Chapter

1

Salt: The Silent Killer in Your Kitchen

The addition of salt to our daily food, while not healthy for anybody, is downright horrible for Black Americans. Let's explore this problem starting with the following real-life scenario.

The phone rings at three in the morning. The nurse from the ICU apologetically says, "I am sorry to wake you up, Doc. I cannot get the blood pressure of this post-bypass heart surgery patient under control." She goes on. "I know you are worried about bleeding problems after his heart surgery. I have already used the maximum doses of three different medications. I am still not able to bring down the blood pressure."

Take any one of the hundreds of thousands of people who undergo heart bypass operations each year and you will see a vertical scar right in the middle of the chest. During a typical open-heart surgery, the breastbone, which is in the front of the chest, is cut open to allow access to the heart. At the end of the surgery, steel wires are used to bring the two halves of the breastbone together. The new bypasses created during surgery are sewn in place with very fine thread. If the patient's blood pressure rises too high after the operation is concluded and the chest is already closed, the raw cut edges of the bone can start to bleed from the heightened pressure. Any of the delicate suture lines on the heart could also break from the same high pressure, causing bleeding.

This bleeding is dangerous because the blood will accumulate around the heart and prevent the heart from pumping well. If a suture line snaps from this high pressure, the sudden loss of a lot of blood could be disastrous. So you can understand why the nurse taking care of this patient is worried. I give orders to switch to a stronger class of medication and higher doses. I hope the pressure comes down, because there's nothing more that I—or anyone else—can do.

This conversation highlights the problem Black Americans face in dealing with salt-induced high blood pressure. Our bodies are made up of water in which a variety of different kinds of salts, called electrolytes, have been dissolved. The concentration of these electrolytes—or salts—in the body is maintained with scrupulous precision by complex mechanisms. What happens when that balance is thrown off, say by our eating excess salt? If the fluid around the blood cells has too high a concentration of salt, our blood cells will release some of their fluid into the surrounding fluid. Balance is restored, but at a cost, because the cells that have provided the necessary fluid wind up dying since they no longer have

enough fluid to stay healthy. Conversely, if the salt concentration in each cell is higher than that of the surrounding fluid, the fluid will permeate the cells to even things out. The extra fluid causes the cells to swell like balloons and, eventually, like balloons that get overfilled, to burst.

As you can see, adding extra salt to your food causes direct damage on the cellular level. Of course, our bodies do have additional resources to help with the salt overload—namely our kidneys. By controlling the composition of our urine, the kidneys can help maintain the right balance of electrolytes to a point. Over time, however, they just can't handle all the excess salt we consume. So the kidneys also cause us to retain water in order to balance out the fluids in and around the blood cells.

When you retain water, the pressure in the blood vessels goes up due to the higher volume of fluids in your body. It's as simple as that. If you have any doubt about this salt and water connection, just try eating salty potato chips or peanuts; you will pretty much be forced to drink some liquids. If you then drink a soda pop instead of a glass of water, the food-processing and beverage industries have it made, especially since sodas contain salt. You'll want to continue eating your salty snack and drinking your salty soda. Why else do you think that these industries fight any salt restriction in processed foods?

These industries are profiting at the expense of your physical well-being. You probably know the feeling that comes with retaining water. Suddenly it's hard to slip on your rings or even your shoes. That's because the volume of water that your system now has to deal with has increased, but the system of blood vessels through which this water circulates has not.

What happens when you stuff a suitcase so full that you

have to sit on it to get it closed? More often than not, the zipper pops. It just can't hold up against all that pressure.

Your body works the same way. All that extra pressure—in this case, blood pressure—that results from having to compensate for an excess of salt in your system eventually wreaks havoc on your body, causing it to malfunction in a number of ways. That's especially true for Black Americans.

Eating salty processed foods or adding salt in home cooking causes Black Americans to suffer high blood pressure and many other consequences at a much greater rate and often with greater intensity than White Americans. That's because, as I will explain at greater length in this book, Black Americans are more sensitive to salt than are Caucasian Americans. This salt sensitivity is largely responsible for Black America's poor state of health and the main reason for Black American life expectancy ranking below that of 100 of the world's nations.

Data gathered from prominent sources such as the American Heart Association reveal that:

- Black Americans have high blood pressure almost twice as often as Caucasian Americans.
- Severe high blood pressure, which is greater than 180 mm Hg, is encountered almost six times more often in African Americans with high blood pressure than in Caucasian Americans.
- This high blood pressure, just as with the heart patient I wrote about at the beginning of this chapter, is much more difficult to control. Stronger medications, higher doses and combinations of medications are usually needed, but they do not always work to lower dangerous blood pressure levels.

- Black Americans have high blood pressure at an earlier age.
- The degree of the problem is also higher, meaning that Black Americans suffer a higher rate of complications from a similar degree of high blood pressure than do White Americans.
- The target organ damage to the heart, kidney and brain from high blood pressure is disproportionately greater.
- Among Black Americans, the risk of high blood pressure goes up even more with obesity, inactivity and diabetes, all of which are also unfortunately more common compared with Caucasian Americans.

Salt-related health problems don't stop with high blood pressure. As I mentioned earlier, Black Americans pay a much higher penalty with salt-related health problems, including asthma, stomach cancer, osteoporosis, obesity and dementia.

Why such a vast difference?

The answer lies in the fact that Black Americans are very sensitive to salt intake.