**Vitamin C Boosts the Immune System**

**BBH411W Short Paper 2**

**By: Gina Piorkowski**

**April 20, 2015**

**Abstract:** The purpose of this paper was to examine a public health message and see what scientific evidence there is to back it up. This would help to see if the public health message was necessarily true. Then, after explaining that the point of this paper was to figure out as a health professional, family member, and peer what one would say to someone who needs to see the public health message due to their current health status.

“The purpose of the writing is to fulfill course requirements for BBH 411W and to stand as a personal writing sample, but the findings should not be treated as generalizable research.”

The message to be reviewed is a message on the label of Vitamin C tablets. This vitamin label claims to, “Boost the immune system.” The company that endorses the Vitamin C tablets is called Nature Made. One study was done on 16 healthy adult male volunteers who were randomized to either get .5g of vitamin C a day or no supplement for an 8 week period. The subjects received blood tests before and after to look at their lymphocyte levels. It was shown in the men who were taking the tablets, that there was a significant increase in the body’s baseline defenses to oxidative damage (Khassaf et. Al, 2003). One double blind, 5 year study was done on 1000 people in Japan. Each group either received a high-dose (500 mg) or a low-dose (5 mg) of Vitamin C every day. The study showed that the people who received the higher doses of vitamin C supplementation had a significantly reduced frequency of the common cold, but not the severity of it (Sasazuki et. Al, 2006).

One review of various studies showed that people’s common cold incidence while on or off of the vitamin C tablets. It basically concluded that Vitamin C does not necessarily prevent common colds due to the “boost in the immune system”, but rather it may help reduce the susceptibility to get the common cold (Hemilä, 1996). Another review of three studies showed that there was significant results that proved vitamin C decreased the amount of people who acquired the common cold (Hemilä, 2013)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I am a family physician. If I notice that my patient gets sick more often than others and often or has an autoimmune problem I would want them to hear the public health message. Some signs would be getting many colds, the flu, strep, sinus infections, etc. Dialogue with patient:

Me: I notice that you get sick quite a few times a year and more often than my other patients. Can I make a recommendation that may help you boost your immune system?

Patient: Yes of course.

Me: They have these Vitamin C tablets that you could take once a day, every day (.5 g or 500 mg). They have been shown to boost your immune system, so that maybe you would get sick less often. You can get them at most drug stores or vitamin shops online for about 10 to 15 dollars.

Patient: Okay, yes I think I may try that to see if helps me boost my immune system, so I hopefully can decrease my risk of getting sick. Thank you.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I am someone’s mother. I find out that my daughter may need to hear the public health message to try to take Vitamin C because she is always calling me telling me she is sick. Just this year she has had the flu, strep, and a cold. Dialogue with daughter:

Me: You are sick again? You have been sick more times this year than I can count.

Daughter: Yes I’m sorry I don’t know why I keep getting sick. I think it’s just because I am in college and my immune system is always run down.

Me: Well maybe you should start taking Vitamin C tablets to boost your immune system. You can get them at Walgreens or any other drug store probably. They are only about 10 to 15 dollars. I recommend you get them.

Daughter: Yes you are right I probably will start to because I hate being sick all of the time.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I am best friends with this peer. I notice that she is sick many times of the year, a lot more than me. So, I think she needs to hear about this public health message. Dialogue with best friend:

Best Friend: I just found out I have strep again. So, I will be on antibiotics again.

Me: You are seriously sick again? I feel like you are always sick and I am never sick.

Best Friend: I am, I know I hate it it is awful.

Me: I always see the advertisements to take vitamin C tablets to boost your immune system. You should take them. I think you can get them at the drug store or something.

Best Friend: Yes I definitely need to start taking those. Thanks for recommending it.

Works Cited

Hemilä, H. "Vitamin C and Common Cold Incidence: A Review of Studies with Subjects Under Heavy Physical Stress." *International Journal of Sports Medicine* 17.05 (1996): 379-83. Web. 27 Feb. 2015. <http://www.mv.helsinki.fi/home/hemila/birkhauser/HH\_IJSM\_1996.pdf>.

Hemilä, Harri. "Vitamin C and Common Cold-induced Asthma: A Systematic Review and Statistical Analysis." *Allergy, Asthma & Clinical Immunology* 9.1 (2013): 46. Web. 26 Feb. 2015. <http://www.aacijournal.com/content/9/1/46>.

Khassaf, M., A. Mcardle, C. Esanu, A. Vasilaki, F. Mcardle, R. D. Griffiths, D. A. Brodie, and M. J. Jackson. "Effect of Vitamin C Supplements on Antioxidant Defence and Stress Proteins in Human Lymphocytes and Skeletal Muscle." *The Journal of Physiology* 549.2 (2003): 645-52. *WileyOnline Library*. Web. 27 Feb. 2015. <http://onlinelibrary.wiley.com/doi/10.1113/jphysiol.2003.040303/full>.

Sasazuki, S., S. Sasaki, Y. Tsubono, S. Okubo, M. Hayashi, and S. Tsugane. "Effect of Vitamin C on Common Cold: Randomized Controlled Trial." *European Journal of Clinical Nutrition* 60.1 (2006): 9-17. *PubMed*. Web. 27 Feb. 2015. <http://www.ncbi.nlm.nih.gov/pubmed/16118650>.

"Vitamin C 500 Mg Chewable." *Nature Made*. N.p., n.d. Web. 27 Feb. 2015.