When patients have upper respiratory infections, they often ask their family doctors “How can I boost my immune system so I won’t get sick?” As a family doctor, I hear patients list various over-the-counter products and natural or health store items wondering if the promises advertised will work. Mega doses of vitamins, mushroom extracts, garlic, selenium, Echinacea and other herbs often top most lists in products that are touted to strengthen the immune response. Unfortunately, there is little to no actual evidence that these help prevent or cure upper respiratory infections. Some may, in fact, be harmful or interfere with other prescribed medications. Antibiotics are also often not helpful in viral illnesses unless some secondary complications such as otitis media (ear aches caused by bacterial infections) occur.

The concept of immune boosting itself poses problems. The immune system is complex and often responds in unexpected ways when confronted with a foreign invader such as a cold virus. Doctors often paradoxically need to give medications that actually DECREASE the immune response to adequately treat disease. One example of this is asthma. Susceptible individuals who get cold viruses (respiratory syncitial virus is a good example) have a cascade of events that in the end lead to excess inflammation and ultimately bronchospasm (constriction of airways) that is typical of an asthma attack. Doctors often respond by using either oral or inhaled steroids and other medications to decrease these symptoms. Another example of this is severe forms of infectious mononucleosis (mono) and cases of severe sinusitis. Both occasionally require therapy to reduce the body’s over reactive immune response (which is commonly called inflammation) with steroids and other medications.

So if “boosting” your immune system is not all that helpful, what else can be done to avoid or treat common colds? Certainly flu vaccine is a good starting point and should be considered every fall season, not just by high-risk individuals, but also for all. People should also wash their hands thoroughly and frequently and cover up when sneezing or coughing. Adequate sleep and stress reduction techniques to lessen anxiety and other psychological factors can play a role. Good nutritional intake is important to maintain health. Finally, a recent study showed some value in zinc supplements for treating cold symptoms although more research needs to be done to determine the right dose and preparation for this purpose.

Avoiding colds and flu is a goal we all want to achieve. Family Physicians can often help guide you in your quest to stay healthy and avoid unnecessary exposures.

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