After meeting with us today, I hope you know our office is strongly focused on achieving proper function of the chewing system, in addition to having straight, beautiful teeth. You may ask yourself, "So what? After all, doesn't straight teeth mean you have a correct bite?"

I'd like to clarify this, but first I need to define the components of the chewing system, and describe how they function when healthy.

The Chewing System

The chewing system consists of the **teeth**, the **two temporomandibular joints** (just in front of each ear), and the **muscles** surrounding the teeth and joints.

How a healthy chewing system functions

Ideally, the muscles will position the ball of the temporomandibular joint <u>all the way up</u> into the socket of the joint. This is the healthiest and most stable joint position. Oftentimes however, the teeth are improperly positioned and get in the way, preventing this from occurring. This "interference" to normal function can cause breakdown and instability of the system, especially in the long run. It is possible, indeed common; to have straight teeth and a beautiful smile without having a properly functioning chewing system.

The teeth are dominant over the joints. The main goal of the brain is to chew food and nourish the body regardless of ill affects to components of the chewing system. So the nerves and muscles are profoundly programmed to direct the jaw to the best tooth fit, making it extremely difficult (often impossible) to identify any tooth-joint discrepancy by just looking at the bite. Thus, certain instruments and precautions must be used to truly identify (diagnose) and treat the problem.

If chewing system problems are not diagnosed and treated, over time they can cause many problems and injury to the components. However, with few exceptions, orthodontic schools focus solely on cosmetics and do not teach the principles of chewing system function – much less how to recognize and treat dysfunction. Many leaders in orthodontics do not believe function is important, for example a well known department chairman at a major U.S. university has said, "Orthodontics is purely a cosmetic service."

For an orthodontist to learn the function of the system, and how to deal with it in clinical work, he/she must take a special, post-graduate course. Though many have attended this course, most in the profession have not.

I wanted to explain this so you might better understand why we do some things that other orthodontists may not do. For example, we mount study molds on an instrument called an articulator that is a critical tool in identifying the relationship between the teeth and jaw joints, and we may take joint x-rays (tomograms) so I can study joint health and integrity. Indeed, the entire practice of orthodontics is different if one is treating for function as well as cosmetics.

As you've no doubt surmised, I feel very strongly that orthodontics is both a cosmetic and a health service. If you have questions regarding what I have said here, please don't hesitate to ask myself, or any of my staff members.

Welcome to our "orthodontic family."

Dr. Bryon Kozak