

Fall Fitness Challenge 2013



Exercise Boosts Your Immune System Adapted from: ACE Fit Facts

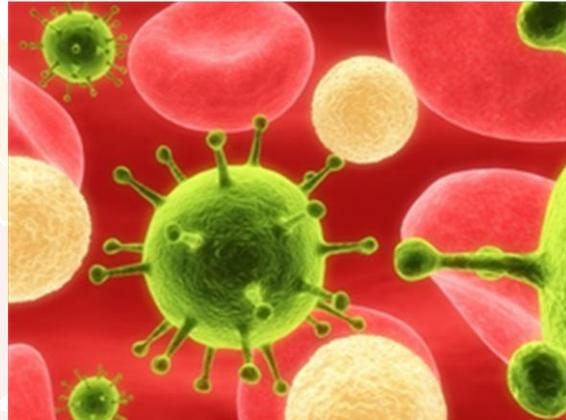
Sir William Osler, the famous Canadian medical doctor, once quipped, “There’s only one way to treat the common cold—with contempt.” The average adult has two to three respiratory infections each year. That number jumps to six or seven for young children.

Whether or not you get sick with a cold after being exposed to a virus depends on the many factors that affect your immune system. Old age, cigarette smoking, mental stress, poor nutrition and lack of sleep have all been associated with impaired immune function and increased risk of infection.

Keeping the Immune System in Good Shape

Research has established a link between moderate, regular exercise and a strong immune system. Early studies reported that recreational exercisers reported fewer colds once they began running. Moderate exercise has been linked to a positive immune system response and a temporary boost in the production of macrophages, the cells that attack bacteria. It is believed that regular, consistent exercise can lead to substantial benefits in immune system health over the long term.

More recent studies have shown that there are physiological changes in the immune system as a response to exercise. During moderate exercise, immune cells circulate through the body more quickly and are better able to kill bacteria and viruses. After exercise ends, the immune system generally returns to normal within a few hours,



but consistent, regular exercise seems to make these changes a bit more long-lasting.

On the other hand, there is also evidence that too much intense exercise can reduce immunity. Research shows that more than 90 minutes of high-intensity endurance exercise can make athletes susceptible to illness for up to 72 hours after the exercise session. This is important information for those who compete in longer events such as marathons or triathlons. Intense exercise seems to cause a temporary decrease in immune system function. During intense physical exertion, the body produces certain hormones that temporarily lower immunity. Cortisol and adrenaline, known as the stress hormones, raise blood pressure and cholesterol levels and suppress the immune system.



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Should you exercise when sick?

Fitness enthusiasts and endurance athletes alike are often uncertain of whether they should exercise or rest when sick. Most sports-medicine experts in this area recommend that if you have symptoms of a common cold with no fever (that is, symptoms are above the neck), moderate exercise such as walking is probably safe. Intensive exercise should be postponed until a few days after the symptoms have gone away. However, if there are symptoms or signs of the flu. Whether or not you get sick with a cold after being exposed to a virus depends on the many factors that affect your immune system. Old age, cigarette smoking, mental stress, poor nutrition and lack of sleep have all been associated with impaired immune function and increased risk of infection.

**Don't let the flu
BUG you this season!**



[On-site Flu Shots
coming in November.](#)

Staying in Shape to Exercise

For athletes who are training intensely for competition, the following guidelines can help reduce their odds of getting sick.

- **Eat a well-balanced diet**—The immune system depends on many vitamins and minerals for optimal function. However, at this time, there is no good data to support supplementation beyond 100% of the Recommended Dietary Allowances.
- **Avoid rapid weight loss**—Low-calorie diets, long-term fasting and rapid weight loss have been shown to impair immune function. Losing weight while training heavily is not good for the immune system.
- **Obtain adequate sleep**—Major sleep disruptions (getting three hours less than normal) have been linked to immune suppression.
- **Avoid overtraining and chronic fatigue**— Space vigorous workouts and race events as far apart as possible. Keep “within yourself” and don’t push beyond your ability to recover.

Get Your Free* Flu Shot

- Visit your doctor
- Visit select Convenience Care Clinics: [CVS Pharmacy](#), [Walgreens Healthcare Clinics only](#), [Target Pharmacy](#), [Safeway Pharmacy](#)
- Visit www.aetna.com or call the number on the back of your health plan ID card

