Integrative Cancer Care

A Conversation with Keith I. Block, M.D.

Keith I. Block, M.D., has a passion for helping people with cancer. It began more than 30 years ago, when he was a teen and witnessed his grandmother's struggle with the disease. An avid high school athlete, he saw his grandmother confined to a hospital bed, getting no physical activity, fighting a recurrence of advanced breast cancer.

"I watched her body wither and waste away," he says. "Nothing was done to stop her physical decline—not nutritionally, not physically, not, really, medically. She eventually died as much from a wasting process as from the disease itself. Some might say that's the same thing, I would argue it is not. Had my grandmother been provided the tools to fight this wasting syndrome, we may have been able to reverse or stabilize her condition and seen a very different outcome. The core of my message is that cancer patients' survival is as much about integrative and nutritional interventions—even in advanced cancer—as it is about the disease itself."

This more comprehensive approach to cancer treatment, backed by research and clinical experience, is at the heart of Block's medical practice. He is co-founder and Medical/Scientific Director of the Block Center for Integrative Cancer Treatment in Evanston, Ill. While the Block Center is a treatment clinic, it also participates in cancer research through the University of Illinois, and with other university facilities in the United States and Israel.

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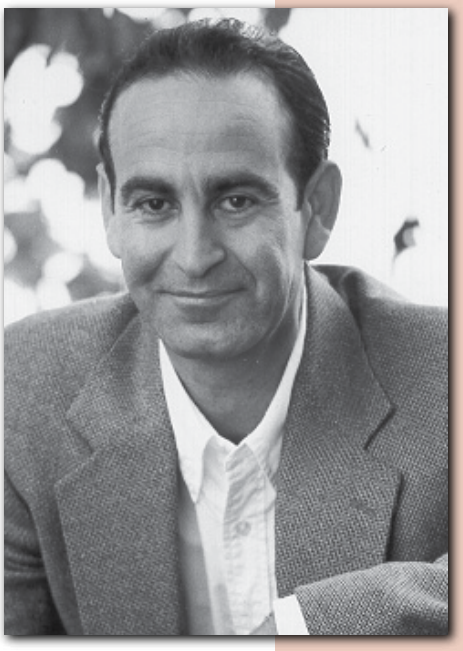
Dr. Block serves on the National Cancer Institute's Editorial Board for PDQ Complementary and Alternative Medicine in Cancer Treatment (CAM) in Washington, D.C., and on three faculties at the University of Illinois at Chicago: He is Director of Integrative Medical Education and a Clinical Assistant Professor in the Department of Medical Education at the College of Medicine; Adjunct Assistant Professor of Pharmacognosy in the Department of Medicinal Chemistry; and Adjunct Assistant Professor of Pharmacognosy in the College of Pharmacy. In addition, Dr. Block is editor-in-chief of the peer-reviewed journal, *Integrative Cancer Therapies,* published by SAGE Science Press and indexed in MEDLINE and Index Medicus.

Breakthroughs In Health's Sherry Baker spoke recently with Dr. Block about how he helps cancer patients using integrative medicine—combining the best of complementary therapies (systems, practices, and products not presently considered to be part of conventional medicine) with innovative approaches to conventional cancer care, providing an individualized program of nutrition, exercise, stress reduction and more.



Keith I. Block, M.D.

BIH: Could you comment on the problem of cachexia, the physical wasting away due to cancer, and how proper nutrition can help patients combat this life-threatening problem?

Block: Between 20 and 40 percent of cancer patients actually die from the complications of malnutrition, not from the disease itself. In addition, 80 percent of cancer patients suffer from some form of clinical malnutrition. Yet nutrition is considered a 'stepdaughter' to medicine, when it clearly should be a profoundly important component of treatment. I do not believe diet and nutrition alone are the answer to cancer cachexia, but I do believe it is an essential tool that, if disregarded, leaves patients with less opportunity for acquiring a survivor's edge. In addition, there is no doubt that malnutrition contributes to a patient's inability to tolerate treatment.

The typical Western diet is filled with saturated fats, omega-6 fatty acids, trans-fatty acids, highly refined sugar and carbohydrates, all of which fuel inflammation, the driving force behind cancer cachexia. Many major institutions talk about preventing cancer with healthy diets consisting of whole grains, fewer animal foods, more vegetables and fruits and fewer processed foods. But the day a person is diagnosed with cancer, they're often told to eat what amounts to a pro-inflammatory diet (contributing to the cachexia) that might include favorites such as milk shakes, cheeseburgers and sugary desserts. This is the equivalent of pouring gas on a fire.

BIH: When did you start implementing your ideas about integrating nutrition, exercise and other modalities with traditional cancer treatment?

Block: We launched the clinic in 1980, and in those early years we focused on lifestyle interventions. I was working on understanding the foundation of optimal health, looking at how one lives and takes care of themselves, and the impact that has on fighting disease. And I was doing extensive research on the complementary tools of nutrition and fitness and mind-spirit interventions.

By the 1990s, I was earnestly pursuing an understanding of what it takes to create and maintain biological integrity. This continues to be a focal point of our research today. We individualize patient care by doing a thorough biochemical assessment of each patient, a 'molecular fingerprint' that allows us to customize a treatment plan. Since each patient's biology is dynamic and continually changing, treatment options are continuously reviewed and altered based on each patient's most current diagnostic information.

By the late-1990s, I was focusing on the use of natural therapies and methods for improving treatment response and reducing treatment-related toxicity. As an example, I became enthusiastic about chronotherapy (timing chemotherapy to the body's own internal clock), a revolutionary way to administer chemotherapy that improves survival and reduces toxicity. By 2000, the Block Center had formalized a "Cancer Rehab" program

BIH: Could you comment on the importance of a person's biochemical environment on the prevention, control and treatment of cancer?

> "Eighty percent of cancer patients suffer some form of clinical malnutrition."

Block: If someone has a cancer growing and proliferating, the biochemical environment is directly responsible for what is going on with that disease. Factors in a patient's individual biochemistry largely determine whether that disease will become aggressive or not. In other words, there are various imbalances in our biochemistry that can be strongly influenced by our lifestyle and nutrition choices, and these same imbalances dictate the behavior of the disease. For example, when people eat excessive amounts of omega-6 fats, their disease is far more likely to spread, or metastasize. Part of our research focus has been to measure different aspects of this biochemical environment in order to tailor treatments to a patient's specific needs and maximize the effectiveness of the treatments.

BIH: If people could be tested for these biomarkers, if we could see if we needed adjustments to our biochemical environment, would it be a way to keep people healthier? Would it be an important prevention tool?

Block: Absolutely. But some of that already exists, and we implement these tests in our strategic clinical programs with patients, as I just mentioned.

BIH: Chronotherapy is also something not often found in the United States. How did you become interested in it?

Block: Through my reading and with the help of my research staff, I learned of an innovative way to mitigate the toxicity of cancer treatments. This was in addition to what I was effectively implementing with nutrition, fitness and mind-body techniques. I started studying the importance of biorhythms in terms of sleep, rest and activity cycles, and how they affect quality of life. That eventually led me to chronomodulated chemotherapy, or more simply, chronotherapy. The research supporting its use is quite impressive. We use a portable pump that I brought to this country from Europe (it is FDA-approved) that allows patients to receive their chemotherapy when

it will be most effective but least toxic. The device times the infusion based on several factors, including the biological uniqueness of the drug being given and the time when the specific type of cancer cells divide. Patients receiving such chemotherapy experience reduced side effects, such as nausea, vomiting and fatigue, increasing the likelihood that the patient will complete their therapy. In addition, chronotherapy has been shown to take patients who were previously inoperable and reduce their tumor size enough to make surgery possible. All of this is remarkable when you consider the fact that one-third of all chemotherapy patients receiving conventional chemotherapy abandon their treatments prematurely due to the side effects. Currently, there are 40 large centers in Europe that give chemotherapy that is chronomodulated, but it is rare in the United States.

BIH: How do you define cancer rehabilitation?

Block: Because of the stress and physical consequences of the disease, it is very common for cancer patients to have multiple physical and psychological challenges, from profound fatigue, muscle wasting, and weight fluctuations to depression, anxiety and the inability to carry out normal daily activities. There's no surgeon on the planet who wouldn't rather have a patient who is more nutritionally, physically and emotionally fit. So why would that be any different from a cancer doctor getting ready to treat a patient?

We intervene with different groups. We implement a rehab program that prepares patients for surgery, and chemo and radiation therapy. Some patients have gone through therapy and cannot tolerate any additional treatments, so we will work with them to help restore their biological integrity, enabling them to complete their therapy.

We also work with patients who are sent home, and deemed "in remission." Despite the positive implications of that phrase, the patient still feels terrible, and may have chronic fatigue and other physical and emotional challenges. These people need to go through an individualized rebuilding and recovery process, too.

There is another group of patients who have advanced disease and for whom additional treatment might not be appropriate. Our goal, with the implementation of a cancer rehab program for these patients, is to restore them to the highest level of functioning possible, with an improved quality of life. Several studies indicate that in this process we will also stretch survival. By stretching

survival, and improving a patient's condition, we may buy them enough time for new and more effective therapies—even experimental therapies—to become available, enabling them to further extend their survival.

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I think many times doctors give up on these patients too early. There is always something that can be done to improve survivorship.

BIH: Thank you Dr. Block for taking the time to speak with us about your important work. **BIH**

Sherry Baker's feature stories, interviews, columns and investigative reports have appeared in a wide variety of publications including Newsweek, Health, *the* Atlanta Journal and Constitution, Omni, Yoga Journal, Arthritis Today, MAMM, Optometry Magazine, Mount Sinai School of Medicine Focus on Healthy Aging *and many others.*