

**Arthritis Prevention and Chiropractic**  
**Chiropractic prevents arthritis in accident victims, the elderly and the sedentary**  
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According to the Arthritis Foundation (2007), "Forty-six million [46,000,000] Americans are currently living with arthritis, the nation's leading cause of disability, and we are all paying a high price for it. The Centers for Disease Control and Prevention (CDC) announced that the annual cost of arthritis to the United States economy was \$128 billion in 2003 and increased by \$20 billion between 1997 and 2003.

CDC attributes the dramatic increase to the aging of the population, predominantly baby boomers, and increased prevalence of arthritis. CDC also estimates an additional 8 million new cases of arthritis will be diagnosed in the next decade" (<http://www.arthritis.org/cost-arthritis.php>).

Arthritis, A.D.A.M., Inc. (2010, February 5), "...is inflammation of one or more joints, which results in pain, swelling, stiffness, and limited movement. There are over 100 different types of arthritis...

Causes, incidence, and risk factors

Arthritis involves the breakdown of cartilage. Cartilage normally protects the joint, allowing for smooth movement. Cartilage also absorbs shock when pressure is placed on the joint, like when you walk. Without the usual amount of cartilage, the bones rub together, causing pain, swelling (inflammation), and stiffness.

You may have joint inflammation for a variety of reasons, including:

- An autoimmune disease (the body attacks itself because the body immune system believes a body part is foreign)
- Broken bone
- General wear and tear
- Infection (usually cause by bacteria or viruses)...

With some injuries and diseases, the inflammation does not go away or destruction results in long-term pain and deformity. When this happens, you have chronic arthritis. Osteoarthritis is the most common type and is more likely to occur as you age. You may feel it in any of your joints, but most commonly in your hips, knees or fingers. Risk factors for osteoarthritis include:

- Being overweight
- Previously injuring the affected joint
- Using the affected joint in a repetitive action that puts stress on the joint (baseball players, ballet dancers and construction workers are all at risk)

Arthritis can occur in men and women of all ages. About 37 million people in America have arthritis of some kind, which is almost 1 out of every 7 people" (<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002223>). With hypomobility (less mobility or movement), adhesions occur in a joint (the region where 2 bones connect).

According to A.D.A.M., Inc. (2010, March 30), "Adhesions are bands of scar-like tissue that form between two surfaces inside the body and cause them to stick together. As the body moves, tissues or organs inside are normally able to shift around each other. This is because these tissues have slippery surfaces.

Causes, incidence, and risk factors

Inflammation (swelling), surgery, or injury can cause adhesions to form almost anywhere in the body...Once they form, adhesions can become larger or tighter over time. Symptoms or other problems may occur if the adhesions cause an organ or body part to twist, pull out of position, or be unable to move as well.

Adhesions may form around joints such as the shoulder...or ankles, or in ligaments and tendons. This problem may happen:

- After surgery or trauma
- With certain types of arthritis
- With overuse of a joint or tendon

Symptoms

Adhesions in joints, tendons, or ligaments make it harder to move the joint and may cause pain...Adhesions in the pelvis may cause chronic or long-term pelvic pain.

Signs and tests

Most of the time, the adhesions cannot be seen using x-rays or imaging tests" (<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002462>).

Over time, with a sedentary lifestyle as seen in many portions of the population and increasingly with the elderly, joints become hypomobile. Hypomobility is also seen in trauma-related cases and repetitive use injuries, such as reading while looking down for extended periods, carrying heavy items, holding the phone between one's shoulder

and ear, prolonged use of hands, wrists, back and neck, excessive use of computers, etc. As time progresses, internal scar tissue or adhesions continue to develop and further increases the loss of mobility. According to Cramer, Henderson, Little, Daley and Grieve in 2010, previous studies have shown that this hypomobility causes degeneration of the joints that connect the bones, which results in arthritis. As time goes on, both the adhesions (internal scar tissue) and arthritis increase. Therefore, with the persistent sedentary lifestyle and no chiropractic care for the hypomobility, the arthritis will get worse over time.

Cramer et al. (2010) also reported that according to their laboratory studies, chiropractic adjustments increase the "Z gap" or spacing between the joints/bones and increase mobility of the joints. As a result, the adjustments prevent further development of adhesions, degeneration and osteophytes, which is the arthritic process. In short, chiropractic adjustments prevent arthritis.

Regardless of the timing of the beginning of chiropractic care, it conclusively increases mobility and prevents loss of mobility, preventing the development of internal scar tissue (adhesions) and, therefore, arthritis.

This breakthrough research that affects approximately 1 in 7 Americans is also draining our economy with its \$128 billion price tag. While not all arthritis is a result of hypomobility, much of it is. If every person was under chiropractic care, we could not only positively affect the lives of every American, we could potentially rescue the economy of the United States and every other country and insurer in the world that assumes risk for an aging and hypomobile society.

#### References:

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