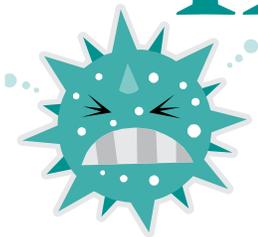


IMMUNITY

Defend Yourself!



by Margy Squires

You are born with a remarkable ability to defend *self* from everything the body discerns as *non-self* through the complex mechanism known as the immune system. From the protective layer of skin down to the smallest of cells, it's a battle of survival of the fittest. In fact, the old adage of *what doesn't kill you makes you stronger* could have been written about your immune system.

Starting with the first cell of a fetus through the life of an individual, immunity operates on two levels. You are born with your first line or *innate* defense. The protective skin that covers your body. The mucous linings of your nose, stomach, GI tract and other organs, along with related chemical secretions. As capable as they are, these physical and chemical barriers offer only a *general* defense. When it comes down to viruses, fungi, bacteria and other pathogens, you need the *specific* defense that annihilates any pathogen that crosses the first line.

In the first few months outside of the womb, you lack the ability to defend yourself and rely on arsenal from mom's immune system. In fact, some of your innate immunity is genetically predisposed so it's important that mom be healthy before you're born. As you grow and your contact with the outside world increases, you slowly *acquire* immunity or *adapt* to your environment. Encounters with non-self via people, places and even food meant to nourish you may carry hidden dangers of viruses, bacteria and other harmful pathogens. Each contact gives your immune system the opportunity to practice and develop the defense skills necessary to survive. In fact, some cells "remember" pathogens from previous attacks, enabling them to respond more quickly and effectively on second encounters.

Immunity Simplified

The acquired or adaptive immunity of the immune system primarily depends on white blood cells (WBCs) known as *leukocytes*. Besides the bone marrow where all blood cells are formed, the other players include the lymph glands (adenoids, adrenals, thymus), lymph nodes, spleen and other lymphoid tissues within the brain, GI tract and liver. The immune system is sometimes

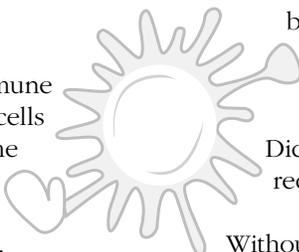
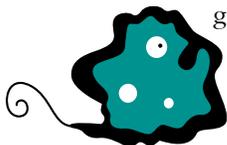
referred to as the *lymphoid system*. Some components are stationary and defend where they are. Other sites provide "homes" for leukocytes on reserve. [See the diagram on next page.] For the millions of circulating cells, the vast network of blood vessels provide an efficient and quick transport to wherever help is needed.

Leukocytes vary in form, function and tactical ability from the B-cells that mature and produce antibodies to the T-cells, T-helper cells and natural killer NK-cells. Some seek out and sound alerts of invaders; others eradicate pathogens with chemicals or eat them for lunch. Like any army, there are commanding generals and trained soldiers to carry out those orders. Remarkably, many have the capability to retain actual bits of information from invading cells and use that "memory" in future weaponry. Overall, the system is brilliantly orchestrated and requires the full regimen to succeed. The various parts of the system also require reinforcement from proteins, antioxidants and other nutrients to stay in top form.

Sabotage or Support

As adults (and parents), many of the things we do actually have the potential to sabotage immunity by interfering with the chemical warfare. For instance, stomach acid helps break down food but also pathogens. An enzyme in saliva destroys bacteria. Sweating helps detox lymph tissues, nodes and glands. A runny nose clears out nasal debris. Antacids, not chewing food, antiperspirants and antihistamines are all ways we suppress these defensive chemicals. Did you know that 100 grams of sugar (any carb) can reduce leukocyte activity by 50% for up to five hours?

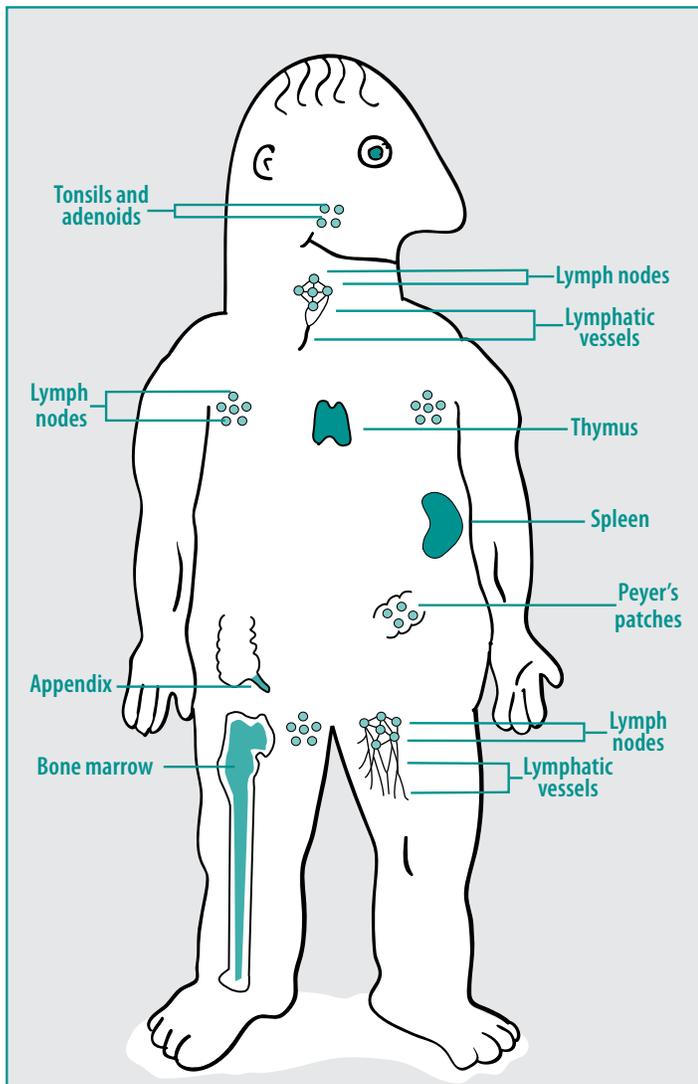
Without question, nutrition is the first supportive measure, supplying the necessary cofactors for energy, protein building and replenishing chemicals, cells, organs and tissues.



Continued

Immunity: Defend Yourself

continued



Hydration with pure water, exercise and body brushing help stimulate lymph and blood circulation. Much of the body's internal checks are done during deep, stage 4 sleep which requires 6-8 (uninterrupted) hours. Finally, reducing the amount of toxins via lifestyle factors (smoking, alcohol, drugs, sugar, foods) should be a no brainer.

What about antibiotics?

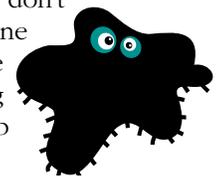
In a perfect world you'd never get sick. Most of the time, the immune system is self-sufficient, needing very little outside intervention from antibiotics. However, in life-threatening situations, you may require prescriptive help. Be smart. If your doctor can do a culture, you're more likely to get the right antibiotic and avoid repeated treatments. Remember that antibiotics are ineffective against viruses. If an antibiotic is required, follow-up with probiotics to restore friendly microflora in the GI tract and keep that immune center operational.



One problem with antibiotics is for each strain of pathogens, there's always a few that are resistant. In fact, over the past 20 years, it seems we're running out of ammunition against these "antibiotic-resistant" bacteria. The second problem is that research tells us antibiotics actually suppress your immune response, making it harder for your immune system to recover post-treatment. Additionally, leukocytes are deprived of the "memory" of the infection and can't arm itself effectively against a repeated attack of the same virus. That's why sometimes you get sick again when antibiotic therapy ends. In childhood especially, immune development may be compromised when antibiotics are overused. Ear infections are one case in point. Recurrent infections are more common in children receiving repeated antibiotics than those less prescribed. Avoiding the overuse of antibiotics actually helps your immune system in the long run.

SUMMARY

How often do you succumb to that bug or flu virus that's going around? If you don't feel quite yourself — an indication that there's a skirmish going on — but you don't get sick, that's a sign of a healthy immune system. Remember, most of the time the immune system can do its job of keeping you well and disease free if you do your job of taking care of your "self" too!



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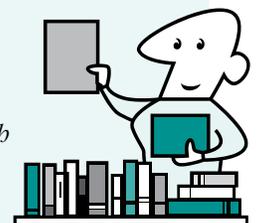
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Helpful Reads for Immunity

Available in our free Health Library at www.e-tyh.com.

- ◆ *A Formula for Success: Nutrients to Beat the Cold War*
- ◆ *Alpha Lipoic Acid, Defending your Liver*
- ◆ *Bioflavonoids: Color Yourself Healthy*
- ◆ *Build Immunity with Better Sleep*
- ◆ *Cold & Flu Season: What's in YOUR Medicine Cabinet?*
- ◆ *Foolin' the Flu*
- ◆ *Olive Leaf Extract, Immune Power from a Plant*
- ◆ *Your Gut, Highway to Health*



Defend Yourself with Olive Leaf Extract

The flu shot you get this year protects you against last year's virus but may not help against this season's strain.

The drug industry has not been able to keep up with these smarter and stronger bugs.

Antibiotics are not effective against viruses.



Phytonutrients, on the other hand, have compounds unlike any single agent. Olive leaf extract is a full spectrum antimicrobial, antibiotic and antiviral and has the capacity to adapt to pathogens and mutations.

Unlike flu shots, Olive Leaf ESE™ and Olive Leaf Extract help *build* up your immune system when taken 2-3 weeks before the cold and flu season. When others around you are sneezing, coughing and spreading germs, you can even take extra for additional immune support. Contains oleuropein, the plant extract researched for maximum effectiveness. TyH offers two strengths (6% and 18% oleuropein) to meet your wellness needs.



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