

Have you ever watched a fine craftsman making pottery by spinning a wheel that holds a ball of clay? With deft hand, the soft clay seems to move fluidly as the potter puts small pressures to the inside and outside to mold the clay.

Amazingly enough, that same basic technique is used for our facial growth as we develop through childhood. The strong muscle of the tongue pushes outward on the upper jaw as we swallow and the muscles of the face push in at a near equal rate as we speak, swallow and breath. What would happen though, if the potter one day couldn't control the movement of one of his hands? It would make for some funny-looking vases as the good hand would overpower the pressures placed by the weak or uncoordinated hand.



As we watch our kids? Faces develop, many times when we have crowding, especially in the top teeth; it is due to that same imbalance the potter might feel. If the child cannot breathe through his nose due to allergies or large adenoid tonsillar tissues, then the tongue changes position and the site at the bottom of the mouth and the muscles of the face overwork in breathing solely through the mouth. In an attempt to achieve better nose breathing, the child may also tilt his head forward to open the blocked airway. Over the years what develops is a child with a slightly forward head posture and one that has a narrow upper jaw and crowded upper teeth and a nose that turns slightly upward. Even the good food we eat works to develop the face. The populations of African and Australian Bushmen like the Aborigines have very broad, wide jaws that rarely have crowding. This is due in large part to their diet which focuses on tougher, unprocessed food and not the hamburger and fries or the meal-in-a-box we so often have in our modern society.

Our children grow up with size 7 jaws and size 8 teeth, thus causing crowding in their teeth. What can we do about this? Previously when we middle agers grew up, dentistry did not believe that the jaw could be grown to the size 8 to fit those larger teeth. So, teeth were taken out and moved around to fit that smaller size jaw. Now, over the last 20 years, we have had a paradigm or fundamental shift in our thinking, so now rather than accepting that smaller size jaw, we grow it by appliances that functionally are like big tongues pushing out on that ball of clay to reform the narrowed jaw. It is exciting to watch the facial changes on the children as they go from a narrow, crowded look, to a beautiful broad smile. More and more in our orthodontic treatment of children, we find out where the bones of the face should be and alter them during the growth phase of their development forward, back and sideways so

that when all the permanent teeth finally come in, all we need to do is rotate or level a few teeth to provide an ideal smile. That is why you see more kids in appliances or retainers for longer times and braces for shorter times.

We have even found that adults can have these same changes, albeit sometimes not quite to the extent of the growing child. But just like a bone regrows after an adult breaks their leg, bone can change and grow in adults also.

So, this is another example of how your total body health, nutrition and even your muscles affect that ability to smile with confidence