10 Immune System Busters & Boosters

Are you secretly sabotaging your immune system? Some common lifestyle habits can have a detrimental effect on your ability to fight off infections like colds and flu – as well as your overall resistance to chronic illness.

If so, you need a lifestyle tune-up. Replacing bad health habits with good ones can improve your immune system health. Check the list of immune system boosters and busters to see where you’re doing well – and where you could use some improvement.

5 Immune System Busters

1. Lack of exercise: Sitting at your desk all day can not only make you feel sluggish, it can leave your immune system sluggish, too. Studies show that regular, moderate exercise – like a daily 30 minute walk -- increases the level of leukocytes, an immune system cell that fights infection. When you’re a non-exerciser, your risk of infections -- such as colds -- increase compared to those who exercise.

Being inactive can weaken your immune system indirectly, too. A sedentary lifestyle can interfere with sleep quality at night and can lead to obesity and other problems that increase your risk of illness.

2. Being overweight: Carrying extra weight puts you at risk of developing diseases such as diabetes, cancer, and heart disease. Part of the reason may lie in how excess fat cells in your body affect your immune system.

A high number of fat cells trigger the release of pro-inflammatory chemicals in the body, leading to chronic inflammation. When the inflammation is ongoing, healthy tissues get damaged.

Animal studies also show that being overweight or obese can impair the immune system. For example, studies have shown that obese and overweight mice make fewer antibodies after receiving common vaccinations. Antibodies are a measured immune response to vaccination.

3. Eating foods high in sugar and fat: Consuming too much sugar suppresses immune system cells responsible for attacking bacteria. Even consuming just 75 to 100 grams of a sugar solution (about the same as in two 12-ounce sodas) reduces the ability of white blood cells to overpower and destroy bacteria. This effect is seen for at least a few hours after consuming a sugary drink.

4. Experiencing constant stress: Everyone has some stress in their lives. And short-term stress may actually boost the immune system – the body produces more cortisol to make “fight or flight” possible. But chronic stress has the opposite effect. It makes you more vulnerable to illness, from colds to serious diseases. Chronic stress exposes your body to a steady cascade of the stress hormones cortisol and adrenaline, which suppress the immune system.

5. Being socially isolated: Having strong relationships and a good social network is important to your physical health as well as your mental health – and specifically your immune system. Several studies
support the idea that people who feel connected to friends – whether it’s a few close friends or a large group – have stronger immunity than those who feel alone. In one study, freshmen who were lonely had a weaker immune response to a flu vaccine than those who felt connected to others. Another recent study found that isolation changed the immune system on a cellular level: Being lonely affected the way some genes that controlled the immune system were expressed.

5 Immune System Boosters

1. Regular exercise: If you want to boost your immune system, get active. Getting your heart rate up for just 20 minutes just three times a week is associated with increased immune function, and a brisk walk five days a week can help reduce your risk of catching a cold. Regular exercise increases the level of leukocytes, an immune system cell that fights infection. Exercise also is associated with increased release of endorphins, natural hormones that pump up your sense of well being and improve sleep quality, both of which have positive effects on your immune system.

2. Get more antioxidants in your diet: A diet rich in antioxidant vitamins and nutrients can boost immunity to help fight infection. Your body produces free radicals -- molecules that can damage cells. Antioxidants help neutralize free radicals so they can’t do any damage. Researchers believe that when the balance between free radicals and antioxidants is upset, it can contribute to the risk of developing cancer and heart disease, as well as age-related diseases.

   Top antioxidants include vitamins C and E, plus beta-carotene and zinc. To get enough of these antioxidants in your diet, experts recommend eating an abundance of brightly colored fruits and vegetables, including berries, citrus fruits, kiwi, apples, red grapes, kale, onions, spinach, sweet potatoes, and carrots.

   Other immune-boosting foods include fresh garlic, which has claims of antiviral and antibacterial properties, and old-fashioned chicken soup. A study showed that if you do come down with a cold or the flu, a bowl of steaming chicken soup can boost immunity and help you get well faster.

   In addition, mushroom varieties such as reichi, maitake, and shiitake may have some influence on immune function.

3. Adequate sleep: Fatigue increases your susceptibility to illness – you may have noticed you’re more likely to catch a cold or other infection when you’re not getting enough sleep. A lab experiment bears this out: When students at the University of Chicago were limited to only four hours of sleep a night for six nights and then given a flu vaccine, their immune systems produced only half the normal number of antibodies. Like stress, insomnia can cause a rise in inflammation in the body – possibly because lack of sleep also leads to an increase in the stress hormone cortisol. Although researchers aren’t exactly sure how sleep boosts the immune system, it’s clear that getting adequate amounts – usually 7 to 9 hours for an adult – is essential to good health.

4. Practice relaxation techniques: If chronic stress suppresses the immune system, then learning techniques to reduce stress should help return your immune system to health – and maybe even give it
an additional boost. Reducing stress lowers levels of cortisol. It also helps you sleep better, which improves immune function. And some studies show that people who meditate regularly may be able to increase their immune system response. In one experiment, people who meditated over an 8-week period produced more antibodies to a flu vaccine than people who didn’t meditate. And they still showed an increased immune system response four months later.

5. Laugh: Comedy is good for you. Laughing decreases the levels of stress hormones in the body while increasing a type of white blood cell that fights infection. In fact, even just anticipating a funny event can have a positive effect on your immune system. In one study, a group of men who were told three days in advance that they were going to watch a funny video saw levels of stress hormones drop while levels of endorphins and growth hormones rose. Both endorphins and growth hormones benefit the immune system.