



CENTER FOR IMMUNE RESEARCH

Improving Your Immune Health: Ways to Strengthen Your Immune System:

At a time when people are exposed to more than 200 different cold viruses, several strains of the flu, and hosts of allergens, having a healthy immune system is more important than ever before. Still, modern life constantly challenges immune function, which is why public health officials offer this important advice: don't take your immune system for granted.

What can you do to ensure that your immune system is healthy and ready to shield your body from infection? Here is what you need to know:

1. Find Ways to Relax

Because stress produces many different effects on the endocrine systems, including the well-known "fight or flight" response, scientists hypothesize that your immune system may become weakened after frequent activation of the autonomic nervous system in the case of chronic stresses. There are a number of techniques to help you relax, such as deep breathing or yoga, which can reduce mental and physical stress, tension and anxiety, promote good sleep, lower blood pressure and slow down your heart rate. Listening to music also reduces stress and relieves anxiety, as does relaxing in a hot bath.

2. Sleep Matters.

Besides leaving you feeling sluggish, irritable, and forgetful, not getting enough sleep can reduce the effectiveness of your immune system by up to 50 percent. This is because sleep time is when the body and immune system do most of its repairs and rejuvenation. Strive to get 7-8 hours of sleep each night. Remember rest and relaxation go hand in hand.

3. Feed Your Immune System Well.

According to a number of studies, not getting enough nutrients in the diet can weaken the immune system. That is why nutritionists recommend a -well-balanced diet that includes plenty of fruit, vegetables, low-fat dairy products and whole grains. Of special importance are foods that are rich in antioxidants (like vitamins C, E, beta carotene and lycopene), omega-3 fatty acids, and folate. Antioxidants fight and neutralize free radicals, which are molecules that damage cells and cause heart disease, cancer and premature aging. Omega-3 fatty acids (a polyunsaturated fat) have anti-inflammatory,

cardiovascular-enhancing and immune-regulating properties while folate prevents age-related cognitive decline, damage to blood vessels and brain cells.

4. Get Physically Active

Being physically active -- which means walking, climbing stairs, dancing, and other activity that involves movement -- strengthens your immune system, cardiovascular system, heart, muscles and bones. Being active also stimulates the release of endorphins, improves mental functioning, concentration/attention and cognitive performance, and lowers cholesterol, blood pressure, cortisol and other stress hormones.

5. Lose Weight in a Healthy Way

If you are overweight, losing weight is a healthy thing to do. But research finds that a rapid weight loss of more than 2 pounds a week can have negative immune effects. According to the Federal Trade Commission (FTC), successful weight loss is typically losing about 10 percent of your body weight in six months. Towards this end, experts recommend losing about $\frac{3}{4}$ to 2 pounds per week and not more than 3 pounds per week (weight loss may be faster at the start of a program). When it comes to successful weight loss and weight management, steady and slow is the way to go.

6. Wash Your Hands

One of the best ways to prevent the spread of microorganisms that cause infections is good hand hygiene. Washing your hands with soap and water several times per day and always before you eat greatly reduces your exposure to bacteria and viruses. In case you cannot wash with soap and water when you are away from home, carry some alcohol-based hand wipes with you to control microbial exposure and transmission.

7. Don't Get Too Much Sun

Unprotected sun exposure is linked with immune suppression. That is why cold sores often appear following time spent in the sun. To protect your immune system, always wear a sunscreen of SPF 15 or higher.

8. Take Advantage of Immune-Supporting Supplementation

A balanced diet containing fruits, vegetables and whole grains is important to keep the immune system functioning effectively. But many Americans have nutritionally deficient diets, which is why it is now possible to take supplements containing herbs that have immunoactive properties. This means the herbs work in combination to naturally increase the body's production of interferon, the protein that triggers the body's immune system to mount an immune response.

Some of the botanicals with these immune-boosting properties are pumpkin seed extract, plantago seed, safflower flower, and Japanese honeysuckle flower buds.

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