



How Holistic Spinal Pain Management is an Important Ally to Chronic Condition Prevention and Control





Cardiovascular disease, hypertension, diabetes and obesity are associated with, or among the top causes of death worldwide. The prevalence of these conditions continue to grow rapidly, especially obesity and diabetes, consequently contributing to **increased rates of certain cancers.**

Chronic conditions have numerous physiological, environmental, societal, genetic and other contributing factors, which can surface differently for each affected person. Likewise, these conditions typically require unique care pathways to manage. Despite varying ways each person is treated for their chronic condition, more providers and researchers continue to find a common denominator: spinal pain. Healthcare professionals are discovering that caring for an individual as a “Whole Being™,” a

complex intrinsic function of an individual, is necessary for greater success for health. Back, neck and other types of neuromusculoskeletal pain are developing both before and after these chronic conditions and often tend to make them worse. The presence of pain along with another disease makes managing both more difficult and negatively impacts the likelihood of a better outcome, especially when the health issues are treated in isolation.

By approaching pain management holistically, however, we can better manage – and even help prevent – a wide range of other chronic conditions. Through this proactive, preventive strategy, we can reduce the devastating, wide-reaching health, societal and economic consequences of chronic conditions and help people live longer, more fulfilling and healthy lives.



Chapter 1: Global Chronic Condition Burden

Not only are chronic conditions some of the top causes of death worldwide, but they are also the costliest. In the U.S. alone, three out of every four healthcare dollars are spent to care for individuals with chronic conditions. According to the Centers for Disease Control and Prevention, 90% of the nation's \$4.1 trillion per year healthcare costs can be attributed to people with chronic diseases and mental health conditions.



Chronic conditions continue to drive skyrocketing costs due to their growth and the challenges in finding effective management plans. For example, although some progress has been made in reducing deaths from heart disease, cardiovascular diseases still accounted for 20.5 million deaths in 2021 and close to one-third of all deaths globally. More than half a billion people around the world have cardiovascular disease, half of which are associated with hypertension, which is the number one risk factor for death globally, affecting more than 1.3 billion people.

Diabetes is another major cause of death and one that is growing more rapidly than cardiovascular disease. Today, 537 million adults (20-79 years) are living with diabetes, which is expected to rise to 643 million by 2030 and 783 million by 2045.

One contributing factor to the rise in diabetes is obesity, growing at a staggering rate, which often develops before the condition. The World Obesity Federation's 2023 atlas predicts that **51% of the world**, or more than 4 billion people, will be obese or overweight within the next 12 years with alarmingly rising rates among children and adolescents.



It turns out, spinal pain is closely linked with all these conditions and others. After analyzing data from a nationwide health survey of nearly 27,000 Americans, researchers concluded that **spinal pain increased the odds** of cardiovascular conditions by 58%, hypertension by 40%, diabetes by 25% and obesity by 34%, controlling for all the confounders.

For some people, spinal pain is the first condition; for others, it may develop later. Regardless, pain paradoxically presents both an obstacle to achieving a better outcome, as well as an opportunity to improve our health. That is because researchers have found that effective pain management leads to better management of other conditions.





Chapter 2: Behavioral and Environmental Contributors

The best way to never suffer from spinal pain, or any chronic condition, is to prevent it from developing in the first place. Chronic condition prevention activities are largely focused on daily behaviors and choices such as what we eat, and drink, how we move our bodies during our working and leisure hours, and our levels of quality sleep and meaningful social connections.

By shifting our healthcare investment toward prevention and forging healthy habits, we could massively reduce healthcare spending. Even if just 5% of adults with one or more chronic conditions could adopt a prevention-focused lifestyle, as much as **\$3.3 billion could be saved each year**, according to one estimate.

In addition to receiving recommended preventive care checkups from doctors, lifestyle modifications in the categories below could have a lasting impact. For example:

Food:

Controlling calories can certainly help reduce the risk of obesity, but so can controlling or eliminating our intake of cholesterol, trans fats and added sugars. Although the results produced by the blockbuster GLP-1 drugs, such as Ozempic, are encouraging, the long-term health risks associated with these drugs **are still unknown**. A diet centered around vegetables, fruits, whole grains and healthy fats, however, has been demonstrated for decades to be linked with long-term obesity control and healthful longevity.



Physical activity:

Consistent and frequent exercise can certainly help control body weight, but the cardiovascular, metabolic and stress-reduction benefits of physical activity are more far-reaching than the calorie-burning merits. Although shorter bouts of high-intensity exercise are found to deliver the most benefit in the least amount of time, experts recommend lower-intensity, longer-lasting activities that most people are likely to stick with and perform regularly.

These physical activity recommendations apply to time spent at work, too. Researchers have determined that sitting too much in our jobs is not only harmful to our health, but can nullify the benefits of consistent exercise at other times.

Alcohol and tobacco:

It may be no surprise that avoiding all forms of tobacco is associated with better health, but recent studies have increasingly concluded that the cardiovascular benefits of red wine are likely minimal or overstated. While not harmful if consumed in moderation, no one needs to assume that they are missing out on health benefits by avoiding alcohol, especially if they are trying to reduce daily calorie intake.





Chapter 3: The Mental Health Dilemma

Intertwined with our physical chronic-condition crisis is a concurrent mental health crisis, which again, is closely linked with one another. Mental health conditions, such as depression and anxiety, have been shown to result from chronic conditions, but also increase the risk of developing physical ailments.

For example, the 37 million Americans who have diabetes are **two to three times more likely** to develop depression than people without diabetes. Likewise, depression was diagnosed in **more than half** (52.5%) of patients with chronic obstructive pulmonary disease and anxiety was found in more than a quarter (27.5%). Overall, **36.6% of people** with mental health conditions were believed to have physical chronic conditions, as well, which is a higher rate than those without.

Again, environmental factors are influencing the rise in mental health conditions, along with other chronic conditions. Social isolation is one such environmental factor that increases a person's risk of developing depression and anxiety, **but also:**

- **Dementia by 50%**
- **Heart disease by 29%**
- **Stroke by 32%**

Chronic pain is also linked with mental health problems, but the relationship is bidirectional. Certainly, it is understandable that someone with chronic back pain, whose sleep, relationships and quality of life have been significantly reduced because of the condition, would develop depression. This cause-and-effect sequence of events, however, is not universal. A study published in 2023 showed that people with depression are **far more likely to develop back pain later** than people without depression (37.4% vs. 22.5%).

It is becoming clear that our mental health has a significant effect on our overall health than previous generations realized. What we now know is that by better managing pain and other chronic conditions, we can have a positive impact on our mental health.



Chapter 4: Incorporating Pain Management into a Holistic Solution

Chronic conditions, including pain and mental health, do not remain isolated or inactive in the body. Without an effective intervention, one condition affects other systems and processes, new conditions then develop, and symptoms expand. A typical progression, for example, could be: chronic pain contributes to less physical activity, which then leads to obesity and depression, resulting in hypertension, cardiovascular disease and diabetes.

Approaching spinal pain management from a whole-body perspective can stop this chain reaction. Regardless of whether the spinal pain develops before or after other chronic conditions, the following five steps – when feasible -- can have positive overall effects on our health and Whole Being: the complex intrinsic function of an individual.



5-Step Plan for Chronic Condition Prevention

Step 1: Improve posture

About 20% to 40% of people aged 60 and older and 55% of people older than age 70 are unable to stand with a straight back. Balanced posture benefits spine health and prevents back and neck pain while promoting healthy respiration and circulation that are protective against cardiovascular conditions.



Step 2: Consistent, daily physical activity

As stated in Chapter 3, physical activity is linked with a lower risk of all of these chronic conditions but is also highly beneficial for [improving symptoms of depression, anxiety and distress](#) across a wide range of adult populations. Physical activity could start with short, daily walks that could increase in length, pace, or both. The key to promoting consistency and frequency is to make the activity something enjoyable, whether it is in the gym, a community soccer club, or a pickleball group. If it's fun, then we tend to make it a part of our everyday lives.



Step 3: Healthier food choices

It is estimated that at least [117 million American adults](#) were living with nutrition-related chronic diseases as of 2017. Limiting the quantity of calories is the primary focus of preventing obesity, but pursuing a diet centered around vegetables, fruit, whole grains and legumes, makes counting calories less crucial because these foods are less energy-dense than highly processed items. This type of diet is also associated with [lower odds of depressive symptoms](#).



Step 4: Quality sleep

Quality sleep – typically 7 to 8 hours depending on age and health – is an overlooked, yet essential element of a holistic chronic condition prevention plan. Consistent quality sleep can be restorative to both our physical and mental health and make it easier to pursue physical activities when we are awake because we tend to feel more energetic and motivated as a result.

Likewise, physical activity and a healthy diet can then help improve sleep quality, as can establishing good sleep hygiene habits. Shutting off screens at least 1 to 2 hours before bedtime, making the bedroom cool, dark and quiet, and ensuring you have a supportive mattress and pillow are a few essential elements of such beneficial sleep hygiene habits.





Step 5: Chiropractic Care First

People who have already developed neuromusculoskeletal pain – with or without other chronic conditions -- should visit a doctor of chiropractic (DC) for a comprehensive, holistic care plan that includes all of these aforementioned elements. DCs can design safe, drug-free, evidence-based care plans that are more effective than traditional, pharmaceutical-drug-centered approaches to pain management while also lowering overall healthcare costs.

A review of clinical trials showed that the non-pharmacological interventions of acupuncture and spinal manipulation (chiropractic adjustments) provide safer benefits than pharmacological or invasive interventions. Regular chiropractic care resulted in a reduction in the total number of days per week with bothersome low back pain compared with patients who only visited when they experienced pain.

In addition, compared with family or internal medicine physician providers, a recent health insurance claims analysis showed patients treated initially by DCs received fewer and less costly imaging services and were less likely to receive invasive therapeutic interventions during follow-up.





FOUNDATION FOR
CHIROPRACTIC
P R O G R E S S

F4CP.org