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RETAKE CONTROL OF YOUR LIFE

You have cancer.”

A doctor has uttered three of the most dreaded words you can hear. A moment before, you were a husband, a wife, a teacher, an accountant. Now, suddenly, you are a *patient*. In the ensuing panic, disbelief, fear, and grief, you run a real risk of losing your identity to the disease and seeing it take over your life, as has happened to countless cancer patients before you. But it is possible to choose a different path, a path of discovery, action, and self-advocacy. You can choose life over cancer.

It is not easy. It requires strength, courage, and an independent spirit. But time and again I have seen patients marshal these survival qualities to face the greatest challenge of their life. You can, too.

In choosing life over cancer, you must consciously and purposefully embrace life and reject the disease every single day. To do so, and to greet each day with authentic hope and conviction, you need the right tools, including sound information about the full range of cancer therapies, both conventional and complementary, and strong, sophisticated forms of support.

In this book, I will explain these tools and how to use them as you set out to reclaim your health. You *can* take charge of your

treatment and your life. You *can* beat the odds. But more than that, you can recover from it with not only your life but also your health.

Why Is Cancer So Hard to Cure?

In 1971, President Nixon declared war on cancer. Almost forty years and billions of dollars later, that war is far from won. Cancer remains the second-leading cause of death in the United States and is poised to become the nation's leading killer. Races and walks for "cures" are being scheduled for many years into the future. For although we can treat, and even drive into submission, a few distinct cancers—pediatric cancers, for instance, have a much higher survival rate than they did two generations ago—the most common and lethal cancers remain difficult to cure unless they are caught very early, and sometimes even then the prognosis is grim. It is sobering that some of the most vaunted new targeted molecular therapies, billion-dollar medications such as Avastin and Erbitux, extend life span by mere months, on average, if at all. Obviously a "successful" cancer treatment is measured quite differently than are treatments for other diseases. In contrast, cardiovascular disease is not the killer it once was: in the same fifty years during which the age-adjusted mortality rate for cancer has remained about the same, that for cardiovascular disease has fallen by about two-thirds.

What is it about cancer that enables it to survive despite surgery to excise it, radiation to burn it, and chemotherapy to poison it?

We have only recently begun to grasp the nature of this disease. Cancer is not an isolated group of errant cells waiting passively to be annihilated by a wonder drug. Instead, it is caused by a cascade of genetic and molecular glitches. That's why cancer does not present a single target for a magic bullet; a tumor is merely the most obvious symptom of an altered, unbalanced system. And that's why both the new targeted therapies and the older weapons of surgery, radiation, and old-line chemotherapy so often fail to prevent the spread or recurrence of the disease:

they neither pick up renegade cancer cells, strengthen the body's biological balance, nor reach all of the underlying molecular accidents that initiated cancer in the first place. As a result, even if the original tumor is gone, this biological imbalance creates an environment for cancer to recur: tumor cells use the body's own healthy resources to grow and multiply. This means that cancer is a systemic disruption and perversion of the body's resources and mechanisms. Because cancer will try to use every bit of your body's biochemistry to proliferate, you must strengthen every biochemical defense possible to defeat it.

The Block Center for Integrative Cancer Treatment

I am a medical doctor who has treated over fifteen thousand people with cancer at our medical center in Evanston, Illinois. I have spent thirty years developing a comprehensive program to treat cancer patients. Based on an individually tailored approach to integrative medicine, it blends treatments from different disciplines ranging from diet and exercise to mind-spirit techniques, natural medicines, and standard chemo and radiation.

This program is based not only on my own clinical experience and research but also on the research and experience of other experts in oncology, nutrition, botanicals, mind-body medicine, and therapeutic exercise, many of whom are staff members at our center. *Life Over Cancer* reflects our understanding of cancer's multiple causes and means of surviving. It is based on new understanding of how treatments interact with each other, with your body, and with the cancer itself. It is designed to create a foundation of general wellness from which cancer can be treated more effectively and with fewer side effects. We combine the best of conventional medicine—including chemotherapy, radiation, surgery, and biologic and targeted therapies—with the best of complementary medicine, encompassing state-of-the-art anti-cancer nutrition, herbs, supplements, physical exercise, and mind-body techniques. Because no two people are alike, the integrative program is individually

tailored through detailed profiling to each patient's specific disease, biochemistry, molecular fingerprint, personal needs, and healing philosophy. The result is a program that transforms lifestyles while reprogramming patients' biochemical environments.

This approach to wellness lets cancer patients live longer and more rewarding lives. As an example, two recent studies found that our patients with either metastatic breast cancer or metastatic prostate cancer, diseases with a grim prognosis, lived roughly twice as long and were far more likely to reach the five-year survival milestone than similar patients receiving only conventional treatments, as I will discuss in Chapter 1.

Many of our patients carry on their daily lives as if they were managing a chronic illness such as diabetes. In fact, I encourage you to begin thinking of your cancer as an illness you can live with or, even better, one you can overcome. I have treated many patients with widespread metastases who were pronounced "incurable" by their doctors but who, with this program, recovered. These survivors testify to what can happen with an integrative approach to treating and managing cancer: no matter what the diagnosis, there are patients who prevail over whatever odds they have been given.

You Have More Options Than You Think

I will never forget how alone and afraid I felt during my own trials with serious illnesses. Soon after I began medical school, I was stricken with bleeding ulcers. I kept losing weight, and became terrified of what would happen if the condition grew worse. Desperate, I turned to antacids, stuffing bottles of them under the car seat and sucking on them throughout the day.

Finally, finding no relief, I saw a doctor. After a brief examination, he told me that if my condition worsened, my only option would be surgery followed by a long and painful recovery. Even then, he warned, I might not be cured. I was stunned that the doctor had so little to offer. Surely there must be other options. But where to find them?

As I began my search, I identified a variety of natural therapies that seemed to improve my condition. But when I combined some of them, it was disastrous. For example, I found that fasting and exercise both made me feel better, so I did both at the same time. Then, while jogging, I felt light-headed and faint. I collapsed and was nearly mowed over by a stream of bikers and other joggers. Eventually, I was able to successfully blend natural medicines and dietary and lifestyle changes in a way that enabled me to get my ulcers under control.

The experience of sitting helplessly at the other end of a stethoscope made a lasting impression on me. Shocked at the scarcity of therapies and how little the standard tools of medicine had to offer, I resolved to become a doctor who offered his patients more—much more—than what I had received. I have devoted my career to that goal.

By the time cancer patients arrive at my center, many feel listless, overwhelmed, weary, or depressed and anxious. After only a few weeks, however, they find their fatigue subsiding and their spirits rising. Many are able to tolerate treatment with few side effects. Some benefit from therapies that had previously failed. When you and I work together through this book, your overall health and quality of life have the potential to be better than you ever thought, giving you a foundation of general wellness from which you can combat your cancer.

You Can Beat the Statistics

Bombarded with doom-and-gloom statistics, you may feel overwhelmed trying to muster enthusiasm for life. So forget all the talk of “survival rates.” *They do not apply to you.* All statistics, by definition, apply only to groups, not individuals. Researchers use them to determine whether a therapy works or not, and physicians use them to help make choices among different therapies. But as an empowered individual, you should not use statistics to dictate *your* chances of survival.

Two of my earliest patients (whose real names I do not use) avoided “becoming a statistic.” I was just finishing my training

when Sam, an executive, came to see me. He had heard that I was researching the clinical use of nutrition as a therapy to fight malignant disease. Sam had prostate cancer that had metastasized to his bones. He lived in constant pain, unable to find any real relief. Sam had made good use of the macrobiotic diet and other alternative treatments, but even those brought him no respite from his pain. Desperate, he pleaded with me to help him fight his disease, as I had done for myself with my ulcers. There was nowhere else for him to turn, he said. His doctors had hit him with the dreaded “nothing more can be done” edict.

At about the same time, Ira came to see me. He was also suffering from advanced prostate cancer that had spread to his bones. Chemotherapy had made him so sick he quit in the middle of his first cycle. After we talked in my office about possible treatments, he fished a bottle of sleeping pills from his pocket and set it on my desk. “Be honest with me, Dr. Block,” he said. “I need to know if you can help me. Because if you can’t, I’m going to check into a hotel and put myself and my family out of misery.”

In medical school, we were taught that in some circumstances extraordinary measures can be used to save a patient’s life. This is known as clinical urgency: when there are no more treatment options and the patient is suffering or terminal, a physician is duty-bound to roll up his sleeves and take almost any rational action he can think of. Ira and Sam were textbook cases of clinical urgency. I talked it over with my wife, Penny, who is also my partner and cofounder of the Block Center for Integrative Cancer Treatment. We decided to put our long-held convictions into action and do everything possible—to go beyond what other doctors had done—to help these two men reclaim their lives and health.

Our work with Ira and Sam became cornerstones of our Life Over Cancer program. Like so many of the patients who followed them to Evanston, Ira and Sam had both been told by their doctors that there was no hope; other cancer centers had turned them away as beyond help. Yet, after following our early program, which further refined the diet and therapeutic changes

he had made, Sam ended up living eleven productive and pain-free years. Ira lived eight years. Scans showed that each had experienced complete remission of his cancer.

They proved to represent many of the thousands of patients we've seen since 1980. Most arrive with disease that has already spread, or metastasized, to areas in the body distant from the original tumor. Most have been through chemotherapy two times or more and are dealing with recurrent and relapsed disease, a stage when most fatalities occur. A tragic number have heard the same dreaded words from their doctor: "There is nothing more that can be done." Yet, after following the Life Over Cancer program, many exceed the expectations of their original doctors—and not by months but by years. That is why I urge you to ignore survival rates, remission rates, and other statistics. *They need not apply to you.*

That is especially so if you are one of the lucky ones. It may seem odd to pair the words *lucky* and *cancer*, but all the advice that follows applies just as much to patients who are at the beginning of their journey—that is, to those who have been diagnosed for the first time with a primary tumor and in whom the cancer has not spread. As I am sure your doctor has told you, you have every reason to remain optimistic. For one thing, surgery alone is often effective against a contained solid tumor. For another, today's chemotherapy agents and high-tech radiation treatments are allowing more and more people to survive cancer. By combining these mainstream therapies with those in this book, your chances of joining their ranks are even greater.

It's time to begin our journey together.

WHY INTEGRATIVE CARE WORKS

Cancer is one of the ultimate challenges any of us can face. I tell my patients that it is like being forced to climb Mount Everest: your trek to recovery requires the same committed focus and fitness of body and mind. Many of my patients tell me this analogy not only captures how overwhelmed their illness makes them feel but also reinforces two key ideas. First, to surmount your illness, just as to climb Everest, you need know-how, planning, and preparedness. Second, all mountains are ascended one step at a time, and all illnesses are conquered one step at a time. Every new health-promoting behavior you adopt is a victory. Every improvement in your symptoms, no matter how small, is an important step toward the summit of health.

The first point: preparedness is a key to successful cancer therapy. If I dropped you onto the summit of Everest, you would be lucky to survive a few hours in the intense cold and low-oxygen atmosphere. In the same way, unprepared cancer patients often lack the reserves to carry them through treatment. Of course, no rational person would ever let himself be plopped beneath the summit of Everest unprepared. You need training, proper equipment, and time to study the routes and learn the terrain *before* starting your trek. En route, you pace yourself and set up camps

along the way to acclimatize yourself to the altitude. If you're smart, you also enlist an experienced guide, one who helps you navigate the trickiest terrain.

So it is with cancer. Ascending Everest is analogous to the *attack phase* of cancer therapy—the conventional treatment for debulking, or shrinking, the primary tumor. The better and smarter the preparation, the more likely you are to complete this treatment. Don't worry if there is only a little time between when you receive your diagnosis and when you begin treatment such as surgery: even a little preparedness can go a long way. With an experienced guide offering strategies complementary to your chemotherapy, radiation, and surgery, treatment will be less debilitating and more effective.

If the attack phase is successful in shrinking or eliminating the primary tumor, you've achieved either a partial remission or a complete remission. This is like reaching the summit of Everest. What next? More often than not, nothing. Former medical thinking viewed successful completion of the attack phase (“we got it all”) as almost synonymous with a cure. But even with remission after surgery and chemo, some residual undetectable cancer cells likely remain. It has been estimated that approximately half of all cancer patients in remission actually have metastases, malignant cells that have broken off the original tumor, traveled through the bloodstream to far-flung sites in the body, and begun the insidious process of growing into another dangerous tumor. Just because you have achieved remission through elimination of the primary tumor does not mean you are home free. Cancer is not like an infection, where you wipe it out and move on. It is a *chronic condition* that needs constant vigilance. While conventional cancer treatments often remove much of the disease burden—and it is critical to remove tumor bulk from your body—that is only half the battle. Even when the primary tumor is eliminated, micro-metastases may already have migrated to and seeded other parts of the body. These dormant cells can rear up and reestablish themselves.

That's why for my patients, complete remission does not

mean the end of treatment. Instead, it means the start of the *containment* or *growth control phase*, when we focus on stopping or slowing further growth of any residual disease (visible tumors) or invisible metastatic cancer cells. Post-treatment is a time to be particularly aggressive.

To continue the Everest metaphor, a successful climb is not only about summiting but also about getting back down. This is where climbers often err because the potential for catastrophe—treacherous ice patches and wrong turns that send you plunging into an abyss—is so great. Similarly, for a cancer patient it is critical to look past the summit of clear scans and remission so that your preparedness carries over into the post-treatment, or *remission maintenance*, phase.

Unfortunately, this is the most neglected phase of cancer treatment. Conventional cancer treatment does little to prevent cells from regrouping, proliferating, and forming new tumors. It also does little to help patients recover from persistent side effects and potentially life-threatening complications of attack-phase treatments. But with the right strategy these effects can be avoided or overcome: we have tools—especially diet, nutritional therapy, and experimental and off-label drug use—that can delay or block the return of cancer.

Now cancer patients part ways with mountain climbers. When mountain climbers return to base camp, their ordeal is over. They have triumphed. Not so with cancer patients who have reached the summit (achieved remission) and descended safely (kept metastatic cells in check). With cancer, you must remain attentive to self-care, taking an active role in your continued health. Rather than waiting passively for the results of your next scan or checkup, you can actively seize control of your future. This will likely entail making changes in what you eat, how you stay fit, and how you balance life's stressors, but I can just about guarantee that the small investment will yield a huge return: not only will this new way of life decrease your risk of relapse, but it will decrease your risk of diseases other than cancer, too, and make you feel better, stronger, and more empowered every day.

The Beginnings of Life Over Cancer

Cancer entered my life long before I went to medical school. As a teenager, I watched my grandmother, my grandfather, and an uncle all die of cancer. They all suffered great pain toward the end, not just from the disease but from the treatments they endured. It was as if the quality of their lives were irrelevant, as if it no longer mattered how they felt once their doctors had proclaimed that there was nothing more that could be done. Though I had no medical training, I couldn't believe there was nothing more that could be done—at least to improve their quality of life as they underwent treatment.

I remember sitting at my grandmother's sickbed, watching helplessly as her cancer progressed and she became increasingly frail and thin. Her body was betraying her, but so were her physicians. Only sixteen, I was undergoing intensive physical training for high school football. I wondered: why weren't her caregivers encouraging her to exercise? Logic told me that keeping her muscles active might help her resist some of the wasting syndrome she suffered.

After my grandmother passed away, I kept thinking about all the things I might have done had I been her doctor. (This was one of the experiences that motivated me to become a doctor.) I was certain she could have lived the remainder of her life, even with her cancer, with far more awareness, dignity, and well-being had she been given a whole other level of care. This experience also made me resolve to be a different kind of doctor, one who did more than run tests and administer standard treatments. I wanted to tend to my patients' emotional and physical well-being, too.

That resolve only grew stronger. As a resident, I sometimes followed an attending physician as he made his rounds at the hospital. One day I was following a doctor who was notoriously a morning person, beginning his rounds at 6:30 A.M. sharp, regardless of the patients' sleep schedule. His first stop that chilly dawn was the bedside of a Chicago bus driver in her mid-forties. Admitted the previous night, she had an advanced case of cancer. This physician, whom she had never laid eyes on,

was the first doctor to speak to her. He sailed into the room and woke her up. With no preamble, he declared, “I am sorry to tell you that you have colon cancer, and it will probably take your life shortly.” He turned with a squeak of shoe leather and left the room, followed by his entourage.

I stayed behind, unable to move a muscle, rooted to the spot where I’d stood as the attending pronounced judgment. The color had drained from the face of this poor woman, and her jaw was slack from the shock. Her entire body appeared frozen in terror. And no wonder. She had just been awakened in a strange bed in a strange hospital by a man who coldly informed her that she was doomed. I found myself in shock as well—not by what he’d said, but how. I stayed with her for over an hour, returning for long periods in the days and weeks that followed, doing what I could to restore her shattered will to live.

When I founded the Block Center for Integrative Cancer Treatment in 1980, I knew it would be essential to provide an environment of hope and authentic caring. We would of course offer the best treatments from mainstream oncology to shrink or eliminate tumors. Although I was intrigued by anecdotal reports of success with purely alternative therapies, there was not enough solid evidence of their effectiveness to employ them alone. In the Life Over Cancer plan, it is crucial to eliminate the bulk of the tumor, freeing the body’s natural defenses for the job of ridding the body of residual or microscopic disease. We recognized that it was asking too much of our body’s immune system and other anti-cancer defenses to destroy or even shrink large, established tumors. It was clear to me that with rare exceptions, patients need and can benefit from established conventional therapies.

But conventional cancer treatment, while necessary, is not sufficient. Also crucial are nutrition (the quickest and surest way to affect one’s biochemistry), natural medicines (since, with a few rare exceptions, the pharmaceutical industry has not produced a true cure for any cancer), exercise, and mind-spirit care (including support and therapy to alleviate the terror associated with cancer treatment). These would be among the most important components of the care we offered. Just to be clear, we use

nutrition, exercise, and mind-body treatments to enhance standard cancer treatments, not replace them.

The term did not exist then, but our approach was the first truly *integrative* cancer treatment in North America. Through innovative interventions and therapies, custom-tailored to the clinical, psychological, biochemical, and molecular characteristics of each patient, we treat the whole person, not just the cancer. Throughout, patients are active participants in their care, as we explain what we are prescribing and why, and what they need to do to have the greatest chance of success.

The Life Over Cancer program was not set in stone in 1980. We have continuously made changes as we learned from patients' experiences, and adopted novel treatments supported by the burgeoning medical literature in cancer therapy, both mainstream and complementary. Full-time staff members stay on top of the latest research, as well as plan and conduct studies of new therapies. As a result, the Life Over Cancer program has improved with time as we've learned in the clinic what works and what doesn't, and as research breakthroughs have emerged. Put simply, if a new treatment holds promise and is safe and effective, we consider including it.

Way back in 1984, I discussed some of our cases of advanced metastatic cancers at a cancer seminar at the University of Chicago. I showed X-rays indicating that the disease had spread to many distant sites in the body—yet these patients had all experienced regressions of their disease and were still alive, many years later. That astonished these specialists. Indeed, a number of patients who have been referred to our center and were considered “hopeless” or “terminal” have stunned even me as they lived and thrived years longer than expected. It was a few years after this talk that I first pointed out that false hopelessness—which some practitioners may implant in the minds of patients—is fully as dangerous as the “false hope” that some alternative therapeutic claims may stimulate.

No matter how impressive, however, anecdotes are not proof of the effectiveness of the Life Over Cancer program. Starting in the mid-1980s, therefore, we devoted ourselves to collecting voluminous data on two groups of our sickest patients—those

with metastatic breast cancer or prostate cancer—in order to determine whether the Life Over Cancer program of intensive integrative oncology helps cancer patients live better and longer lives compared with patients relying solely on the best mainstream treatments.

Evidence of Longer Survival

In ninety women with metastatic breast cancer, the disease had spread to the liver, lungs, brain, bones, or other organs. (Why one kind of primary tumor metastasizes to one set of organs while another kind spreads to a different set remains one of the enduring mysteries of cancer biology.) This is called stage IV metastatic breast cancer. All the women participated in the full Life Over Cancer (LOC) program, including our tailored diet, supplements, exercise, and mind-spirit programs. Eighty percent of them received multiple chemotherapy regimens after they came to us; this was sometimes their third, fourth, or even fifth round of chemo. We compared the survival of our patients with those from other studies conducted by leading researchers in the United States in which the patients received hormonal and/or chemotherapy treatments. Our breast cancer patients lived roughly twice as long as patients getting standard treatments alone as we reported in a study published in 2009 in *The Breast Journal*. Our median survival was thirty-eight months, compared to fifteen to twenty-three months in the comparison studies of other stage IV patients. Moreover, *our patients were 33 percent more likely to be alive at five years than patients getting standard treatment alone.*

This edge held even in women with the worst metastases. Our patients with bone metastases lived almost twice as long (forty months versus twenty-three months) as non-LOC patients with bone metastases receiving standard therapy. Our patients with liver metastases lived ten months longer (twenty-three months versus thirteen months) than non-LOC patients with liver metastases receiving standard therapy. Our patients with lung metastases lived more than twice as long (forty-three

months versus eighteen months) as non-LOC patients with lung metastases receiving standard therapy. In sum, our metastatic breast cancer patients on the Life Over Cancer program had doubled survival times, increased five-year survival rates, and dramatically better long-term outcomes than patients on standard therapy alone.

We also studied twenty-seven men with metastatic prostate cancer. The disease had spread to their bones or visceral organs, meaning they had stage D₂ cancer. All received the standard treatments, called combined androgen blockage, from either our center or their original oncologist to halt production of the male hormones that stimulate the growth of prostate cancer. The patients also all received a drug designed to block the further spread of the cancer. In addition, they received our whole package of integrative treatments, including our dietary plan, select nutritional supplements, a therapeutic exercise program, and a mind-spirit regimen for psychological and spiritual well-being. We compared our patients' results with results for stage D₂ patients from four different studies who underwent treatment at leading cancer centers such as the Johns Hopkins University Medical Center and to patients whose cancer was less advanced (stage C, having spread from the prostate to the local surrounding tissue, but not to the bones or other organs).

The results? Our Life Over Cancer patients lived, on average, twice as long as stage D₂ patients getting standard treatments alone. For the latter, median survival at the four cancer centers averaged thirty months. The median survival time of patients in the Life Over Cancer program was sixty months. In other words, *Life Over Cancer patients had a median survival twice as long as patients getting standard care alone*. Since “median” means that half the patients lived longer than that amount of time and half lived shorter, fully 50 percent of the Life Over Cancer patients were alive five years after diagnosis. Only 26 percent of prostate cancer patients receiving just standard hormone treatments survived five years. Moreover, 20 percent of our metastatic prostate cancer patients lived more than ten years.

How did the Life Over Cancer patients—all stage D₂—fare

compared with patients whose disease had not spread as far? They lived twenty months longer than a group that included equal numbers of stage C and stage D patients. Median survival in the mixed group ranged from thirty to just under forty months, so our median survival was over twenty months longer. *Thus, our patients lived considerably longer than patients who, as a group, were far less sick.*

We recently have begun collecting data on other cancers. Nearly 70 percent of lung cancer patients who come to the Block Center are stage IV, compared with 38 percent of lung cancer patients nationally. In other words, they are sicker than most. Nevertheless, the median survival time that we observed is about twice what is usually expected. As you can imagine, our clinical and research staff are encouraged by these treatment outcomes. These are among the most compelling studies to date supporting the potential role integrative oncology can play in the lives of cancer patients. Our next research steps are underway to extend and expand these findings using randomized trial designs.

Your Blueprint for Recovery

The Life Over Cancer program can be effective, and can reach into so many aspects of your life, because cancer is not merely a tumor. It is an underlying condition. It is based on abnormal patterns driven by genetics and lifestyle. It reflects changes in your body all the way down to the microscopic and molecular levels, changes that began long before you had any symptoms of cancer—indeed, long before cancer was diagnosed or even detectable. It therefore makes no sense to think of cancer as a tumor. That is merely its most obvious manifestation. A whole slew of physiological processes are also out of whack—sufficient to allow malignant cells to arise, grow, and proliferate uncontrollably.

Although only limited progress has been made in treating cancer, biologists have made tremendous strides in understanding its origins and development. Cancer can begin in any of several ways. Toxic chemicals from the air we breathe, the water we

drink, the smoke we inhale, or the food we eat can alter the DNA in a single one of our cells and cause a genetic mutation. Or the unstable and highly reactive molecules called free radicals, generated by normal metabolism, can damage DNA, also giving rise to mutations. Alternatively, cancer can arise by chance: DNA in our cells is forever making copies of itself, and if the copy is flawed, the resulting cell can start down the path to malignancy.

Normally, the body's defense systems eliminate mutated cells by causing them to commit suicide and through other mechanisms. If mutations overwhelm the body's defenses, however, the mutated cells will proliferate uncontrolled until they are numerous enough to form a solid tumor or a blood cancer. Even more perniciously, cancer can hijack many of the body's own mechanisms to create an environment that actually nurtures a tumor's growth and spread. The Life Over Cancer program emphasizes strengthening your anti-cancer biology: unless the body's physiological defenses prevent the growth and spread of malignancies, they are likely to return sooner or later.

Tumors affect the body in many devious ways. Chemicals they release can cause abnormal blood clots. They can take over and pervert the body's metabolism of carbohydrates, fat, and protein, a theft of nutrients that can lead to loss of appetite, weight loss, nutritional wasting, and fatigue. Tumors can alter the body's hormone levels, causing depression, weight gain, and the loss of lean body mass and skeletal muscle. Many of the complementary therapies included in the Life Over Cancer program combat these insidious effects of cancer—for obvious reasons. If you suffer from fatigue, for instance, you may not be able to endure the arduous process of cancer treatment. If appetite loss and the erosion of lean muscle tissue lead to the wasting syndrome called cachexia, you may survive your cancer but succumb to its side effects. And if you develop depression, you are more likely to have a poor response to chemotherapy; indeed, studies estimate that one-third of cancer patients abandon chemotherapy, most of them suffering from psychological distress or physical debilitation. Little wonder, then, that depression and hopelessness seem linked to high rates of recurrence and premature death in patients with some types of cancer.

I hope this makes clear the futility of trying to cure cancer solely by destroying tumors. Tumors are merely a manifestation of a broader condition, and painful experience has shown that far too often they reappear, with even greater resilience, if the systemic condition that nurtured them is not treated. That is why the fixation on eliminating tumors, which has dominated cancer care for well over half a century, has brought dismal results for so many patients. Yes, surgery or radiation can remove the tumor, but unless you change the environment that nurtured it in the first place, malignant cells that remain behind can simply pick up where they left off. Sometimes that happens alarmingly quickly: studies of postoperative cancer patients show that when a surgeon cuts close to a tumor to remove it, growth signals associated with wound healing can sometimes be unleashed, triggering any residual malignant cells to grow and develop into a new tumor. To reduce this risk, when the location of the incision permits, the surgeon will use a wider incision to remove the tumor.

The good news is that the Life Over Cancer program can reduce the physiological imbalance and deprive the malignant cells of the resources they need in order to thrive. That will allow your biochemical and physiological systems to return to health, and you to recover.

The Three Targets of the Life Over Cancer Program

The Life Over Cancer program consists of changes you will need to make in three areas. Let me explain them briefly; each is covered more thoroughly in the three parts of this book.

► Improving Your Lifestyle

First, you will need to adopt changes in how you live, including changes in what you eat, how you stay fit, how you handle stress, and how you sleep. Each of these can enhance or undermine your health. Each time you choose a certain food or physical activity or experience unrelieved distress, you are influencing your health. By making more healthful lifestyle choices

at any point along your journey—including after you have been diagnosed with cancer, and even after you have completed conventional therapy—you improve the odds that your body will be able to combat cancer. A low-fat, plant-based diet; aerobic, flexibility, and strength exercises; and stress-reducing activities are the basic ingredients of sound health. Whatever your condition and whatever your stage of cancer, implementing these measures can be crucial toward improving your health.

▶ **Boosting Your Biology**

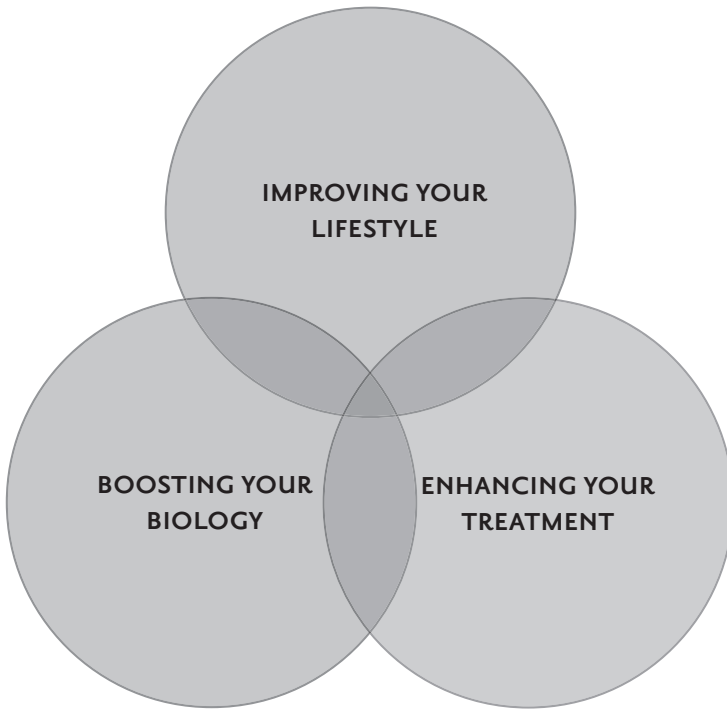
Second, you will need to strengthen your anti-cancer biology, the physiological environment that either encourages the growth and spread of malignancies or thwarts them. While targeting the tumor directly is obviously essential, if you do so in a way that leaves untouched the biochemical environment that supports it, then recovery is likely to be short-lived. This internal biochemistry includes levels of oxidation and inflammation, the state of your immune system, and levels of growth signals. While the standard tools of modern oncology are certainly good at removing tumors, they often fail to prevent the spread or recurrence of cancer. In part, that's because they ignore the environment that supports the cancer.

▶ **Enhancing Your Treatment**

In addition to helping you make changes in how you live and in the environment that supports your cancer, the Life Over Cancer program targets the tumor directly, through surgery, chemotherapy, radiation, and molecular-targeted therapies. This, of course, is the focus—really, the sole focus—of conventional treatment. But the Life Over Cancer program goes further. In some cases, I advise experimental options, off-label use of approved drugs, and natural medicines, all of which can sometimes shrink or eliminate tumors. In addition, I will explain which aspects of diet, supplements, fitness regimens, and mind-spirit interventions will complement these therapies, minimizing their toxic or debilitating side effects and increasing their effectiveness.

The Life Over Cancer program works for two main reasons. First, therapies and interventions are chosen to complement

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each other, with diet increasing the chance that a tumor eliminated by radiation will not return, for instance, and nutritional supplements as well as specific mind-spirit techniques making it less likely that you will become too nauseous and debilitated from chemotherapy to continue. Second, the plan can be individualized to fit each person's disease and situation.

This may all seem a little abstract, so let me describe how individualized Life Over Cancer plans worked for two of my patients. Delores and Marlene (not their real names) each had breast cancer when they came to the Block Center for Integrative Cancer Treatment. By explaining how these two very different women battled their cancers using individualized versions of the Life Over Cancer program, I hope to give you the insight and inspiration you need to face and overcome your own illness.

Delores: Counteracting the Typical American Lifestyle

When Delores first came to the center in 1999, she was a reserved, mellow, good-humored woman who worked a nine-to-five job and lived a sedentary lifestyle. In her mid-forties, she was about 50 percent over her ideal weight. She ate a standard American diet, high in sugar and fat. Delores had been diagnosed with localized breast cancer. When we first saw her, a year after diagnosis, she had already undergone a mastectomy—after which her surgeon told her they had “got it all”—and six months of a chemotherapy regimen called CMF. Being a “good patient,” she had followed her doctor’s game plan without question. But as she began reading about nutrition and the role it could play in keeping cancer from recurring, she came to us for advice on how she might fortify her biological defenses without committing to a full program. When we later ran blood work to assess her risk of recurrence, the results indicated there was already evidence of high tumor activity. Less than two years after surgery, her cancer was back. Even worse, her CAT scan showed four small spots of cancer on her liver, a dire situation indicating far-flung and potentially fatal metastasis. (It is not quite accurate to say someone has died of breast cancer. Death is caused by metastases of the original tumor that have spread to a vital organ.) Delores decided to begin the full Life Over Cancer program immediately.

After studying a patient’s medical records, my first step is always a full assessment of his or her lifestyle, diet, fitness level, and mind-spirit strengths. In Delores’ case, this showed that beneath her cheerful and controlled manner, she was beset by extreme anxiety. Interviews revealed that she believed this anxiety, like the physical effects of her disease, was beyond her control. Throughout her life, she had downplayed the importance of her own needs compared with the needs of others; indeed, she panicked at the mere thought of doing anything that might disrupt the routine and emotional equilibrium of her family, even something that might save her life.

Next, I tested Delores’ “biochemical terrain,” as I call it. Blood tests showed high levels of oxidative stress, probably a

result of both her cancer and her chemotherapy. Her immune function was low, also due to the chemo. Levels of the stress hormone cortisol were abnormally low, too, which meant that Delores would have a hard time sustaining her energy and other crucial bodily resources. Other tests detected high levels of insulin and growth hormones, essential to the spread of cancer, and common in people who are overweight.

Now that we knew her situation, our first step was to attack the tumors in her liver. I chose a three-drug chemotherapy combination frequently used to treat breast cancer, referred to as CAF, which was at that time the standard treatment. The delivery method, however, was decidedly non-standard. Instead of the usual large and highly toxic dose, we used a slower, graduated process called fractionated infusion. By administering her chemo in a slow, steady dose, we helped avoid known side effects of the CAF drugs, including damage to the heart. To further avoid side effects, Delores took detoxifying supplements to help her body flush out toxic chemo metabolites. Finally, to enhance Delores' sensitivity to the drugs and reduce the likelihood that the tumor cells would develop resistance to treatment, I advised melatonin and fish oil.

As Delores began her chemotherapy, our staff helped her to make changes to her lifestyle. She adopted a semi-vegetarian diet low in animal fats and high in vegetables, whole grains, legumes, and fruit. I believe there is no better diet for general wellness (my wife, Penny, and I both follow this diet for prevention and optimal health, and have raised our four children on it), and such nutrition is especially crucial to anyone living with cancer and its treatments. Delores supplemented this diet with a protein-rich drink that helps maintain nutrients and repair tissue. Because obesity is associated with a poorer prognosis for cancer patients, we started Delores on gentle strengthening exercises while enhancing her aerobic capacity, with the goal of a healthier weight and increased muscle mass. Being fitter lowered her insulin levels (which greatly improves the prognosis for breast cancer patients), allowed her to better withstand the rigors of chemotherapy, and, not incidentally, helped her feel better, lifting her out of depression.

To counter her anxiety, Delores learned “relaxed breathing” exercises, which helped her break the chain of panic felt whenever she dwelled on her condition. She also learned biofeedback so she could observe and become confident about her newfound ability to control what she had thought were inevitable responses to stress. A religious person, Delores also practiced prayerful meditation. This enabled her to tap into a source of calm and strength. Cognitive training helped her adjust her priorities and embrace the things she had to do to preserve her health.

Next we focused on strengthening Delores’ anti-cancer biology. As mentioned above, tests showed high levels of oxidative stress, low immune function, low cortisol levels, and high levels of growth hormones. Tumors thrive in these conditions, so it was obviously necessary to get them back to healthful levels. To combat the oxidative damage, possibly a result of her prior chemotherapy, I recommended a twice-daily 8-ounce glass of a vegetable-fruit drink rich in phytochemicals (phytochemicals are the powerful healing compounds found in plant pigments), equivalent to a dozen servings of vegetables. She also began taking Siberian ginseng to normalize cortisol production and immune function. To support normal insulin production, I placed her on the supplement taurine.

We were now ready to introduce complementary therapies and natural medicines aimed at enhancing the efficacy of standard cancer treatments. I started Delores on a Chinese herbal formula composed of ginseng, astragalus, cinnamon, and other ingredients that we have found helps patients maintain energy levels. I also recommended micronutrients (cancer patients need to avoid standard multivitamins, as too much iron, copper, manganese, and high levels of vitamins B₁ and B₁₂ can promote cancer). These included antioxidants, fish oil capsules that support a healthy inflammation response, and a formulation containing extracts from six types of medicinal mushrooms thought to support immune function. Since Delores’ breast cancer was estrogen-receptor-positive, I also gave her calcium d-glucarate, a compound that research suggests may support normal metabolism of estrogen, the hormone that can latch on

to estrogen receptors and trigger tumor-cell proliferation. After her chemotherapy and full integrative program knocked out her liver tumors, Delores regained and, in fact, greatly improved her overall health. However, as is commonly the case with metastatic disease, her cancer eventually began to show signs of returning. The integrative lifestyle program seems to have kept it at bay, since it was a full three years before it came roaring back (usual survival after diagnosis of liver metastases was a little over a year at that time). This time, metastases covered 80 percent of her liver.

But because we had stretched her survival, we were now able to turn to a new conventional therapy. Molecular analysis showed that the molecule HER2/neu studded the surface of Delores' tumor cells, similar to the way that estrogen receptors stud the surface of many breast cancer cells. Herceptin, a new molecular target therapy, had just received FDA approval for treating HER2/neu-bearing tumors. Thus, in 1999, Delores became one of the first U.S. patients to receive Herceptin outside a clinical trial. Had we not been able to keep her cancer at bay with her integrative program, she might have missed this chance. Once again, conventional therapy knocked out her liver tumors, and her full program continued to support her health.

Just as important as enhancing the potency of treatment is preventing what can be its serious side effects. I therefore gave Delores a micronutrient, coenzyme Q₁₀ (coQ₁₀), an amino acid supplement, L-carnitine, as well as a plant extract of hawthorn, all to support her heart muscle. (Adriamycin in the CAF therapy as well as Herceptin can damage heart muscle tissue.) Despite receiving Herceptin for four years and undergoing several more rounds of chemotherapy, Delores' last heart scans before she discontinued Herceptin were completely normal.

As Delores progressed through treatment I adjusted the dosages of coQ₁₀, L-carnitine, and hawthorn extract. When the common side effect neuropathy (which Delores experienced as numbness in the fingers) occurred, Delores began taking the botanical supplement ginkgo biloba and lipoic acid as nervous system supports. Delores went on to survive seven years beyond the few months she had been given when her liver mets were

found, living well and getting to see her children graduate from college.

Marlene: Overcoming Mistrust

Marlene faced a very different set of challenges. She was an exercise addict, a competitive bodybuilder, and, in her own words, “a mountain climbing fanatic” who began her day at 5:45 A.M. by lifting weights for nearly two hours. She worked two jobs. Too busy to cook, she had made fast food and sugar the centerpieces of her diet, ingesting a steady stream of cookies and sugary sodas as she powered through her grueling schedule. In order to fuel this frenetic lifestyle, she drank an average of eight cups of coffee a day and smoked heavily.

Marlene was in her mid-forties and in peak physical condition when she found a large lump in her breast. An extraordinary capacity for denial, as well as severe apprehension about doctors, kept her from having the lump examined for nearly six months. Eventually she saw her physician and learned she had cancer. Five days later she underwent a modified radical mastectomy that removed her breast and lymph nodes. Because of her deep mistrust of the medical world, at five in the morning the day after the surgery she struggled out of her hospital bed, pulled out her IV, got dressed, and demanded to be released.

Her pathology report was not encouraging. The tumor was 4.5 centimeters in diameter, and ten of thirteen lymph nodes examined showed evidence of cancer. At a follow-up visit her doctor told her, “I’m sorry, but you will die from this disease.” This fatal pronouncement stirred Marlene’s rebellious spirit. She read everything she could find about cancer treatment. She began a strict macrobiotic diet. Happening on a description of our center, she made an appointment to see us. As she put it, she felt she “had to trust somebody.”

Marlene received a full, individualized assessment upon her arrival in 1996. Although she appeared to be in good physical condition and of normal weight, her detoxification capacity was

greatly reduced, likely due in part to her history of smoking. We did not need to conduct a formal psychological assessment to see that Marlene had a strong aversion to medical settings: she experienced extreme anxiety whenever she underwent any type of exam (we therefore used relaxed focused imagery before each exam to calm her). Our assessment revealed a woman truly panic-stricken at a perceived loss of control over her body and her life. Furthermore, she suffered from an underlying depression that deprived her of a sense of pleasure in being alive.

Tests of Marlene's biochemical terrain found high levels of stress hormones. While having too low a level of cortisol, as Delores had, is associated with a decline in vitality and generalized enervation, chronically high levels of the stress hormone cortisol are associated with poor outcomes. Marlene also had high oxidation levels (a reflection of smoking and stress) and inflammation (probably in part from excessive exercise). Unlike Delores' tumor, Marlene's was estrogen-receptor-negative, an indication that something other than this hormone was fueling cellular proliferation.

We first targeted Marlene's lifestyle. I focused on a balanced fitness regimen, advising her to add stretching and flexibility. I encouraged her to continue hiking but to reduce high-impact exercises such as excessive weight lifting, which can promote inflammation. I advised her to relax her overly rigid version of the macrobiotic diet in order to get important nutrients such as omega-3 fatty acids (found in fish oils) and lycopene (found in tomatoes, which were not part of her strict macrobiotic diet). By widening her food choices, I hoped, she would reap an added benefit: obsessive dietary attitudes can keep you from really enjoying food, with the result that you absorb fewer nutrients.

In the mind-spirit area, we worked with Marlene to help her master her anxiety, recapture pleasure in her life, and alleviate depression. Training with our staff in cognitive therapy allowed her to identify what triggered her anxiety around any medical encounter and calmly prevent these events from tipping her into an anxiety attack. She learned to focus on the pleasurable aspects of her life and to enter the highly focused state of

self-hypnosis, where she was able to conquer much of her fear just prior to each medical encounter by inducing her body's relaxation response at will. Most important, Marlene learned that there are many acceptable ways of living between the opposing poles of utter failure and perfection, something that let her enhance relationships with family members, who in turn provided invaluable support as she dealt with cancer.

Now it was time to attack her cancer directly. At first, Marlene refused to even consider chemotherapy. I worked hard to gain her trust, speaking to her at length about my patients' experiences, and explained that the severity of her disease made chemotherapy imperative to prevent progression and advanced disease. I reassured her that, bolstered by our supplement program, I believed that she would be able to tolerate chemo with little discomfort and few side effects. She finally agreed to begin chemotherapy.

As with Delores, we opted for a CAF regimen. To minimize her anxiety, I obtained a portable chemo pump that she could wear in a fanny pack. It allowed Marlene to receive the CAF through the fractionated infusion method, as Delores did, and it also made her less anxious than she would have been stuck in a chair getting chemo. She actually received CAF while taking walks. This helped her regain a sense of control. Marlene experienced no side effects and, over the six months of chemo, never missed a meal.

To complement this treatment, I recommended a Chinese herbal concoction that promotes energy levels. Marlene also took macronutrients that support appetite and immune function and protect the gut wall, which can be damaged by chemo. She took an antioxidant, a formula of fish oil and curcumin (a turmeric extract) for a normal inflammatory response, and silymarin (a milk thistle extract) to promote healthy liver function. Because tests showed Marlene had low levels of essential phytochemicals (such as the anti-cancer compound lycopene), I also started her on a phytochemical drink.

Let me pause for a moment to underline how individualized Marlene's and Delores' treatments were. Marlene took silymarin; Delores did not. Delores took immune-enhancing mushrooms;

Marlene did not. Delores took Siberian ginseng for her stress response; Marlene did not. The differences were not confined to supplements. Persuading Marlene to relax her strict macrobiotic diet and exercise regimen proved extremely helpful, but such an approach would have been inappropriate, even dangerous, for Delores with her high-fat, high-sugar diet. In fact, it is probably a misnomer to refer to *the* Life Over Cancer program. There are as many Life Over Cancer programs as there are patients, with each program customized to a patient's unique biochemical, social, psychological, and biological characteristics.

Today Marlene has completely restructured her life. She is successfully balancing work, relaxation, and relationships and is following an improved diet and sensible exercise regimen. She says that although she wouldn't have wished for cancer, her "life after cancer is richer than it was before." In 2008, over twelve years after her surgeon told her she would die from the disease, Marlene is healthy and completely free of malignancy. Her complete remission is impressive, a true testament to the Life Over Cancer program and Marlene's terrific spirit.

Your Turn

I hope these two stories have given you a sense of how the Life Over Cancer program is customized—tailored to fit your needs and your situation. Some elements, such as a diet rich in vegetables and fruits, apply to everyone. Others, such as the precise supplements you should take to make your internal biochemical environment as hostile as possible to cancer, vary from one person to another. This book will allow you to create an individualized program, one that is much more effective than the standard one-size-fits-all therapies offered by much of conventional and complementary medicine. It's time to dive in.