Excerpt from **CHAPTER 1**

Your Aching Back

If your back hurts, you are not alone. You suffer from one of the most common but vexing conditions of modern times. Back pain is so much a part of our culture that people seem to think this discomfort is simply part of daily life. For some people, back pain is debilitating, and they find it difficult, if not impossible, to get through each day. For others, the discomfort may be more like a nagging annoyance, but one that leads them to take ibuprofen or prescription painkillers in some quantity.

Here are some shocking statistics about back pain:

- Back pain sends more patients to physicians than any ailment except the common cold, and it accounts for a quarter of all workers' compensation claims.
- One-third of people over the age of 18 have sought treatment in the past 5 years for back pain.
- Back pain is the leading cause of job disability in adults younger than 45 years.
- The healthcare system spends more than $90 billion annually on back pain treatments—much of that for X-rays, computed tomography (CT) scans, injections, and surgeries, which studies show are often premature or unnecessary.
- As many as 4 in 10 imaging studies associated with lower back pain are unnecessary, and as many as two in three epidural steroid injections are avoidable, according to the National Committee for Quality Assurance, an organization that monitors healthcare quality and accredits health plans.
- According to the National Institutes of Health (NIH), back pain is the fifth most common reason for hospitalization and the third most common reason for surgery.

Help Me Make This Pain Go Away!

I know that statistics are the last thing you want to hear about right now—your aching back is pretty much all you can think about at this time. And while I will discuss the "what you should do" suggestions quite soon, first I want to explain what's meaningful and what isn't when it comes to back pain.

My favorite myths about back pain vividly illustrate why your confusion is so understandable—you've been hearing a lot of misinformation, ranging from medical misconceptions (imaging studies are helpful for making a diagnosis) to old wives' tales (if you are middle-aged, it's normal to have back pain).

Realizing that the following popular myths aren't always true will put you on the path toward better understanding.

Ten Myths About Back Pain

Myth 1: If you bend down to lift something up and your back goes out, it is because you bent wrong.

Very rarely will your back go out after you've made a simple movement, such as bending. If you suffer sudden back pain as a result of bending, it is more likely that you have been doing something that has damaged your back little by little. Bending was simply the final indignity, and your back responded with, "No more!"

Myth 2: The location of the back pain determines the problem.

The fact is, you may be experiencing pain in one part of the body but the problem often does not originate from the same spot. For example, an imbalance in your feet can cause your lower back to hurt.

Myth 3: Extra weight can be the primary cause of back pain.

While extra weight is not good for your body overall, your spine is not going to give out because of a few extra pounds. Being overweight is only one piece of the back pain puzzle—it is by no means the determining factor.

The question I always ask is, "Was the patient overweight before he or she had the back problem?" Extra weight is generally not the root problem; the unhealthy habits that caused the patient to be overweight in the first place are usually the primary reason for their back pain.

Myth 4: If you have back pain more than once, you will probably need to have surgery at some point.

Surgery is not inevitable; nothing could be further from the truth. It is always best to start with the least invasive solution. Back surgery is *not* a cure-all. The common model that the surgeon may present to you—that a disc sitting on a nerve needs to be corrected—is oversimplified and at best only partially true. As a rule of thumb, don't even consider surgery initially. It is not recommended during the first 6 weeks of pain onset; half of patients with radiating lower back pain recover spontaneously with pain management, minimal bed rest, and a return to appropriate physical activity.

According to the National Committee for Quality Assurance, patients often undergo aggressive treatments when less costly and less complicated therapy may yield similar or better results. Unfortunately, some patients who have back surgery find themselves suffering from failed back surgery syndrome (FBSS). The fact that there is actually a term to describe this situation says it all.

For a select few, back surgery can be the best course of action, but explore the less invasive solutions first.

Myth 5: MRIs are helpful for diagnosing back pain.

Magnetic resonance imaging (MRI) is actually ineffective when it comes to the diagnosis of back pain. Based on studies conducted between 1998 and 2000, doctors at the University of Washington in Seattle concluded that using MRIs leads to a higher rate of specialist consultations and more surgeries for patients, but results in fewer beneficial outcomes. In the *Journal of the American Medical Association*, Nortin M. Hadler, professor of medicine at the University of North Carolina at Chapel Hill, noted that MRIs are not effective for patients with back pain because the imagery is insufficient to diagnose the root cause.

Myth 6: The best way to predict future occurrences of back pain is with an X-ray and/or blood work.

In one study, 3,000 Boeing employees were followed over a period of 4 years. The investigators found that psychological stress was a far more accurate predictor of future back pain problems than any physical measure.

Myth 7: By age 60, it is normal to have some back pain in the morning.

It is not normal, but it is very common for middle-aged adults to experience back pain. However, back pain does not have to be a life sentence that worsens as you age.

Myth 8: If you have a disc herniation, there is nothing that you can do; you just have to learn to live with pain.

There are thousands of people who have a disc herniation who have absolutely *no symptoms*. In a landmark study published in the *New England Journal of Medicine*, researchers found that 28 percent of the people whose MRI results revealed a disc herniation have actually never suffered back pain.

Myth 9: To have a strong back, you need strong abdominals and a strong core; the best way to achieve this is through sit-ups and crunches.

Sit-ups and crunches actually cause more back pain than they prevent. I've treated so many patients who have hurt themselves by doing these exercises that I am perfectly willing to tell you that these are the worst exercises you can do. I firmly believe that *they should never be done*.

Yes, you want to strengthen your back by having a well-functioning core and abdominals, but the abdominal exercises (like sit-ups) that doctors have been recommending for years have nothing to do with stabilizing your back because they work the wrong abdominal muscles. The ideal exercise for back

strengthening is an exercise called “The Skinnies” (see Chapter 6), which works a small internal abdominal muscle called the transverse abdominus.

Myth 10: Diet has nothing to do with back pain.

“You are what you eat” happens to be true about back pain. When people digest food, they have a *viscerosomatic reaction*. This means that as the digestive system processes the food, it can affect the muscles. Just as every joint and muscle seems to ache if you have an alcohol-induced hangover, the same type of viscerosomatic reaction occurs when you eat foods that disagree with you in some way.

Excerpt from **CHAPTER 2**

The Back Pain Solution

Christopher Columbus set sail from Spain in search of a quicker travel route to Asia. Though he was armed with mileage calculations and the best maps of the day, he ran into a major obstacle on his way: the Americas.

Just as Columbus was never going to get to the East Indies with an inaccurate map, we face the same problem with our current approach to back pain. Essentially, we are making the same mistake Christopher Columbus did. We are basing our diagnoses and treatments on erroneous information. We have been working with the wrong map for back pain, and it's never going to get us where we need to go.

A New Approach to Back Pain

When patients arrive in our offices, the diagnosis they have may have already received is usually partially true. Most doctors utilize the clearest imaging technology (often an MRI) to diagnose the problem. They usually look for a structural cause, which certainly makes sense initially, and then they recommend anti-inflammatory medications, muscle relaxants, home exercises, physical therapy, and, if none of those things work, surgery.

As you read in Chapter 1, the search for a structural issue is problematic, because back abnormalities *may or may not* cause pain. Yes, a patient may have a slight structural abnormality, but that may not actually be at the root of the pain. Recall the 1994 study, which I cited previously, in which almost two-thirds of the people whose MRIs showed evidence of structural back abnormalities suffered no pain at all. Because so many people *do* suffer back pain—with or without structural abnormalities—we obviously need a new diagnostic method.

This chapter explains our three-tiered approach to back pain. We have used it with thousands of patients, and it has proved to us that imbalance in any one of the following three areas may contribute to or cause pain:

- **STRUCTURAL PROBLEMS** involving bones, muscles, and nerves
- **CHEMICAL ACTIONS** related to hormonal and digestive issues that affect the body on a chemical and cellular level
- **EMOTIONAL STRESS**, or the psychological factors that lead to imbalance in the musculoskeletal, nervous, hormonal, and immune systems

Back Pain Isn't Really the Problem

You read that right—it is my belief that back pain itself is not the problem! Back pain is only a symptom of the real trouble. Pain is the body's way of trying to protect you from doing further damage to your body. The medical community spends its time and research money trying to get rid of the pain, when we should instead be looking for the true causes of back problems.

Imagine, for example, that you bend over to retrieve a tennis ball, or stoop to pick up some dirty laundry. You hear an odd, cracking sound. As you try to stand up, you feel a sharp, knife-like cramp in the small of your back. The back pain you experience is not random. It is a reliable and predictable symptom of something else that is happening in your body, and the pain is a signal. You are being given the opportunity to remedy the situation before it becomes more serious.

As discussed in Chapter 1, instead of asking "Where does it hurt?" we need to start asking "*Why* does it hurt?" Whether the principal cause is structural (muscles and bones), chemical (nutrition and hormonal),

or emotional (stress related), these imbalances are all interrelated. We often find that the problem stems from a combination of two of these issues, and sometimes all three.

Do you have a herniated disc? Possibly. But the real cause of your pain may be the three cups of coffee you drink daily. Or the actual trigger may be the distress you feel about a situation with a loved one. "It feels like someone jabbing a sword into my back," said one patient about the anguish he felt during his divorce.

Remember, too, that back pain is rarely one catastrophic event but several situations combining to create back pain (like the winds gathering to create a perfect storm). Any one of these factors, or a combination thereof, can be the one that catapults you into unbearable agony.

In Chapter 3 we walk you through a self-diagnostic program that will help you understand what might be at the root of *your* back pain, but first it's important to understand how the three possible causes of back pain can affect you.

Structural Causes of Back Pain

"Look first to the spine for the cause of disease," said Hippocrates. We couldn't agree more. If your back hurts, then checking for a structural cause is a good place to start.

The first structural issue to consider, of course, is an actual physical injury, an abnormality, or an age-related wearing away of the bone, which may cause or contribute to back pain. These issues may be relatively easy for the medical community to diagnose, but there are many routes to a cure, and we'll talk more about these in Chapter 4. In this chapter, I just want to remind you of our personal mantra: Start with the least invasive treatment and proceed from there. In autumn 2006, the *Journal of the American Medical Association* published a well-designed study that compared patients who had surgery for ruptured discs in their lower backs to those who did not have surgery. Those who had surgery found relief more quickly; however, when the two groups were evaluated 2 years later, the authors noted that the patients who had simply waited eventually improved to the same degree as those who had the surgery. When evaluated 5 to 7 years later, the two groups showed no discernible difference. Although one can't discount the benefit of addressing the pain early through surgery, when you factor in the expense and the possible risk factors, a definite case can be made for simply waiting it out. This means that even if you have one of the classic structural issues that can cause back pain, you don't want to book time with the surgeon just yet. There are many alternatives to surgery, which will be discussed later in the book.

Structural pain can also come from such lifestyle issues as poor posture and too much time sitting with a rounded back at the computer; it can even come from a surprising source, such as years and years of sitting on your wallet. (More about this in Chapter 5.) Iowa researchers examined 15 different studies and found that as little as 20 hours of work at the computer doubles the risk of developing shoulder and arm pain, and over time, shoulder and arm pain often resonate as pain that is felt in the back and neck.

When the muscles and spine are not aligned—often because of bad posture and other lifestyle issues—muscle function, nerve function, and blood supply are compromised. Proper posture and correct use of your muscles make for more effective functioning. Weight lifters understand this concept, and as a result, they are able to lift some impressive weight. When picking something up, most of us hinge at the waist and reach down with our hands. This lifting method compromises our breathing, blood flow, and nerve function. You could never accomplish with this method what a weight lifter could by squatting down first and letting the leg muscles do the real work.

Body form is a vital part of back health and general well-being. Good form permits us to accomplish what we need to without causing injury, and it increases strength and generally optimizes muscular function. Even sedentary acts can be done "better" when proper form is employed. Though sitting at the computer has proven to be a major cause of back pain, you can even do that for prolonged periods if you use proper form. This involves having a good chair, exerting the effort to maintain good posture, and taking regular 5-minute stretching breaks.

Throughout the book, you'll find many suggestions and some specially designed exercises to help you regain proper form so that the pain caused by structural issues will diminish. In the process, you will improve your overall health because your breathing and blood flow will be better able to send nutrients to every part of your body.

Chemical (Nutritional) Causes of Back Pain

"We are what we eat and that can cause back pain" is a statement that always causes patients to raise their eyebrows and look at me quizzically. Their skepticism generally arises because in the Western view of medicine, our bodies are viewed as a nonintegrated collection of separate systems, and the idea that diet could cause back pain is revolutionary. It comes down to the head-scratching question: How could something you eat affect your back?

Because we get such surprised responses when we start asking people about what they eat, there are plenty of days when I think it would be easier to say to a patient, "Yeah, you're right...it's that disc that's bothering you. We'll do some adjustments. You should put heat [or ice] on it, and come back next week." Instead, our office is committed to educating our patients on how a chemical or dietary imbalance can contribute to back pain.

Have you ever had a hangover? At some point most people have. And how did you feel? "Nauseous" and "achy all over" are usually among the symptoms. If what you eat or drink has nothing to do with your musculoskeletal system, why do you feel so sick and achy after drinking too much? And what do you do for relief? Usually you take some kind of medication, such as an anti-inflammatory or muscle relaxant. Now you can clearly see the chemical/dietary connection.

Because our bodies are very advanced machines, it makes sense that the quality of the "fuel" we put in it makes a difference. Just as your car functions poorly with dirty oil or conks out without enough gas, your body relies on the excellence of what you put into it.

In Finland, researchers conducted autopsies on people who had died from non-back-related causes but were on record as having suffered from back pain. What they discovered was that people who suffered back pain were more likely to have blocked arteries to the spine than were the comparison group of people who did not have back pain. The average person with back pain was found to have two arteries to the lower back completely blocked and at least one more artery narrowed. This is a notable example of how proper circulation brings nutrients to the spine and removes the cells' waste products. If this isn't happening efficiently, inflammation can result.

Unfortunately, average Americans are not good nutritionists. They'll eat almost anything! It is remarkable how quickly perfectly sane people will take up with the latest fad diet. Shortly after the news media writes about the most recent food-related study, a new diet will have been created to capitalize on the findings. In the early 1990s, everything was low fat, even though some fat is a vital component to health. Then Americans switched to a high-fat, low-carb diet, even though carbohydrates are vital for health.

Now we're swinging toward super-enriched foods, which can also be quite problematic. For example, many breakfast cereals now advertise that they contain 100 percent of our daily requirement of fiber. Although these cereals might be great for you if that's all you ate all day, you don't really need to pack every ounce of fiber into your morning meal. What's wrong with eating healthy foods throughout the day? The same goes regarding the current fad for vitamins and nutritional supplements. Since most of us don't know what we're really eating in the first place, loading up on excess—or even harmful—supplements is not the way to compensate for poor eating habits.

The simple fact is that extremes of anything are not healthy. Too much in the way of simple carbohydrates can lead to diabetes; too much protein can lead to ketoacidosis (a harmful process that breaks down tissues); too much fiber can lead to gas and bloating and digestive issues, all of which can affect arthritis and back pain.

Later in the book we'll discuss dietary changes you can make that will provide proper nutrition to help fight back pain.

Emotional Causes of Back Pain

"God will forgive you but your nervous system will not" is a favorite quote of ours from Hans Selye, a pioneer in the field of stress research. When you experience back pain and your doctor can't find any structural cause, it's reasonable to assume that your pain might be both a symptom and an expression of some distress in your life that generates troubling emotions.

During the last 35 years, researchers have established that the mind–body connection does exist, and it's actually very simple to understand. Scientists now know that stress hormones trigger chronic inflammation and tension in back muscles, tendons, ligaments, and discs. Muscles that contract (read that

as tighten up, sometimes too much) need an opportunity to relax, and when you are stressed, the muscles may stay tight, eventually causing great pain. Therefore it is obvious that stress triggers pain—it's not all in your head. When you experience a psychological (mind) imbalance—for example, when you are chronically angry about a problem at work—you also invariably experience a physiological (body) imbalance.

People under stress are sometimes so uncomfortable they think they are having a heart attack. They experience severe chest pains, shortness of breath, and sometimes nausea. When they go to the emergency room, they are told they were having a panic attack, not a heart attack. If emotions can trigger bodily reactions that mimic a heart attack, it is not difficult to understand how negative emotions can set off some very powerful pain mechanisms in your back. The person who is upset about an impending divorce hearing, the one who is anxious about his wedding, and the one who has been caregiver to her parent for several years will all experience stress differently. One may have a migraine, one may have a panic attack, and the other may find herself laid up with back or neck pain. These reactions can all be stress induced.

Sometimes the in-office evaluation leads us to suspect that a patient's pain may have an emotional cause. (Patients would often prefer that we say something like, "Ahhhh...I see what the trouble is," or even, "Go home, take two aspirin, and call me in the morning.") These are always the most difficult conversations to have.

"What do you mean I'm stressed?!" is often the response from patients when we mention that a decrease in stress might lead to a decrease in back pain. Although most of us are conditioned to believe that it is a weakness if we have a physical manifestation of how we are feeling, I am here to tell you that's crazy. We all have emotions, and they are going to come out somehow.

Life stresses—and our often negative reactions to them in the form of anger, distress, or fear—are also major triggers of both acute and chronic back pain. Think about it:

- If you're afraid of, or don't enjoy, public speaking or flying, how does your body feel in the hours before a speech or a flight?
- How do you feel when you are waiting for an important phone call, such as news from your parent or child, the outcome of a job interview, or the results of a medical test? How is your breathing? What do you do while waiting? Can you concentrate? Do you have any aches or pains?

When you stop and think about it, you *know* there is a mind–body connection. Every thought and feeling coexists with a set of neurological, hormonal, and even immune-system changes. Your entire biochemistry from moment to moment affects, and is affected by, your thought patterns and emotions. Altered breathing often accompanies these situations and can add to your discomfort. People hold their breath when frightened; they take shallow breaths when nervous—these factors contribute to body pain. When you breathe less deeply, oxygen and nutrients do not circulate around your body at the optimum rate, which results in the formation of a toxic environment. Your muscles tighten up, and you may be in pain until your body has a chance to loosen up.

One Friday, a patient, who is also a friend, called me as he was walking to work. His back was killing him, and he reported that it came "out of the blue." He mentioned that he had a big conference coming up, and he couldn't afford to be sick or have anything be wrong.

I asked him, "Did you do anything differently, strain yourself or sleep on a different mattress?"

The answer was no.

"Did you eat anything differently? Are you feverish? Have your bowel movements been different or are you having any problems while urinating?"

"No."

"Are you feeling stressed?"

"Yes!"

"Bingo," I told him.

Back pain doesn't come from nowhere. If my friend had been eating properly and had no particular reason to worry about a structural issue, then stress was the likely culprit. His muscles were on overdrive because of emotional strain. Some people get headaches, other people's jaws clamp up; still others feel the tightness in their backs.

We talked for a few more minutes about the upcoming conference he was worried about, and we discussed his options: Could he knock off work early that day (no), go for a massage Saturday morning (another no), or at least sleep a little extra Friday night (yes)?

When I called him the following Saturday, his back pain was gone. He said that simply figuring out that it was stress allowed him to calm down a bit.

One of my favorite success stories is my patient Risa, who comes in every few months whenever her hip starts to hurt. She's told me that when she begins to notice muscle tension as a result of stress, she simply focuses on what is stressing her out. Within 10 minutes the pain usually goes away.

Why the Three-Tiered Approach Works

As you continue reading this book, you'll come to better understand that what you eat or how you feel can provoke back pain that is every bit as debilitating as pain from whiplash, arthritis, and other physical causes. When we work with our patients, the effectiveness of our diagnoses and remedies prove that this is true. But this is not to say that the diagnostics of back pain are easy.

For one thing, the symptoms may arise from more than one source. After all, how many people eat really healthfully when they are stressed out? The interaction of these influences can make a diagnosis very complex.

Can pain come solely from a structural issue? Absolutely, but that doesn't always call for surgery. Recently I saw a patient who entered the office complaining of neck and shoulder pain that has bothered her consistently for the past 3 years. Though she had seen other chiropractors and physical therapists, she had complained to me that nothing had ever seemed to help for any prolonged period of time.

During the initial examination, it became pretty evident that even though the symptoms were located in her neck and shoulders, her problem was rooted in something much deeper than just those locations. By taking a postural evaluation of her, I noticed that one shoulder was higher than the other, one hip was considerably higher than the other, and one leg was longer than the other. From this evaluation, I knew that her shoulder and neck symptoms were secondary and that her postural imbalance was the primary cause of her problems. My suspicion was that the other professionals had worked on only her neck and shoulders. We worked out a plan involving stretches and exercises as well as chiropractic corrections. These were designed to correct her postural imbalance, and once her alignment was better, we had less to do to reduce the tightness that had settled in her neck and shoulders.

Diagnoses are all the more complicated because the body has a natural order. The primary cause of the problem needs to be corrected before you can have a long-term effect on what, in many cases, are the more bothersome secondary symptoms. This may mean sacrificing the short-term feel-good type of treatment for the fix that will work over the long term. For example, had I focused on only the neck and shoulder issues of my recent patient, her pain would have continued.

The message to you is to be a patient patient. If your first attempt doesn't work, stay focused on other possibilities. The amazing thing about taking care of the primary factors first is the number of secondary symptoms that disappear soon after.

From *The Truth About Back Pain* by Todd Sinett, DC, and Sheldon Sinett, DC

Published by Perigee, a member of Penguin Group USA Inc.