

What's The Deal With Cracking Knuckles?

Ah yes the age old question. I thought that cracking your knuckles was bad for you? At least that is what my mother always said. And isn't that popping sound that occurs during a chiropractic adjustment the same thing?

Quick answers: No; mom is often right but not always (sorry mom); and yes. Let's take a closer look.

First off what is that sound? [Synovial fluid](#) in your joints contains oxygen, nitrogen and carbon dioxide gas. When a joint is rapidly pulled apart (think chiropractic adjustment or cracking your knuckles) the volume of the joint increases by 15-20%. This creates a partial vacuum (decrease in pressure) and the gas rapidly releases due to the pressure change. ([Boyle's Law](#), 1662). The ligaments of the joint that just got stretched out will slowly return back to a normal position and the gases will be compressed back into the synovial fluid. This takes about 20 minutes for smaller joints (hands) and longer in larger joints.

Try this: Crack your knuckles. Then immediately try again. No popping sound the second time. Now wait 20-30 minutes and try again. More popping.

The Missed Adjustment? Sometimes when you get adjusted there is no popping sound, why is that? Simple the joint was not pulled apart far enough and/or fast enough. This is typically because the patient's muscles are too tight and will not allow the joint to be pulled apart.

Okay, so good or bad? Does cracking knuckles cause arthritis?

Previous studies had **NOT** shown a link between knuckle cracking and hand [osteoarthritis](#). One study even suggested that knuckle cracking helped prevent osteoarthritis.

Knuckle cracking and hand osteoarthritis, [Journal American Board of Family Medicine](#), April 2011.

This study involved 215 people, of whom 135 had x-rays that showed they had osteoarthritis in their hands and 80 did not (healthy controls). The participants were aged from 50-89 years; they all had an x-ray of the right hand during the previous 5 years.

The results:

- 20% of all the 215 participants cracked their knuckles regularly
- 18.1% of those who cracked their knuckles regularly had hand osteoarthritis
- 21.5% of those who did not crack their knuckles had hand osteoarthritis

None of them had evidence of neuromuscular, inflammatory or [malignant diseases](#), factors associated with lower grip strength and hand osteoarthritis.

Cool Story! [Dr. Donald Unger](#) spent 60 years cracking the knuckles of his left hand but never his right. He reported no arthritis or other problems in either hand. He earned the [Ig Nobel Prize in Medicine](#) for this in 2009.

So there you have it, that popping sound is not bad for your joints.