

The Cause of Colds, Sore Throats, and Other Infectious Diseases

And what your body tries to do about it.

By
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What is the cause of colds, sore throats, and other infectious diseases? The generally believed answer is obvious: bacteria and viruses. This is what we were taught in our health classes in high school, what the newspapers and magazines say, and most likely, what our family doctor says. But is this the whole truth and nothing but the truth? Are people nothing more than walking potential incubators for bacteria and viruses? Is the main reason for "coming down" with an infection one or two "bugs" which attack, invade, and multiply? As we will see, it is not quite that simple.

The main reason that we get colds, sore throats, and other infectious diseases is the underlying state of our body. You have heard it called decreased resistance. Consider the following quote from Robbin's respected textbook on pathology: "Bacterial disease-producing potential is relative to the resistance of the host (our body). Man lives in a relatively delicate state of balance with his microbial environment. He is in constant contact with a wide range of bacteria, viruses, fungi, and indeed, all manner of microbiologic agents with whom he lives in a state of commensalism (mutual cooperation)." The author goes on to say that bacteria and viruses are present on all body surfaces and in every body opening (ears, nose, throat, etc.) at all times and that, under normal conditions, these organisms are harmless.

So bacteria and viruses *cannot* be considered the primary cause of infectious diseases. The primary cause is a change within the body which decreases the resistance and/or creates the conditions favorable for growth of such organisms. Therefore, in all honesty, we must look within ourselves for the cause of infection.

Now such an answer as "decreased resistance" or "more favorable conditions within the body for bacterial growth" are about as vague as you can get. In order to be able to resist an infection, we must know more. What exactly lowers our resistance? What exactly leads to creation of those conditions favorable for bacterial and viral growth?

Good health, including freedom from infections, is the expected and natural result of normal living. Normal living means eating the right foods in the right amounts; it means avoiding excess stress, getting sufficient exercise and rest. Basically, if we live abnormally in any regard, we may expect a departure from normal health. This is an inexorable law of nature; as sound as the law of gravity. Let's examine each of the aspects of normal living and see how departures from such will increase our chance of "coming down" with an infection.

What is the effect of food? As is well known, deficiencies of protein or of certain vitamins will compromise the resistance of the body. A severe protein deficiency will cause a reduction in

the level of bacteria-killing antibodies in the bloodstream. But true deficiency diseases such as beriberi from vitamin B1 deficiency, scurvy from vitamin C deficiency, and kwashiorkor from protein-calorie deficiency are quite rare in Western countries. If we were in Vietnam, such nutritional problems would be more common.

On the contrary, the food problem in the U.S. is one of over-nutrition, not under-nutrition. Both rich and poor people commonly eat excesses of calories, fat, protein, and refined carbohydrates. A large proportion of the population is seriously overweight. The major killer diseases in the U.S. have all been related to over-nutrition: heart disease and strokes from cholesterol, saturated fat, and calories; high blood pressure from salt and calories; diabetes mellitus (sugar diabetes) from calories; cholesterol gallstones from cholesterol and fat; cancer of the breast from fat; cancer of the large intestine from fat and cholesterol; cancer of the uterus from calories; cancer of the lungs from tobacco; liver disease from alcohol. About the only major killer in the U.S. that can't be related to over-consumption is accidents! It is important to discuss the relation of nutrition to infections in light of the epidemic of over-nutrition in this country.

History and scientific studies have shown many times that over-eating increases the incidence and severity of infectious diseases. For instance, in the 1830s in England, each jail had to tell the government every year exactly how much it had spent on each prisoner for food. It was found that the more food consumed, the greater likelihood for disease, including infections. In one concentration camp in World War II, almost 100% of "well-fed" German guards died of typhus while only 30% of "malnourished" Russian prisoners died. One doctor concluded that "resistance seemed highest in those who, though on an inadequate diet, had not yet reached the level of gross hunger and malnutrition." In a laboratory experiment, researchers infected mice with bacteria and then divided the mice into two groups; one group was allowed to follow its inner instinct and not eat, but the second group was force-fed. The result: increased death rate and shorter survival time in the fed mice."

We can hypothesize as to why over-eating often results in decreased resistance to infection. When excess food is eaten, there is a buildup of excess food material inside the blood vessels, and inside and surrounding every one of the millions of cells in the body. When this material accumulates in too great an amount, normal cellular function is compromised and bacteria and viruses are more able to thrive. It has been proposed that bacteria and viruses are nature's scavengers which aid the body in removing excess waste material.

Hand-in-hand with over-eating as a cause of infections is lack of exercise. Regular aerobic exercise helps circulate the blood more efficiently to the cells. This improves the supply of nutrients to the cells, and increases the drainage of wastes from

the cells. The result is improved cellular function resulting in increased resistance.

Stress, in the form of divorce, marriage, loss of job, change to different job, change in residence, etc., also can increase the chance of infection. During a period of stress, the adrenal glands secrete more of certain hormones which suppress the functioning of the body's defensive systems, thus allowing unchecked bacterial and viral growth. One study found that after acute stress, we are four times more likely to have a respiratory infection than if we had experienced no emotional shock.



Stress can increase the chance of infection.

Lack of rest is also a factor to consider. When the body gets too little rest, all of its functions are compromised. The elimination systems (liver, kidneys, etc.) are not able to do their full job of elimination of excess food materials so there is a build-up. This contributes to the cause of infection as discussed above. Also, lack of rest results in reduced ability to destroy bacteria and viruses.

Therefore, the cause of infection is multiple. Many factors including over-eating, stress, lack of enough exercise and rest can facilitate the development of infection. What does the body do once the bacteria and viruses have a toe-hold?

Clinically we observe that much of the body's energy during an infection is directed towards getting rid of the excess "garbage" that has built up. The body mounts a multi-spectrum defensive action to remove obstacles to normal functioning. One of the first symptoms of such activity is loss of appetite. When people fast while suffering from an infection, their defensive white blood cells become more effective in destroying bacteria. Fasting and lowered food intake also allow the body to break down and eliminate some of the material which has accumulated in and around the cells.

Another defensive action is a fever. As the body temperature rises, so does the amount of metabolic activity. At a higher level of metabolic activity, built-up material is removed at a faster rate. Scientists have speculated that bacteria and viruses find the environment much less hospitable when the body temperature is raised.

Vomiting and diarrhea are also beneficial defensive activities. When the bloodstream is over-loaded with excesses, the liver will pick up some of it and eliminate it in the bile. Often the bile will then be regurgitated into the stomach from where it will be

eliminated by vomiting. When the intestines are over-loaded with excesses, the body will sometimes mount a violent bout of diarrhea to rapidly eliminate the material.

Sneezing and coughing should also be seen as intelligent defensive actions by which the body eliminates material that is an obstacle to normal functioning. During a cold, sneezing and coughing are often vigorous.

The flow of mucus from the nose and sinuses is another route of elimination. When the blood is over-loaded, the cells lining the nose and sinuses will remove excess material and flush it out in the form of mucus. A normal amount of mucus is healthful, but when one has a cold the amount is manifoldly increased as a form of elimination.

It is unfortunate that many people regard the symptoms of defensive and eliminative activity as the disease itself. Aspirin is taken to reduce the fever, food is almost force-fed to bypass the lack of appetite, anti-histamines are taken to suppress the flow of mucus, medications are taken to suppress vomiting, diarrhea, and coughing. Such treatment is equivalent to the Allies in World War II bombing tanks and soldiers in the field below, only to discover that they were also Allies! Suppression of defensive activity keeps the body from removing the cause of the infection. The usual result is that following infections are more frequent and violent.

I do not wish to imply that the relationship between over-nutrition and infection is as scientifically proven as the relationship between over-nutrition and diabetes or heart disease. Yet we want to know all the available information so that we can do everything possible to avoid frequent infections. Clinically, it has been observed that the major causes of decreased resistance to bacteria and viruses in this country are over-eating, too little exercise, too much stress, and too little rest. And, clinically, we have observed that when people either cut way back on the amount they eat, or they fast when suffering from an infection, and when they rest at the same time, there is a swifter resolution of the problem. Also, when infections are dealt with in this way, future infections are of lesser severity. So even though all the mechanics of this problem are not understood, we would do well to act upon the information presented in this article about the relationship between infections and our life-style.

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