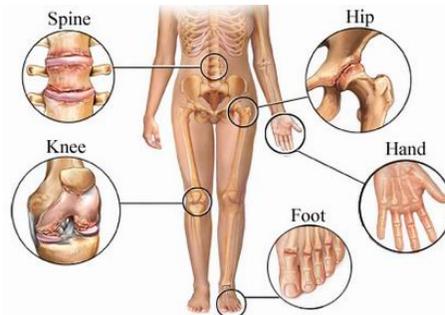


WHAT DOES IT MEAN TO HAVE DEGENERATIVE JOINT CHANGES?

By Dr. John A. Papa, DC, FCCP(R)(C)

Have you had a joint problem and been told that you have "**degeneration**" or "**degenerative changes**"? What exactly does this mean? Is this something that can be fixed? Let's take a closer look at two common types of **degenerative changes** and some potential management strategies that can be employed.

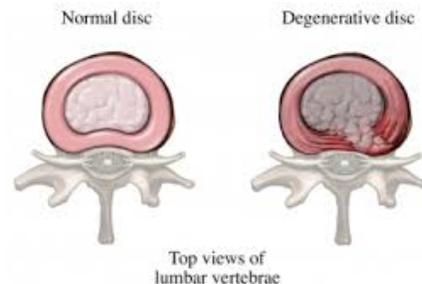
1. **Degenerative Joint Disease (DJD)** is also known as osteoarthritis, and is the most common form of arthritis. Weight-bearing joints such as the hips and knees are most commonly affected, but **DJD** can affect any area of the body, including the hands, neck, and low back.



Most joints in our body have smooth cartilage surfaces that glide against each other, which allow two or more opposing bones to move freely and perform a specific set of movements. A joint becomes "**degenerated**" or arthritic when there is wearing down of these cartilage surfaces, and a change in the composition of the bone underneath the cartilage occurs. An arthritic joint does not mechanically function like it is supposed to. This may result in a number of symptoms including: muscle tightness and weakness, joint pain and stiffness, decreased ranges of motion, creaking in the joints, swelling, inflammation, and joint thickening (i.e. finger nodules, bunions).

2. **Degenerative Disc Disease (DDD)** specifically affects the spinal discs between each vertebrae and is also considered an arthritic disorder. Spinal discs allow for some movement between vertebrae, and they also absorb compressive, tensile, and shearing loads with everyday activities.

The centre of the disc, called the *nucleus pulposus*, is jelly-like and mostly made up of water. The outside of the disc, called the *annulus fibrosus*, is tough and thick and contains the *nucleus pulposus*. Over time, the water content of the spinal disc diminishes, causing it to dry out and become fibrotic (tough and brittle). As the disc becomes fibrotic it can develop tears. This breakdown can result in disc herniations, the development of bony spurs, and sciatica.



Risk factors/causes for **DJD** and **DDD** are typically multi-factorial, meaning that there is usually no single cause, but rather a combination of several different factors. These risk factors/causes may include but are not limited to: advancing age, genetic predisposition, mechanical overload from occupational and recreational activities, direct injury to the affected region, cigarette smoking, lack of exercise, and being overweight or obese.

Degenerative changes can result in debilitating symptoms for some individuals and can be managed a number of ways. Maintaining an ideal body weight through a healthy diet and regular exercise consisting of *strength*, *flexibility*, and *endurance* training can reduce the risk of pain and subsequent disability. Treatment from licensed health professionals who utilize manual mobilization therapies, soft tissue therapy, electrotherapy, acupuncture, exercise and rehabilitation strategies can also significantly help to decrease pain by restoring normal muscle and joint motion, and promote healing of arthritic or injured areas.

In the event that you suffer from **degenerative** joint changes, you should contact a licensed health professional who deals in the diagnosis and treatment of these conditions. For more information, visit www.nhwc.ca.

This article is a basic summary for educational purposes only. It is not intended, and should not be considered, as a replacement for consultation, diagnosis or treatment by a duly licensed health practitioner.