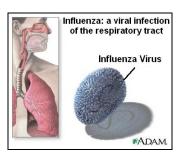


THE FLU: WHAT I DO WHEN INFLUENZA ATTACKS MY BODY By: D. Graeme Shaw, MD

Two months ago I wrote about how to prepare yourself for the approaching winter viral season. You can read my article *Immune Enhancement During the Cold and Flu Season* to learn about the various techniques for maintaining your health all season long.

Many of my patients remain very healthy through each cold and flu season by following the key strategies I described in my article.



But occasionally, some who do come down with a virus will ask me, "What do YOU do when you get the flu?" In this article I'll focus on how I support my own body's defenses when viral respiratory infection sets in.

Phagocytes Are First Line of Defense

Our body's first line of defense for a respiratory infection in the lungs is the phagocyte – a cell that eats bacteria, viruses, etc. Phagocytes are known to play a key role in early infections. There are two populations of phagocytic cells in the lung: the alveolar and dendritic macrophages.

Alveolar macrophages are most predominant in healthy lungs and are thought to regulate and modulate the immune system under normal conditions.

During viral infections, the second type of macrophage, known as dendritic cells, play a key role in our immune system's response. Their principal function is to act as our body's central command center, interacting and stimulating T cells and B cells to initiate and control the immune response to the viral pathogen. Dendritic cells are located throughout the respiratory tract and constantly survey for invading pathogens.

During infection, there is a significant influx of these cells into the lungs. These cells acquire the viral protein antigen, either directly through viral infection, or by consuming dead or dying virally infected epithelial cells.

Following this, the dendritic cells produce inflammatory cytokines and interferons. The interferons have a potent effect in controlling viral infections. Interferons also stimulate the maturation of phagocytes, which eventually results in enhanced production of antibodies.

Another key step in the production of defenses against acute viral infections is the migration of the mature dendritic cells to the lymph nodes. In the lymph nodes, the dendritic cells stimulate various T-cell lymphocytes (CD8, CD4, CD11) to produce viral specific antibodies. The levels of these cells reach a peak at 18 to 48 hours after viral exposure. ¹

"What about the flu vaccines?"

This is another common question I get asked. Since one of the major challenges of effective conventional antiviral therapy is keeping up with the everchanging viral strains, I'm cautious about relying on this type of therapy for myself because of the ability of these viruses to mutate and the difficulty pre-

dicting the correct strain of influenza that may infect us in the future.

Most of you have heard of *Influenza* A. This strain of virus is the most likely to mutate and is the one most commonly responsible for many pandemics.

Viruses mutate in two mechanisms: 'antigenic drift' and 'antigenic shift'. Antigenic drift is the most common and involves small, gradual changes in the surface antigens of the virus. Antigenic shift involves more extensive genetic changes and results in viruses capable of pandemics.

One of the most important aspects to remember about viral flu and any respiratory infection is that they cause oxidative stress to the body.

Personally, I would rather rely on supporting my immune system to stay healthy than on the 'hit or miss' strategy of trying to predict the viral strain for the coming year.

Support Healthy Immune Response

One of the most important aspects to remember about viral flu and any respiratory infection is that they cause an oxidative stress to the body. Obviously, those patients with preexistent health conditions that deplete antioxidants (like heart disease, diabetes, etc.) are more vulnerable to viral infections.

Antioxidants like glutathione are very supportive to the body's defenses in acute viral infections because of their ability to enhance macrophage consumption of viruses, prevent viral replication and protect white cells from damage by viruses. ²

Other methods of supporting the healthy immune response to viral infections are herbal nutritional supplements that naturally support healthy white cell response – phagocytosis and migration to lymph nodes and production of viral antibodies by lymphocytes.

From an Eastern Medicine point of view, white cell response and phagocytosis are typically enhanced by healthy lung energy. I have used herbs such as Cordyceps, Lonicera flower and Andrographis for years to support my healthy white cell response to acute infections.

I also like using an herb called Astragalus since it is both a kidney and lung herbal tonic, which I find helpful in supporting lymphocytic production of antibodies and immunoglobulins. Additionally, most of these herbs have antioxidant effects, which as I mentioned, supports the body's defenses.

In addition to these natural substances, I like a promising and safe substance that has been developed and used for more than ten years called *Silver Hydrosol* (liquid). It was created by using nanotechnology to produce a silver nutriceutical nanoparticle known as oligodynamic silver hydrosol, or simply, silver hydrosol.

Additionally, most of these herbs have antioxidant effects, which I mentioned is supportive for the body's defenses.

During research, this silver hydrosol particle was shown to act on viruses by denaturing the surface proteins or nucleic acids of the virus, and therefore it may help kill the virus no matter what its protein or genetic mutation.

Other benefits found during this research using silver hydrosol included

the stimulation of white cell production and enhanced phagocytosis (the white cells ability to 'eat the infective cells'). As with many other therapies, the best results are obtained by using the product in the first 48 hours of the infection. ³

My Health Protocol

Here are the steps I take as part of my personal health protocol whenever I feel I'm coming down with a cold or flu.

1. At the first "early" signs of viral respiratory infection, I try to give my body maximum support. I emphasize "early" because the sooner I can support my body's defenses against a cold or respiratory virus, the better. Even traditional therapies, like taking antiviral medications such as Tamiflu and amantadine, work best if taken early.

In my experience, most people call for help after the symptoms have been apparent for a few days. Unfortunately, by then the body is already in an extremely weakened state. That's why I choose to act fast and try to educate my patients to do the same.

Remember that your immune system is reacting to a viral infection almost immediately with its full resources active within 48 hours. That's when you most need to support your immune system.

2. I eat a healthy diet with plenty of foods that contribute antioxidants, including fruits and vegetables. I definitely avoid sugar, as it gets absorbed into the bloodstream very quickly and must be processed by the enzymes of white blood cells. If my immune system is taking care of my sugar consumption, it has fewer resources to care of a viral infection.

- 3. Stress reduction is very important. Stress is a prime contributor to our immune system being low in the first place. I get plenty of rest and drink fluids when I'm ill and try not to engage in situations that I know might increase my stress levels.
- **4.** I wash my hands often. Viruses are spread through the air and by human contact. The last thing I want to do is infect someone I care about. But I don't use antibacterial soaps, as they are not effective against viruses. Just lots of soap and water does the job.

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- 5. I take a good multimineral or multivitamin to support my white blood cell function. These usually include Vitamin C, D, E, selenium, magnesium citrate, zinc, and others.
- 6. Taking glutathione precursors is a good idea before you get sick. But they don't help in the acute phase of a viral infection. These precursors include N-Acetyl Cysteine, glutathione tablets/capsules, MSM, SAM or whey protein.

Since they may take days to be converted into usable glutathione in the body, and their conversion into glutathione is inhibited by oxidative stress (the viral infection), I find that my body works best when I take glutathione in a liposomal form. It is the only oral glutathione that is designed to get absorbed whole and starts supporting your immune system within 20 to 30 minutes of consumption.

- **7.** Regarding the use of herbs, I start them as early as possible. If I am around a sick individual, I often take them immediately to give my body maximum support for my immune response.
- **8.** I also like to add one teaspoon of silver hydrosol one to three times per day to my protocol to help support my immune system function.
- **9.** As always, if my flu ever includes any significant symptoms, especially breathing problems and recurrent fevers, I always contact my physician.



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If you have any questions regarding the use of herbal dietary supplements to support your health, contact Get Well Natural at contact@getwellnatural.com or call 1-888-522-HERB (4372) or 408-260-9714, or visit the GWN website at www.getwellnatural.com or the offices at 4010 Moorpark Avenue, Suite 119, San Jose, Calif. 95117

*Statements in this article have not been evaluated by the U.S. Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

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Footnotes

- 1. Innate Immune Control and Regulation of Influenza virus infections Jodi McGill, et al Journal of Leukocyte Biology Volume 86, October 2009
- 2. Inhibition of Influenza Infection by Glutathione Jiyano Cai, et al Free Radical Biology & Medicine, Vol. 34, No. 7, pp 928-936 2003
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