The theoretical speculation behind the knuckle and joint popping

Health & Medicine



Page 2

Science have been able to answer so many questions, especially the humongous and brain consuming ones: Geology Biochemistry, medicine, astrophysics and so much more. But few have attempted to answer questions that are quite little or perhaps insignificant, but then nothing is insignificant in science.

Take for instance, what's the science behind the cuteness in cats, what makes dogs man best friend, is there any science behind laughing aside the Nitro gas? There are so many questions with little attempt to answer. Today I want to share with you my findings or research work on one of those questions that looks perhaps insignificant, but at the long run, quite informative.

Popping of knuckles is more of an average occurrence for me, I wake up and the first thing is to give a long body stretch and pop, the sound comes out. After a long hard work, I either pop my legs or hands or twist my neck to continue the work. I probably would pop my fingers after this post; what a relief.

I want to be sure I am not the only one who pops his or finger or legs everyday, and I want to assume that statistically about 70% of people reading this post now do pop or crack their knuckles everyday, and hey!, I very much stand to be corrected, after all, it's just an hypothesis. Scientists from time memorial laid down hypothesis, theories to explain the science behind the noises that comes up whenever we pop our knuckles, till now there has been arguments to explain this phenomenal. It all started with Roston and Haines, in their publication: Cracking in the metacarpo-phalangeal joint. They were the first scientist that published article on the basis on the cracking of the joints, in their experimental analysis, they made use of serial radiography in visualizing joint cracking when forces were applied to the joints. This did not totally answered the question as to what makes the sound.

From what I could find out, there were contentions to the theories laid by this scientists, and hence as time evolved more approaches has been laid to explain this. Though limited in the number of scientist researching on this aspect. What then is the causes the sound we hear whenever we pop our knuckles?

The sound comes from our joints, specifically the synovial joints also known as the diathrodial joints. Well for the non-science folks, joints are junctions or point where two bones meet. There are different types of joints, but the interest of this post is on the diathrodial (synovial) joint.

The different synovial joints

This type of joints are joints that move freely. The whole contiguous bony surfaces of the diathrodial joints are all covered by what is known as articular cartilage and connected by a fibrous connective tissue capsule which are lined with what is known as synovial membrane. The diathrodial joint are joints made of complex internal structure, ends of bones, ligaments, cartilage, the articular capsule, and sometimes bursae composition, since its very much free allows it to be more easily cracked.