

## Simple Ways to Boost Your Immune System

The immune system has two major parts:

1. **Innate Immune System** – This part of the immune system mounts the initial response to infections, particularly those infections that are new to us. Lymphocyte or Natural Killer (NK) cells, monocytes, and macrophages are the major players in the innate immune system. This system is particularly strong in infants and young children. Its strength wanes as we age.
2. **Adaptive Immune System** - This part of the immune system responds to immunizations and protects us against future infections. It also has a major role late in infections. This part of the immune response tends to dominate as we age.

NK cells produce Type II interferon. Interferon is a cytokine that is used by the body to fight off viral infections. If the innate immune system response is strong and large amounts of interferon is produced, then mild infections usually follow. If the innate immune response is relatively weak, then the late-phase immune response is often over-blown and massive inflammation can take place, resulting in severe disease.

The following have been shown to stimulate the innate immune system and reduce the severity of infections:

- Go to bed by 9 p.m. If you have trouble sleeping, avoid screen time after 5 p.m.
- Take a walk in the woods and expose yourself to pine and or fir trees as often as possible at least weekly. Exposure to the essential oils in fir, pine, and cypress increase NK cell activity, and a walk in the woods reduces adrenaline. Adrenaline reduces NK cell activity.
- Take Vitamin D 1000 IU on any day that you do not get 20 -30 minutes of sunshine. Recall that you do not get vitamin D from the sun if your shadow is longer than your height.
- Exercise 30-90 minutes daily.
- Take a hot bath (102 degrees Fahrenheit) for 15-20 minutes followed by a quick rinse with a cold shower. A sauna will work as well as a bath.
- Wear a mask and wash your hands.
- Avoid or lose weight around your waist. Fat stored around the waist causes inflammation and is associated with diabetes, hypertension, and coronary artery disease.

**IMPORTANT NOTE:** This information in this document is provided for your education and enrichment and should not be used for diagnosing and treating a health problem or issue. It should not be relied upon for personal diagnosis, treatment, or any other medical purpose. This list does not constitute an endorsement of the information contained in the resources. If you believe that a particular diagnosis or therapy applies to your situation, please contact your doctor or healthcare provider to discuss it further.