

# Parental Awareness about Thumbsucking: The Earliest Addiction of Children

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## Abstract

Thumb sucking is a type of non-nutritive sucking that occurs in the early days of the 29th week of gestation. Parents should be concerned about the health of their kids. Parents have to look after their children good health who should be raised void of developing any behavior that would endanger their suitable development. Thumb sucking is one of the concerned habits that makes every parent worry about as their babies grow and grow to be toddlers. Parents keep speculating if the habit will continue, or if they have to look for help to stop it. This review article discusses all the importance of habits related to the oral health of a child and focus on the need of awareness among parents about thumbsucking.

**Keywords:** Thumbsucking, Parental Awareness, Management.

## Introduction

Thumb Sucking is also known as Finger/Digit Sucking Habit. This habit is the putting of one more fingers or only one thumb in varying depths of despair into the oral cavity. Moreover thumb sucking is the repeated and forceful sucking of thumb with associated strong buccal and lip contractions.<sup>1</sup> Thumb sucking is a type of nonnutritive sucking that occurs in the early days of the 29th week of gestation. The persistence of such kind of continuous oral habits regularly might be because of various emotional stimuli such as pleasure, sadness, hunger, boredom, hyperactivity stress and various kinds of physical disabilities.<sup>2</sup> These kinds of sucking habits in infants as well as in small children are primarily copied from the physiologic requirement for nutrients and these kinds of behavior are normal in the initial years of life, however, might result in enduring damage if continued beyond this age.<sup>1</sup> The present perception of the child growth suggested that sucking behaviors occur and continue because of psychological requirements along with some studies reported that grown-up infants have an inherent biological drive for sucking.<sup>3,4</sup>

## Classification of Thumb Sucking<sup>4</sup>:

### 1. Cook classification (1958):

- A. **ALPHA** Group pushes the palate inside the oral cavity in a vertical direction that displays only a little contraction of the buccal wall.
- B. **BETA** Group shows strong contraction of the buccal wall as well as a negative pressure in the oral cavity. A posterior crossbite can be seen in the Beta group.
- C. **GAMMA** Group shows alteration in positive and negative pressure. Among all the groups, the least amount of malocclusion can be seen in this group.

### 2. Clinical classification of thumb sucking Clinical classification:

- A. **Normal Thumb Sucking:** Habit during first and second year of life is normal.
- B. **Abnormal Thumb Sucking:** Physiological Habitual

### 3. Thumb sucking by O'Brien:

- A. **Nutritive Sucking:** Breast Feeding, Bottle Feeding

**B. Non-nutritive Sucking:** Thumbsucking, Finger sucking, Pacifier Sucking

#### 4. According to Subtelny (1973):

**Type A:** 50%: Thumb occupies a larger portion of the vault of the hard palate which was kept into the mouth. Thumb is in contact with the maxillary and mandibular anterior.

**Type B:** 13-24%: Without touching the vault of the palate, the thumb is placed inside the oral cavity. Thumb is in contact with the maxillary and mandibular anterior.

**Type C:** 18%: As in type A here also thumb passed fully into the hard palate. Contact with maxillary incisors only

**Type D:** 6%: Thumb retreat appreciably and the lower incisors made contact at the estimated level of the thumbnail.

Thumbsucking is a conduct found in humans, chimpanzees, and different primates. This more often than not includes putting thumb into the oral cavity and rhythmically continuing sucking. During childbirth, an infant will submissively suck anything set in its mouth which is called as sucking reflex in charge of breastfeeding.<sup>3,5</sup> As the child becomes more seasoned and is, in the long run, weaned the dietary sucking, they can create elective method to accept equivalent sentiments of physical and passionate satisfaction or they can keep encountering those agreeably mitigating encounters by starting to suck their thumbs or fingers.<sup>1</sup> Thumbsucking by and large stops by 5 years of age.<sup>2</sup> While many dental practitioners suggest bringing an end to the tendency as right, on time as could reasonably be expected, the harm is reversible.<sup>3</sup>

#### Etiological Factors<sup>4</sup>:

- a. The socioeconomic status of the family-related with the parent's occupation.
- b. Children of working mothers children get onto sucking habit to attain secure feeling.
- c. More number of siblings in a family divides the attention from a child.
- d. Scolding parents, as well as peer pressure, leads to stress and social adjustment.

**Factors Affecting Thumbsucking:** The severity of displacement of the teeth and investing tissue depends on these factors:

- a. Duration- the amount of time spent on sucking; longer the duration of each suckling period, the greater is the damage.
- b. Frequency of indulgence – number of times the habit is practiced; frequent and continuous sucking is more damaging than occasional, short-time practice.
- c. Intensity of force – the amount of force exerted on teeth while practicing the habit.<sup>2</sup>

Apart from these conditioning factors, the type of malocclusion produced also depends on various factors is also mentioned:

- a. Location of digit inside mouth
- b. Involvement of orofacial muscle contraction
- c. Position of mandible during sucking
- d. Skeletal pattern of face<sup>2</sup>

**Thumb Sucking: Effect on Oral Health:** Parents should be concerned about the health of their kids. Parents have to look after their children good health who should become adults without budding any habits that would endanger their proper development. Thumb sucking among all the oral habits, is one of the concerning things that makes every parent be bothered about as their babies grow and become toddlers. Parents speculate if the habit will prolong, or if they have to look for help to stop it. Good advice from a dentist is required for both the child and parents. The good thing is that the habit will more often stop before a child starts going to preschool.<sup>1,3</sup>

**Normal Behaviour:** Thumb sucking habit along with pacifier use is atolerable behavior for infants in the society. As mentioned by the American Dental Association (ADA), this kind of behavior is a natural reflex for an infant that cannot be found in the womb during development. This type of reflex makes the baby feel comfortable, secure as well as happy. Many babies as well as toddlers use it as a recovering mechanism whenever anxious or they get separated from their parents then this habit encourages sleep.<sup>5</sup>

**How Long Is Acceptable?:** As mentioned by the ADA, the suitable time to discontinue thumb sucking is till age four. By this age, long duration sucking started affecting developing jaw and teeth as a result of which permanent teeth may be misaligned. If a child is a passive sucker then his habit can easily be discouraged whereas

prolonged sucking can result in the occurrence of changes in the palate that impinge on the bite and generally very difficult to quit without doing any intervention.<sup>6</sup>

When continuous habit starts to become physiologically need—in other words, craving starts when something is missing and this is what happens with thumbsucking.<sup>6</sup>

- a. Sometimes addictions continue because they might give life-motivating purposes.
- b. Since these addictions are gratifying that is why they can continue.
- c. It has to take a firm decision before ending any habit.
- d. When a habit is motivated by a combination of fear and desire then its ending starts more effectively.
- e. To quit any addictive habit all of a sudden is very difficult practically, therefore keeping a record of the progress helps to motivate and reach the goal.
- f. Complete blocking of the adaptive habit can help a bit in this process.
- g. During the process of quitting the addictive habit, patience and continuous persistence are required.
- h. Anything that can replace the habit will surely help in quitting.

**Stepladders for Discouraging:** Sometimes children will find out on their own onto which time they want to continue their behavior and their habit will not be accepted from any social situations and peer pressure. When the habit of a child sustains beyond kindergarten then steps should be taken to stop the habit.<sup>4</sup>

- A pacifier can be offered to infants, they might easily adapt to this replacement.
- For proper tracking, a chart can be established and rewarded from time to time for seeing the child's progress for quitting.
- A child should always be encouraged and praise for making any attempt to quit his habit.
- It should make sure that parents should visit their dentist about positive as well as beneficial effects of stopping the habit.

Some children may face difficulty in stopping their thumb sucking. In this kind of situation, it may be required to purchase replaceable products that can be

placed on the thumb or fingers to discourage the habit. Parents can just be placing a bandage on the finger or socks or glove on the preferred hand is sufficient. Whatever method is chosen to employ to discourage the behavior, positive reinforcement to encourage children should always be used. Criticism or nagging may cause more anxiety and carry on the problem.<sup>3</sup>

**Oral Effects:** When oral habit keeps on going further age of five or six, the pressure and sucking motion will start to make changes in the oral cavity. As mentioned by the ADA:<sup>7</sup>

- a. Front teeth of the upper jaw may come out for which the bite will remain open that will not allow the upper and lower front teeth to touch each other.
- b. The skeletal effects of the mouth will start disturbing the alignment of the permanent teeth.
- c. The dentist can evaluate the changes and then can give a referral to an orthodontist or pediatric dentist for a consultation.
- d. As suggested by NYU's Langone Medical Center, in a very exceptional situation, a dental appliance or a crib, may be required to be placed in the roof of the oral cavity to accomplish a modify in behavior.
- e. To Correct the bite itself it is always better to start stopping the habit as soon as possible to get better results.<sup>7</sup>

**Insights for Parents:** It has been mentioned that 15-20% of children under age 6 engage in thumb or finger sucking habits. Even orthodontists' children suck their thumbs!<sup>5</sup>

Below are 4 considerations for parents with a child who engages in thumb sucking. All of the following are evidence-based and established by clinical research, to help the child to avoid dental health problems while building self-confidence associated with overcoming a challenging task.

**Impact on Dental and Facial Growth and Development:** After age 6 and with the corresponding eruption of the first permanent teeth, sucking habits will begin to have an irreversible negative effect on the development of the jaws, bite relationship, and positioning of teeth. In most cases, the habit will contribute specifically to a narrow upper jaw (causing crossbite), protruded upper teeth (overbite), and a failure of the front teeth to bite together properly (open bite).<sup>1</sup>

### **Stopping By Age 6 or 7 Will Minimize Most Long**

**Term Effects:** In my experience as an orthodontist, I find that most children begin to establish social awareness of thumb sucking around age 5-6 and develop an internal motivation to cease the habit when it is observed that peers at school are not engaged in the habit. Fortunately for children and parents, this period coincides with the time in development at which irreversible negative effects can be prevented. Research has shown that cessation of thumb and finger habits before the eruption of the permanent incisors (central teeth) at age 6 or 7 will prevent lasting negative impacts on the development of the upper jaw and permanent teeth. This key age to stop also aligns with the American Association of Orthodontists' (AAO) recommended age for the initial evaluation of your child (age 7) by an orthodontic specialist.<sup>9</sup>

### **Techniques for stopping Thumb and Finger**

**Sucking:** The single most important aspect in helping a child to stop sucking a finger or thumb is to determine self-motivation. In the clinical setting, I typically begin by simply asking the child if he or she would like to stop the sucking habit. If your child is not ready and motivated, then it is not time to attempt to stop the habit. It will only lead to frustration and negativity. The focus, instead, should be on education. Explaining to your child how it would be helpful to them to stop and point out that others in their social group or class at school may be in the process of stopping. Acknowledging the difficulty in stopping is also very important. For example, if either parent had a sucking habit as a child, explain to your child how you recall how hard it was to stop, but how rewarded you felt once you were able to tackle the difficult challenge.<sup>10</sup>

**Once established that the child is motivated, I recommend the following techniques to positively reinforce stopping the habit<sup>3,8</sup>:**

- 1. Continuously reaffirm the child's self-motivation and goal to stop.** Examples: "That is so great that you set this goal." and "You can do this, we are so proud of you."
- 2. Set up a reminder system to help the child stop when the body may be unconsciously initiating the habit during sleep.** This can include sleeping with a glove or band-aid on the sucking hand and using nail polish on the sucking finger (Mavala Stop is one brand name). The goal is not to physically prevent your child from performing the habit, but to

help to provide reminders so they can fully stop the habit in a positive, supportive environment. Positive reinforcement is the key.

- 3. Use a reward calendar on the refrigerator.** Every full day/night your child goes without engaging in the habit, place a star on the calendar. Arrange for a reward after 14 consecutive days are achieved without the habit. After 14 consecutive days, the chance of relapse of the habit is very small. (Link: I Can Do It Reward Chart)
- 4. In many cases, early orthodontic intervention will help your child if he or she is actively engaged in a sucking habit over age 7.** Most often, a constricted (narrow) upper arch and possible associated crossbite will indicate the need for a maxillary expander to orthopedically widen the upper jaw. In this case, this very common appliance will change the dynamics of the thumb habit just enough to serve as a reminder and aid the child in stopping the habit.

### **Conclusion**

Your child will overcome this habit. Your role as a parent is to educate, to motivate, and to provide a positive and supportive environment. Keep in mind that this may be the very first conscious, difficult sacrifice your child makes to improve his or her health and well-being. It must be our goal as adults (parents and healthcare providers alike) to foster self-motivation, encourage that little girl or boy that they are up to the challenge, and celebrate with them when they achieve what they set out to do. Comments like "how am I going to get him to stop" or "she will never stop this" do little to motivate and will undermine the child's self-expectations. This habit should be looked at as a profound opportunity that can be used as a very important confidence builder for a young child. We adults must create an environment that encourages children in our sphere of influence to learn, to set goals, and to succeed- in thumb-sucking and beyond!!

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