lymphatic system. For that matter, the role of a single lymphocyte to contribute to the role of the lymph node can be compared to the role of other component organs of the lymphatic system such as tonsils, spleen and thymus in contributing to the effective functioning of the whole system. One of the said organs which is very similar to the role of the lymph node is the spleen, which functions in protecting the internal organs of the body such as liver (Pepper and Skobe, 2003; U. S. National Cancer Institute's Surveillance, Epidemiology and End Results (SEER), 2002).

Describe a scenario where an infection would start at the innate level but eventually require an adaptive defense.

The functions of the immune system is based on two interacting mechanism namely the innate and the adaptive immunity. The innate immunity is the defense of the immune system that is non-specific. For example in case of cancer, the pathogens than can cause the disease can be fought against by the innate mechanism but if the said action failed, the help of specialized cells are needed. This mechanism is referred to as the adaptive defense which can be described as antigen specific. An example is for breast cancer, the immune system specific for the area where the cancer tumor is located, such as the breast area, can act on the pathogen. It can also be considered <https://assignbuster.com/the-role-for-maintenance-of-healthy-body-function/>

that the said action is the one enhanced to help improve the condition or cure the patient for other diseases aside from cancer (DeNardo and Coussens, 2007).

3. Age-Related Changes in the Heart

thickening of the walls, slowing down of heart rate, decline of maximum heart rate, reduction of efficiency of pumping

Source: McCoy, 2008

4. Connection in Cardiovascular and Neurologic Systems

Functions of the different parts and organ systems of the body can be considered in synergy and interrelated. In the case of the neurologic and cardiovascular systems, there are different examples that can be cited. One example is in terms of the stress being experienced in neurologic functioning for example emotional stress that can induce heart attack. In the study of cardiac damage resulting to sudden death, included in the main causes pointed out are stress and nervous system stimulation and the anatomic connection between the nervous system and the heart and lungs (Samuels, 1993).

References

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