Thumb sucking appears to be a harmless habit, unfortunately, it can have a physical and emotional toll on parents and thumb suckers alike.

Thumb sucking changes the structures of the mouth and can negatively influence facial growth and development. Socialization and self-esteem are also negatively influenced by thumb sucking. Children try to quit so they do not get teased; parents nag and make promises and even threats to stop the habit. Parents and children get discouraged about their failed efforts and a cycle of negativity perpetuates.

Shari Green is a dental hygienist and is certified in oral myology (COM). Although she no longer practices dental hygiene, she is now "The Thumb Lady" of Chicago, where she has an oral myology practice offering Thumb Sucking Elimination Therapy. I had the opportunity to talk with Shari and ask her about thumb and digit sucking and how she helps eliminate the habit.

Shari, why do children suck their thumbs?

**Green:** The No.1 reason for sucking is nourishment. Children are born with a suckling reflex – just stroke a baby's chin and you see the instinctive response immediately. Babies associate sucking with mommy, warmth, love, togetherness, nourishment and a myriad of other wonderful feelings. Sucking actually produces endorphins, a natural-occurring chemical in our brain, which produces pleasure. With all these early positive associations and pleasurable experiences relating to the sucking process, they soon transfer this sucking action to other items, namely a convenient finger, toe or thumb, and receive those same positive and pleasurable conditioned sensations.

When do children most often suck their thumbs?

**Green:** Children find finger sucking can stave off boredom and they often use this as a means of soothing distress, illness or fatigue. Soon sucking becomes a habit.

When do children start sucking their thumbs?

**Green:** It starts very early. Babies have been documented on sono-
grams to begin thumb sucking in utero. Many parents report their newborn having blisters and calluses on their digits as evidence of this in-utero sucking.

**When should parents or dental professionals become concerned?**

**Green:** According to many dental professionals, between age four and just prior to the eruption of the permanent teeth is when much of the damage that occurs to the palatal structure can be reversed. If it continues past age four, prolonged and vigorous sucking can alter normal growth and development of skeletal bones, facial muscles and the nasal cavity. In thumb suckers, the roof of the mouth grows vertically instead of horizontally, narrows, and becomes vaulted, often taking on the shape of the thumb or finger. If the palate is narrow, the nasal cavity and sinus may also develop with a narrow and shallow anatomy. Thumb sucking can also affect tooth alignment, lip structure, tooth eruption, finger growth, speech, breathing and swallowing functions. That little thumb can do an enormous amount of damage.

**Are there factors that make thumb sucking worse?**

**Green:** Yes, there are several factors. The more vigorous and prolonged the sucking habit and the more fingers sucked, the greater the degree of damage. Two-finger sucking is considered the most damaging and a thumb sucker who hooks the index finger above the nose will develop finger, nasal and palatal damage simultaneously. The longer the sucking habit continues, the greater the chance the negative effects (especially palatal narrowing) will become resistant to spontaneous reversal.

**Besides dental concerns, what aspects should be considered?**

**Green:** There are often social aspects that need to be considered. Older children who thumb suck may experience difficulty with socialization, as they are often ostracized by their peers. Parents express concerns over their child’s increased negative self-esteem. This negative impact only encourages more sucking behavior as they withdraw from social situations out of fear of ridicule. Of course, the child with “sloshy” speech or buck teeth as a result of their thumb-sucking habit is often at a major social disadvantage as well.

**How common is thumb sucking?**

**Green:** Estimates suggest that 33 to 50 percent of three- to five-year-olds suck fingers and thumbs when they’re tired. Some children quit sucking entirely once they begin preschool due to peer pressure, however, nighttime sucking may continue. Approximately 13 percent of children entering kindergarten suck a finger or thumb, and for seven to 11-year-olds, the incidence is six percent, with more thumb or finger sucking occurring at night.
What are the options for parents?

Green: There are generally two approaches: appliance therapy and orofacial myology. Appliances can be bonded directly to the teeth by the GP, pediatric dentist or orthodontist. Most appliances have extraneous extensions that act as a deterrent to placing a thumb into the mouth.

That sounds a bit barbaric. Tell me more about the oral myology therapy you provide.

Green: As an oral myology specialist, I provide strategies and expertise to children and families specifically in the area of habit elimination. Children are treated with respect and given encouragement, love and support in their desire to stop their sucking habit. Positive reinforcement techniques and parental participation are instrumental to success. I work directly with the child and parents to help plan rewards for successful habit elimination. I am also a resource for parents, providing daily contact to the children, monitoring success and offering encouragement.

That sounds like a good approach for daytime sucking, but what about nighttime sucking?

Green: Nighttime sucking is addressed with gentle “proprioceptive” reminders geared for a particular child on an individual basis. I use a variety of things including finger splints and custom gloves. Although parents have tried many of these on their own without success, therapy with an oral myologist works primarily because it is an outside person. A special relationship of support and guidance from an outside person is often the reason for such a positive outcome. Most patients with no psychological problems will overcome their thumb- or finger-sucking habit after the first visit! The key is that the child must want to stop.

Do you work with orthodontists?

Green: Orthodontists are one of my largest referral sources. The orthodontists want to eliminate thumb- or digit-sucking habits prior to banding to encourage the best possible orthodontic outcome. Eighty to 90 percent of my clients will require some type of orthodontic treatment after habit elimination therapy. If a tongue thrust has developed as a result of prolonged thumb sucking, this too needs to be eliminated through exercises designed to retrain, improve and correct muscle patterns. Oral myology, orthodontic and dental visits are coordinated to work together for the best possible comprehensive outcome.

What can dentists and hygienists outside the Chicago-area do to find an oral myologist in their area?

Green: To view a list of all Certified Orofacial Myologists in their vicinity, dentists and hygienists can visit the IAOM Web site at www.iaom.com. Should dentists or hygienists wish to pursue a career in the field they can take the coursework, an internship, and a written and on site evaluation for certification.

If they just want to focus on thumb sucking, I have several suggestions. First, read the research in this area to become familiar with the problem as well as the solutions. There are several books available as well – Helping the Thumb-sucking Child by Rosemarie Van Norman is a great place to start. Kits are available on the IAOM Web site to help introduce this topic into a dental office. They can also visit my Web site, www.thumblady.com for research, ideas and more information.

Thank you Shari, you are a wealth of information on this subject! Providing help for both the child and the family is crucial to early intervention.