



CANCER

Survival Guide

**How to Conquer It and
Live a Good Life**

Inside:

- Comprehensive info on the 13 most common cancers including lung, breast, prostate, and colon
- New genetic tests that can reveal your risk
- Early detection and prevention techniques
- Latest medical breakthroughs and miracle drugs
- Alternative therapies that really work
- How to find the best treatments and doctors
- Locate a lifesaving clinical trial near you
- Find cost-effective therapies and free resources



Foreword by
Gary Small, M.D.,
New York Times Bestselling Author

THE *Da Vinci* GUIDES

CHARLOTTE LIBOV Award-Winning Medical Writer

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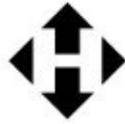
How to Conquer It and Live a Good Life

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How to Conquer It and Live a Good Life

CHARLOTTE LIBOV



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This book is dedicated to all cancer survivors and their loved ones.

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Foreword

MOST PEOPLE DESIRE A long life, provided they maintain their health and independence. Thanks in part to advances in medical technology, we are now living longer than ever. Most of those born in 1900 would have been fortunate to have lived beyond age 50. Today, life expectancy approaches 80 years in many countries, which has led to the greying of our population. In 2010, more than 40 million Americans were aged 65 or older — 12 times the estimate in 1900. If current trends continue unabated, we can anticipate a doubling of the number of older adults by 2030.

The goal for most of us is to achieve successful aging; we don't just want to live a long life, we want to live *well* throughout that long life. And we have made strides in achieving such quality longevity, according to the MacArthur Foundation Network on an Aging Society, which reported that genetics accounts for only about one-third of what determines wellness as people age. Healthful lifestyle strategies and effective medical treatments can help prevent age-related illnesses, including many forms of cancer, as well as extend the number of years of successful aging.

But despite our remarkable gains in life expectancy and a greater knowledge of how to live well as we age, not everyone is living better longer. Nearly three-quarters of people aged 65 and older suffer from one or more chronic medical illnesses, such as cancer, Alzheimer's disease, Parkinson's disease, heart disease, hypertension, arthritis, and diabetes. The costs of these conditions exceeds hundreds of billions of dollars each year, and as the 78 million baby boomers begin to populate our older age group, our country must tackle a looming financial, social, and healthcare burden.

Prevention strategies can have a critical impact on many of these age-related illnesses. For example, Alzheimer's disease afflicts more than five million people in the United States, and 40 million worldwide. Although no disease-modifying treatment has yet been discovered, recent research shows that healthy lifestyle behaviors may delay symptom onset and lower disease prevalence. A new analysis estimates that nearly 50 percent of Alzheimer's cases worldwide could be attributed to modifiable risk factors, such as high blood pressure, obesity, smoking, depression, cognitive inactivity, or limited education, and physical inactivity.

Many of these modifiable risk factors can prevent other diseases that burden our population at nearly every age, including heart disease, stroke, cancer, and arthritis. Remarkable medical advancements have led to effective treatment and prevention strategies for cancer, but people are not always informed about the best prevention, detection, and treatment methods available. Greater public awareness and expanded programs to help reduce smoking, increase physical activity, improve diet, and expand screening would have a considerable impact on the prevalence and mortality rate of cancer. The American Cancer Society estimates that tobacco smoking alone accounts for approximately 170,000 cancer deaths each year. In 2015, it is estimated that poor nutrition, physical inactivity, overweight, and obesity will contribute to 1.5 million cases of cancer.

When people understand the connection between their daily behavior and cancer risk, they can adjust those behaviors, lower their cancer risk, and extend their life expectancy. Legislative bodies can help to shape healthier behaviors. For instance, despite convincing evidence of the cancer risks from indoor tanning facilities, in 2013 four percent of US adults reported using such facilities during the previous year. That same year, 20 percent of female and five percent of male high school students reported using an indoor tanning device. As a result of such high usage rates, laws restricting

minor's access to indoor tanning facilities have been enacted in 42 states.

These kinds of laws will save lives, but greater awareness about the disease, its physical and psychological impact, and practical strategies for treatment and prevention are still critically needed. Those at risk for cancer or facing the challenge of a cancer diagnosis have to make difficult decisions that will impact the quality and duration of their lives. They often read conflicting accounts of "miracle cures," prevention methods, and diagnostic tests. Many people end up confused and overwhelmed by the weight of puzzling data. They need a way to put this daunting amount of complex information into perspective so they can make these vital decisions with the most rational and practical mindset, and in a very brief time frame.

The *Cancer Survival Guide* provides an informed perspective that will enlighten people at risk for cancer, patients already suffering from the disease, and their loved ones as well. By translating the latest scientific information into accessible language and practical advice, this important book will be the go-to guide for anyone navigating the threat of cancer and its consequences. Whether searching for the best doctor, deciding on an appropriate diagnostic test, or navigating the multiple options for treatment, the *Cancer Survival Guide* offers the kind of guidance that will allay anxieties and help people come up with an informed plan to deal with cancer.

Although the number of deaths from cancer has declined by 20 percent during the past two decades, scientists and doctors still have much to learn about cancer detection and treatment. While research for new treatments and cures continues, the *Cancer Survival Guide* provides an important and valuable resource for anyone desiring to live better and longer. I expect that this book's clear, sensible, and knowledgeable guidance will not only become a welcome source of information and comfort for readers, it will help extend the years of successful aging for many of them.

Gary W. Small, M

CANCER DOESN'T WAIT.

From the instant you are diagnosed with cancer, you are bombarded with decisions that you need to make — fast. And these first steps can have huge repercussions all the way down the line, from how your cancer diagnosis is typed, sub-typed, staged, and treated, to even whether or not you survive, and your quality of life after treatment.

The problem is that you are going to be called upon to make what essentially are life-or-death decisions . . . with probably less information than you had when you decided on your last car!

The *Cancer Survival Guide* is intended to give you a jump-start in dealing with your cancer — provide you with the tools you need to make those difficult choices, and also to quickly access additional information as you need it.

Here's just a sampling of the questions those newly diagnosed with cancer need to consider, almost instantly, or within a couple of weeks at most:

- Who is the best doctor to treat my type of cancer?
- Where can I get the best treatment?
- Should I stick with my oncologist, or visit a large-scale cancer center?
- What kind of treatment is best?
- What side effects can I expect during treatment?
- Do I need a second opinion?
- Now that I have a second opinion, whom should I trust? Do I need a third?
- What will my cancer diagnosis mean for my loved ones?

This book was written to give you tools you need to survive, and the information you need to make decisions and deal with issues that will come at you, not only in your early days as a cancer patient but all the way through treatment and beyond.

Here's a guide to the more specific types of information you will find:

Part I: What Is Cancer?

These chapters provide you with a foundation for understanding cancer, no matter what form of the disease you have. You'll learn that there are common features that most cancers share. In addition, you'll get information on the basic tests that are used to diagnose the most common forms of cancer and the current ways of treating cancer, from traditional surgery, radiation, and chemotherapy, to the state-of-the-art targeted treatments. In addition to conventional treatments and new therapies, you'll also find a chapter that is devoted to complementary and alternative treatments. Moreover, you'll benefit from detailed information that will guide you in choosing the best doctor and treatment center for your particular type of cancer.

Part II: Types of Cancer

This section offers vital information on the 13 types of cancers covered in this book. This includes the “big four” cancers — breast, lung, prostate, and colon — that are the most common types of cancer, comprising the vast majority of cancer cases. The remaining nine cancers may be less common, but still affect the population in great numbers; this list includes the types that are the most deadly, like brain cancer, ovarian cancer, and melanoma.

Part III: After Diagnosis

You need to educate yourself when diagnosed with cancer, and this quest doesn't end after treatment or even years later. Part III contains information on the psychological and emotional effects of dealing with cancer through the years. In addition, you learn how cancer and its treatment will affect the rest of your body as well, so you'll be able to spot potential trouble early. Also, as a cancer survivor, you'll find tips on how to stay cancer-free for the rest of your life.

In the book's [appendix](#), you'll find recommended reading and resources — a veritable cancer directory — meant to guide you through the process, including web addresses, physical addresses, and phone numbers for ease of use.

Throughout the *Cancer Survival Guide*, you'll meet the top doctors who are experts in your particular type of cancer, and they'll share with you their words of encouragement, guidance, and wisdom, honed from years of experience in the field. You'll also learn the inspiring stories of cancer survivors who will tell you how they did it, as well as pass their advice on to you!

On the pages that follow, you will also learn:

- The statistics and prognosis for each particular type of cancer according to the stage of the disease
- How the genes that you were born with affect your chances of getting cancer
- Exactly which types of tests are used to diagnose your specific type of cancer, and what you need to know about them
- How to choose complementary and alternative cancer treatments that work
- How to avoid the side effects of cancer treatment
- How to avoid the depression and anxiety that come with cancer
- What a cancer survivorship plan is, and why you'll need one when you finish your cancer treatment
- All about the new targeted cancer therapies that are replacing conventional treatments and when and how they can be used
- How to access clinical research studies to learn about experimental treatments that could save your life
- What future medical problems you are vulnerable to developing according to the specific type of cancer you had
- What a “patient resource navigator” is, how to get one, and how having one can help you deal with the day-to-day issues that cancer patients face
- The steps you need to take after treatment to live the rest of your life cancer-free

In short, this book has been produced to provide you with the kind of clear-cut, step-by-step tool you'll need to beat cancer. It's intended to be sharp and to-the-point. Whether you're a man or woman or whether you are young, old, or in-between, this book is written with the fervent hope that its information will guide you in your journey from cancer patient to cancer survivor.

Acknowledgments

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PART I

What Is Cancer?

An Introduction to Cancer

IN THIS CHAPTER YOU'LL DISCOVER

- What Cancer Is
- How This Disease Affects the Body
- The Major Types of Cancer
- How Genetics Impacts Cancer
- Lifestyle and Environmental Factors That Contribute to Cancer
- Tips for Cancer Prevention

JOANNE FILINA WAS 37 when she was diagnosed with a potentially deadly form of leukemia. Her doctor told her that the blood disease would probably kill her. Determined to beat the odds, Joanne decided to head to a leading cancer clinic, where she found the attitude of the doctors there to be rooted, instead, in positivity. After aggressive treatment, her cancer is now in remission.

At age 33, Mike Craycraft felt a testicular lump; his immediate thought was that he had cancer. He even made his own “bucket list,” culminating in a giant good-bye party that he’d throw for himself. Although his immediate assumption was correct, today Craycraft is also cancer-free, and looking forward to many more decades ahead.

Anna Strazzante was diagnosed at the age of 41 with a potentially life-threatening and difficult-to-treat form of bladder cancer. “I felt like I’d been kicked in the stomach. It just seemed like I was living in a nightmare that I couldn’t awaken from,” she recalls. But today, Anna is not only cancer-free, she is a marathon runner — a sport she took up following her treatment.

Joanne, Mike, and Anna are just three of the cancer survivors you’ll meet in this book. They are among the 13.7 million people living in the United States who are beating cancer. And this statistic does not include cancers that were caught in their earliest stages, so the tally is undoubtedly much higher.

If you are diagnosed with cancer today, you are more likely to survive than at any time in history. The mission of this book is to give you the tools to do it.

What Is Cancer?

Our bodies are comprised of trillions of living cells, all of which make up our organs and features — from the hair on our scalp to the toenails on our feet. These cells are preprogrammed to grow, divide into new cells, and die in an orderly fashion. Cancer takes hold when cells begin to grow uncontrollably. Instead of dying, these cells continue to grow, forming new, abnormal cells. In effect, they become immortal.

How Does Cancer Affect the Body?

In most cases, cancer damages the body because of its capacity to spread to vital organs, ultimately

engulfing them and destroying their ability to perform their life-sustaining functions.

The precise way in which cancer affects the body, though, depends on the type of cancer. Most cancers are comprised of cells that clump together and form solid masses, or tumors. They spread by sending off cancerous cells that travel in the lymph system, taking up residency and colonizing other organs. These cancers are known as “malignancies,” a word that comes from Latin, meaning “to act maliciously, or with evil intent.” It is an apt term.

But there are exceptions. Brain cancer, for instance, does not spread to other organs, but its growth can destroy the delicate structure within the body’s vital command center. Leukemia results in armies of abnormal cells that destroy the blood’s critical, oxygen-carrying function.

Major Types of Cancer

All cancers fall within one of these four major categories:

Carcinoma is the most common type of cancer. In fact, 80 to 90 percent of all cancers are carcinomas. They are solid tumors that begin in the epithelial tissue of the cells in our body, which form the covering or lining of the organs, glands, and other bodily structures. Lung, breast, prostate, colon, rectal, and pancreatic cancer, for instance, are all carcinomas.

Sarcoma begins in the connective tissue, between bones and cartilage, or in the fat, muscles, and also blood vessels. Sarcomas can develop anywhere in the body, but half of them occur in the arms and legs.

Blood cancers are those that form in the bone marrow, in the blood itself, or in the lymph system — the interconnected, cleansing superhighway that occupies spaces and vessels between tissues and organs, by which lymphatic fluid circulates throughout the body. Lymph is a colorless fluid containing white blood cells that keep the tissues healthy and free of toxins.

Central nervous system cancers begin in the tissues of the brain and spinal cord. Most of these cancers occur in or spread to the brain.



DID YOU KNOW . . .

Fifty percent of all cancers are diagnosed as one of these four major types: breast, colon, lung, and prostate cancer. All other cancers, which comprise the remaining 50 percent, are cancers that are designated as “rare” because they occur in fewer than 200,000 people a year.

Common Symptoms of Cancer

Many types of cancers have different symptoms, which occur depending on where the disease is located, its type, and how large the tumor may have grown. That said, there are some common symptoms that indicate the presence of cancer. It’s important to realize, though, that many diseases, including some that are not serious, can cause these symptoms as well.

UNEXPLAINED WEIGHT LOSS

The first sign of cancer may be an unexplained loss of 10 pounds or more. This happens most often

with cancers of the pancreas, stomach, esophagus (swallowing tube), or lung(s). Weight loss can also be a later sign of other types of cancers, as they rob the body of vital nutrients in order to feed their own growth. As a general rule, doctors agree that an unexplained weight loss of five percent or more of your normal body weight in a six-month to one-year period — especially for older adults — is a signal for concern and requires medical evaluation.

FEVER

A rise in normal temperature is the body's way of attempting to fight off an infection. There are several reasons why cancer can cause a fever. The body may be reacting to substances produced by the tumor, or the fever may be due to blockages the tumor causes in the kidney, bladder, or bowel. Fever can also be an early sign of a blood cancer like leukemia or a non-Hodgkin's lymphoma.

PAIN

Pain can be an early symptom of testicular cancer. A headache that does not get better with time or treatment can indicate a possible brain tumor. Back pain is not usually an early warning sign of cancer, but an indication it has spread. Such pain can be caused by colon or ovarian cancer.

SUDDEN SHORTNESS OF BREATH

Belabored breathing, wheezing, fatigue, and trouble swallowing are sometimes early signs of lung cancer.

SKIN CHANGES

Redness, swelling, dark or bruised-looking patches, or itchy skin can also be an indication of inflammatory breast cancer. Itchy skin can be a symptom of lymphoma as well. Changes in any wart, mole, or freckle, whether in color, size, shape, or border, can signal the dangerous form of skin cancer known as melanoma.

SORES THAT DO NOT HEAL

A skin cancer may bleed and resemble a sore. A long-lasting sore in the mouth could be an oral cancer. Sores on the penis or vagina are commonly caused by infection or virus, but may also be an early warning sign of cancer.

ABNORMALITIES IN THE MOUTH

White patches inside the mouth and white spots on the tongue can indicate leukoplakia, a chronic condition caused by tobacco use. If unchecked, this can become mouth cancer.

UNUSUAL BLEEDING OR DISCHARGE

Bleeding or discharge with no apparent cause should spark concern, and could signal either early or advanced cancer. For instance, spitting up blood can indicate lung cancer. Blood in the stool can be a sign of colon or rectal cancer, and uterine cancer can cause abnormal vaginal bleeding. Blood in the urine can indicate bladder or kidney cancer, and a bloody discharge from the nipple can signal breast cancer.

THICKENINGS OR LUMPS IN THE BODY

Cancerous cells clump together, so it's not surprising that many cancers can be felt through the skin. A lump is a well-known tip-off to breast cancer, of course. Lumps elsewhere in the body, especially on the arms and legs, can indicate a sarcoma, which is a soft tissue cancer. Lumps in the armpit, neck, or groin area can indicate lymphoma.

INDIGESTION OR TROUBLE SWALLOWING

Persistent difficulty digesting or swallowing may be indicative of cancer of the esophagus (the swallowing tube), stomach, or pharynx (area where nasal passages connect to one's mouth and throat).

Genetics and Cancer

Cancer has always been with us. Indeed, our knowledge of cancer dates back to early recorded history. Later, the ancient Greek physician Hippocrates (460 BCE–377 BCE) gave cancer its name by describing several types of cancer with the Greek word *carcinos* (crab or crayfish) to denote the appearance of a cut, solid tumor with veins stretched out that suggested the claws of a crab to him.

The reason that cancer dates back to the birth of humankind is because it originates from deep within us — within our very genetic makeup. Deoxyribonucleic acid (DNA) contains the self-replicating genetic material, or genes, occupying every cell of our body. Our genes are arranged on chromosomes. Each cell in the human body contains 46 chromosomes, or 23 pairs, half obtained from each parent.

Here's a rundown on the types of genes involved in the development of cancer:

Proto-oncogene: These are genes that normally direct how a cell divides, but have the potential to undergo mutation and become an oncogene. The prefix “onco-” comes from the Greek *oncos*, meaning mass or tumor.

Oncogene: This is the product of a proto-oncogene that has developed a defect, mutated, and could result in a cancer. Scientists believe that we all carry oncogenes, but that they remain harmless unless triggered.

Tumor suppressor gene: These are genes we also carry that protect cells and slow their division. If something goes awry in this gene, the cancer is enabled to grow. The different genes involved in specific types of cancer are further discussed in those respective chapters.

How Genetics Works

The cells of our body contain genes that are comprised of DNA, which is known as the “genetic code” and orchestrates their functioning. The genetic code that oversees this process is contained in the 23 pairs of chromosomes; half of the code is located in a female's egg, and the other half in the male's sperm. Eggs and sperm are known as “germ cells.”

When the egg and sperm meet at the moment of conception, their individual chromosomes combine to create our complete DNA code. Our DNA programs the cells to live, multiply, and then die. If, for some reason, the cell ceases to respond to the DNA's growth-inhibiting signals, it can become cancerous.

The impact of inherited genetics varies with the type of cancer. A minority of cancers — perhaps only about five to 10 percent of cancers — are directly inherited. But genetics also plays a broad role, because certain genetic mutations also increase the likelihood that a person will develop cancer.

These account for cancers that seem to run in families, but do not follow the normal, direct genetic rules of inheritance.

The mutation of a gene into a cancer-causing one is not a simple process. It takes mutations in several genes for a person to develop cancer. What specifically causes mutations to occur in these genes is largely unknown. These are known as “sporadic” mutations, as they occur not due to heredity but by chance. They may occur from aging, tobacco use, sunlight or chemical exposure, or from other factors we don’t yet understand, but they are not caused by genetic inheritance.

Most cancers are diagnosed in those aged 60 and older. This is because mutations in some genes become more common as we age. At the same time, aging weakens the immune process. As the immune system becomes weaker, it’s less able to prevent these cancer-causing mutations from occurring.

Personal Genetic Testing

Genetic testing, which is also sometimes called “predictive testing,” seeks to find specific inherited changes, or mutations, in a person’s genetic makeup that could cause them to have a predisposition to develop cancer.

Even if you’ve been diagnosed with cancer, you should consider genetic testing for the following two reasons:

- Genetic testing can tip you off to an increased risk for developing a related form of the disease and alert you to take steps to prevent it. For instance, inheriting a BRCA gene increases the risk of developing both breast and ovarian cancer.
- Confirmation of a genetic mutation can enable you to alert your relatives that they should be tested as well, which could save their lives. There is an inherited form of colon cancer, and those people with the genetic mutation should undergo screening tests far earlier.

Currently, there are about 900 genetic tests available for all diseases, including many forms of cancer, such as breast, ovarian, prostate, endocrine, and some very rare cancers. Because of genetic trends in culture and bloodline, some individuals are highly encouraged to undergo genetic testing. For example, people of Ashkenazi (Eastern European) Jewish ancestry have been found to be at an increased risk for BRCA gene mutations that cause breast and ovarian cancer. As well, testing is recommended for those with two or more family members diagnosed with the following characteristics:

- Adult cancer at an earlier than expected age (under 50)
- Developed the same type of cancer (in some cases, this might not necessarily be the exact same type, as breast and ovarian cancer can be considered the same for purposes of determining genetic predisposition)
- Two or more different cancers in the same person
- A rare cancer, such as male breast cancer or sarcoma

Lifestyle Factors That Contribute to Cancer

TOBACCO

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