



Your Lymphatic System the Unsung Hero

by Ananda Russ

In the previous Living Well Magazine we looked at how to boost and build your immune system for the oncoming winter. This time we are looking at why is it important to have a healthy lymph system.

What is lymph?

Lymph is a water or milky body fluid containing lymphocytes, proteins, and fats. Lymph accumulates outside the blood vessels in the intercellular spaces of body tissues, and is collected by the vessels of the lymphatic system. This system filters the fluid and eventually returns it to the bloodstream. Lymph plays an important role in the immune system as well as in absorbing fats from the intestine.

What is the lymphatic system?

It is a system of vessels (lymphatic vessels) that drains lymph from tissues all over the body back into the bloodstream. The lymphatic system is part of the immune system and has a major function in defending the body against infection and cancer. This system also plays a part in the absorption of fats from the intestine.

All body tissues are bathed in lymph, a watery fluid derived from the bloodstream.

Much of this fluid is returned to the bloodstream through the walls of the capillaries, but the remainder is transported to the heart through the lymphatic system.

Lymph is moved along the lymphatic vessels during physical activity, as muscle contractions compress the vessels; valves inside the vessels ensure that the lymph flows in the correct direction. Situated on the lymphatic vessels are lymph nodes, through which the lymph passes. These nodes filter the lymph and trap infectious micro-organisms or other foreign bodies.

The nodes contain many lymphocytes, white blood cells that can neutralize or destroy invading bacteria and viruses. The lymphatic system also includes the spleen and the thymus, which produce lymphocytes.

What is a lymph node?

This is a small organ lying along the course of a lymphatic vessel; commonly but incorrectly called a lymph gland. Lymph nodes vary considerably in size, from microscopic to about 2.5cm in diameter.

A lymph node consists of a thin, fibrous outer capsule and an inner mass of lymphoid tissue. Penetrating the capsule are several small lymphatic vessels (which carry lymph into the node). Each node contains sinuses (spaces), in which the lymph is filtered.

The flow of the lymph slows as it moves through narrow channels in the sinuses; this reduction in flow allows macrophages (white blood cells that engulf and destroy foreign and dead material) time to filter micro-organisms from the lymph. Germinal centres in the lymph node release white blood cells called lymphocytes, which also help to fight infection. A single, larger vessel carries lymph out of the node.

What is a lymphocyte?

It is any one of a group of white blood cells that are of crucial importance to the immune system. There are 2 principal types of lymphocyte: B- and T-lymphocytes.

B-lymphocytes produce immunoglobulins or antibodies, which attach themselves to antigens (proteins) on the surfaces of bacteria. This starts a process leading to the destruction of the bacteria.

The T-lymphocytes comprise 3 main groups of cells: killer cells, helper cells, and suppressor cells. The killer T-lymphocytes attach to abnormal cells (e.g. tumor cells, cells that have been invaded by viruses, and those in transplanted tissue) and



release chemicals called lymphokines, which help to destroy the abnormal cells. Helper T-cells enhance the activities of the killer T-cells and the B-cells, and also control other aspects of the immune response. Suppressor T-cells act to “switch off” the immune response. Some lymphocytes do not participate directly in immune responses, but serve as a memory bank for antigens that have been encountered.

The Spleen

This is an organ that removes worn-out and defective red blood cells from the circulation and helps to fight infection by producing some of the antibodies, lymphocytes, and phagocytes that destroy invading micro-organisms. The spleen is a fist-sized, spongy organ in the upper left abdomen behind the lower ribs.

The spleen enlarges in many diseases. These include infections such as malaria and infectious mononucleosis; blood disorders such as leukemia, thalassaemia, and sickle cell anaemia; and tumors such as lymphomas. The spleen may be ruptured by a severe blow to the abdomen.

The Thymus

The thymus is a gland that forms part of the immune system. The thymus lies behind the sternum and consists of 2 lobes that join in front of the trachea. Each lobe is made of lymphoid tissue consisting of lymphocytes, epithelium, and fat. The thymus conditions lymphocytes to become T-cells. It plays a part in the immune response until puberty.

Helping the lymphatic system:

- Start by drinking plenty of water. Making sure the body is well hydrated will help the lymphatic system do its job of flushing toxins and waste from the body. Try to drink 8 to 10 glasses of pure water per day.
- Bouncing on a rebounder (mini-trampoline) for 5 to 15 minutes per day can help drain the lymphatic system. Exercise is vitally important in ensuring a healthy lymph flow in your body.
- Brushing your skin is also helpful. This can stimulate the lymphatic system to discharge toxins, as the system flows close to the surface of your skin.
- Having regular lymphatic draining massages helps to ensure a good flow of the lymph and assists the body in discharging the toxins from the body.

AIM Herbal Release™ is an excellent supplement to assist in lymph health.

Herbal reinforcements

As with every body system, our lymphatic system needs nutritional support to continue to function effectively. In today's highly toxic environment, our lymphatic system is taxed substantially as it works to rid the body of the many pathogens and toxins that bombard our bodies each day. AIM Herbal Release® helps our lymphatic system rise to the challenge by providing 11 herbs that support the many functions and nutritional needs of this vital system.

Most important, many of the herbs help to cleanse the lymphatic system. For example, dandelion root and echinacea found in AIM Herbal Release® are classified as lymphatics—they cleanse the lymphatic system. Boldo helps to expel intestinal worms and provides gall bladder support.

Sarsaparilla has been known as a blood purifier, and is especially known for its ability to rid the body of endotoxins (toxins in bacteria) which are very damaging if not removed.

Licorice root not only helps in the production of interferon, a protein that helps regulate the immune system, but supports the liver as well.

When combined, the 11 herbs in AIM Herbal Release® boost your lymphatic system, which in turn boosts your immune system. With your lymphatic and immune system working at top capacity, you will enjoy greater vitality and greater resistance to the “bugs.”

- Maintains Immuno Health
- Maintains a healthy lymphatic system
- Cleanses the lymphatic system
- Functions as an antiparasitic

