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| *" Let food be thy medicine and thy medicine be thy food"* ~Chinese Proverb (7) NUTRITION "Only recently have scientists begun to investigate and unravel the fascinating and complex workings of the immune system, including its dependence on diet. It is increasingly clear that you can manipulate your immunity by what you eat." (8)There is a direct relationship between the kind of foods you eat and the strength of your immune system. There are vitamins and minerals that are essential for the immune system to be efficient. One food in particular has been repeatedly named as having an extremely advantageous effect on our immune system. This food is yogurt. Yogurt kills bacteria as well as boosting immune functions. It increases production of gamma interferon and antibodies, as well as increasing activity of NK cells. According to Food-Your Miracle Medicine, foods that stimulate immunity include yogurt, shiitake mushrooms, garlic, foods rich in beta-carotene and zinc, and a low fat, vegetarian diet. Certain foods affect how neutrophils and lymphocytes (white blood cells) perform against bacteria and infections. Since white blood cells are key players in the immune system�s efficiency, any negative effect on their performance could lead to disaster. "Nutrition is a potent tool in preventing many illnesses, in curing some, and in supporting conventional medical practices." (9)Having a well-balanced diet (based on the food pyramid) can help protect you from many infections, especially bacterial and some viral. There are specific vitamins and minerals that extremely important in fighting off sickness. VITAMINS **Vitamin A**: Also known as beta-carotene, one of the most important nutrients in strengthening our immune system. It keeps the mucous membranes in your mouth, respiratory passages, and urinary tract moist, therefore ensuring resistance to infection. Vegetables that are green and yellow, such as carrots, sweet potatoes, dark leafy greens, apricots, cantaloupe, and winter squash, are rich in beta-carotene. (10)  **Vitamin B**: There are many B vitamins. Some of the main ones are Thiamine, Riboflavin, Niacin, B6, B12, and Folic Acid. B6 vitamins are known as the building blocks of proteins. (11) B6 is found in banana, salmon, chicken, liver, and sunflower seeds. Riboflavin increases the production of red blood cells and lengthens their lives. It also helps red blood cells to maintain a high iron level. Riboflavin can be found in yeast, liver, wheat germ, eggs, milk, and green leafy vegetables. (12)  **Vitamin C**: "The speed with which the immune system can react to invading viruses, etc., is directly dependent upon the immediately available supply of vitamin C." (13) Vitamin C protects cell membranes against thin walls, through which blood cells can move, which results in scurvy. Vitamin C contains interferon, which is the first attacker to the disease, even before the antibodies! Vitamin C-rich foods include kiwifruit, sweet peppers, broccoli, cauliflower, kale, lemons, strawberries, papaya, asparagus, spinach, cantaloupe, oranges, grapefruit, and tomatoes. (14) People who take Vitamin C do not tend to have as many, and as severe of colds.  **Vitamin E**: These vitamins repair free radicals� damage. Free radicals are the products of splitting molecules of water, and cause blood cells to clump and infections can colonize. Vitamin E escorts the blood cells that are part of oxygen transport so they cannot destroy cells unnecessarily. "Vitamin E boosts the body�s cell-mediated immunity" which protects us from bacteria, viruses and cancer. (15) Vitamin E can be found in eggs, nuts, whole-grain products, and margarine. (16)  **Vitamin K**: This vitamin can be produced in the human intestines by bacteria. Vitamin K is essential because it causes blood to clot, so bleeding to death does not occur. However, only a small amount is needed for its function to be carried out. Vitamin K is also needed for maintaining healthy bones. Foods that contain significant amounts of Vitamin K include yogurt, liver, and dark leafy vegetables.    ([Intro1](http://docs.google.com/introduction.html))([Intro2](http://docs.google.com/intro2.html))([Intro3](http://docs.google.com/intro3.html))([Intro4](http://docs.google.com/intro4.html))  [[Home](http://docs.google.com/home.html)][[Introduction](http://docs.google.com/introduction.html)][[Hypothesis](http://docs.google.com/hypothesis.html)][[Procedure](http://docs.google.com/procedure.html)][[Data](http://docs.google.com/data.html)][[Conclusions](http://docs.google.com/conclusions.html)][[Bilio/Links](http://docs.google.com/biblio.html)]  [[2002 Projects](http://docs.google.com/AP2002/index.html)][[2001 Projects](http://docs.google.com/index.html)][[2000 Projects](http://docs.google.com/AP2000/index.html)][[1999 Projects](http://docs.google.com/AP99/index.html)][[1998 Projects](http://docs.google.com/AP98/index.html)] |