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## Understanding Your X-rays

So you have taken home a copy of your spinal x-ray report, and you see some pictures and a lot of numbers. But what does it all really mean? Before we proceed, make sure you have your x-ray report handy so you can follow along.

### You vs. Normal

The first thing you will likely notice on your x-ray report is that there are 2 pictures on each page. The left hand side is a normal spine, and the right hand side is your spine. Normal and ideal has been defined through research and is widely accepted in the orthopedic, chiropractic, and biomechanics fields. Next, you'll see some red and green lines on your x-rays. The red lines trace along your spinal alignment, and the green lines are the normal alignment that your spine was designed to have.

The comments section at the end of each page will explain to you how close (or far) you are to the normal spinal position. For example, the ideal cervical (neck) curve is  $-42^{\circ}$ , so if your curve measures  $-21^{\circ}$ , then you know you have lost 50% of the normal curve. The other important measurement we are taking in the neck is how far forward your head is positioned – it should be 0mm, meaning the red and green lines would be overlapping.

### What it all means

The further off your spine is from the normal alignment, the more pressure or tension there is on your spinal cord and nerves. It also means there will be abnormal wear and tear on the joints of the spine, resulting in degenerative disc disease (spinal arthritis), bone spurs, and deterioration of your body posture. You can relate your spinal condition to function in your body simply by tracing out from the spine to the related body part; for example, forward head posture and nerve pressure in the neck can cause headaches and neck pain. A tilted lumbar spine (lower back) and uneven hips can cause bowel and bladder irregularities and pain in the legs. Please remember, you may not be feeling pain or symptoms in your body, but that does not mean that your spine is ok.

### **It's complicated...and simple at the same time**

Near the end of your x-ray report, you will see some charts containing a lot of numbers in millimeters and degrees. Our amazing Posture Ray software digitizes your x-rays for us once we plot a series of points on your spine, and it will then generate individual disc angles at every level of your spine and also measure if the bones are lined up properly with each other in the 3 normal curves. From these numbers, we can determine if there are any areas of ligament damage or instability in your spine. This information allows us to design the best care plan schedule and spinal rehab exercises for you.

If you have any additional questions about what you are seeing in your x-ray report, please consult with your Chiropractor.

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A decorative graphic consisting of a thick, grey, curved stem-like shape and two large, light green, stylized leaf shapes. The leaves are positioned on either side of the stem, with one leaf pointing upwards and the other pointing downwards. The overall design is simple and modern.