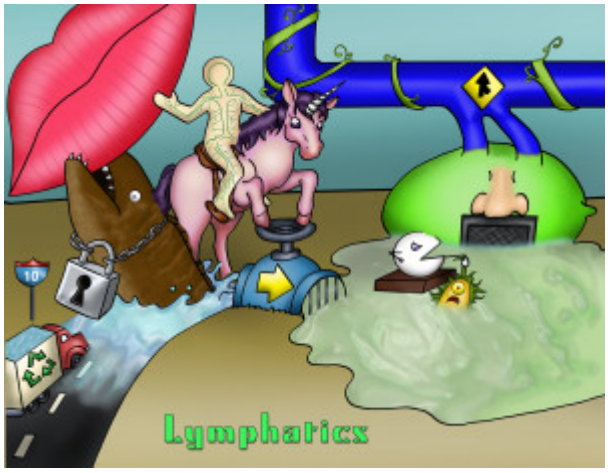
Lymphatics

The lymphatic system is a part of the circulatory system that is involved with both circulatory processes and immune system processes. While the majority of the plasma that goes through capillary filtration will re-enter the bloodstream directly, about 10% of it is left behind in tissue as interstitial fluid. The lymph system recycles this 10% of interstitial fluid and transports it back into the blood. Additionally, it helps transport large lipids through lacteals, because large lipids are too big to travel through the capillaries into the blood. Lymph travels unidirectionally because its valves are unidirectional and prevent backflow. The lymph is full of white blood cells that monitor it for pathogens. At the lymph nodes, antigen-presenting cells stimulate the adaptive immune response. The lymph nodes filter the lymph, which enters into the lymph vessels and lymphatic duct. From the lymphatic duct it merges with veins, allowing lost plasma to travel back to the blood.



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Characteristics

Recycles 10% of Interstitial Fluid
Recycling-truck on Interstate-10 with Fluid
While majority of the plasma that goes through capillary filtration will re-enter the bloodstream directly, about 10% of it is left behind in tissue as interstitial fluid. The lymph system recycles this 10% interstitial fluid and transports it back into the blood.

Transport Large Lipids from Lacteals
Large Lips eaten by Locked-eel
The lymph system also helps transport large lipids from the small intestine that cannot be absorbed through cardiovascular capillaries. Large lipids are absorbed by the lacteals, lymphatic capillaries, and are transported in lymph.

Unidirectional Valves
Unicorn on One-way Valve
Lymph flows unidirectionally due to the unidirectional valves designed to prevent backflow.

Lymph Nodes Filter Lymph
Lime-nose filters Lime-juice
The lymph nodes are filtration sites for lymph. Additionally, the lymph nodes are one of the main locations of the immune system response to pathogens.

WBCs Monitor Lymph for Pathogens
White-mac-man Monitors Lime-juice for Pathogens
White blood cells monitor lymph at the lymph nodes for pathogens. Antigen-presenting cells trigger the adaptive immune response at lymph nodes if a pathogen is encountered.

Merge with Veins
Merging-sign going to Vine-vessel
Lymph vessels drain into lymph ducts, which merge with veins and recycle plasma into the bloodstream.

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