

## PART ONE

# WHAT YOU NEED TO KNOW ABOUT KIDNEY STONES

*May I govern my passions with absolute sway,  
And grow wiser and better, as strength wears away,  
Without gout or stone, by a gentle decay.*

—WALTER POPE (c. 1630–1714)



# 1

## THE KIDNEY STONE “BOOM”

*I drink gallons of milk a day. I love cheese, especially Brie. I love cheeseburgers. I often go out for a big lunch and grab a yogurt for dinner. I like raspberry jam on toast and I love peanuts. I've always sort of pooh-poohed dietary counseling. Listen, I smoke a pack and a half of cigarettes a day: telling me not to put raspberry jam on my toast is sort of ridiculous to my way of thinking. But the pain was the type I couldn't stand. I couldn't sit and I couldn't lie down. It came in waves. If I'm good, maybe I won't get these damn things again.*

—SARA, 28

*You get different advice from different doctors. It's confusing. About four years after my first episode, I saw a urologist in the country who did an X-ray and found three more stones in my kidney. He wanted to do lithotripsy to break up the stones. But, when I got back to the city and saw my regular doctor, he felt the three stones were too small to zap. The doctor in the country wanted to zap them, the doctor in the city felt they were too small. I was kind of caught between a stone and a hard place. . . .*

*What will really cut down my chance of getting stones again?*

—PETER, 44

*It happened right in the middle of my summer holiday. Just like the first episode. We weren't allowed to take stuff on the*

*beach to drink, so I'd sit down there sweating. I'd drink gallons of iced tea, though, whenever we weren't on the beach. Anyway, I was fine one minute, and the next minute I had this horrible pain and I was vomiting and had diarrhea. It came and it went, and came and went. But then it got worse and worse until I was on the floor.*

*I'm terrified of doctors. I'm terrified of hospitals. I don't want to know about it. I don't like the idea that I could be anywhere and go off like a time bomb like I did last summer. What do I do to never get another kidney stone?*

—ANITA, 52

*I'm an ex-college football player and all that stuff. Went into sales, great expense account, best restaurants, steaks—I was going for the world cholesterol record when it all stopped. The doctors said, if you can get your weight under control, you are going to be fine. I lost 35 pounds and thought that would do it. I put a little bit of it back on this year and then unfortunately this happened. I knew what it was—unless my wife and kids were sticking me in the back with a knife.*

*I'm going to take whatever precautions I need to take to avoid it again.*

—CHRIS, 45

The torment of a kidney stone attack is not easily forgotten. It is often impossible to believe that something so little can cause so much pain. Most people who have suffered through such an episode are highly motivated to do anything necessary to avoid another attack. Unfortunately, despite their initial good intentions, people who have made a kidney stone are likely to make another.

A health problem since ancient times, kidney stones have afflicted many famous historical figures, including Benjamin Franklin, Isaac Newton, Peter the Great, and Louis XIV. X-rays of Egyptian mummies dating back eight thousand to ten thousand years ago show evidence of stones. “Cutting for the stone” is one of the oldest surgical procedures. Interestingly, the specialty of urology is the only one noted in the Hippocratic oath.

## What Are Kidney Stones?

In the simplest of terms, kidney stones are composed of waste products—things the body does not need. Your kidneys normally eliminate these wastes in urine. When there is too much waste, or not enough fluid to flush it out, it comes together to form a “stone.” Some of these stones are so small they are like grains of sand, or gravel. When the kidneys eliminate these stones, the pain can be excruciating. It is often compared, unfavorably, to childbirth or surgery without anesthesia.

## Why Do Some People Get Kidney Stones?

Medical science cannot say with certainty why some people are prone to kidney stones. We do know that they tend to run in families, indicating a genetic predisposition to the condition. There is also a link to chronic dehydration and certain types of eating disorders.

Today, approximately one in fifteen people in the industrialized world will develop kidney stones. In some communities, that number is one in five. More than a million Americans are hospitalized each year for treatment of the condition. And what was once predominantly a male disease is now crossing the sexual barrier.

Why are we seeing such a growth in kidney stone disease?

## The Stone “Boom”

Since World War II, the incidence of stone disease has been increasing dramatically in the Western industrialized nations. In Germany, an adult male has a one in ten chance of making a kidney stone in his lifetime. This is a country that saw very little stone disease before the 1950s. A number of studies have been done, and they have clearly connected this increase to what people are eating.

As we eat richer diets, we must deal with more wastes. And wastes come through our kidneys and out in our urine. While this is an oversimplification of the issues we discuss in this book, it focuses the main problem for most stone formers. The stone “boom” is tied to our diets.

In addition, while the medical treatment of existing stones is now extremely sophisticated, it is not the long-term answer to the problem of recurring stone disease. Lithotripsy, surgery, medication, and/or painkillers can solve your immediate problem and alleviate your pain until the next episode occurs. After numerous episodes of renal colic (kidney stones), especially if the stones become infected, you can do permanent damage to one or both of your kidneys.

## **Prevention Is the Cure**

You cannot cure a predisposition to kidney stones. We cannot change the fact that some people are prone to stone disease because of genetics or an underlying medical condition. In some cases an anatomic abnormality can be surgically corrected, but this is not the cause of the majority of kidney stones. You *can* change your diet and actually prevent a stone recurrence.

## **The Dietary Prescription**

After many years of trying to find a medicine that would “cure” people of kidney stones, doctors found that two-thirds of patients seen with recurring stones stopped making them with basic dietary advice. The Mayo Clinic labeled this phenomenon the “stone clinic effect.”

My experience is even better than the two-thirds figure. If people understand what causes stones and make the basic diet and lifestyle changes that we are recommending, they can prevent the recurrence of kidney stones. Only a handful need to take medication. While there are certain medical conditions that predispose some people to stone formation and make their special cases more difficult to control, even the toughest stone problems can be ameliorated with the advice in this book.

## **Preventing Kidney Stones**

Preventing kidney stones requires an understanding of the problem and the specific changes you will have to make to avoid a recurrence.

## Step One

I have found that people who understand how and why they made kidney stones are more successful in preventing a recurrence. They are able to determine how aggressively their dietary and lifestyle habits must be changed. Therefore, the first part of this book explains what kidney stones are, how and why they form, what habits and behaviors raise the risk of attack, and the dietary and lifestyle elements that promote stone formation. We then help you assess whether you are at low or high risk of another attack.

## Step Two

The next step consists in targeting the specific dietary and lifestyle changes that will prevent your type of stone disease. The Master Plan for kidney stone prevention, outlined in part two, is a dietary prescription that has evolved and been refined over almost thirty years of clinical practice.

Any diet is, by definition, an inhibition of spontaneous behavior. You cannot eat *what* you want *when* you want it. I was explaining certain foods that might trigger another episode to one patient who told me, “I’m the type of person that if you told me right now I could never have rhubarb again I’d suddenly want rhubarb. I hate rhubarb.”

Certain desserts, large portions, second helpings, cheating on weekends, and certain forbidden foods all play a part. You must be motivated and willing to change certain eating and lifestyle habits.

## Commitment to Change

Because many people are given medicines or must undergo procedures to get rid of stones, part three of this book explains the medical specialties, medicines, and procedures you may encounter.

If you are reading this book, you have either made or passed a kidney stone or want to help someone who has had kidney stones. That process is usually sufficient motivation. We are asking you to make a commitment to change certain eating and lifestyle habits that contribute to stone formation. Most of you will find the necessary

changes quite easy to accomplish. The Master Plan is easy to follow and fits into the way people actually live and work.

I have found that the resolve of many people often recedes along with the memory of their pain. For this reason, I recommend keeping this book in a convenient spot and rereading not only the dietary advice but also the case histories. They may serve to remind you of the discomfort—and extreme pain—that you are missing.