



## Getting It Straight

by Dr. Kirk Christensen,  
Woodstock's Orthodontic Specialist

**Q:** My son has a headgear, but his friend goes to another orthodontist and has some giant piston like springs in his mouth. What is that about?

**A:** Both the boys have what is known as a Class II malocclusion. This type of bite may be due to a deficient growth of the lower jaw (mandible), excessive growth of the upper jaw (maxilla), or a combination of both. Additionally, the jaws may relate properly, but it may just be the upper and lower dentition that is forward or back in the same manner described above. It may also be a combination of all of these factors. It was found in a classic study by Dr. James McNamara that most Class II malocclusions of children in the USA are due to a retrusive lower jaw. Many orthodontists hold the belief that spring loaded appliances that push the lower jaw forward (eg. Herbst, Jasper Jumper) will grow a deficient lower jaw more than it would have naturally. I have not seen that to be true in cases I have reviewed, and the literature does not consistently support that theory. We use Cervical Traction Headgear at Woodstock Orthodontics because it holds the upper jaw in position (plus, with excellent wear around the house and sleeping it retracts the upper jaw) while the lower jaw grows forward naturally in growing children. It also provides backward movement of the upper molars and upper front teeth without negatively influencing the lower teeth, as its forces are only directed to the upper jaw and teeth. The spring loaded appliances, although not dependent on compliance, as they are in all the time, have not shown to have any positive effects on the upper jaw, lower jaw or upper dentition, but mostly advance (push forward) the lower teeth; see AJO-DO July 2007 article page 54. In full Class II cases (not mild), this typically results in forward flaring of the lower front teeth, leading to increased chance of root resorption and lower dental crowding relapse post-retention. So, if a child has a Class II malocclusion with a mandibular deficiency, the only reliable orthopedic appliance remains the Cervical Traction Headgear. I am pleased to see that current research still supports this long standing philosophy held at Woodstock Orthodontics.

!Dr. Christensen's column appears weekly in the Northwest Herald. Questions to be answered and treatment inquiries may be directed to: **Woodstock Orthodontics, c/o Kirk H. Christensen, DDS, 226 West Judd Street, Woodstock, IL 60098, Phone: 815-337-5522**