## ILLINOIS STATE UNIVERSITY



Department of Biological Sciences

Monica G. Parkside Junior High School Normal, IL

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Dear Monica:

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Telephone: (309) 438-3669 Facsimile: (309) 438-3722

Thank you for your question about what young women can do to improve their health. I believe one of the most important things you can do is to become educated about how your body works. All of those science classes you are taking now through high school will give you a great start! If you really understand how your lungs work and how oxygen is exchanged, for example, you will better understand the harmful effects of smoking. Lots of people can tell you smoking is bad for you, but few really know why. If you understand how food is metabolized into energy you will know why it is important to eat well, exercise and get plenty of rest. Knowing chemistry, anatomy, and health science can benefit you now and also in the future. Wouldn't it be great to know exactly why you have to go get a tetanus shot after you stepped on that rusty nail? During their lifetimes, many individuals are going to be faced with a major medical issue such as cancer, diabetes or heart disease. By being better informed about the science you will able to be an active participant in your own health care. Lack of understanding by patients is a real problem for physicians right now: for example, people often don't finish a course of antibiotics as directed because they start to feel better and stop taking the medication. Being aware of how antibiotics work, you would know that you need to take the medicine at the directed times and for the full course to really get rid of the bacterial infection.

There are many health careers that you may be interested in that all involve math and science. Physicians, dentists, physical therapists, nurses, physician's assistants, optometrists, opthalmologists, exercise physiologists, nutritionists, phlebotomists, radiologists, speech pathologists, respiratory therapists, audiologists, pharmacists, and chiropractors are just some of the careers that help people maintain their physical health. Psychologists and psychiatrists, social workers and other mental health professionals help us have good mental health. Some careers you might not think of right away include veterinary medicine (our pets need to be healthy too!) or epidemiology working for a public health department or the Centers for Disease Control tracing outbreaks of infectious disease. Maybe you will even decide to become a research scientist and find a cure for arthritis! The possibilities are endless, but to get started decide what types of science interest you. Find out what education and training are required for the career you are interested in. Try to talk to someone who has a job in that particular area. Your teacher or counselor can help you!

Best of luck to you!

Sincerely.

Taura A. Vogel Laura A. Vogel, Ph.D.

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