



The following is a collection of articles that I have come across while reflecting on, researching and dialoguing with colleagues about the ubiquitous sippy cup. What piqued the curiosity was the increasing numbers over the years of children in preschool who:

- 1) Choke while drinking from a paper cup, and/or
- 2) Are experiencing articulation difficulties.

-- Tina Thompson

Sippy Cups Alert

The increased caries risk for toddlers who use the duck-billed cups, often carrying with them and sip-ping throughout the day can cause cavities. Spill-proof cups are more like a bottle than a cup. These cups are an effective tool for shifting children from baby bottles to regular cups, but parents should use the cups only as a transitional device because tooth decay remains the most common chronic childhood disease-five times as common as asthma. Prolonged use of the cup also inhibits the development of muscles needed for proper speech. You should not to allow your child to suck on the cups throughout the day. "Sippy cups are great; however a traditional cup is even better."

In response to the "sippy cup dilemma"..... As a licensed practicing Speech Language Pathologist, I have observed the damaging impact on oral-motor musculature, swallowing patterns, dentition, and speech/articulation development as a result of chronic sippy cup use. This is especially true with the "new" totally spill proof sippy cups that have a stopper and the only way to drink is to suck. Maintaining a sucking pattern while drinking interferes with the development of adult swallow patterns and directly impacts on oral-motor muscle development, speech, and articulation development. Sippy cups were/are meant to TRANSITION a child from bottle to regular cup. A child is transitioned from a bottle at a certain age to encourage proper oral-motor musculature development and development of an adult swallow pattern. In my opinion, chronic use of a pacifier, bottle, and/or sippy cup during this time FREQUENTLY results in oral-motor and/or speech disorders, malocclusion, and "tongue thrust" swallowing patterns. I also agree that chronic use of a sippy cup may be one of several contributing factors for a particular child with speech/articulation delays. Once a child has been identified as having oral-motor/speech/articulation deficits, removing pacifiers, sippy cups, and/or thumbs will at least contribute to increased rate of progress in therapy. Many parents continue chronic

use of sippy cups until age 3 to 4 (or later). It is not the sippy cup that is the problem, but in how it is used, and how parents are not informed as to the dangers and risks of not using it properly: as a transitioning tool rather than as a "pacifier for the carpet or car".

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Can speech problems develop due to overuse of a sippy cup?

I am not aware of an association of sippy cups or straw cups with speech problems. Chronic sucking, whether of a thumb, finger or pacifier may promote a habitual tongue thrust which may cause a child to have difficulty with the "s", "ch", "sh" and "z" sounds. This means the tongue goes between the teeth rather than staying behind them with these sounds. Although a tongue thrust is not uncommon in children who were not "suckers." Children with enlarged adenoids and possibly repeated ear infections may be more likely to have a tongue thrust.

Permitting a child to use a pacifier for much of the waking hours may be associated with speech problems and delay not to mention problems with poor alignment of the teeth. I encourage parents to limit pacifier use to bedtime and stressful situations after twelve months.



What's Next? Blankie? Sippy Cups Draw Fire for Speech Slurs, Cavities (JONATHAN EIG / Wall Street Journal 12Feb 02)

Beware the sippy cup.

That modest conveyor of liquids, protector of carpets, friend to parents of small children, is suddenly under attack.

A sippy cup, as virtually every modern parent knows, is a plastic cup equipped with a tight lid and a protruding bill-shaped spout. Children can toss it, drop it and turn it upside down, but they can't spill its contents. That's thanks to a valve in the lid that releases liquid only when a child puts his lips around the bill and sucks.

The sippy cup is the toddler's equivalent of the cell phone, essential equipment for the kid on the go. Many parents view it as the most extraordinary invention since the disposable diaper. But in products made for children, popularity often fosters worry. Now, it's the sippy cup's turn.

Warnings are coming from two fronts: First, some speech pathologists say children are using sippy cups long after they should have made the transition to a traditional, lidless

cup. They're still sucking and slurping when they ought to be swilling and gulping. The consequence: a lazy tongue that produces sloppy "th" and "st" sounds, at least temporarily. Nursery-school teachers were among the first to raise concerns.

"What we've noticed in the past five or six years is that articulation for young children has totally disappeared," says Gail Smith, director of the Gingham Giraffe Preschool in Chatham, N.J. "And I directly attribute it to the use of sippy cups."

Ms. Smith first heard about the concerns from a speech therapist. Before warning parents at her nursery school to ditch the cups, she took one home and drank from it herself for a weekend. She became concerned that sucking a sippy cup was a lot like sucking a thumb. "You do tend to leave your tongue under the cup," she says.

Second, some pediatric dentists say they are beginning to see more cavities among children who use sippy cups as if they were baby bottles -- sucking milk, juice and other sugary drinks for hours at a time, sometimes even while they sleep.

The issue emerged last year after a group of German dentists published an article in the *Journal of Dentistry for Children* entitled "Nursing-bottle Syndrome Caused by Prolonged Drinking from Vessels with Bill-Shaped Extensions."

When Cindi Sherman, a dentist in Independence, Kansas, read the article, she experienced a moment of revelation. "I hadn't made the connection," says Dr. Sherman. Now, she says, she quizzes all her patients about their children's drinking habits.

Playtex, the market leader in spill-proof cups, says the complaints are without merit. The Westport, Conn., company notes that there is no scientific evidence suggesting that sippy cups affect speech. And as for the published research on tooth decay, the company says sugary drinks, not the cups that carry them, cause cavities. Novartis's Gerber Products Co., another big sippy-cup manufacturer, declines to comment.

Sippy-cup warnings leave parents torn between concerns about their toddlers and concerns about their car seats. "You can't put a kid in a car seat and drive to preschool with an open glass of orange juice," says Kirby Adams, mother of two small children and a television news reporter in Louisville, Ky.

Sippy cups, designed to help parents teach their children how to drink without spilling, have been around in one form or another for at least 50 years. But during most of their early history they were infrequently used.



Kids on the Go

By the time Playtex began marketing the plastic version of the product in 1994, American culture had changed. Cup-holders had sprouted in cars, movie theaters and on treadmills. People seemed to be carrying Big Gulps and bottles of water everywhere. The phrase "multi-tasking," a term that originally referred to computers, now applied to humans, too. Parents were eager to embrace a spill-proof container that let them hydrate their children without breaking stride.

Americans spent more than \$30 million last year on spill-proof cups, which usually sell for less than \$5 each, according to ACNielsen, which tracks product sales in grocery stores, drug stores and some of the big mass-merchandising outlets. ACNielsen doesn't count sales at Wal-Mart, Toys "R" Us or specialty shops for children, so sales are probably much higher.

Some speech pathologists worry about overindulgence. When children drink from a bottle or breast, they perform something speech therapists refer to as a suckle-swallow. The tongue lays flat and moves mostly in a back-and-forth pattern.

Drinking from a regular cup, however, requires a more complicated swallow. The cheeks and lips suck the liquid onto the tongue, then the tongue squeezes, lifts and propels the water down the throat. That action helps build the muscles required for proper speech -- at least according to one school of experts.

'Wreaking Havoc'

But with a sippy cup, according to its critics, the tongue doesn't get enough action. "It's wreaking havoc on that tongue position," says Charlotte A. Boshart, a speech pathologist in Temecula, Calif.

"It's just like sucking your thumb all the way up until you're five or six years old," says Sara Rosenfeld-Johnson, a speech pathologist in Tucson, Arizona. In seminars that she conducts nationwide, she has become one of the most outspoken critics of the sippy cup. Most children who develop speech difficulties after drinking from sippy cups are easily cured, says Ms. Johnson. Their speech usually improves as soon as they begin drinking from other vessels.

But for children with Down Syndrome or other illnesses that weaken the facial muscles, these problems can be longer lasting. In those cases, she prescribes a series of exercises in which children gradually switch from sippy cups to straws to regular cups.

Yet while Ms. Johnson spreads the word, others in the field of speech maintain that the sippy-cup debate is a lot of crying over unspilled milk.

"I can't imagine how they could be a problem," says Christopher A. Moore, professor of speech and hearing sciences at the University of Washington. "It's an anecdotal observation that's not supported by research."

In fact, says Dr. Moore, children are so good at learning to speak that almost nothing gets in their way. Learning to speak is far more complicated than learning to walk, yet almost every child figures it out. Even if a child is four years old and incomprehensible to all but his parents, Dr. Moore counsels patience.

"Parents have so much other stuff to worry about," he says.



Laura Goepfert, a speech therapist in Chatham, N.J., says sippy cups could be one factor among many, but she doubts the cups are a significant problem. Some speech therapists and school teachers "have kind of gone on a crusade," she says. Dentists are engaged in their own discussions on the subject. Next month, the Academy of General Dentistry plans to print an article in its quarterly newsletter addressing the concerns. The article says in part "that the long-term and regular use of

sippy cups puts children's growing teeth at increased risk for decay." And it warns parents not to put sugary drinks in the cups.

Meanwhile, Ms. Adams, the television news reporter in Louisville, recently launched an investigation of her own into another hazard of the sippy cup. A toddler may pick up a sippy cup left for days in a toy box and start sucking, while the sealed lid makes it impossible for his parents to see or smell the condition of the drink inside. Ms. Adams collected sippy cups from various parents' homes as well as from her own car and had them tested in a lab. Her report, aired recently on WHAS, revealed that the cups were teeming with germs.

