

Build Your Immune System with Good Nutrition

What is your immune system and why is it important?

Each person is born with a system in his/her body to fight off disease caused by bacteria, microbes, viruses, toxins, and even parasites. This is your immune system. Some people have strong immune systems, others do not. The immune system has many processes with one of three particular jobs to do: 1. stopping disease from entering the body, 2. killing bacteria or viruses once they enter the body but before they make you sick, and 3. destroying viruses and/or bacteria after they have created disease.

The immune system can recognize viruses that have been in your body before. The first time a virus enters your body, a healthy immune system will develop antibodies or other compounds that are designed to attack this virus. The next time this virus enters your body, these antibodies are ready to attack right away. This is the process that prevents you from getting a disease like chicken pox more than one time.



Most public health officials believe there are signs that a new virus will appear in humans worldwide. No one will have had this disease before and thus your body will not be able to attack it right away. This is called a pandemic flu and could result in many deaths. When might this pandemic flu occur? No one really knows. Is it too early

to prepare? If you ask that question to victims of Hurricane Katrina, they are likely to say that it is never too early to be ready for the “big one.”



What will good nutrition do for you?

Good nutrition will not prevent you from getting a pandemic flu. Good nutrition will not prevent you from getting complications from a pandemic flu. But, good nutrition can:

- Help you develop the best possible immune system;
- Increase the ability of your body to know a virus has entered it, lowering your chances of getting sick;
- Increase the ability of your body to attack the virus, helping you fight-off the pandemic flu once you get it; and,
- Provide “reserves” that can be used when you are too ill to eat.

When is it best to start?

The immune system cannot be built overnight. The body must be given the building blocks daily to ensure a healthy immune system. You need to start eating for health now.

What is best to eat?

- Eat many different types of foods every day. Eat a variety of foods from day to day.
- Include at least five fruits and vegetables every day. One serving is approximately ½ cup or an average size piece of fruit. Make these choices a rainbow full of color – red, orange, yellow, green, blue, indigo and violet.
- Include three servings of low-fat dairy each day. One serving is 1 cup of milk/yogurt or 1 ounce of cheese.
- Add six or more servings of whole grain breads and cereals to your meals each day. One serving is one slice of bread, 1 cup dry cereal, or ½ cup cooked rice, cereal, or pasta.
- Don't forget protein foods. Most people need two servings each day. A serving of meat is about the size of a deck of cards. two eggs or 2 tablespoons of peanut butter is also one serving of protein. Choose low fat options often.



Great Foods

All foods as they are grown are good foods. However, some foods are packed with nutrients and phytochemicals, compounds found in foods that have special benefits to health. Many phytochemicals are found in the fruit and vegetable groups.

Some great fruits high in phytochemicals are:

- blueberries
- cherries
- strawberries
- red grapes
- oranges
- plums
- blackberries
- raspberries



Some great vegetables high in phytochemicals are:

- Brussels sprouts
- broccoli
- kale
- beets
- red bell peppers
- corn
- onions
- eggplants
- spinach



References: 1. <http://science.howstuffworks.com/immune-system4.htm>
2. J Infect Dis 2000 Sept;182 Suppl 1; S108-14. Phenotype and functional considerations in the elevation in nutritionally compromised hosts. Gershwin ME, Borchers AT, Keen CL.

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