Hope

& Healing

Immunity

Stimulating Your Immune System

A heart at peace gives life to the body — Proverbs 14:30

Introduction

Nowadays it happens often: new management threatens layoffs and a vulnerable breadwinner develops one flulike infection after another. Or, a 41-year-old mother discovers she has breast cancer less than a year after her daughter flunked out of college because she was pregnant. Maybe these are coincidences. Maybe not. In the news there is much talk of whether severe or ongoing emotional stress can sap our health when our resistance breaks down through weakened immune function.

Recently researchers have directly linked our emotions with the chemistry of our immune systems. This is a significant step but not the final piece of the puzzle. We need practical ways to help our immune system stimulate our resistance.

The Immune Connection

Candace Pert, Ph.D., of Rutgers University, firmly believes that her research shows the intimate connection between our minds and the function of every cell in the body.

For years it was believed that our elaborate defense systems operated independently of any other body systems. But now it's clear. The immune system is connected to the nervous system, involving the brain in the control of the disease fighting process. Just how our brains and our immune systems talk to one another and which moods and states of mind affect our health is a mystery just beginning to unravel.

Our immune system functions within

various components:

- Lymph nodes. These small, beanshaped organs are located in the neck, armpits, abdomen, and groin, where they act as storage compartments for white blood cells.
- Lymphatic vessels. White blood cells travel to their sites of battle through blood vessels and lymphatic channels. This network is a bodywide connection that links lymph nodes and other immune organs.
- Thymus. The T helper cells, the main disease fighters, are produced in the bone marrow and migrate to the thymus, a gland beneath the breast plate. Here they mature into real disease fighters.
- Bone marrow. The long bones of the legs, the pelvis bones, and the backbones contain soft centers where white blood cells are produced.
- Spleen. This fist-sized storage tank for white blood cells is located under the left rib margin. Here mature white blood cells wait until rallied to action.

How Stress Causes Illness

Studies show that bursts of stress that last for short time periods may actually stimulate our resistance. However, when we become emotionally drained by a drawn out situation that seems not to have a solution, our immune systems falter and health problems arise.

Dr. Joseph Courtney, of the University of California, Los Angeles, studied 1,000 men who hated their jobs, to determine whether they were more likely to get cancer of the colon. The job haters were 5 times more likely to get colon cancer than those men without job

difficulties.

Also studied were: moving to another house, suffering the death of a spouse, getting divorced, and being out of work for 6 months. These stresses also increased the risk of colon cancer but not as much as working at a job that you hate. As Dr. Courtney said, "A lot of time, people have to stay in jobs, keeping a smiling face whether they're happy or not."

In another study, 69 persons taking care of spouses with Alzheimers for an average of 5 years, actually showed a decline in their measurements of immune functions as well as increases in the number of colds. As Nicholas Hall, Ph.D., of the University of South Florida, says, "It's not stress that causes our problems, it's the way we react to the stress."

Being in Control or Out of Control

The vital factor in resistance to illness or lack of resistance is whether the stress we face causes us to feel helpless or powerless. A sense of personal control appears to have a positive impact.

The critical factor, then, in both preventing sickness and in overcoming illness is to anticipate what is likely to happen and jump in before it happens. Being proactive against stress either before or during sickness helps in 2 ways:

1. The stress hormones, adrenalin and cortisol are reduced and, 2. We have more energy to invest in healthy behavior: eating better, exercising, and getting plenty of sleep, all of which help our resistance.

Awaken the Power Within You

Here are several practical ways to protect you from disease, and to keep you feeling good, looking great, and brimming with energy.

• Reduce stress. Stress busting techniques such as deep, slow breathing, laughter, and even plain old relaxing with friends have been shown to boost levels of disease fighting cells and antibodies.

A recent study found that optimists have higher immune levels than pessimists. Dr. Terry Phillips of George Washington University Medical Center believes that "attitude control" can help cancer patients fight disease.

Immunity also surges when you watch a comedy video tape and laugh. Researchers say that laughter can cut the immune dampening effects of everyday stress almost in half.

During sleep your body and brain rest, but your immune system doesn't. Lack of sleep weakens your body's resistance by making your immune system fight harder for the raw materials it needs to keep going. So, get 7 to 9 hours, whatever is right for you.

- Workout. Can you strengthen your immunity through exercise? Studies show that you can with moderate exercise such as walking, bicycling, swimming or jogging. In one study, persons doing moderate exercise 45 minutes a day, 5 days a week, ended up spending half as much time sick with colds and flu as did persons who were sedentary. Pounding the pavement hard for 2 to 3 hours, however, worked the opposite way.
- Eat power foods. "The role of diet in immunity is very direct," says Dr. Jeffrey Blumberg of the Dept. Of Agriculture's Human Nutrition Research Center.

Here are the nutrients you need to

know about:

- Vitamin A. Vitamin A is the cement that keeps foreign invaders from entering through the mouth and skin. The recommended daily allowance is 1000 RE (Retinol Equivalents) and it is best gotten through foods like sweet potatoes, carrots, spinach, broccoli, and lettuce.
- **Vitamin B6.** Eat two large bananas, chicken, fish, rice, or wheat germ.
- **Vitamin C.** Sources include citrus fruits and juices, green peppers, potatoes, and spinach.
- Vitamin D. Vitamin D's role in boosting immunity is somewhat mysterious but evidence is growing that it is important. You can get your daily requirement by drinking a pint of skim milk, eating some oily fish such as tuna, or by soaking up 10 to 15 minutes of sunshine.
- Vitamin E. Vitamin E is a real powerhouse for immune functions. The richest food sources are nuts, sunflower seeds, sweet potatoes, carrots, and green leafy vegetables.
- Iron. Iron helps maintain the immune army. Men shouldn't take supplements. Women who menstruate, however, will sometimes need to take iron. Lean steak, dark chicken, liver, pork, and potatoes are good sources.

Summary ____

"In the end," says Dr. Tony Phillips, "It's how well we look after ourselves that decides how well our immune system looks after us."

Awaken the Miracles Within You

The Miracle in Fresh Berries

Fresh berries are sweet, messy and good enough to be eaten in heaven, according to Walt Whitman.

And, they're miraculous on earth. Boysenberries, raspberries and blackberries have nutritional powers that eclipse those of many other fruits.

One cup of berries packs half the Vitamin C we need for the entire day. And, there's cancer prevention; relief of constipation, and lowering of cholesterol in the gel and the tiny seeds of each berry.

So, when your sweet tooth needs indulging, seek the zest of life in fresh berries and create a cobbler for the entire family.

The recommendations and information in this handout are appropriate in most cases. However, for specific information concerning your personal medical condition, please, consult your doctor.