

**I Have Cancer: What Should I Do?  
Your Orthomolecular Guide for  
Cancer Management**

by MJ Gonzalez, JR Miranda, AW Saul  
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Applying the principles of nutritional medicine specifically to the treatment of cancer, Gonzalez, Miranda & Saul in *I Have Cancer: What Should I Do?* have written a surprisingly hopeful book. I say surprisingly because one might think, if the methods for treating this disease are as successful as described therein, that everyone would have already heard about them and the face of medicine would be changed forever. That is the promise and I imagine the likely outcome of this book. If read and appreciated by the medical establishment, the book may very well provide a new and fresh outlook to a difficult medical specialty—and save many lives.

The book starts by establishing the authors' backgrounds and expertise. All have had personal experience with cancer, so they are personally motivated; all are experts in Orthomolecular Medicine; and all recommend working cooperatively with doctors to enhance the patient's treatment. They explain that it is important for the patient to find a healthcare provider who can listen and help, and for the cancer patient, this means someone who is knowledgeable about therapeutic nutrition as well as hopeful. Orthomolecular medicine works by providing nutrients like vitamins and minerals that the body recognizes and needs, in optimal quantities to allow the body to overcome disease. In addition to proper nutrition, the book describes a comprehensive and integrative program of treatment, personally motivated, that will be most effective in inducing health. Patience is what a patient needs; some may find the book's advice difficult to follow, but the important thing is to seriously consider the different therapies and learn for yourself. Don't self-diagnose, but along with your medical

professional, own your own case. If you are aware of your body and the treatment, you are going to be much more effective in an informed team.

Some doctors have advised that nutritional supplements should not be taken along with chemotherapy. The book explains that this is incorrect. Many doctors, aware that cancer drugs are toxic, simply haven't read up on the benefits of optimizing the nutritional state. Bad nutrition does not fight cancer. Nutrients given at appropriate doses can optimize the body's biochemistry to allow it to react to stress which helps during treatment. Proper nutrition can reduce the secondary effects of the oncology treatment, strengthen the patient's immune system to prevent disease and reinforce the patient's health and recovery, and with appropriate macro and micro quantities of nutrients, treat the disease directly.

In fact, high doses of vitamin C and other nutrients can specifically target cancer cells. This may seem unbelievable at first. We have all heard of the healing aspects of vitamin C (ascorbate)—it is non-toxic and, unlike drugs, isn't harmful when we take large quantities. It is a vitamin for us because our bodies require it for health but can't make it, so we must get it from the food we eat. But how much is enough, especially if we are fighting cancer? Most animal species except primates and guinea pigs make vitamin C in an amount equivalent to our bodies making 5,000-10,000 mg/day, and they make more when they are sick or stressed. Vitamin C is concentrated into cells by transporters, special proteins on the surface of all cells that selectively take up biochemicals needed by the cell. It is a powerful anti-oxidant that helps the body to prevent oxidative stress that comes from disease. Every cell needs anti-oxidants, especially vitamin C, to prevent harmful free radicals that damage enzymes and can cause mutations in deoxyribonucleic acid. Additionally, the authors explain, vitamin C is selectively toxic to cancer cells.

The book goes into an adequate amount of depth on the attributes of cancer, what it is, how it starts, and what allows it to progress. Even if you don't have a good understand-

ing of biology and molecules, you will likely be able to follow the reasoning. Cancers start by mutations that deregulate genes controlling the division and metabolism of the cell. Many cancers don't use oxygen like normal cells, but utilize anaerobic metabolism, which means they need more blood sugar (glucose) than normal cells do, because they don't use it as efficiently.

The growth of cancer cells is thought to be regulated and targeted by vitamin C because they take up large amounts of vitamin C along with their huge need for glucose. The vitamin C is thought to act in the cancer cell paradoxically as a pro-oxidant, generating hydrogen peroxide which stops the cell from dividing. Thus vitamin C can specifically target cancer cells, and along with its function to enhance the immune system, regress tumors. The effect is robust and has been shown many times in the clinical treatment of cancer patients. The amounts of vitamin C needed for this effect are large, and may require intravenous application of buffered ascorbate to achieve the high blood levels necessary, along with high doses of vitamin C taken orally.

A study done by the Mayo Clinic didn't find any effect of ascorbate on cancer, but the book explains that the lack of the anti-cancer effect was likely because the Mayo study didn't use enough vitamin C, discontinued therapy too soon, and doses were oral only, not intravenous. Vitamin C at high doses is known to be a very effective treatment for many types of cancer, and it is non-toxic.

Along with information about cancer and how it can be targeted by vitamin C, there is a generous section about good nutrition and its helpful effects on preventing and reversing cancer. The body recognizes cancer cells and actively works to defeat them with its immune system, but it needs help. We must provide the materials that can enhance the body's immune system and reduce contaminants and stress that can cause free radicals and initiation of cancer. The biological terrain of the body is important but delicate, and can be damaged by eating the wrong foods or smoking. We are encouraged to eat a healthy diet of pure water, whole grains, lots of fresh

vegetables and fruits, enhance our intake of omega-3 fatty acids, and avoid an excess of high-calorie foods and animal foods such as red meat and dairy products. This diet is known to prevent cancer, for example, in Japan, where cancer rates are low and life expectancy is long. We all differ in our biochemistry because of genetic differences and our different daily lives, and so, as Dr. Roger J. Williams pointed out, an average diet is likely to cause deficiency in some nutrients. Thus we can help the body fight off disease by supplementing our food with an adequate intake of macro minerals such as magnesium and potassium, and micro minerals and vitamins. Vitamin D has recently been shown to prevent many types of cancer, and vitamin E and vitamin C are important in preventing heart disease and cancer. The book includes a complete program of excellent nutrition, applicable to all of us, with or without cancer.

Do I understand and believe every word? No, I found several ideas to be on the fringe of strict science, such as energy therapy; the role of magnetic fields in the body; how eating lots of protein depletes pancreatic enzymes; and why food containing active enzymes helps with cancer. But then, if you want to check the statements and theories, the authors provide references throughout. There is a short section of patient success stories—people (including physicians) who have received orthomolecular treatment and survived, with or without standard cancer therapy.

Overall, I think the book is excellent. It is full of helpful information, much of which will be new to many readers. The book is very well-written and easy to read, and it has an extremely positive tone—most likely because orthomolecular therapy works—and not only for cancer!

—Robert G. Smith, Ph.D.