As CEO and president of New Orleans-based company Theodent, Tulane alumnus Arman Sadeghpour and his partners debuted a chocolate-based toothpaste that is a safe alternative to fluoride at a news conference on Wednesday (Jan. 4).

Sadeghpour said the product is the culmination of 30 years of research, including his own doctoral dissertation on the effectiveness of an extract of cocoa on stimulating growth of the enamel of human teeth. This research led to development of Rennou, a proprietary blend of this extract and other minerals. Generally regarded as safe by the U.S. Food and Drug Administration, Rennou has been verified by two U.S. patents, and a worldwide patent is pending.

While fluoride is effective in protecting tooth enamel from erosion when it is exposed to acids (such as orange juice), its safety is controversial. Rennou has been shown to be more effective than fluoride, Sadeghpour said.

Ironically, Sadeghpour's pivotal research might not have occurred without Hurricane Katrina, said Nick Altiero, dean of the Tulane School of Science and Engineering. Sadeghpour had been pursuing computer science before the storm, but that program was eliminated as part of the university's Renewal Plan. So Sadeghpour switched to studying the compound discovered by Tetsuo Nakamoto of the LSU School of Dentistry.

"Dental decay is the only disease that every human on this earth suffers from so it's a concern for everyone," Sadeghpour said. "Rennou effectuates a change in the actual hardness of the tooth. After one week, you start to see these [beneficial] results.”

Sadeghpour credits a Tulane news release with generating buzz that provided the momentum for the toothpaste's development and marketing. At the news conference, Kurt Weigle, president of the Downtown Development District, and Aimee Quirk, economic development adviser to New Orleans mayor Mitch Landrieu, lauded the company's decision to make New Orleans the headquarters for Theodent.