

FOR IMMEDIATE RELEASE

**Media Contact:**

Joe Ferlito

Franco Public Relations Group

313-567-5031

[ferlito@franco.com](mailto:ferlito@franco.com)



## Research Indicates Lollipops May Reduce Tooth Decay

*Delta Dental's Research and Data Institute funds pioneer study to help prevent childhood dental disease*

**OKEMOS, Mich. (Aug. 10, 2011)** – A recent study, published by the [European Academy of Pediatric Dentistry](#), demonstrated that sugar-free lollipops containing licorice root extract significantly reduced the bacteria that causes tooth decay, specifically in pre-school children with high-risk of tooth decay.

The study, funded by the Research and Data Institute of the affiliated companies of Delta Dental of Michigan, Ohio, Indiana, Tennessee, Kentucky, New Mexico and North Carolina, analyzed 66 preschool students ages 2 to 5 enrolled in the Greater Lansing Area Head Start Program. Each student received a lollipop for 10 minutes twice daily for three weeks.

“Dental decay is one of the most common childhood diseases with more than half of children ages 5 to 17 having had at least one cavity or filling,” said Jed J. Jacobson, D.D.S., M.S., M.P.H., chief science officer at Delta Dental. “We are working to find simple, effective regimens that will encourage prevention and control of dental disease. While the results of this pilot clinical trial are encouraging, more research is needed to confirm these early findings.”

Results showed a significant reduction in *Streptococcus mutans* (*S. mutans*), the primary bacteria responsible for tooth decay, during the three-week period when the lollipops were being used and lasting for an additional 22 days before beginning to rebound.

Using a saliva test, the amount of *S. mutans* in the patient’s mouth was measured before and during the three-week period where lollipops were used, as well as for several weeks thereafter.

“The use of the licorice root lollipops is an ideal approach as it will stop the transfer and implantation of the bacteria that cause dental decay from mothers to their infants and toddlers,” said Martin Curzon, editor-in-chief, *European Academy of Pediatric Dentistry*. “It also has the merit of being a low cost-high impact public dental health measure.”

“This study is important not only for dental caries prevention research, but also demonstrates the feasibility of a classroom protocol using a unique delivery system suitable for young children,”

said Jacqueline Tallman, R.D.H., B.S., M.P.A., principal investigator of the study. “Early prevention is key for lifetime oral health and effective innovative protocols are needed.”

The investigation was a collaborative effort of the Greater Lansing Area Head Start Program, the University of Michigan and the University of California – Los Angeles (UCLA). Delta Dental’s Research and Data Institute provided the grants as part of its mission to remain on the cutting edge of finding solutions to oral health problems.

“Our Head Start program was excited to participate in the Lollipop project,” said Teresa Spitzer, R.N., Health Programs Manager, Capital Community Head Start Inc. – Head Start and Early Childhood Programs. “Staff and parents were intrigued by something as simple as a special Lollipop having the ability to decrease the incidence of dental caries in children. The outcomes only reinforced the value the parents placed on the project.”

The lollipops, manufactured by Dr. John’s Candies of Grand Rapids, Mich., were developed using FDA-approved materials by Dr. Wenyuan Shi, a microbiologist at the University of California – Los Angeles (UCLA), and C3 Jian, Inc., a research and development company in California. The orange-flavored, sugarless lollipops contain extract of licorice root (*Glycyrrhiza uralensis*), which targets and is thought to kill the primary bacteria (*Streptococcus mutans* or *S. mutans*) responsible for tooth decay.

#### **About *Streptococcus mutans***

There are approximately 700 types of bacteria in the human mouth. While most are harmless, *Streptococcus mutans* (*S. mutans*) is considered the primary culprit in tooth decay. They live in a biofilm (plaque) that adheres to the teeth, consume sugar and release acid that erodes tooth enamel, causing decay. Regular brushing and flossing, along with dental checkups, can help to keep *S. mutans* and *Lactobacillus casei* in check.

#### **About Delta Dental**

The affiliated companies of Delta Dental of Michigan, Ohio, Indiana, Tennessee, Kentucky, New Mexico and North Carolina, collectively comprise one of the largest dental plan administrators in the nation. In 2010, the enterprise paid more than \$2 billion for dental care for nearly 8 million people. Offices are located in Okemos and Farmington Hills, Mich.; Columbus and Cleveland, Ohio; Indianapolis and Greenwood, Ind.; Nashville, Knoxville, and Memphis, Tenn.; Louisville, Ky.; Albuquerque, N.M.; and Raleigh and Charlotte, N.C.

#### **About Delta Dental’s Research and Data Institute**

The Research and Data Institute was established in 2005 to develop innovative and scientifically based dental benefits that improve health. The institute, which has the world’s largest database of dental claims information, works closely with researchers from the University of Michigan, UCLA and other leading universities in the United States.

#### **Additional links**

More information on the organizations affiliated with these studies is available at:

- Capital Area Community Services, Inc., [www.mcaaa.org/directory/caca.htm](http://www.mcaaa.org/directory/caca.htm)
- University of Michigan School of Dentistry, [www.dent.umich.edu](http://www.dent.umich.edu)

- School of Dentistry and Dental Research Institute of UCLA, <http://uclasod.dent.ucla.edu/>
- Dr. John's Candies, [www.drjohns.com](http://www.drjohns.com)

[Editor's Note: The full study results can be viewed at  
<http://www.deltadentalmi.com/pdf/LollipopsResults.pdf>]

###